



Overcoming

Indigenous Disadvantage

Overcoming Indigenous Disadvantage

Key Indicators 2009

Steering Committee
for the Review
of Government
Service Provision

2009

© Commonwealth of Australia 2009

ISSN 1448 9805

This work is subject to copyright. It has been produced by the Steering Committee for the Review of Government Service Provision (SCRGSP). Apart from any use as permitted under the *Copyright Act 1968*, no part may be reproduced by any process without prior written permission from the Attorney-General's Department. Requests and inquiries concerning reproduction and rights should be addressed to the Commonwealth Copyright Administration, Attorney-General's Department, Robert Garran Offices, National Circuit, Canberra ACT 2600.

The Productivity Commission acts as the Secretariat for the Steering Committee.

Secretariat

Steering Committee for the Review of Government Service Provision
Productivity Commission
LB 2 Collins Street East Post Office
Melbourne VIC 8003

Level 28
35 Collins Street
Melbourne VIC 3000

Tel: (03) 9653 2100 or Freecall: 1800 020 083
Fax: (03) 9653 2359
Email: gsp@pc.gov.au
www.pc.gov.au/gsp

Suggestions:

The Steering Committee welcomes suggestions on the information contained in this report. Please direct your suggestions to the Productivity Commission Secretariat at the above address.

An appropriate citation for this report is:

SCRGSP (Steering Committee for the Review of Government Service Provision) 2009, *Overcoming Indigenous Disadvantage: Key Indicators 2009*, Productivity Commission, Canberra.

The Steering Committee thanks Reconciliation Australia for providing the photographs reproduced on the report cover. No inference is intended that the people or communities shown are the subject of any issue raised in the report.

Cover photos: Photos courtesy of Reconciliation Australia and Wayne Quilliam (Indigenous Governance Awards 2008).

Foreword

Overcoming Indigenous Disadvantage 2009 is the fourth report in a series commissioned by heads of Australian governments in 2002, to provide regular reporting against key indicators of Indigenous disadvantage.

In March this year, the terms of reference were updated in a letter from the Prime Minister. The new terms of reference reaffirm governments' commitment to being accountable for improved outcomes for Indigenous Australians, with the OID serving as a public report card on progress against the COAG targets and other significant indicators.

The new terms of reference align the OID framework with COAG's six high level targets for Closing the Gap in Indigenous outcomes. The structure of the aligned framework remains very similar to that of previous reports, but highlights the COAG targets and priority areas for reform, as well as including additional indicators. The Steering Committee will be consulting further on the new framework.

The OID aims to help governments address the disadvantage that limits the opportunities and choices of many Indigenous people. However, it is important to recognise that most Indigenous people live constructive and rewarding lives, contributing to their families and wider communities. That said, across nearly all the indicators in the OID, there are wide gaps in outcomes between Indigenous and non-Indigenous Australians. While the gaps are narrowing in some areas, in too many cases outcomes are not improving, or are even deteriorating. We still have a long way to go to fulfil COAG's commitment to close the gap in Indigenous disadvantage.

Data from the past two Censuses show that Indigenous people have shared in the general economic prosperity of the past decade, with increases in employment, incomes and home ownership. A key challenge will be preserving and building on these gains and closing the gaps in a more difficult economic climate. In areas such as criminal justice, outcomes for Indigenous people have been deteriorating. Indigenous people and governments are grappling with ways to identify and address the underlying drivers of these outcomes.

The utility of the OID report depends on access to good data. As the Prime Minister observed, ‘without high quality data, it is impossible to understand where we are headed’. All governments have been committed to ensuring data are available for reporting, and some impressive efforts at data improvement are underway. These efforts are strongly supported.

But more is needed. For example, life expectancy is a key COAG target, with a commitment to closing the unacceptable gap between Indigenous and other Australians within a generation. But estimating life expectancy is a complex undertaking, and requires robust data about death rates. Changes in methodology mean that the more accurate estimates in this report are significantly lower than estimates included in previous reports. But it is not possible to say that there has been any actual improvement over time.

On behalf of the Steering Committee, I again offer sincere thanks to all those who have contributed to this report, either by providing data or through their advice and feedback on earlier reports. Special thanks are due to members of the Working Group overseeing the development of the report, particularly its Convenor, Commissioner Robert Fitzgerald. I am grateful also to the members of the Secretariat at the Productivity Commission, for their efforts and evident commitment to the development of the report. Finally, we thank all those who participated in the consultations, which have contributed greatly to improvements in the scope and content of this latest edition of the Overcoming Indigenous Disadvantage report.

Gary Banks AO

Chairman

July 2009

Contents

Foreword	III
Contents	V
Acronyms and abbreviations	IX
Glossary	XIV
Terms of reference	XXII
Overview	1
1 Introduction	1.1
1.1 Not just another statistical report	1.1
1.2 Background	1.3
1.3 The Review of Government Service Provision	1.5
1.4 References	1.6
2 The framework	2.1
2.1 The framework	2.1
2.2 COAG developments	2.8
2.3 Changes to the framework for this report	2.11
2.4 Consultations	2.16
2.5 Culture	2.17
2.6 Data issues	2.21
2.7 References	2.28
3 Interactions across the framework	3.1
3.1 Multiple disadvantage	3.1
3.2 Multiple causes	3.3
3.3 Multiple effects	3.5
3.4 References	3.7

4	COAG targets and headline indicators	4.1
4.1	Life expectancy	4.4
4.2	Young child mortality	4.13
4.3	Early childhood education	4.24
4.4	Reading, writing and numeracy	4.32
4.5	Year 12 attainment	4.50
4.6	Employment	4.57
4.7	Post secondary education — participation and attainment	4.71
4.8	Disability and chronic disease	4.83
4.9	Household and individual income	4.99
4.10	Substantiated child abuse and neglect	4.115
4.11	Family and community violence	4.127
4.12	Imprisonment and juvenile detention rates	4.139
4.13	Future directions in data	4.151
4.14	References	4.153
5	Early child development	5.1
5.1	Maternal health	5.3
5.2	Teenage birth rate	5.12
5.3	Birthweight	5.19
5.4	Early childhood hospitalisations	5.23
5.5	Injury and preventable disease	5.27
5.6	Basic skills for life and learning	5.33
5.7	Hearing impediments	5.39
5.8	Future directions in data	5.46
5.9	References	5.48
6	Education and training	6.1
6.1	School enrolment and attendance	6.3
6.2	Teacher quality	6.8
6.3	Indigenous cultural studies	6.10
6.4	Year 9 attainment	6.15
6.5	Year 10 attainment	6.25
6.6	Transition from school to work	6.29
6.7	Future directions in data	6.38

6.8	References	6.38
7	Healthy lives	7.1
7.1	Access to primary health	7.4
7.2	Potentially preventable hospitalisations	7.18
7.3	Avoidable mortality	7.27
7.4	Tobacco consumption and harm	7.33
7.5	Obesity and nutrition	7.38
7.6	Tooth decay	7.44
7.7	Mental health	7.55
7.8	Suicide and self-harm	7.65
7.9	Future directions in data	7.74
7.10	References	7.75
8	Economic participation	8.1
8.1	Labour market participation (full time/part time) by sector and occupation	8.3
8.2	Indigenous owned or controlled land and business	8.18
8.3	Home ownership	8.38
8.4	Income support	8.46
8.5	Future directions in data	8.55
8.6	References	8.55
9	Home environment	9.1
9.1	Overcrowding in housing	9.3
9.2	Rates of disease associated with poor environmental health	9.11
9.3	Access to clean water, functional sewerage and electricity services	9.20
9.4	Future directions in data	9.30
9.5	References	9.30
10	Safe and supportive communities	10.1
10.1	Participation in organised sport, arts or community group activities	10.4
10.2	Access to traditional lands	10.11
10.3	Alcohol consumption and harm	10.14
10.4	Drug and other substance use and harm	10.25

10.5	Juvenile diversions as a proportion of all juvenile offenders	10.33
10.6	Repeat offending	10.42
10.7	Future directions in data	10.50
10.8	References	10.51
11	Governance and leadership	11.1
11.1	Case studies in governance	11.2
11.2	Governance capacity and skills	11.25
11.3	Engagement with service delivery	11.30
11.4	Future directions in data	11.36
11.5	References	11.37
12	Outcomes for Torres Strait Islander people	12.1
12.1	Selected outcomes for Torres Strait Islander people	12.1
12.2	Attachment tables	12.18
12.3	References	12.18
13	Measuring multiple disadvantage	13.1
13.1	Patterns of relative Indigenous disadvantage	13.2
13.2	Patterns of multiple disadvantage	13.10
13.3	Influences on Indigenous labour force participation and unemployment	13.16
13.4	References	13.24
Appendix 1	COAG Communiqués	A1
Appendix 2	Implementation of the framework	A2.1
Appendix 3	Indigenous population and language use	A3.1
Appendix 4	Data limitations	A4.1
Appendix 5	Measures and data sources	A5.1

Acronyms and abbreviations

ABS	Australian Bureau of Statistics
ABS Census	Census of Population and Housing
ACC	Area Consultative Committee
ACER	Australian Council for Educational Research
ACIR	Australian Childhood Immunisation Register
ACF	Administration for Children and Families
ACT	Australian Capital Territory
AEC	Australian Employment Covenant
AED	Aboriginal Economic Development directorate
AEDI	Australian Early Development Index
AES	Aboriginal Employment Strategy
AHMAC	Australian Health Ministers' Advisory Council
AHO	Aboriginal Housing Office
AIC	Australian Institute of Criminology
AIEW	Aboriginal and Islander Education Workers
AIHW	Australian Institute of Health and Welfare
AMIC	Aboriginal Maternal and Infant Care
AMP	Alcohol Management Plans
APY	Anangu Pitjantjatjara Yankunytjatjara
ASHE	Academy of Sport, Health and Education
ATSIHPF	Aboriginal and Torres Strait Islander Health Performance Framework
AuSSA	Australian Survey of Social Attitudes
BMI	body mass index
BSC	Building strong corporations

CAEPR	Centre for Aboriginal Economic Policy Research
CDE	Census Data Enhancement Indigenous Mortality Quality Study
CDEP	Community Development Employment Projects
CHC	Child Health Check
CHINS	Community Housing and Infrastructure Needs Survey
CIRCA	Cultural and Indigenous Research Centre Australia
COAG	Council of Australian Governments
CRC	COAG Reform Council
CRCAH	Cooperative Research Centre for Aboriginal Health
CSTDA	Commonwealth, State and Territory Disability Agreement
CYI	Cape York Institute
CYWR	Cape York Welfare Reform
DALYs	Disability-adjusted life years
DEEWR	Department of Education, Employment and Workplace Relations
DET	Department of Education and Training
DEWR	(former) Department of Employment and Workplace Relations
DHAC	Commonwealth Department of Health and Aged Care
DHCS	Department of Disability Housing and Community Services
DOGIT	deed of grant in trust
DUMA	Drug Use Monitoring in Australia
FaHCSIA	Department of Families, Housing, Community Services and Indigenous Affairs
FAS	Fetal alcohol syndrome
FASD	Fetal alcohol spectrum disorder
FCH	Family and Community Healing
FIM	Family Income Management
FWB	Family Wellbeing
GP	General practitioner

GWEH	Gross Weekly Equivalised Household Income
HEP	Higher Expectations Program
HFAB	Healthy Food Access Basket
HREOC	Human Rights and Equal Opportunity Commission (now Australian Human rights Commission)
IBA	Indigenous Business Australia
ICAP	Improving Care for Aboriginal and Torres Strait Islander Patients
ICC	Indigenous Coordination Centre
ICD-10-AM	International Classification of Diseases, 10th Edition, Australian Modification
ICGP	Indigenous Community Governance Project
IEP (1)	Indigenous Employment Program
IEP (2)	Indigenous Enterprise Partnerships
IESIP	Indigenous Education Strategic Initiatives Programme
IHHP	Indigenous Hip Hop Projects
IHO	Indigenous Housing Organisation
ILC	Indigenous Land Corporation
ILUA	Indigenous Land Use Agreement
IPA	Indigenous Protected Area
KIC	Kwinana Industrial Centre
KIEP	Kwinana Industry Education Partnership
LDC	Larrakia Development Corporation
LSAY	Longitudinal Surveys of Australian Youth
LSIC	Longitudinal Study of Indigenous Children
MBS	Medicare Benefits Schedule
MCEETYA	Ministerial Council on Education, Employment, Training and Youth Affairs
MOU	memorandum of understanding
NAPLAN	National Assessment Program — Literacy and Numeracy
NATSIHS	National Aboriginal and Torres Strait Islander Health Survey

NATSIS	National Aboriginal and Torres Strait Islander Survey
NATSISS	National Aboriginal and Torres Strait Islander Social Survey
NCVER	National Centre for Vocational Education Research
NDICP	National Deaths in Custody Program
NDSHS	National Drug Strategy Household Survey
NHMD	National Hospital Morbidity Database
NHMP	National Homicide Monitoring Program
NHMRC	National Health and Medical Research Council
NHS	National Health Survey
NICP	National Indigenous Cadetship Project
NIRA	National Indigenous Reform Agreement
NMDS	National Minimum Data Set
NNTT	National Native Title Tribunal
NP	National Partnership
NPC	National Preschool Census
NSSC	National Schools Statistics Collection
NSW	New South Wales
NT	Northern Territory
NTCE	Northern Territory Certificate of Education
NTER	Northern Territory Emergency Response
OEA	Office of Evaluation and Audit (Indigenous Programs)
OECD	Organisation for Economic Co-operation and Development
OID	Overcoming Indigenous Disadvantage
OIPC	Office of Indigenous Policy Coordination
ORIC	Office of the Registrar of Indigenous Corporations
PEDS	Parents Evaluation of Developmental Status
PISA	Program for International Student Assessment
PTA	Papunya Tula Artists
QAS	Queensland Ambulance Service
Qld	Queensland

RCH	Royal Children’s Hospital
RSE	Relative standard error
RTIO	Rio Tinto Iron Ore
SA	South Australia
SAAP	Supported Accommodation Assistance Program
SAAP NDCA	Supported Accommodation Assistance Program National Data Collection Agency
SCRCSSP	Steering Committee for the Review of Commonwealth/State Service Provision
SCRGSP	Steering Committee for the Review of Government Service Provision
STEP	Structured Training and Employment Program
STI	Sexually Transmitted Infection
SWAMS	South West Aboriginal Medical Service
TAFE	Technical and Further Education
Tas	Tasmania
TIMSS	Trends in International Mathematics and Science Study
UNICEF	United Nations Children’s Fund
VET	Vocational Education and Training
Vic	Victoria
VIAF	Victorian Indigenous Affairs Framework
WA	Western Australia
WAACHS	Western Australian Aboriginal Child Health Survey
WASTC	West Arnhem Shire Transitional Committee
WGIR	Working Group on Indigenous Reform
WHO	World Health Organisation

Glossary

- Aboriginal** A person who identifies as being of Aboriginal origin. May also include people who identify as being of both Aboriginal and Torres Strait Islander origin.
- Age standardised rates** Age standardised rates enable comparisons to be made between populations that have different age structures. Age standardisation is often used when comparing the Indigenous and non-Indigenous populations because the Indigenous population is younger than the non-Indigenous population. Outcomes for some indicators are influenced by age, therefore, it is appropriate to age standardise the data when comparing the results. When comparisons are not being made between the two populations, the data are not age standardised.
- CDEP** Community Development Employment Projects (CDEP) is an Australian Government funded program that provides activities for unemployed Indigenous people to develop work skills and move into employment. For statistical purposes the ABS classifies participants in CDEP as employed rather than as unemployed or not in the labour force. Some CDEP activities are similar to those undertaken by participants in Work for the Dole, while other activities are essential roles in municipal services, health care, community services, education and other sectors that would be considered employment in mainstream communities and organisations (see section 4.6).

**Core activity
limitation (ABS
definition)**

The ABS defines a core activity need for assistance as a profound or severe disability, that is, people needing help or assistance in one or more of the three core activity areas of self-care, mobility and communication, because of a disability (lasting six months or more), long term health condition (lasting six months or more) or old age (ABS 2006).

Self care, mobility and communication are defined as core activities. The ABS defines levels of core activity limitation as follows: mild, where a person has no difficulty with self care, mobility or communication, but uses aids or equipment; moderate, where a person does not need assistance, but has difficulty with self care, mobility or communication; severe, where a person sometimes needs assistance with self care, mobility or communication; and profound, where a person is unable to perform self care, mobility and/or communication tasks, or always needs assistance (see section 4.8).

Data in section 4.8 are from the ABS 2006 Census, which collected data on people needing assistance with core activities. However, information on the degree of core activity limitation was not collected.

**Confidence
intervals**

Survey data, for example data from the National Aboriginal and Torres Strait Islander Health Survey, are subject to sampling error because they are based on samples of the total population. Where survey data are shown in charts in this report, error bars are included, showing 95 per cent confidence intervals. There is a 95 per cent chance that the true value of the data item lies within the interval shown by the error bars. See ‘statistical significance’.

Disability (ABS definition)

A person has a disability if he or she has a limitation, restriction or impairment, which has lasted, or is likely to last, for at least six months and restricts everyday activities. These activities include: loss of sight (not corrected by glasses or contact lenses); or an aid to assist with, or substitute for, hearing is used; speech difficulties; shortness of breath or breathing difficulties causing restriction; chronic or recurrent pain or discomfort causing restriction; blackouts, fits, or loss of consciousness; difficulty learning or understanding; incomplete use of arms or fingers; difficulty gripping or holding things; incomplete use of feet or legs; nervous or emotional condition causing restriction; restriction in physical activities or in doing physical work; disfigurement or deformity; mental illness or condition requiring help or supervision; long-term effects of head injury, stroke or other brain damage causing restriction; receiving treatment or medication for any other long-term conditions or ailments and still restricted; or any other long-term conditions resulting in a restriction. See ‘core activity limitation’.

ICD

ICD is the International Statistical Classification of Diseases and Related Health Problems, endorsed by the World Health Organization (WHO). It is primarily designed for the classification of diseases and injuries with a formal diagnosis. ICD-10-AM is the Australian modification of the tenth revision and was adopted for Australian use from 1 January 1999 (superseding ICD-9).

Equivalised household income

Equivalised household income adjusts the actual incomes of households to make households of different sizes and compositions comparable. It results in a measure of the economic resources available to members of a standardised household (see section 4.9).

Excess deaths

Calculated by subtracting expected Indigenous deaths (based on age, sex and cause specific rates for non-Indigenous Australians) from the number of actual cause specific deaths in the Indigenous population.

Income ranges

See ‘quintiles’.

Infant mortality	Deaths of children between birth and exactly one year of age.
Inner regional	See ‘remoteness areas’.
Hospitalisation	Hospitalisations recorded in this report are called ‘hospital separations’ in many other publications using hospital statistics. A ‘separation’ refers to an episode of care, which can be a total hospital stay (from admission to discharge, transfer or death), or a portion of a hospital stay beginning or ending in a change of type of care (for example, from acute to rehabilitation). It is also defined as the process by which an admitted patient completes an episode of care by being discharged, dying, transferring to another hospital or changing type of care. For measuring a hospital’s activity, separations are used in preference to admissions because diagnoses and procedures can be more accurately recorded at the end of a patient’s stay and patients may undergo more than one separation from the time of admission. Admitted patients who receive same day procedures (for example, renal dialysis) are recorded in hospitalisation statistics.
Indigenous status not stated/ Indigenous status unknown	Where a person’s Indigenous origin has either not been asked or not recorded.
Indigenous	A person of Aboriginal and/or Torres Strait Islander origin who identifies as an Aboriginal and/or Torres Strait Islander.
Inner regional	See ‘remoteness areas’.
Jurisdiction	The Australian Government or a State or Territory Government and areas that it has legal authority over.

Labour force

The labour force is the most widely used measure of the economically active population or the formal supply of labour. It is a measure of the number of people contributing to, or willing to contribute to, the supply of labour and, as defined by the ABS, comprises two mutually exclusive categories of population: the employed (people who have worked for at least one hour in the reference week, including those who have participated in Community Development Employment Projects (CDEP)), and the unemployed (people who are without work, but are actively looking for work and available to start work within four weeks).

Major cities

See 'remoteness areas'.

Mean and median income measures

A mean income value is the average value of a set of income data. It is calculated by adding up all the values in the set of data and dividing that sum by the number of values in the dataset. Median value is the middle point of a set of income data. Lining up the values in a set of income data from largest to smallest, the one in the centre is the median income value (if the centre point lies between two numbers, the median value is the average value of the two numbers).

Median value is a better measure for income than mean as mean income values are more influenced by extreme income values (including the lowest and highest incomes). Therefore, median income value is a more accurate measure of income for an average household or average individual income earner.

For example, the gross monthly incomes for 9 households are: \$10 000, \$5000, \$2500, \$1500, \$1500, \$1500, \$1000, \$450, \$450.

The **mean income value** among the 9 households is $(\$10\,000 + \$5\,000 + \$2500 + \$1500 + \$1500 + \$1500 + \$1000 + \$450 + \$450) / 9 = \2655.6 . The **median income value** is the fifth value (the mid point), \$1500.

Non-Indigenous	A person who does not identify as Aboriginal and/or Torres Strait Islander.
Non-school qualification	Non-school qualifications include vocational or higher education qualifications.
Non-remote	See ‘remoteness areas’.
Outer regional	See ‘remoteness areas’.
Perinatal mortality	Death of an infant within 28 days of birth (neonatal death) or of a fetus (unborn child) that weighs at least 400 grams of that is of a gestational age of at least 20 weeks.
Quintiles	Income quintiles are groups that result from ranking all people in the population in ascending order (from the lowest to the highest) according to their incomes and then dividing the population into five equal groups, each comprising 20 per cent of the population. In addition to use in measuring income distribution, quintiles can also be used for grouping other data.
Rate ratio	The rate ratio is the rate for the Indigenous population divided by the rate for the non-Indigenous population. See ‘relative Indigenous disadvantage’.
Regional	See ‘remoteness areas’.
Relative Indigenous disadvantage	Relative Indigenous disadvantage is measured by comparing the rate of Indigenous disadvantage (for example, the proportion of Indigenous people reporting they do not have a non-school qualification) with the rate for the non-Indigenous population. See ‘rate ratio’.
Relative standard error (RSE)	The relative standard error (RSE) of a survey data estimate is a measure of the reliability of the estimate and depends on both the number of people giving a particular answer in the survey and the size of the population. The RSE is expressed as a percentage of the estimate. The higher the RSE, the less reliable the estimate. Relative standard errors for survey estimates are included in the attachment tables. See also ‘statistical significance’.

Remote	See ‘remoteness areas’.
Remoteness	See ‘remoteness areas’.
Remoteness areas	<p>Remoteness areas are defined in the Australian Standard Geographical Classification (ASGC) developed by the ABS. The ASGC remoteness classification identifies a place in Australia as having a particular degree of remoteness. The remoteness of each place is determined using the Accessibility/Remoteness Index of Australia (ARIA). The ABS generates an average ARIA score for each location based on its distance from population centres of various sizes. Locations are then added together to form the remoteness areas in each State and Territory. Remoteness areas comprise the following six categories:</p> <ul style="list-style-type: none"> • major cities of Australia • inner regional Australia • outer regional Australia • remote Australia • very remote Australia • migratory regions (comprising off-shore, shipping and migratory places). <p>The aim of the ASGC remoteness structure is not to provide a measure of the remoteness of a particular location but to divide Australia into five broad categories (excluding migratory regions) of remoteness for comparative statistical purposes. A map of Australia showing geographic areas according to each of the five remoteness categories is included in section 8.2.</p>

**Statistical
significance**

Statistical significance is a measure of the degree of difference between survey data estimates. The potential for sampling error — that is, the error that occurs by chance because the data are obtained from only a sample and not the entire population — means that reported responses may not indicate the true responses.

Using the relative standard errors (RSE) of survey data estimates, it is possible to use a formula to test whether the difference is statistically significant. If there is an overlap between confidence intervals for different data items, it cannot be stated for certain that there is a statistically significant difference between the results. See ‘confidence intervals’ and ‘relative standard error’.

**Torres Strait
Islander people**

People who identify as being of Torres Strait Islander origin. May also include people who identify as being of both Torres Strait Islander and Aboriginal origin.

**Universities
Admissions Index
(UAI)**

Eligibility for admission to a public university in Australia on the basis of merit is determined in each State and Territory through the use of a score — the UAI. Calculating the UAI varies between each State and Territory.

Very remote

See ‘remoteness areas’.



PRIME MINISTER
CANBERRA

Reference: B08/2004

11 MAR 2009

Mr Gary Banks AO
Chairman
Steering Committee for the Review of Government Service Provision
C/- Productivity Commission
Locked Bag 2
COLLINS STREET EAST VIC 8003

Dear Mr Banks

I am writing in my capacity as Chair of the Council of Australian Governments (COAG) to convey to you updated Terms of Reference for the Overcoming Indigenous Disadvantage (OID) Report.

Since it was first published in 2003, the OID report has established itself as a source of high quality information on the progress being made in addressing Indigenous disadvantage across a range of key indicators. The OID report has been used by Governments and the broader community to understand the nature of Indigenous disadvantage and as a result has helped inform the development of policies to address Indigenous disadvantage. The OID report is highly regarded and I commend the Steering Committee for the Review of Government Services (the Steering Committee) for its efforts in preparing the report every two years.

In December 2007 and March 2008, COAG committed to six ambitious targets to close the gap in Indigenous disadvantage:

- closing the life expectancy gap within a generation;
- halving the gap in the mortality rate for Indigenous Children under five within a decade;
- ensuring all Indigenous four year olds in remote communities have access to quality early childhood programs within five years;
- halving the gap in reading, writing and numeracy achievements for children within a decade;
- halving the gap for Indigenous students in Year 12 attainment rates or equivalent attainment by 2020; and
- halving the gap in employment outcomes within a decade.

Without high quality data, it is impossible to understand where we are headed in terms of overcoming Indigenous disadvantage. Through the National Indigenous Reform Agreement, all Governments have committed to ensuring their data is of high quality, and moreover, is available for reporting purposes. This undertaking has been made with specific reference to the need for data to be provided for the OID report.

In August 2008, the Chair of the COAG Working Group on Indigenous Reform (WGIR), the Hon Jenny Macklin MP, wrote to you requesting the Steering Committee work with the WGIR to align the OID framework to the Closing the Gap targets.

As a result, on 29 November 2008, COAG agreed a new framework for the OID report which takes account of the six ambitious targets to Close the Gap in Indigenous disadvantage. The Steering Committee should take account of this new framework in preparing future OID reports thereby ensuring the report continues to provide Governments and the broader community with an understanding of the progress being made to overcome Indigenous disadvantage.

I have copied this letter to the Treasurer, Ms Macklin and the Chair of MCATSIA the Deputy Premier of the Government of Western Australia and Minister for Indigenous Affairs, the Hon Dr Kim Hames MLA.

Yours sincerely



Kevin Rudd

Overview

In 2002, Australian governments committed themselves collectively to overcoming the disadvantage experienced by Indigenous Australians. As part of this commitment, governments agreed to a regular public report on progress — the *Overcoming Indigenous Disadvantage: Key Indicators* report. This is the fourth edition of that report.

This report is more than a collection of data. It draws on extensive evidence to identify the areas where government policies will have the greatest impact. Over time, the report measures the effects of those policies — and reveals where more effort is required. This was recognised in the updated terms of reference for this report, provided this year by the Prime Minister on behalf of the Council of Australian Governments (COAG):

The OID report has been used by Governments and the broader community to understand the nature of Indigenous disadvantage and as a result has helped to inform the development of policies to address Indigenous disadvantage.

Governments acting alone are unable to overcome Indigenous disadvantage. Meaningful change will also require commitment and actions by Indigenous people themselves, with support from the private and non-profit sectors and the general community, as well as governments. This report provides Indigenous people with a clear summary of current outcomes, and some examples of programs and policies that are improving those outcomes.

The report has three main parts:

- this Overview, which summarises the report's key messages
- the main report, which provides the evidence base supporting the report's framework and more detailed information on outcomes
- attachment tables (available electronically), which present and expand on the data used in the report.

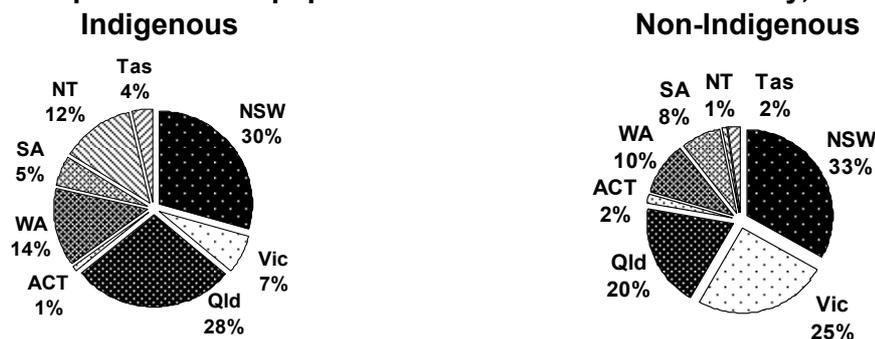
How many people?

In 2006, the estimated resident Indigenous population of Australia was 517 000, out of a total population of 21 million people (2.5 per cent of the Australian population). In the Indigenous population, 463 700 (90 per cent) were of Aboriginal origin only, 33 300 (6 per cent) were of Torres Strait Islander origin only and 20 100 (4 per cent) were of both origins.

Throughout this report, the term 'Indigenous' is used to refer to Aboriginal people and Torres Strait Islander people. Although the situations of Aboriginal people and Torres Strait Islander people can be very different, the relatively small number of Torres Strait Islander people makes it difficult to report separately about their experiences. Available data are summarised in the section 'Outcomes for Torres Strait Islander people'.

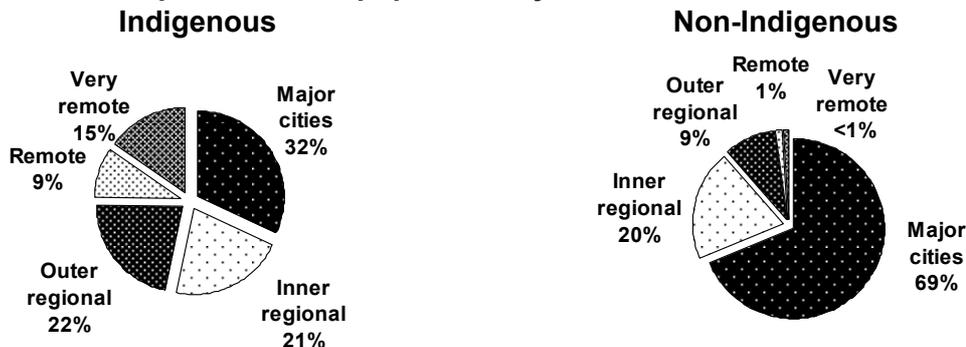
A higher proportion of both Indigenous and non-Indigenous populations lived in NSW than other states and territories (30 per cent and 33 per cent respectively in 2006). There were 194 000 Indigenous children aged 14 years and under in 2006 (38 per cent of all Indigenous people, compared with 19 per cent for the non-Indigenous population).

Proportion of the population in each State and Territory, 2006



An estimated 32 per cent of Indigenous people lived in major cities in 2006. A further 21 per cent lived in inner regional areas, and 22 per cent in outer regional areas. An estimated 9 per cent lived in remote areas and 15 per cent in very remote areas. Almost 90 per cent of non-Indigenous people lived in major cities or inner regional areas.

Proportion of the population by remoteness area, 2006



Source: Figures A3.2 and A3.3 of the main report. See appendix 3 of the main report for more information.

What has changed?

Our ability to measure changes in outcomes over time varies. For some indicators, up to ten years of data are available. For other indicators, information from the 2006 Census can be compared to information from the 2001 Census. However, for some important indicators, such as life expectancy, there are as yet no trend data.

Because of delays in data collection and time lags between policy implementation and social outcomes, information in this report may not reflect recent government actions (such as aspects of the Northern Territory Emergency Response) or recent economic conditions (such as the global economic slowdown). Future editions of this report will include information on current events.

Across virtually all the indicators in this report, there are wide gaps in outcomes between Indigenous and non-Indigenous Australians. However, the report shows that the challenge is not impossible — in a few areas, the gaps are narrowing. However, many indicators show that outcomes are not improving, or are even deteriorating. There is still a considerable way to go to achieve COAG's commitment to close the gap in Indigenous disadvantage.

Overall, Indigenous people have shared in Australia's economic prosperity of the past decade or so, with improvements in employment, incomes and measures of wealth such as home ownership. However, in almost all cases, outcomes for non-Indigenous people have also improved, meaning the gaps in outcomes persist. The challenge for governments and Indigenous people will be to preserve these gains and close the gaps in a more difficult economic climate.

COAG targets

- *Life expectancy* — there are no trend data for life expectancy except for the NT, where research shows that both Indigenous and non-Indigenous life expectancy increased between 1967 and 2004. Over this period, the gap in life expectancy between Indigenous and non-Indigenous males increased slightly and decreased for females.
- *Young child mortality* — Indigenous infant (0–12 months) mortality rates have improved in recent years, while child (0–4 years) mortality rates have remained relatively constant. Mortality rates for Indigenous infant and young children remain two to three times as high as those for all infants and young children.
- *Early childhood education* — there are limited data available on Indigenous preschool participation and it is difficult to draw conclusions about participation rates.

-
- *Reading, writing and numeracy* — there has been negligible change in Indigenous students' performance over the past ten years, and no closing of the gaps between Indigenous and non-Indigenous students' performances. A lower proportion of Indigenous than non-Indigenous students in all year levels achieved NAPLAN national minimum standards in reading, writing and numeracy in 2008.
 - *Year 12 attainment* — the proportion of Indigenous 19 year olds who had completed year 12 or equivalent increased from 31 to 36 per cent between 2001 and 2006. However, the non-Indigenous rate increased from 68 to 74 per cent, leaving the gap unchanged. (In April 2009, COAG decided that in future this target would be measured for people aged 20–24 years rather than 19 years.)
 - *Employment* — the employment-to-population ratio for Indigenous people increased from 43 per cent to 48 per cent between 2001 and 2006. However, similar increases for non-Indigenous people left the 24 percentage point gap unchanged.

Headline indicators

- *Post secondary education* — post secondary attainment to certificate level III or above increased slightly for Indigenous and non-Indigenous people across all age groups between 2001 and 2006.
- *Disability and chronic disease* — the level of need for assistance with a core activity among Indigenous people was almost twice that for non-Indigenous people in 2006. However, no trend data are available.
- *Household and individual income* — after adjusting for inflation, median incomes for both Indigenous and non-Indigenous households increased by around 8 per cent between 2001 and 2006. Median incomes of Indigenous households were 65 per cent of those of non-Indigenous households in both 2001 and 2006.
- *Substantiated child abuse and neglect* — the rate of substantiated notifications for child abuse or neglect increased for both Indigenous and non-Indigenous children between 1999-2000 and 2007-08. However, the gap widened, with the Indigenous rate increasing from 4 to 6 times the non-Indigenous rate.
- *Family and community violence* — there are limited data on the prevalence of family and community violence, but several recent reports have found violence to be a continuing issue for many Indigenous communities.
- *Imprisonment and juvenile detention* — the imprisonment rate increased by 46 per cent for Indigenous women and by 27 per cent for Indigenous men between 2000 and 2008. After adjusting for age differences, Indigenous adults

were 13 times as likely as non-Indigenous adults to be imprisoned in 2008, compared to 10 times in 2000. The Indigenous juvenile detention rate increased by 27 per cent between 2001 and 2007. Indigenous juveniles were 28 times as likely to be detained than non-Indigenous juveniles as at 30 June 2007.

Strategic areas for action

There was no change in the Indigenous teenage birth rate between 2004 and 2007. The Indigenous rate was over four times that for non-Indigenous teenagers. High hospitalisation rates for Indigenous 0–4 year olds were generally unchanged between 2004-05 and 2006-07.

There has been a reduction in the proportion of young Indigenous people neither at school nor employed.

Overall, the rate of hospitalisation for potentially preventable diseases increased for Indigenous people between 2004-05 and 2006-07. ‘Lifestyle’ issues, relating to obesity, nutrition, tobacco and alcohol use and drug and substance misuse remain key contributors to poor outcomes.

There has been some improvement in housing overcrowding, with the proportion of Indigenous people living in overcrowded housing falling from 31 per cent to 27 per cent between 2001 and 2006. There have also been improvements in access to clean water and functioning sewerage and electricity services in discrete Indigenous communities. However, there was little change in hospitalisations for diseases associated with poor environmental health between 2004-05 and 2006-07.

Other social and justice outcomes have shown no improvement. There was a slight increase in hospitalisations of Indigenous people for self-harm between 2004-05 and 2006-07, and involvement with the criminal justice system has worsened.

The reporting framework

The report’s framework is based on the best available evidence about the underlying causes of disadvantage, in order to focus policy attention on prevention, as well as addressing existing disadvantage.

At the top of the framework, three closely linked priority outcomes reflect a vision for how life should be for Indigenous people. These outcomes have been endorsed by both Indigenous people and governments.

It is difficult to measure progress or to hold governments accountable for achieving such broadly stated priority outcomes. So the framework includes two layers of measurable indicators. The logic of the framework is that, over time, improvement in these indicators will demonstrate progress toward achieving the priority outcomes.

The first layer of indicators is made up of the six Closing the Gap targets set by COAG, and six headline indicators previously developed by the Steering Committee in consultation with Indigenous people and researchers. Together, the COAG targets and headline indicators provide a high level summary of the state of Indigenous disadvantage. However, whole-of-government action over a long period will be necessary before significant progress can be made in many of these indicators.

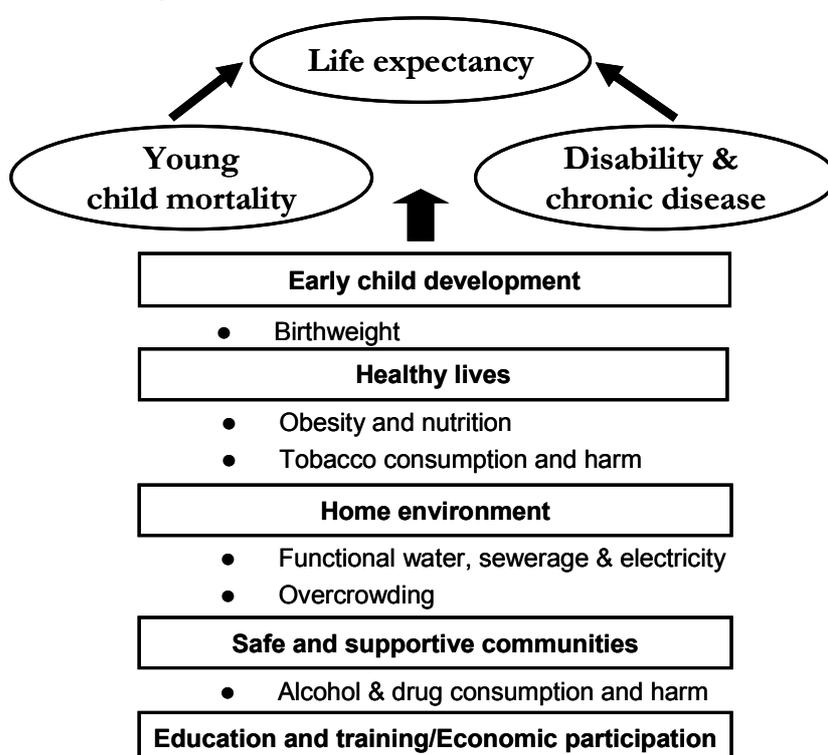
Beneath the COAG targets and headline indicators, therefore, are seven ‘strategic areas for action’. The evidence shows that action is needed in these areas of policy if the COAG targets and headline indicators are to be achieved. For each, a small number of ‘strategic change indicators’ inform governments and the community about progress being made in the short-term and help to identify specific policy areas where more attention is needed.

The logic behind the framework is that the strategic change indicators will measure the outcomes of targeted policies in each strategic area for action. Over time, improvements in the strategic change indicators will lead to changes in the COAG targets and headline indicators, demonstrating progress toward the priority outcomes.

The strategic areas are deliberately not intended to mirror typical government service agencies. In some cases, a specific service area can be expected to play a major role, but in all strategic areas, more than one government agency will have to take action in order to achieve better outcomes. Conversely, sometimes a single, well-targeted action by one agency can lead to improvements across many strategic areas.

Disadvantage can have multiple causes

The important COAG target of 'Life expectancy' is clearly linked to the 'Young child mortality' target and the 'Disability and chronic disease' headline indicator. In turn, these outcomes will be influenced by outcomes such as 'Birthweight' and 'Injury and preventable disease' in the 'Early child development' strategic area for action, and 'Obesity and nutrition' and 'Tobacco consumption and harm' in the 'Healthy lives' strategic area. But actions in these areas must be supported by actions to address outcomes such as 'Access to clean water and functional sewerage and electricity' and 'Overcrowding in housing' in the 'Home environment' strategic area, and 'Alcohol and drug consumption and harm' under the 'Safe and supportive communities' strategic area. Actions must also address other social determinants of health in the education and employment areas.

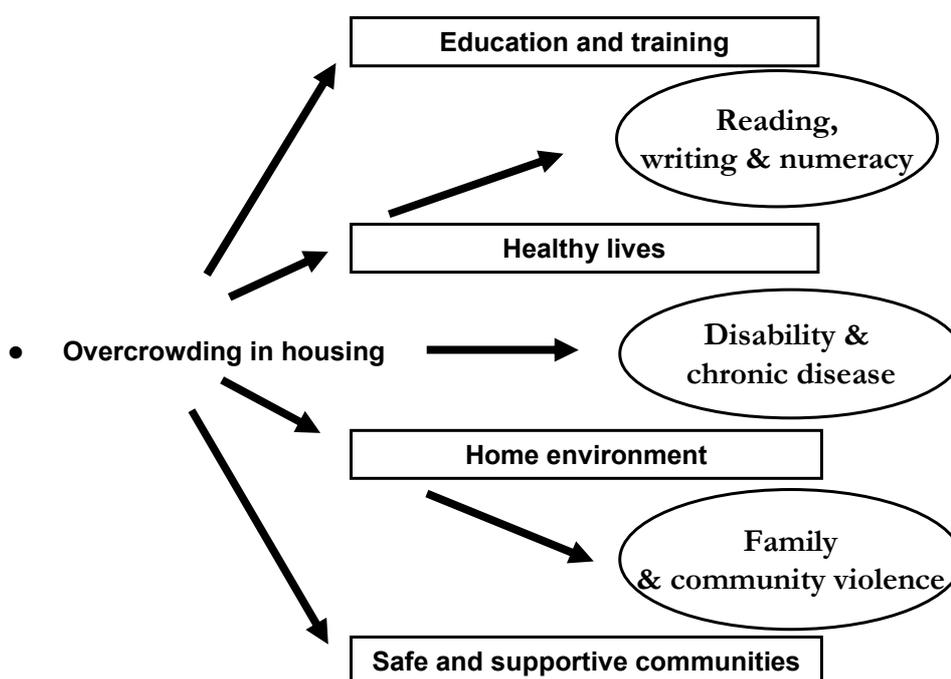


Things that work

Not everything that matters can be captured in indicators, and some information is better presented in words, rather than numbers. In particular, community level change may not show up in State or national data. The main report includes many examples of 'things that work' — activities and programs that are making a difference, often at the community level. This Overview summarises these 'things that work' in the discussion of each COAG target, headline indicator or strategic area.

Some actions can have multiple effects

Reducing overcrowding can affect outcomes in the 'Education and training', 'Healthy lives', 'Home environment' and 'Safe and supportive communities' strategic areas for action, and can contribute to the COAG target of 'Reading, writing and numeracy', and headline indicators of 'Disability and chronic disease' and 'Family and community violence'. Although other influences are also important in each of these areas, there is sufficient evidence for education, health and justice departments to be concerned about housing issues.



Analysis of the 'things that work', together with wide consultation with Indigenous people and governments, identified the following 'success factors':

- cooperative approaches between Indigenous people and government — often with the non-profit and private sectors as well
- community involvement in program design and decision-making — a 'bottom-up' rather than 'top-down' approach
- good governance — at organisation, community and government levels
- ongoing government support — including human, financial and physical resources.

The lack of these factors can often contribute to program failures.

Developments in reporting

Consultations

This report has evolved over time, and consultations with Indigenous people, government agencies and researchers have made important contributions to its development. Initial consultations in 2002-03 provided the foundation for developing the framework. Following the release of each report, consultations have sought feedback on the report and ideas for future improvements. Common themes from consultations have included:

- broad support from Indigenous people — who generally considered that the indicators reflected the issues affecting their communities
- endorsement of the case studies of ‘things that work’ — participants encouraged further analysis of the ‘success factors’ behind the ‘things that work’
- recognition of the importance of cultural issues to the wellbeing of Indigenous Australians — but acceptance of the difficulty of developing further indicators
- a general view that improving governance remains critically important — for governments as well as Indigenous organisations and communities.

COAG developments

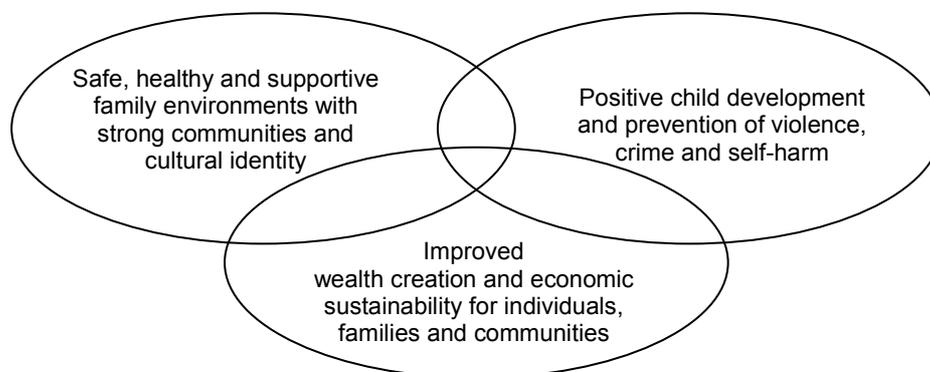
Since the 2007 report, COAG has renewed its commitment to addressing Indigenous disadvantage. In December 2007, COAG identified Indigenous issues as one of seven priority areas of national reform. COAG set six high level targets for closing the gaps in Indigenous outcomes, and established a high level Working Group on Indigenous Reform (WGIR).

The WGIR developed a Closing the Gaps framework to achieve the targets. The WGIR framework was based on the indicators from the 2007 Overcoming Indigenous Disadvantage report, but developed a slightly different structure, in recognition of the specific areas of reform highlighted by COAG.

To keep this report consistent with COAG developments, the Overcoming Indigenous Disadvantage strategic framework has been aligned with the WGIR Closing the Gaps framework. COAG endorsed the aligned framework at its meeting in November 2008, and in March 2009, the Prime Minister updated the terms of reference to take account of the new framework (p. XXII).

The framework

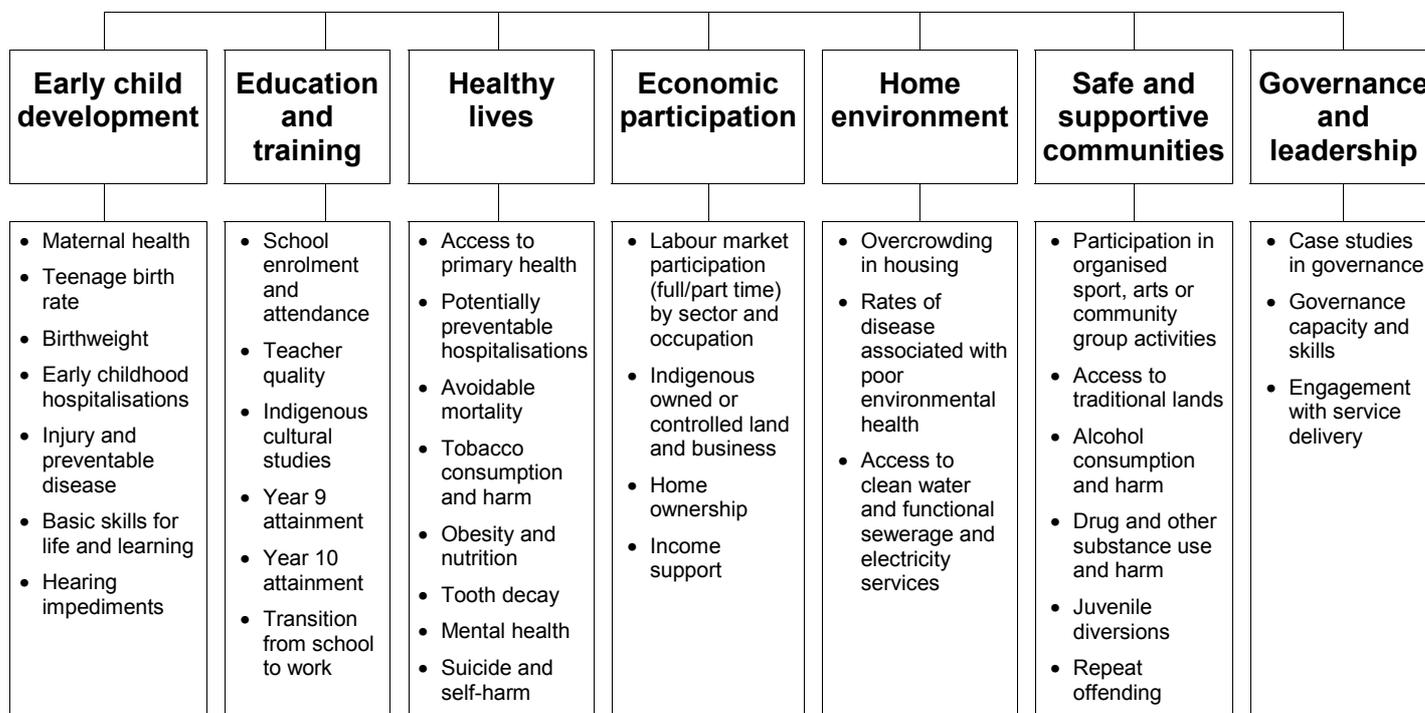
1. Priority outcomes



2. COAG targets and headline indicators

COAG targets	Headline indicators
<ul style="list-style-type: none"> • Life expectancy • Young child mortality • Early childhood education • Reading, writing and numeracy • Year 12 attainment • Employment 	<ul style="list-style-type: none"> • Post secondary education — participation and attainment • Disability and chronic disease • Household and individual income • Substantiated child abuse and neglect • Family and community violence • Imprisonment and juvenile detention

3. Strategic areas for action



At first glance, the strategic framework may not appear very different to previous reports. The broad structure remains the same, but the alignment involved:

- retaining the priority outcomes as the shared ‘vision’
- highlighting the COAG targets as specific government priorities within the headline indicators
- renaming the strategic areas for action to reflect the building blocks for reform identified in the WGIR framework
- retaining all previous OID indicators, and including additional indicators and measures from the WGIR framework.

COAG targets and headline indicators

The first part of the report focuses on the six COAG targets and six headline indicators. These are high level measures of the social and economic outcomes that must improve, in order to close the gap in Indigenous outcomes and achieve the vision of an Australia in which Indigenous people enjoy the same opportunities and standard of living as other Australians.

COAG targets	Headline indicators
<ul style="list-style-type: none">• Life expectancy at birth• Young child mortality• Early childhood education• Reading, writing and numeracy• Year 12 attainment• Employment	<ul style="list-style-type: none">• Post secondary education — participation and attainment• Disability and chronic disease• Household and individual income• Substantiated child abuse and neglect• Family and community violence• Imprisonment and juvenile detention

Life expectancy

Life expectancy is a broad indicator of a population’s long-term health and wellbeing. It can be affected by outcomes across the framework — access to effective health care, levels of income and education, and environmental factors such as clean water and adequate sanitation. Lifestyle factors are also important, including nutrition, exercise and use of drugs, tobacco and alcohol.

This indicator estimates the average number of years a person born between 2005 and 2007 could expect to live, if there were no change to population death rates

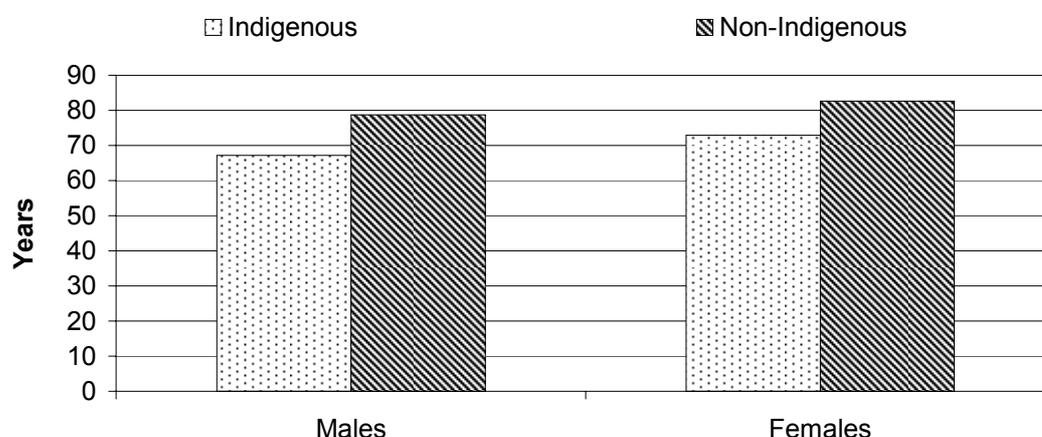
throughout his or her lifetime. The estimate requires complex calculations and good data about death rates. Changes in methodology and uncertainty about the quality of the Indigenous deaths data used in previous calculations mean that no trend data are available for Indigenous life expectancy — the estimates in this report cannot be compared to the estimates published in the 2007 or earlier reports.

Box 1 KEY MESSAGES — Life expectancy

Closing the Indigenous life expectancy gap within a generation is a COAG target.

- Based on combined data for Australia for 2005–2007:
 - estimated life expectancy at birth for Indigenous males was 67 years, and for Indigenous females, 73 years. The corresponding estimates for non-Indigenous males and females were 79 years and 83 years, respectively (table 4.1.1 and figure 4.1.1)
 - the gap between Indigenous and non-Indigenous life expectancy at birth was 12 years for males and 10 years for females (table 4.1.1).
- Age specific death rates were higher for Indigenous than non-Indigenous people for all age groups for 2005–2007 (table 4.1.2).
- In Queensland, WA, SA and the NT combined, after adjusting for age differences in the two populations, for 2002–2006:
 - the Indigenous all causes mortality rate was twice the rate for non-Indigenous people (table 4.1.3)
 - Indigenous death rates were nine times as high as non-Indigenous rates for diabetes, six times as high for cervical cancer, four times as high for kidney diseases and three times as high for digestive diseases (table 4.1.4).

Life expectancy at birth, 2005–2007



Source: Figure 4.1.1 in the main report.

Young child mortality

Young child mortality (particularly infant, or 0 to 1 year old, mortality) is an indicator of the health and wellbeing of a population. Most childhood deaths occur during the first year of life. Far fewer deaths occur in the 1 to 4 year old age group.

The mortality rate for Indigenous infants is improving, but is still much higher than for infants in the rest of the population. Infant mortality is affected by many other outcomes in this report — including the socioeconomic status, age and nutrition of mothers, and the birthweight of babies. Young child mortality (0 to 4) is further influenced by outcomes such as substantiated child abuse and neglect, injury and preventable disease, and access to clean water and adequate sanitation.

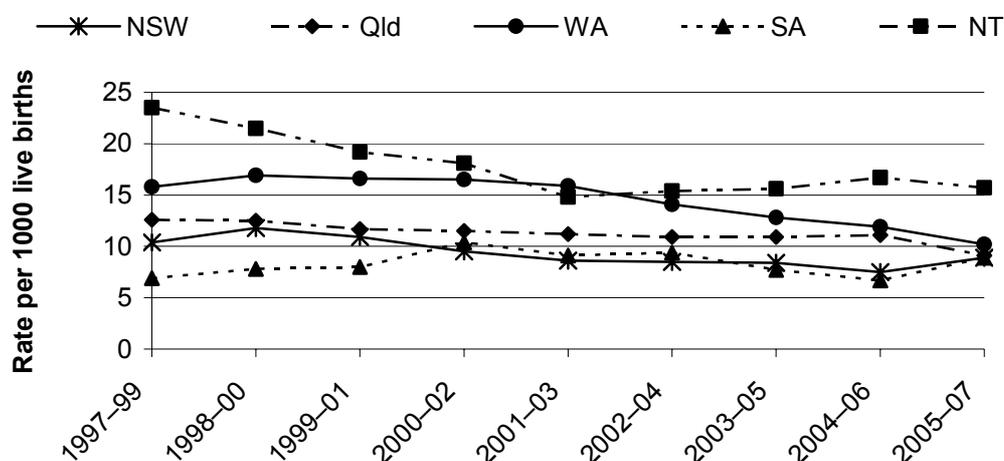
Box 2 **KEY MESSAGES — Young child mortality**

Halving the gap in mortality rates for children under five within a decade is a COAG target.

- Indigenous perinatal¹ and infant (within one year) mortality rates improved in recent years in most states and territories for which data are available, but remain two to three times the non-Indigenous rates (figures 4.2.1 to 4.2.4).
- Indigenous child mortality rates for the 1–4 years and 0–4 years age groups remained relatively constant in the period 1997–99 to 2005–07 at between two and four times the non-Indigenous rates (figures 4.2.5 and 4.2.7).

¹ Perinatal mortality is the death of an infant within 28 days of birth (neonatal death) or of a fetus (unborn child) that weighs at least 400 grams or that is of a gestational age of at least 20 weeks.

Indigenous infant mortality, 1997–99 to 2005–07^a



^a Small numbers of Indigenous infant deaths contribute to variability in the reported rates.

Source: Figure 4.2.3 in the main report.

Box 3 Things that work

- The Safe Sleeping (SIDS prevention) project in Indigenous communities, WA, aims to promote awareness of the risk factors associated with SIDS (box 4.2.2).
- The NSW Aboriginal Maternal and Infant Health Strategy, operating since 2001, improves access to culturally appropriate maternity services for Aboriginal mothers (box 4.2.2).

Early childhood education

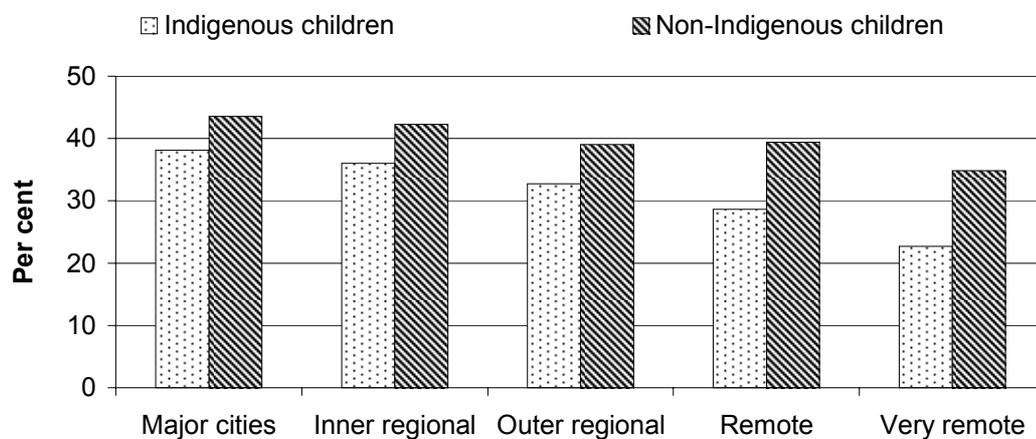
Children's experiences in their early years influence lifelong learning, behaviour and health. High quality early childhood education can help develop the social and cognitive skills necessary for achievement at school and later in life. Early childhood education can be particularly important for children from disadvantaged backgrounds, and can provide an opportunity for early detection and treatment of hearing, language, visual and behavioural problems.

Box 4 KEY MESSAGES — Early childhood education

Providing all Indigenous four year olds with access to quality early childhood education within five years, including in remote communities, is a COAG target.

- There is no single source for data on Indigenous preschool participation and it is therefore difficult to draw conclusions about participation rates.

Preschool participation rates, children aged 3–5 years, 2006



Source: Figure 4.3.1 in the main report.

Box 5 Things that work

- The Yappera Centre in metropolitan Melbourne assists Koori families to participate in childcare and kindergarten (box 4.3.2).
- The Bound for Success Pre-Prep in Indigenous Communities program in Queensland provides high quality, consistent early childhood education programs for children aged three and a half to four and a half in 29 Cape York and Torres Strait communities and six other Aboriginal communities (box 4.3.2).
- For over 30 years, SA preschool policy has enabled Aboriginal 3 year olds to access state preschools. Qualified teachers and early childhood workers emphasise working with families and communities to develop shared understandings, positive relationships and culturally inclusive practices (box 4.3.2).
- The Aboriginal Early Years Program (Tasmania) has been successful in connecting Indigenous families with preschool services and has helped parents stimulate their children's learning (box 4.3.2).
- A NT Government funded mobile program provides a regular preschool program for Indigenous children in six remote sites (box 4.3.2).
- The Mobile Early Childhood Service, funded by the Australian Government, provides early childhood services for children aged 0–5 years in the NT (box 4.3.2).

Reading, writing and numeracy

Improved educational outcomes are key to overcoming many aspects of disadvantage. Participation in year 12 and entry into higher education rely on strong literacy and numeracy skills. School leavers who lack these skills face poor employment prospects. There are also links between education, income and health.

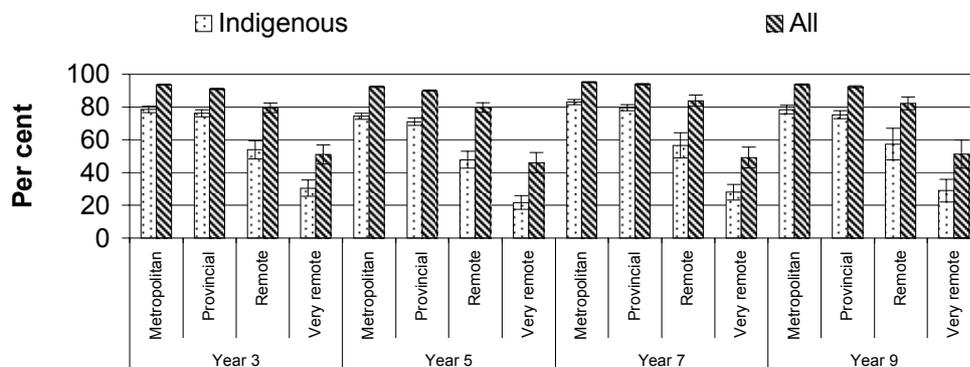
There is little if any gap in cognitive ability between young Indigenous and non-Indigenous children. However, a gap in school performance is evident as early as year 1. This gap widens over time, and as the degree of remoteness increases.

Box 6 KEY MESSAGES — Reading, writing and numeracy

Halving the gap for Indigenous students in reading, writing and numeracy within a decade is a COAG target.

- There were generally no significant changes in Indigenous year 3, 5 and 7 students' performance against the national benchmarks for reading, writing and numeracy between 1999 (2001 for year 7 students) and 2007 (figures 4.4.2, 4.4.4 and 4.4.6).
- A substantially lower proportion of Indigenous than non-Indigenous students in all year levels achieved the national minimum standards for reading, writing and numeracy in 2008 (figures 4.4.1, 4.4.3, 4.4.5 and 4.4.7).
- Indigenous students' learning outcomes declined, and the gap between Indigenous students and all students increased, as remoteness increased (figure 4.4.9).
- As Indigenous students progressed through school, the proportion who achieved the national benchmarks decreased for reading (from year 3 to year 5) and numeracy (from year 3 to year 5, and year 5 to year 7) (figure 4.4.8).
- Participation rates in national tests are lower for Indigenous students than for all students, and the gap increases as year levels increase (tables 4A.4.11; 23; 35; 47).

Students achieving the reading standard, by remoteness, 2008^a



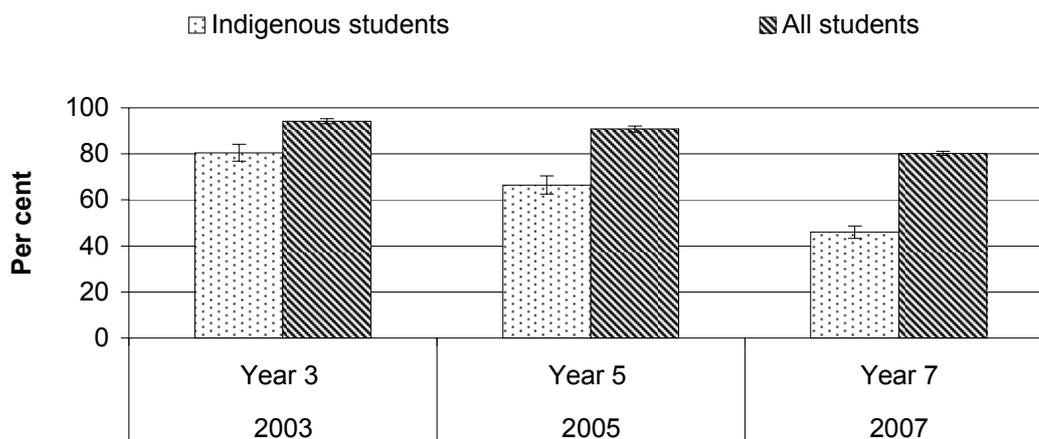
^a These data are subject to measurement error. See source in main report.

Source: Figure 4.4.9 in the main report.

Box 7 Things that work

- The MULTILIT program at Coen State School (Cape York, Queensland) provides the least proficient readers with intensive, systematic instruction in phonics for 17 to 18 weeks by specialist teachers (box 4.4.2).
- MINILIT is a modified version of MULTILIT, offered to younger students in years 1 and 2 at the Redfern Tutorial Centre (NSW) (box 4.4.2).
- The Scaffolding Literacy Program in the NT (further developed as the National Accelerated Literacy Program), requires students to study one quality written text per term. The text is broken down into smaller parts in a group learning environment until students can think like the writer and imitate language (box 4.2.2).
- Finding Your Pathway into School and Beyond at two primary schools in Tasmania aims to improve literacy and has improved attendance rates (box 4.4.2).

Students who achieved the numeracy benchmark^a



^a These data are subject to measurement error. See source in main report.

Source: Figure 4.4.8 in the main report.

Year 12 attainment

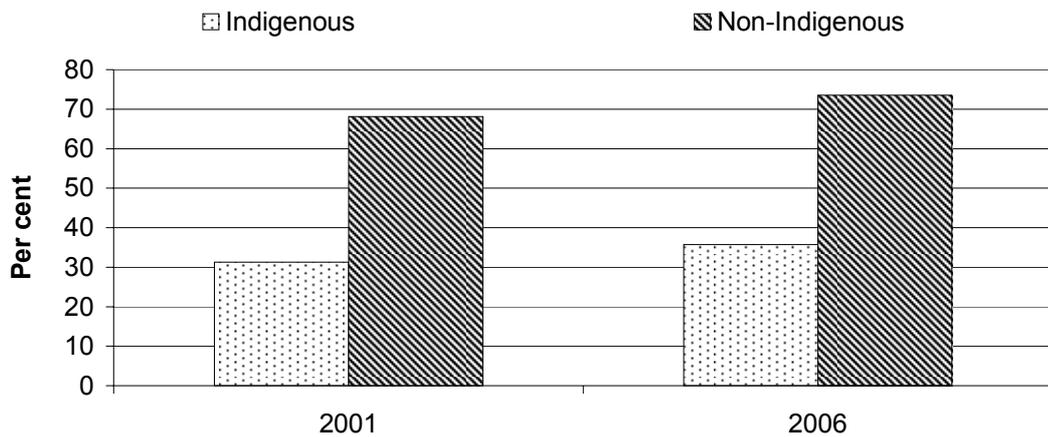
There are strong links between education, income and health. Students who stay on at school and complete year 12 or equivalent are more likely to go on to further education and training, and also have better employment options. In the long run, people who have completed secondary education are likely to encourage their children to do the same, so that the benefits flow from one generation to another.

Box 8 KEY MESSAGES — Year 12 attainment

At least halving the gap for Indigenous students in year 12 or equivalent attainment by 2020 is a COAG target.

- The proportion of Indigenous 19 year olds who had completed year 12 or equivalent (36 per cent) was half that of non-Indigenous 19 year olds (74 per cent) in 2006 (table 4.5.1).
- Apparent retention rates for Indigenous students from the beginning of secondary school to year 12 increased from 40 per cent in 2004 to 47 per cent in 2008, while the non-Indigenous rate remained steady around 76 per cent (figure 4.5.1).

Nineteen year olds who had completed year 12 and/or certificate level II



Source: Table 4.5.1 in the main report.

Box 9 Things that work

- *Deadly Vibe*, a magazine for Indigenous students published by Vibe Australia (an Aboriginal media agency) with funding from the Australian Government, encourages Indigenous students to stay at school (box 4.5.2).
- The Cape York Institute's Higher Expectations Program and St Joseph's Indigenous fund are examples of successful non-government sector sponsorship of scholarship programs for children to board at private schools (box 4.5.2). The St Joseph's Indigenous fund offers scholarships to Indigenous boys to attend St Joseph's College at Hunters Hill in Sydney (box 4.5.2).
- A dedicated Northern Territory Certificate of Education (NTCE) implementation officer working with remote schools, and professional development opportunities for senior years teachers (including a remote schools conference held annually) have increased the number of students achieving the NTCE in their home communities (box 4.5.2).

Employment

Having a job that pays adequately and provides opportunities for self development is important to most people. Employment contributes to individual living standards, self-esteem and overall wellbeing. It is also important to the family. Children who have a parent who is employed are more likely to attend school and stay on past the compulsory school age. They are also more likely to enter into post secondary education and gain employment. Where people are employed, benefits also flow on to the wider community. On the other hand, unemployment can contribute to poor health, domestic violence, homelessness and substance misuse.

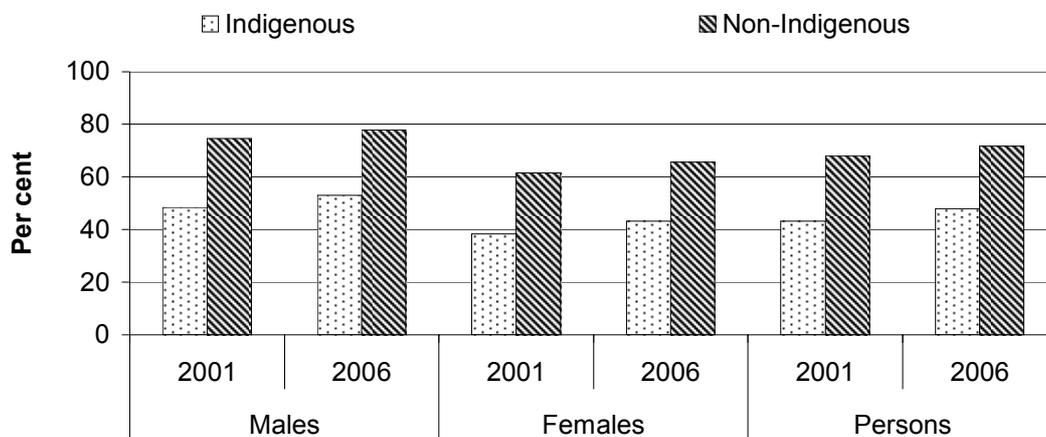
Indigenous people's participation in the labour force is affected by the limited employment opportunities available to Indigenous people in some remote areas, along with the employment opportunities provided by Community Development Employment Projects (CDEP). Information in this section does not reflect recent changes made to the CDEP program.

Box 10 KEY MESSAGES —Employment

Halving the gap in employment outcomes between Indigenous and non-Indigenous Australians within a decade is a COAG target.

- Between 2001 and 2006, for those aged 15–64 years:
 - the employment to population ratio increased for Indigenous people from 43 per cent to 48 per cent, and for non-Indigenous people from 68 per cent to 72 per cent. The gap remained around 24 percentage points (figure 4.6.1)
 - labour force participation increased for Indigenous people from 54 per cent to 57 per cent and for non-Indigenous people from 73 per cent to 76 per cent (figure 4.6.3)
 - the unemployment rate decreased for Indigenous people from 20 per cent to 16 per cent and for non-Indigenous people from 7 per cent to 5 per cent (figure 4.6.6).
- The Indigenous labour force participation rate was lower, and the unemployment rate was higher, than for non-Indigenous people in all remoteness areas, states and territories and age groups (figures 4.6.3–9).

Employment to population ratio, 2001 and 2006



Source: Figure 4.6.1 in the main report.

Post secondary education — participation and attainment

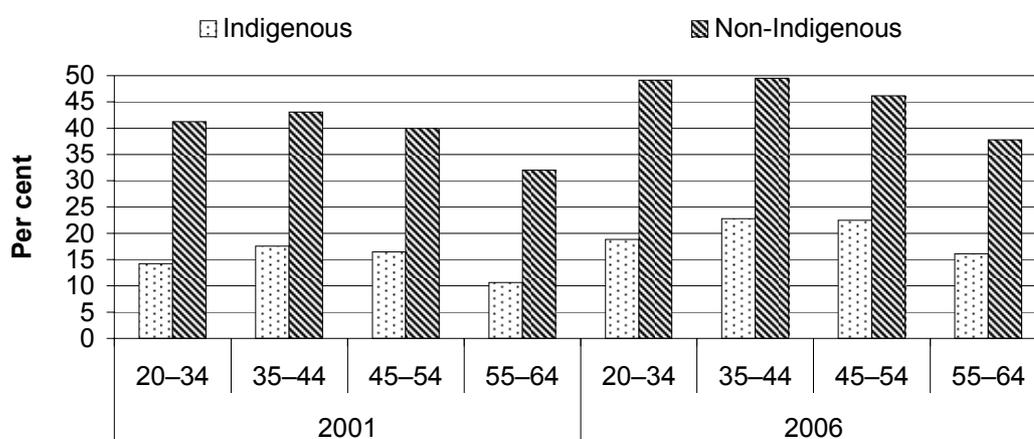
People who have participated in post secondary study have greatly improved employment prospects. They are also more likely to earn higher incomes. Individuals' education can also affect their health, and the health of their children, as well as their ability to make informed life decisions. In the long term, people who

have completed post secondary education are more likely to encourage their children to do the same, so that the benefits flow from one generation to another.

Box 11 KEY MESSAGES —Post secondary education

- Indigenous people had significantly lower rates of post secondary attainment to certificate level III or above compared with their non-Indigenous counterparts across all ages, jurisdictions and remoteness areas in 2006 (tables 4A.7.18 and 4A.7.24).
- Post secondary attainment to certificate level III or above increased for both Indigenous and non-Indigenous people between 2001 and 2006 (figure 4.7.5).
- Indigenous people aged 20–24 years attended university at about one-fifth the rate of non-Indigenous people (5 and 24 per cent, respectively) and attended Technical and Further Education (TAFE) at two-thirds the rate of non-Indigenous people (5 and 8 per cent, respectively) in 2006 (figure 4.7.1). Between 2001 and 2006, Indigenous participation at university and TAFE decreased across all age groups (figures 4.7.2 and 4.7.3).

Attainment of certificate level III or above by age, 2001 and 2006



Source: Figure 4.7.5 in the main report.

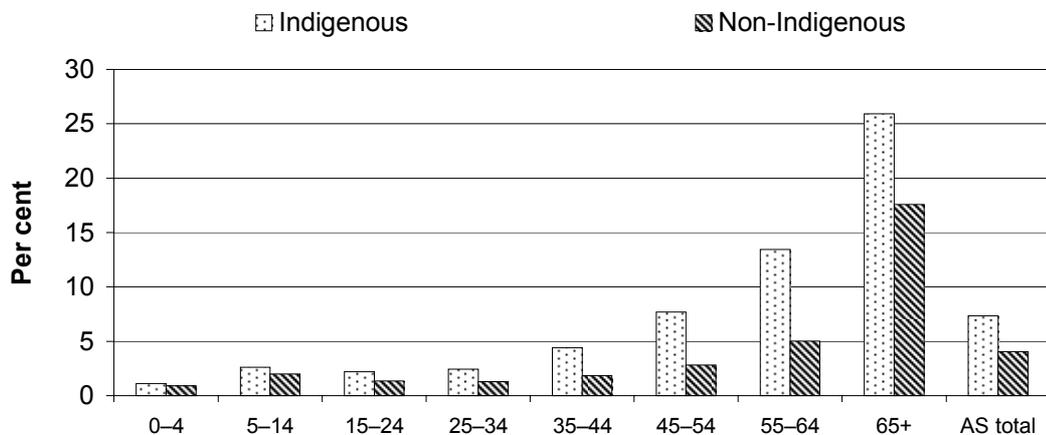
Disability and chronic disease

High rates of disability and chronic disease affect the quality of life of many Indigenous people. Disability and chronic disease can also affect other outcomes, by creating barriers to social interaction and reducing access to services, education and employment.

Box 12 KEY MESSAGES — Disability and chronic disease

- Nationally, in 2006:
 - Indigenous people were almost twice as likely as non-Indigenous people to need assistance with one or more core activities. Indigenous people aged 45–64 years were 3 times as likely as non-Indigenous people in that age group to need assistance with core activities (figure 4.8.1)
 - among those with a need for assistance, Indigenous people were less likely than non-Indigenous people to have attained year 12 (13 per cent compared with 26 per cent), to have completed a bachelor degree or higher qualification (3 per cent compared with 6 per cent) (tables 4A.8.11 and 4A.8.16), or to be in the labour force (18 per cent compared with 23 per cent) (figure 4.8.2)
 - Indigenous 15–24 year olds were twice as likely as non-Indigenous 15–24 year olds to have provided unpaid assistance to a person with a disability, long term illness or problems related to old age (figure 4.8.3).

People with a disability (need for assistance with core activities), 2006



AS = total is age standardised.

Source: Figure 4.8.1 in the main report.

Box 13 Things that work

- The Chronic Care for Aboriginal People (Walgan Tilly) Clinical Services Redesign project was developed from established NSW Health initiatives in an attempt to address the disparities in health care and improve access to, and utilisation of, chronic care services for Aboriginal people in NSW (box 4.8.2).

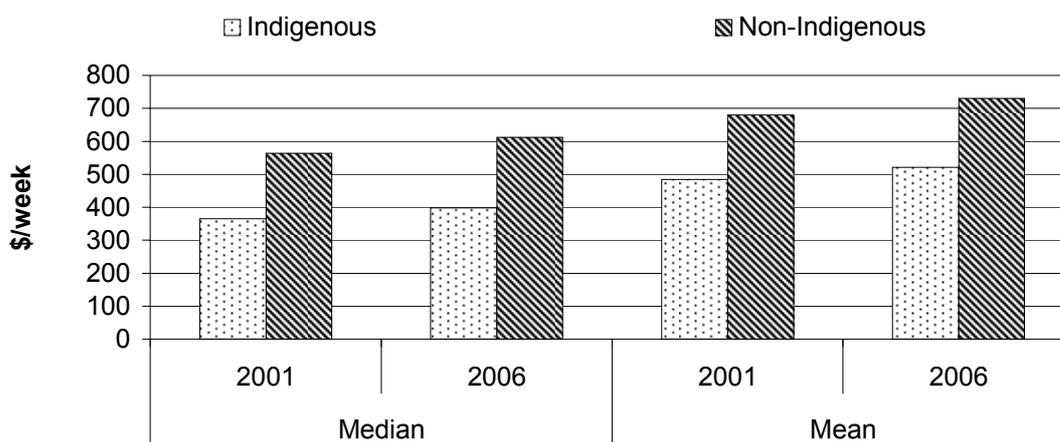
Household and individual income

Household and individual incomes are linked to overall wellbeing. Higher incomes can enable the purchase of better food, housing, recreation and health care. There may also be psychological benefits such as a greater sense of personal control and self-esteem. Low incomes can be both a cause and an effect of disadvantage — for example, low incomes can contribute to health problems, which in turn limit people's ability to work and increase their incomes.

Box 14 KEY MESSAGES — Household and individual income

- Indigenous households' gross weekly equivalised (adjusted) incomes (\$398) were 65 per cent of those of non-Indigenous households (\$612) in 2006. After adjusting for inflation, median incomes increased by 9 per cent for Indigenous households and 9 per cent for non-Indigenous households between 2001 and 2006 (figure 4.9.1).
- Median weekly individual incomes for Indigenous people aged 15 years and over (\$278) were 59 per cent of those of non-Indigenous people aged 15 years and over in 2006 (\$473) (figure 4.9.4).

Median and mean real gross weekly equivalised household income (2006 dollars)^a



^a Household income has been 'equivalised' or adjusted to account for household size and composition.

Source: Figure 4.9.1 in the main report.

Box 15 Things that work

- The Cape York Family Income Management project (Queensland) was designed by Indigenous people to build financial literacy and implement budgets, stabilise family functioning, improve living standards and reduce household and individual debt in a culturally sensitive and practical way (box 4.9.2).
- The MoneyBusiness program, implemented in partnership with the ANZ in WA and the NT, provides Indigenous people with the money management information and support they need to build self-reliance and improve individual, family and community wellbeing (box 4.9.2).
- My Moola is a financial literacy package for Indigenous Australians developed by First Nations Foundation and ANZ in conjunction with the Indigenous community in Shepparton, Victoria (box 4.9.2).

Substantiated child abuse and neglect

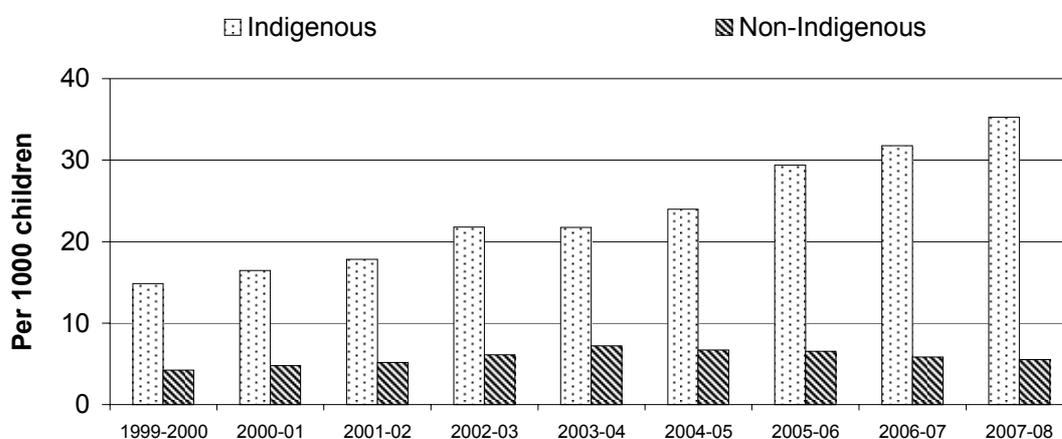
Many Indigenous families and communities live under severe social strain, caused by a range of social and economic factors. This social strain, combined with factors such as alcohol and substance misuse, and overcrowded living conditions, can contribute to the incidence of child abuse and violence.

This indicator provides some information about the extent of abuse, neglect and harm to children in the family environment. However, the available data refer only to matters which have been notified to the authorities and investigated. No data exist on actual levels of abuse.

Box 16 KEY MESSAGES — Substantiated child abuse and neglect

- The rate of substantiated notifications for child abuse or neglect increased for both Indigenous and non-Indigenous children from 1999-2000 to 2007-08, with the rate for Indigenous children more than doubling over this period (figure 4.10.1):
 - the rate for Indigenous children increased from 16 to 35 per 1000 children
 - the rate for non-Indigenous children increased from 5 to 6 per 1000 children.
- Indigenous children were more than six times as likely as non-Indigenous children to be the subject of a substantiation of abuse or neglect in 2007-08 (figure 4.10.1).
- 41 out of every 1000 Indigenous children were on care and protection orders, compared to 5 per 1000 non-Indigenous children at 30 June 2008 (table 4.10.1).

Children aged 0–16 years who were the subject of substantiations



Source: Figure 4.10.1 in the main report.

Family and community violence

Family and community violence problems are complex. Social, economic and environmental factors, such as unemployment, low income, housing overcrowding and alcohol and substance misuse, can all contribute to violence. Actions in a number of areas can make a difference, by addressing the circumstances which contribute to the social strain under which many Indigenous people live.

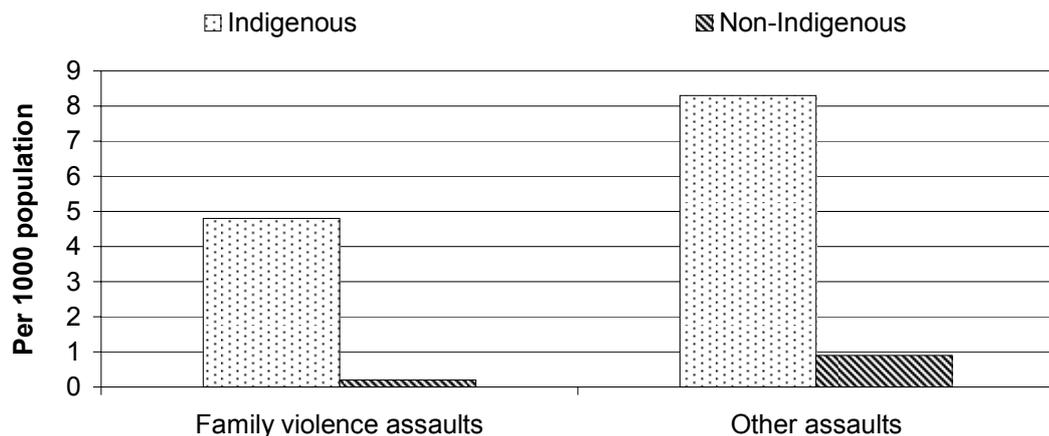
Box 17 KEY MESSAGES — Family and community violence

- Indigenous people were hospitalised as a result of spouse or partner violence at 34 times the rate of non-Indigenous people (table 4.11.1). Indigenous females and males were 35 and 21 times as likely to be hospitalised due to family violence related assaults as non-Indigenous females and males (table 4A.11.2).
- Indigenous females sought Supported Accommodation Assistance Program assistance in 2006-07 to escape family violence at the rate of 45 per 1000 population, compared with 3 per 1000 population for non-Indigenous females (table 4A.11.32).
- Nationally, the Indigenous homicide death rate (6 per 100 000 population) was 7 times the non-Indigenous homicide death rate (1 per 100 000 population) between 2003–2007 (figure 4.11.2).

Box 18 Things that work

- An early intervention project in SA, 'Rekindling Indigenous Family Relationships in the Riverland' is assisting the Aboriginal community to resolve family violence and child abuse issues (box 4.11.2).
- The Family and Community Healing Program (Adelaide, SA) aims to equip Aboriginal women, men and youth with the skills for effective communication and conflict resolution (box 4.11.2).
- The Kalparrin Spirited Men's Project (SA) (a male perpetrator's program), aims to encourage positive parenting and educate Indigenous men about the detrimental effects of family violence (box 4.11.2).

Non-fatal hospitalisations for assault, NSW, Victoria, Queensland, WA, SA and the NT, age standardised, 2006-07



Source: Table 4.11.1 in the main report.

Imprisonment and juvenile detention

Poverty, unemployment, low levels of education and lack of access to social services are associated with high crime rates and high levels of imprisonment. Indigenous people are over-represented in the criminal justice system, as both young people and adults. The early involvement of young people in the criminal justice system puts them at much higher risk of further involvement as adults.

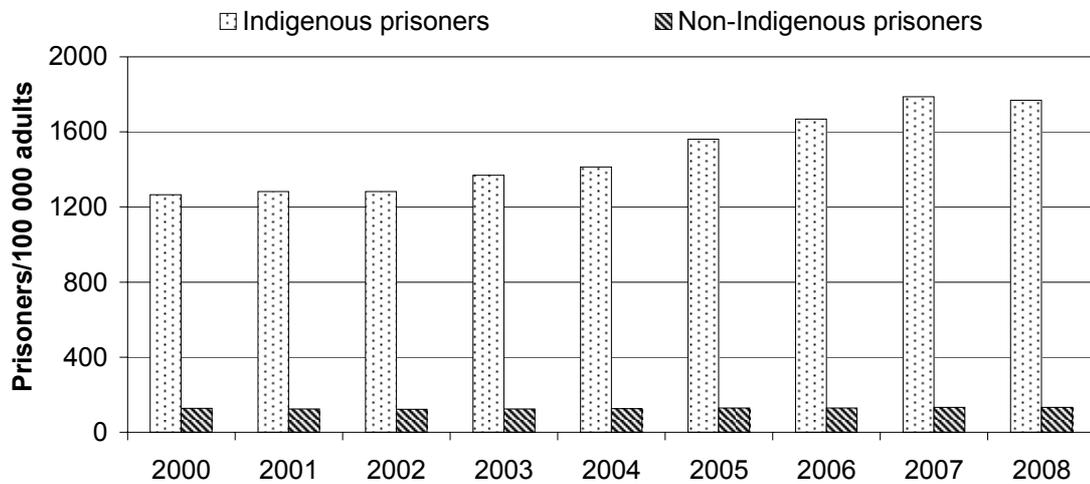
Box 19 KEY MESSAGES — Imprisonment and juvenile detention

- After adjusting for age differences, Indigenous people were 13 times as likely as non-Indigenous people to be imprisoned in 2008 (table 4A.12.3).
- The imprisonment rate increased by 46 per cent for Indigenous women and by 27 per cent for Indigenous men between 2000 and 2008 (table 4A.12.7).
- Indigenous juveniles were 28 times as likely to be detained as non-Indigenous juveniles at 30 June 2007. The Indigenous juvenile detention rate increased by 27 per cent between 2001 and 2007 (figure 4.12.5).

Box 20 Things that work

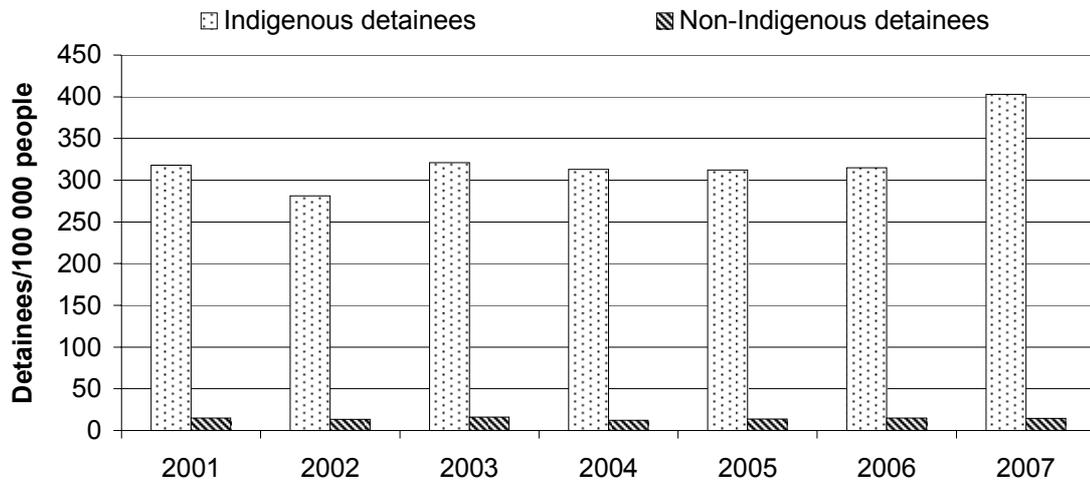
- Aboriginal sentencing operates within the SA magistrates courts in Port Adelaide (Nunga court), Port Augusta, Murray Bridge, Ceduna and Berri. The aim of these courts is to make the justice system more culturally appropriate to Indigenous people (box 4.12.2).
- An Aboriginal Conferencing initiative in Port Lincoln (SA) involves members of the Aboriginal community, SA Police and victims. It encourages contrition and reparation, and provides a restorative opportunity to victims. The magistrate considers the conference outcomes when sentencing the defendant (box 4.12.2).
- The Koori Court (Victoria) has an informal atmosphere allowing greater Koori community participation in sentencing and support programs and has led to a reduction in reoffending (box 4.12.2)
- The Murri Court (Queensland) provides a forum where Aboriginal and Torres Strait Islander elders and respected persons have cultural input into the sentencing process and provide insight into the impacts of offending on the local community (box 4.12.2).
- Meenah Mienne (Tasmania) helps prevent crime through mentoring, arts, education and employment for young people (box 4.12.2).

Age standardised adult imprisonment rates, 30 June each year



Source: Figure 4.12.1 in the main report.

Juvenile detention rates, aged 10–17 years, Australia, as at 30 June



Source: Figure 4.12.5 in the main report.

Strategic areas for action

This Overview summarises the key messages and ‘things that work’ for each strategic area for action. Much more information can be found in the main report.

Strategic area for action	Strategic change indicators
Early child development	<ul style="list-style-type: none"> • Maternal health • Teenage birth rate • Birthweight • Early childhood hospitalisations • Injury and preventable disease • Basic skills for life and learning • Hearing impediments
Education and training	<ul style="list-style-type: none"> • School enrolment and attendance • Teacher quality • Indigenous cultural studies • Year 9 attainment • Year 10 attainment • Transition from school to work
Healthy lives	<ul style="list-style-type: none"> • Access to primary health • Potentially preventable hospitalisations • Avoidable mortality • Tobacco consumption and harm • Obesity and nutrition • Tooth decay • Mental health • Suicide and self-harm
Economic participation	<ul style="list-style-type: none"> • Labour market participation (full/part time) by sector and occupation • Indigenous owned or controlled land and business • Home ownership • Income support

Strategic area for action	Strategic change indicators
Home environment	<ul style="list-style-type: none"> • Overcrowding in housing • Rates of disease associated with poor environmental health • Access to clean water and functional sewerage and electricity services
Safe and supportive communities	<ul style="list-style-type: none"> • Participation in organised sport, arts or community group activities • Access to traditional lands • Alcohol consumption and harm • Drug and other substance use and harm • Juvenile diversions • Repeat offending
Governance and leadership	<ul style="list-style-type: none"> • Case studies in governance • Governance capacity and skills • Engagement with service delivery

Early child development

Providing children with a good start in life can influence the whole of their lives. Problems at this early stage can create barriers that prevent children achieving their full potential.

Maternal health

The health of women during and after pregnancy and childbirth is important for the wellbeing of both women and their children. Access to appropriate health services is important, but so are behavioural factors such as women's nutrition and alcohol and tobacco consumption during pregnancy.

Box 21 KEY MESSAGES — Maternal health

- The proportion of low birthweight babies, pre-term babies and perinatal deaths decreased as the number of antenatal visits increased for both Indigenous and non-Indigenous mothers in 2006 (figures 5.1.3, 5.1.4 and 5.1.5). A lower proportion of Indigenous than non-Indigenous mothers attended at least five antenatal sessions in Queensland, SA and the NT in 2006 (figure 5.1.1).
- The proportion of Indigenous mothers who attended at least one antenatal session remained constant in most states and territories and increased significantly in SA between 1998 and 2006 (figure 5.1.6).
- Around half of Indigenous mothers smoked during pregnancy and the proportion remained relatively constant between 2001 and 2006 (figure 5.1.7).

Box 22 Things that work

- The Koori Maternity Strategy (Victoria) provides culturally appropriate maternity care to Koori women (box 5.1.2).
- The Winnunga Nimmityjah Aboriginal Health Service Aboriginal Midwifery Access Program in the ACT provides community-based antenatal and postnatal care to Indigenous women and their babies (box 5.1.2).
- The Community Midwifery Programme in Elizabeth, SA, is a midwifery led care model offering appropriate models of care for Indigenous women (box 5.1.2).
- The Anangu Bibi Family Birthing Program in Port Augusta and Whyalla (SA) involves Aboriginal maternal and infant care workers and midwives working in partnership to provide antenatal, birthing and early childhood care to Aboriginal women (box 5.1.2).

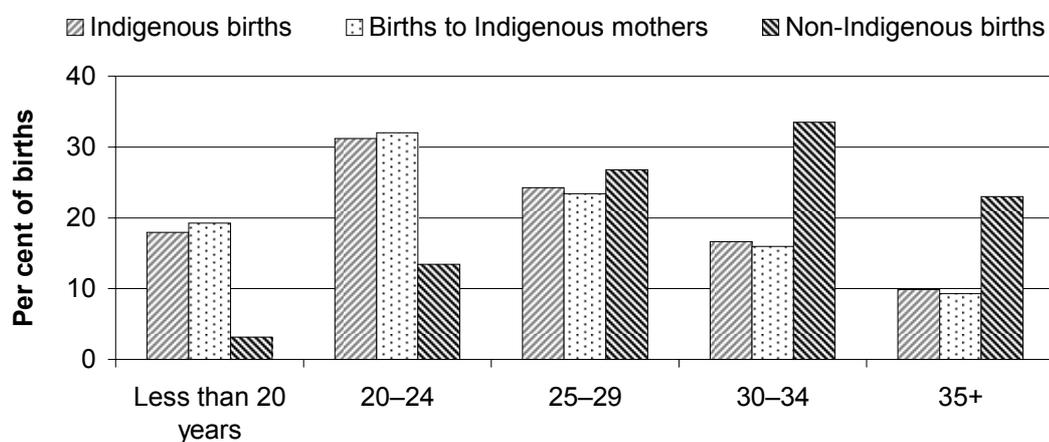
Teenage birth rate

Teenage pregnancy is generally associated with higher rates of complications during pregnancy and delivery. Teenage births are also associated with lower incomes and poorer educational attainment and employment prospects for the mother.

Box 23 KEY MESSAGES — Teenage birth rate

- Teenage birth rates were much higher for Indigenous females than non-Indigenous females in both 2004 and 2007 (figure 5.2.1).
- 18 per cent of Indigenous births were to teenage mothers in 2007. In contrast, 3 per cent of non-Indigenous births were to teenage mothers (figure 5.2.3).
- The proportion of Indigenous births to teenage mothers increased with remoteness and was highest in very remote areas between 2001 and 2007 (figure 5.2.4).

Births, by Indigenous status of baby and age of mother, 2007



Source: Figure 5.2.3 in the main report.

Box 24 Things that work

- The Nunga Young Mums Program (SA), based on the Incredible Years Program in the United States, targets young mums (under 25 years), and promotes the use of principles of play and attention, praise and rewards, limit setting, ignoring and distracting and then time out (box 5.2.2).

Birthweight

Low birthweight is a key factor affecting infant mortality, and can lead to health problems early in life. Low birthweight may also influence the development of chronic diseases in adulthood, including diabetes and heart disease. This section reports birthweight for babies born to Indigenous mothers.

Box 25 KEY MESSAGES — Birthweight

- Indigenous mothers (13 per cent) were almost twice as likely as non-Indigenous mothers (6 per cent) to have a low birthweight baby in the period 2004–06 (table 5.3.2).
- The average birthweight of babies born to Indigenous mothers during 2004–06 was 3162 g, compared with 3379 g for babies born to non-Indigenous mothers — a difference of 217 g, or 6 per cent (table 5.3.2).

Early childhood hospitalisations

The hospitalisation rate provides a broad indicator of the scale of serious health issues experienced by Indigenous children, as admissions to hospital typically relate to more serious conditions. A high rate may also indicate problems with access to primary health care, as many hospital admissions could be prevented if effective non-hospital care were available. This section reports on hospitalisations for all causes for children aged 0 to 4 years.

Box 26 KEY MESSAGES — Early childhood hospitalisations

- Hospitalisation rates for Indigenous 0–4 year olds (320 per 1000) were higher than those for non-Indigenous 0–4 year olds (232 per 1000) in 2006-07 (figure 5.4.1).
- Hospitalisation rates for both Indigenous and non-Indigenous 0–4 year olds remained relatively constant between 2004-05 and 2006-07 (figure 5.4.1).

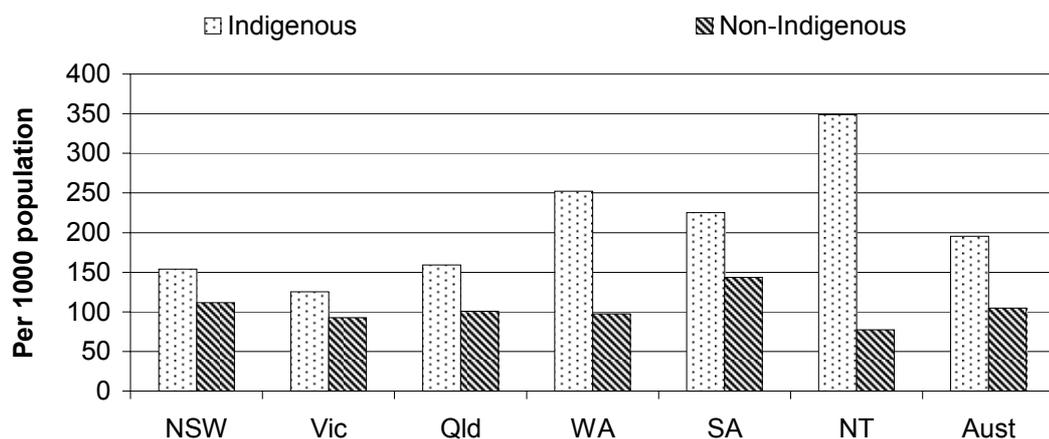
Injury and preventable disease

This indicator examines injury and preventable diseases that result in children being hospitalised. Most childhood injuries and diseases can be prevented or treated without hospitalisation, so high rates for this indicator may point to problems with the living environment or access to primary health care.

Box 27 KEY MESSAGES — Injury and preventable disease

- Indigenous children under five were twice as likely to be hospitalised for potentially preventable diseases and injuries as non-Indigenous children (195 per 1000 compared to 105 per 1000) in NSW, Victoria, Queensland, WA, SA and the NT combined, in 2006-07 (table 5.5.1).
- The death rate from external causes and preventable diseases for children aged less than five years was 2 to 5 times as high for Indigenous as for non-Indigenous children (3 to 9 per 10 000 compared to 1 to 2 per 10 000) in NSW, Queensland, WA, SA and the NT, during 2003–2007 (figure 5.5.2).

Potentially preventable hospitalisations, children aged less than five years, 2006-07



Source: Figure 5.5.1 in the main report.

Box 28 Things that work

- The Nganampa Health Council provides primary healthcare services for the Anangu people of SA (box 5.5.2).
- The Jalaris Health Outreach service in Derby, WA, targets marginalised families with early intervention, engagement and education services (box 5.5.2).
- The East Arnhem Healthy Skin project (NT) (completed in 2007) halved children's skin sore burden (scabies, skin sores and tinea) in five East Arnhem communities (box 5.5.2).

Basic skills for life and learning

Basic skills for life and learning include a range of social, emotional, language, cognitive and communication skills, as well as general knowledge. The early development of these skills provides the foundations for later relationships and formal learning. Gaps in children's basic skills for life and learning that appear at age five or six are often difficult to close, even with targeted school interventions. Children who have access to, and attend, good quality early childhood education have a head start at school.

Box 29 KEY MESSAGES — Basic skills for life and learning

- 67 per 1000 Indigenous children aged 0–14 years received a Medicare funded voluntary health check/assessment in 2007-08 (table 5.6.1).
- The Australian Early Development Index is being implemented in 2009 and will provide information on Indigenous children at a State and national level.

Box 30 Things that work

- Best Start, a WA Department for Communities program, aims to improve life opportunities for Aboriginal children aged from 0–5 years, with co-operation from health, welfare and Indigenous agencies (box 5.6.2).
- The Welcome Baby to Country project in the Wimmera/Mallee region (Victoria) is based on a traditional Aboriginal welcome to country. The project engages traditional owners and the broader Aboriginal community in a celebration of the birth of Indigenous babies (box 5.6.2).

Hearing impediments

Indigenous children tend to have high rates of recurring ear infections, which, if not treated early, can become a chronic disease and lead to hearing impediments. As well as direct health impacts, hearing impediments can affect children's capacity to learn and socialise. However, only limited information is available on the burden of hearing loss in Indigenous children.

High rates of recurring ear infections are associated with poverty, crowded housing conditions, inadequate access to clean water and functional sewerage systems, nutritional problems and poor access to health care.

Box 31 KEY MESSAGES — Hearing impediments

- Despite evidence of high prevalence rates for hearing impediments in Indigenous children, particularly in remote areas, the hospitalisation rate for middle ear and mastoid disease for Indigenous 0–3 year olds (9 per 1000) was below that for non-Indigenous 0–3 year olds (10 per 1000) in 2006-07 (table 5.7.1).

Box 32 Things that work

- The ‘Can’t hear? Hard to Learn’ program in NSW is an education and screening program for otitis media in Aboriginal children. The program is improving hearing and communication in Aboriginal children through improved access to early intervention and treatment, including access to specialist services (box 5.7.2).
- Swimming pools in remote communities in WA have contributed to significant reductions in the prevalence of skin infections and reduced rates of ear disease (box 5.7.2).
- An ear health program in Leonora (WA) has successfully taught children how to keep the ear canals clean, and people who learned this as children are now teaching their own children (box 5.7.2).
- The Education Queensland Indigenous Schooling Support Unit has developed hearing assessment tools for teaching staff, hearing assessment games for parents and professional development for both teachers and parents. The early identification of students with hearing loss has facilitated educational support and early referral for treatment (box 5.7.2).

Education and training

Education and training aims to develop the capacities and talents of students, so they have the necessary knowledge, understanding, skills and values for a productive and rewarding life. Education is a life-long activity, beginning with learning in the home, and continuing through the more formal settings of school, vocational and higher education. At all stages, parental support makes an important contribution to children’s education.

There are strong links between higher levels of education and improved employment, income and health outcomes. Improved educational outcomes can also help strengthen communities and regions socially and economically.

School enrolment and attendance

There is a direct relationship between the number of days absent from school and academic performance. There is a general concern that Indigenous children are less likely to be enrolled in school and, even if enrolled, less likely to attend regularly.

Student attendance data are based on enrolments and therefore do not provide any information about children of school age who are not enrolled.

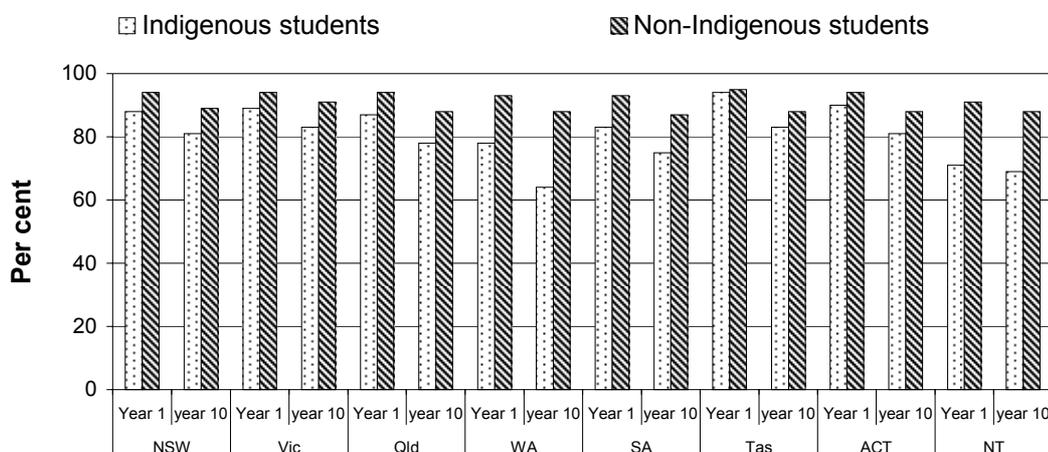
Box 33 KEY MESSAGES — School enrolment and attendance

- Attendance rates in government schools for years 1–10 were lower for Indigenous students than non-Indigenous students, in all states and territories in 2007 (figure 6.1.1).
- Attendance rates in government schools declined from year 1 to year 10 for both Indigenous and non-Indigenous students in 2007. The decline was generally greater for Indigenous students (between 2 and 14 percentage points) than non-Indigenous students (between 3 and 7 percentage points) (figure 6.1.1).

Box 34 Things that work

- The Clontarf Foundation Program (NT) (originally launched in WA in 2000) provides teenage Indigenous boys with high quality football coaching, specialist physical conditioning, health education and mentoring in life skills, linked to attendance and performance at school (box 6.1.2).
- The Community Festivals for Education Engagement program (Australian Government) targets events that encourage students (particularly Aboriginal and Torres Strait Islander students) to attend school and lead healthy lifestyles. Students participate in concerts and cultural activities that endorse education, health, culture and potential vocational pathways (box 6.1.2).

Student attendance in government schools, year 1 and year 10, 2007



Source: Figure 6.1.1 in the main report.

Teacher quality

The quality of teaching is a key determinant of student outcomes. However, it is difficult to define and measure teacher quality.

Box 35 KEY MESSAGES — Teacher quality

- Teacher quality is important for improving Indigenous student outcomes. COAG has agreed to a National Partnership on Improving Teacher Quality, but no data were available for this report.

Indigenous cultural studies

Culturally appropriate education for Indigenous students does not mean that different standards should apply to Indigenous academic outcomes. Rather, Indigenous cultural studies can enhance Indigenous students' education, and help Indigenous people to share their knowledge with the wider community.

Approaches to Indigenous cultural studies vary widely between education systems and between schools, but the participation of Indigenous people in the development and delivery of cultural material is generally regarded as highly desirable.

Box 36 KEY MESSAGES — Indigenous cultural studies

- Many schools have introduced Indigenous language, culture and history programs to improve education outcomes for Indigenous students and to improve all students' knowledge and appreciation of Indigenous peoples and cultures.

Box 37 Things that work

- The 'Dare to Lead' program fosters Indigenous education programs in schools throughout Australia. In 2005, the Bendigo Senior Secondary College in Victoria was one of six national winners of the Excellence in Leadership in Indigenous Education awards established under the program (box 6.3.2).
- The Broulee Public School Dhurga Djamanji language program in NSW has been successfully integrated into everyday classroom activities and has received strong support from the school and local communities (box 6.3.2).
- Specialist language training to teach Aboriginal languages in NSW public schools is being provided by the NSW Department of Education and Training's Aboriginal Education and Training Directorate, in collaboration with the University of Sydney's Koori Centre (box 6.3.2).
- A Stage 4 Aboriginal language program in place in ten NSW schools means that the local Indigenous language can be studied to meet the mandatory language requirement for the School Certificate (box 6.3.2).
- The Teacher Education Scholarship Program (NSW) encourages and supports Aboriginal people to become secondary or primary teachers (box 6.3.2).
- The Connecting with Country, Culture and Community program (Tasmania) engages Indigenous students with their culture through meaningful and relevant cultural learning experiences as part of their academic schooling (box 6.3.2).
- The Tasmanian Aboriginal Sharers of Knowledge Program (ASK) provides cross cultural training for teaching and education staff and equips teachers and students with awareness and understanding of Tasmanian Aboriginal peoples and their cultures (box 6.3.2).

Year 9 attainment

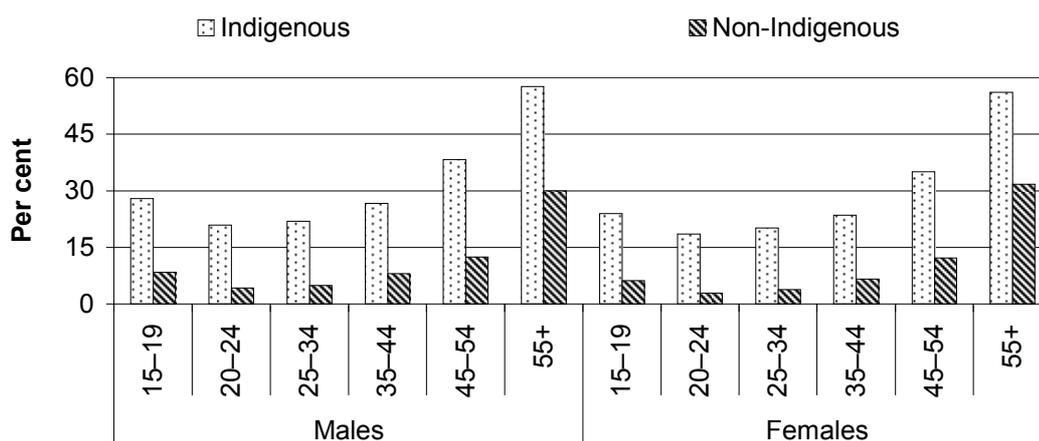
Anecdotal evidence suggests that many Indigenous children are leaving school in years 9 and 10 with poor literacy and numeracy skills and with limited post school options. Leaving school early often leads to poor employment options and lower income in later life.

Other areas of this report examine some of the causes of early school leaving, including poverty, poor literacy and numeracy skills, a student's lack of interest, and the quality of teaching staff.

Box 38 KEY MESSAGES — Year 9 attainment

- Much higher proportions of Indigenous than non-Indigenous people aged 15 years and older reported year 9 or below as their highest level of schooling in every age group in 2006 (figure 6.4.1).
- A higher proportion of Indigenous students than non-Indigenous students did not achieve the minimum proficiency level in international tests for science, mathematics and reading literacy (tables 6.4.2–6).

Year 9 or below as highest level of schooling completed, 2006^a



^a Persons aged 15 years and over, excluding persons still attending secondary school.

Source: Figure 6.4.1 in the main report.

Year 10 attainment

Year 10 generally signifies the end of compulsory schooling, and there is a significant drop off in Indigenous enrolments. Yet there can be significant employment and income benefits of continuing education beyond the period of compulsory schooling.

Box 39 KEY MESSAGES — Year 10 attainment

- The apparent retention rate from years 7 or 8 to year 10 for Indigenous students was 89 per cent compared with 100 per cent for non-Indigenous students in 2008 (table 6.5.1).
- The school enrolment rate was much lower for Indigenous 15–19 year olds (38 per cent) than for non-Indigenous people in that age group (52 per cent) in 2006 (table 6A.1.4). For both Indigenous and non-Indigenous people, enrolment rates declined as students exceeded the compulsory school age.

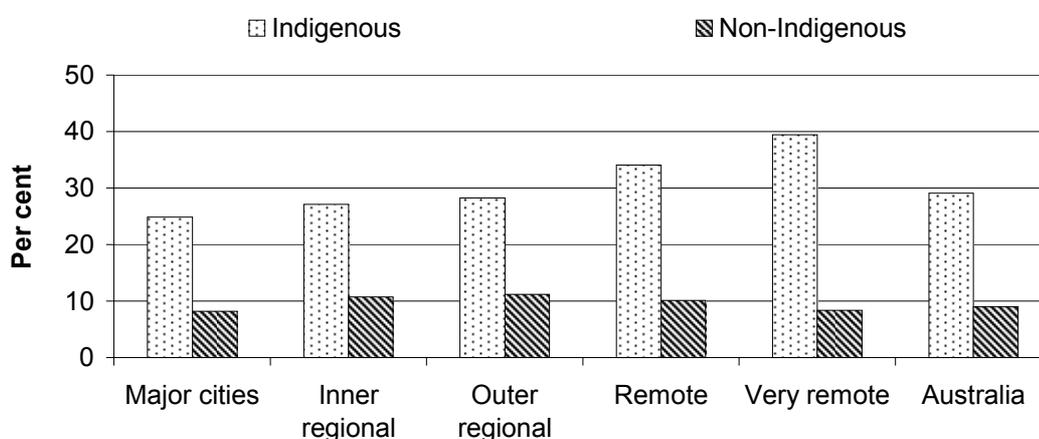
Transition from school to work

The later years of childhood and adolescence are critical development phases. At these stages, a good foundation in early childhood can be built upon, or actions can assist disadvantaged young people to make the transition to a positive adulthood. The transition from school to work is critical. Young people who are neither engaged in education and training, nor employed, are at risk of long-term disadvantage.

Box 40 KEY MESSAGES — Transition from school to work

- Indigenous people aged 15 to 24 years were more than three times as likely as non-Indigenous people to be neither employed nor studying in 2006 (29 and 9 per cent respectively) (figure 6.6.1).
- The proportion of Indigenous people aged 15 to 24 years who were neither employed nor studying decreased between 2001 and 2006. The gap between Indigenous and non-Indigenous people also decreased (from 20 to 17 percentage points for males, and from 27 to 24 percentage points for females) (figure 6.6.2).

People aged 15 to 24 years who were not employed and not studying, 2006^a



^a CDEP participants were counted as employed in the 2006 Census.

Source: Figure 6.6.1 in the main report.

Box 41 Things that work

- Follow the Dream, run by the WA Department of Education and Training, targets high achieving Aboriginal students enrolled in years 6 to 12, and aims to increase the number of Aboriginal students completing year 12 and gaining university entrance (box 7.5.2).
- The Will and a Way program (NSW) addresses barriers that prevent 'at risk' students from completing year 12 and gaining entry to university. The program provides individualised support to 'at risk' Indigenous and non-Indigenous youth in years 10 to 12 (box 7.5.2).

Healthy lives

Health outcomes affect many aspects of people's lives, including their ability to socialise with family and friends and participate in the community, and to learn and work. Indigenous people have very high rates for many physical and mental illnesses, which contribute to poorer quality of life and shorter life expectancy.

Physical health outcomes are affected by the living environment and access to health services, and also health risk behaviours, such as smoking and poor diet. Mental health issues can be affected by a complex mix of medical issues, drug and substance misuse, and social stressors associated with entrenched disadvantage. Education and income levels also affect health.

Access to primary health

Primary health care is the first point of contact with the health system. It includes prevention, early intervention, case management and ongoing care. It can help address health risk behaviours and contribute to improved health outcomes.

Access to primary health care can affect outcomes across the framework, including life expectancy, infant mortality, disability and chronic disease and early child development. Poor health can also affect education and employment outcomes.

Box 42 KEY MESSAGES — Access to primary health

- Expenditure per person on primary health care was 27 per cent higher for Indigenous people than for non-Indigenous people in 2004-05 (table 7.1.2).
- Immunisation rates for one year old Indigenous children (83 per cent) were lower than for non-Indigenous children of the same age (92 per cent) in 2007. Immunisation rates were similar for all children aged two and six years (table 7.1.3).
- Sixty per cent of Indigenous people reported that they usually went to the same general practitioner or health service. A further 30 per cent reported they usually went to an Aboriginal medical service (section 7.1).
- Indigenous people represent a small proportion (1 per cent) of people working in health-related occupations in Australia, and even smaller proportions for occupations such as nurses (0.6 per cent), doctors (0.2 per cent) and dentists (0.2 per cent) (table 7A.1.21).

Box 43 Things that work

- The Kimberley Satellite Dialysis Centre in Broome (WA) is a dialysis unit run by an Aboriginal Community Controlled Health Service, which provides a culturally safe environment for Aboriginal haemodialysis patients (box 7.1.2).
- The Healthy Heart Cardiac Rehabilitation Program provided by the Wuchopperen Health Service, in partnership with the Cairns Base Hospital, has significantly improved Indigenous participation in cardiac rehabilitation programs (box 7.1.2).

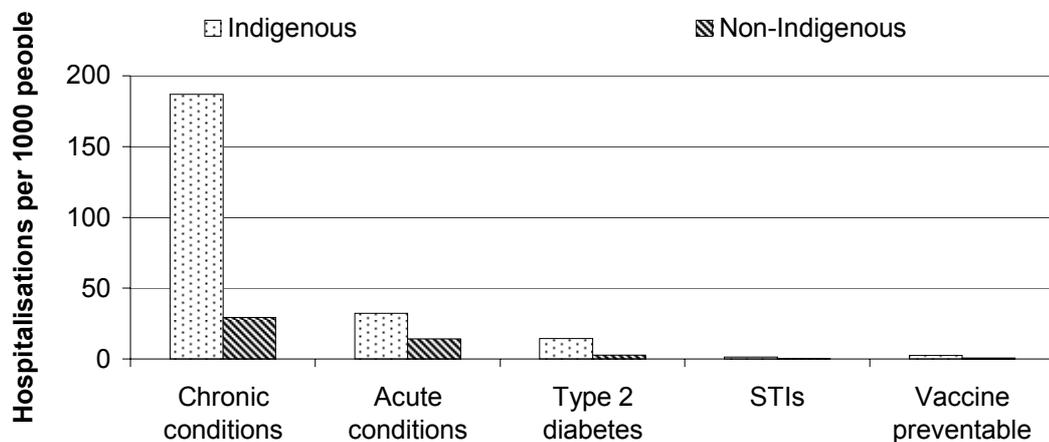
Potentially preventable hospitalisations

In many cases, hospital admissions could be prevented if more effective non-hospital care were available. Better care might provide an alternative to hospital, or might prevent conditions reaching the point where hospitalisation is necessary.

Box 44 KEY MESSAGES — Potentially preventable hospitalisations

- In 2006-07, in NSW, Victoria, Queensland, WA, SA and public hospitals in the NT:
 - the Indigenous hospitalisation rate for potentially preventable chronic conditions was six times the rate for non-Indigenous people (table 7.2.1). The Indigenous hospitalisation rate in 2006-07 was 21 per cent higher than the rate in 2004-05 (187 compared to 154 hospitalisations per 1000 people) (table 7A.2.1)
 - the Indigenous hospitalisation rate for type 2 diabetes (with and without complications) was five times the rate for non-Indigenous people (table 7.2.2). Complications of diabetes accounted for 89 per cent of hospitalisations of Indigenous people for potentially preventable chronic conditions (table 7.2.1)
 - the Indigenous hospitalisation rate for potentially preventable acute conditions was twice the rate for non-Indigenous people. Hospitalisation rates for vaccine preventable and sexually transmitted diseases were also higher for Indigenous than non-Indigenous people (tables 7.2.3–5).
- Indigenous people were 46 times as likely as non-Indigenous people to be hospitalised for injury and poisoning and other external causes in 2005–2007 in NSW, Victoria, Queensland, WA, SA and public hospitals in the NT (table 7.2.6).

Potentially preventable hospitalisations



STIs = infections with a predominantly sexual mode of transmission.

Source: Tables 7.2.1–5 in the main report.

Box 45 Things that work

- The Aboriginal Burns Program (SA) was developed in response to the over-representation of Aboriginal people in the South Australian Burns Service. It includes prevention and pre-hospital care through to acute care and rehabilitation (box 7.2.2).

Avoidable mortality

Avoidable mortality refers to untimely and unnecessary deaths from causes that could potentially have been prevented.

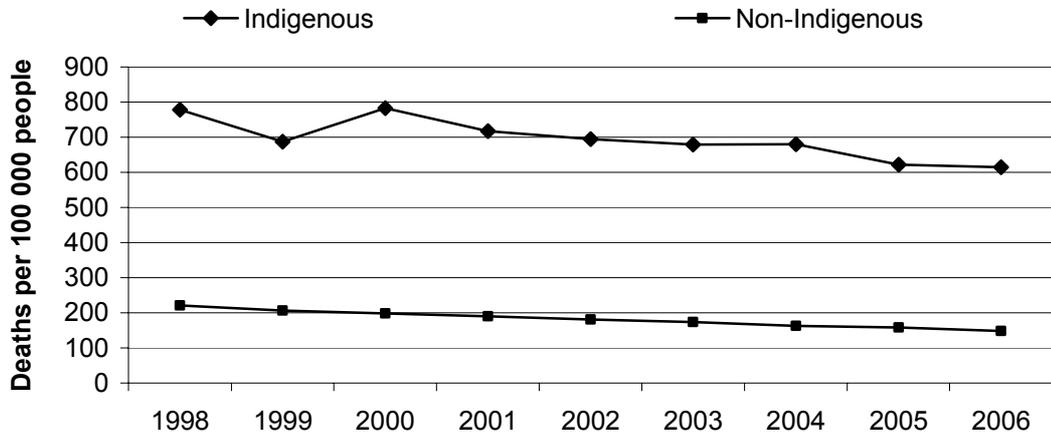
Box 46 KEY MESSAGES — Avoidable mortality

- For the period 2002–2006 in Queensland, WA, SA and the NT combined:
 - Indigenous females were four times as likely as non-Indigenous females and Indigenous males were five times as likely as non-Indigenous males to die from avoidable causes (table 7.3.2)
 - Indigenous people were five times as likely to die from heart attack, twice as likely to time from cancer, 18 times as likely to die of diabetes, and twice as likely to die from suicide as non-Indigenous people (table 7.3.3).
- Mortality rates from avoidable causes declined for both Indigenous and non-Indigenous people, and the Indigenous gap decreased between 1998 and 2006 in Queensland, WA, SA and the NT combined (figure 7.3.1).

Box 47 Things that work

- Heart attack survival rates have improved for Indigenous people in the NT through improvements in the early management of patients; a combination of patients' response to their condition, initial primary health care management and access to hospital care (box 7.3.2).

Avoidable mortality rates, 0–74 year olds, Queensland, WA, SA and the NT^a



^a Age standardised.

Source: Figure 7.3.1 in the main report.

Tobacco consumption and harm

Tobacco use is a significant contributor to premature death and ill health among Indigenous people, and it is often associated with other lifestyle related health risk factors, such as excessive alcohol consumption, low levels of physical activity and poor diet. In addition to health risks, tobacco use can consume a significant proportion of individual or family income.

Box 48 **KEY MESSAGES — Tobacco consumption and harm**

- In 2004-05, half of Indigenous Australians aged 18 years and over reported that they were current smokers (table 7A.4.10). This figure had not changed significantly since 1995 (table 7A.4.7). It remains twice that of the non-Indigenous population (figure 7.4.1).
- Hospitalisation rates related to tobacco use were consistently higher for Indigenous people than for non-Indigenous people in 2006-07 (table 7.4.1).

Box 49 Things that work

- The 'Smoke busters' campaign in Maningrida (NT) reduced tobacco consumption by increasing community awareness of the dangers of tobacco, second hand smoke, strategies to stop smoking, and non-smokers' rights (particularly the benefits of not smoking near children) (box 7.4.2).

Obesity and nutrition

Obesity and nutrition both contribute to health outcomes. Obesity is a risk factor for conditions such as diabetes, heart disease, high blood pressure, osteoarthritis and some cancers. Nutrition, or healthy eating, can contribute to better health outcomes, particularly for pregnant women and young children.

Box 50 KEY MESSAGES — Obesity and nutrition

- In non-remote areas in 2004-05, 31 per cent of Indigenous adults were obese and, after adjusting for differences in the age structure of the two populations, Indigenous adults were twice as likely to be obese as non-Indigenous adults (table 7.5.2).
- In non-remote areas in 2004-05, after adjusting for age, similar proportions of Indigenous and non-Indigenous people aged 12 years and over were eating the recommended usual daily intake of vegetables; 45 per cent of Indigenous people were eating the recommended usual daily intake of fruit compared with 54 per cent of non-Indigenous people, and 71 per cent of Indigenous people usually consumed whole milk compared with 45 per cent of non-Indigenous people (figure 7.5.1).

Box 51 Things that work

- The Outback Stores model in remote and very remote communities has improved food availability and food security in the communities, enhanced health outcomes, increased awareness of healthy food, provided employment, and supported the long-term sustainability of the community store as a business enterprise (box 7.5.2).

Tooth decay

Healthy teeth are an important part of overall good health. Unless treated early, tooth decay may result in pain, infection and destruction of soft tissue in the mouth. Poor dental health can affect speech and language development, as well as school attendance and performance, self-esteem, employment and social wellbeing. Dental

health can also be an indicator of nutrition, dental hygiene and access to dental health care.

Box 52 KEY MESSAGES — Tooth decay

- The proportion of adults with untreated tooth decay was significantly higher for Indigenous than for non-Indigenous people across all age groups for 2004–2006 (figure 7.6.5).
- Potentially preventable hospitalisations for dental conditions were higher for Indigenous people than non-Indigenous people from 2004-05 to 2006-07 (figure 7.6.6).

Box 53 Things that work

- Since 2005, the Wuchopperen Health Service 'Filling the Gap' Indigenous Dental Program has provided care to approximately 20 000 Aboriginal and Torres Strait Islander people in and around Cairns, Queensland (box 7.6.2).
- The Aboriginal Liaison Program of the SA Dental Service was expanded following the employment of an Aboriginal Liaison Officer in Northern Adelaide, leading to improved access to dental care by Indigenous people (box 7.6.3).
- The Great Southern Aboriginal Health — Dental Health Program (WA) improved dental health and access to dental services for 0 to 4 year olds, through tooth brushing programs, checking and treating dental health; helping communities to improve oral health through diet and personal dental care; and cultural awareness programs for dentists and dental students (box 7.6.4).

Mental health

For many Indigenous people, good health does not just mean the physical wellbeing of the individual, but includes the social and emotional wellbeing of the community. Mental health is one important aspect of social and emotional wellbeing.

Mental health issues include a broad range of problems, which can result from domestic violence, substance misuse, physical health problems, imprisonment, family breakdown and social disadvantage. For Indigenous people, broader cultural and historic issues such as dispossession, removal from family and discrimination also influence mental health and wellbeing.

Box 54 KEY MESSAGES — Mental health

- Indigenous people had higher treatment rates for mental health issues in community clinics, residential care facilities and hospitals compared with non-Indigenous people in 2005-06 (table 7.7.1).
- 'Life stress events' have been identified as the factor most strongly associated with a high risk of clinically significant emotional or behavioural difficulties in Aboriginal children. In WA, in 2000-01, more than one in five Aboriginal children aged 0–17 years were living in families that had been exposed to 7 to 14 major life stress events, such as death, incarceration, violence and severe hardship, in the previous 12 months (section 7.7).

Box 55 Things that work

- The school-based 'Family Wellbeing Program' for remote Indigenous school children in Cape York, Queensland, aims to enhance the life skills and psychosocial development of young Indigenous people (box 7.7.2).
- In NSW, the Aboriginal Mental Health Worker Training Program aims to increase the representation of Aboriginal people in mental health professions (box 7.7.2).

Suicide and self-harm

Suicide and self-harm cause great grief in both Indigenous and non-Indigenous communities. Indigenous suicide is influenced by complex factors relating to social disadvantage and a history of dispossession, removal from family and discrimination.

Box 56 KEY MESSAGES — Suicide and self-harm

- Suicide death rates were higher for Indigenous people (between 11 and 42 per 100 000 population) than non-Indigenous people (between 8 and 15 per 100 000 population) in NSW, Queensland, WA, SA and the NT in 2003–2007 (figure 7.8.1). Indigenous people aged 25–34 years had particularly high suicide rates (between 26 and 100 per 100 000 people) (figure 7.8.2).
- Suicide rates were significantly higher for Indigenous males (between 19 and 76 per 100 000) than for non-Indigenous males (between 13 and 24 per 100 000), and for Indigenous females (between 7 and 17 per 100 000) than non-Indigenous females (between 4 and 5 per 100 000) (figure 7.8.3).
- The hospitalisation rate for non-fatal intentional self-harm (age standardised) was higher for Indigenous people (4 per 1000) than non-Indigenous people (1 per 1000) in 2006-07 (table 7.8.1). There was a slight increase in hospitalisations of Indigenous people for self-harm between 2004-05 and 2006-07 (figure 7.8.4).

Box 57 Things that work

- The Yarrabah Family Life promotion program (Queensland), established in 1995, has developed a set of strategies for suicide prevention, intervention, aftercare and life promotion (box 7.8.2).
- The Koori Kids Wellbeing Project in Shoalhaven, NSW, provides a promotion, prevention and early intervention approach to mental health support and suicide prevention for Aboriginal children aged 3–12 years (box 7.8.2).
- LivingWorks. (SA) is a training program to equip a range of community people with the skills to assist those at risk of suicide. Two suicide intervention programs strengthen local suicide intervention skills and increase knowledge of mental health (box 7.8.2).

Economic participation

Participation in the economy is a significant influence on living standards. Having a job or being involved in a business activity can not only lead to improved incomes for families and communities, it can also enhance self-esteem and reduce social alienation. Reliance on income support can entrench the disadvantages that accompany low socioeconomic status, and can contribute to long-term welfare dependency.

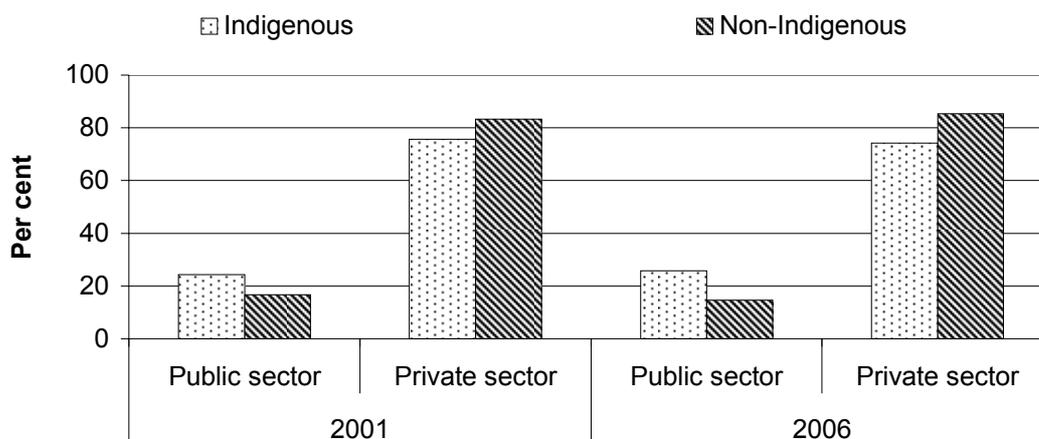
Labour market participation

The types of employment undertaken by Indigenous people can affect rates of pay, job satisfaction and security, and opportunities for advancement. Data for this indicator include CDEP participation as employment.

Box 58 KEY MESSAGES — Labour market participation

- Employment rates for Indigenous people in the labour force increased from 80 per cent to 84 per cent between 2001 and 2006. Employment rates for non-Indigenous people also increased, from 93 per cent to 95 per cent. Overall, the gap narrowed from 13 to 11 percentage points (figure 8.1.1).
- In 2006:
 - employment rates for Indigenous people were lower than for non-Indigenous people in all age groups, states and territories, and remoteness areas (figures 8.1.3, 8.1.4 and table 8A.1.2)
 - 26 per cent of employed Indigenous people worked in the public sector, compared to 15 per cent of employed non-Indigenous people (figure 8.1.5)
 - 59 per cent of employed Indigenous people were employed full time, compared to 69 per cent of employed non-Indigenous people (figure 8.1.7)
 - Indigenous people were less likely than non-Indigenous people to be employed as managers and administrators and professionals, and more likely to be employed as labourers (figure 8.1.6).

Employment by public/private sector, people aged 15 to 64 years^a



^a CDEP participants are included in the private sector for both 2001 and 2006.

Source: Figure 8.1.5 in the main report.

Box 59 Things that work

- The Workstart Program is an intensive, self paced 13 week pre-employment program for Indigenous trainees in the Pilbara. It includes literacy, drivers' licences, alcohol and drug training, fitness for work, safety training, self development and personal financial management (box 8.1.2).
- Rio Tinto Indigenous employment programs have helped increase the proportion of Indigenous employees at Rio Tinto from 0.5 per cent to 8 per cent. Rio Tinto has included education and training as part of employment, helping Indigenous employees overcome educational barriers. Rio Tinto is also involved in the Australian Government's National Indigenous Cadetship Project (box 8.1.2).
- The Learning to Earning program (WA) is a 12 week pre-vocational course that includes structured workplace experience with industry as part of the accredited certificate I training in engineering and plant processing (box 8.1.2).
- The Aboriginal Employment Strategy, established in Moree in 1997, now provides tailored employment services to unemployed Indigenous Australians in eleven sites in NSW, NT, WA and Queensland, utilising the Australian Government's Structured Training and Employment Projects program (box 8.1.2).
- The Accor Asia Pacific Corporate Leaders for Indigenous Employment Project encourages private sector companies to generate job opportunities, using elements of the Australian Government's Indigenous Employment Program (box 8.1.2).
- The ACT Indigenous Traineeship Program provides opportunities for Indigenous youth to commence 12 month traineeships, with a view to permanent full time employment with ACT Government agencies on completion (box 8.1.2).
- The VicRoads Indigenous Traineeship Program operates in 14 rural and metropolitan Customer Service Centre locations across Victoria where there is a local Indigenous community (box 8.1.2).
- Warakurna Artists in remote WA has 150 artists on its registry and provides significant benefits to the community, with approximately \$500 000 turnover per year and a range of social welfare outcomes (box 8.1.2).

Indigenous owned or controlled land and business

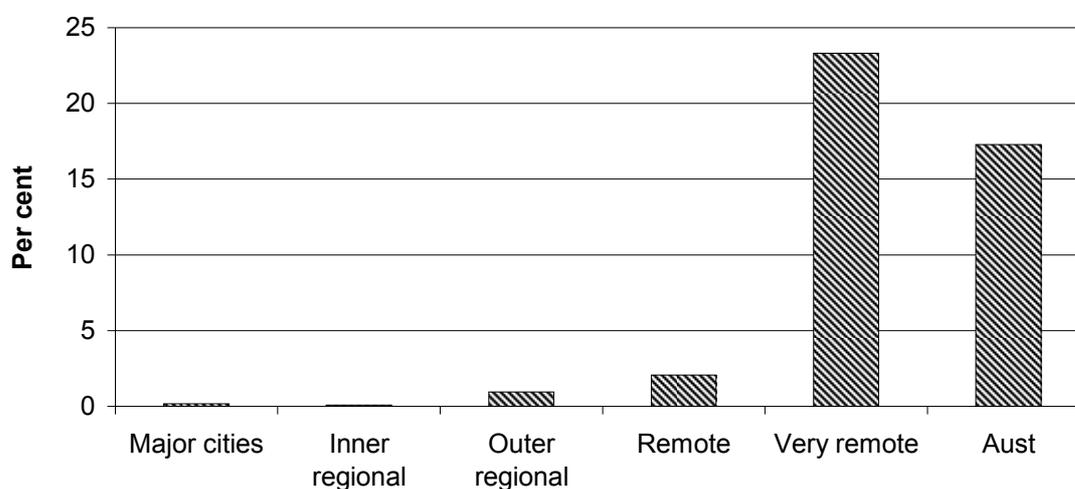
Land provides cultural, social and economic benefits for Indigenous people. Owning or controlling land can facilitate the practice of culture and customary activities such as fishing, hunting and gathering. Land can also provide people with a place to live, through either individual home ownership or community housing. Economic benefits may arise from commercial activities, such as mining royalties and tourism, although these will depend on factors such as location, property rights, governance arrangements, and the desires of the Indigenous landowners.

Not all Indigenous economic activity is necessarily associated with land — Indigenous owned businesses have flourished in areas including art, tourism and native foods, as well as more mainstream activities.

Box 60 KEY MESSAGES — Indigenous owned or controlled land and business

- Indigenous people obtain a variety of economic, social and cultural benefits from land they own or control. Nationally, in 2008:
 - Indigenous owned or controlled land comprised 17 per cent of the area of Australia (figure 8.2.2). Virtually all of this land (99 per cent) was in remote or very remote areas of Australia (tables 8A.2.2, 8A.2.4 and 8A.2.7)
 - native title had been determined to exist in full or in part in 11 per cent of the total area of Australia, compared with 5 per cent in June 2004 (figure 8.2.3)
 - registered Indigenous Land Use Agreements (ILUAs) covered 13 per cent of the total area of Australia (table 8A.2.6).
- Self-employment rates decreased slightly for Indigenous people (from 6 per cent to 5 per cent) and non-Indigenous people (from 17 per cent to 16 per cent) between 2001 and 2006 (figure 8.2.6).

Indigenous owned land as a proportion of each remoteness area, 2008



Source: Figure 8.2.2 in the main report.

Box 61 Things that work

- The main report provides examples of the following sorts of benefits arising from Indigenous ownership and control of land:
 - the customary economy
 - commercial business
 - land management/tradeable assets
 - residential use and home ownership
 - service delivery
 - eco-services (section 8.2).
- The Indigenous Land Corporation purchases land on behalf of Indigenous organisations, with the aim of delivering a range of social and cultural benefits. Its 'Land Management Program' assists with managing that land (box 8.2.2).
- A longitudinal study of 16 Utopia outstations in central Australia found that residents had a range of better health outcomes than those living in centralised communities. Likely contributors included the decentralised nature of the settlement, reliance on hunting and gathering of traditional foods and access to an outreach community-controlled primary health service (box 8.2.3).
- The Indigenous Pastoral Program was established in 2003 in the NT to increase sustainable pastoral production on Indigenous land and Indigenous involvement in the pastoral industry (box 8.2.4).
- The Kimberley Indigenous Management Support Service, a collaboration between the Indigenous Land Corporation, the WA Government and Kimberley Indigenous pastoral lease holders, focuses on developing the technical and management skills of Indigenous directors, managers and workers on Indigenous-owned Kimberley cattle stations (box 8.2.4).
- Indigenous Business Australia's Business Development Programme, known as IBA Enterprises, directly assists Indigenous individuals, families and partnerships to succeed in business, through support, mentoring and business loans (box 8.2.5).
- An intensive, place based approach to Indigenous business development was piloted in Galiwin'ku (Northern Arnhem Land) in 2007. Economic development officers, including a local Indigenous person, provided practical support to assist Indigenous individuals and families to turn business ideas into reality (box 8.2.5).

Home ownership

Home ownership, although not necessarily an aspiration of all Indigenous people, is an important indicator of wealth and saving. As well as providing other benefits, home ownership provides a secure asset base that can contribute to financial stability, and against which people can borrow.

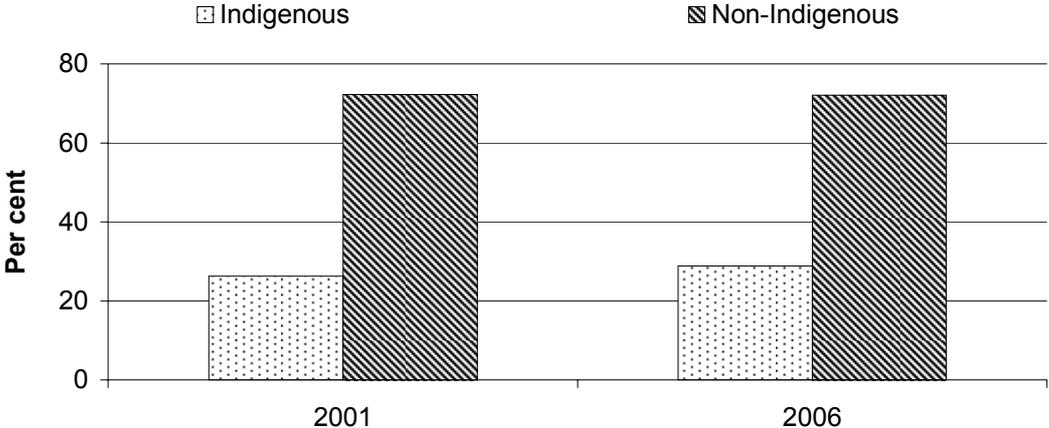
Not all Indigenous people want to own their own homes. In particular, Indigenous people living more traditional lifestyles in remote areas may prefer a more

communal form of ownership. Information on communally owned land is reported in the section on ‘Indigenous owned and controlled land’.

Box 62 KEY MESSAGES — Home ownership

- The proportion of Indigenous people living in home owner/purchaser households increased from 26 per cent to 29 per cent between 2001 and 2006 (figure 8.3.1).
- In 2006:
 - a much lower proportion of Indigenous people lived in home owner/purchaser households (29 per cent) than non-Indigenous people (72 per cent) (figure 8.3.1)
 - the proportion of Indigenous people living in home owner/purchaser households was much lower in very remote (5 per cent) and remote areas (20 per cent) than in major cities (35 per cent) and inner and outer regional areas (36 and 32 per cent, respectively) (figure 8.3.2).

Proportion of people in home owner/purchaser households, 2001 and 2006



Source: Figure 8.3.1 in the main report.

Box 63 Things that work

- An Indigenous home ownership program, now known as IBA Homes, was established in 1975. It has helped more than 12 000 Indigenous families buy their own homes (box 8.3.2).
- The NSW Aboriginal Housing Office works with IBA to facilitate Indigenous home ownership (box 8.3.2).
- The HomeStart Nunga Home Loan program, in SA, was designed to address financial, educational and other issues that often stand in the way of Indigenous home ownership (box 8.3.2).

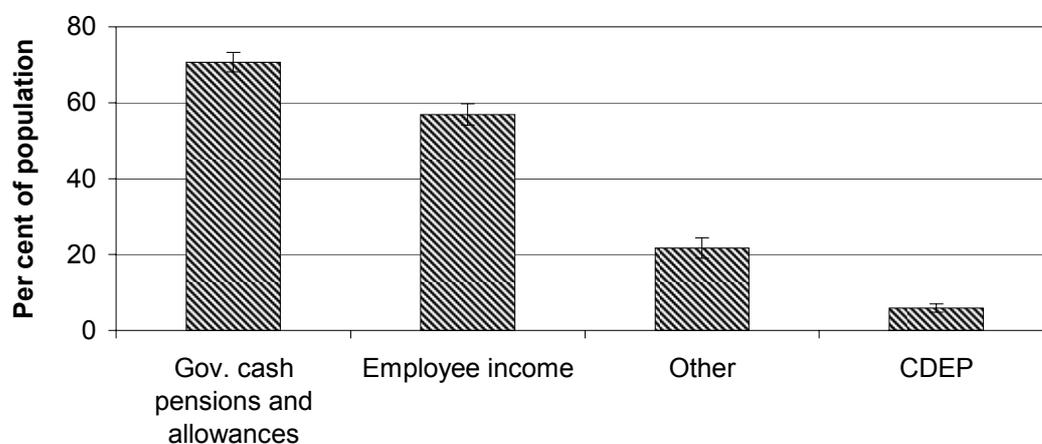
Income support

A high proportion of Indigenous people receive most of their income from government pensions and allowances. Although income support can provide a valuable safety net, recipients usually fall within the lowest income groups, with associated disadvantages. There is also a risk that able-bodied people of working age who spend long periods on income support can become dependent on welfare.

Box 64 KEY MESSAGES — Income support

- In 2004-05:
 - government pensions and allowances (71 per cent) were the most common source of cash income for Indigenous households, followed by employee income (57 per cent), other cash income (22 per cent) and income from Community Development Employment Projects (6 per cent) (figure 8.4.1)
 - 48 per cent of Indigenous people aged 15 to 64 years received government pensions and allowances as their main source of personal cash income, compared to 17 per cent of non-Indigenous people aged 15 to 64 years (figure 8.4.2).
- Higher proportions of Indigenous than non-Indigenous people aged 15–64 years received the most common income support payment types in 2006. Parenting payment single was the most common income support payment received by Indigenous people aged 15–64 years (11 per cent), followed by Newstart allowance (11 per cent), disability support pension (8 per cent) and youth allowance (5 per cent) (figure 8.4.4).

Sources of household cash income for Indigenous people, 2004-05^a



^a Households may report more than one source of income.

Source: Figure 8.4.1 in the main report.

Home environment

The environment in which people live affects their health and wellbeing. Safe and healthy living conditions are influenced by the homes in which people live, the water they drink, and the safe removal of waste. A healthy home environment has many links with aspects of the ‘healthy lives’ strategic area, such as preventable hospitalisations and access to primary health care.

Overcrowding in housing

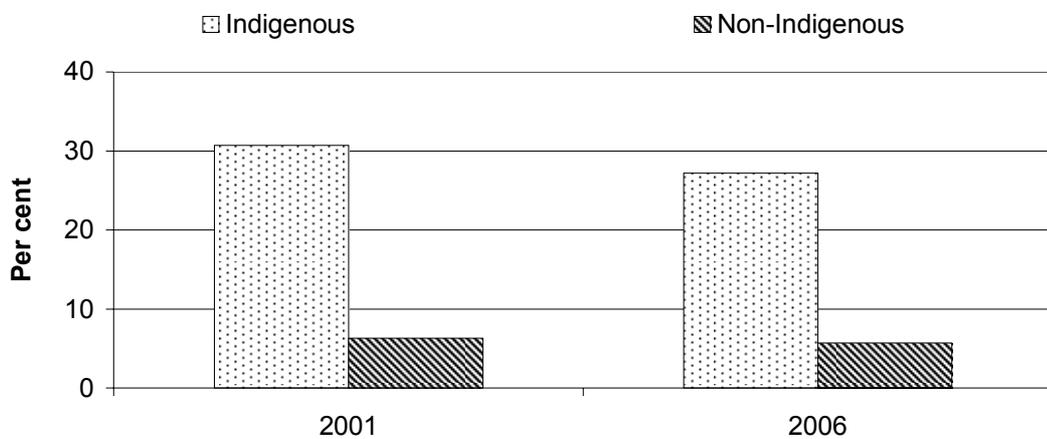
If a house is not appropriate for the number of residents, or has inadequate facilities, it may be more difficult to prevent the spread of infectious diseases. Cramped living conditions can increase domestic tensions and contribute to domestic violence. Overcrowding also affects the ability of children to do homework or study, and even to gain sufficient sleep and relaxation.

Housing overcrowding is calculated by comparing the number of bedrooms with the number, sex and age of people in a dwelling. However, particularly in larger households, the number and condition of bathrooms and toilets, and the size of kitchens, bedrooms and other living spaces, may be as important as the number of bedrooms.

Box 65 KEY MESSAGES — Overcrowding in housing

- Indigenous people were five times as likely as non-Indigenous people to live in overcrowded housing in 2006 (figure 9.1.1). Overcrowding was highest in very remote areas (65 per cent) (figure 9.1.2).
- The proportion of Indigenous people living in overcrowded housing decreased from 31 per cent in 2001 to 27 per cent in 2006 (figure 9.1.1).

Proportion of people living in overcrowded housing, 2001 and 2006



Source: Figure 9.1.1 in the main report.

Rates of disease associated with poor environmental health

Sanitation, drinking water quality, food safety, disease control and housing conditions are major contributors to health and quality of life. However, many rural and remote Indigenous communities still struggle to achieve the basic level of environmental health that has been achieved for the rest of the population, and there are relatively high rates for some diseases that are rare in non-Indigenous communities.

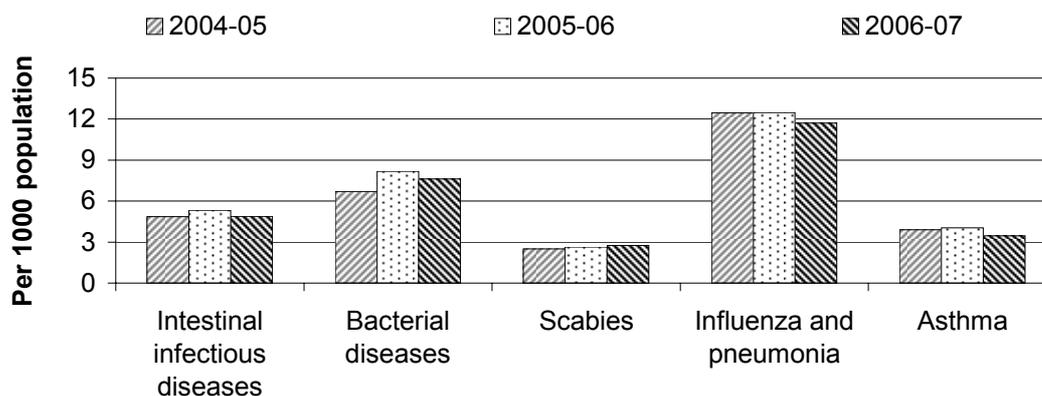
Box 66 KEY MESSAGES — Diseases associated with poor environmental health

- Hospitalisation rates for Indigenous people for all diseases associated with poor environmental health (scabies, influenza and pneumonia, asthma, intestinal infectious diseases, bacterial diseases and acute upper respiratory infections) were higher than for non-Indigenous people in 2006-07 (table 9.2.1). There was little significant change in these hospitalisation rates from 2004-05 to 2006-07 (figure 9.2.2).
- Death rates for diseases associated with poor environmental health were much higher for Indigenous people than non-Indigenous people between 2003–07 (figure 9.2.4).

Box 67 Things that work

- An Animal Management Program (Queensland) aims to control animal populations, reduce negative health, social, economic and environmental effects and improve animal health and welfare (box 9.2.2).

Indigenous hospitalisation rates for diseases associated with poor environmental health^a



^a Age standardised data for NSW, Victoria, Queensland, WA, SA, and public hospitals in the NT.

Source: Figure 9.2.2 in the main report.

Access to clean water and functional sewerage and electricity services

All communities need a clean, adequate and reliable supply of water for drinking, cooking and washing; a functional sewerage system to prevent sewage from

contaminating drinking water and food; and reliable electricity services for refrigeration of foods and power for hot water, cooking and lighting. Many rural and remote Indigenous communities rely on local water, sewerage and electricity systems that have not achieved the basic level of service that has been achieved for the rest of the population.

Box 68 KEY MESSAGES — Clean water and functional sewerage and electricity

- The number of discrete Indigenous communities without an organised sewerage system decreased from 91 in 2001 to 25 in 2006 (table 9A.3.4).
- The number of discrete Indigenous communities without an organised electricity supply decreased from 80 in 2001 (section 9.3) to 32 in 2006 (table 9A.3.7).
- In 2006, of the 322 discrete Indigenous communities with a reported usual population of 50 or more, 165 (51 per cent) had experienced water supply interruptions; 130 (40 per cent) had experienced sewerage overflows or leakages; and 246 (76 per cent) had experienced an electricity interruption in the previous 12 months (tables 9A.3.2, 9A.3.5 and 9A.3.7).

Box 69 Things that work

- An Australian Government and NSW Department of Health program assessed health hardware in Indigenous communities. After low cost repairs, follow up surveys found that the proportions of houses meeting minimum safety standards increased from 11 per cent to 62 per cent for electrical, from 54 per cent to 76 per cent for gas, from 31 per cent to 54 per cent for structure and access, and from 12 per cent to 31 per cent for fire (box 9.3.2).
- The Housing for Health program in NSW improves living conditions in Aboriginal communities, particularly for children aged 0–5 years (box 9.3.2).

Safe and supportive communities

Safe and supportive families and communities are fundamental to the physical and mental wellbeing of Indigenous children and adults. Together they provide a protective, caring and resilient environment, promoting a range of positive outcomes.

Community breakdown can contribute to alcohol and drug misuse, child abuse and neglect, violence and imprisonment, and poor health, education, employment and income outcomes.

Participation in organised sport, arts or community group activities

Taking part in sport, arts or community group activities can foster self-esteem, social interaction and the development of skills and teamwork. Early participation in these activities can lead to stronger bodies, the prevention of chronic diseases and improved learning and academic performance. Reductions in substance misuse, self-harm and crime may also result.

Indigenous people's participation in artistic and cultural activities helps to reinforce and preserve living culture, and can also provide a profitable source of employment.

Box 70 KEY MESSAGES — Sport, arts or community group activities

- For discrete Indigenous communities with a population of 50 or more, 67 per cent had some form of sporting facilities (such as outdoor courts for ballgames or sports grounds) in 2006 (section 10.1).
- Indigenous people (21 per cent) were less likely than non-Indigenous people (31 per cent) to engage in moderate or high levels of exercise, in non-remote areas in 2004-05 (table 10A.1.1).
- Approximately one-third (36 per cent) of Indigenous people aged 15 years and over had attended an Aboriginal or Torres Strait Islander festival involving arts, craft, music or dance in the previous 12 months, and approximately one quarter (27 per cent) had participated in creative art activities in 2002. Indigenous people in remote areas were three times more likely than those in non-remote areas to have attended an Aboriginal or Torres Strait Islander ceremony (section 10.1).

Box 71 Things that work

- A Residential Circus Camp for Indigenous students with the Flying Fruit Fly Circus is supported by the Arts NSW program ConnectEd Arts (box 10.1.2).
- The Hamilton Local Indigenous Network (Victoria) 'Actively Maintaining Cultural Identity' project aims to build cultural awareness and promote health and wellbeing through outdoor recreational activities designed to appeal to the target group of young unemployed Indigenous men (box 10.1.2).
- The Rumbalara Football and Netball Club in Shepparton, Victoria, operates an Academy of Sport, Health and Education, using participation in sport as an avenue for Indigenous people to undertake education and training within a trusted, culturally appropriate environment (box 10.1.2).
- In 1983, the Garbutt Magpies (Queensland) selected 19 young men (15 Aboriginal and Torres Strait Islanders) to travel to Melbourne to watch the Australian Rules Grand Final and play football against other young men. A 2008 study found that positive experiences during involvement with the Garbutt Magpies may have contributed to improved health and lifestyle for these men later in life (box 10.1.2).
- Yirra Yaakin, established in 1993 in WA, has become a world class theatre company and leader in community development, supporting positive self-enhancement through artistic expression (box 10.1.2).
- Indigenous Hip Hop Projects are a team of artists who use traditional Indigenous culture fused with hip-hop, rap, beat boxing and break dancing to foster positive thinking and leadership skills in remote Australian communities (box 10.1.2).
- The Galiwin'ku Gumurr Marthakal Healthy Lifestyle Festival, organised by the Galiwin'ku Community in northeast Arnhem Land on Elcho Island, aims to strengthen traditional understandings of health and healing (box 10.1.2).
- Yolngu Radio 1530 AM (NT) is a regional radio service broadcasting to approximately 8000 Yolngu people in 30 remote communities in North East Arnhem Land, as well as Darwin and Nhulunbuy (box 10.1.2).
- The Dieri Families Reviving Language and Culture Project (SA), funded by the Australian Government's Maintenance of Indigenous Languages and Records program, is working to revive and maintain the Dieri language (box 10.1.12).
- Papunya Tula Artists, owned and directed by Indigenous artists of the Western Desert, aims to promote individual artists, provide economic development for communities, and assist in the maintenance of a rich cultural heritage (box 10.1.2).

Access to traditional lands

The focus of this indicator is on access to traditional lands. It does not show whether Indigenous people have control or ownership over their homelands.

Benefits of land ownership are discussed under the ‘Economic participation’ strategic area.

Access to land may allow Indigenous people to practise and maintain their knowledge of ceremonies, rituals and history. However, this indicator does not provide information on whether Indigenous people have access to particular sites that may be of special significance to them.

This indicator aims to show access by all Indigenous people to traditional lands. However, available data are limited to Indigenous adults in non-remote areas, and are not representative of all Indigenous people.

Box 72 KEY MESSAGES — Access to traditional lands

- The most recent data on access to traditional lands are for 2004-05, and relate only to adults in non-remote areas. The most recent data for remote areas are for 2002.
- In 2004-05, of Indigenous adults living in non-remote areas:
 - 38 per cent did not recognise an area as their homelands (up from 29 per cent in 1994) (table 10A.2.3)
 - 15 per cent lived on their homelands (down from 22 per cent in 1994) and 44 per cent were allowed to visit their homelands (similar to the 47 per cent reported in 1994) (table 10A.2.3).

Alcohol consumption and harm

Excessive alcohol consumption has both health and social consequences. It increases the risk of heart, stroke and vascular diseases, liver cirrhosis and several types of cancers. It also contributes to disability and death through accidents, violence, suicide and homicide. In the case of pregnant women, excessive alcohol consumption can affect the health of newborn infants.

Alcohol misuse can also have effects at the family and community levels, contributing to problems in the workplace, child abuse and neglect, financial problems, family breakdown, violence and crime.

Box 73 KEY MESSAGES — Alcohol consumption and harm

- Indigenous adults were less likely than non-Indigenous adults to have consumed alcohol in the week prior to interview in a 2004-05 survey (53 per cent compared with 36 per cent). Among those who drank alcohol, rates of risky to high risk drinking were similar for Indigenous and non-Indigenous people (table 10A.3.9).
- 70 per cent of Indigenous homicides over the period 1999-2000 to 2006-07 involved both the offender and victim having consumed alcohol, compared to 23 per cent of non-Indigenous homicides (figure 10.3.2).
- Hospitalisation rates for all alcohol related conditions were higher for Indigenous people than non-Indigenous people in 2006-07 (table 10.3.1).

Box 74 Things that work

- At the request of local women in Fitzroy Crossing (WA), the WA director of liquor licensing limited the local hotel to selling only low strength beer for consumption off the premises. There have been marked improvements in health, education and safety since the ban was imposed in October 2007 (box 10.3.2).
- The Groote Eylandt Liquor Management Plan in the NT was developed in 2005 to reduce the number and harm of liquor related incidents in Groote Eylandt and Bickerton Island. The plan, which restricts alcohol consumption through a permit system that controls the takeaway of alcohol from two licensed premises on the island, won two national awards in 2008 (box 10.3.2).
- Alcohol Management Plans in Cape York (Queensland) are developed by communities in partnership with government agencies, and may include limits on alcohol carriage within communities, canteen takeaway restrictions, limited canteen opening hours and restrictions on the sale of full strength alcohol beverages. Plans have contributed to significant reductions in serious injuries (box 10.3.2).

Drug and other substance use and harm

Drug and other substance use and misuse can have far reaching effects on individuals and those around them. It contributes to illness, violence and crime, family and social disruption, and workplace problems. Reducing drug related harm can improve health, social and economic outcomes at both individual and community levels. Many social factors can influence drug and other substance use, such as poor education, unemployment, socioeconomic status and mental health.

Box 75 KEY MESSAGES — Drug and other substance use and harm

- Illicit substance use in the previous 12 months was reported by 28 per cent of Indigenous adults living in non-remote areas in 2004-05 (table 10A.4.3).
- For all homicides recorded from 1999-2000 to 2006-07, a lower proportion of Indigenous homicides than non-Indigenous homicides occurred under the influence of drugs (24 per cent compared to 34 per cent) (table 10A.4.2).
- Indigenous people (2 per 1000) were three times as likely as non-Indigenous people (0.7 per 1000) to be hospitalised for mental and behavioural disorders caused by drug use (table 10A.4.6).

Box 76 Things that work

- The introduction of alternative fuel with low aromatics (Opal fuel) has been successful in reducing the incidence of and harm from petrol sniffing (box 10.4.2).

Juvenile diversions

Indigenous young people have a high rate of contact with the juvenile justice system. In some states and territories, diversion programs allow young offenders to be dealt with outside the traditional court processes, for example, through cautions or attendance at community and family conferences. These programs can contribute to a reduction in antisocial behaviour and offending.

Box 77 KEY MESSAGES — Juvenile diversions

- A smaller proportion of Indigenous than non-Indigenous juveniles were diverted from court by formal cautioning or referrals in each State and Territory for which data were available.

Box 78 Things that work

- A pre-court diversion program for juvenile offenders in the NT, which gives police power to divert offenders through a verbal or written warning, or by requiring the juvenile to attend a family or victim-offender conference, has reduced reoffending rates (box 10.5.2).

Repeat offending

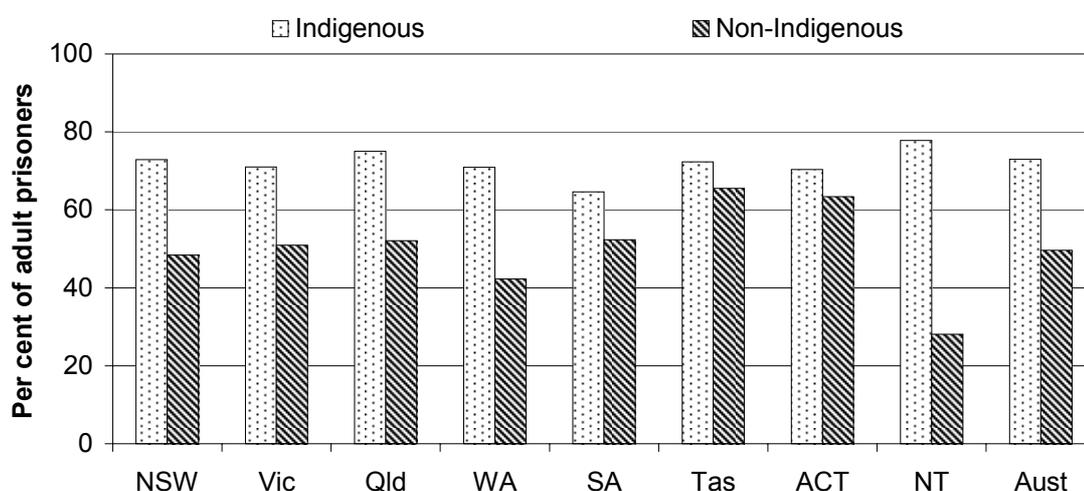
Indigenous people are over-represented in the criminal justice system, and once they have come into contact with the system, are more likely to have further contact with it. Indigenous people are also likely to begin contact with the system at younger ages than non-Indigenous people. High rates of imprisonment and reoffending affect families and communities, as well as individuals. It is important that Indigenous people who have had contact with the criminal justice system have the opportunity to integrate back into the community and lead positive and productive lives.

Reducing reoffending may also help break the intergenerational offending cycle (whereby incarceration of one generation affects later generations through the breakdown of family structures).

Box 79 KEY MESSAGES — Repeat offending

- A greater proportion of Indigenous prisoners (73 per cent) than non-Indigenous prisoners (50 per cent) had prior adult imprisonment in 2008 (figure 10.6.1). There was no significant change at the national level in the proportion of Indigenous prisoners with prior adult imprisonment from 2000 to 2008 (table 10A.6.3).
- Studies on juvenile offenders carried out in NSW, Queensland, WA and SA show that Indigenous juveniles experienced a higher number of court reappearances and higher rates of repeat offending than non-Indigenous juveniles (tables 10A.6.6, 10A.6.7, 10A.6.9 and 10A.6.10).

Prisoners with known prior adult imprisonment, 30 June 2008



Source: Figure 10.6.1 in the main report.

Box 80 Things that work

- Operation Flinders (SA) aims to reduce recidivism of young offenders through an eight day trek in the Flinders Ranges to help youth develop self esteem, leadership, personal responsibility and motivation. In 2006-07, 13 per cent of participants were Aboriginal (box 10.6.2).
- The Aboriginal Outdoor Recreation Program in Tasmania has helped Aboriginal people released from prison not to reoffend or return to prison (box 10.6.2).

Governance and leadership

Governance generally refers to the way the members of a group or community organise themselves to make decisions that affect them as a group. It might include governance of Indigenous communities or organisations, or the governance arrangements of government itself.

Leadership is critical to the development of a strong governance culture, and there can be specific cultural aspects to Indigenous leadership.

Case studies in governance

Many Indigenous organisations provide important social, economic and cultural services to their communities.

Each Indigenous organisation has unique historical and cultural characteristics — but some key aspects of good governance seem to apply to all successful bodies, while allowing for the unique cultural differences. The same key aspects also apply to ‘government governance’ — how governments engage with Indigenous organisations and communities.

Box 81 KEY MESSAGES — Case studies in governance

- Six determinants have general application to good Indigenous governance, while allowing for the unique cultures of different organisations and communities:
 - governing institutions
 - leadership
 - self-determination
 - capacity building
 - cultural match
 - resources.
- These determinants also play a role in good government governance — the way governments engage with Indigenous people.

Box 82 Things that work

The Indigenous Governance Awards are a partnership project between Reconciliation Australia and BHP Billiton, established in 2005, to encourage, reward and promote best practice in Indigenous governance.

Indigenous Governance Awards Finalists 2008

Organisations under 10 years old

Winner

- Warakurna Artists Aboriginal Corporation (Warakurna Community, Ngaanyatjarra Lands, WA)

Highly commended

- Yawoorroong Miriuwung Gajerrong Yirrgeb Noong Dawang Aboriginal Corporation (Kununurra, WA)
- Murrijabree Aboriginal and Torres Strait Islander Association Inc (Deception Bay, Queensland)
- Tirkandi Inaburra Cultural and Development Centre Inc (Coleambally, NSW)

Organisations over 10 years old

Winner

- Traditional Credit Union (Darwin, NT)

Highly commended

- South West Aboriginal Medical Service (Bunbury, WA)
- Yirra Yaakin Aboriginal Corporation (Perth, WA)
- Waltja Tjutangu Palyapayi (Aboriginal Corporation) (Alice Springs, NT)

Source: Section 11.1 in the main report.

Governance capacity and skills

Capacity building for good governance can take many forms. Individuals, groups and organisations can build on their strengths and address their weaknesses through both formal and informal training. This indicator provides information on participation in courses that are considered useful for developing skills relevant to governance — management and commerce, economics and law. However, students in other courses may also be well equipped to provide leadership and contribute to good governance.

Box 83 KEY MESSAGES — Governance capacity and skills

- Indigenous students were less likely than non-Indigenous students to enrol in university and VET courses relevant to governance in 2007:
 - 10 per cent of Indigenous university students compared with 29 per cent of non-Indigenous university students
 - 16 per cent of Indigenous VET students compared with 21 per cent of non-Indigenous VET students (table 11.2.1).

Box 84 Things that work

- The Office of the Registrar of Indigenous Corporations (ORIC) has developed a range of corporate governance training programs for Indigenous corporations and their governing committees/boards:
 - members of ORIC's Mediation and Dispute Resolution section work together with ORIC's corporate governance trainers to combine dispute assistance with governance training (box 11.2.2)
 - the Managing in Two Worlds governance training program aims to strengthen the management capacity of Victorian Aboriginal community organisations and improve service delivery, using programs developed by ORIC and Aboriginal Affairs Victoria (box 11.2.2)
 - ORIC, in collaboration with the Ngaanyatjarra Pitjantjatjara Yankunytjatjara Women's Council, has produced the Building Strong Corporations program for remote settlements or centres servicing remote settlements (box 11.2.2).

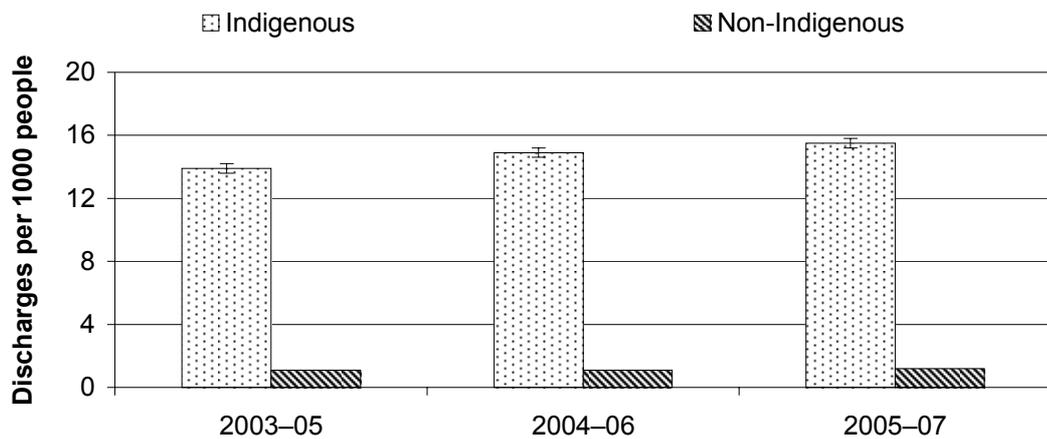
Engagement with service delivery

Engagement with service delivery looks at barriers that restrict Indigenous people's access to services. Lack of cultural awareness may create barriers, particularly to mainstream services. In remote areas, barriers may include lack of services, long distances, or lack of interpreters.

Box 85 KEY MESSAGES — Engagement with service delivery

- A key lesson from the COAG Indigenous community coordination trials and the Northern Territory Emergency Response is that engagement with Indigenous communities is essential to achieve measurable improvements in economic, health and social indicators (section 11.3).
- Rates of discharge from hospital against medical advice for Indigenous people were between 13 and 14 times as high as the rates for non-Indigenous people in 2003–05, 2004–06 and 2005–07, in those jurisdictions for which data were available (figure 11.3.1).

Discharge from hospital against medical advice^a



^a NSW, Victoria, Queensland, WA, SA and public hospitals in the NT.

Source: Figure 11.3.1 in the main report.

Box 86 Things that work

- The Aboriginal Birth Certificate Registration project in Dubbo, involving the Western Region of NSW Sport and Recreation, the Registry of Births, Deaths and Marriages, and members of the Indigenous community, was initiated because the absence of a birth certificate was preventing young Aboriginal people from participating in organised sporting activities (box 11.3.2).
- Local Indigenous Community Partnership Projects (Victoria) are place-based projects led by a departmental secretary in partnership with local Indigenous communities. The projects aim to find local solutions to community concerns (box 11.3.2).
- The Improving Care for Aboriginal and Torres Strait Islander Patients program (Victoria) aims to improve identification of, and quality care for, Aboriginal and Torres Strait Islander patients (box 11.3.2).
- The Keeping Our Mob Safe national emergency management strategy for remote Indigenous communities has improved emergency response service delivery for Indigenous communities in Queensland (box 11.3.2).
- The Northern Territory Aboriginal Interpreter Service has been operating for approximately seven years and currently employs 177 interpreters (box 11.3.3).
- The Let's Start project (NT) is targeted at Indigenous preschool and early primary school-aged children and their parents. The project uses a differentiated strategy of engagement in the diverse social settings of remote communities, fringe communities and suburbs in large towns and major centres (box 11.3.3).

Outcomes for Torres Strait Islander people

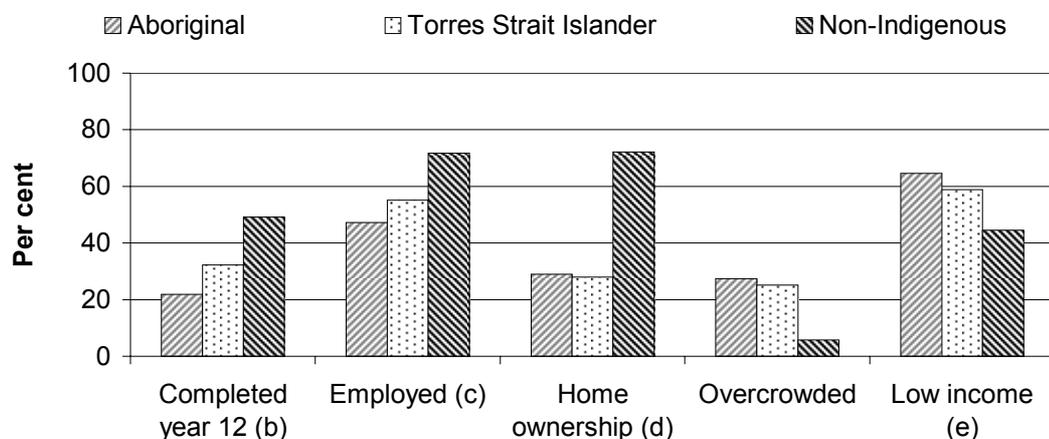
Torres Strait Islander people are a culturally distinct group of Indigenous Australians. The ABS 2006 Census provides an opportunity to report results that separately identify outcomes for Torres Strait Islander people and Aboriginal people. The Census data show that Torres Strait Islander people tend to have slightly better outcomes than Aboriginal people, but there is still a significant gap between outcomes for Torres Strait Islanders and non-Indigenous Australians.

Much more information on outcomes for Torres Strait Islander, Aboriginal and non-Indigenous people is provided in the main report.

Box 87 KEY MESSAGES — Outcomes for Torres Strait Islander people

- Between 2001 and 2006:
 - the proportion of Torres Strait Islander people aged 15 years or over who had completed year 12 or an equivalent increased from 27 per cent to 32 per cent (figure 12.1) and the proportion aged 25–64 years with a non-school qualification increased from 22 per cent to 29 per cent (figure 12.2)
 - the proportion of Torres Strait Islander people aged 15–64 years who were employed increased from 50 per cent to 55 per cent (figure 12.3)
 - after adjusting for the effects of inflation, median individual incomes for Torres Strait Islander people aged 15 years and over increased by 4 per cent (figure 12.4)
 - there was little change in the proportion of Torres Strait Islander people living in a home owned or being purchased by a member of the household (around 28 per cent) (figure 12.7) or in the proportion living in overcrowded housing (around 25 per cent) (figure 12.9).

Outcomes for Torres Strait Islander, Aboriginal and non-Indigenous people, 2006^a



^a Torres Strait Islander includes 'Torres Strait Islander only' plus 'Aboriginal and Torres Strait Islander'. Aboriginal includes only 'Aboriginal'. Non-Indigenous includes 'not stated'. ^b People aged 15 years and over who had completed year 12 or equivalent. ^c Employed people as a proportion of people aged 15–64 years. ^d Proportion of people living in a home owned or being purchased by a member of the household. ^e Proportion of people aged 15 years and over with incomes less than \$400 a week.

Source: Chapter 12 in the main report.

Measuring multiple disadvantage

Different aspects of disadvantage often seem to occur together — for example, poor education appears to be linked with poor employment outcomes, and both are linked with low income. Using data from the ABS 2006 Census, the main report identifies some aspects of disadvantage that tend to occur together. This analysis does not identify cause and effect (that is, it does not say that disadvantage in one area is the *cause* of another poor outcome).

Box 88 **KEY MESSAGES — Measuring multiple disadvantage**

In 2006:

- Indigenous people were markedly disadvantaged when compared with non-Indigenous people against measures of education, labour force and income (figures 13.1.1–3)
- patterns of disadvantage by age and sex were generally similar for Indigenous and non-Indigenous people. However, for Indigenous people, disadvantage increased with remoteness, while rates of disadvantage for non-Indigenous people were lower in remote areas (figures 13.1.1–3).

Using a statistical technique that holds other modelled factors constant, in 2006:

- Males and females who had attained higher than year 8 were more likely to be in the labour force and less likely to be unemployed than those whose highest level of educational attainment was year 8 or below. This effect was stronger for Indigenous males and females than for non-Indigenous males and females (figure 13.3.1 and table 13.3.2).

FUTURE DIRECTIONS IN DATA

This report has drawn extensively on data from the five-yearly ABS Census. Updated Census data will not be available for several future reports. Although there have been improvements in some alternative data sources, many key data continue to be of poor quality. All Australian governments have agreed that the improvement of Indigenous data is a high priority.

Indicator	Data priority
Life expectancy	<ul style="list-style-type: none"> Continue work on improving quality and availability of Indigenous mortality data, including trend data on life expectancy.
Substantiated child abuse and neglect	<ul style="list-style-type: none"> Develop data collections on the underlying extent of child protection issues. These are not necessarily apparent from administrative data on substantiations, notifications and orders.
Tobacco, alcohol and drug and other substance use and harm	<ul style="list-style-type: none"> Collect regular data comparing Indigenous and non-Indigenous consumption and more robust data by jurisdictional and geographic levels.
Birthweight	<ul style="list-style-type: none"> Extend data collections to focus on the Indigenous status of babies (rather than mothers).
Hearing impediments	<ul style="list-style-type: none"> Collect data to enable the assessment of the true burden of hearing loss and the type and severity of ear infections in the Indigenous population.
Hospitalisation data	<ul style="list-style-type: none"> Improve quality of Indigenous identification in hospital administrative systems.
Social and emotional wellbeing	<ul style="list-style-type: none"> Improve data on comparable measures of social and emotional wellbeing.
Family and community violence	<ul style="list-style-type: none"> Improve data on relationship of victim to offender and comparability across states and territories.
Tooth decay	<ul style="list-style-type: none"> Expand the availability of comparable data on dental health.
Juvenile diversions	<ul style="list-style-type: none"> Develop and collect comparable national data.
Self employment and Indigenous business	<ul style="list-style-type: none"> Collect regular data on Indigenous business and self-employment.
Access to clean water and functional sewerage and electricity services	<ul style="list-style-type: none"> Collect regular data allowing comparison between services in Indigenous communities and those delivered by major utilities.

1 Introduction

In April 2002, the Council of Australian Governments (COAG) commissioned the Steering Committee for the Review of Government Service Provision to:

produce a regular report against key indicators of Indigenous disadvantage. This report will help to measure the impact of changes to policy settings and service delivery and provide a concrete way to measure the effect of the Council's commitment to reconciliation through a jointly agreed set of indicators (COAG 2002, see appendix 1).

The first edition of *Overcoming Indigenous Disadvantage: Key Indicators* was released in November 2003. A second edition of the report was published in July 2005, and a third in June 2007. All three editions have been widely welcomed and generally well received, and there has been widespread endorsement of the vision embodied in the report of 'a society where Aboriginal and Torres Strait Islander peoples should enjoy a similar standard of living to that of other Australians, without losing their cultural identity' (CAR 2000).

The report has led to constructive debate amongst Indigenous organisations, governments and public sector agencies, non-government organisations, and many individuals — both Indigenous and non-Indigenous. Based on the best available information, the report has provided depth to the discussions and improved the potential for practical solutions to entrenched problems.

This is the fourth report in the series. It has been informed by ongoing consultations, and by recent developments in COAG's approach to addressing Indigenous disadvantage.

1.1 Not just another statistical report

COAG nominated two core objectives for this report. The first is to inform Australian governments about whether policy programs and interventions are achieving improved outcomes for Indigenous people. The second is to produce a report that is meaningful to Indigenous people.

Therefore, the *Overcoming Indigenous Disadvantage: Key Indicators* report aims to be more than a collection of data. This report does not aim to replicate what is being done elsewhere — numerous reports and academic publications have been produced

containing statistical information on Indigenous Australians, and many service areas have developed comprehensive suites of performance indicators.

This report is both visionary and strategic. Its vision, outlined in the ‘priority outcomes’, is that Indigenous people will one day enjoy the same opportunities as other Australians, together with strong cultural identity. The Overcoming Indigenous Disadvantage framework underpins a strategy to achieve this vision.

The information in this report provides policy makers and Indigenous people with a high level view of the current state of Indigenous disadvantage and draws attention to where things need to change if the priority outcomes are to be achieved. The report focuses on the underlying factors that ultimately cause disadvantage; relying on experience, evidence and logic to identify areas where targeted policies will have the greatest impact. Over time, editions of this report are tracking where governments have had an impact on Indigenous disadvantage — and where work still needs to be done.

The report also provides a practical tool for government agencies and Indigenous organisations. The report’s whole-of-government, outcome focus encourages agencies to think beyond their existing policy frameworks. Governments and agencies are encouraged to incorporate the report’s indicators into their own monitoring and evaluation. However, the report acknowledges that many factors bear on change. A key message from consultations with Indigenous people was that the efforts of governments acting alone would not be enough to overcome Indigenous disadvantage. Fundamental, long term change will require concerted actions on the part of governments, the private sector, the general community and, not least, Indigenous people themselves.

Data limitations, and a desire to keep the report to a manageable size, mean that much of this report concentrates on outcomes for Indigenous Australians at the national and State and Territory level. However, the report recognises the diversity of Aboriginal and Torres Strait Islander cultures and experience; and acknowledges that disadvantage may come in different forms for those who live in urban, regional and remote areas. Some information has been reported separately for Aboriginal people and Torres Strait Islander people, and some has been disaggregated by remoteness. Elements of the Overcoming Indigenous Disadvantage framework have been adopted by some jurisdictions, and even individual Indigenous communities, to produce more disaggregated information to meet their specific needs.

Implementation of the framework

The report is influencing how governments address Indigenous disadvantage. Implementation of the Overcoming Indigenous Disadvantage framework by all governments is summarised in appendix 2.

Indigenous organisations can use the report's indicators to monitor their own outcomes, and to hold governments to account. The Close the Gap Campaign draws on many of the Overcoming Indigenous Disadvantage report indicators to hold governments accountable for achieving Indigenous health equality (box 1.1.1).

Box 1.1.1 Close the Gap Campaign for Indigenous Health Equality

In April 2007, 40 of Australia's leading Indigenous and non-Indigenous health peak bodies and human rights organisations joined forces to launch a campaign to 'Close the Gap' on health inequality.

Close the Gap calls on all levels of Australian government to put in place firm targets, funding and timeframes to address health inequalities, including providing equal access to primary health care for Indigenous Australians within 10 years.

In March 2008, the Australian Government (with bipartisan support) and Indigenous health leaders signed a Statement of Intent to work together to achieve equality in health status and life expectancy between Aboriginal and Torres Strait Islander peoples and non-Indigenous Australians by the year 2030.

The signing of the Statement was the culmination of a two-day Indigenous Health Equality Summit attended by more than 100 experts across the Indigenous and mainstream health sector and related fields. The Summit developed working targets and benchmarks to be used to close the gap in Indigenous life expectancy by 2030.

Source: AHRC (2009)

1.2 Background

The origins of this report can be traced back to COAG's response to the Council for Aboriginal Reconciliation's report, *National Strategies to Advance Reconciliation* (CAR 2000). The final report of the Council for Aboriginal Reconciliation called for COAG to agree on a framework for all governments (and the Aboriginal and Torres Strait Islander Commission) to set measurable program performance benchmarks and annually report performance against those benchmarks. In its response, COAG acknowledged the unique status of Indigenous Australians, and agreed that 'many actions are necessary to advance reconciliation, from

governments, the private sector, community organisations, Indigenous communities, and the wider community' (COAG 2000; appendix 1).

In December 2000, the then Prime Minister wrote to the Ministerial Council for Aboriginal and Torres Strait Islander Affairs (MCATSIA), requesting it to develop its action plan on reconciliation to include performance reporting strategies and benchmarks. A framework was developed by early 2002, which identified three priority areas for action, headline indicators and strategic change indicators. This framework formed the basis of extensive consultations undertaken by the Steering committee in developing the framework for the 2003 edition of this report. The Australian, State and Territory governments conducted consultations within their jurisdictions. Officials representing MCATSIA and the former Aboriginal and Torres Strait Islander Services consulted within their organisations, and the Chairman of the Steering Committee and the Secretariat held discussions with Indigenous people and their organisations, and officials and researchers across the country.

Following the release of the 2003 report, and again following the 2005 and 2007 reports, the consultation process continued. The outcomes of each round of consultations and their influence on the content of the report have been summarised in each edition of the report, and two reports on specific consultations have been produced (SCRCSSP 2003b; SCRGSP 2007b).

Recent COAG developments

In December 2007, COAG agreed to explicit targets for improving the lives of Indigenous people, and established the Working Group on Indigenous Reform (WGIR) to make progress towards achieving these targets (COAG 2007).¹ The working group is chaired by the Australian Government Minister for Families, Housing, Community Services and Indigenous Affairs and comprises senior officials from each jurisdiction.

The WGIR developed a Closing the Gaps framework to support the achievement of COAG's Indigenous targets. This framework had many similarities to the 2007 Overcoming Indigenous Disadvantage report. In the interests of an integrated approach to Indigenous reporting, the Chair of the WGIR wrote to the Chairman of

¹ In December 2007, three targets were agreed (closing the life expectancy gap within a generation, halving the mortality gap for children under five within a decade and halving the gap in reading, writing and numeracy within a decade). Three further targets were agreed in March 2008 (all four year olds in remote communities access to early childhood education within five years, at least halve the gap for students in year 12 attainment or equivalent by 2020, and halve the gap in employment outcomes within a decade) (COAG 2007, 2008).

the Steering Committee in August 2008, requesting that the Steering Committee work with the WGIR to align the WGIR and OID frameworks. Following consultation between the WGIR and the Secretariat for the Review, the WGIR endorsed an aligned framework in October 2008, and COAG agreed to the new framework at its meeting in November 2008 (COAG 2008).

To the casual reader, the framework for this report may not appear very different to that in previous reports. However, the Steering Committee is conscious that these changes to the framework require further consultation with Indigenous people and their organisations, to ensure that the report continues to be ‘of relevance to all governments and Indigenous stakeholders’. The Steering Committee has planned a broad round of consultations following the release of this report, to gather feedback on the changes, and to inform the structure and content of future reports.

1.3 The Review of Government Service Provision

The Steering Committee

The Review of Government Service Provision was an initiative of the Prime Minister, Premiers and Chief Ministers at the Premiers’ Conference in July 1993 and now operates under the auspices of COAG. The Review is overseen by a Steering Committee, which comprises senior representatives from the Prime Minister’s, Premiers’ and Chief Ministers’ departments, and Treasury and Finance departments in the Australian, State and Territory Governments, and observers from the ABS and AIHW. It is chaired by the Chairman of the Productivity Commission, which also provides the Secretariat.

Review reports

The Review undertakes three major exercises for COAG:

- the annual *Report on Government Services*, now in its fourteenth edition. This report provides information on the efficiency and effectiveness of, and equity of access to, mainstream government services in the areas of education, justice, emergency management, health, community services and housing. Since 2003, the Review has published a separate Indigenous Compendium of information relating to the delivery of mainstream services to Indigenous people, drawn from this report (SCRCSSP 2003a; SCRGSP 2004–2007a, 2008, 2009)

-
- the two-yearly *Overcoming Indigenous Disadvantage: Key Indicators* report, which reports on outcomes for Indigenous people and, unlike the report on Government Services, does not focus on specific services
 - annual reporting of performance information relating to National Agreements between the Commonwealth and the states and territories to the COAG Reform Council, including the National Indigenous Reform Agreement. National Agreements may include a mix of outcome measures and indicators of the performance of services.

Indigenous Expenditure Report

The Productivity Commission also provides the Secretariat to a separate COAG Steering Committee with responsibility for producing an annual report on expenditure on services to Indigenous Australians. This report focuses on government expenditure on both Indigenous-specific and mainstream services used by Indigenous people.

The Overcoming Indigenous Disadvantage Working Group

The Steering Committee is advised on production of this report by a working group comprising representatives from Prime Minister's department and Premiers' and Chief Ministers' departments, as well as observers from the MCATSIA, the ABS and the AIHW. The Working Group was originally convened by Gary Banks, the Chairman of the Steering Committee and the Productivity Commission, and since 2004 has been convened by Commissioner Robert Fitzgerald of the Productivity Commission.

1.4 References

- AHRC (Australian Human Rights Commission) 2009, *Close the Gap: Indigenous Health Campaign*, http://www.hreoc.gov.au/social_justice/health/index.html, accessed 14 April 2009.
- CAR (Council for Aboriginal Reconciliation) 2000, *National Strategies to Advance Reconciliation*, Sydney.
- COAG (Council of Australian Governments) 2000, *Communiqué Meeting 3 November 2000*, Canberra.
- 2002, *Communiqué*, Meeting 5 April 2002, Canberra.
- 2007, *Communiqué*, Meeting 20 December 2007, Canberra.
- 2008, *Communiqué Meeting 29 November 2008*, Canberra.
- SCRCSSP (Steering Committee for the Review of Commonwealth/State Service Provision) 2003a, *Report on Government Services Indigenous Compendium*, Productivity Commission, Canberra.

— 2003b, *Draft Framework for Reporting on Indigenous Disadvantage: Report on Consultations*, Productivity Commission, Canberra.

SCRGSP (Steering Committee for the Review of Government Service Provision) 2004–2007a, 2008, 2009, *Report on Government Services Indigenous Compendium*, Productivity Commission, Canberra.

—2007b, *Framework for Reporting on Indigenous Disadvantage: Report on Consultations 2006*, Productivity Commission, Canberra.

2 The framework

This chapter explains the structure and logic of the *Overcoming Indigenous Disadvantage: Key Indicators* report framework. As noted in chapter 1, the report aims to be more than a compilation of statistics. The report's framework is intended to help governments target their efforts to overcome Indigenous disadvantage, and to provide meaningful information to Indigenous people.

Section 2.1 describes how the key elements of the framework fit together. Section 2.2 describes how changes to the Council of Australian Government's (COAG's) approach to Indigenous issues since the 2007 report have influenced the report framework, and section 2.3 summarises how the framework for this report differs from the framework in the 2007 report. Section 2.4 provides feedback from consultations conducted following the release of the 2007 report, and section 2.5 describes the report's approach to reporting on 'cultural' issues that influence the welfare of Indigenous people. Section 2.6 concludes with a discussion of data issues with broad implications for the information in this report.

2.1 The framework

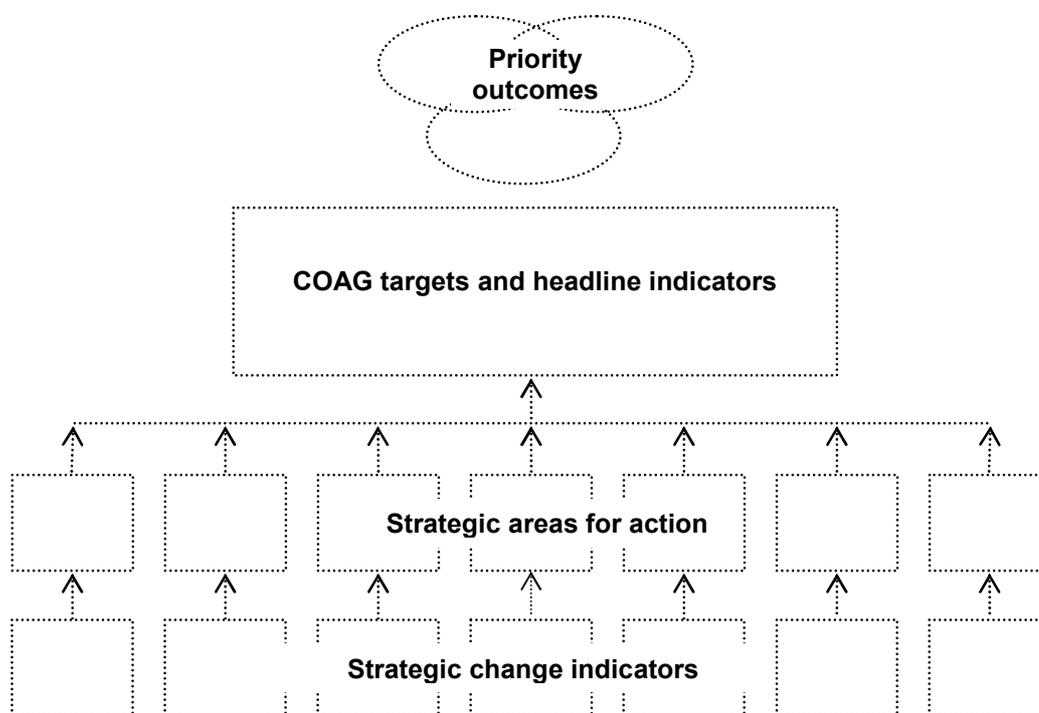
The terms of reference for this report require it to help inform governments' response to Indigenous disadvantage, by providing information about the impact of past program and policy interventions. Reports about the performance of governments usually focus on specific programs or policies, and usually take a 'silo' approach — education is reported by departments of education, health by health departments — and tend to focus on service inputs (how budgets are spent) and outputs (the actual services delivered).

While information on inputs and outputs is valuable, this report provides something different. The report's framework focuses on outcomes — the impact of policies and programs on Indigenous people — rather than inputs and outputs. It emphasises the need to assess the impact of programs and policies from a whole-of-government perspective. The current level of Indigenous disadvantage is the result of a complex mix of historical, social and economic factors. Closing the gaps in outcomes will require the combined efforts of governments, the community and, most importantly, Indigenous people themselves. Chapter 3 discusses in more detail the need for

coordinated government action to address the complex interactions between different aspects of disadvantage.

The key elements of the indicator framework are shown in a simplified form in figure 2.1.1. The framework is based on the best available evidence about the root causes of continuing disadvantage, in order to ensure that policy attention is directed to prevention, as well as responding to existing disadvantage. Each of the framework elements is discussed briefly below.

Figure 2.1.1 Framework elements



Priority outcomes

Three interlinked priority outcomes sit at the top of the framework — no single aspect of the priority outcomes can be achieved in isolation:

- Safe, healthy and supportive family environments with strong communities and cultural identity
- positive child development and prevention of violence, crime and self-harm
- improved wealth creation and economic sustainability for individuals, families and communities.

These outcomes reflect COAG's vision for Indigenous Australians to have the same life opportunities as other Australians. Indigenous people and their organisations have also endorsed these outcomes, in extensive consultations over several years.

However, it is extremely difficult to measure progress in achieving such broadly stated, aspirational outcomes, and to hold governments and service providers accountable. Therefore, the framework includes two layers of quantifiable indicators. The logic of the framework is that, over time, measurable improvement in these indicators will demonstrate progress toward achieving the priority outcomes.

COAG targets and headline indicators

The first layer of indicators is made up of the six targets COAG has set for closing the gaps in outcomes for Indigenous people, and a further six headline indicators selected by the Steering Committee to represent significant, high level outcomes.

In December 2007 and March 2008 COAG announced six closing the gaps targets (the name of the indicator in the framework is in italics, followed by the full text of the target):

- *life expectancy* — close the life expectancy gap within a generation (COAG 2007)
- *young child mortality* — halve the gap in mortality rates for children under five within a decade (COAG 2007)
- *reading, writing and numeracy* — halve the gap for Indigenous students in reading, writing and numeracy within a decade (COAG 2007)
- *employment* — halve the gap in employment outcomes between Indigenous and non-Indigenous Australians within a decade (COAG 2008a)
- *early childhood education* — providing access to quality early childhood education, within five years, for all Indigenous four year olds, including those in remote communities (COAG 2008a)
- *year 12 attainment* — at least halve the gap for Indigenous students in year 12 attainment or equivalent attainment rates by 2020 (COAG 2008a).

These ambitious targets highlight specific outcomes in areas that are either significant in their own right (life expectancy and early childhood mortality) or are important preconditions or preventative factors for addressing long term disadvantage (access to preschool, learning outcomes and school attainment, and employment). Prime Minister Rudd noted that practical targets formed the core of a

new partnership between Indigenous and non-Indigenous Australians:

Our challenge for the future is to embrace a new partnership between Indigenous and non-Indigenous Australians. The core of this partnership for the future is closing the gap between Indigenous and non-Indigenous Australians on life expectancy, educational achievement and employment opportunities. This new partnership on closing the gap will set concrete targets for the future: within a decade to halve the widening gap in literacy, numeracy and employment outcomes and opportunities for Indigenous children, within a decade to halve the appalling gap in infant mortality rates between Indigenous and non-Indigenous children and, within a generation, to close the equally appalling 17-year life expectancy gap between Indigenous and non-Indigenous when it comes to overall life expectancy. (Rudd 2008)

The Steering Committee has selected six headline indicators that sit alongside the COAG targets in the first layer of indicators. These headline indicators are all important outcomes in their own right, that will require whole-of-government action over the long term before significant progress can be measured:

- post secondary education, participation and attainment
- disability and chronic disease
- household and individual income
- substantiated child abuse and neglect
- family and community violence
- imprisonment and juvenile detention.

Together, the COAG targets and headline indicators provide an overview of the state of Indigenous disadvantage, and act as proxy measures for the priority outcomes. Chapter 4 includes a discussion of the evidence base supporting the selection of each indicator, the definitions of the specific measures used to report against each indicator, and the available data, including any information on recent trends.

Strategic areas for action and strategic change indicators

The COAG targets and headline indicators, by their very nature, are extremely important, but their whole-of-government, long term nature can make it difficult to hold specific governments or agencies accountable for outcomes. The second layer of the framework seeks to overcome this limitation by identifying ‘strategic areas for action’ — specific areas of policy where immediate action is needed if the COAG targets and headline indicators are to be achieved. Each strategic area for action has a small number of ‘strategic change indicators’ that measure short term progress.

The full strategic framework is presented in section 2.3. The rationale for each strategic area for action, and reporting against relevant strategic change indicators are presented in chapters 5 to 11.

Strategic areas for action

The seven strategic areas for action were chosen for their potential to have a significant and lasting impact in reducing Indigenous disadvantage. Each strategic area represents a set of related activities that evidence suggests have the potential to drive improvement in the COAG targets and headline indicators.

The strategic areas for action in this report differ slightly from those in the 2007 report, as they have been aligned with the seven ‘building blocks’ identified by COAG to support the reforms aimed at achieving the six COAG targets (COAG 2008b). (Changes to the framework since the 2007 report are summarised in section 2.3.) The seven strategic areas are:

- early child development (chapter 5)
- education and training (chapter 6)
- healthy lives (chapter 7)
- economic participation (chapter 8)
- home environment (chapter 9)
- safe and supportive communities (chapter 10)
- governance and leadership (chapter 11).

The strategic areas deliberately do not mirror typical government service silos. In some cases, a specific service area will logically play a major role, but in all strategic areas, more than one government agency will have to take action in order to achieve better outcomes. For example, in the area of ‘education and training’, the school system has an important role to play, but so do agencies dealing with transport availability, housing arrangements and health.

During consultations, many people have asked how governments’ progress in addressing the strategic areas for action would be monitored. The monitoring of specific government programs and services is beyond the scope of this report, but a summary of implementation measures being adopted by individual governments is contained in appendix 2. Data on Indigenous people’s access to a range of government services are included in the Indigenous Compendium of the Review’s annual *Report on Government Services* (SCRGSP 2009).

Strategic change indicators

A small number of targeted, shorter term ‘strategic change indicators’ measure progress for each strategic area for action. These indicators make it easier to track short term progress, and improve accountability for outcomes.

Linkages across the framework mean that some indicators could potentially be placed in more than one strategic area for action (for example, alcohol consumption and harm is relevant to both the ‘Healthy lives’ and ‘Safe and supportive communities’ strategic areas). Indicators have been placed in the strategic area where the evidence base suggests they will have greatest effect, but their potential to influence other outcomes is emphasised in the text.

Many potential indicators could have been included in this report. Potential indicators were assessed against the criteria listed in box 2.1.1 before they were added to the framework. Most of the indicators in the report met the criteria — but a few indicators were regarded as so important that they were included in the framework even though they did not meet some criteria. Similarly, most indicators are linked to outcomes — not to specific program or service outputs. However, some outputs are so closely tied to outcomes that they are included; for example, access to primary health care.

Box 2.1.1 Criteria used to select strategic change indicators

1. Relevance to priority outcomes
2. Actions in the strategic areas for action result in positive outcomes over time in the COAG targets and headline indicators
3. Supported by strong logic or empirical evidence
4. Sensitive to policy interventions and changes in policy settings
5. Meaningful to stakeholders and principally to the Indigenous community
6. Unambiguous and clear in meaning and interpretation
7. The existence, or ease, of developing supporting data sets

The first three criteria are closely related. The whole framework is geared toward achieving the priority outcomes, as evidenced by movement in the COAG targets and headline indicators. The report draws its strength from the evidence base or underlying theory of causality that links improvement in a strategic change indicator to progress toward the COAG targets and headline indicators, and therefore the priority outcomes. For most indicators, empirical evidence provides the basis for

satisfying this criterion. For some indicators, despite limited empirical evidence, causal logic and feedback from consultations were considered compelling.

The fourth and fifth criteria are also closely linked. The terms of reference for the report require it to inform Australian governments about the impact of policy programs and interventions, and to be meaningful to Indigenous people. All indicators have been endorsed by governments as relevant to policy actions, and most have been accepted by Indigenous people as meaningful. The Steering Committee is committed to further broad consultations with Indigenous people on the new indicators included in this report.

The sixth criterion recognises that, to be most useful, an indicator should be clear and unambiguous. Most indicators in this report are relatively easy to understand. However, in some cases, important indicators have been included, even though they may yield ambiguous results. For example, an increase in notifications of child abuse or neglect might reflect an undesirable increase in the incidence of such behaviour, but alternatively could reflect a desirable increase in the proportion of incidents being reported or investigated. In such cases, the report includes explanatory text that highlights the potential ambiguity.

The final criterion recognises the practical need for relevant data to report against an indicator. In many cases, the absence of directly relevant data means that proxy measures must be reported. In a few cases, important indicators have been included even though data are substantially qualified or not available for all jurisdictions. In two cases, indicators have been included even though there are no reliable data available (Indigenous cultural studies and governance). These indicators were considered to be so important that qualitative information using case studies has been included in the place of data. Some new indicators identified as high priorities by COAG (for example, ‘basic skills for life and learning’ and ‘teacher quality’ do not yet have data available, and data strategies are being developed.

Things that work

The Steering Committee recognises that indicators alone cannot tell the complete story about overcoming Indigenous disadvantage. The gaps in almost all reported outcomes can appear overwhelming — yet there are many examples of successful initiatives, often at the community level, that are acting to close those gaps. These successes are often not apparent from the aggregate data used to report against indicators.

For almost every indicator, the Steering Committee has included a number of brief case studies of programs or services that are making a difference — ‘things that

work'. These examples illustrate how things can change for the better, and provide models that other governments or communities can draw upon and adapt for their own use.

'Things that work' in this report were assessed against the criteria in box 2.1.2. However, formal evaluations of Indigenous programs are very limited, and in many areas, lacking altogether. Focused, rigorous research and program evaluation is urgently required to improve the effectiveness of government policies and programs. COAG has agreed to establish a clearinghouse to compile, disseminate, and promote research and program evaluation in the field of Indigenous policy. This could provide a valuable resource for policy makers and Indigenous communities, and a potential source of rigorously evaluated 'things that work' case studies for future editions of this report.

Box 2.1.2 'Things that work' criteria

'Things that work' case studies highlight programs or services that are successfully acting to close the gap in Indigenous outcomes. Case studies must:

- be relevant to a report indicator
- have measurable, up to date outcomes
- have a reasonable track record of success
- be supported by local Indigenous people who use or are affected by the case study
- be agreed for inclusion by all jurisdictions.

2.2 COAG developments

Since the 2007 report, COAG has re-emphasised its commitment to addressing Indigenous disadvantage.

Working Group on Indigenous Reform

In December 2007, COAG identified Indigenous reform as one of seven priority areas of national reform. COAG established a Working Group on Indigenous Reform (WGIR), chaired by the Hon. Jenny Macklin, Australian Government Minister for Families, Housing, Community Services and Indigenous Affairs, and comprising senior officials from each jurisdiction (COAG 2007).

The WGIR developed a broad Closing the Gaps framework to support its work. The WGIR framework was based on the indicators endorsed by COAG for inclusion in

the 2007 report, with some additional indicators drawn from new National Agreements between the Commonwealth and the states and territories (discussed below). However, the WGIR framework was structured slightly differently, in recognition of the specific areas of reform highlighted by COAG.

In related developments, in November 2008, COAG endorsed a new Intergovernmental Agreement on Federal Financial Relations, which included a new National Indigenous Reform Agreement (NIRA), based on the WGIR framework. The NIRA sets out the objectives, outcomes, outputs, performance indicators and performance benchmarks agreed by COAG in order to close the gap in Indigenous disadvantage.

In the interests of an integrated approach to Indigenous reporting, the Chair of the WGIR wrote to the Chairman of the Steering Committee in August 2008, requesting that the Steering Committee work with the WGIR to align the WGIR and OID frameworks and the NIRA. Following consultation between the WGIR and the Secretariat for the Review, the WGIR endorsed an aligned framework in October 2008, and COAG agreed to the new framework at its meeting in November 2008 (COAG 2008). In March 2009, Prime Minister Rudd wrote to the Chairman, updating the terms of reference for the report to take account of the new framework (p. XXII).

This report is based on that aligned framework. In summary, the alignment involved:

- retaining the priority outcomes as the government and Indigenous endorsed ‘vision’
- highlighting the COAG targets as government priorities within the headline indicators
- renaming the strategic areas for action to reflect more closely the WGIR building blocks for reform
- retaining all previous OID indicators, and adding additional indicators and measures from the WGIR framework.

The framework for this report, and a summary of changes from the 2007 report framework are presented in section 2.3.

National Agreements

In December 2007, COAG agreed to reform Specific Purpose Payments (SPPs) (COAG 2007). SPPs are financial agreements between the Australian Government and State and Territory governments, involving a contribution by the Australian

Government to the funding of services which are considered a joint Australian and State and Territory government responsibility.

At its 29 November 2008 meeting, COAG revised over 90 SPPs down to just five covering schools, vocational education and training, disability services, healthcare and affordable housing. Each of the five SPPs is associated with a new National Agreement that contains the objectives, outcomes, outputs and performance indicators for each sector. The performance of all governments in achieving the mutually agreed outcomes and benchmarks specified in each National Agreement will be monitored and assessed by the COAG Reform Council (CRC) (COAG 2008b). The WGIR was responsible for ensuring that all National Agreements included specific indicators for Indigenous Australians (COAG 2007).

The National Agreements are supplemented by National Partnerships (NPs). Funding for NPs may be conditional on states and territories meeting agreed performance benchmarks. The following Indigenous National Partnerships had been agreed as at March 2009 (although not all jurisdictions are signatories to all NPs):

- National Partnership Agreement on Indigenous Early Childhood Development
- National Partnership Agreement on Closing the Gap in Indigenous Health Outcomes
- National Partnership Agreement on Indigenous Economic Participation
- National Partnership Agreement on Remote Indigenous Housing.

National Partnership Agreement on Remote Service Delivery Other National Partnerships, which are not Indigenous-specific, may also contribute to achieving the COAG Closing the Gap targets. Any National Agreement or National Partnership indicators that were relevant to outcomes for Indigenous people were included in the WGIR Closing the Gap framework, and so are included in the aligned framework for this report.

Annual report to Commonwealth Parliament

In 2008, the Prime Minister announced an annual report to Parliament on progress against COAG's targets for closing the outcomes gaps for Indigenous people. The first annual report was presented to Parliament on 26 February 2009.

The alignment of this report's framework with the WGIR Closing the Gap framework means that the COAG targets will be reported every second year in this report. The Steering Committee will ensure that reporting on the targets in this report is consistent with the Prime Minister's annual report to Parliament.

Report on Expenditure on Services to Indigenous Australians

At its December 2007 meeting, COAG agreed to report on expenditure on services for Indigenous people. The January 2008 meeting of the Ministerial Council for Federal Financial Relations agreed to the development of a national framework for reporting expenditure on Indigenous services. An inter-jurisdictional steering committee (for which the Productivity Commission provides the Secretariat, but separate to the Steering Committee which produces this report) has developed a framework and methodology for collecting and reporting these expenditure data. The proposed framework is scheduled for endorsement by the Ministerial Council and COAG.

A key objective of the expenditure report is to provide information that will enable governments to assess the effectiveness of, and better target, policy responses to Indigenous disadvantage. The proposed framework is closely aligned with this report's strategic areas for action (and associated indicators). Over time, it is hoped that the cost effectiveness of government policy can be informed by linking expenditure data to high level outcomes data from this report.

2.3 Changes to the framework for this report

To many readers, the framework for this report may not appear very different to that in previous reports. The broad structure (priority outcomes, headline indicators, strategic change areas and strategic change indicators) remains the same. However, the Steering Committee draws attention to the following changes:

- replacing the former twelve headline indicators with the six COAG targets and six headline indicators
- renaming the strategic areas for action to match more closely the WGIR 'building blocks'
- reorganising the reporting of strategic change indicators to match the new strategic areas for action
- the addition of several new indicators (from the WGIR framework, National Agreements and National Partnership agreements)
- reporting against additional measures for some indicators.

Changes to headline indicators

The twelve headline indicators in the 2007 report have been replaced with the six COAG targets (which represent explicit COAG commitments) and six high level outcome measures (table 2.3.1).

Table 2.3.1 Changes to headline indicators

<i>2007 report</i>	<i>2009 report</i>
Headline indicators^a	COAG targets^b and Headline indicators
Life expectancy at birth	<i>Life expectancy</i> <i>Young child mortality</i> <i>Early childhood education</i> <i>Reading, writing and numeracy</i>
Years 10 and 12 retention and attainment	<i>Year 12 attainment</i>
Labour force participation and unemployment	<i>Employment</i>
Post secondary education — participation and attainment	Post secondary education — participation and attainment
Disability and chronic disease	Disability and chronic disease
Household and individual income	Household and individual income
Substantiated child abuse and neglect	Substantiated child abuse and neglect
Imprisonment and juvenile detention rates	Imprisonment and juvenile detention
Family and community violence	Family and community violence
Deaths from homicide and hospitalisations for assault	
Suicide and self-harm	
Home ownership	

^a The 2007 headline indicators have been re-ordered in this table to match the COAG targets. ^b COAG targets are printed in *italic*.

Although there is significant overlap between the COAG targets and the previous headline indicators, the following changes are noted:

- The COAG targets of ‘Young child mortality’ and ‘Early childhood education’ have been added (sections 4.2 and 4.3). Similar information was previously reported as part of the ‘Early child development’ strategic area for action.
- The former headline indicator ‘Home ownership’ is now an indicator under the ‘Economic participation’ strategic area for action. Successful programs have shown that well targeted programs can improve the prospects for Indigenous home ownership in the relatively short term (section 8.3).
- The former headline indicator ‘Suicide and self harm’ is now an indicator under the ‘Healthy lives’ strategic area for action. Suicide is closely linked to the mental health indicator in this area, and programs exist that aim to improve outcomes in this area by limiting the incidence and growth of suicide ‘clusters’ (section 7.8).

- Information previously reported under the former headline indicator ‘Deaths from homicide and hospitalisations for assault’ is now reported under the headline indicator ‘Family and community violence’ (section 4.11).

Renaming the strategic areas for action

The former strategic areas for action have been renamed to match more closely the WGIR ‘building blocks (table 2.3.2). The WGIR building blocks reflect COAG’s priority areas of reform, and as with the strategic areas for action in the 2007 report, none of the strategic areas is service or agency specific, even though their names may suggest otherwise.

Table 2.3.2 Strategic areas for action

<i>2007 report^a</i>						
Early child development and growth (prenatal to age 3)	Early school engagement and performance (preschool to year 3)	Positive childhood and transition to adulthood	Economic participation and development	Effective environmental health systems	Functional and resilient families and communities	Substance use and misuse
<i>2009 report</i>						
Early child development	Education and training	Healthy lives	Economic participation	Home environment	Safe and supportive communities	Governance and leadership

^a The 2007 strategic areas have been re-ordered in this table to match the order of the WGIR building blocks.

There is significant overlap between the strategic areas for action in the 2007 and 2009 reports, the following changes are noted:

- ‘Early child development and growth (prenatal to age 3)’ has been renamed ‘Early child development’ (chapter 5)
- many elements of ‘Early school engagement and performance (preschool to year 3)’ and ‘Positive childhood and transition to adulthood’ have been combined in the new ‘Education and training’ area (chapter 6)
- ‘Economic participation and development’ has been renamed ‘Economic participation’ (chapter 8)
- many elements of ‘Effective environmental health systems’ are reported under the new area ‘Home environment’ (chapter 9)
- ‘Functional and resilient families and communities’ has been renamed ‘Safe and supportive communities’ (chapter 10)

-
- indicators previously reported under ‘Substance use and misuse’ have been moved to ‘Healthy lives’ (‘tobacco consumption and harm’) (section 7.4) and ‘Safe and supportive communities’ (‘Alcohol consumption and harm’ and ‘Drug and other substance use and harm’) (sections 10.3 and 10.4 respectively)
 - the most significant change is the elevation of ‘Governance and leadership’ to a specific strategic area for action, recognising the importance of good governance in communities, organisations and governments. This area includes indicators previously reported under the area ‘Economic participation and development’ (‘Case studies in Governance’ (section 11.1), ‘Governance capacity and skills’ (section 11.2) and ‘Engagement with service delivery’ (section 11.3)).

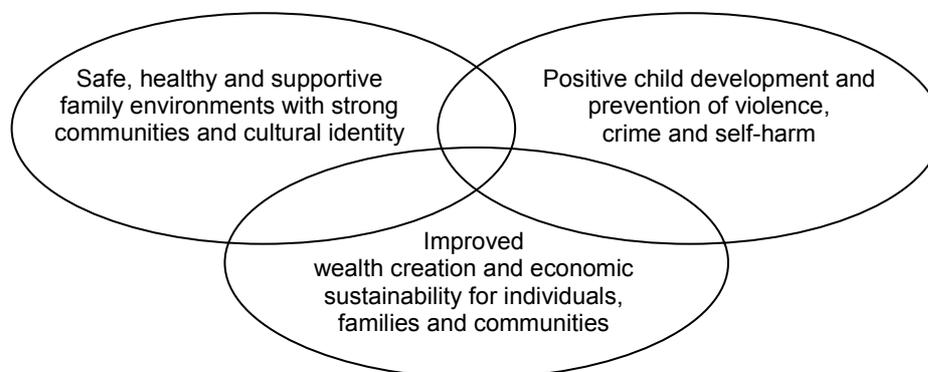
New indicators and measures

In this report, the term ‘indicator’ refers to a broad statement of *what* outcome is to be measured. Indicators are usually described in general terms, to allow for developments in the evidence base and changing data sets over time. The term ‘measure’ refers to *how* an indicator will be measured. Data availability means that proxy measures must be used to report against some indicators, and sometimes multiple measures may be required to illustrate a single indicator.

Drawing on the work of the WGIR, and indicators and measures in relevant COAG National Agreements and National Partnership agreements, several new indicators have been added to the framework for this report, and reporting against many indicators from the 2007 report has been enhanced with additional measures. Figure 2.3.1 presents the complete framework for the 2009 report. Changes to indicators from the 2007 report are printed in *italic*. Information on the measures reported for each indicator is provided in each indicator section, and summarised in appendix 5 ‘Measures and data sources’.

Figure 2.3.1 **Multi-level indicator framework**

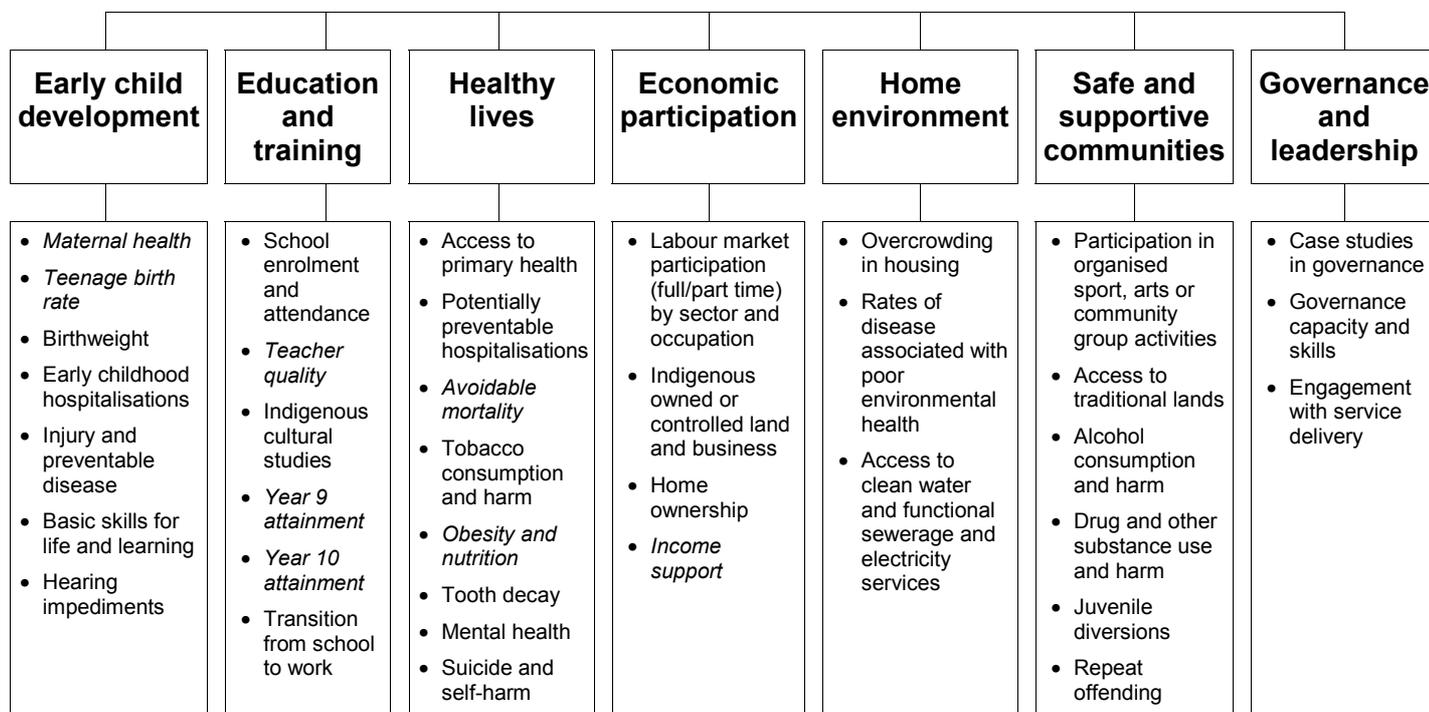
1. Priority outcomes



2. COAG targets and headline indicators

COAG targets	Headline indicators
<ul style="list-style-type: none"> • <i>Life expectancy</i> • <i>Young child mortality</i> • <i>Early childhood education</i> • <i>Reading, writing and numeracy</i> • <i>Year 12 attainment</i> • <i>Employment</i> 	<ul style="list-style-type: none"> • Post secondary education — participation and attainment • Disability and chronic disease • Household and individual income • Substantiated child abuse and neglect • Family and community violence • Imprisonment and juvenile detention

3. Strategic areas for action



^a New indicators since the 2007 report are noted in *italic*.

2.4 Consultations

Consultations with Indigenous people, government agencies and researchers have made important contributions to the ongoing development of the report. Initial consultations in 2002-03 provided a foundation for developing the framework. Following the release of each report, further rounds of consultation have sought feedback on the report and ideas for improving future reporting. Two reports on consultations have been produced (SCRCSSP 2003; SCRGSP 2007).

Consultations prior to the 2007 report revealed broad support for the existing framework — importantly, Indigenous people generally agreed that the indicators reflected the issues affecting their communities and causing disadvantage. Reflecting the diversity within the Indigenous population, there were different perspectives on some indicators, particularly those relating to home ownership and land. Nevertheless, there was broad acceptance of the inclusion of these indicators within the framework.

Following consultations in 2006, the Steering Committee made changes to some of the indicators in the framework for the 2007 report. These changes addressed all the straightforward issues raised in consultations, but a few specific topics were identified that required further investigation. Following the 2007 report, as well as general consultations, the Steering Committee made more detailed examination of the following topics:

- child abuse and neglect — Indigenous child abuse and neglect is of significant policy interest to governments, but no data are currently available on the underlying incidence of child abuse and neglect. Developments in this area are discussed in section 4.10
- substance use and misuse — alcohol, tobacco and other substance misuse contributes to poor health, family violence, child abuse and neglect, and poor educational outcomes, but there are limited data on rates of substance use and misuse, and the effects of a variety of policies initiated by governments and Indigenous communities. Developments in this area are discussed in sections 7.4, 10.3 and 10.4
- social and emotional wellbeing — Indigenous people have emphasised the role of social and emotional wellbeing in providing ‘protective factors’ for individuals and communities. However, it is difficult to define and measure social and emotional wellbeing. Developments in this area are discussed in section 7.7
- access to clean water and functional sewerage — a reliable supply of clean drinking water and a reliable and effective sewerage system are vital to good health. However, with available data it is difficult to compare access for discrete

Indigenous communities with access for similar sized mainstream towns. Developments in this area are discussed in section 9.3

- economic participation and development, particularly in remote areas — governments and Indigenous organisations have identified the importance of increased economic participation and development for Indigenous people, particularly in remote areas that are distant from mainstream labour markets. Developments in this area are discussed in chapter 8
- justice outcomes (imprisonment and juvenile detention, family violence) — Indigenous people are over-represented in the criminal justice system as both victims and offenders, and outcomes are getting worse over time. Better understanding of the underlying causes of poor justice outcomes could assist policy makers to target interventions. Developments in this area are discussed in sections 4.11 and 4.12
- development of an Indigenous language indicator — language is regarded as significant to the wellbeing of many Indigenous Australians but it is difficult to define a specific indicator. Developments in this area are discussed in section 2.5, and section 6.3 includes information on Indigenous language programs in schools.

These topics raise complex conceptual and data collection issues, and the Steering Committee acknowledges that improvements in reporting will take some time — potentially, several editions of the report. The Steering Committee is committed to ongoing consultations and development in these areas.

2.5 Culture

The representation of culture in the framework has been a constant topic of discussion during consultations with Indigenous people. Culture pervades every aspect of the lives of Indigenous people, and some studies have suggested that cultural strength can provide communities with a degree of resilience to entrenched disadvantage.

One clear message has been that no single indicator could adequately reflect the place of culture in the lives of Indigenous people, and several cultural indicators are included in this report. Just as culture pervades every aspect of the lives of Indigenous people, the cultural indicators are spread across the strategic areas for action. The links across the strategic areas for action and between these areas and the COAG targets and headline indicators are particularly strong for many of the cultural indicators.

The following sections outline the cultural indicators in this report. Consultations have suggested several cultural indicators that are highly meaningful to Indigenous people. However, many of these indicators are in areas that Indigenous people, in consultations, regarded as the responsibility of Indigenous people themselves, not governments, or are not sensitive to government policies and programs. Very often, there are no supporting data which would allow reporting. In some other areas, further work is underway to develop cultural indicators.

Indigenous cultural studies

‘Indigenous cultural studies’ is included in the ‘Education and training’ strategic area for action (section 6.3). Many people raised the potential for Indigenous cultural studies to benefit both Indigenous and non-Indigenous young people, and to address the ignorance and misunderstanding that often underlie racism. In addition, culturally appropriate curriculum may improve the motivation of Indigenous children to attend or remain at school.

Data are limited in this area. This report includes some information on: schools with culturally inclusive curricula, including selected case studies; and levels of Indigenous employment in schools.

Participation in Indigenous cultural activities

‘Participation in organised sport, arts or community group activities’ is included in the ‘Safe and supportive communities’ strategic area for action (section 10.1). The breadth of this indicator reflects the diversity of Indigenous culture. Art and ceremony are significant markers of a society’s spiritual and cultural strength in both western and Indigenous contexts, while there is strong anecdotal evidence that a range of sport and community activities can foster self-esteem, social interaction, and the development of skills and teamwork, leading to outcomes such as a reduction in juvenile crime.

Information is reported on involvement in a range of activities, supplemented with case studies on particular activities taking place in some communities.

Land

‘Access to traditional lands’ is included in the ‘Safe and supportive communities’ strategic area for action (section 10.2). Although there was unanimous agreement during consultations about the cultural significance of land, there was also widespread recognition of land as an economic indicator. Torres Strait Islanders

noted that the sea was more culturally important to them than land, although land was also important in economic terms. The ‘Economic participation’ strategic area for action includes the related indicator ‘Indigenous owned or controlled land and business’ (section 8.2).

Data in this area are very limited. This report repeats information from the 2007 report, drawn from the ABS 2004-05 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS). Data on peoples’ ‘recognition of homelands/traditional country’ and their access to those homelands were available only for people in non-remote areas.

Governance and culture

‘Case studies in governance arrangements’ are included in the ‘Governance and leadership’ strategic area for action (section 11.1). Culture is an essential element of the determinants of good governance, and section 11.1 examines each of the following determinants using a series of case study examples:

- governing institutions
- leadership
- self determination
- capacity building
- cultural match
- resources.

Engagement with service delivery

‘Engagement with service delivery’ is included in the ‘Governance and leadership’ strategic area for action (section 11.3). Service engagement is a broad concept that encompasses accessibility (including barriers to access) and appropriate delivery (including recognition of Indigenous cultural perspectives in designing and delivering programs). This section includes information such as: perceived barriers to accessing services; difficulty communicating with service providers; information from primary carers of Aboriginal children on their satisfaction with access to community services and facilities; and case studies of effective service engagement.

Indigenous language as a potential indicator

An indicator of ‘Indigenous language’ attracted widespread support during consultations. Indigenous language is closely linked with Indigenous culture and law, and all three are linked with Indigenous wellbeing. However, there was no clear consensus about the form of a language indicator.

Information around the use of Indigenous languages, and speakers of Indigenous languages, is relevant to many areas of the report. Although at present there is not a large amount of empirical evidence, there is a clear relationship between the loss of Indigenous languages and speakers and ‘disadvantage’ — the focus of this report. Language and disadvantage can be linked broadly in two main ways, building upon the role that language plays in the continuation of culture and promotion of resilient communities:

- Disadvantage may occur at an individual level through a reduction in the numbers of speakers — for example through individual loss of culture and decreased wellbeing of speakers and communities. The 2006 ABS Census of Population and Housing found:
 - 170 Australian Indigenous languages with 3 speakers or more, based on coding within the Second Edition of the Australian Standard Classification of Languages (ABS 2005)
 - twelve per cent of Indigenous people in Australia reported speaking an Indigenous language at home. A large proportion of Indigenous people reported no Indigenous language use at home (86 per cent)
 - of those that speak an Indigenous language, 74 per cent live in very remote Australia, while only 1 per cent of Indigenous people in major cities speak an Indigenous language at home. The majority of Indigenous language speakers (56 per cent) live in the NT
 - the proportion of Indigenous language speakers increased with age, from 9 per cent of 0–14 year olds up to 11 per cent for those 45 or older.
- Disadvantage may occur at an aggregate level, with the loss of distinct languages or a reduction in the ability of a community to maintain cultural practices:
 - the 2005 National Indigenous Languages Survey report (AIATSIS and FATSIL 2005) found that, from an original number of over 250 Indigenous languages, only around 145 languages were still spoken. However, around 110 of these were considered ‘severely and critically endangered’. Only around 20 languages were considered ‘strong’.

Some further information about Indigenous languages is included in the report. Use of Indigenous languages in schools is included in the indicator ‘Indigenous cultural

studies’ (section 6.3). ‘Engagement with service delivery’ (section 11.3), includes information about communication between service providers and Indigenous people. Appendix 3 presents information about speakers of Indigenous languages, drawing on data from the 2006 ABS Census of Population and Housing.

Other potential cultural indicators

Other potential cultural indicators have been identified, but to date it has not been possible to construct indicators that met the criteria for strategic change indicators:

- Heritage — many Indigenous people expressed the view that government had a role in ensuring that cultural heritage was protected and maintained. However, it is difficult to construct a meaningful quantitative measure of ‘heritage’. For example, although heritage registers give legal protection to a number of sites, there is little information about sites that are not listed. There is also little information about the effectiveness of heritage listing.
- Indigenous culture and law — several Indigenous organisations emphasised the importance of official recognition of Indigenous culture by governments and the legal system. Possible indicators included: observance of Indigenous protocols in ceremonies; and recognition of Indigenous law and governance. Although no data sources exist to report on these indicators, some aspects of these suggestions are reflected in the governance case studies in section 11.1.

Both of these indicators reflect outcomes that are important for the wellbeing of Indigenous people but about which there is no consensus on specific indicators. Continuing research will be undertaken on other possible cultural indicators for future reports.

2.6 Data issues

Readers of this report should bear a number of issues in mind when interpreting the data in this report. (Appendix 4 contains more information about data limitations.)

Timeliness

The data in this report are the most recent available. Many data collections are not updated annually, and some data collections require significant time for processing and validation between collection and publication.

Sources

Data for this report have been drawn from three types of sources — Census, survey and administrative data. Each has strengths and weaknesses.

Census data

The ABS Census of Population and Housing takes place every 5 years. The Census is rich in information and has the potential for extensive disaggregation, and the 2006 Census is a major data source for this report.

The 2006 Census includes responses from just over 450 000 people who identified as being of Aboriginal and/or Torres Strait Islander origin, out of an estimated Indigenous population of just over 500 000. The undercount of Indigenous people was particularly significant in WA (estimated at 25 per cent) and the NT (estimated at 20 per cent). Census data for these jurisdictions still provide a high quality picture of the circumstances of those who were counted, but readers should not assume that the characteristics of those who were counted in the Census are necessarily the same as those who were missed.

Survey data

Survey data can provide a rich source of data at higher levels of aggregation, for example, national and State and Territory data, and sometimes remoteness area disaggregations. The reliability of survey data is limited by sampling error, especially if data are disaggregated further than the survey sample was designed to allow.

The ABS has introduced a three yearly rolling program of Indigenous household surveys, the most recent being the 2008 National Aboriginal and Torres Strait Islander Social Survey (NATSISS). Data from this survey are expected to be released during 2009, and will form an important input for the 2011 report. The next survey in the program will be the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) scheduled for 2011.

Data from other surveys are included in this report, but many general surveys do not contain a large enough Indigenous sample to allow detailed disaggregations.

Administrative data

Administrative data are usually collected as part of the management of a service delivery activity (for example, hospital patient records). These data are updated

frequently (often annually) but there can be issues with the accuracy of Indigenous identification across jurisdictions and over time. There may also be differences between states and territories in the types of services provided or definitions used within collections, which make it difficult to compare across jurisdictions or to estimate national totals. Major differences in definitions or data collections are noted in this report as appropriate.

In addition, administrative data can be affected by the availability or accessibility of services, and by Indigenous people's willingness (or 'propensity') to access those services. For example, different rates of substantiated child abuse and neglect across jurisdictions or over time may be the result of differential access to services or different propensities to report child abuse, rather than differences in its occurrence (section 4.10).

There has been a significant improvement in the availability of administrative data on hospitalisations of Indigenous people. The 2007 report included data for Queensland, WA, SA and the NT. This report also includes hospital data for NSW and Victoria for 2004-05 to 2006-07 (longer time series are also presented for Queensland, WA, SA and the NT). Data from Tasmania and the ACT are considered to be of insufficient quality for analytical purposes, due to a combination of poor Indigenous identification and the small absolute numbers of Indigenous people in those jurisdictions.

Interpreting the data

Indigenous identification

Virtually all the information in this report relies on self-identification by Indigenous people. Therefore, the accuracy of the data depends on the opportunities provided to identify as Indigenous, and peoples' willingness to do so.

The level of Indigenous identification can vary over time and across data collections. Improvements over time in data collections (for example, the adoption or correct application of the standard ABS question on Indigenous status) will improve the accuracy of Indigenous identification, but in some cases will also make trend analysis difficult. For example, it might be difficult to establish whether an increase in the recorded use of a service by Indigenous people reflects an actual increase in use, or better identification of existing service users.

Indigenous population

Most of the indicators in this report are expressed as rates, or as proportions of a particular population. Estimates of numbers of people are sometimes included, but using rates makes it easier to compare outcomes for Indigenous and non-Indigenous people. This report generally uses ABS estimates of the Indigenous population to create rates (for example, hospitalisations per 1000 people). Data from different sources, or for different years, might use population estimates from different sources. For example:

- Census data are compared to the number of Indigenous people identified in the Census (this provides internal consistency as both the numerator and the denominator are from the same source)
- data as at June 2006 are compared to the ABS estimate of the Indigenous population as at June 2006 (ABS 2007). This estimate is based on adjusted 2006 Census data
- data for other years generally are compared to the ABS 'low series' experimental projections of the Indigenous population for those years (ABS 2004). These projections are based on adjusted 2001 Census data and a set of assumptions about likely trends in Indigenous population growth (box 2.6.1). Indigenous population estimates and projections based on the 2006 Census are expected to be released later in 2009.

Box 2.6.1 Indigenous population growth

In September 2004, the ABS released experimental estimates of the Indigenous population for 2001, and projections from 2002 to 2009 for Australia and states and territories (ABS 2004).

Between the 1996 and 2001 Censuses, the number of people identifying as Indigenous increased by more than could be explained by known fertility and mortality trends. Therefore, the 2004 ABS publication provided two alternative sets of projections:

- 'low series' projections, that assume no further 'unexplained' growth in the Indigenous population, and the Indigenous population is projected to grow 1.8 per cent annually
- 'high series' projections, that assume that the 'unexplained' growth experienced between 1996 and 2001 continues, and the Indigenous population is projected to grow 3.4 per cent annually.

In this report, the 'low series' projections generally have been used as population denominators for the purpose of calculating rates and proportions.

Revised Indigenous population projections based on the 2006 Census are likely to be published by the ABS later in 2009.

Source: ABS (2004) unpublished.

Box 2.6.2 summarises information from the 2006 ABS Census of Population and Housing on the number of Indigenous people and where they live.

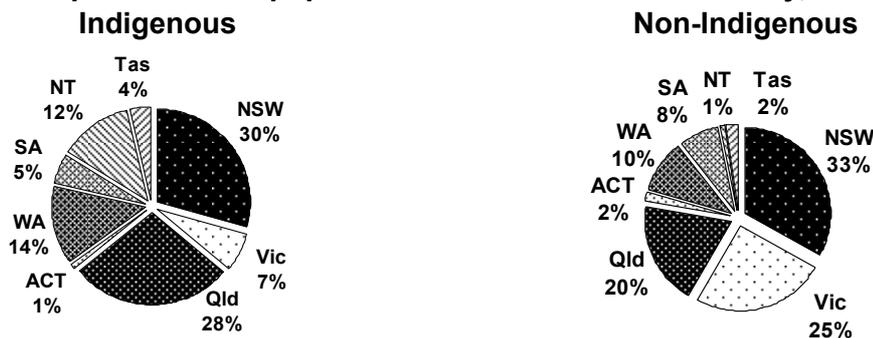
Box 2.6.2 How many people?

In 2006, the estimated resident Indigenous population of Australia was 517 000, out of a total population of 21 million people (2.5 per cent of the Australian population). In the Indigenous population, 463 700 (90 per cent) were of Aboriginal origin only, 33 300 (6 per cent) were of Torres Strait Islander origin only and 20 100 (4 per cent) were of both origins.

Throughout this report, the term ‘Indigenous’ is used to refer to Aboriginal people and Torres Strait Islander people. Although the situations of Aboriginal people and Torres Strait Islander people can be very different, the relatively small number of Torres Strait Islander people makes it difficult to report separately about their experiences. Available data are summarised in the section ‘Outcomes for Torres Strait Islander people’.

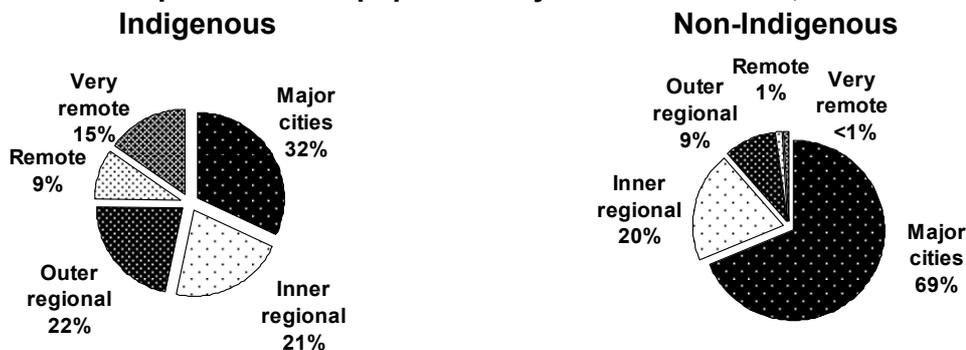
A higher proportion of both Indigenous and non-Indigenous populations lived in NSW than other states and territories (30 per cent and 33 per cent respectively in 2006). There were 194 000 Indigenous children aged 14 years and under in 2006 (38 per cent of all Indigenous people, compared with 19 per cent for the non-Indigenous population).

Proportion of the population in each State and Territory, 2006



An estimated 32 per cent of Indigenous people lived in major cities in 2006. A further 21 per cent lived in inner regional areas, and 22 per cent in outer regional areas. An estimated 9 per cent lived in remote areas and 15 per cent in very remote areas. Almost 90 per cent of non-Indigenous people lived in major cities or inner regional areas.

Proportion of the population by remoteness area, 2006



Source: ABS (2008a) 2008a, *Experimental Estimates of Aboriginal and Torres Strait Islander Australians*, Jun 2006, Cat. no. 3238.0.55.001. See appendix 3 for more information.

Sampling and measurement error — confidence intervals and standard errors

Survey data are subject to sampling error, because they are based on samples of the total population.

Generally, where sample data are shown in charts in this report, error bars are included, showing 95 per cent confidence intervals. (That is, there is a 95 per cent chance that the true value of the data item lies within the interval shown by the error bars.) If there is an overlap between confidence intervals for different data observations, it cannot be stated for certain that there is a statistically significant difference between the results. The Review has evaluated the statistical significance of differences between sample items and only highlighted differences in the text where they are statistically significant. (However, ‘statistically significant’ differences are not necessarily material or important.)

Learning outcomes data in this report (reading, writing and numeracy (section 4.4)) are subject to measurement error, which has a similar practical effect to sampling error. Learning outcomes charts in the report include 95 per cent confidence intervals, and the attachment tables for these data also include the confidence intervals.

Relative standard errors (RSEs) are a statistical measure of the precision of a survey statistic, and are used to calculate the 95 per cent confidence intervals. For the survey data included in the report, RSEs are included in the attachment tables.

Disaggregation

Different readers of the report might be interested in how results vary according to factors such as people’s sex, location or age. Where possible, relevant indicators are disaggregated into various categories — for example, by gender, remoteness and age groups. Where useful, rate ratios are calculated to compare rates between different groups. (A rate ratio compares rates so that statements such as ‘the Indigenous rate is three times the non-Indigenous rate’ can be made.)

Remoteness areas used in this report are from the ABS Australian Standard Geographical Classification (ASGC). The ASGC remoteness classification identifies a location in Australia as having a particular degree of remoteness based on its distance from population centres of various sizes. Some indicators are disaggregated into five Remoteness Area categories (major cities, inner regional, outer regional, remote, and very remote). When data quality does not support disaggregation into five categories, indicators may be collapsed into three categories (major cities, regional, and remote) or two categories (non-remote and remote).

A map of Australia showing geographic areas according to each of the five Remoteness Area categories is included in section 8.2. For more information on how remoteness is defined, see ABS (2001a, 2001b, 2008b).

Age standardisation

The Indigenous population has a younger age profile than the non-Indigenous population. Age standardisation, which accounts for differences in the age structures of populations, enables more realistic comparisons to be made between populations, and in this report has been applied to relevant data on health and justice outcomes.

2.7 References

- ABS (Australian Bureau of Statistics) 2001a, *ABS Views on Remoteness*, 2001, Cat. no. 1244.0, Canberra.
- 2001b, *Outcomes of ABS Views on Remoteness Consultation, Australia*, Cat. no. 1244.0.00.001, Canberra.
- 2004, *Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians*, Cat. no. 3238.0, Canberra.
- 2005, *Australian Standard Classification of Languages*, Cat. no. 1267.0, Canberra.
- 2007, *Population Distribution, Aboriginal and Torres Strait Islander Australians, 2006*, Cat. no. 4705.0, Canberra.
- 2008a, *Experimental Estimates of Aboriginal and Torres Strait Islander Australians*, June 2006, Cat. no. 3238.0.55.001, Canberra.
- 2008b, *Australian Standard Geographic Classification*, Cat. no. 1216.0, Canberra.
- AIATSIS (Australian Institute of Aboriginal and Torres Strait Islander Studies) and FATSIL (Federation of Aboriginal and Torres Strait Islander Languages) 2005. *National Indigenous Languages Survey Report 2005*, Department of Communications, Information Technology and the Arts. DCITA, Canberra.
- COAG (Council of Australian Governments) 2007, *Communiqué*, Meeting 20 December 2007, Canberra.
- 2008a, *Communiqué*, Meeting 26 March 2008, Canberra.
- 2008b, *National Indigenous Reform Agreement Fact Sheet*, Meeting 29 November 2008, Canberra.
- Rudd, K. 2008 (Prime Minister), Australia, *Apology to Australia's Indigenous Peoples*, House of Representatives, 13 February 2008, pp. 167–173.
- SCRCSSP (Steering Committee for the Review of Commonwealth/State Service Provision) 2003, *Draft Framework for Reporting on Indigenous Disadvantage: Report on Consultations*, Productivity Commission, Canberra.

SCRGSP (Steering Committee for the Review of Government Service Provision) 2007, *Framework for Reporting on Indigenous Disadvantage: Report on Consultations 2006*, Productivity Commission, Canberra.

—2009, *Report on Government Services 2009: Indigenous Compendium*, Productivity Commission, Canberra.

3 Interactions across the framework

Different aspects of disadvantage are often interrelated, and there are strong links between many of the COAG targets and headline indicators, and across the strategic areas for action. Action may be needed on several fronts at once in order to make progress and, conversely, sometimes a single action can have multiple effects. The report framework therefore emphasises the need for a whole-of-government perspective, in order to close the gaps in outcomes for Indigenous people.

3.1 Multiple disadvantage

Different aspects of disadvantage often seem to occur together. Significant interactions between outcomes are noted in the text of each section, but the report does not attempt to map all the possible interactions across strategic areas for action or indicators.

In some areas, research has provided evidence to link certain factors — for example, between one-third and one-half of the gap in Indigenous self-assessed health status can be attributed to education and income (Booth and Carroll 2005, AIHW 2004). Similarly, between one-third and two-thirds of the gap in early childhood outcomes can be attributed to socio-economic differences between Indigenous and non-Indigenous people (Leigh and Gong 2008).

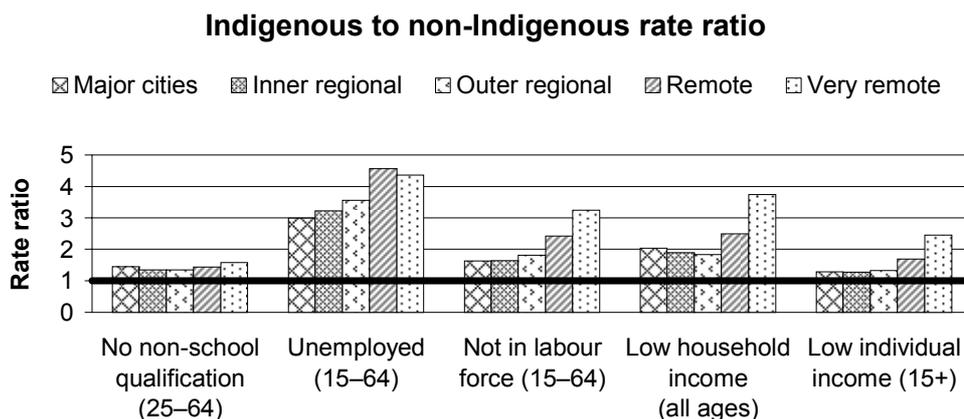
Academic research on the underlying *causal* factors behind Indigenous disadvantage is still thin, but data sources such as the 2006 ABS Census of Population and Housing allow analysis of the *association* between different aspects of disadvantage. Chapter 13 of the report uses data from the Census to identify some aspects of disadvantage that tend to occur together (box 3.1.1) and to model the effects of some particular influences in isolation (box 3.1.2). However, these analyses do not demonstrate that disadvantage in one area is the *cause* of another poor outcome.

Box 3.1.1 Measuring multiple disadvantage

Chapter 13 examines patterns of disadvantage using proxy measures of COAG targets and other headline indicators and strategic change indicators.

In the figure below, 'relative' Indigenous disadvantage is measured by comparing the rate of Indigenous disadvantage (for example, the proportion of Indigenous people reporting they do not have a non-school qualification) with the corresponding rate for the non-Indigenous population. The 'rate ratio' is the rate for the Indigenous population divided by the rate for the non-Indigenous population. For 'negative' outcomes (such as unemployment), a rate ratio value greater than one (above the solid horizontal black line) implies that Indigenous people are disadvantaged compared to non-Indigenous people.

The figure shows that, although disadvantage tends to increase with the degree of remoteness, Indigenous people in all remoteness areas are relatively disadvantaged across measures of education, employment and income.



Source: Chapter 13, sections 13.1 and 13.2.

Chapter 13 also includes some information from a Productivity Commission research project into factors related to Indigenous labour market participation and unemployment (box 3.1.2). In this analysis, statistical techniques have been used to isolate the contribution of one factor holding other modelled factors constant. The use of this technique means that the results of this analysis are not comparable to other sections of the report.

Box 3.1.2 Influences on labour market outcomes

Using data from the ABS 2006 Census, the Productivity Commission used a technique called multiple regression analysis to identify which factors have the strongest effects on Indigenous labour force participation and unemployment. The technique allows modelled factors to be held constant, in order to isolate the effect of just one factor.

As expected, higher education was associated with increased labour force participation. The effect was greater for Indigenous people than for non-Indigenous people, and peaked at year 12 for Indigenous males (although there were still benefits from even higher levels of education) and at degree or higher level for Indigenous females. The subject area studied at post-school level also influenced labour market outcomes for Indigenous people more than for non-Indigenous people, holding other factors constant.

The analysis also examined the effects of some non-education factors on labour force participation, such as personal and family characteristics, relationship status and geographical location.

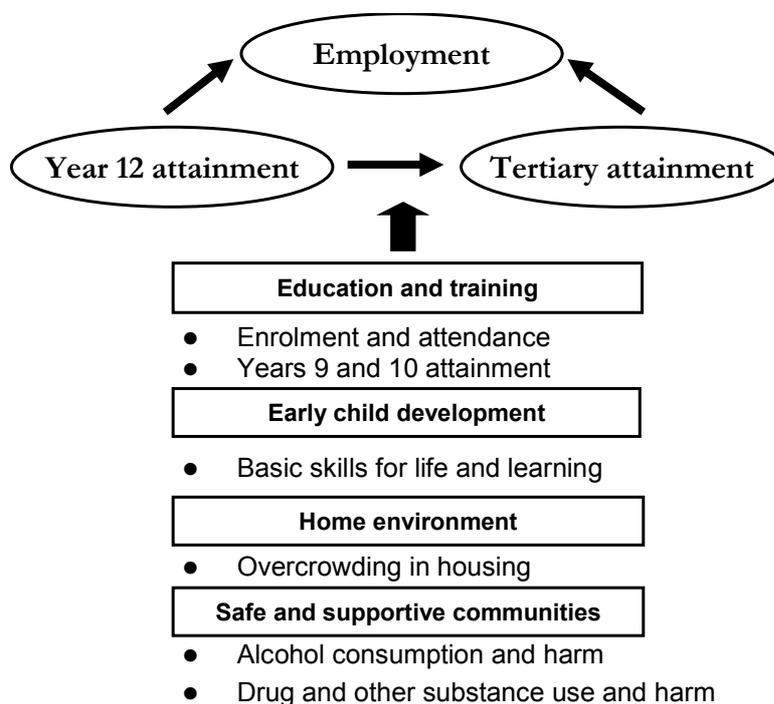
Source: Chapter 13, section 13.3.

3.2 Multiple causes

Prevention and early intervention lie at the heart of the report framework. The focus is on encouraging action in the strategic areas that, over time, will lead to improvements in the COAG targets and headline outcomes, and progress toward the priority outcomes.

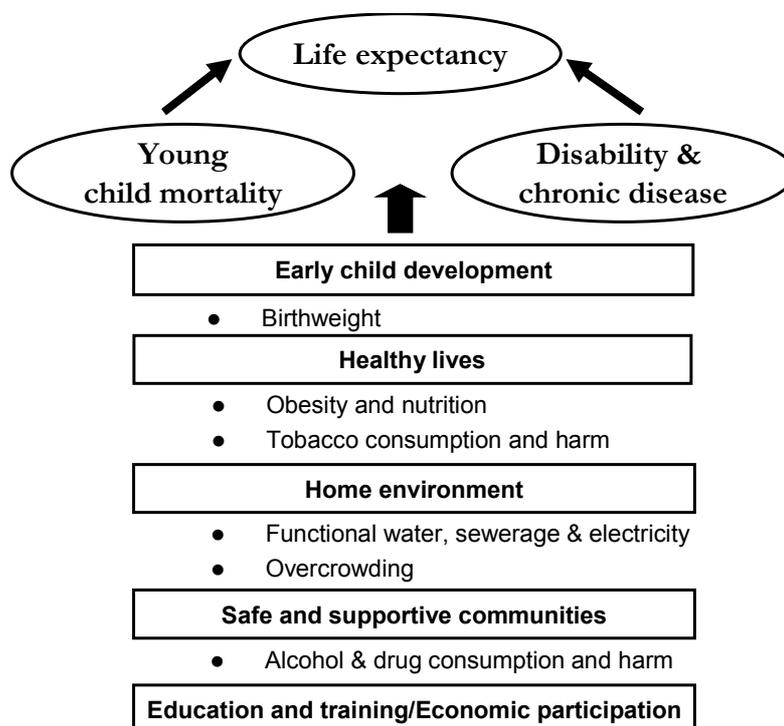
The diagrams in figures 3.2.1 and 3.2.2 illustrate just some of the many linked factors that can affect outcomes. In figure 3.2.1, the COAG target of employment, the closely related COAG target of year 12 attainment and headline indicator of tertiary attainment, are influenced by outcomes across the framework. It is obvious that educational success will depend on outcomes such as enrolment, attendance and attainment in the ‘Education and training’ strategic area, which in turn depend on the achievement of basic skills for life and learning during ‘Early child development’. However, social and environmental factors, such as those in the ‘Home environment’ and ‘Safe and supportive communities’ strategic areas for action, also affect all these outcomes. Of course, these are not the only factors at work — for example, employment and education outcomes can also be influenced by the inter-generational effects of parental income, employment and education levels. The message from the framework is that, although educational services play an important role in achieving these COAG targets and headline indicators, many other services must also play a part.

Figure 3.2.1 Multiple causes — employment



In figure 3.2.2, the COAG target of ‘Life expectancy’ is clearly linked to the ‘Young child mortality’ target and the ‘Disability and chronic disease’ headline indicator. In turn, these outcomes will be influenced by outcomes such as ‘Birthweight’ and ‘Injury and preventable disease’ in the ‘Early child development’ strategic area for action, and ‘Obesity and nutrition’ and ‘Tobacco consumption and harm’ in the ‘Healthy lives’ strategic area. But actions in these areas must be supported by actions to address outcomes such as ‘Access to clean water and functional sewerage and electricity’ and ‘Overcrowding in housing’ in the ‘Home environment’ strategic area, and ‘Alcohol and drug consumption and harm’ under the ‘Safe and supportive communities’ strategic area. Actions must also address other social determinants of health in the education and employment areas.

Figure 3.2.2 **Multiple causes — health**



3.3 Multiple effects

Although some high level outcomes may require actions across a range of areas, sometimes a single well-targeted action can have effects across a number of strategic areas for action and influence a range of high level outcomes. These interactions emphasise the need for a whole of government approach to assessing the costs and benefits of such actions.

For example, housing typically is regarded as the responsibility of departments of housing. But as illustrated in figure 3.3.1, reducing overcrowding in housing can affect outcomes in the ‘Education and training’, ‘Healthy lives’, ‘Home environment’ and ‘Safe and supportive communities’ strategic areas for action, and can contribute to the COAG targets of ‘Reading, writing and numeracy’, ‘Disability and chronic disease’ and ‘Family and community violence’. Although other influences are also important in each of these areas, there is sufficient evidence for education, health and justice departments to be concerned about housing issues.

Figure 3.3.1 Multiple effects — overcrowding

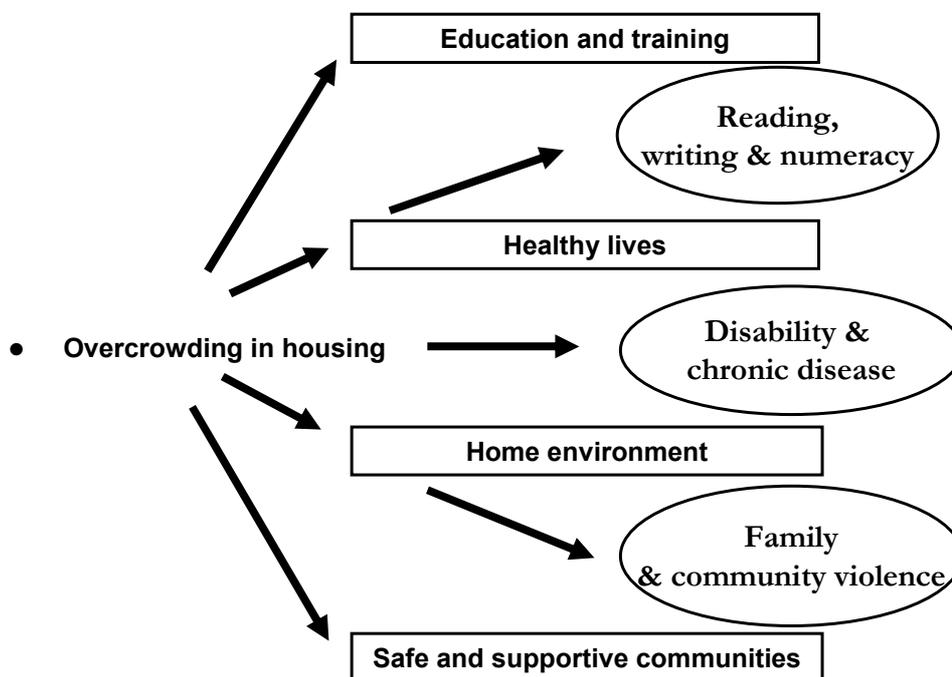
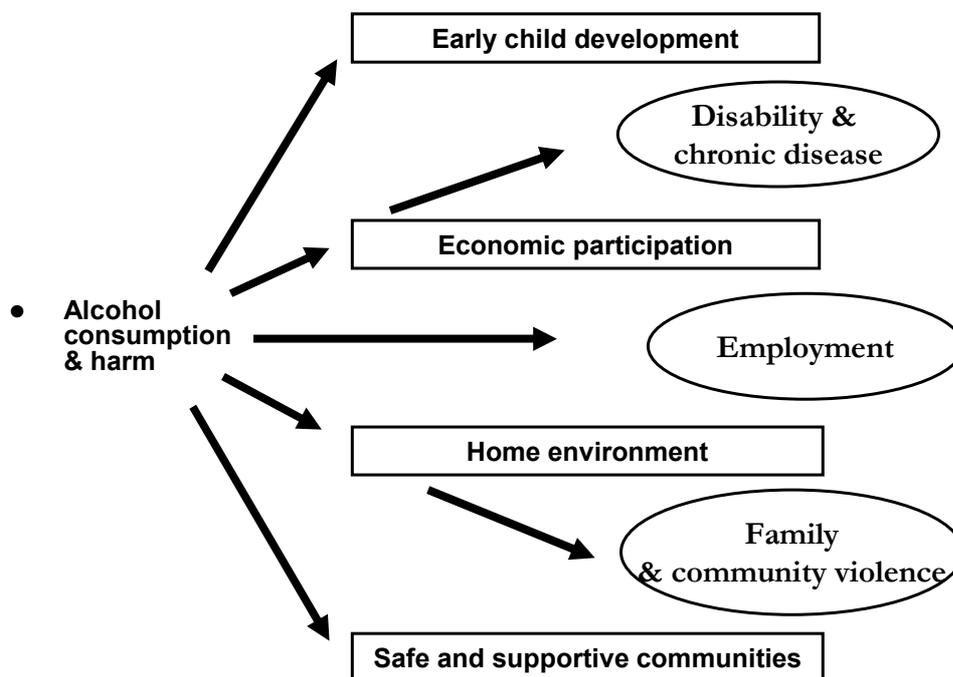


Figure 3.3.2 illustrates similar links for actions designed to address excessive alcohol consumption and associated harm. Misuse of alcohol can affect outcomes in the ‘Early child development’, ‘Healthy lives’, ‘Economic participation’, and ‘Safe and supportive communities’ strategic areas for action, and can contribute to the COAG targets of ‘Disability and chronic disease’, ‘Employment’ and ‘Family and community violence’, among others. Although alcohol misuse is not the only influence in these areas, a range of studies have identified the significant part this risk factor can play in a broad range of outcomes (section 10.3).

Figure 3.3.2 Multiple effects — alcohol



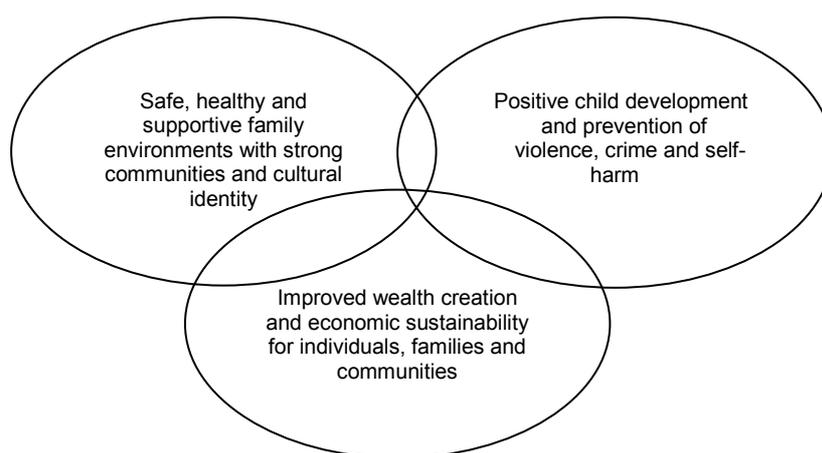
3.4 References

AIHW (Australian Institute of Health and Welfare) 2004, *Australia's Health 2004*, Canberra.

Booth A, and Carroll N. 2005, *The Health Status of Indigenous and Non-Indigenous Australians*, IZA Discussion Paper No. 1534.

Leigh, A and Gong, X. 2008, *Estimating Cognitive Gaps Between Indigenous and Non-Indigenous Australians*, Working Paper, Research School of Social Sciences, Australian National University.

4 COAG targets and headline indicators



Headline indicators

COAG targets	Headline indicators
<ul style="list-style-type: none">• Life expectancy• Young child mortality• Early childhood education• Reading, writing and numeracy• Year 12 attainment• Employment	<ul style="list-style-type: none">• Post secondary education — participation and attainment• Disability and chronic disease• Household and individual income• Substantiated child abuse and neglect• Family and community violence• Imprisonment and juvenile detention

The three priority outcomes that sit at the top of the report’s framework reflect COAG’s vision for Indigenous Australians to have the same life opportunities as other Australians. The priority outcomes are interlinked — no single aspect of the priority outcomes can be achieved in isolation. ‘Positive child development and prevention of violence, crime and self-harm’ are key determinants in the achievement of ‘safe, healthy and supportive family environments with strong communities and cultural identity’. Without these conditions in place, it is very difficult to achieve ‘improved wealth creation and economic sustainability’.

The COAG targets and headline indicators reflect the extent to which this vision is becoming a reality. Like the priority outcomes themselves, there is a strong thread of interdependence in these indicators. Few of the COAG targets or headline indicators are likely to improve solely as the result of a single policy or a single agency. Positive change will generally require action across a range of areas.

These are generally high level indicators, and most would be expected to take some time to improve, even if effective policies were implemented in the strategic areas for action discussed in the following chapters:

- Life expectancy — life expectancy is a broad indicator of the long-term health and wellbeing of a population. Closing the Indigenous life expectancy gap within a generation is a COAG target (section 4.1)
- Young child mortality — young child mortality (particularly infant, or 0 to 1 year old, mortality) is an indicator of the general health of a population. Halving the gap in mortality rates for children under five within a decade is a COAG target (section 4.2)
- Early childhood education — children’s experiences in their early years influence lifelong learning, behaviour and health. High quality early childhood education can enhance the social and cognitive skills necessary for achievement at school and later in life. Providing, within five years, access to high quality early childhood education for all Indigenous four year olds, including those in remote communities, is a COAG target (section 4.3)
- Reading, writing and numeracy — improved educational outcomes is seen as a key to overcoming many aspects of disadvantage. Halving the gap for Indigenous students in reading, writing and numeracy within a decade is a COAG target (section 4.4)
- Year 12 attainment — growing evidence emphasises the importance of continuing education after the period of compulsory schooling ends. At least halving the gap for Indigenous students in year 12 or equivalent attainment by 2020 is a COAG target (section 4.5)
- Employment — employment contributes to living standards, self-esteem and overall wellbeing. It is also important to families and communities. Halving the gap in employment outcomes between Indigenous and non-Indigenous Australians within a decade is a COAG target (section 4.6)
- Post secondary education, participation and attainment — an individual’s education can affect employment prospects and incomes, but also their health, and the health of their children, as well as their ability to make informed life decisions (section 4.7)

-
- Disability and chronic disease — high rates of disability and chronic disease affect the quality of life of many Indigenous people. Disability and chronic disease can also affect other outcomes, by creating barriers to social interaction and reducing access to services, employment and education (section 4.8)
 - Household and individual income — the economic wellbeing of families and individuals is largely determined by their income and wealth. Higher incomes can enable the purchase of better food, housing, recreation and health care. There may also be psychological benefits such as a greater sense of personal control and self-esteem (section 4.9)
 - Substantiated child abuse and neglect — many Indigenous families and communities live under severe social strain, caused by a range of social and economic factors. Alcohol and substance misuse, and overcrowded living conditions are just some of the factors that can contribute to child abuse and neglect (section 4.10)
 - Family and community violence — family and community violence problems are complex, and the impact of such violence may be felt from one generation to another (section 4.11)
 - Imprisonment and juvenile detention — Indigenous people are over-represented in the criminal justice system, as both young people and adults. Poverty, unemployment, low levels of education and lack of access to social services are associated with high crime rates and high levels of imprisonment (section 4.12).

Attachment tables

Attachment tables for this chapter are identified in references throughout this chapter by an ‘A’ suffix (for example, table 4A.2.3). The attachment tables can be found on the Review web page (www.pc.gov.au/gsp), or users can contact the Secretariat directly.

4.1 Life expectancy

Box 4.1.1 Key messages

- Based on combined data for Australia for 2005–2007:
 - estimated life expectancy at birth for Indigenous males was 67.2 years, and for Indigenous females, 72.9 years. The corresponding estimates for non-Indigenous males and females were 78.7 years and 82.6 years, respectively (table 4.1.1 and figure 4.1.1)
 - the gap between Indigenous and non-Indigenous life expectancy at birth was 11.5 years for males and 9.7 years for females (table 4.1.1).
- Age specific death rates were higher for Indigenous than non-Indigenous people for all age groups for 2005–2007 (table 4.1.2).
- In Queensland, WA, SA and the NT combined, after adjusting for age differences in the two populations, for 2002–2006:
 - the Indigenous all causes mortality rate was 2.1 times the rate for non-Indigenous people (table 4.1.3)
 - Indigenous death rates were 8.8 times as high as non-Indigenous rates for diabetes, 5.7 times as high for cervical cancer, 4.2 times as high for kidney diseases and 3.3 times as high for digestive diseases (table 4.1.4).

The Council of Australian Governments (COAG) has committed to ‘closing the life expectancy gap [between Indigenous and non-Indigenous Australians] within a generation’.¹ Life expectancy is an indicator of health status and refers to the average number of additional years a person of a given age and sex can expect to live, if current trends (age specific death rates²) were to continue throughout his or her lifetime. Life expectancy is widely viewed as a key measure of the health of populations. As well as being a fundamental health indicator, studies have found life expectancy to be highly correlated with a range of other factors including employment, education and overall economic wellbeing (Becker, Philipson and Soares 2003; Carson et al. 2007).

As well as data on life expectancy at birth, this section includes some additional information about Indigenous mortality:

- age specific death rates and median age at death
- age standardised mortality

¹ Further information on COAG’s commitments to addressing Indigenous disadvantage is included in appendix 1.

² Age-specific death rates are the number of deaths registered (or occurring) during a calendar year at a specified age, per 100 000 of the estimated resident population of the same age (ABS 2006).

-
- mortality rate and excess deaths
 - leading causes of death.

Life expectancy

Life expectancy is an indicator of the long-term health and wellbeing of Indigenous Australians. Improvements in outcomes across all of the strategic areas for action have the potential to affect life expectancy.

Disparities in life expectancy can be influenced by differences in income and education levels, access to quality health services, social factors and, to a lesser extent, environmental factors including overcrowded housing, lack of clean drinking water and inadequate sanitation (other sections of the report contain more information on some of these factors). Overcrowding of households (see section 9.1) can contribute to a range of poor health, educational, and safety outcomes for Indigenous people that may influence life expectancy (see diagram in chapter 3). Poor quality housing, including overcrowding, can increase psychological stress (AHMAC 2008). British research has shown that poor quality housing associated with significantly higher risk of high blood pressure and that long term exposure to an adverse environment, in this case poor quality housing in a cold climate, can damage health and increase the risk of stroke and coronary heart disease (Mitchell, Blane and Bartley 2002).

People from lower socioeconomic groups suffer from higher rates of ill health and death at younger ages, and are more likely to exhibit risky behaviours such as smoking and excessive alcohol consumption, poor nutrition, and lack of exercise (see sections 7.4, 7.5, 10.1 and 10.3), which, in turn, contribute to higher rates of chronic disease. Chronic diseases (for example, circulatory diseases, diabetes, kidney diseases, respiratory diseases and cancer) are responsible for 70 per cent of the health gap (ill health and mortality) between Indigenous and non-Indigenous people (Vos et al. 2007) and 59 per cent of excess mortality for Indigenous people (AHMAC 2008).

Improvements in Indigenous life expectancy may be achieved by promoting positive health behaviours. Positive cultural, social and economic factors all help to make healthy choices viable. Alternatively, poor community functioning, poverty, disadvantage and stress can lead to unhealthy behaviours — smoking, insufficient physical activity, poor nutrition, risky alcohol consumption and illicit drug use.

Improving access to high quality health services can have a positive impact on life expectancy through increased levels of preventative care, increased early diagnosis

of diseases (such as diabetes) and more effective treatment of chronic diseases (see sections 7.1 and 7.2).

Since the 2007 report was published, the ABS has used population data from the 2006 Census and Post Enumeration Survey, and death registrations data to estimate Indigenous and non-Indigenous life expectancy at birth for 2005–2007. In November 2008, the ABS released a discussion paper assessing various methods used to calculate life expectancy for Indigenous people (ABS 2008b). The ABS concluded that the indirect method that had been used to calculate Indigenous life expectancies included in the 2005 and 2007 editions of this report was no longer adequate and that previously published Indigenous life expectancy estimates for 1996–2001 may have been too low (although the disparity in outcomes between Indigenous and non-Indigenous people would still be substantial). However, it is not possible to recalculate identification rates for Indigenous deaths in earlier periods.

After consulting with experts and data users on the preferred method, the ABS has used a direct demographic method to derive Indigenous life expectancy estimates for 2005–2007. This method applies identification factors (obtained from the ABS Census Data Enhancement (CDE) Indigenous Mortality Quality Study) to death registrations data to adjust for under-identification of Indigenous people in death registrations (ABS 2009).

Despite the ABS's efforts to improve the accuracy of Indigenous life expectancy estimates, the underlying population and death registrations data have limitations. Therefore, life expectancy estimates included in this report are experimental and are reported with confidence intervals that reflect these limitations.

While the life expectancy estimates presented here are the best that can be compiled with currently available data, it is not possible to present time-series or trend statistics for Indigenous life expectancy. Differences between the 1996–2001 and 2005–2007 life expectancy estimates should not be interpreted as measuring changes in Indigenous life expectancy at birth over time.

Differences between the estimated life expectancies for Indigenous males and females and for Indigenous Australians in different states and territories should be interpreted with care as they are sensitive to the demographic assumptions and differential quality of death registrations data across states and territories. Due to the small number of Indigenous deaths in Victoria, SA, Tasmania and the ACT, it is not possible to produce life expectancy estimates for these states and territories.

Box 4.1.2 Estimating Indigenous life expectancy

Estimation of life expectancy requires complete and accurate data on deaths and reliable estimates of the population at risk of dying, by age and sex. Estimating life expectancy for Indigenous people is difficult because of inherent uncertainties in these data. Indigenous population estimates are derived from the Census. However, not all Indigenous people are counted in the Census, so the ABS uses information from the Post Enumeration Survey to make adjustments to the Census count in order to derive population estimates.

Identification of Indigenous deaths in death registrations data is incomplete and varies between states and territories. While it is expected that most Indigenous deaths are registered, not all are identified as Indigenous when they are registered. The ABS has linked Census records from 2006 and death records from August 2006 to June 2007 to estimate the identification rate of Indigenous deaths (ABS 2008c). Nationally, the ABS estimates the identification rate of Indigenous deaths at around 92 per cent (ABS 2009). (Indigenous identification in deaths data for the NT has been much more accurate since the 1960s — research on mortality over time in the NT is reported later in this section.)

Table 4.1.1 Estimated Indigenous life expectancies at birth, 2005–2007

	<i>Life expectancy at birth</i>		<i>95% confidence intervals</i>	
	<i>Males</i>	<i>Females</i>	<i>Males</i>	<i>Females</i>
NSW	69.9	75.0	68.6–71.2	73.9–76.1
Queensland	68.3	73.6	67.3–69.3	72.8–74.4
WA	65.0	70.4	63.8–66.2	69.4–71.4
NT	61.5	69.2	60.5–62.5	68.4–70.0
Australia ^a	67.2	72.9	66.3–68.1	72.1–73.7

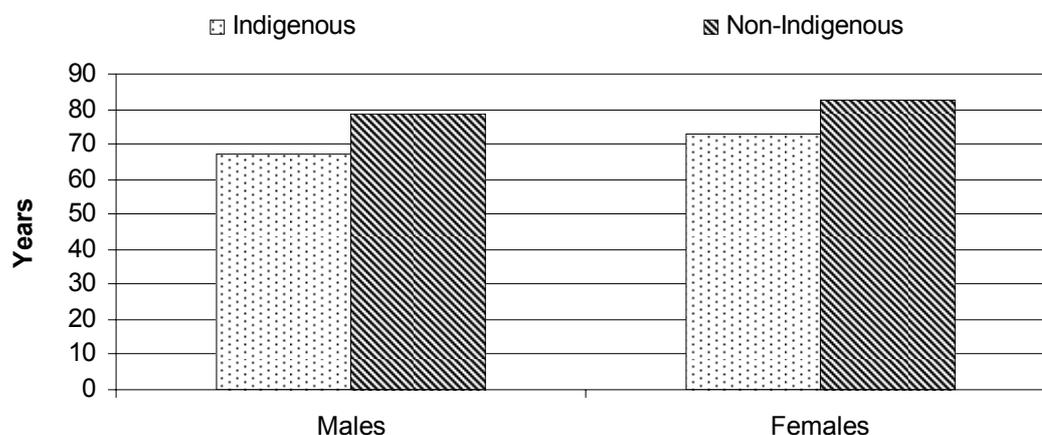
^a Includes all states and territories.

Source: ABS (2009); table 4A.1.1.

Based on data for 2005–2007, the estimated life expectancy at birth:

- for Indigenous males was 67.2 years; 11.5 years less than for non-Indigenous males (table 4.1.1, figure 4.1.1)
- for Indigenous females was 72.9 years; 9.7 years less than for non-Indigenous females (table 4.1.1, figure 4.1.1)

Figure 4.1.1 Life expectancy at birth, Indigenous and non-Indigenous population, 2005–2007^{a, b}



^a Indigenous data are for the Australian Aboriginal and Torres Strait Islander population, and include an adjustment for under-identification of Indigenous deaths. ^bThe ABS has calculated confidence intervals for Indigenous life expectancy at birth, which are shown in table 4.1.1. Confidence intervals have not been calculated for non-Indigenous life expectancy.

Source: ABS (2009); table 4A.1.1.

- In both the Indigenous and non-Indigenous populations, females tend to live longer than males. Based on data for 2005–2007 for Australia, estimated life expectancy at birth for Indigenous females was 5.6 years higher than for Indigenous males. The size of the ‘gender gap’ in the non-Indigenous population was 3.9 years (figure 4.1.1).
- Life expectancy at birth for non-Indigenous males was 78.7 years, while the life expectancy at birth of non-Indigenous females was 82.6 years (figure 4.1.1).

The NT is the only jurisdiction in which Indigenous identification in mortality has been of sufficient and sustained quality to allow time series analysis. A recent study by Wilson, Condon and Barnes (2007) found that the life expectancy of Indigenous people in the NT had risen by eight years for men (from 52 to 60 years) and 14 years for women (from 54 to 68 years) over the past 40 years (1967 to 2004). Over the same period total Australian life expectancy rose ten years for males (from 68 to 78 years) and nine years for females (from 74 to 83 years). The gap between Indigenous and non-Indigenous life expectancies in the NT remains large, but over 40 years, the gap between Indigenous and non-Indigenous female life expectancy has narrowed from 20 to 15 years (Wilson, Condon and Barnes 2007). Over the more recent period from 1981 to 2004, life expectancy for Indigenous males in the NT changed little while life expectancy for Indigenous females in the NT increased from 63.5 to 68.2 years (Fearnley and Li 2007).

The gap in life expectancy between Indigenous and non-Indigenous people in Australia is larger than in other countries where Indigenous peoples share a similar history of relatively recent European colonisation, for example Canada (gap of 8 years for males and 6 years for females) (AIHW 2009) and New Zealand (gap of 9 years for males and 8 years for females) (Statistics New Zealand 2008). Caution must be used in comparing data with other countries due to variations in data quality and scope, estimation methods and coverage of the Indigenous populations and definitions of who is an Indigenous person.

Age specific death rates and median age at death

Table 4.1.2 Age specific death rates, 2005–2007^{a, b}

Age (years)	Males			Females		
	Indigenous	Non-Indigenous	Rate ratio ^c	Indigenous	Non-Indigenous	Rate ratio ^c
NSW/QLD ^d						
0 ^e	11.1	5.2	2.2	7.7	4.1	1.9
1–4	51.8	23.9	2.2	29.3	19.3	1.5
5–14	20.4	11.3	1.8	11.6	8.4	1.4
15–24	94.1	59.2	1.6	48.6	23.5	2.1
25–34	191.2	85.0	2.2	111.1	33.8	3.3
35–44	462.1	128.1	3.6	269.6	68.7	3.9
45–54	862.1	278.9	3.1	506.6	167.9	3.0
55–64	1675.8	674.8	2.5	1143.3	400.0	2.9
65 and over	5091.4	4217.6	1.2	4173.9	3681.2	1.1
WA/SA/NT ^f						
0 ^e	14.0	3.6	3.9	10.1	3.8	2.6
1–4	79.9	25.4	3.1	69.7	15.0	4.6
5–14	36.5	7.8	4.7	28.2	7.7	3.6
15–24	260.2	67.1	3.9	113.8	26.6	4.3
25–34	503.6	100.4	5.0	264.8	37.5	7.1
35–44	1080.6	139.3	7.8	578.8	73.3	7.9
45–54	1565.2	282.3	5.5	972.1	167.1	5.8
55–64	2682.7	660.9	4.1	2022.0	376.0	5.4
65 and over	6729.5	4190.4	1.6	5334.1	3625.9	1.5

^a Deaths per 100 000 population except age zero. ^b Indigenous rates are based on deaths registered as Indigenous and are, therefore, likely to be underestimated. Data are subject to a degree of uncertainty and apparent differences in mortality estimates between jurisdictions may not be statistically significant. ^c Indigenous rate divided by the non-Indigenous rate. ^d Data for NSW and Queensland combined. ^e Infant deaths per 1000 live births. ^f Data for WA, SA and the NT combined.

Source: ABS (2008a) *Deaths Australia 2007*, Cat. no. 3302.0.

-
- For 2005–2007 combined, age specific death rates (deaths per 100 000 population) were higher for Indigenous than non-Indigenous people for all age groups (table 4.1.2).
 - For all age groups below 65 years in WA, SA and the NT combined, the age-specific death rates for Indigenous people were at least twice the rate for non-Indigenous people (table 4.1.2).
 - In NSW and Queensland combined, the age-specific death rates for Indigenous people were at least twice the rate for non-Indigenous people, for all age groups between 25 and 64 years (table 4.1.2).
 - The greatest differences were for those people aged between 35 and 54, where Indigenous death rates were from three to eight times those for non-Indigenous people (table 4.1.2).

Median age at death is another way of looking at Indigenous mortality but estimates should be treated with caution. Differences in coverage rates by age can lead to biased summary results; for example, higher coverage of infant deaths than deaths in older age groups may lead to underestimates of median age at death. The Indigenous population has a younger age structure than the non-Indigenous population, which also influences median age at death values (ABS 2008a). Furthermore, median age at death is not a sensitive measure of changing mortality over time (Coory and Baade 2003).

- In 2007, median ages at death in all states and territories for which data were available were significantly lower for Indigenous males and females than non-Indigenous males and females (table 4A.1.2).
- Median ages at death for Indigenous people fluctuated between 2000 and 2007 but no clear trend was apparent (table 4A.1.2).

Age standardised mortality

Another measure of Indigenous mortality is age standardised mortality from all causes. Age standardised mortality data are for the period 2002–2006 and are limited to Queensland, WA, SA and the NT — states and territories with an acceptable level of Indigenous identification in deaths data. Data for NSW will be available for future reports as NSW data are now considered to have sufficient identification of Indigenous deaths. Data for 2003–2007 including NSW were not available in time for this report.

Table 4.1.3 All causes mortality, age standardised, by Indigenous status, Queensland, WA, SA and the NT, 2002–2006^{a, b, c, d, e}

	<i>Indigenous</i>	<i>Non-Indigenous</i>	<i>Rate ratio</i>
	<i>Rate per 100 000</i>	<i>Rate per 100 000</i>	
Queensland	1184.3	620.0	1.9
WA	1357.8	592.9	2.3
SA	1089.4	627.6	1.7
NT	1661.1	664.4	2.5
Qld, WA, SA and the NT	1318.0	615.7	2.1

^a Data are reported for Queensland, WA, SA and the NT only. These four jurisdictions were considered to have adequate levels of Indigenous identification in mortality data. They do not represent a quasi-Australian figure. ^b Data are presented for a five year grouping because of small numbers each year. ^c Although most deaths of Indigenous people are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these data are likely to underestimate the Indigenous all causes mortality rate. ^d Deaths are by year of registration. ^e Directly age-standardised using the 2001 standard Australian population.

Source: AIHW (2009); table 4A.1.3.

In Queensland, WA, SA and the NT combined, after adjusting for the age differences in the two populations:

- the Indigenous all causes mortality rate was 2.1 times the rate for non-Indigenous people, based on data from 2002–2006 (table 4.1.3)
- the Indigenous all causes mortality rate decreased by 2.0 per cent between 1998 and 2006. Over the same period the non-Indigenous rate decreased by 16.1 per cent (table 4A.1.4).

Table 4A.1.4 contains further data on mortality rates, rate ratios and rate differences over the period 1998 to 2006.

An independent examination of mortality for the NT only, over a long period (1967–2000), reported that Indigenous all-cause mortality rates in the NT declined overall and for all age groups. Declines were greater for females than males, and greater in younger and older age groups than in the early and middle adult years (25–64 years). However, the declines in Indigenous mortality, ‘did not keep pace with the relative decline for the total Australian population’ (Condon et al. 2004).

Mortality rate (and excess deaths) by leading causes

Table 4.1.4 shows leading causes of Indigenous mortality. Age standardised mortality data are for the period 2002–2006 and were only available for Queensland, WA, SA and the NT. Data for NSW will also be available for future reports as they are now considered to have sufficient coverage of Indigenous deaths.

Table 4.1.4 Causes of death, age standardised, by Indigenous status, Qld, WA, SA and the NT, 2002–2006^a

	<i>Indigenous</i>	<i>Non-Indigenous</i>	<i>Rate ratio</i>
	<i>Rate per 100 000</i>	<i>Rate per 100 000</i>	
Circulatory diseases	411.7	221.4	1.9
External causes	105.8	38.3	2.8
Cancer	240.0	183.2	1.3
Lung cancer ^f	57.7	35.2	1.6
Cervical cancer ^{f, g}	6.2	1.1	5.7
Endocrine, metabolic & nutritional disorders	151.1	22.0	6.9
Diabetes ^f	133.6	15.3	8.8
Respiratory diseases	136.4	53.4	2.6
Digestive diseases	67.4	20.5	3.3
Conditions originating in perinatal period	7.7	2.8	2.8
Nervous system diseases	26.8	21.2	1.3
Kidney diseases	40.2	9.6	4.2
Infectious and parasitic diseases	22.9	7.3	3.1
Other causes ^h	108.1	36.1	3.0
All causes	1318.0	615.7	2.1

^a Data are reported for Queensland, WA, SA and the NT only. These four jurisdictions were considered to have adequate levels of Indigenous identification in mortality data. They do not represent a quasi-Australian figure. ^b Data are presented for a five year grouping because of small numbers each year. ^c Although most deaths of Indigenous people are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these data are likely to underestimate the Indigenous all causes mortality rate. Different causes of death may have levels of completeness of identification of Indigenous deaths that differ from the all cause under-identification (coverage estimates). ^d Deaths are by year of registration. ^e Directly age-standardised using the 2001 standard Australian population. ^f Data for lung cancer and cervical cancer are a subset of data presented for all cancers; data for diabetes are a subset of data presented for all endocrine, metabolic and nutritional disorders. ^g Rates for cervical cancer are for females only. ^h See table 4A.1.5 for a full list of diseases included as part of other causes.

Source: AIHW (2009); table 4A.1.5.

For 2002–2006 in Queensland, WA, SA and the NT combined, after adjusting for the age differences in the two populations:

- Indigenous people died at higher rates than non-Indigenous people for all causes listed in table 4.1.4
- the leading causes of death for Indigenous people were circulatory diseases (411.7 per 100 000), cancer (240.0 per 100 000), endocrine, metabolic and nutritional disorders (mostly diabetes) (151.1 per 100 000) and respiratory diseases (136.4 per 100 000) (table 4.1.4)
- Indigenous death rates were 8.8 times as high as non-Indigenous rates for diabetes, 5.7 times as high for cervical cancer, 4.2 times as high for kidney diseases and 3.3 times as high for digestive diseases (table 4.1.4).

Table 4A.1.6 presents data on numbers and proportions of excess Indigenous deaths by cause.

4.2 Young child mortality

Box 4.2.1 Key messages

- Indigenous perinatal³ and infant (within one year) mortality rates improved in recent years in most states and territories for which data are available, but remain two to three times the non-Indigenous rates (figures 4.2.1 to 4.2.4).
- Indigenous child mortality rates for the 1–4 years and 0–4 years age groups remained relatively constant in the period 1997–99 to 2005–07 at between two and four times the non-Indigenous rates (figures 4.2.5 and 4.2.7).

Halving the gap in mortality rates for Indigenous children under five within a decade is a COAG target (COAG 2008). The COAG indicators for this target are:

- child under five mortality rate (and excess deaths⁴)
- mortality rates (and excess deaths) by leading causes
 - perinatal, infant⁵, 1–4 and 0–4 years.

The mortality rate for children under five years is a key indicator of the general health and wellbeing of a population. In examining the mortality rates for children aged 0–4 years presented in this section, readers should note that the mortality experience of infants is different to that for children aged one year or over. Most childhood deaths occur in the first year of life and are captured in the perinatal and infant mortality rates. In 2004–05, deaths in the first year of life comprised 68 per cent of all childhood deaths, while deaths of children aged 1–4 years comprised 15 per cent (with the remaining 17 per cent in the 5–14 years age group)

³ Perinatal mortality is defined as the death of an infant within 28 days of birth (neonatal death) or of a fetus (unborn child) that weighs at least 400 grams or that is of a gestational age of at least 20 weeks (AIHW 2009).

⁴ While families and communities may hope to avoid all childhood deaths, data tell us that some deaths will occur. The term excess deaths is used to describe the extent to which more Indigenous deaths occur than would be anticipated based on the rate for non-Indigenous people. Excess deaths are calculated by subtracting the expected Indigenous deaths (based on age, sex and cause specific rate of non-Indigenous Australians) from the number of actual cause-specific deaths in the Indigenous population (AIHW 2009).

⁵ Infant mortality is defined as the number of deaths of children between birth and exactly one year of age.

(ABS 2007). The leading causes of deaths for Indigenous infants were conditions originating in the perinatal period (AIHW 2009).

The main risk factors for perinatal mortality are low birthweight (section 5.3) and pre-term birth. Other factors which may be associated with perinatal mortality are smoking during pregnancy, infection, inadequate maternal nutrition and underutilisation of antenatal services (AIHW 2009). Antenatal visits provide opportunities to inform mothers about risk factors, identify ‘at risk’ fetuses and allow for implementation of primary prevention strategies (see section 5.1 and 5.3).

There was a dramatic decline in overall infant mortality rates in Australia over the 20th century (the rate of infant deaths decreased from 103 deaths per 1000 live births in 1900 to 4.2 deaths per 1000 live births in 2007). During the first half of the 20th century, a significant share of this decline was associated with improvements in public sanitation and health education. By the 1940s, the development of vaccines and mass vaccination programs resulted in further gains. Improved medical technology and education campaigns about the importance of immunisation, and more recently, in the case of sudden infant death syndrome, infant sleeping position, have led to further modest declines in infant deaths (ABS 1996 and 2008a). For the total population, the infant mortality rate has been consistently higher for males than females over the past 20 years (ABS 2008a).

The death rate for young children (aged 1–4 years) is lower than for infant and perinatal deaths. The mortality rate for children aged 1–4 years has declined over the 20th century, but this decline has not been as dramatic as for infant and perinatal death rates. Research has shown that once the infancy period has passed, injury deaths emerge as one of the leading causes of death for children aged 1–4 years. There has been an overall decline in injury specific child deaths over the last two decades, partly from a decline in transport deaths and a decrease in drownings that may be a result of laws in most states and territories making fencing around swimming pools compulsory (ABS 2005).

At present, estimates of the child mortality rates among Australia’s Indigenous population are imprecise:

The exact scale of difference between the Indigenous and total population mortality is difficult to establish conclusively, due to data quality issues with Indigenous deaths data and the uncertainties inherent with estimating and projecting the size and structure of the Indigenous population over time. Caution should be exercised when undertaking analysis of Indigenous mortality and in particular trends in Indigenous mortality (ABS 2008a).

The ABS suggests that under-identification of Indigenous child mortality is mainly due to under-identification of Indigenous children in deaths data. Although each

jurisdiction now asks a standard question about the Indigenous status of the deceased, it is sometimes left unanswered or recorded incorrectly. The ABS suggests rates of Indigenous identification vary with how the information is collected (for example, by surveys or through administrative data) and who provides the information (for example, the person of interest, a relative, a health professional or an official) and other factors that influence data collected for death certificates (ABS 2008a).

Although the total proportion of deaths for which Indigenous status is not stated is quite small (1.0 per cent), the Indigenous Mortality Quality Study conducted as part of the ABS Census Data Enhancement project identified substantial mis-classification of Indigenous status in death registrations, contributing to the under identification of Indigenous deaths (ABS 2008a and 2008b).

There is limited information on the variation of under-coverage of Indigenous mortality across age groups, and differences may exist across adult and child deaths. At the time of publication of the ABS Indigenous Mortality Quality Study a conclusion had not been reached in relation to the differences across age groups (ABS 2008b). At present, the AIHW is undertaking data linkage research on Indigenous deaths, comparing deaths in hospital and aged care facilities, which may provide further information on the differences across age groups in the future.

When evaluating mortality data, differences in Indigenous identification methodology between the denominator and the numerator must be acknowledged. Indigenous identification of deaths data is usually given by the parent or relative of the deceased infant, but in birth registrations Indigenous status is ascribed from the parents Indigenous status. In addition the birth data used for calculation of rates in this indicator are on a year of registration basis and time lags may exist due to delays in registration and of the provision of that information to the ABS from state/territory registrars of births, deaths and marriages (ABS 2008c).

Mortality rate data reported are sourced from the ABS. Infant mortality rate data are taken from the ABS *Deaths Australia* (ABS 2008a) publication, and the perinatal, 1–4 years and 0–4 years mortality rates are from unpublished data. Indigenous mortality data only contain sufficient identification of Indigenous deaths for NSW, Queensland, WA, SA, and the NT. Data on causes of death are taken from the AIHW *Aboriginal and Torres Strait Islander Health Performance Framework 2008: Detailed Analysis* (AIHW 2009), and were available for perinatal, infant and 0–4 years deaths. Causes of death data were not available up to 2007, which include NSW, and are only available for Queensland, WA, SA and the NT which had sufficient identification of Indigenous deaths.

Some examples of programs designed to reduce Indigenous young child mortality are reported in box 4.2.2.

Box 4.2.2 ‘Things that work’— young child mortality

The **Safe Sleeping project** in WA addresses the significantly increased risk of Indigenous infants in Western Australia dying from Sudden Infant Death Syndrome (SIDS) compared to non-Indigenous infants.

Although the cause of SIDS is unknown, the project aims to promote awareness in WA Indigenous communities of risk factors associated with SIDS. The project involved community consultation and collaboration with Indigenous and non-Indigenous health workers and researchers and is coordinated through Indigenous women.

An evaluation of the initial outcomes of the project found that it has significantly increased awareness of risk factors (AMA 2008 and SIDS and Kids Western Australia).

The **Aboriginal Maternal and Infant Health Strategy** (AMIHS) commenced in 2000-01 across seven sites in NSW through the Aboriginal Health Partnership, with funding from the NSW Department of Health. The aim is to improve the health of Aboriginal women during pregnancy and decrease perinatal mortality through:

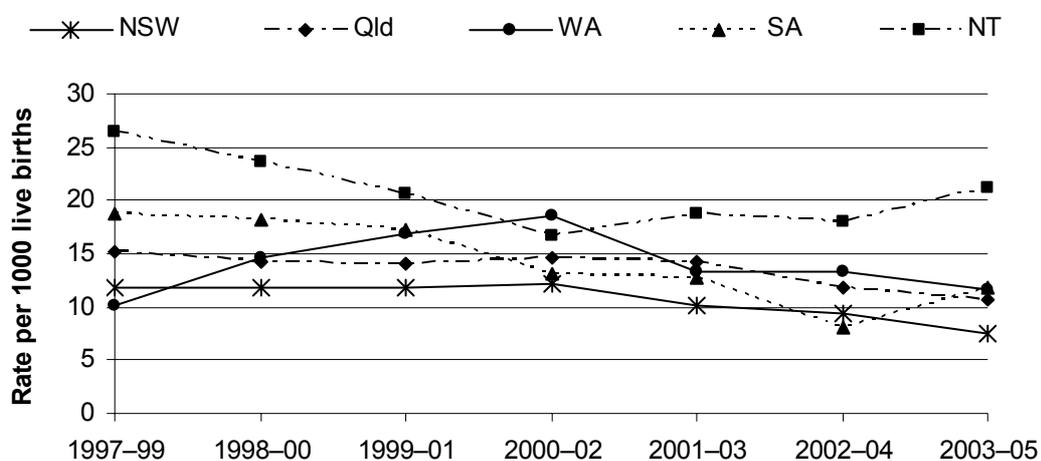
- providing women with health education and a female peer support network
- accessing a pre-existing Aboriginal Women’s Reference Group to guide service development and empower communities
- providing transport services to Aboriginal mothers
- in rural and remote communities, establishing teams of midwives and Aboriginal health workers to provide accessible services
- the implementation of the Training and Support Unit (TSU) in partnership with the University of Sydney, to provide maternal and infant preparatory courses for Aboriginal workers.

A 2005 evaluation of the AMIHS found that between 1996–2000 and 2001–2003: Aboriginal perinatal mortality fell from 20.4 per 1000 to 14.2 per 1000; premature births fell from 20 per cent to 11 per cent; and breastfeeding and antenatal attendance improved. The program was a finalist in the Baxter 2006 NSW Health Awards, and a further three sites were funded under the same service delivery model (ARCHI 2009).

Perinatal mortality

The ABS is in the process of adopting new wording and expanded definitions in its perinatal collection to achieve consistency between ABS collections and other external collections. As a result perinatal deaths were removed for the Causes of Death publication released in March 2009. A separate Perinatal Deaths publication will be released in June 2009, providing data for the years 1999–2007 (ABS, unpublished). Data for this report are therefore only available up until the period 2003–05.

Figure 4.2.1 Indigenous perinatal mortality, 1997–99 to 2003–05^a

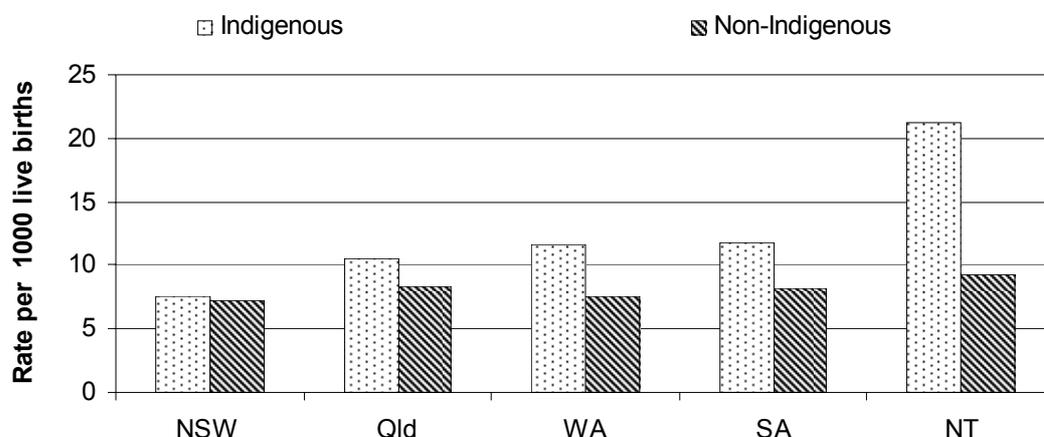


^a The perinatal mortality rate is defined as the death of an infant within 28 days of birth (neonatal death) or of a fetus (unborn child) that weighs at least 400 grams or that is of a gestational age of at least 20 weeks.

Source: ABS (unpublished), table 4A.2.1.

- Between 1997–99 and 2003–05, Indigenous perinatal mortality fell in NSW, Queensland, SA and the NT. The Indigenous perinatal mortality rate for WA fluctuated over the period (figure 4.2.1).
- The Indigenous perinatal mortality rate was consistently higher than the non-Indigenous rate over the period 1997–99 to 2003–05 for all jurisdictions for which data were available (table 4A.2.1).

Figure 4.2.2 Perinatal mortality by Indigenous status, 2003–05^a



^a The perinatal mortality rate is defined as the death of an infant within 28 days of birth (neonatal death) or of a fetus (unborn child) that weighs at least 400 grams or that is of a gestational age of at least 20 weeks.

Source: ABS (unpublished); table 4A.2.1.

For the period 2003–05:

- perinatal mortality rates among Indigenous babies were higher than for non-Indigenous babies for all states and territories for which data are available. Indigenous to non-Indigenous perinatal mortality rate ratios ranged from 1.0 for NSW to 2.3 for the NT (figure 4.2.2)
- the perinatal mortality rate for Indigenous males (27.7 per 1000 live births) was greater than for Indigenous females, (14.2 per 1000 live births) (table 4A.2.1).

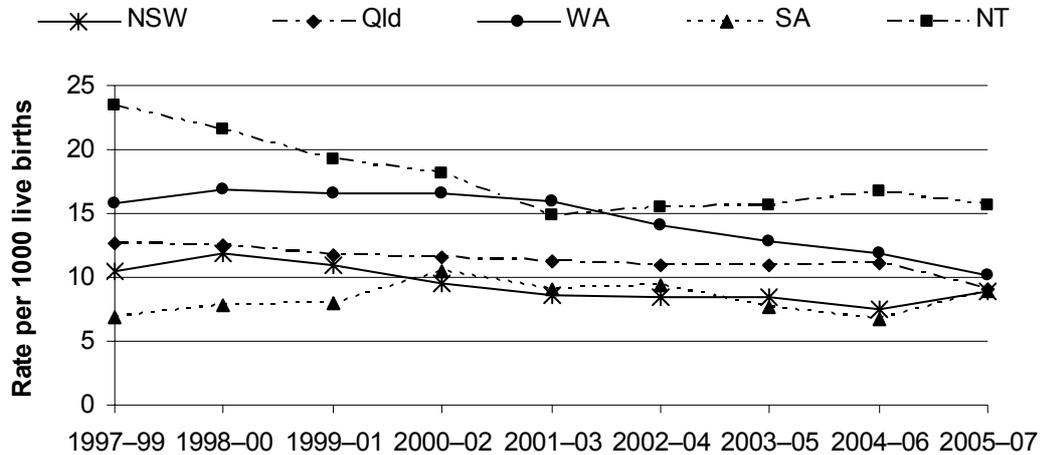
Data on causes of perinatal deaths are taken from AIHW (2009). Perinatal cause of death data should be interpreted with care as the level of identification by cause is unknown, hence rates are not available. For the period 2001–2005, in Queensland, WA, SA and the NT combined:

- the major cause of perinatal death originating in the fetus or infant, was ‘other conditions originating in the perinatal period’ (41.0 per cent of deaths of Indigenous babies. This was followed by ‘disorders related to length of gestation and fetal growth’ (22.8 per cent of deaths of Indigenous babies) (table 4A.2.5)
- the major cause of perinatal deaths originating in the mother was the ‘fetus or newborn affected by complications of placenta, cord and membranes’ (30.1 per cent of deaths of Indigenous babies) (table 4A.2.5).

Data on excess perinatal deaths were unavailable for inclusion in the 2009 report.

Infant mortality

Figure 4.2.3 Indigenous infant mortality, 1997–99 to 2005–07^a

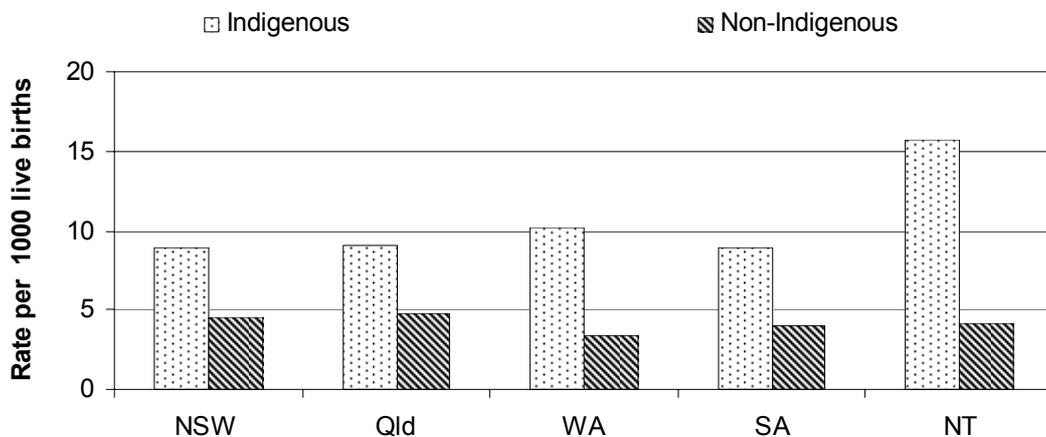


^a The infant mortality rate is defined as the number of deaths of children between birth and exactly one year of age per 1000 live births.

Source: ABS (2008a), *Deaths Australia, 2007* (and previous issues); table 4A.2.2.

- Between 1997–99 and 2005–07, Indigenous infant mortality fell in NSW, Queensland, WA and the NT (figure 4.2.3). The rate for SA fluctuated over this period. Infant mortality rates for the non-Indigenous populations fell over the same time period, but the improvement has not been as large as for Indigenous infants (table 4A.2.2).

Figure 4.2.4 Infant mortality, by Indigenous status, 2005–07^a



^a The infant mortality rate is defined as the number of deaths of children between birth and exactly one year of age per 1000 live births.

Source: ABS (2008), *Deaths Australia, 2007*; table 4A.2.2.

-
- Infant mortality rates among Indigenous infants were about two to three times higher than for non-Indigenous infants for the period 2005–2007, in states and territories for which data are available (figure 4.2.4).
 - Indigenous infants in the US, Canada and New Zealand have higher mortality rates than infants in the general populations of those countries, but the gap is not as large as between Aboriginal and Torres Strait Islander infants in Australia and the general population (AHMAC 2008).

Data on causes of infant death are taken from AIHW (2009). In Queensland, WA, SA and the NT combined for the period 2002–2006:

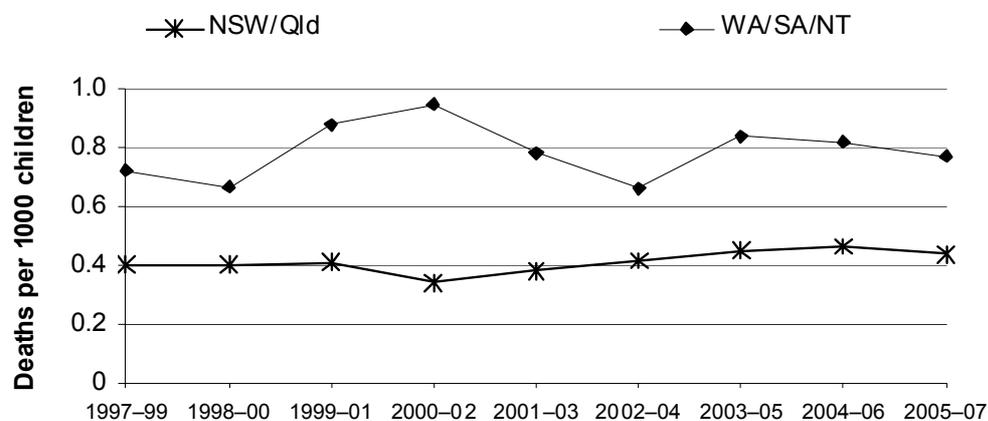
- the leading cause of Indigenous infant mortality was ‘conditions originating in the perinatal period’, such as birth trauma, disorders related to fetal growth, complications of pregnancy, labour and delivery, and respiratory and cardiovascular disorders specific to the perinatal period. This was also the leading cause of infant mortality for non-Indigenous infants, but Indigenous infants died of this group of causes at nearly three times the rate of non-Indigenous infants (5.7 and 2.1 per 1000 live births respectively) (table 4A.2.6)
- infant mortality rates from diseases of the respiratory system were much greater for Indigenous babies (0.9 per 1000 live births) than for non-Indigenous babies (0.1 per 1000 live births) (table 4A.2.6)

Data on excess infant deaths were unavailable for this report.

Mortality 1–4 years

Due to the small numbers of Indigenous deaths in the 1–4 year age group and the imprecision of estimates of Indigenous child mortality, data have been aggregated into two groups (NSW/Queensland and WA/SA/NT). These combinations were made by grouping states and territories with similar levels of coverage of Indigenous deaths. When interpreting differences between the two groups it needs to be acknowledged that part of these variations may be due to the lower levels of coverage of Indigenous deaths in NSW and Queensland than in WA, SA and the NT.

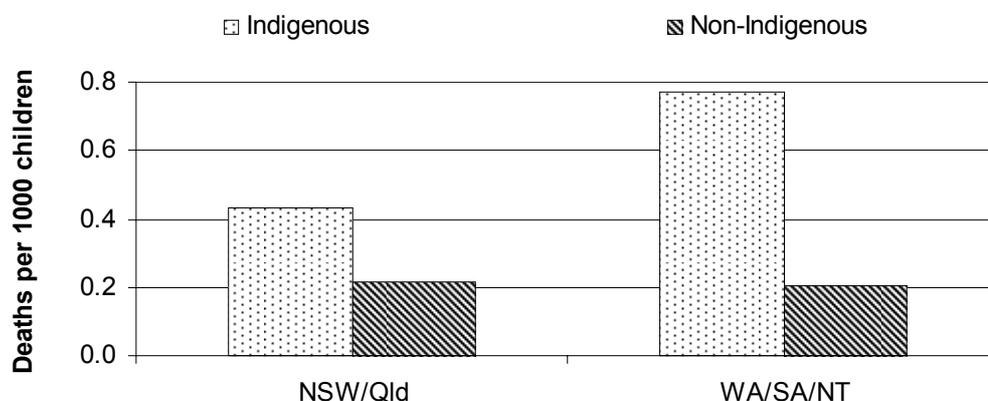
Figure 4.2.5 **Indigenous mortality, children aged 1–4 years, 1997–99 to 2005–07**



Source: ABS *Deaths Australia* (unpublished); table 4A.2.3.

- Between 1997–99 and 2005–07 Indigenous mortality for the 1–4 year age group remained relatively constant in both NSW/Queensland and WA/SA/NT, particularly compared to the significant decline in infant mortality rates over the same period (figure 4.2.5 and figure 4.2.3). Over the period, in both NSW/Queensland and WA/SA/NT, the Indigenous rate remained consistently higher than that for non-Indigenous children (table 4A.2.3).
- The rate for NSW/Queensland was lower than the rate for WA/SA/NT, over the period 1997–99 to 2005–07, although part of this difference may be due to the lower levels of coverage of Indigenous deaths in NSW and Queensland than in WA, SA and the NT (figure 4.2.5).

Figure 4.2.6 **Mortality, children aged 1–4 years, by Indigenous status, 2005–07**



Source: ABS *Deaths Australia* (unpublished); table 4A.2.3.

During 2005–07:

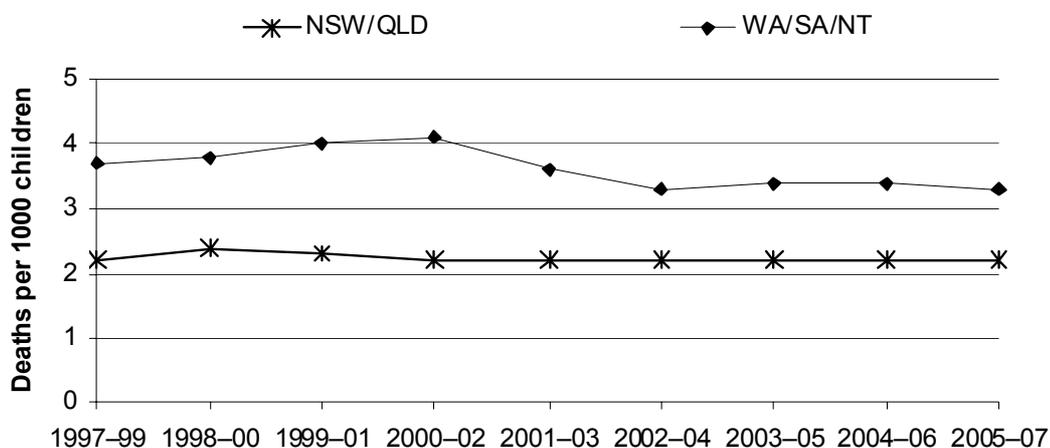
- Indigenous mortality rates for children aged 1–4 years were two and four times higher than those for non-Indigenous children in NSW/Queensland and WA/SA/NT, respectively (figure 4.2.6 and table 4A.2.3).
- The Indigenous mortality rate for children aged 1–4 years in WA/SA/NT was nearly twice the rate in NSW/Queensland. Non-Indigenous mortality rates for children aged 1–4 years were similar in the two regions (figure 4.2.6).

The major causes of death for Indigenous and non-Indigenous children aged 1–4 years, as well as data on excess deaths for this age group, were unavailable for this report.

Mortality 0–4 years

Due to the small numbers of deaths of children aged 0–4 years and the imprecise estimates of child mortality among Australia’s Indigenous population, data have been aggregated into two groups (NSW/Queensland and WA/SA/NT). These combinations were made by grouping states and territories with similar levels of coverage of Indigenous deaths. When interpreting differences between the two groups it needs to be acknowledged that part of these variations may be due to the lower levels of coverage of Indigenous deaths in NSW and Queensland than in WA, SA and the NT.

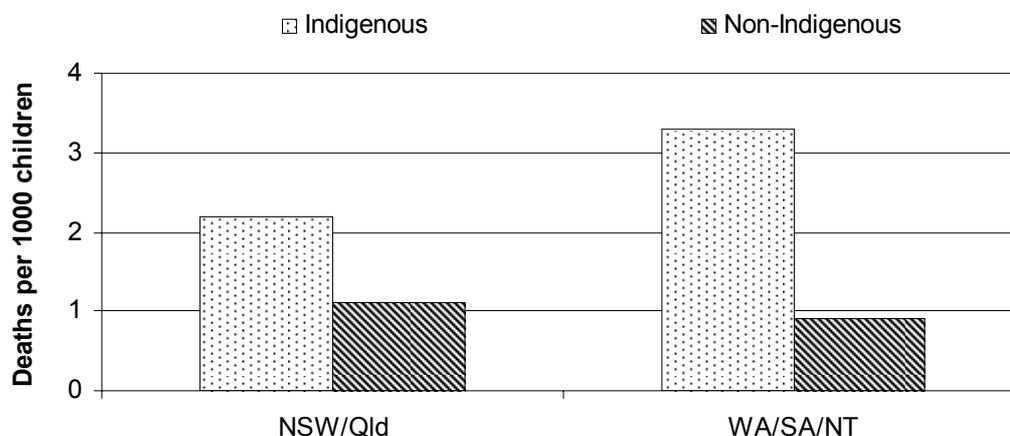
Figure 4.2.7 Indigenous mortality, children aged 0–4 years, 1997–99 to 2005–07



Source: ABS *Deaths Australia* (unpublished), table 4A.2.4.

- Between 1997–99 and 2005–07, Indigenous mortality for the 0–4 year age group remained relatively constant in both NSW/Queensland and WA/SA/NT (figure 4.2.7). A similar fairly constant rate occurred throughout the same period for non-Indigenous children, but the Indigenous rate was two to four times as high as the non-Indigenous rate (table 4A.2.4).
- Throughout the period 1997–99 to 2005–07 the Indigenous 0–4 year mortality rate in WA/SA/NT combined was consistently higher than the rate in NSW/Queensland, but part of this difference may be due to the lower levels of coverage of Indigenous deaths in NSW and Queensland than in WA, SA and the NT (figure 4.2.7).

Figure 4.2.8 **Mortality, children aged 0–4 years, by Indigenous status, 2005–07**



Source: ABS (2008), *Deaths Australia*, (unpublished); table 4A.2.4.

In 2005–07:

- mortality rates for Indigenous children aged 0–4 years were 2.0 and 3.6 times as high as those for non-Indigenous children in NSW/Queensland and WA/SA/NT, respectively (figure 4.2.8)
- mortality rates for Indigenous children aged 0–4 years were 1.5 times as high in WA/SA/NT as in NSW/Queensland. For non-Indigenous children the rate in NSW/Queensland was 1.2 times as high as in WA/SA/NT (figure 4.2.8).

Data on 0–4 year causes of death are taken from AIHW (2009). For children aged 0–4 years in Queensland, WA, SA and NT combined for the period 2002–2006, the leading cause of death for Indigenous and non-Indigenous children was ‘conditions originating in the perinatal period’, with the Indigenous rate around three times the rate for non-Indigenous children (1.2 and 0.4 per 1000 children, respectively) (table 4A.2.7).

4.3 Early childhood education

Box 4.3.1 Key messages

- There is no single source for data on Indigenous preschool participation and it is therefore difficult to draw conclusions about participation rates.

The Council of Australian Governments (COAG) has recognised the importance of early childhood education for Indigenous children by including it as one of its six targets for closing outcomes gaps for Indigenous Australians. COAG's target is to ensure that, within five years, all Indigenous four year olds, including those in remote communities, have access to high quality early childhood education.

The following key measures were listed against the early childhood education indicator in the revised OID framework endorsed by COAG in November 2008:

- proportion of Indigenous children who are enrolled in an early childhood education program delivered by a four year university qualified teacher in the year before formal schooling
- proportion of Indigenous three year olds in early childhood education
- proportion of Indigenous children participating in formal education and care services.

In 2008, COAG endorsed a National Partnership Agreement for Indigenous Early Childhood Development, which identified the importance of reducing the gap in developmental outcomes between Indigenous and non-Indigenous children. Similarly, the National Partnership Agreement on Early Childhood Education includes increasing early childhood education participation rates, particularly for Indigenous and disadvantaged children, as a national priority. Both National Partnership Agreements include a commitment to universal access, under which all Indigenous children have access to affordable, high quality early childhood education in the year before formal schooling (COAG 2008).

Children's experiences in their early years affect their development and influence lifelong learning, behaviour and health (Mustard 2007; McCain, Mustard and Shanker 2007). Early childhood education programs are associated with increased levels of school completion and enhanced literacy and social skills (Ou and Reynolds 2004; Reynolds et al. 2001; Mustard 2007; Schweinhart 2007). Child care has been acknowledged as providing development opportunities for children, as well as supporting the needs of families, and can be considered be a significant influence in a child's early education (McCain, Mustard and Shanker 2007). The provision of services to children during their early years may provide an opportunity for early intervention to address developmental problems (see chapter 5 for information on factors influencing early childhood development).

Investment in early childhood education, particularly for disadvantaged children, is more effective than intervention at later ages (Heckman 2006). Children who have access to, and attend, good quality early childhood education programs have a head

start at school (Elliott 2006; Frigo and Adams 2002; Schweinhart 2007; Sparling, Ramey and Ramey 2007).

The quality of early childhood education programs, including program content and staff quality, influence attendance and outcomes for children. The provision of culturally appropriate programs is an important factor influencing children's attendance and children's readiness for school (Fordham and Schwab 2007; High 2008; Sims et. al. 2008). For Indigenous children, the presence of an Indigenous preschool worker is likely to have a positive influence on preschool attendance (Biddle 2007; Fordham and Schwab 2007).

This indicator examines preschool participation for Indigenous children aged 3–5 years. In Australia, preschool attendance is not compulsory. Preschool programs are offered to children in each of the two years prior to commencing full time school, and are available to children aged 3–5 years. However, there are some barriers to accessing preschool in the forms of fees and program availability, particularly in remote and very remote regions (ANAO 2002; HREOC 2000; NTDE 1999).

Data for the early childhood education indicator are sourced from the National Preschool Census (NPC), the ABS Census of Population and Housing (ABS Census) and the Report on Government Services.

There is no single, definitive source for data on Indigenous participation in preschool programs in Australia. This section draws on NPC data to present participation rates based on preschool enrolments as a proportion of preschool aged children in the population, and data on preschool participation for children aged 3–5 years from the ABS Census. Participation rates do not reflect whether a child actually attends preschool on a regular basis, therefore, this report also includes data on preschool attendance, based on absences from non-government preschools during 2007.

The proportion of people living in regional and remote areas was higher for Indigenous people (67.9 per cent) than for non-Indigenous people (30.6 per cent) in 2006 (ABS 2008). The impact of geographic remoteness on preschool attendance is explored briefly in this section, using data from the ABS Census.

This report also includes data on child care services and participation in early childhood education and care services.

Case studies on early childhood education programs

The case studies in box 4.3.2 describe activities within organisations and Indigenous communities that demonstrate the benefits of early childhood education programs.

Box 4.3.2 'Things that work' — increasing preschool attendance and learning outcomes

The **Yappera Children's Service Cooperative (Victoria)**, based in Thornbury in Melbourne, is a multifunctional Aboriginal children's service that assists Koori families in the surrounding area to participate in child care and kindergarten. The centre first began operating in an informal capacity in 1982 and the Australian Government has provided recurrent funding to the service since 1988. The centre supports 60 children per day and is linked to organisations that provide additional services such as speech therapy, exercise programs, drama workshops, parent/carer activities and programs, dental, audiology and optometry visits and support services for a smooth transition to primary school. The committee members are all Koori, and their approach to management and support enables strong links with the local community and promotes a philosophy of strengthening culture and participation (Victorian Government, unpublished).

The **Bound for Success Pre-Prep in Indigenous Communities (Queensland)** program is a Queensland Government initiative to provide high quality, consistent early childhood education programs for children aged three and a half to four and a half living in 29 Cape York and Torres Strait communities and 6 other Aboriginal communities. Funding has been provided over four years (2006–2010) to enhance the provision of existing early childhood education programs.

In February 2008, 566 children were attending an early childhood education program across the 35 communities. The location and ownership for each early childhood education program is different, and learning programs are developed specifically to meet the needs of Indigenous children in each community (Queensland Government, unpublished).

The **South Australian preschool policy** has enabled Indigenous 3 year olds to access state preschools for over 30 years. Qualified teachers and early childhood workers emphasise working with families and communities to develop shared understandings, positive relationships and culturally inclusive practices. Programs are guided by the South Australian Curriculum, Standards and Accountability Framework, which supports ongoing learning across children's services and schools. Eight broad outcomes for children 0–5 years include trust and confidence, personal and group identity, positive relationships with others, effective communication, intellectual inquisitiveness, physical competencies and wellbeing. In the last six years, enrolments have increased from 994 in term 2, 2003, and reached 1141 in term 2, 2008, the highest ever number of Aboriginal children accessing preschool education in SA (SA Government, unpublished).

(Continued next page)

Box 4.3.2 (continued)

The **Aboriginal Early Years Program (Tasmania)** has been supporting parents and caregivers of Indigenous children aged 0–5 years since 2005. The program has been successful in connecting Indigenous families with their local early childhood education services and has provided parents with culturally appropriate activities to nurture and stimulate children’s learning, emphasising early literacy, language development and school readiness (Tasmanian Government unpublished).

The **Mobile Preschool Program (NT)** provides Indigenous children in remote NT communities with access to preschool. Funded by the NT Government, there are 19 mobile preschools currently operating in the Central Australia, Katherine and Barkley regions and from the Top End Group School. Each preschool has a teacher who travels to five remote community sites to support assistant teachers with local community knowledge delivering daily preschool activities. In the Eastern Plenty and Sandover Highways region, the mobile preschool program has increased preschool access for Indigenous 3–5 year olds in the area (NT Government unpublished).

The **Mobile Early Childhood Service (MECS)**, funded by the Australian Government, provides early childhood services (including parenting support, health and early learning) for children aged 0–5 years in the NT. The mobile service delivery model had been piloted in three hubs of up to six sites, and between seven and 25 children participate in the program at each site, depending on the specific community. The long term goal of these mobile services is to transfer service delivery to local community councils (Australian Government unpublished).

Preschool enrolments and participation

Data on the number of children enrolled in preschool are available from the National Preschool Census (NPC). These data exclude children enrolled in preschool programs delivered in child care settings (for example, long day care services) and, therefore, do not represent participation in all early childhood education programs. Data from the NPC show that between 2002 and 2007, the number of Indigenous children enrolled in preschool increased slightly from 8729 to 9627 (tables 4A.3.1 and 4A.3.3).

Preschool enrolment rates, calculated as preschool enrolments divided by the number of preschool aged children in the population, are presented in tables 4A.3.2 and 4A.3.3. Nationally, in 2007:

- 17.2 per cent of Indigenous 3 year olds, and 12.5 per cent of non-Indigenous 3 year olds were enrolled in preschool
- 51.9 per cent of Indigenous 4 year olds, and 50.1 per cent of non-Indigenous 4 year olds were enrolled in preschool

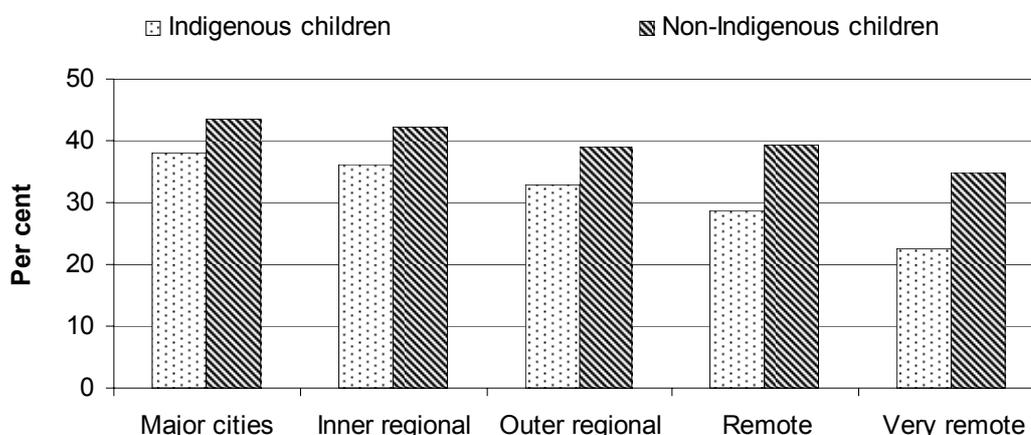
-
- 10.6 per cent of Indigenous 5 year olds, and 18.1 per cent of non-Indigenous 5 year olds were enrolled in preschool (table 4A.3.2).

These data should be interpreted with care as there are different arrangements across states and territories (including different starting ages for preschool and primary school), and there are problems identifying and counting Indigenous children enrolled in preschools. Definitions of preschool also vary across states and territories. Indigenous population projections used to calculate the rates are based on the 2001 ABS Census and data for single year age groups for single jurisdictions are subject to an increasing degree of error. Revised population estimates will be published by the ABS in late 2009.

Supplementary data on preschool participation for children aged 3–5 years from the ABS Census are presented in tables 4A.3.4–4A.3.6. Data from the ABS Census differ from NPC data, as ABS Census data are based on responses from parents/guardians to a question on the type of educational institution that the child was attending (with one option for response being preschool), while NPC data are sourced directly from preschools. Differences may arise due to parents/guardians interpretation of the term ‘preschool’, as preschool program names vary across states and territories. As noted elsewhere in this report (chapter 2 and appendix 4), there was an undercount of Indigenous people in the 2006 ABS Census, which may also affect the results, and data should be interpreted with care.

Addressing differential access due to remoteness is a key part of the COAG target for Indigenous children’s participation in early childhood education. Figure 4.3.1 shows preschool participation rates for Indigenous and non-Indigenous children aged 3–5 years, by remoteness area.

Figure 4.3.1 Preschool participation rates for children aged 3–5 years, by remoteness area, 2006^{a, b, c}



^a Preschool participation data sourced from the ABS Census of Population and Housing are based on responses from parents/guardians to a question on the type of educational institution that the child attended, with one option for response being preschool. Preschool is not defined in the ABS Census and variability in data may occur due to parents/guardians interpretation of the term 'preschool' (as preschool program names vary across states and territories). These data may also differ from other preschool data presented in this report which are based on enrolment and/or attendance data reported by preschools. ^b As noted in chapter 2 and appendix 4, there are difficulties in collecting data on the Indigenous population, and there was an undercount of Indigenous persons in the ABS Census. ^c Data exclude children where Indigenous status was not stated.

Source: ABS (unpublished), derived from 2006 *Census of Population and Housing*; table 4A.3.6.

- Preschool participation rates derived from the 2006 ABS Census for children aged 3–5 years (33.2 per cent for Indigenous children and 42.8 per cent for non-Indigenous children) are different to those derived from the NPC (table 4A.3.4). Consequently, it is difficult to draw conclusions about preschool participation rates.
- Nationally in 2006, Indigenous children participated in preschool at lower rates than non-Indigenous children in all remoteness areas (figure 4.3.1).

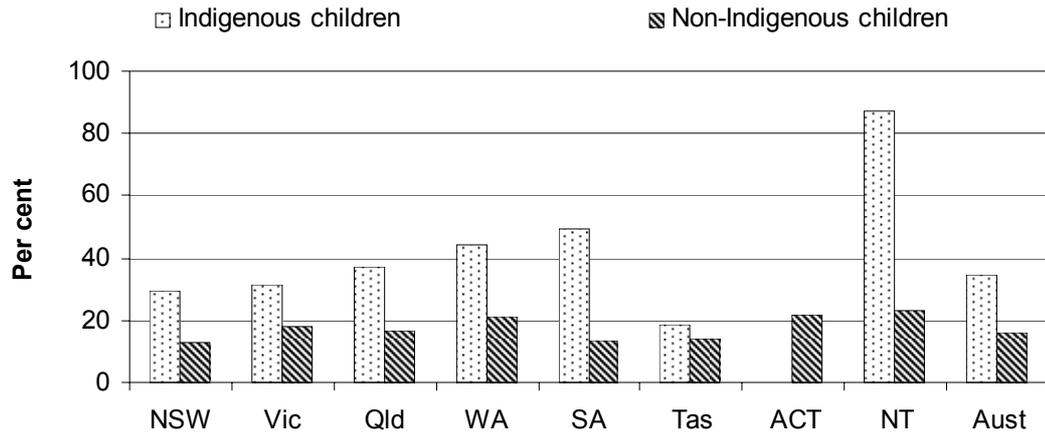
Preschool attendance

Data on preschool attendance were sourced from the NPC for 2007 and relate only to children enrolled in non-government preschools. The NPC collected data from 3248 non-government preschools nationally, which represents approximately 70 per cent of all preschools, but only 44 per cent of Indigenous enrolments, although these proportions vary across states and territories (DEEWR 2008, table 4A.3.1).

In this section, attendance rates are measured by absentee rates, with a low absentee rate indicating a higher rate of attendance. In the NPC, a child was considered

‘absent’ if they missed one or more of the sessions they were enrolled in during the NPC reference week. Figure 4.3.2 shows the absentee rates for Indigenous and non-Indigenous children who were enrolled in non-government preschools in 2007.

Figure 4.3.2 Enrolled children absent from non-government preschools, 2007 a, b, c, d, e, f, g



a Data on attendance are limited to non-government preschools, and exclude government preschools. At the national level, around 70 per cent of children are in preschools considered to be ‘non-government’, though this percentage varies across jurisdictions. **b** Preschool attendance is not compulsory. **c** Attendance measured during the week of 30 July–3 August 2007. Children are counted as absent if they miss one or more of the sessions that they were enrolled in during this week. Absences due to illness may be higher during winter than at other times of the year. **d** ‘Non-Indigenous children’ has been derived by subtracting ‘Indigenous children’ from ‘all children’. **e** There were no Indigenous children enrolled in ACT non-government preschools absent during the Census week. **f** In the NT, only 7.7 per cent of children attending preschools were enrolled in non-government preschools. **g** The Australian totals do not include data for the ACT.

Source: DEEWR (unpublished), *National Preschool Census 2007*; table 4A.3.7.

- Figure 4.3.2 shows that, nationally, in 2007, the proportion of Indigenous children absent from preschool (34.5 per cent) was significantly higher than the proportion of non-Indigenous children absent from preschool (16.2 per cent) (table 4A.3.7).

Early childhood education and care

This section presents data on the representation of children in government funded and/or provided early childhood education and care services. Early childhood education and care services refer to preschool programs and formal child care services, where formal child care services include long day care, family day care, vacation care, outside school hours care, occasional care and other formal care services.

The Report on Government Services 2009 (SCRGSP 2009) includes data on Australian, State and Territory Government funded and/or provided child care

services, and State and Territory Government funded and/or provided preschool services. More than eighty per cent of children attend Australian Government funded and/or provided child care services (SCRGSP 2009), but data were not available for Indigenous children attending Australian Government child care services.

Table 4A.3.8 shows the representation of Indigenous and non-Indigenous children aged 0–12 years in State and Territory funded and/or provided early childhood education and care services. Representation is measured by the number of children attending child care and preschool services as a proportion of children in the community. Data in this section are for NSW, Victoria, Queensland, SA, and Tasmania combined, as data for children attending State and Territory Government child care services in WA, ACT and the NT were not available.

- Indigenous children’s representation in early childhood education and care services in 2007-08 (6.3 per cent) was lower than for all children (7.9 per cent), but this varies across jurisdictions (table 4A.3.8).

4.4 Reading, writing and numeracy

Box 4.4.1 Key messages

- There were generally no significant changes in Indigenous year 3, 5 and 7 students’ performance against the national benchmarks for reading, writing and numeracy between 1999 (2001 for year 7 students) and 2007 (figures 4.4.2, 4.4.4 and 4.4.6).
- A substantially lower proportion of Indigenous than non-Indigenous students in all year levels achieved the national minimum standards for reading, writing and numeracy in 2008 (figures 4.4.1, 4.4.3, 4.4.5 and 4.4.7).
- Indigenous students’ learning outcomes declined, and the gap between Indigenous students and all students increased, as remoteness increased (figure 4.4.9).
- As Indigenous students progressed through school, the proportion who achieved the national benchmarks decreased for reading (from year 3 to year 5) and numeracy (from year 3 to year 5, and year 5 to year 7) (figure 4.4.8).
- Participation rates in national tests are lower for Indigenous students than for all students, and the gap increases as year levels increase (tables 4A.4.11; 23; 35; 47).

Halving the gap for Indigenous students in reading, writing and numeracy achievements within a decade is a COAG target (COAG communiqué, November 2008).

The COAG indicators for this target are:

- National Assessment Program — Literacy and Numeracy (NAPLAN) performance
- NAPLAN student participation rates.

This chapter presents nationally comparable learning outcomes data for 2008 for years 3, 5, 7 and 9 reading, writing and numeracy. Nationally comparable learning outcomes data for years 3, 5 and 7 for 2007 and previous years are reported in the attachment tables.

The disparity in academic performance between Indigenous students and non-Indigenous students is evident from year 1 onwards, and is maintained until the mid high school years (Zubrick et al. 2006). Studies have shown that, unless preschool learning and early primary school assistance are provided, underperforming students are rarely able to catch up (Ou and Reynolds 2004; Reynolds et al. 2001; Schweinhart 2005). Section 4.3 has more information on preschool and early learning.

There is evidence that the gap in cognitive test scores between Indigenous and non-Indigenous children is relatively small, and may widen over the life cycle (Leigh and Gong, 2008). By the age of 10, Indigenous children have substantially lower levels of academic achievement compared to non-Indigenous children, with their relative performance deteriorating further over the next two years (Bradley et al. 2007).

Absenteeism from school affects students' academic performance. On average, Indigenous students miss around 26 days of school per year compared with 8 days for all students (Zubrick et al. 2006). Indigenous students living in remote and very remote locations are likely to miss an even greater number of school days (Zubrick et al. 2006). Section 6.1 has more information on student attendance.

Another factor associated with academic performance is emotional distress. Aboriginal students at high risk of clinically significant emotional or behavioural difficulties were almost three times more likely to have low academic performance compared with Aboriginal students at low risk (Zubrick et al. 2006). Section 7.7 has more information on mental health and social and emotional wellbeing issues for children.

Achieving literacy and numeracy benchmarks for years 5 and 7 has a significant effect on participation in year 12 and entry into higher education (ACER 2004). Evidence suggests that school leavers who lack fundamental skills in literacy and numeracy face poor employment prospects (ACER 2004).

Studies have also highlighted the link between health and education (Schwab and Sutherland 2004; Zubrick et al. 2006). Low literacy has been identified as a significant barrier to improving the health of Indigenous people (Schwab and Sutherland 2004).

Some examples of initiatives that are improving educational outcomes for Indigenous students are summarised in box 4.4.2.

Box 4.4.2 'Things that work' — early literacy engagement

The **MULTILIT pilot program** improved the reading ability of Indigenous children at Coen State School in Cape York in Queensland. The program involved taking the 15 least proficient readers and giving them intensive, systematic instruction in phonics for 17 to 18 weeks by specialist teachers (IRUA 2006; Devine 2006).

Since the Coen pilot, MULTILIT has been expanded as part of the broader Cape York Welfare Reform Trial, which began on 1 July 2008, to Hope Vale and Mossman Gorge (OATSIP 2008), and was rolled out in Aurukun in term 1, 2009 (Queensland Government unpublished). In addition, the MULTILIT program provided assistance to Indigenous students at the Redfern Tutorial Centre in NSW, under the auspices of the Exodus Foundation. Results for the second intake of MULTILIT students under the 2007 program at the Centre showed that after 18 weeks of instruction the cohort made average gains of: 13 months in reading accuracy; 7 months in comprehension; and 15 months in spelling (Australian Government unpublished).

MINILIT, a modified version of MULTILIT, was offered to younger students in years 1 and 2 at the Redfern Tutorial Centre. Results for the second intake of MINILIT students showed that, after 15 weeks of instruction, the cohort made average gains of: 8 months in single word recognition and 11 months in spelling (Australian Government unpublished).

The **National Accelerated Literacy Program (NALP)** is an enhancement of the **Scaffolding Literacy Program** initially introduced at the Kulkarriya Community School. More than 70 schools across the NT participate in the NALP. There have been significant improvements in literacy outcomes for the students involved in the program. An evaluation by the Charles Darwin University found that the 2007 average progress rate for NT Accelerated Literacy students was 1.18 reading year levels per year (on average one reading level per year is expected of students) (SSPR 2008).

The **Finding Your Pathway into School and Beyond** program was introduced at Port Dalrymple and South George Town Primary Schools in Tasmania in 2007. The aim of this program was to improve Aboriginal students' literacy. Computers and specialised software were bought, which enabled students to undertake self-paced learning. Home usage and loan of the computers was used as an incentive to encourage participation. There has been an increase in school attendance and a decrease in suspension rates. The project is assisting 55 Aboriginal students, and attendance rates have increased to 95 per cent (Tasmanian Government unpublished).

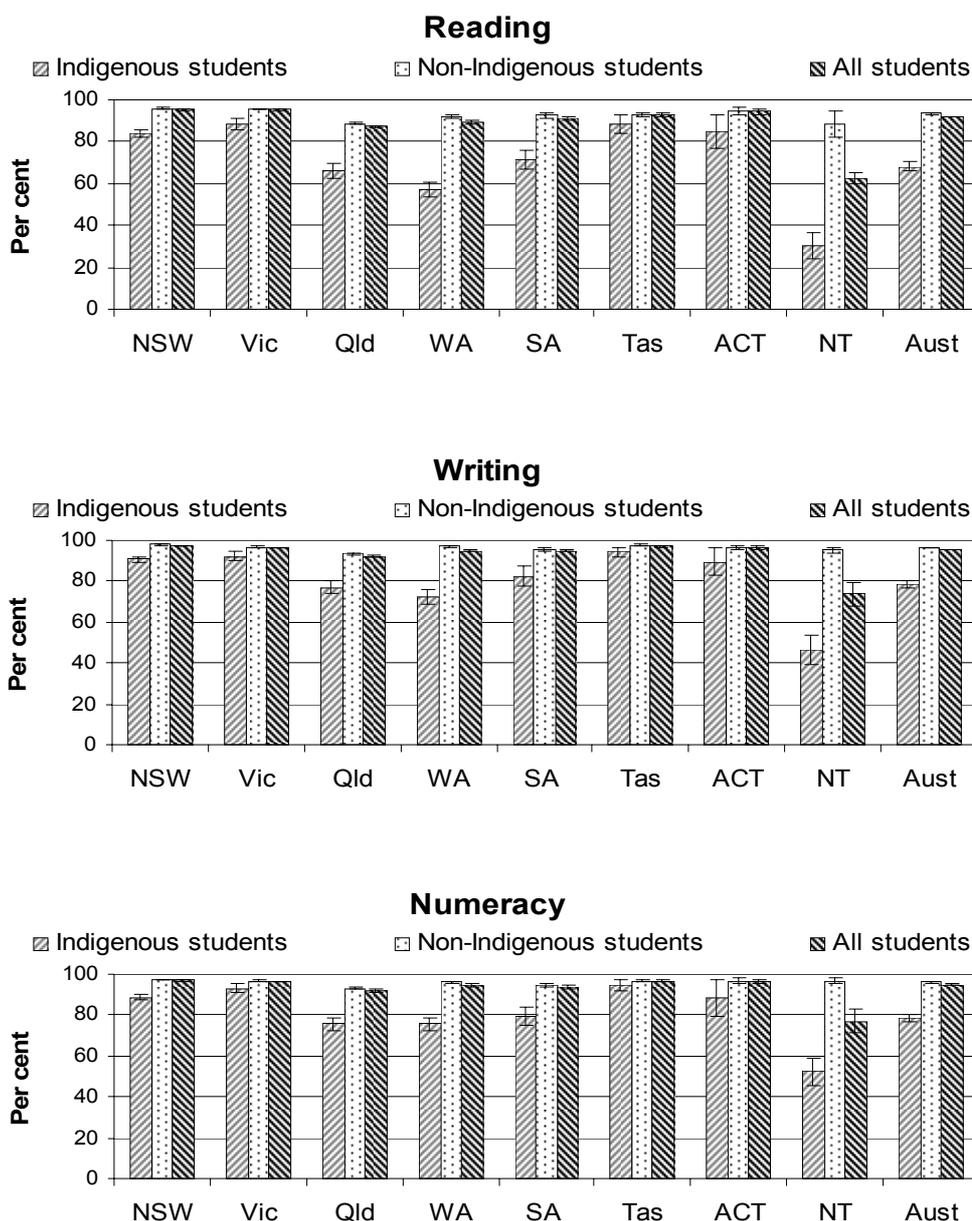
In March 1997, MCEETYA agreed to the development of national benchmarks for use in reporting years 3, 5 and 7 students' reading, writing and numeracy performance (reporting began with year 3 and year 5 in 1999, and year 7 in 2001). These benchmarks describe the nationally agreed minimum acceptable standard in each area of study at particular year levels. A student who does not achieve the benchmark standard will have difficulty making sufficient progress at school.

In 2008, national common tests were introduced for the first time (replacing the previous State/Territory based assessments) — the NAPLAN. Reporting by benchmarks was replaced with reporting by 'national minimum standards'. Therefore 2008 NAPLAN data are not directly comparable with previous years. This report includes 2008 NAPLAN data for the most recent results (which are available for Indigenous and non-Indigenous students) and 1999 to 2007 benchmark data for trend information (which are available for Indigenous and all students).

Care needs to be taken in interpreting the learning outcomes data, because differences in student achievement may sometimes be the result of sampling or measurement error. The publication of confidence intervals with the results reflects the uncertainty associated with the measurement of student achievement. The tables reporting achievement percentages include 95 per cent confidence intervals. (For example, a result of 80 per cent with a confidence interval of ± 2.7 per cent means that we can say with 95 per cent confidence that between 77.3 and 82.7 per cent of the students achieved the benchmark or national minimum standard.)

Year 3

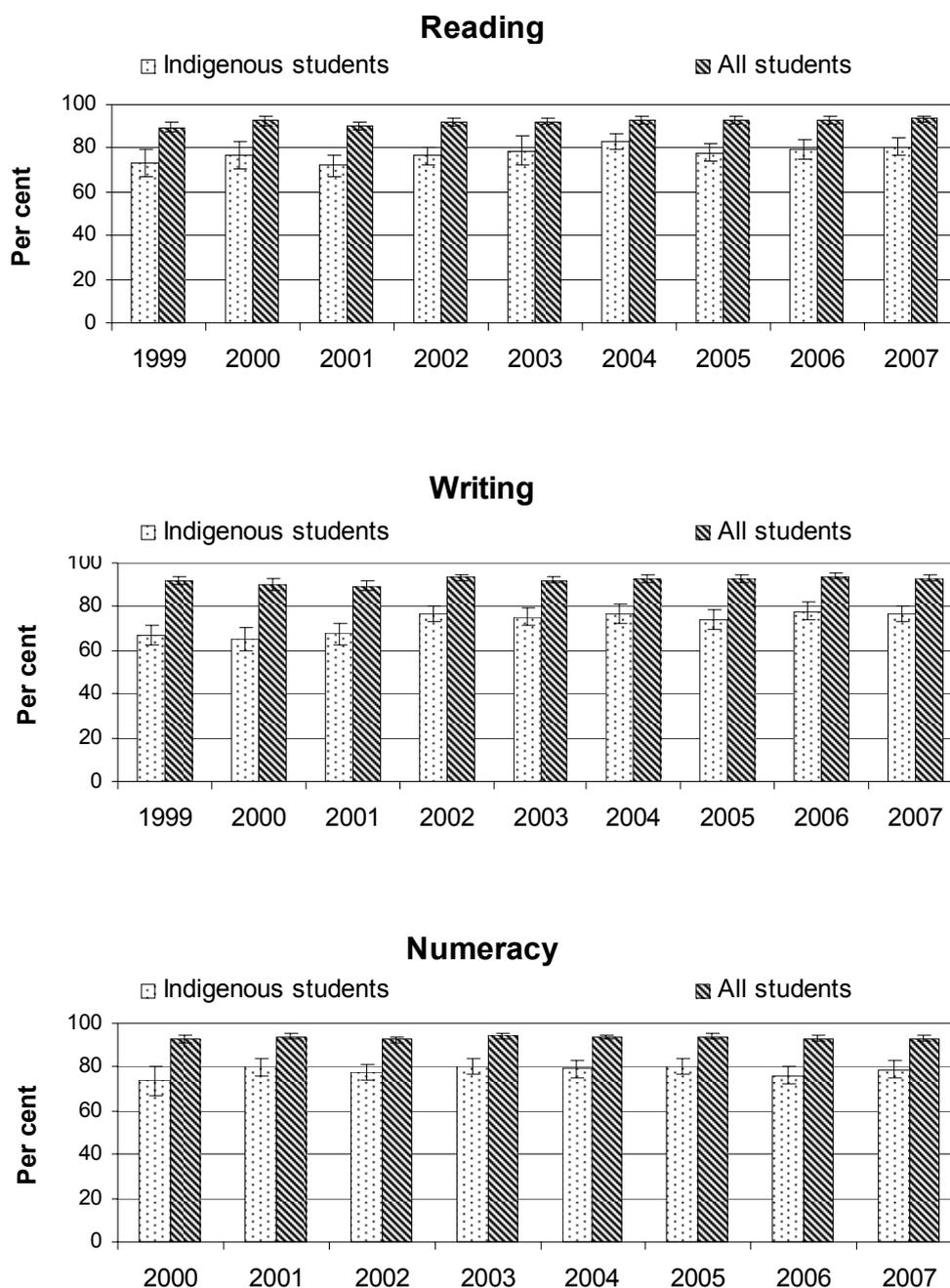
Figure 4.4.1 **Proportion of year 3 students who achieved the national minimum standard by learning domain, by State and Territory, 2008^{a, b}**



^a The achievement percentages reported in this figure include 95 per cent confidence intervals, for example, 80 per cent \pm 2.7 per cent. ^b Exempt students were not assessed and were deemed not to have met the national minimum standard.

Source: MCEETYA (2008); tables 4A.4.1, 4A.4.3 and 4A.4.9.

Figure 4.4.2 Proportion of year 3 students who achieved the national benchmarks by learning domain, 1999–2007^{a, b, c, d, e}



^a The achievement percentages reported in this figure include 95 per cent confidence intervals, for example, 80 per cent \pm 2.7 per cent. ^b Students who were absent or withdrawn from testing are not classified as assessed students and are not included in the benchmark calculations. The proportion of absent and withdrawn students varied across jurisdictions. Readers are urged to be cautious when comparing results. ^c Some movements in the results over time might have occurred because of the State/Territory equating processes, and may not reflect actual changes in student performance. ^d The methods used to identify Indigenous students varied across jurisdictions. ^e Numeracy data only collected from 2000 onwards.

Source: MCEETYA (various years); tables 4A.4.49–51.

Nationally in 2008:

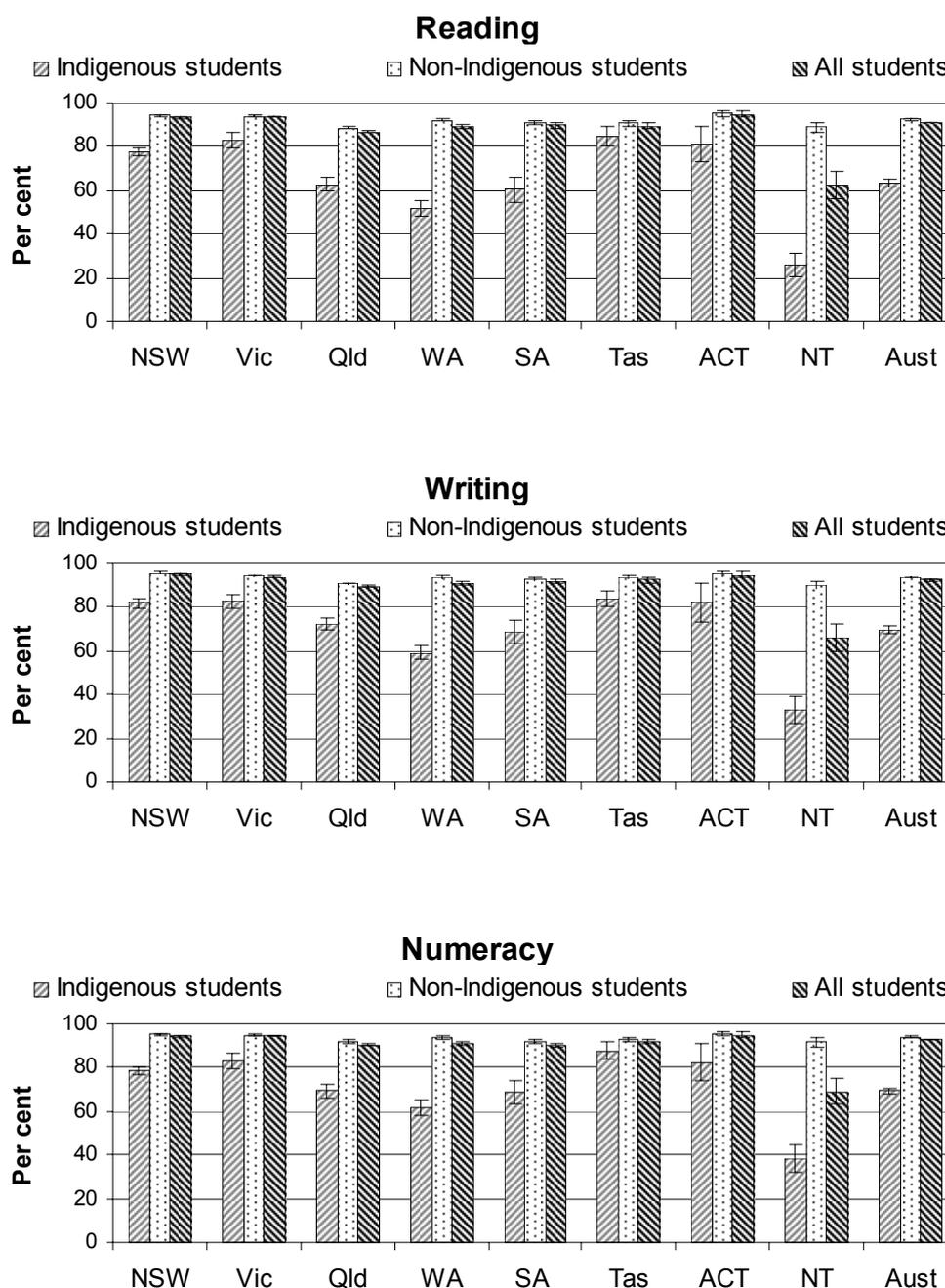
- 68.3 per cent of year 3 Indigenous students achieved the national minimum standard for reading compared to 93.5 per cent of non-Indigenous year 3 students (figure 4.4.1)
- 78.8 per cent of year 3 Indigenous students achieved the national minimum standard for writing compared to 96.4 per cent of non-Indigenous students (figure 4.4.1)
- 78.6 per cent of year 3 Indigenous students achieved the national minimum standard in numeracy compared to 96.0 per cent of non-Indigenous students (figure 4.4.1).

From 1999 (2000 in the case of numeracy) to 2007:

- there was no clear trend (and no statistically significant difference) in the proportion of year 3 Indigenous students who achieved the reading benchmark (figure 4.4.2)
- the proportion of year 3 Indigenous students who achieved the writing benchmark increased significantly between 2001 and 2002 (figure 4.4.2)
- there was no statistically significant change over time in the proportion of year 3 Indigenous students who achieved the numeracy benchmark (figure 4.4.2)
- the proportion of students who achieved the benchmark was lower for Indigenous students, relative to all students, for all years, for reading, writing and numeracy (figure 4.4.2).

Year 5

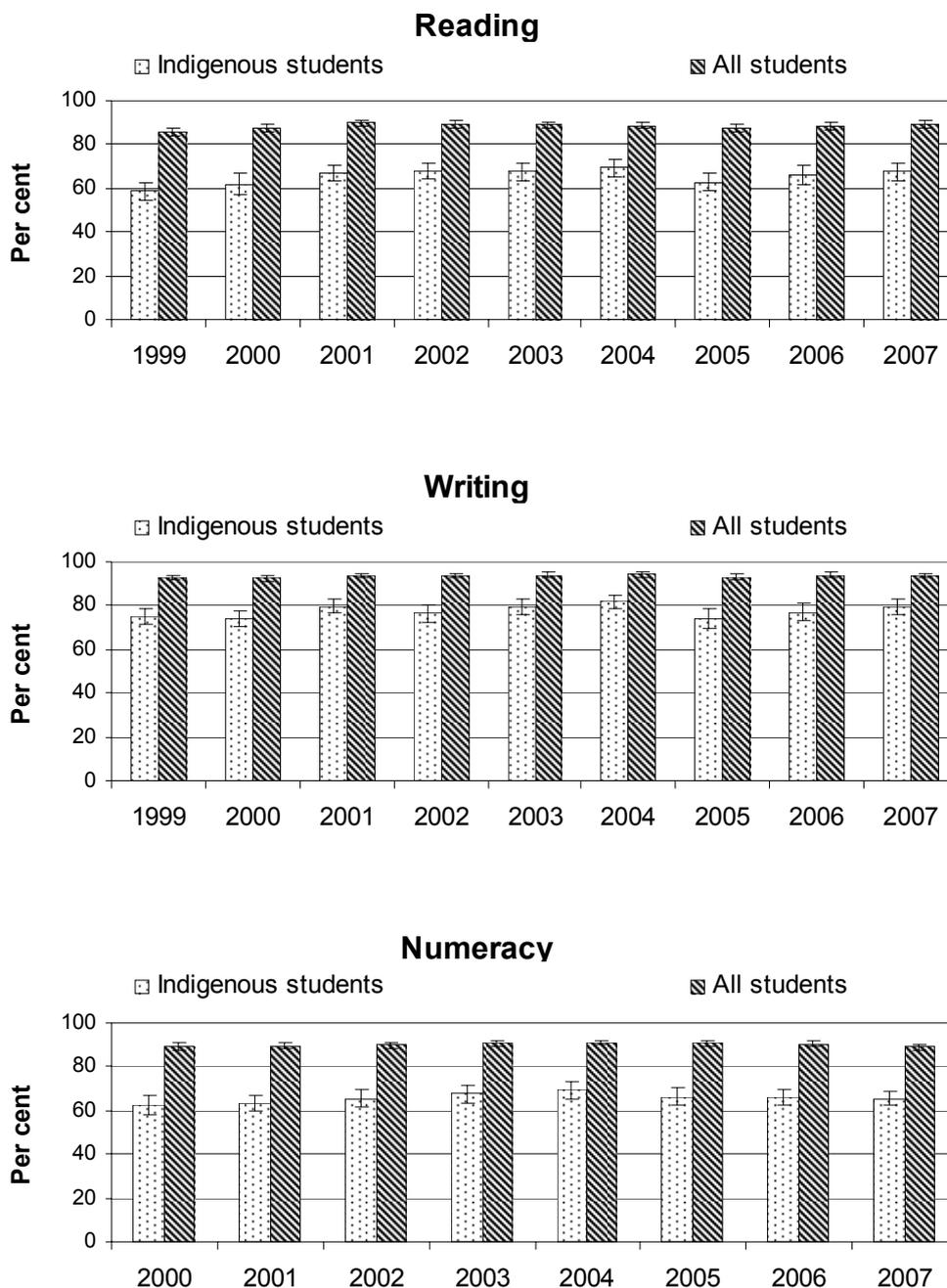
Figure 4.4.3 **Proportion of year 5 students who achieved the national minimum standard by learning domain, by State and Territory, 2008^{a, b}**



^a The achievement percentages reported in this figure include 95 per cent confidence intervals, for example, 80 per cent \pm 2.7 per cent. ^b Exempt students were not assessed and were deemed not to have met the national minimum standard.

Source: MCEETYA (2008); tables 4A.4.13, 4A.4.15 and 4A.4.21.

Figure 4.4.4 Proportion of year 5 students who achieved the national benchmarks by learning domain, 1999–2007^{a, b, c, d, e}



^a The achievement percentages reported in this figure include 95 per cent confidence intervals, for example, 80 per cent \pm 2.7 per cent. ^b Students who were absent or withdrawn from testing are not classified as assessed students and are not included in the benchmark calculations. The proportion of absent and withdrawn students varied across jurisdictions. Readers are urged to be cautious when comparing results. ^c Some movements in the results over time might have occurred because of the State/Territory equating processes, and may not reflect actual changes in student performance. ^d The methods used to identify Indigenous students varied across jurisdictions. ^e Numeracy data is only available from 2000 onwards.

Source: MCEETYA (various years); tables 4A.4.52–54.

Nationally in 2008:

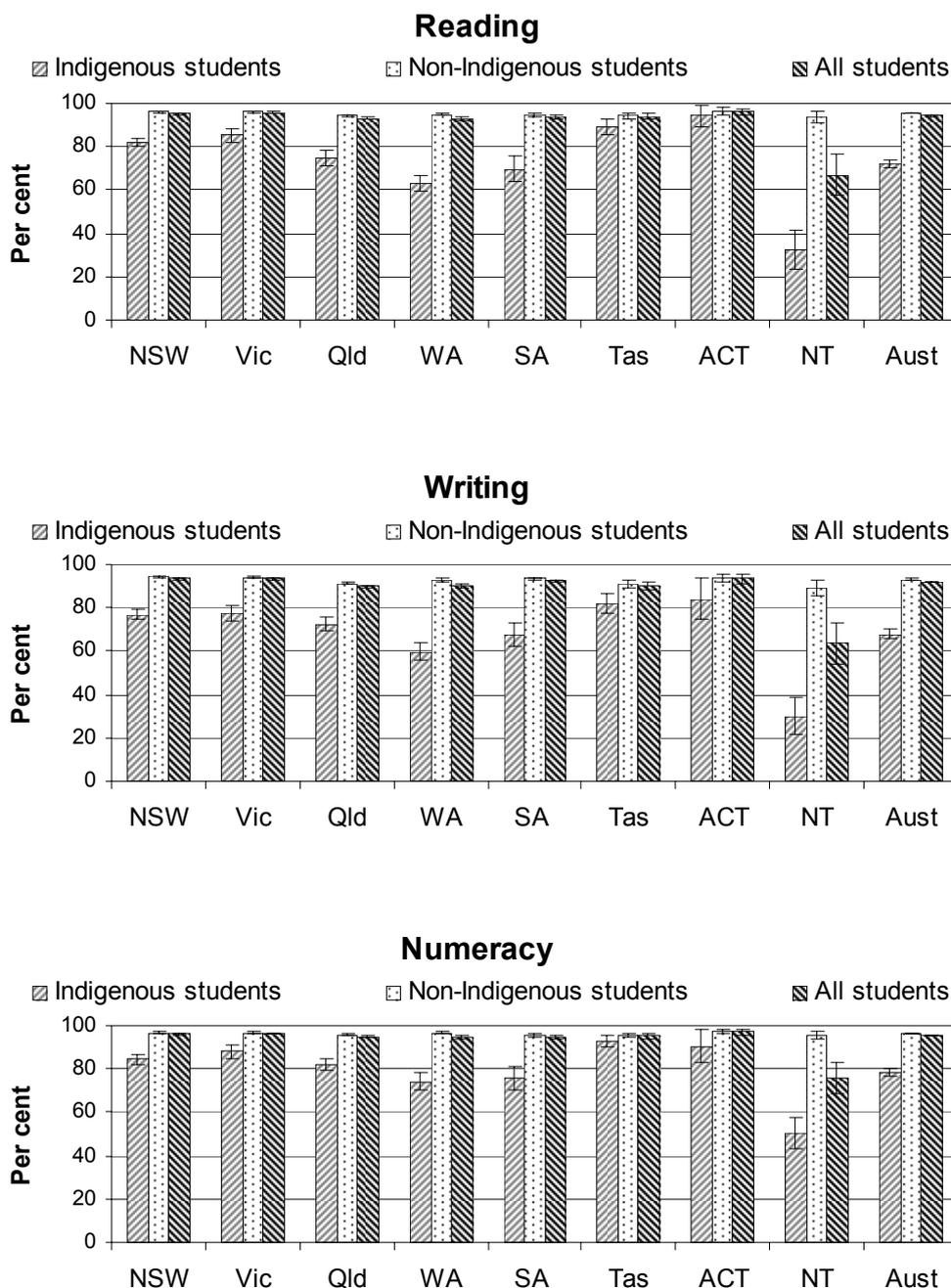
- 63.4 per cent of year 5 Indigenous students achieved the national minimum standard for reading compared with 92.6 per cent of non-Indigenous students (figure 4.4.3)
- 69.7 per cent of year 5 Indigenous students achieved the national minimum standard for writing compared to 93.9 per cent of non-Indigenous students (figure 4.4.3)
- 69.2 per cent of year 5 Indigenous students achieved the national minimum standard for numeracy compared to 94.0 per cent of non-Indigenous students (figure 4.4.3)
- the proportions of year 5 Indigenous students who achieved the national minimum standards for reading, writing and numeracy varied significantly across some states and territories (figure 4.4.3).

From 1999 (2000 for numeracy) to 2007:

- there was no statistically significant change over time in the proportion of year 5 Indigenous students who achieved the reading, writing or numeracy benchmarks (figure 4.4.4).
- performance levels for all students were consistently higher than for Indigenous students over time (figure 4.4.4).

Year 7

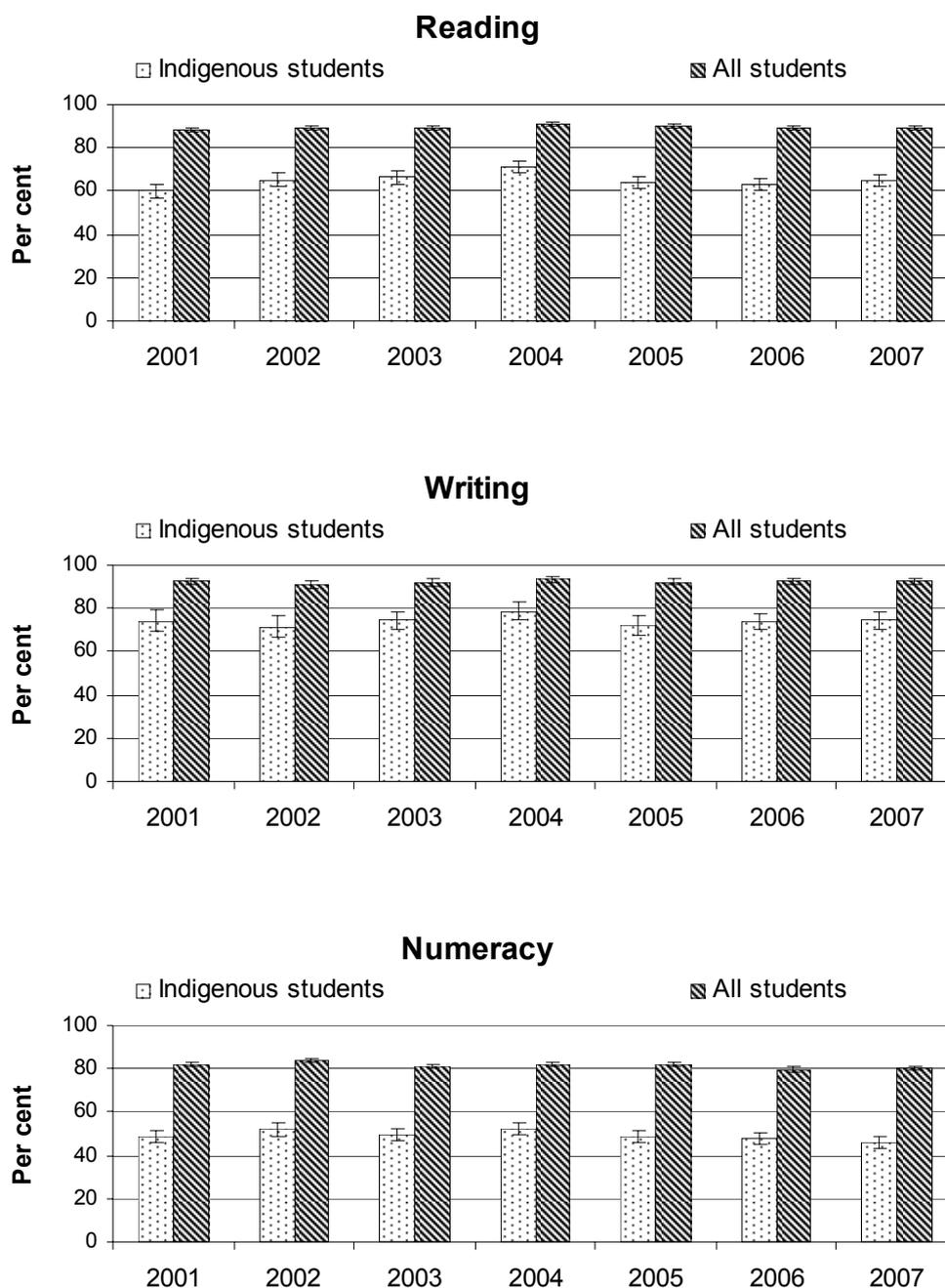
Figure 4.4.5 Proportion of year 7 students who achieved the national minimum standard by learning domain, by State and Territory, 2008^{a, b}



^a The achievement percentages reported in this figure include 95 per cent confidence intervals, for example, 80 per cent \pm 2.7 per cent. ^b Exempt students were not assessed and were deemed not to have met the national minimum standard.

Source: MCEETYA (2008); tables 4A.4.25, 4A.4.27 and 4A.4.33.

Figure 4.4.6 Proportion of year 7 students who achieved the national benchmarks by learning domain, 2001–2007^{a, b, c, d}



^a The achievement percentages reported in this figure include 95 per cent confidence intervals, for example, 80 per cent \pm 2.7 per cent. ^b Students who were absent or withdrawn from testing are not classified as assessed students and are not included in the benchmark calculations. The proportion of absent and withdrawn students varied across jurisdictions. Readers are urged to be cautious when comparing results. ^c Some movements in the results over time might have occurred because of the State/Territory equating processes, and may not reflect actual changes in student performance. ^d The methods used to identify Indigenous students varied across jurisdictions.

Source: MCEETYA (various years); tables 4A.4.55–57.

Nationally in 2008:

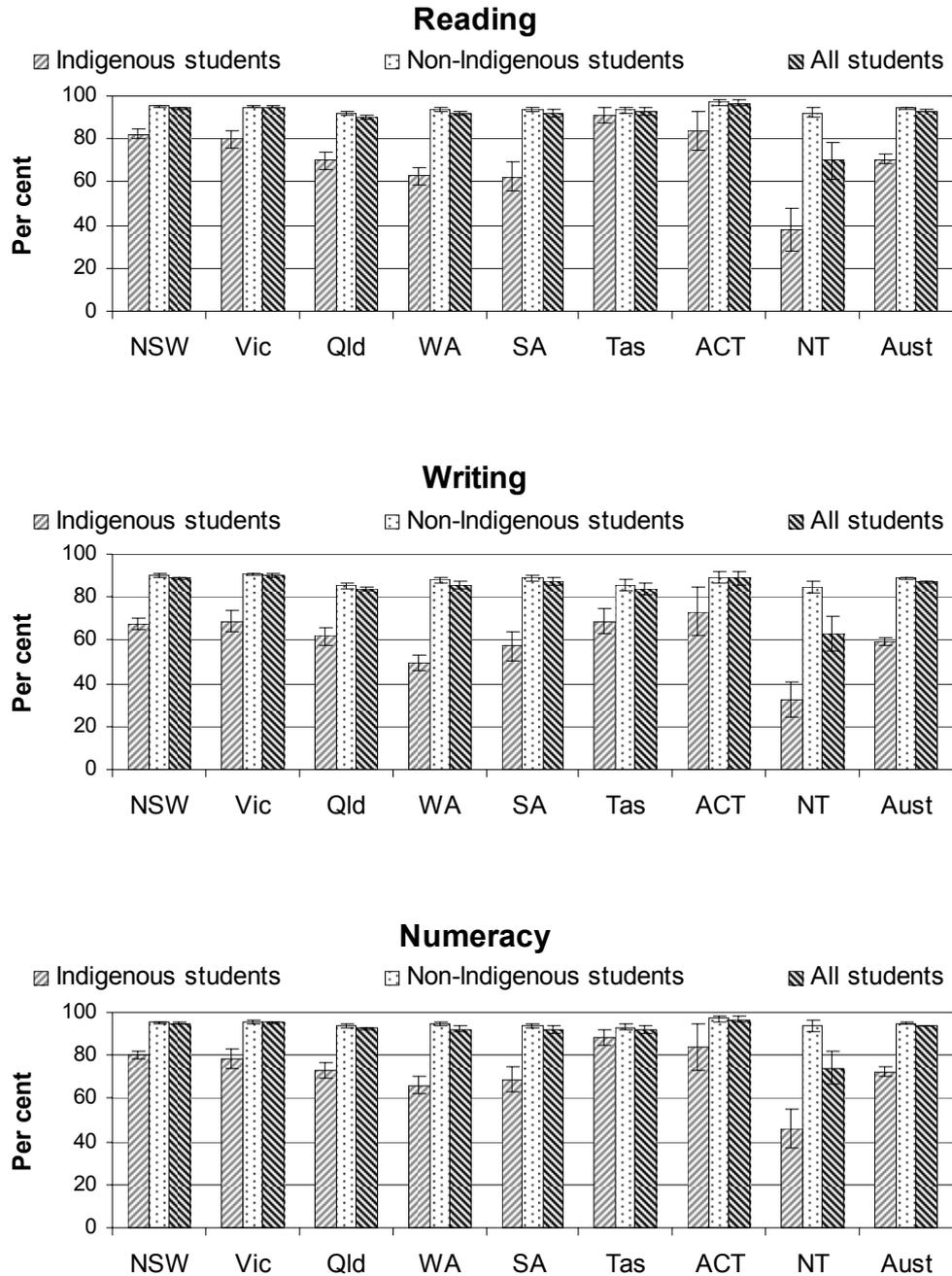
- 71.9 per cent of year 7 Indigenous students achieved the national minimum standard for reading compared to 95.4 per cent of non-Indigenous students (figure 4.4.5)
- 67.9 per cent of year 7 Indigenous students achieved the national minimum standard for writing compared to 93.2 per cent of non-Indigenous students (figure 4.4.5)
- 78.6 per cent of year 7 Indigenous students achieved the national minimum standard for numeracy compared to 96.4 per cent of non-Indigenous students (figure 4.4.5)
- there was significant variation across some states and territories in the proportion of year 7 Indigenous students who achieved the national minimum standard for reading, writing and numeracy (figure 4.4.5).

From 2001 to 2007:

- there was no statistically significant change over time in the proportions of year 7 Indigenous students who achieved the reading, writing and numeracy benchmarks (figure 4.4.6)
- performance levels for all students have been consistently higher than for Indigenous students over time for reading, writing and numeracy (figure 4.4.6).

Year 9

Figure 4.4.7 Proportion of year 9 students who achieved the national minimum standard by learning domain, by State and Territory, 2008^{a, b}



^a The achievement percentages reported in this figure include 95 per cent confidence intervals, for example, 80 per cent \pm 2.7 per cent. ^b Exempt students were not assessed and were deemed not to have met the national minimum standard.

Source: MCEETYA (2008); tables 4A.4.37, 4A.4.39 and 4A.4.45.

Nationally in 2008:

- 70.7 per cent of year 9 Indigenous students achieved the national minimum standard for reading compared to 94.2 per cent of non-Indigenous students (figure 4.4.7)
- 59.7 per cent of year 9 Indigenous students achieved the national minimum standard for writing compared to 88.8 per cent of non-Indigenous students (figure 4.4.7)
- 72.5 per cent of year 9 Indigenous students achieved the national minimum standard for numeracy compared to 94.8 per cent of non-Indigenous students (figure 4.4.7).
- the proportion of year 9 Indigenous students who achieved the national minimum standards for reading, writing and numeracy varied significantly across some states and territories in 2008 (figure 4.4.7).

Comparisons of year 3, 5 and 7 learning outcomes

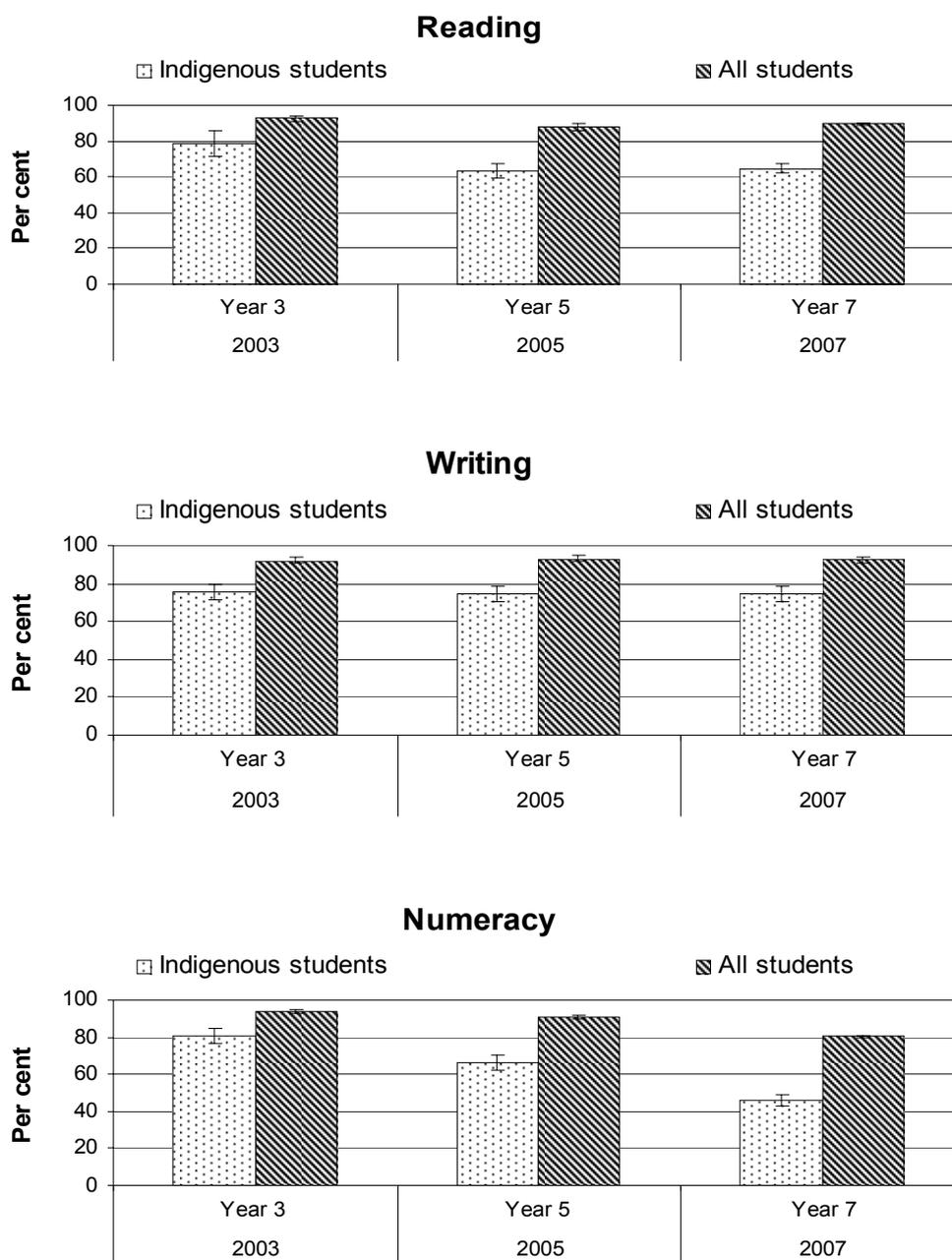
Research suggests that the disparity in academic performance between Indigenous and non-Indigenous students increases as they progress through the education system and that underperforming students are unable to catch up (Ou and Reynolds 2004; Reynolds et al. 2001; Schweinhart 2005; Zubrick et al. 2006).

National benchmarks data are not longitudinal in design or measurement and, therefore, there is no certainty that the same cohort of year 3 students in 2003 are tested again in year 5 in 2005 or in year 7 in 2007. However, the normal progression through school would mean a large proportion of year 3 students in 2003 would progress through to year 5 in 2005 and then year 7 in 2007, and be tested at those year levels.

Data for year 9 students were collected for the first time as part of the 2008 NAPLAN. Results from the 2008 NAPLAN are not included in the figures below as the NAPLAN is not comparable to previous tests.

The data presented in the next section provide some indication of how students are faring as they progress through the middle school years.

Figure 4.4.8 Proportion of year 3 students in 2003, year 5 students in 2005 and year 7 students in 2007 who achieved the national benchmarks by learning domain^{a, b, c, d}



^a The achievement percentages reported in this figure include 95 per cent confidence intervals, for example, 80 per cent \pm 2.7 per cent. ^b Students who were absent or withdrawn from testing are not classified as assessed students and are not included in the benchmark calculations. The proportion of absent and withdrawn students varied across jurisdictions. Readers are urged to be cautious when comparing results. ^c Some movements in the results over time might have occurred because of the State/Territory equating processes, and may not reflect actual changes in student performance. ^d The methods used to identify Indigenous students varied across jurisdictions.

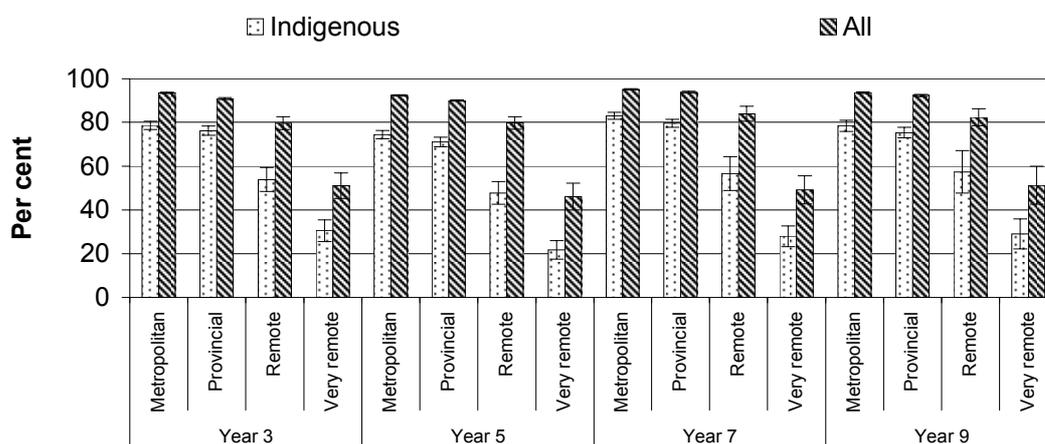
Source: MCEETYA (various years); tables 4A.3.49–57.

As Indigenous students progressed through school from year 3 (2003) to year 7 (2007):

- the proportion who achieved the national minimum reading benchmark significantly decreased from year 3 to year 5, but there was no significant difference between the proportion who achieved the reading benchmark from year 5 to year 7 (figure 4.4.8) — there was no difference in the proportion of all students who achieved the reading benchmark at each year level (figure 4.4.8)
- there was no statistically significant difference in the proportion of Indigenous students who achieved the writing benchmark, or the proportion of all students (figure 4.4.8)
- the proportion of Indigenous students who achieved the numeracy benchmark decreased significantly from year 3 to year 5, and year 5 to year 7 (figure 4.4.8) — there was also a significant decrease in the proportion of all students who achieved the numeracy benchmark between year 5 and year 7 (figure 4.4.8).

Comparison of Indigenous learning outcomes by geographic region

Figure 4.4.9 **Proportion of years 3, 5, 7 and 9 students achieving the national minimum standard for reading, by Indigenous status and geolocation, 2008^{a, b}**



^a The achievement percentages reported in this figure include 95 per cent confidence intervals, for example, 80 per cent \pm 2.7 per cent. ^b Exempt students were not assessed and were deemed not to have met the national minimum standard.

Source: MCEETYA (2008); tables 4A.4.2, 4A.4.14, 4A.4.26 and 4A.4.38.

Nationally in 2008:

- for all categories of remoteness across years 3, 5, 7 and 9, the reading outcomes for Indigenous students were lower than those for all students. As with all students, outcomes for Indigenous students declined as remoteness increased — with significant differences between metropolitan and provincial areas and remote areas, and between very remote areas and all other areas (figure 4.4.9)
- the gap in learning outcomes between Indigenous students and all students increased as the degree of remoteness increased (for example, the gap in year 3 reading outcomes between Indigenous students and all students in metropolitan areas is 15.0 percentage points, compared to a gap of 20.6 percentage points for the same group in very remote areas) (figure 4.4.9)

Results for writing and numeracy are similar to those outlined above for reading (tables 4A.4.4, 4A.4.16, 4A.4.28, 4A.4.40, 4A.4.10, 4A.4.22, 4A.4.34 and 4A.4.46).

Historical data on Indigenous learning outcomes by geolocation by State/Territory are available for 2006 and 2007 (national data are available for 2005) (SCRGSP 2009).

Indigenous student participation rates in the NAPLAN

Students who do not participate in the NAPLAN (either because they are absent or withdrawn) are not included in the results, and therefore their level of performance is unknown. ‘Exempt’ students are counted as part of the cohort of assessed students, and are therefore included in the participation rates. Students may qualify for exemption because of their lack of proficiency in the English language (important for Indigenous students) or because of significant intellectual and/or functional disability.

Data on participation rates for Indigenous students in the 2008 NAPLAN are available by:

- State/Territory
- years 3, 5, 7 and 9
- reading, writing, language conventions (spelling, punctuation and grammar) and numeracy (see attachment tables).

Nationally in 2008, the Indigenous student participation rate in the NAPLAN was lower than the participation rate for all students, for reading, writing and numeracy, by around:

- 6 percentage points for year 3 students (for reading, 90.2 per cent compared to 96.6 per cent; for writing, 89.9 per cent compared to 96.4 per cent; and for numeracy, 89.4 per cent compared to 96.3 per cent)
- 6 percentage points for year 5 students (for reading, 90.1 per cent compared to 96.8 per cent; for writing, 90.0 per cent compared to 96.7 per cent; and for numeracy, 89.3 per cent compared to 96.6 per cent)
- 8 percentage points for year 7 students (for reading, 87.9 per cent compared to 96.3 per cent; for writing, 87.7 per cent compared to 96.2 per cent; and for numeracy, 87.4 per cent compared to 96.1 per cent)
- 14 percentage points for year 9 students (for reading, 79.7 per cent compared to 93.5 per cent; for writing, 79.7 compared to 93.6 per cent; and for numeracy, 79.3 per cent compared to 93.3 per cent).

Furthermore, the student participation rate for all students is stable between 96 and 97 per cent for reading, writing and numeracy tests for years 3, 5 and 7, before decreasing to around 93 per cent for year 9 students. For Indigenous students, participation rates are above 89 per cent for reading, writing and numeracy for years 3 and 5, before decreasing in year 7 (to around 87 per cent) and again in year 9 (to around 79 per cent).

Participation rates for spelling and grammar and punctuation are available in the attachment tables (tables 4A.4.11, 4A.4.23, 4A.4.35 and 4A.4.47). Participation rates are not currently available by geolocation.

4.5 Year 12 attainment

Box 4.5.1 Key messages

- The proportion of Indigenous 19 year olds who had completed year 12 or equivalent (35.7 per cent) was half that of non-Indigenous 19 year olds (73.5 per cent) in 2006 (table 4.5.1).
- Apparent retention rates for Indigenous students from the beginning of secondary school to year 12 increased from 39.8 per cent in 2004 to 46.5 per cent in 2008, while the non-Indigenous rate remained steady around 76 per cent) (figure 4.5.1).

‘Halving the gap for Indigenous students in year 12 attainment or equivalent attainment rates by 2020’ is one of six closing the gap targets announced by COAG (COAG 2009b). This indicator reports on the proportion of 19 year olds who are no longer at school and who have completed year 12 and/or equivalent (certificate level II), and year 12 retention rates. At its April 2009 meeting, COAG decided that in future this target would be measured for people aged 20–24 years rather than 19 years (COAG 2009a).

Evidence from a range of sources indicates that successful completion of year 12 is necessary if young people are to have access to the full range of further education, training, employment and life chances consistent with their abilities (ACER 2004; OECD 2005). Examples of initiatives that have been successful in increasing Indigenous secondary school participation and attainment can be found in box 4.5.2.

There is growing evidence showing the importance of continuing school after the period of compulsory schooling ends (Dusseldorp Skills Forum 2006). Young people who do not complete year 12 are less likely to be fully engaged in study or work than young people who do complete year 12 (Long 2006). In 2006, Indigenous people who attained a year 12 certificate were more likely to be employed than those who finished schooling only to year 10 (68.2 per cent compared to 52.8 per cent, respectively) and were more likely to have higher incomes (table 4A.5.19).

A large body of research emphasises the pivotal role of education in reducing long term disadvantage of Indigenous peoples (ACER 2003, 2004; Buckskin 2000; OECD 2004; WHO 1986). School completion is linked to economic and social wellbeing (and other positive health behaviours) and can also reduce the need for remedial education and social welfare services (Barnett 1993; Reynolds et al. 2002).

Evidence suggests a connection between educational disadvantage and involvement in crime. An examination of the link between education and crime by Mackenzie (2002) concluded that improving school performance and retention reduced the risk of juvenile involvement in crime. A study on correlations between Indigenous contact with the justice system and social factors found that failure to complete year 12 has only a small effect on the risk of imprisonment but a significant effect on the likelihood of being charged (Weatherburn, Snowball and Hunter 2006). The authors of the study noted that their findings were consistent with empirical research but acknowledged that it is unclear whether the relationship between poor school performance and offending is actually causal or a reflection of some other factors.

Box 4.5.2 'Things that work' — increasing secondary school participation and attainment

Deadly Vibe is a magazine for Indigenous students published by Vibe Australia (an Aboriginal media agency) with funding from the Australian Government. The magazine promotes positive self-image and healthy lifestyle messages through articles focusing on the achievements of Indigenous people in sport, music, the arts and education. The target audience for the magazine is school aged children (6 to 18 years old).

The magazine has been evaluated three times since 2002, most recently in 2006 by the Cultural and Indigenous Research Centre Australia (CIRCA). A survey of young people and readers of the magazine showed that:

- Deadly Vibe was the most popular magazine/newspaper they read
- 83 per cent had read the magazine, with 23 per cent of respondents reading it regularly
- 75 per cent of readers of Deadly Vibe assessed it as 'deadly'
- 85 per cent agreed that Deadly Vibe magazine made them feel proud to be Indigenous
- 83 per cent agreed that the magazine teaches them about being healthy (Australian Government unpublished).

The **Cape York Institute's Higher Expectations Program (HEP)** and **St Joseph's Indigenous fund** are examples of non-government sponsorship of programs for children to board at private schools. The HEP provides Indigenous children living in the Cape York region with access to secondary education at Queensland's most academically successful boarding schools. The HEP provides both financial assistance and ongoing support from a program administrator and student support officer, who maintain regular contact with students, school staff, parents/guardians and home communities, and assist students and their families with transition and communication issues.

The HEP has expanded from six scholarships in 2005, to 24 in 2006, 25 in 2007, 33 in 2008 and 38 from 15 communities enrolled in 2009. There are currently nine partner schools located in Brisbane, Rockhampton, Townsville, Charters Towers and Cairns. The Australian Government contributed funding for 9 students in 2008 and 29 students in 2009 and funding from Macquarie Group Foundation has been approved for 2009–2011.

(Continued next page)

Box 4.5.2 (continued)

The HEP program's success is partly due to the individual case management of students and the extra activities to increase motivation, develop life skills and leadership. Though only a fraction of Cape York students will participate in the HEP, their success (completion of secondary school and enrolment in tertiary studies) will greatly influence Cape York educational statistics and provide Cape communities with a pool of talented and educated future leaders. In 2007, four students finished year 12 and three of those students enrolled in university and, in 2008 two students graduated from year 12 and enrolled in university.

The St Joseph's Indigenous fund offers scholarships to Indigenous boys to attend St Joseph's College at Hunters Hill in Sydney. Started in 1998 with one year 7 student from Walgett, the program has more than 40 Indigenous children whose fees are paid through assistance from the Australian Government, parents, the school and other donors. Six boys have already completed their higher school certificate (Queensland Government unpublished).

Information on **remote schooling in the NT** has been included in previous reports. The focus has been on increasing access to secondary education for students in remote and very remote communities in the NT. Across the NT, the number of Indigenous students completing the Northern Territory Certificate of Education (NTCE) increased from 126 in 2007 to 157 in 2008. In 2008, 45 students achieved the NTCE in their home communities. The individual schools that are producing graduates are increasing in number and support structures include a dedicated NTCE implementation officer to work with remote schools that offer NTCE, and professional development opportunities for senior years teachers including a remote schools conference held annually (NT Government unpublished).

Student attainment

Data on the proportion of 19 year olds who are no longer at school and who have completed year 12 and/or certificate level II have been derived from the ABS 2001 and 2006 Censuses. Census data rely on self-reporting — people may say they have completed a particular year of school or post-school qualification but may not have actually been awarded a certificate.

Table 4.5.1 Proportion of 19 year olds who have completed year 12 and/or certificate level II, 2001 and 2006^{a, b, c, d}

	2001			2006		
	Indigenous ^e (%)	Non-Indigenous (%)	Rate ratio ^f	Indigenous ^e (%)	Non-Indigenous (%)	Rate ratio ^f
NSW	33.1	67.4	2.0	35.7	71.9	2.0
Vic	35.6	68.5	1.9	37.1	76.2	2.1
QLD	44.2	72.9	1.6	48.0	76.7	1.6
WA	25.0	65.1	2.6	31.6	70.9	2.2
SA	26.3	62.8	2.4	33.9	67.8	2.0
Tas	36.5	56.8	1.6	37.1	62.3	1.7
ACT	52.4	81.4	1.6	50.0	84.8	1.7
NT	7.3	52.4	7.2	12.0	62.2	5.2
Australia	31.3	68.1	2.2	35.7	73.5	2.1

^a Excluding people still attending secondary school. ^b Based on place of usual residence. ^c Equivalent means attainment of certificate level II and does not include other certificate levels. ^d Excludes 19 year olds for whom level of schooling and certificate level was not known. ^e Includes Aboriginal and Torres Strait Islander people who identify as both Aboriginal and Torres Strait Islander. ^f The rate ratio is calculated by dividing the non-Indigenous rate by the Indigenous rate.

Source: ABS (unpublished), derived from 2006 Census of Population and Housing and 2001 Census of Population and Housing; tables 4A.5.2 and 4A.5.6.

In 2006, excluding those still attending school:

- nationally, the proportion of Indigenous 19 year olds who had completed year 12 and/or a year 12 equivalent (certificate II) was half that of non-Indigenous 19 year olds (35.7 per cent compared with 73.5 per cent, respectively) (table 4.5.1)
- the proportion of Indigenous 19 year olds who had completed year 12 and/or equivalent was higher in major cities (44.4 per cent) than in very remote areas (19.2 per cent). Among non-Indigenous 19 year olds, 77.1 per cent of those in major cities had completed year 12 and/or an equivalent certificate compared with 58.4 per cent of those in very remote areas (table 4A.5.8).

Between 2001 and 2006, excluding those still attending school:

- nationally, the proportion of Indigenous and non-Indigenous 19 year olds who had completed year 12 and/or equivalent increased (from 31.3 to 35.7 per cent for Indigenous 19 year olds and from 68.1 to 73.5 per cent for non-Indigenous 19 year olds) (table 4.5.1)
- the proportion of Indigenous 19 years olds completing year 12 and/or equivalent increased in all states and territories (except the ACT) (table 4.5.1)

-
- the proportion of Indigenous 19 year olds who had completed year 12 and/or equivalent increased in each remoteness area with the largest increase in remote and very remote areas (from 20.2 to 28.0 per cent and from 13.7 to 19.2 per cent, respectively). However, the gap between Indigenous and non-Indigenous year 12 attainment increased in each region, except in remote areas where it fell slightly (tables 4A.5.4 and 4A.5.8).

More data on the proportion of 19 year olds who have completed year 12 and/or certificate level II in 2001 and 2006, by jurisdiction and remoteness area are available in tables 4A.5.1–8.

Year 12 completion rate

State and Territory education authorities issue year 12 certificates to students who have completed year 12. A year 12 completion rate is the number of students who meet the requirements of a year 12 certificate expressed as a percentage of the estimated potential year 12 population. The estimated potential year 12 population is an estimate of a single year age group which could have attended year 12 that year, calculated as the estimated resident population aged 15–19 years divided by five. Completion rates are not comparable to data derived from the Census. Completion rates may not include equivalent qualifications such as the certificate level II.

Nationally, the year 12 completion rate for Indigenous students was 24.0 per cent compared with 57.8 per cent for non-Indigenous students (tables 4A.5.14 and 4A.5.15). Between 2001 and 2007, the completion rate for Indigenous students increased from 19.5 to 24.0 per cent while the rate for non-Indigenous students increased from 56.6 to 57.8 per cent. Over this period, the gap between Indigenous and non-Indigenous year 12 certificate completion fell from 37.1 percentage points to 33.7 percentage points (tables 4A.5.14 and 4A.5.15).

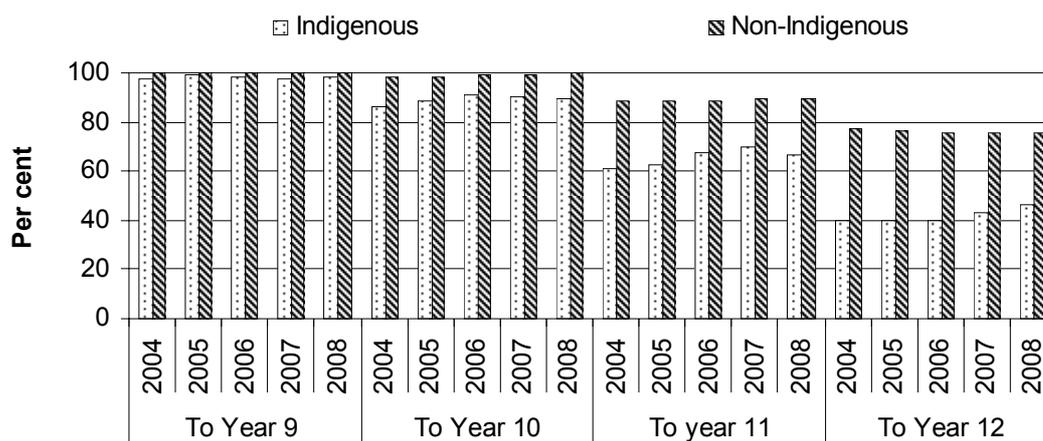
More data on completion rates by jurisdiction are available in tables 4A.5.14 and 4A.5.15.

Student retention

Apparent retention rates estimate the percentage of full time students who progress through secondary school. These measures are under examination because apparent retention rates do not reflect the increasing number of students who enrol in school part time or choose to pursue their senior secondary studies or an equivalent vocational education and training qualification at TAFE. The method of calculation for apparent retention rates does not take into account impacts of migration and

overseas students, and students repeating a year level or moving interstate (ABS 2009). Apparent retention rates do not reflect students who do not make the transition from primary to secondary school.

Figure 4.5.1 Apparent retention rates of full time secondary students, all schools^{a, b, c}



^a The apparent retention rate is the percentage of full time students who continued to years 9, 10, 11, and 12 from respective cohort groups at the commencement of their secondary schooling (year 7/8). See notes to tables 4A.5.26–30 for more detail. ^b The exclusion of part time students from standard apparent retention rate calculations has implications for the interpretation of results for all jurisdictions, but particularly for SA, Tasmania and the NT where there is a high proportion of part time students. ^c Ungraded students are not included in the calculation of apparent retention rates. This exclusion has particular implications for the NT and as a result, Indigenous apparent retention rates may misrepresent the retention of students in secondary schooling in the NT.

Source: ABS (2009); table 4A.5.23.

- Apparent retention rates for Indigenous students from the beginning of secondary school to year 12 increased from 39.8 per cent in 2004 to 46.5 per cent in 2008 (figure 4.5.1).
- Nationally, in 2008, the retention rate to year 12 for Indigenous students was significantly lower than the rate for non-Indigenous students (46.5 per cent compared with 75.6 per cent, respectively) (figure 4.5.1).
- The most significant differences between Indigenous and non-Indigenous retention rates were at the post compulsory years 11 and 12.
- Table 4A.5.35 shows apparent retention rates of full time students who continued to year 12 from year 10. Nationally, Indigenous students' retention from year 10 to year 12 in 2008 was 51.0 per cent compared with 76.5 per cent for non-Indigenous students. Apparent retention rates from year 10 to year 12 from 2004 to 2008 by State and Territory are included in tables 4A.5.31–4A.5.35.

Section 6.4 and 6.5 include retention rates to year 9 and year 10, respectively. More data on apparent retention rates from 2002 to 2008, by jurisdiction and gender are included in tables 4A.5.24–4A.5.30.

4.6 Employment

Box 4.6.1 Key messages

- Between 2001 and 2006, for those aged 15–64 years:
 - the employment to population ratio increased for Indigenous people from 43.2 per cent to 48.0 per cent, and for non-Indigenous people from 68.0 per cent to 71.7 per cent. The gap remained around 24 percentage points (figure 4.6.1)
 - labour force participation increased for Indigenous people from 54.1 per cent to 56.8 per cent and for non-Indigenous people from 73.3 per cent to 75.5 per cent (figure 4.6.3)
 - the unemployment rate decreased for Indigenous people from 20.0 per cent to 15.6 per cent and for non-Indigenous people from 7.3 per cent to 5.1 per cent (figure 4.6.6).
- The Indigenous labour force participation rate was lower, and the unemployment rate was higher, than for non-Indigenous people in all remoteness areas, states and territories and age groups (figures 4.6.3–9).

The Council of Australian Governments (COAG) has committed to ‘halve the gap in employment outcomes between Indigenous and non-Indigenous Australians within a decade’ (COAG 2008).

This section includes information about the key indicator ‘employment to population ratio’, and additional information on labour force participation, unemployment and Community Development Employment Projects (CDEP).

Labour market outcomes are directly related to people’s living standard and many aspects of their wellbeing. Being employed leads to improved income for families and communities (which in turn has a positive influence on health and the education of children). It also enhances self-esteem, increases opportunities for self development, influences interaction at the family and community levels and reduces social alienation. Employment by part time/full time status and skill level is discussed in more detail in section 8.1. The focus of this section is the extent to which people are participating in the labour force or are unemployed.

The labour force is the most widely used measure of the economically active population or the formal supply of labour.

The labour force is a measure of the number of people contributing to, or willing to contribute to, the supply of labour and, as defined by the ABS, comprises two mutually exclusive groups within the population:

- the employed (people who have worked for at least one hour in the reference week, including those who have received wages for participating in CDEP)
- the unemployed (people who are without work, but are actively looking for work and available to start work within four weeks).

The remainder of the population are not in the labour force. There are many reasons why people may not be in the labour force. They may not wish or be able to work because they are in education, retired, caring for family members, have a disability or poor health or have some other means of financial support. Alternatively, they could be discouraged jobseekers who would like work but are not actively looking for work. People may become discouraged jobseekers because they believe that there are no suitable jobs in their area, the costs of searching are too great, or they believe that they do not have the appropriate skills or qualifications (Hunter and Gray 1999). It is likely that the extent of unemployment, particularly long term unemployment, is underestimated because of discouraged jobseekers. After people have been unemployed for long periods of time they are more likely to drop out of the labour force. Indigenous people may also be engaged in activities outside of the labour force, through participation in traditional or customary activities, or occupied with activities that often generate income, such as the production of Indigenous art, but which are not always recorded as employment (Altman et al. 2006).

Data for employment to population ratios, labour force participation and unemployment in this section are from the ABS 2006 Census and ABS 2001 Census. Data are reported for the population aged 15 to 64 years. The age of 15 years is the lowest practical limit above the compulsory schooling age for measuring the participation of young people in economic activity. The age of 65 years is when most people have retired from the workforce.

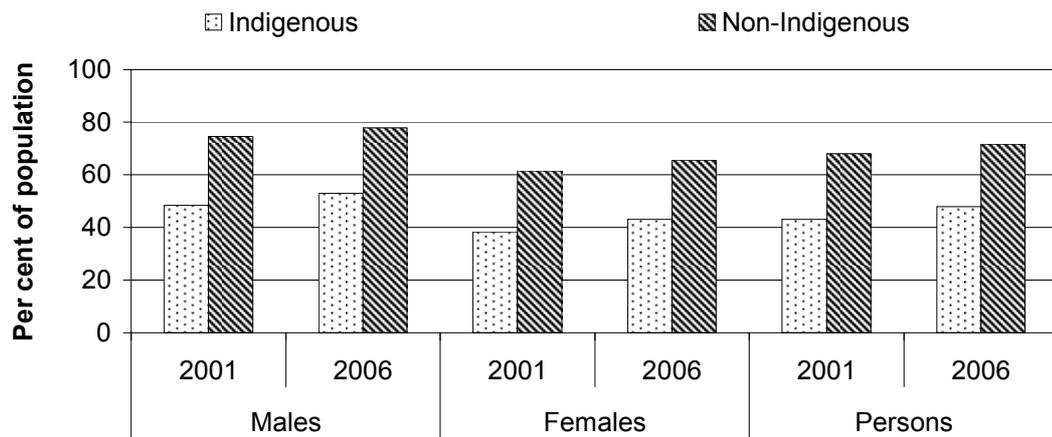
The Indigenous labour force participation and unemployment data reported in this section are influenced by the CDEP program. The CDEP program is funded by the Australian Government and provides activities for unemployed Indigenous people to develop work skills and move into employment. More information on CDEP is included later in this section.

Employment to population ratio

The National Indigenous Reform Agreement (NIRA) (COAG 2009) identifies the employment to population ratio as the primary performance measure for this COAG

target. Employment to population ratios measure the employed as a proportion of the working age population and are complemented by labour force participation rates presented later in this section. Labour force participation measures those in the labour force (the employed and the unemployed) as a proportion of the working age population.

Figure 4.6.1 Employment to population ratio, 2001 and 2006^a



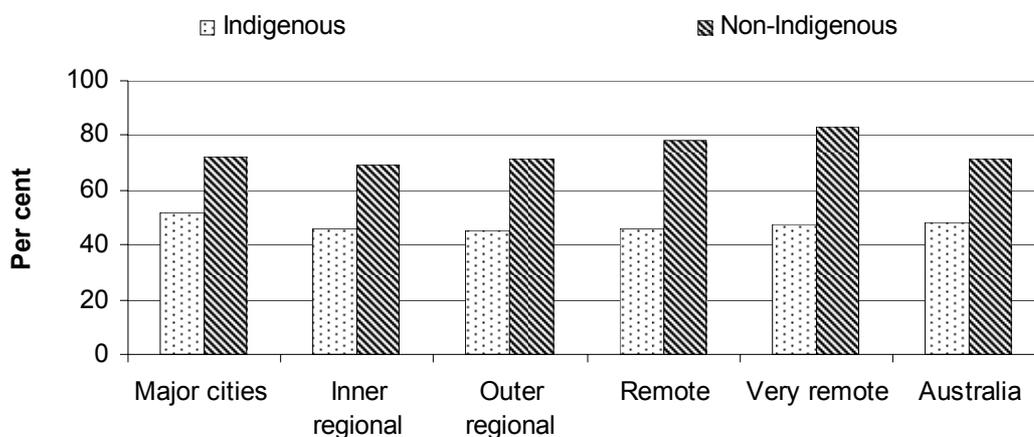
^a Employment to population ratio is calculated for those aged 15–64 years.

Source: ABS (unpublished) derived from the *2006 Census of Population and Housing*; ABS (unpublished) derived from the *2001 Census of Population and Housing*; tables 4A.6.5–6.

Between 2001 and 2006:

- the employment to population ratio for Indigenous people increased from 43.2 per cent to 48.0 per cent. This ratio also increased for non-Indigenous people (from 68.0 per cent to 71.7 per cent). Overall, the gap remained relatively unchanged (24.8 percentage points to 23.7) (figure 4.6.1)
- the employment to population ratio for Indigenous women increased from 38.3 per cent to 43.2 per cent. This ratio also increased for non-Indigenous women (from 61.5 per cent to 65.6 per cent) (figure 4.6.1)
- the employment to population ratio for Indigenous men increased from 48.5 per cent to 53.0 per cent. This ratio also increased for non-Indigenous men (from 74.5 per cent to 77.8 per cent) (figure 4.6.1)
- employment to population ratios for Indigenous and non-Indigenous women were lower than those for Indigenous and non-Indigenous men, respectively (figure 4.6.1).

Figure 4.6.2 Employment to population ratio, by remoteness, 2006^a



^a Employment to population ratio is calculated for those aged 15–64 years.

Source: ABS (unpublished) derived from the 2006 Census of Population and Housing; table 4A.6.18.

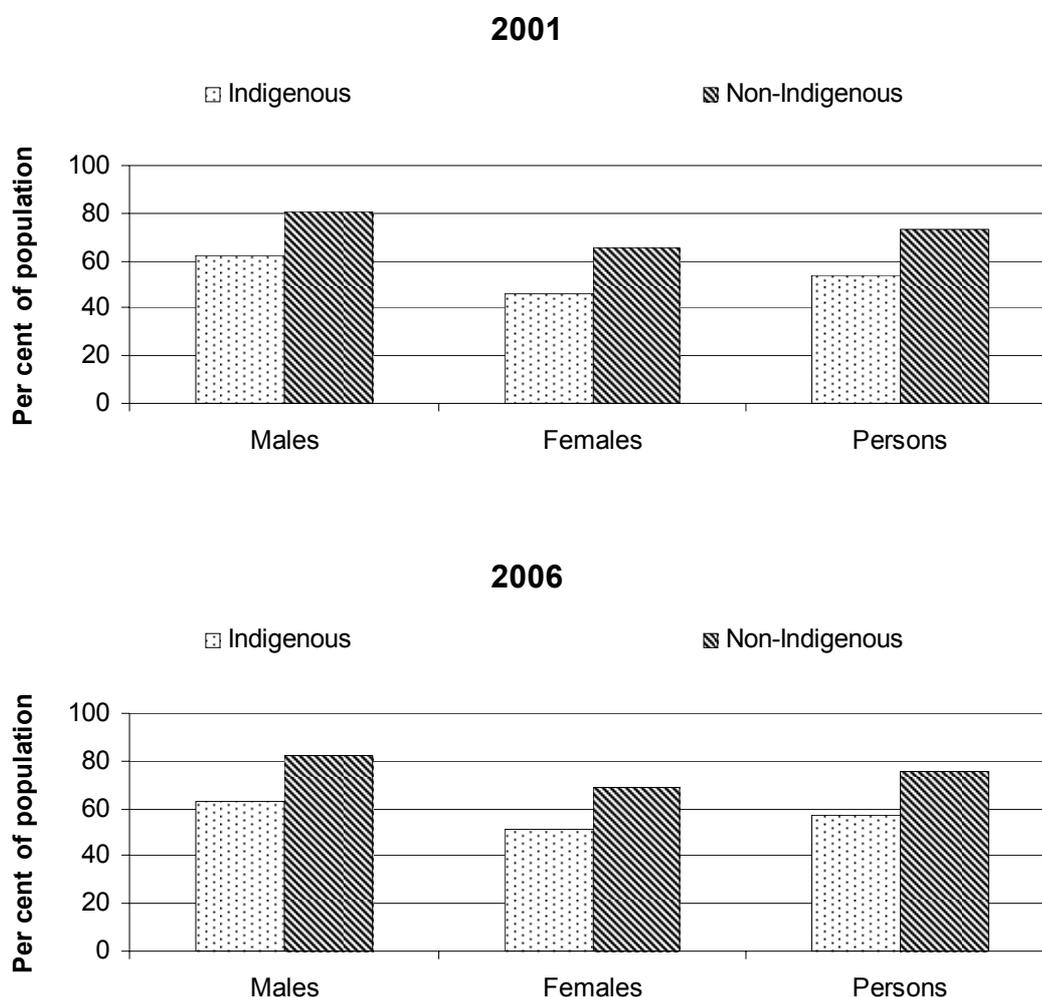
In 2006:

- employment to population ratios for Indigenous people were lower than for non-Indigenous people in all remoteness areas (figure 4.6.2)
- employment to population ratios varied across remoteness areas for both Indigenous and non-Indigenous people (figure 4.6.2)
- employment to population ratios for Indigenous people were highest in major cities (51.8 per cent) and lowest in outer regional areas (45.5 per cent) (figure 4.6.2)
- in contrast, employment to population ratios for non-Indigenous people were highest in very remote areas (83.4 per cent) and lowest in inner regional areas (69.2 per cent) (figure 4.6.2).

Labour force participation

The labour force participation rates used in this section are calculated as the number of people aged 15 to 64 years who are employed or are available for work (the labour force), divided by the population in that age group.

Figure 4.6.3 Labour force participation, 2001 and 2006^{a, b}



^a Labour force participation is the number of employed plus those who were unemployed and available for work expressed as a percentage of people aged 15–64 years. ^b Data are not age standardised.

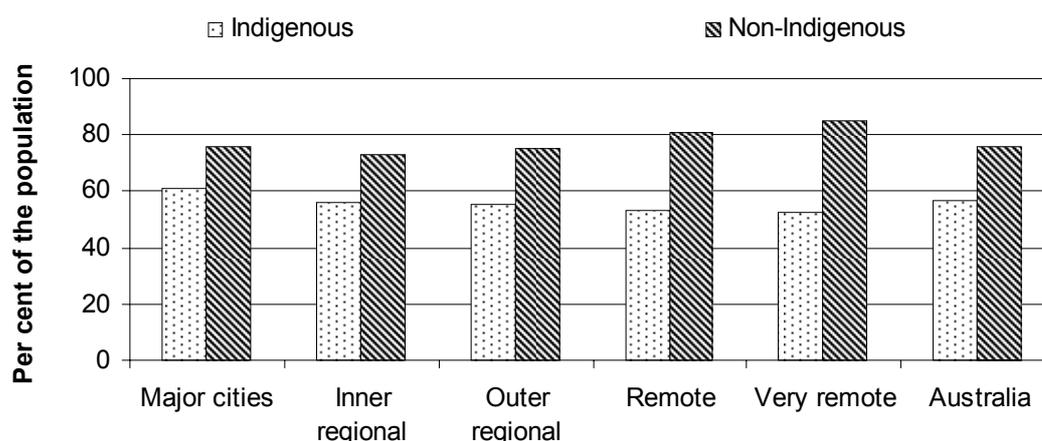
Source: ABS (unpublished) derived from the 2006 Census of Population and Housing; ABS (unpublished) derived from the 2001 Census of Population and Housing; tables 4A.6.3–4.

Between 2001 and 2006:

- labour force participation increased for Indigenous people (from 54.1 per cent to 56.8 per cent) and for non-Indigenous people (from 73.3 per cent to 75.5 per cent). Overall, the gap remained relatively unchanged (from 19.3 percentage points to 18.7 percentage points) (figure 4.6.3)
- labour force participation increased for Indigenous women (from 46.5 per cent to 51.1 per cent) and for non-Indigenous women (from 65.8 per cent to 69.2 per cent) (figure 4.6.3)

- labour force participation increased slightly for Indigenous men (from 62.1 per cent to 63.0 per cent) and for non-Indigenous men (from 80.9 per cent to 82.0 per cent) (figure 4.6.3)
- Indigenous and non-Indigenous women both participated in the labour force at a lower rate than Indigenous and non-Indigenous men, respectively (figure 4.6.3).

Figure 4.6.4 Labour force participation, by remoteness, 2006^{a, b, c}



^a Labour force participation is the number of employed plus those who are unemployed and available for work expressed as a percentage of people aged 15–64 years. ^b Data are not age standardised. ^c CDEP participation was counted as employment by the ABS and varied with remoteness. Indigenous people living in remote and very remote areas of Australia were much more likely to participate in CDEP.

Source: ABS (unpublished) derived from the 2006 Census of Population and Housing; table 4A.6.4.

Across remoteness areas, in 2006:

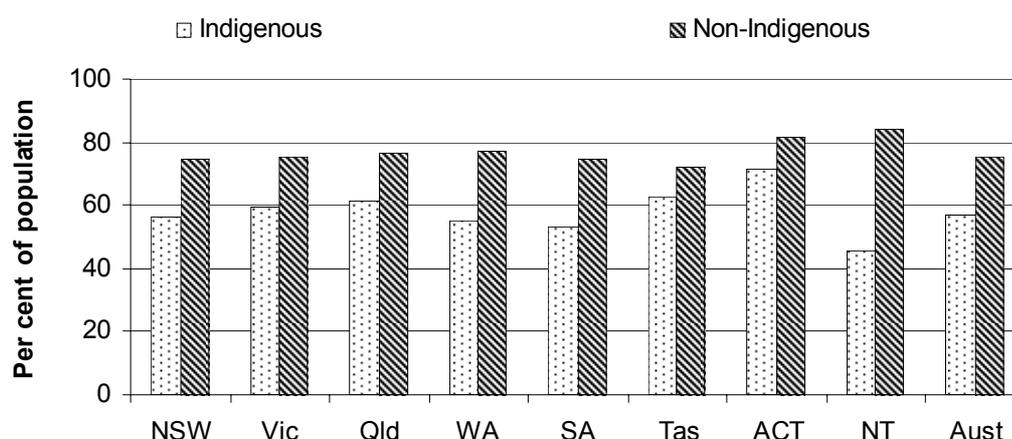
- labour force participation for Indigenous people was lower than for non-Indigenous people in all remoteness areas (figure 4.6.4)
- labour force participation for Indigenous people was lower in more remote areas. In contrast, labour force participation was higher for non-Indigenous people in more remote areas (figure 4.6.4)
- labour force participation for Indigenous people was highest in major cities (61.0 per cent) and lowest in very remote areas (52.7 per cent). In contrast, labour force participation for non-Indigenous people was very similar in major cities, inner regional areas and outer regional areas, (76.0 per cent, 73.4 per cent and 75.3 per cent respectively), was higher in remote areas (80.8 per cent) and highest in very remote areas (85.4 per cent) (figure 4.6.4).

For both Indigenous and non-Indigenous people, labour force participation rates vary through life cycle stages, initially increasing with age as young people move

from education and training (often combined with part-time work) into full-time jobs, remaining relatively high during prime working ages, and then declining towards retirement.

Across age groups, in 2006, labour force participation for Indigenous people was lower than for non-Indigenous people in all age groups (table 4A.6.4). A breakdown of labour force participation by sex is available in table 4A.6.4.

Figure 4.6.5 Labour force participation, by State/Territory 2006^{a, b, c, d}



^a Labour force participation is the number of employed plus those who are unemployed and available for work expressed as a percentage of people aged 15–64 years. ^b Data are not age standardised. ^c Australia includes 'other territories'. ^d CDEP participation varies across states and territories. Indigenous people living in the NT and other states with a large proportion of Indigenous people living in remote or very remote areas have a much higher proportion of Indigenous people participating in CDEP.

Source: ABS (unpublished) derived from the 2006 Census of Population and Housing; table 4A.6.6.

Across jurisdictions, in 2006:

- labour force participation for Indigenous people was lower than for non-Indigenous people in all states and territories (figure 4.6.5)
- Indigenous labour force participation was highest in the ACT (71.6 per cent) and lowest in the NT (45.5 per cent). In contrast non-Indigenous labour force participation was highest in the NT (84.2 per cent) and lowest in Tasmania (72.3 per cent) (figure 4.6.5).

Unemployment

The unemployment rate, which is the number of unemployed people expressed as a percentage of the labour force (employed plus unemployed people), is a widely used measure of potentially underutilised labour resources in the economy.

Data on unemployment need to be considered alongside data on CDEP participation and people who are not in the labour force, especially for Indigenous people in remote areas. In 2001 and 2006 (the years from which Census data are drawn upon in this section), known CDEP participants were counted as employed, as distinct from unemployed or not in the labour force in ABS statistics. This accounts for a relatively large number of Indigenous people, particularly in remote areas.

Figure 4.6.6 Unemployment, 2001 and 2006^{a, b}



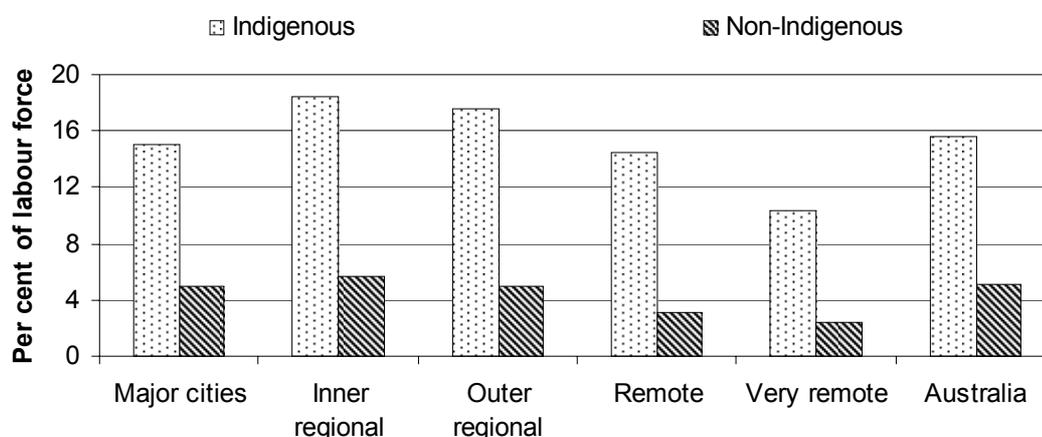
^a The unemployment rate is the number of unemployed people expressed as a percentage of people in the labour force (the employed plus the unemployed) aged 15–64 years. ^b Data are not age standardised.

Source: ABS (unpublished) derived from the 2006 Census of Population and Housing; ABS (unpublished) derived from the 2001 Census of Population and Housing; tables 4A.6.21 and 4A.6.22.

Between 2001 and 2006:

- unemployment decreased for both Indigenous people (from 20.0 per cent to 15.6 per cent) and for non-Indigenous people (from 7.3 per cent to 5.1 per cent). Overall, the gap narrowed from 12.7 percentage points to 10.5 percentage points (figure 4.6.6)
- unemployment decreased for Indigenous women (from 17.6 per cent to 15.4 per cent) and for non-Indigenous women (from 6.5 per cent to 5.2 per cent) (tables 4A.6.21 and 4A.6.22)
- unemployment decreased for Indigenous men (from 21.9 per cent to 15.8 per cent) and for non-Indigenous men (from 7.9 per cent to 5.1 per cent) (tables 4A.6.21 and 4A.6.22).

Figure 4.6.7 Unemployment by remoteness, 2006^{a, b}



^a The unemployment rate is the number of unemployed people expressed as a percentage of people in the labour force (the employed plus the unemployed) aged 15–64 years. ^b Data are not age standardised
 Source: ABS (unpublished) derived from the 2006 Census of Population and Housing; table 4A.6.22.

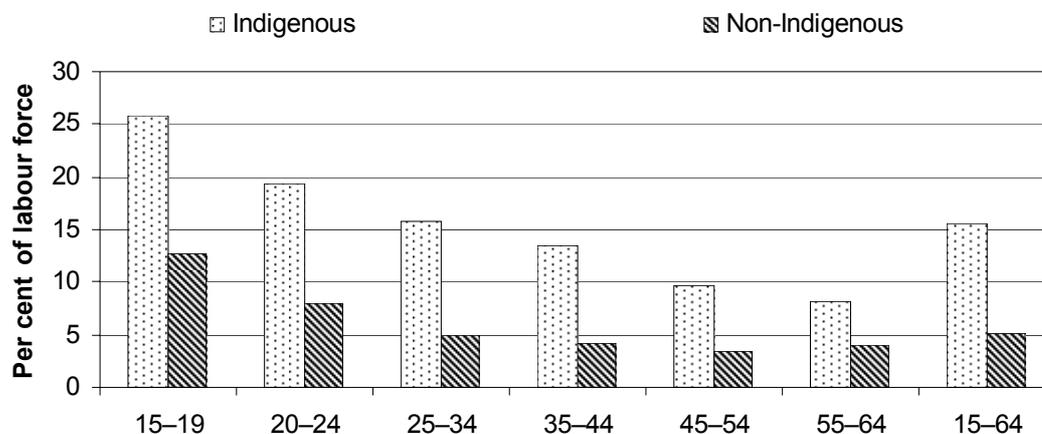
Across remoteness areas, in 2006:

- the unemployment rate for Indigenous people was much higher than for non-Indigenous people in all remoteness areas (figure 4.6.7)
- the unemployment rate for Indigenous people was highest in inner regional areas (18.5 per cent) and lowest in very remote areas (10.3 per cent). The unemployment rate for non-Indigenous people was also highest in inner regional areas (5.7 per cent) and lowest in very remote areas (2.4 per cent) (figure 4.6.7).

Unemployment rates for Indigenous people in remote and very remote areas are affected by participation in CDEP. Readers are encouraged to refer to tables 4A.6.23–26 when interpreting unemployment data.

Regardless of Indigenous status, the likelihood of being unemployed is related to life cycle stages. The unemployment rate for both Indigenous and non-Indigenous people tends to be highest among young people. Young people typically have less developed work-related skills and are more likely to be entering the labour force for the first time than older people, which contributes to higher unemployment for this group.

Figure 4.6.8 Unemployment by age group, 2006^{a, b}



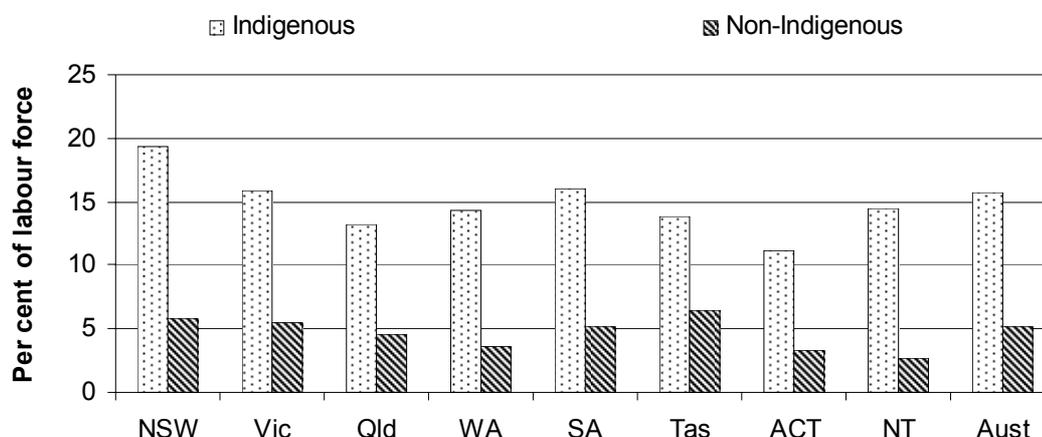
^a The unemployment rate is the number of unemployed people expressed as a percentage of people in the labour force (the employed plus the unemployed) aged 15–64 years ^b Data are not age standardised.

Source: ABS (unpublished) derived from the 2006 Census of Population and Housing; table 4A.6.22.

Across age groups, in 2006:

- for both Indigenous and non-Indigenous people, unemployment rates were highest for young people (figure 4.6.8)
- Indigenous unemployment was higher than non-Indigenous unemployment in all age groups (figure 4.6.8)
- Indigenous unemployment was lowest for those aged 55 to 64 years (8.1 per cent) and for non-Indigenous people, unemployment was lowest for those aged 45 to 54 years (3.5 per cent) (figure 4.6.8).

Figure 4.6.9 Unemployment by State/Territory, 2006^{a, b, c}



^a The unemployment rate is the number of unemployed people expressed as a percentage of people in the labour force (the employed plus the unemployed) aged 15–64 years. ^b Data are not age standardised. ^c Australia includes 'Other territories'.

Source: ABS (unpublished) derived from the 2006 Census of Population and Housing; table 4A.6.6.

Across jurisdictions, in 2006:

- unemployment rates for Indigenous people were much higher than for non-Indigenous people in all states and territories (figure 4.6.9)
- Indigenous unemployment was highest in NSW (19.4 per cent) and lowest in the ACT (11.2 per cent). In contrast, non-Indigenous unemployment was highest in Tasmania (6.5 per cent) and lowest in the NT (2.7 per cent) (figure 4.6.9).

The long term unemployed are defined as unemployed people who have been without work for a year or more. People who have been unemployed for long periods may experience greater financial hardship, and may have more difficulties in finding employment because of the loss of relevant skills and employers' perceptions of their 'employability'. The socioeconomic costs of unemployment become greater for those who have been unemployed long term.

Data on long term unemployment are not available from the Census. The most recent available data are from the 2004-05 National Aboriginal and Torres Strait Islander Health Survey, which found, after taking into account the different age structures of the Indigenous and non-Indigenous populations:

- Indigenous people were five times as likely as non-Indigenous people to have been unemployed long term (4.7 per cent of the labour force compared to 0.9 per cent) (table 4A.6.27)

-
- long term unemployment as a proportion of total unemployment was higher for Indigenous people than for non-Indigenous people (41.6 per cent compared to 27.4 per cent) (table 4A.6.27).

Over the period from 1994 to 2004-05, there was a large fall in the Indigenous long term unemployment rate from 14.2 per cent to 5.1 per cent.

Community Development Employment Projects (CDEP)

The original aim of the CDEP scheme, when introduced in 1977, was to create local employment opportunities in remote Indigenous communities where the labour market might not otherwise offer employment. The scheme was later extended to all areas, but most CDEP organisations continue to be located in regional and remote areas of Australia.

Since July 2004, the Australian Government has made changes to CDEP to increase the transition of participants into other (mainstream) employment. Changes since 1 July 2006 include introduction of a youth participant wage rate to encourage young Indigenous people to complete education. Other changes limit the duration of entitlement to CDEP for new participants in urban and regional centres and require participants in these areas to register as job seekers with an employment service provider. Where no Job Network service is available (in many remote areas), CDEP participants need to develop a 'participation plan' to move into other employment. More changes from 1 July 2007 included the removal of funding for CDEP programs in urban and major regional centres with strong employment opportunities. Former CDEP funding has been directed to additional Structured Training and Employment Project (STEP) programs to assist job seekers move into work (DEWR 2006).

The Australian Government also had a policy of phasing out the CDEP program in prescribed Indigenous communities under the Northern Territory Emergency Response (NTER). This process was placed on hold in December 2007, after the election of the current Australian Government. In April 2008 the Australian Government announced that CDEP would be restored from 1 July 2008 in those NT communities where it had ceased.

Since 2007, the Australian Government has been working with State and Territory governments to identify CDEP positions that support the provision of government services, in order to convert these positions into mainstream jobs.

In October 2008, further changes to Indigenous employment programs were outlined. In non-remote areas with established economies, CDEP would cease and Indigenous job seekers would be supported by the reformed employment services

arrangements (Job Services Australia to commence 1 July 2009) and the reformed Indigenous Employment Program (IEP). A new community support program is to be established in urban and regional locations with significant Indigenous populations to assist Indigenous people to better access the employment programs and other services in those areas (Macklin and O'Connor 2008b). In remote areas with emerging and limited economies, CDEP would be re-structured (Macklin and O'Connor 2008a).

Further changes to CDEP were announced in December 2008. From 1 July 2009, new CDEP participants will be paid income support, with existing CDEP participants continuing to access CDEP wages until 30 June 2011 before transferring to income support. Support will be available to assist local Indigenous CDEP providers expand their businesses or take up employment and other service provision opportunities. The Australian Government and state governments will fund this program over five years under the COAG National Partnership on Indigenous Economic Participation (Macklin and O'Connor 2008b).

For statistical purposes, in both 2001 and 2006, the ABS classified known participants in CDEP as employed rather than as unemployed or not in the labour force. Consequently the employment rate for Indigenous people appears higher than it would be if participants in the CDEP program were classified as unemployed. It is important to consider CDEP when analysing the labour force and unemployment data because:

- CDEP participant payments are received in place of an income support payment such as NewStart Allowance, for which recipients are considered unemployed
- CDEP has elements of both unemployment and employment, especially in remote and very remote areas. Some CDEP activities are similar to those undertaken by participants in Work for the Dole, while other activities are essential roles in municipal services, health care, community services, education and other sectors that would be considered employment in mainstream communities and organisations.

Historical numbers of CDEP participants (from administrative data) are as follows:

- 24 098 participants in 1993-94 (ATSIC 1994)
- 35 182 participants in 2002-03 (ATSIC 2003)
- 34 775 participants as at 30 June 2005 (DEWR 2005)
- 32 782 participants as at 8 August 2006 (table 4A.6.26)
- 26 421 participants as at 30 June 2007 (FaHCSIA unpublished)
- 18 800 participants as at 30 June 2008 (FaHCSIA unpublished).

Table 4A.6.26 reports administrative data on CDEP from the Department of Families, Housing, Community Services and Indigenous Affairs. These data, provide the number of CDEP participants by State and Territory, sex and age on 8 August 2006, the night of the 2006 Census.

Nationally, in 2006, 32 782 people participated in CDEP. WA and the NT had the most CDEP participants (9023 and 8422, respectively), and NSW, Queensland and SA also had large numbers of CDEP participants (table 4A.6.26). Data are not available by remoteness area, but State/Territory data reflect the location of CDEP programs in (mainly) remote areas.

In 2006, among Indigenous people aged 15 years and over:

- 10.2 per cent participated in CDEP (table 4A.6.26)
- nationally, a higher proportion of males than females participated in CDEP (12.6 per cent and 8.0 per cent, respectively) (table 4A.6.26)
- CDEP participation for males and females was highest in the NT and WA and lowest in Tasmania and Victoria (table 4A.6.26).

Attachment table 4A.6.25 contains data on CDEP participation in 2001. These data correspond with timing of the 2001 Census.

Additional data are available from the Census 'Interviewer household form'⁶ used in discrete Indigenous communities. Data from the Census can give information on the characteristics of CDEP participants but is not an accurate count of CDEP participants.

Among the 28 600 employed Indigenous people in remote and very remote areas, who were counted on the interviewer household form in 2006:

- 44.5 per cent were participating in CDEP (table 4.6.23)
- the proportion who participated in CDEP was highest in younger age groups (table 4.6.23)
- Indigenous males were more likely to participate in CDEP than Indigenous females (table 4A.6.24).

The National Indigenous Reform Agreement (NIRA) includes progress measures for the Closing the Gap targets. Two of these relate to CDEP:

- CDEP participation and off-CDEP job placements

⁶ The Interviewer household form is used in nominated discrete communities (communities of Indigenous people in which language differences or other factors make use of the standard self-enumeration forms impractical).

-
- 3 month employment outcomes (post program monitoring).

The Department of Education, Employment and Workplace Relations (DEEWR) collected post-program outcomes information from former CDEP participants through its Post-Program Monitoring survey between March 2006 and September 2007. However, the survey was terminated due to the low response rate achieved (approximately 10 per cent) and the transfer of responsibility for CDEP from DEEWR to the Department of Families, Housing, Community Services and Indigenous Affairs (FaHCSIA). While outcomes data for CDEP are no longer collected, DEEWR collects outcomes information for a range of employment assistance programs and services it delivers. Comparisons of the outcomes of Indigenous and non-Indigenous people for all or some of these programs/services could measure progress against this COAG target (DEEWR, unpublished).

Under the Indigenous Economic Participation National Partnership (NP) COAG has agreed to a national target of at least 2.6 per cent of public sector employment for Indigenous people across all classifications by 2015, to reflect the expected national Indigenous working age population share.

4.7 Post secondary education — participation and attainment

Box 4.7.1 Key messages

- Indigenous people had significantly lower rates of post secondary attainment to certificate level III or above compared with their non-Indigenous counterparts across all ages, jurisdictions and remoteness areas in 2006 (tables 4A.7.18 and 4A.7.24).
- Post secondary attainment to certificate level III or above increased for both Indigenous and non-Indigenous people between 2001 and 2006 (figure 4.7.5).
- Indigenous people aged 20–24 years attended university at about one-fifth the rate of non-Indigenous people (4.9 and 23.9 per cent, respectively) and attended Technical and Further Education (TAFE) at two-thirds the rate of non-Indigenous people (5.2 and 7.9 per cent, respectively) in 2006 (figure 4.7.1). Between 2001 and 2006, Indigenous participation at university and TAFE decreased across all age groups (figures 4.7.2 and 4.7.3).

Post secondary education may lead to more than just better employment prospects and higher incomes. As discussed in section 6.6, people with a skilled vocational qualification or higher qualifications are more likely to be employed than those without such qualifications. There are also many potential benefits that flow from a person's higher education:

-
- the schooling of their children — parental education is a positive influence on student performance (OECD 2004; Wolfe and Haveman 2001; Zubrick et al. 2006)
 - efficiency of their choices — making the most of the opportunities on offer throughout life (Wolfe and Haveman 2001; Zubrick et al. 2006)
 - their health outcomes and their children's health outcomes — accessing health care as required assists in ensuring healthy successive generations (Wolfe and Haveman 2001; Zubrick et al. 2006).

Post secondary education includes both vocational education and training (VET) at institutions such as TAFE colleges, and higher education at universities. Research suggests that young people who are not participating full time in education, training, work or some combination of these activities are more likely to have difficulty in making a transition to full time employment by their mid-20s (Dusseldorp Skills Forum 2006; Marks 2006). Section 6.6 contains more information on young people's transition from school to work.

Research undertaken by the Dusseldorp Skills Forum (2006) found that almost as many school leavers were studying at TAFE as at university. TAFE is a particularly important destination for early school leavers (Dusseldorp Skills Forum 2006). Indigenous people participate in VET at rates above those for non-Indigenous people (Saunders et al. 2003). Young Indigenous people may be more likely to participate in VET because year 12 Indigenous students are less likely than non-Indigenous students to attain a sufficiently high score to enable admission to university (see section 4.5).⁷

VET provides an opportunity for Indigenous people to attain post-school qualifications and improve their employment prospects. In addition, participation in VET may improve self esteem, literacy and confidence (Gelade and Stehlik 2004; O'Callaghan 2005; NCVER 2005). However, Indigenous VET students do not achieve similar outcomes to their non-Indigenous counterparts. Indigenous VET students tend to study lower level and shorter courses compared with non-Indigenous students (ANTA 2005; Buckskin 2001; Saunders et al. 2003). In 2007, the proportion of Indigenous students in diploma or higher courses was 3.5 per cent compared with 35.1 per cent for other full-time students (NCVER 2007).

⁷ Eligibility for admission to a public university in Australia on the basis of merit is determined in each State and Territory through the use of a score – the Universities Admissions Index (UAI). Calculating the UAI varies between State and Territories.

Employment outcomes from VET remain lower for Indigenous students compared with other students (ANTA 2005; Buckskin 2001; NCVET 2006; O'Callaghan 2005; Saunders et al. 2003). In 2007, 72.4 per cent of Indigenous students were employed after VET training compared with 81.1 per cent of non-Indigenous students (NCVER 2007).

Locality can influence Indigenous people's participation in post secondary education (ACER 2002). There is evidence that Indigenous people in regional and remote areas are substantially less likely to participate in higher education than Indigenous people in major cities.

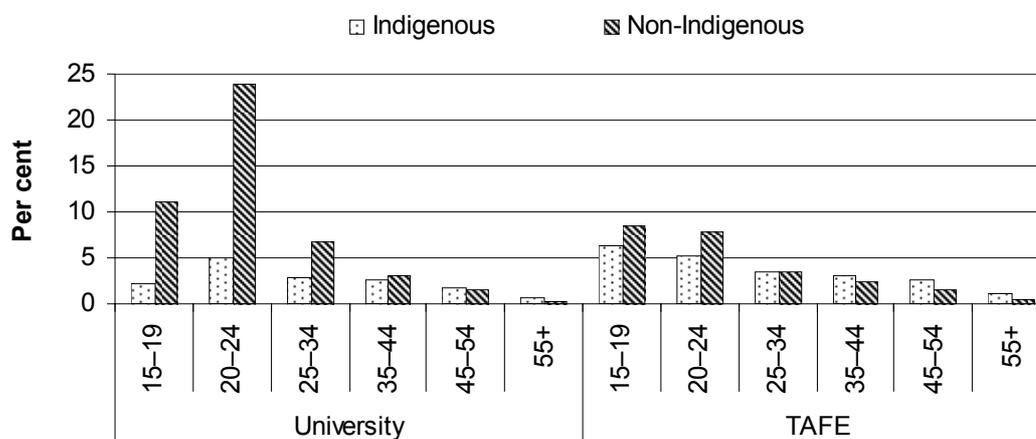
Although participation in post secondary education may have some benefits, the major impact on improved outcomes for Indigenous people results from attainment of a qualification or completion of a course of study. This indicator uses ABS 2006 Census data to examine the extent to which people (1) participate in post secondary education and (2) have attained a particular level of qualification.

The broad types of courses Indigenous people are undertaking at higher education institutions along with load pass rates for VET courses and success rates for higher education are also examined.

Post secondary participation

Post secondary participation rates provide information on the proportion of people who had left school and were attending a technical or further educational institution (including TAFE colleges, business colleges and industry skills centres), or university or other higher educational institution.

Figure 4.7.1 Post secondary participation by people aged 15 years and over, 2006^{a, b, c, d, e}



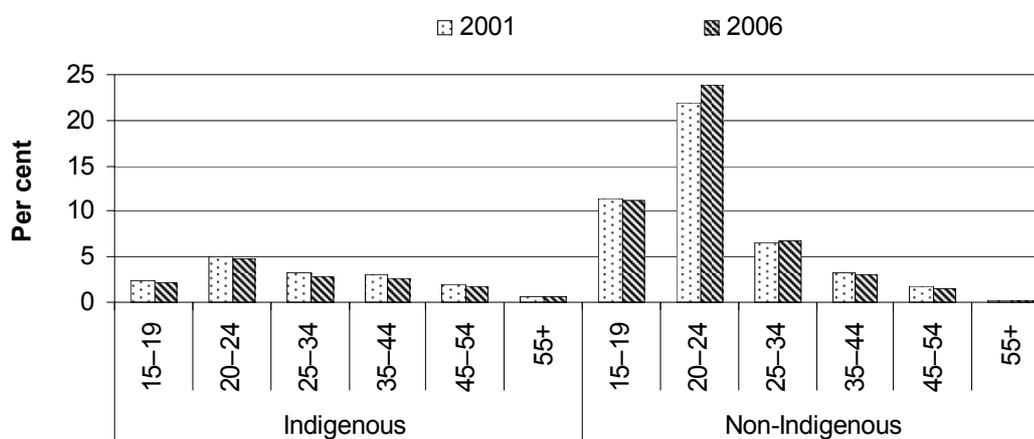
^a The ABS 2006 Census asked what type of educational institution a respondent was attending. ^b University refers to the ABS 2006 Census category of university or other higher educational institution, TAFE refers to the ABS 2006 Census category of technical or further educational institution (including TAFE colleges). ^c Data does not include the 'Other educational institutions' category from the ABS 2006 Census. ^d Age adjusted national totals were not available. ^e Denominators include people who did not state their post secondary participation.

Source: ABS (unpublished), derived from 2006 Census of Population and Housing; table 4A.7.1.

In 2006:

- university participation was highest for both Indigenous and non-Indigenous 20–24 year olds. However, Indigenous people in this age group attended university at about one fifth the rate of non-Indigenous people (figure 4.7.1)
- TAFE participation was highest amongst 15–19 and 20–25 year old Indigenous and non-Indigenous people. However, Indigenous people aged 15–19 years attended TAFE at three-quarters the rate of non-Indigenous people, and Indigenous people aged 20–24 years attended TAFE at two-thirds the rate of non-Indigenous people (figure 4.7.1)
- across all age groups Indigenous people were more likely to attend TAFE than university (figure 4.7.1).

Figure 4.7.2 University participation, 2001 and 2006^{a, b, c, d}



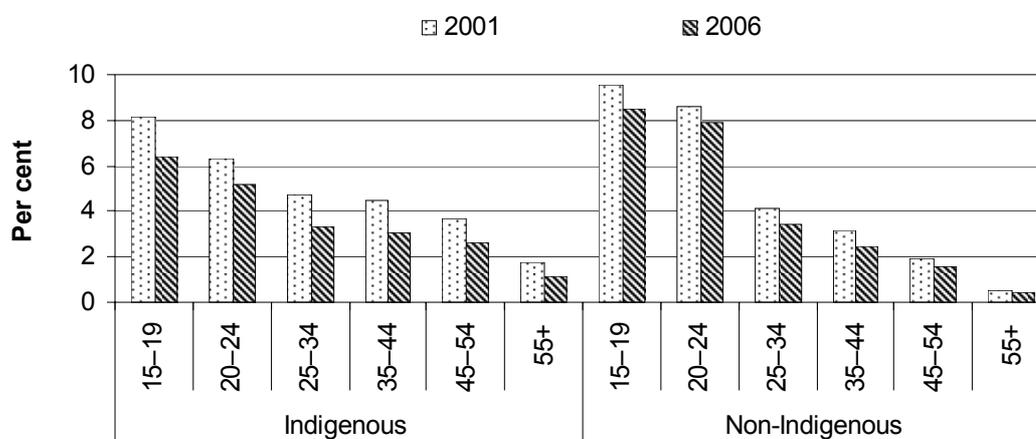
^a Participation in university education by persons aged 15 years and over (excluding overseas visitors) by age, 2001, 2006. ^b University refers to the ABS 2006 Census category of university or other higher educational institution. ^c Age adjusted national totals were not available. ^d Denominators include people who did not state their post secondary participation.

Source: ABS (unpublished), derived from 2006 Census of Population and Housing and 2001 Census of Population and Housing; tables 4A.7.1 and 4A.7.4.

Between 2001 and 2006:

- Indigenous participation at university decreased across all age groups. Amongst 25–34 year olds the participation rate decreased from 3.4 to 2.8 per cent. Over the same period, non-Indigenous university participation in the 20–24 and 25–34 age groups increased, while falling slightly in all other age groups (figure 4.7.2)
- the gap between Indigenous and non-Indigenous university participation increased slightly for people aged 20–44 years (figure 4.7.2).

Figure 4.7.3 TAFE participation, 2001 and 2006^{a, b, c, d}



^a Participation in TAFE education by persons aged 15 years and over (excluding overseas visitors) by age, 2001, 2006. ^b TAFE refers to the ABS 2006 Census category of technical or further educational institution (including TAFE colleges). ^c Age adjusted national totals were not available. ^d Denominators include people who did not state their post secondary participation.

Source: ABS (unpublished), derived from 2006 Census of Population and Housing and 2001 Census of Population and Housing; tables 4A.7.1 and 4A.7.4.

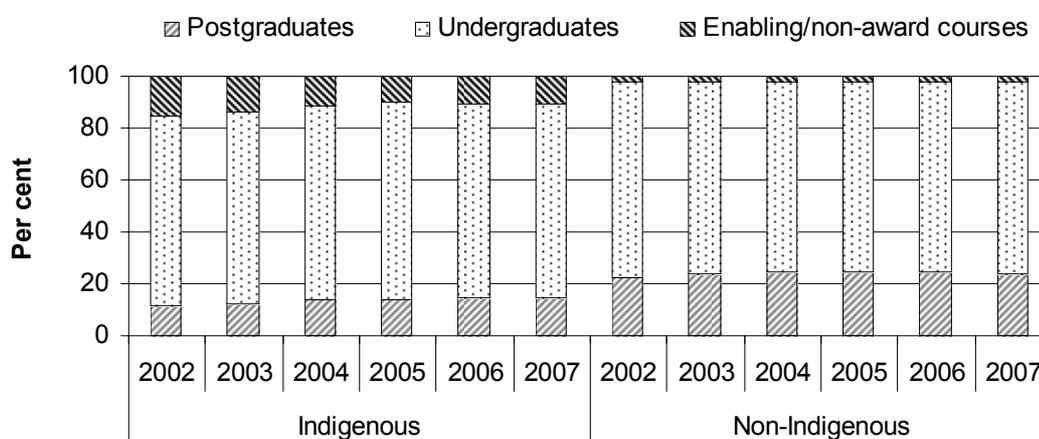
Between 2001 and 2006:

- TAFE participation decreased for both Indigenous and non-Indigenous people across all age groups (figure 4.7.3)
- the decrease in TAFE participation across all age groups was greater for Indigenous people than for non-Indigenous people (figure 4.7.3)
- the largest decrease in TAFE participation was for Indigenous people aged 15–19 years (8.2 per cent in 2001 to 6.4 per cent in 2006) (figure 4.7.3)
- there was an increase in the TAFE participation gap between Indigenous and non-Indigenous people aged 15–34 years (figure 4.7.3).

More data on post secondary participation by Indigenous students by state and territory and remoteness areas can be found in tables 4A.7.2, 4A.7.3, 4A.7.5 and 4A.7.6.

The *Report on Government Services* (SCRGSP 2009) contains further data on Indigenous participation in the VET system. Chapter five of the report contains data on the number of government funded participants in the VET system who self-identified as Indigenous, as a proportion of the total number of Indigenous people aged 15–64 years, compared with that of the general population.

Figure 4.7.4 Post secondary participation at higher education institutions, by course level, 2002–07



Source: DEST higher education statistics collection (unpublished); tables 4A.7.7–12.

Between 2002 and 2007:

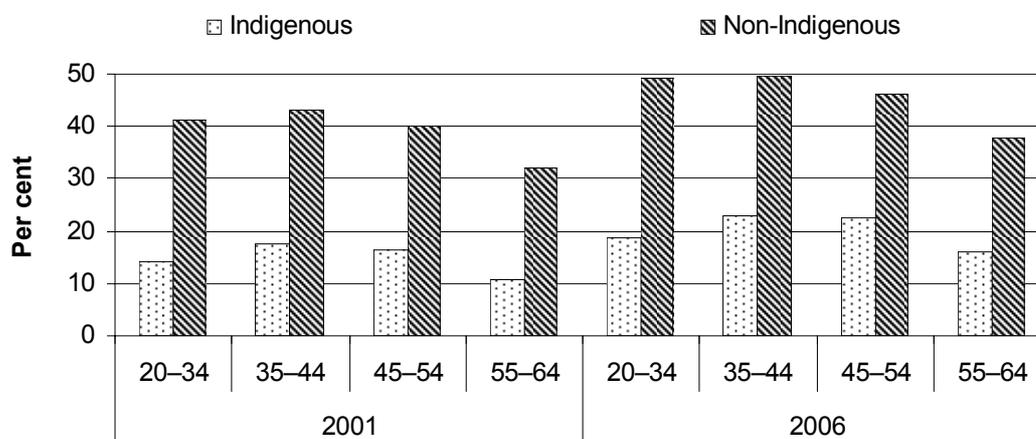
- Indigenous students were more likely to be enrolled in enabling and non-award courses, and less likely to be enrolled in postgraduate courses, than non-Indigenous students (figure 4.7.4)
- the proportion of Indigenous students enrolled in enabling or non-award courses decreased from 15.2 per cent to 10.5 per cent (figure 4.7.4)
- the proportions of Indigenous students enrolled in undergraduate and postgraduate courses increased (from 73.2 per cent to 74.7 per cent, and 11.6 per cent to 14.8 per cent, respectively) (figure 4.7.4).

More data on the types of courses Indigenous people were undertaking by State and Territory can be found in tables 4A.7.7–12.

Post secondary attainment

One measure of post secondary attainment is the proportion of the population that has completed a particular level of qualification. This section includes data from the ABS 2001 and 2006 Censuses showing the proportion of people aged 20–64 years, whose highest level of qualification completed was a certificate III or above. Certificate level III is considered the minimum qualification needed to improve a person’s employability. The ABS Australian Standard Classification of Education defines certificate III or above to include postgraduate degrees, graduate diplomas or certificates, bachelor degrees, advanced diplomas, diplomas, and certificate levels III and IV (ABS 2006).

Figure 4.7.5 Post secondary attainment of certificate level III or above by age, 2001 and 2006^{a, b, c, d}



^a The ABS 2001 and 2006 Census question asked respondents for the highest educational qualification they had completed. ^b Post secondary attainment is measured as a proportion of the population aged 20–64 years (excluding overseas visitors). ^c Age adjusted national totals were not available. ^d Denominators include people who did not state their educational attainment.

Source: ABS (unpublished), derived from *2006 Census of Population and Housing* and *2001 Census of Population and Housing*; tables 4A.7.18 and 4A.7.24.

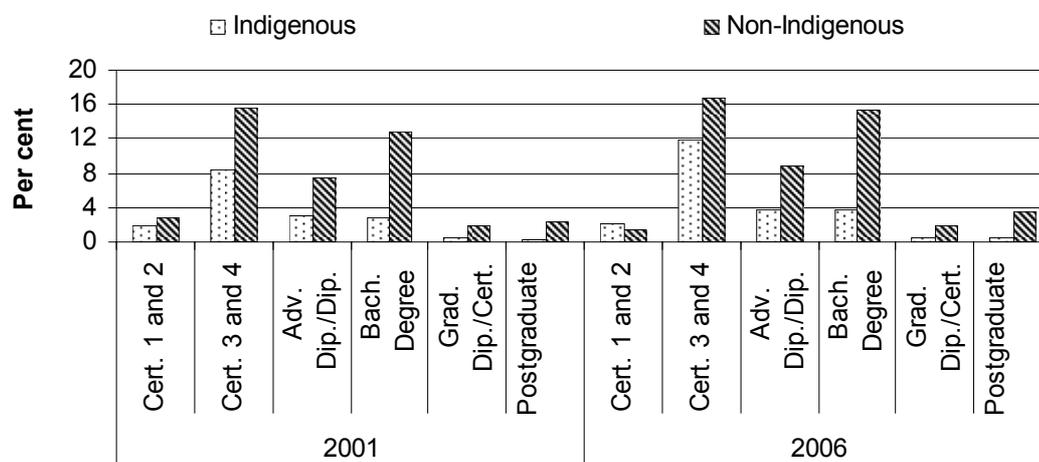
Between 2001 and 2006, post secondary attainment increased for both Indigenous and non-Indigenous people across all age groups (figure 4.7.5).

In 2006:

- Indigenous people had significantly lower rates of post secondary attainment than their non-Indigenous counterparts across all age groups, jurisdictions and remoteness areas (figure 4.7.5)
- the greatest gap in post secondary attainment was for people aged 20–34 years (18.8 per cent of Indigenous people attained certificate level III or above compared to 49.1 per cent of non-Indigenous people). The gap declined as age increased (figure 4.7.5)
- Indigenous females had slightly lower post secondary attainment rates across all age groups than Indigenous males (tables 4A.7.14 and 4A.7.16)
- post secondary attainment for Indigenous people decreased with remoteness, whereas for non-Indigenous people attainment varied with remoteness, but with no clear trend (table 4A.7.18).

More data on post secondary attainment by remoteness areas and by states and territories can be found in tables 4A.7.13–24.

Figure 4.7.6 **Post secondary attainment by course level, people 20–64 years old, 2001 and 2006**^{a, b, c, d}



^a The ABS 2001 and 2006 Census question asked respondents for the highest educational qualification they had completed. ^b Post secondary attainment for each course level is measured as a proportion of the population aged 20–64 years (excluding overseas visitors). ^c Age adjusted national totals were not available. ^d Denominators include people who did not state their educational attainment.

Source: ABS (unpublished), derived from 2006 Census of Population and Housing and 2001 Census of Population and Housing; tables 4A.7.18 and 4A.7.24.

In both 2001 and 2006, Indigenous people (20–64 years old) had lower rates of post secondary attainment at each course level than non-Indigenous people (except for certificate I and II courses in 2006) (figure 4.7.6).

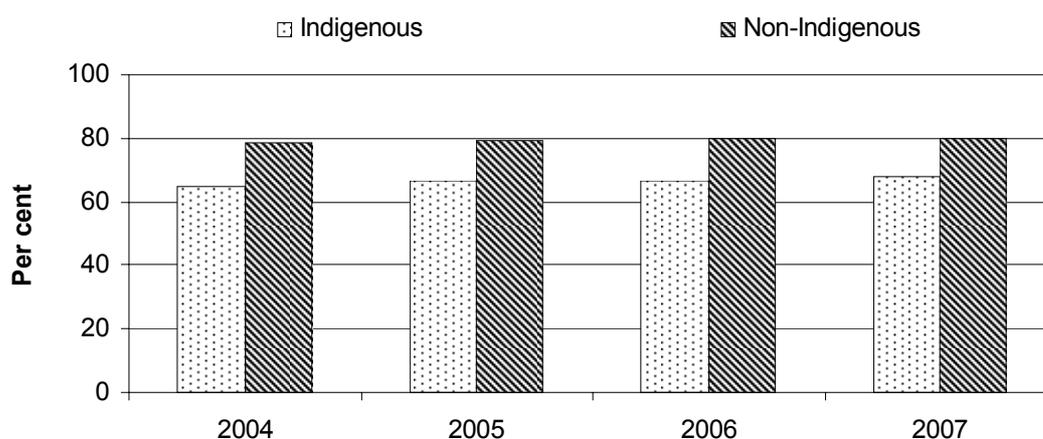
Between 2001 and 2006, for people aged 20–64 years:

- Indigenous attainment at all course levels increased. The proportion of Indigenous people who had attained a certificate III and IV increased from 8.4 per cent in 2001 to 11.8 per cent in 2006. Indigenous people who had attained bachelor degrees, and advanced diplomas and diplomas also increased slightly (2.8 per cent in 2001 to 3.6 per cent in 2006, and 3.1 per cent in 2001 to 3.8 per cent in 2006, respectively) (figure 4.7.6)
- post secondary attainment by non-Indigenous people in all course levels increased, except for certificate I and II courses, where it fell slightly. Among non-Indigenous people attainment of bachelor degrees rose from 12.7 to 15.4 per cent of the population. Attainment of advanced diplomas and diplomas, certificate III and IV, and postgraduate courses also rose (figure 4.7.6)
- the gap between Indigenous and non-Indigenous attainment of certificate III and IV courses decreased. However, the gap between Indigenous and non-Indigenous attainment of bachelor degrees, and advanced diplomas and diplomas, increased (figure 4.7.6).

Another measure of post secondary attainment is the extent to which people complete or pass the course they are undertaking. This is known in the VET system as the load pass rate and in the higher education system as the success rate. There is a consistent and marked difference in VET load pass rates by age, with younger Indigenous students (15–19 years) having the lowest load pass rates and older Indigenous students the highest (ANTA 2005).

The VET load pass rate indicates the extent to which students pass assessment in an assessable module or unit of competency. Load pass rates are calculated as the ratio of hours attributed to students who passed assessment in an assessable module or unit of competency to all students who were assessed and either passed, failed or withdrew. The calculation is based on the nominal hours supervised for each assessable module or unit of competency. Care needs to be taken in comparing data because average module durations and standards of competencies achieved by students vary across jurisdictions.

Figure 4.7.7 VET national load pass rate, 2004–07^a



^a Excludes students participating in VET programs in schools. Not adjusted for recognition of prior learning, credit transfer and student enrolment no participation.

Source: National 2004–2007 VET provider collections (unpublished); table 4A.7.25.

From 2004 to 2007:

- the national load pass rate for Indigenous students was lower than the national load pass rate for non-Indigenous students in all years (figure 4.7.7)
- the national load pass rate for Indigenous students increased from 64.5 per cent in 2004 to 67.8 per cent in 2007. Over the same period, the load pass rate for non-Indigenous students also increased, from 78.8 per cent to 80.0 per cent (figure 4.7.7)

- the gap between the national load pass rate for Indigenous students and the national load pass rate for non-Indigenous students fell from 14.3 percentage points to 12.2 percentage points (figure 4.7.7).

The load pass rates for Indigenous and non-Indigenous students by State and Territory, remoteness areas and course level can be found in tables 4A.7.25–27.

Table 4.7.1 VET load pass rates, by course level, 2004–07^a

	<i>Indigenous</i>				<i>Non-Indigenous</i>			
	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>
Diploma or higher	68.9	73.4	71.6	73.8	79.2	79.3	79.4	79.6
Certificate IV	69.3	69.8	67.5	69.1	76.5	77.0	76.9	77.4
Certificate III	70.2	72.5	71.4	73.5	83.1	84.2	84.4	84.3
Certificate II	61.8	65.2	64.7	63.7	75.8	76.4	77.4	77.6
Certificate I	52.2	52.2	55.8	57.8	65.2	66.4	67.6	67.5
Other ^a	57.0	60.6	60.6	60.8	74.5	74.2	74.7	75.4

^a Includes senior secondary education and other education (bridging and enabling courses).

Source: National 2004–2007 VET provider collections (unpublished); table 4A.7.26.

In 2007, the highest national load pass rates achieved by Indigenous students were at diploma level or higher (73.8 per cent) and certificate level III (73.5 per cent) (table 4.7.1).

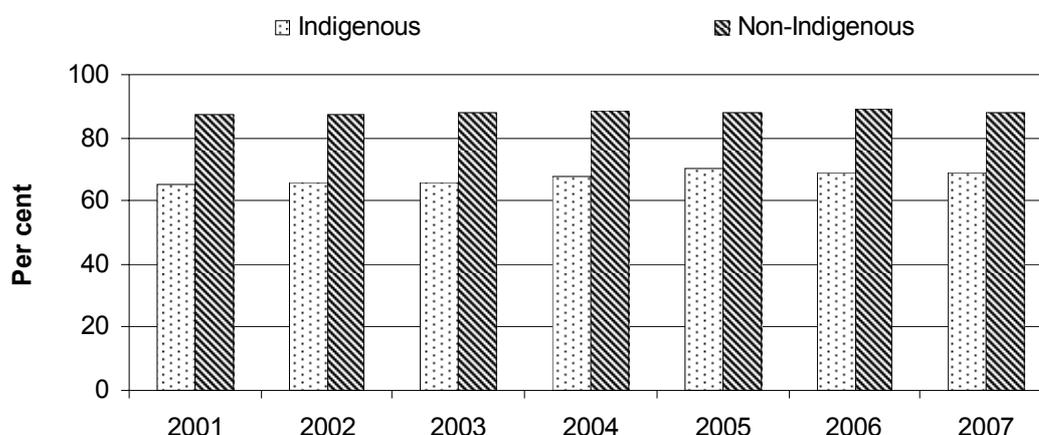
Between 2004 and 2007:

- there was an increase in load pass rates for all course levels for both Indigenous and non-Indigenous students, except for load pass rates for Indigenous students undertaking certificate IV courses, which were stable (table 4.7.1)
- the gap in load pass rates for all course levels for Indigenous and non-Indigenous students decreased (except for certificate IV courses, where it increased slightly). Over this period, the gap in load pass rates for Indigenous and non-Indigenous students undertaking courses at diploma level or higher almost halved (10.3 percentage points in 2004 to 5.9 percentage points in 2007) (table 4.7.1).

The *Report on Government Services* (SCRGSP 2009) contains further data on Indigenous outcomes in the VET system. Chapter five reports on the number and proportion of qualifications completed, and units of competency and modules (outside training packages) achieved/passed in a given year by Indigenous students.

Although the measures are based on different calculations, the success rate for higher educational institutions shows similar results to the load pass rate for VET. The success rate is the proportion of units passed within a year compared with the total units enrolled.

Figure 4.7.8 Higher education success rate, 2001–07^{a, b}



^a Success is defined as the student progress rate, which is the proportion of units passed within a year compared with the total units enrolled. ^b The non-Indigenous category for 2001 includes 'Indigenous status unknown'.

Source: DEST higher education statistics collection (unpublished); tables 4A.7.28–34.

From 2001 to 2007:

- the higher education success rate was lower for Indigenous students than non-Indigenous students in all years (figure 4.7.8)
- the success rate for Indigenous students increased from 65.1 per cent to 69.0 per cent (figure 4.7.8). Over the same period, the success rate for non-Indigenous students increased from 87.3 per cent to 88.0 per cent (figure 4.7.8)
- the gap between the success rate for Indigenous students and non-Indigenous students fell from 22.2 percentage points to 19.0 percentage points (figure 4.7.8).

4.8 Disability and chronic disease

Box 4.8.1 Key messages

- Nationally, in 2006:
 - Indigenous people were almost twice as likely as non-Indigenous people to need assistance with one or more core activities. Indigenous people aged 45–64 years were 2.7 times as likely as non-Indigenous people in that age group to need assistance with core activities (figure 4.8.1)
 - among those with a need for assistance with core activities, Indigenous people were less likely than non-Indigenous people to have attained year 12 (13.3 per cent compared with 26.0 per cent), to have completed a bachelor degree or higher qualification (2.9 per cent compared with 6.3 per cent) (tables 4A.8.11 and 4A.8.16), or to be in the labour force (17.5 per cent compared with 23.2 per cent) (figure 4.8.2)
 - Indigenous 15–24 year olds were 1.7 times as likely as non-Indigenous 15–24 year olds to have provided unpaid assistance to a person with disability, long term illness or problems related to old age (figure 4.8.3).

Indigenous Australians experience significantly higher rates of disability and chronic disease than non-Indigenous Australians. People with disability have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others. Many people with a chronic disease will have impairments that hinder their ability to effectively participate in society on an equal basis with others. Because disability is context dependent a significant physical, mental, intellectual or sensory impairment may not be severely disabling if there is a sufficiently supportive and enabling environment, for example, from informal carers or formal support services.

The Aboriginal Disability Network of NSW (2007) consulted 300 Aboriginal people with disability across NSW in 2004 and 2005 and found that disability was a major barrier to social interactions and access to health services, employment and education. It found that many Indigenous people in rural and remote areas experienced greater difficulty in accessing disability support services and disability aids and appliances. Many were housebound because their houses did not have ramps or other aids for access or because of lack of transport. For many people, family and other kin were their only form of support. Those with intellectual disabilities, mental illnesses and acquired brain injuries had a range of negative experiences with the justice system including police, courts and correctional services.

Chronic disease limits the extent to which people can effectively participate in the social and economic life of their communities. An Australian Institute of Health and Welfare report found people with chronic disease were 60 per cent more likely to not participate in the labour force, were less likely to be employed full-time, and were more likely to be unemployed, than those without chronic disease. Employed people with a chronic disease had a rate of absenteeism almost double the rate for those without a chronic disease (AIHW 2009).

Health risk factors affect the onset and progression of a variety of chronic diseases. A wide body of research has demonstrated connections between biomedical and behavioural factors and major chronic diseases and conditions. A family history of poor health and chronic disease may also influence whether an individual has a genetic predisposition to certain long term health conditions (AIHW 2006).

An ABS and AIHW (2008) report found that Indigenous Australians were twice as likely as non-Indigenous Australians to be subject to health risk factors, including: smoking, binge drinking, using illicit drugs, and being victims of violence. Indigenous Australians were also more likely to be physically inactive and subject to more than one of these risk factors. This high exposure is linked to the disadvantage Indigenous people experience across a range of socio-economic and environmental factors. For example in 2004–05, Indigenous people with low levels of educational attainment were more likely than those who had completed Year 12 to regularly smoke, to consume alcohol at risky/high risk levels, and to engage in low levels of exercise, and were less likely to eat fruit or vegetables on a daily basis (ABS and AIHW 2008).

Carson et al. (2007) argued that a range of socioeconomic and environmental conditions contribute to poor health among Indigenous people. They presented a framework for Indigenous health which takes into account social determinants including poverty, social class, social capital, education, employment, welfare and housing.

Indigenous people also have high exposure to a range of ‘personal stressors’ that may contribute to the development of long term health conditions. Most prevalent among these stressors are death of a family member or close friend, alcohol and drug problems, family member(s) having been sent to prison or currently in prison, overcrowding at home, and not being able to get a job (ABS and AIHW 2005). Table 4A.8.51 presents the proportions of Indigenous people with selected long term health conditions disaggregated by the types of personal stressors experienced by the individual, their family or friends.

The 2007 report included data on the incidence of disability and the degree and type of core activity limitation among Indigenous people, sourced from the ABS 2002 NATSISS. This section of the 2009 report includes:

- age standardised data from the ABS 2006 Census on the prevalence of need for assistance with one or more core activities, and two measures of participation in society by disabled people with these needs;
 - the labour force participation rate (and employment and unemployment rates)
 - the level of secondary and post secondary educational attainment
- data on informal and formal support provided for people with disability;
 - age standardised data from the ABS 2006 Census on carers who provide unpaid assistance to people with disability, long term illness, or problems related to old age
 - use by people with disability of Commonwealth State and Territory Disability Agreement (CSTDA) funded disability services
- proxies for the prevalence of long term health conditions amongst Indigenous people;
 - age standardised hospitalisation rates by principal diagnosis and chronic disease for Indigenous people from the AIHW National Hospital Morbidity Database
 - data on the burden of disease and injury for Aboriginal and Torres Strait Islander peoples.

Some successful programs aimed at preventing the development of chronic diseases among Indigenous people through education, primary health care and disease management have been implemented across Australia. Examples of successful programs are provided in box 4.8.2.

Box 4.8.2 'Things that work' — disease prevention programs for Indigenous people in NSW

The Chronic Care for Aboriginal People (**Walgan Tilly**) Clinical Services Redesign project was developed from established NSW Health initiatives in an attempt to address the disparities in health care and improve access to, and utilisation of, chronic care services for Aboriginal people in NSW.

The project developed six state-wide solutions and associated implementation plans:

- models of Care for Aboriginal People
- integration of Aboriginal Health and mainstream chronic care
- greater Aboriginal cultural awareness and cultural sensitivity of services
- Justice Health linkages
- improved access to primary care
- improved data quality.

Twenty three proposed Area Health Service and Justice Health-specific solutions and implementation plans were developed for implementation from 2008-09, which will be evaluated over time (NSW Government, unpublished).

Disability (need for assistance with core activities)

Data on 'core activity need for assistance' are available from the ABS 2006 Census. The ABS defines a core activity need for assistance as a profound or severe disability, that is, a need for help or assistance in one or more of the three core activity areas of self-care, mobility and communication, because of a disability (lasting six months or more), long term health condition (lasting six months or more) or old age (ABS 2006).

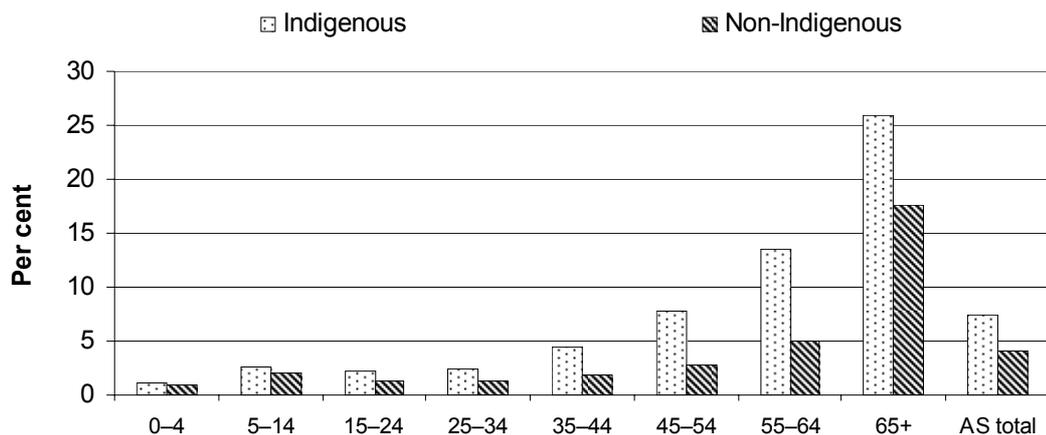
Core activity need for assistance data derived from the ABS 2006 Census should be interpreted with caution. For the Indigenous population, core activity need for assistance rates were lower than expected and lower than rates derived from the ABS 2002 NATSISS. The data were affected by high non-response levels, particularly in remote areas, and anecdotal evidence suggests that interpretation of the questions may have been an issue (ABS 2006).

The 2006 Census collected data on people needing assistance with core activities. The 2002 NATSISS collected data on profound/severe core activity limitation, defined as a limitation in the performance of one or more core activities of self-care, mobility or communication (ABS and AIHW 2008). Results from the 2002 NATSISS and 2006 Census are based on reliable concepts, but are not suitable for

direct comparison and can not provide an indication of change in the prevalence of disability over time due to differences in the questions asked, and the methods of data collection.

In addition, definitions of, ‘disability’, ‘long term health condition’, ‘unpaid care, help or assistance’ and ‘voluntary work’ used by health professionals might not be the same as definitions used by Indigenous and non-Indigenous people. Furthermore, research has shown that a person’s perception of their own disability/long term condition is dependent on their knowledge of available aids and services. This may have a substantial impact on reporting rates of disability/long term health conditions, particularly when the methodology depends on self reporting (AIHW and DHFS 1998).

Figure 4.8.1 People with a need for assistance with core activities, by age group, 2006^a



AS = age standardised. **a** Excludes overseas visitors.

Source: ABS (unpublished), derived from *2006 Census of Population and Housing*; table 4A.8.1-4.

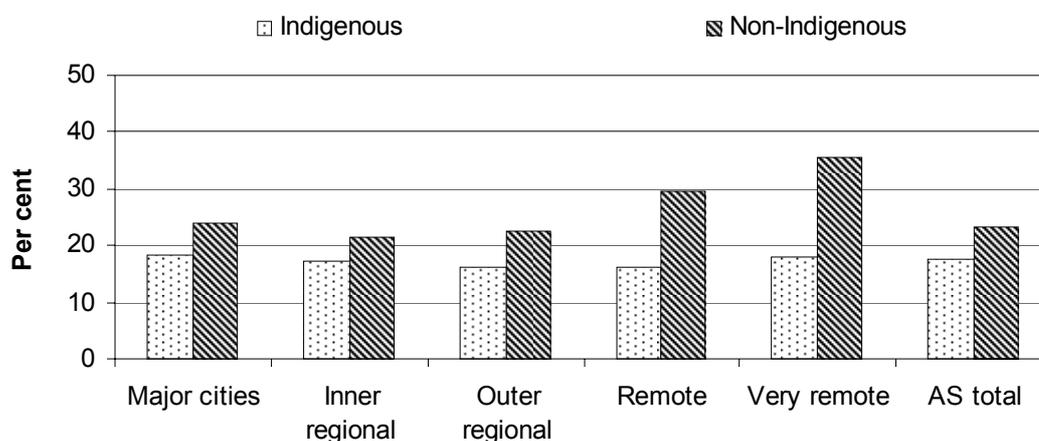
Across age groups in 2006:

- the disparity between Indigenous and non-Indigenous people reporting a core activity need for assistance increased with age. The gaps were highest in the 45-54 and 55-64 years age groups. In these age groups, Indigenous people were 2.7 times as likely as non-Indigenous people to need assistance with core activities (figure 4.8.1).

After taking into account the different age structures of the Indigenous and non-Indigenous populations:

- nationally, the level of need for assistance with core activities among Indigenous people was almost twice as high as that among non-Indigenous people (figure 4.8.1)
- across all states and territories and remoteness areas, a higher proportion of Indigenous people needed assistance with core activities compared with non-Indigenous people (table 4A.8.1–4)
- the disparity between Indigenous and non-Indigenous people reporting a disability was greatest in the NT (7.2 per cent compared with 3.3 per cent) and smallest in Queensland (6.7 per cent compared with 4.0 per cent) (table 4A.8.1–4)
- the largest gap between Indigenous and non-Indigenous people reporting a disability was in remote and very remote areas. Indigenous people living in remote areas reported significantly higher rates of disability (7.3 per cent) compared with non-Indigenous people (3.2 per cent). In very remote areas, 6.7 per cent of Indigenous people reported a disability compared with 2.7 per cent of non-Indigenous people (table 4A.8.1–4).

Figure 4.8.2 Labour force participation of people aged 15–64 who had a need for assistance with core activities, age standardised, 2006^{a, b, c}



AS = age standardised. ^a Based on place of usual residence. ^b Labour force participation includes employed and unemployed people. ^c The labour force participation rate is the number of people aged 15–64 years who were in the labour force and who reported a core activity need for assistance expressed as a percentage of people aged 15–64 years who reported a core activity need for assistance.

Source: ABS (unpublished), derived from 2006 Census of Population and Housing; table 4A.8.5.

In relation to labour force participation outcomes in 2006, after taking account of the age differences between the Indigenous and non-Indigenous populations:

- nationally, 17.5 per cent of Indigenous people with disability were participating in the labour force compared with 23.2 per cent for non-Indigenous people with disability (figure 4.8.2)
- among those who needed assistance with core activities, Indigenous people experienced lower labour force participation rates than non-Indigenous people across all states and territories and remoteness areas (figure 4.8.2 and table 4.A.2.3)
- the disparity in labour force participation rates between Indigenous and non-Indigenous people who needed assistance with core activities was smallest in Victoria and Tasmania. The largest gap between Indigenous and non-Indigenous people was in the NT (table 4A.2.3).

More data on employment, unemployment and volunteering rates for people with disability can be found in tables 4A.8.2–7 For data on labour force participation, employment and unemployment rates for the general Indigenous population, refer to section 8.1.

Nationally, in 2006, in relation to secondary educational attainment by people with disability aged 15 years and older, after taking account of the age differences between the Indigenous and non-Indigenous populations:

- almost half (48.8 per cent) of the Indigenous people with disability had completed schooling only to year 9 or below compared with a one-third (33.8 per cent) of non-Indigenous people with disability (table 4A.8.11 and 4A.8.16)
- Indigenous people with disability attained year 12 at half the rate of non-Indigenous people with disability (13.3 per cent compared with 26.0 per cent) (table 4A.8.11 and 4A.8.16).

Nationally, in 2006, in relation to post secondary educational attainment by people with disability aged 25 to 64 years, after taking account of the age differences between the Indigenous and non-Indigenous populations:

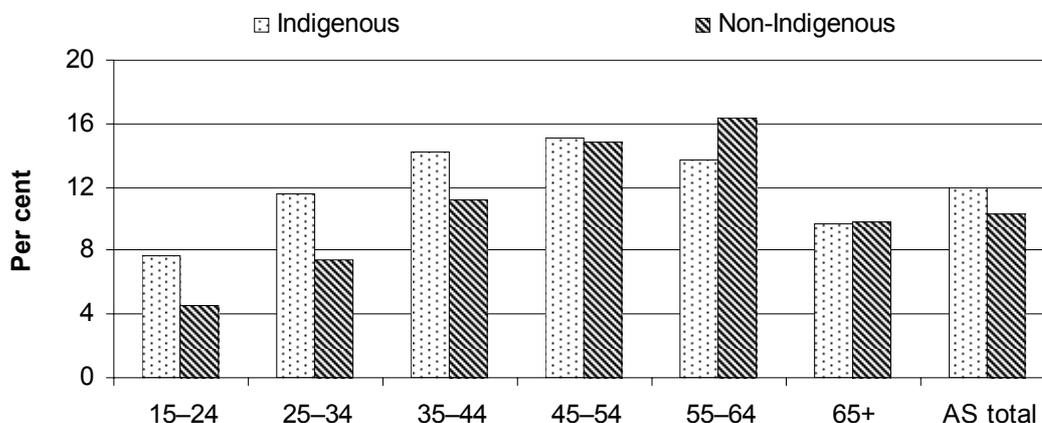
- fewer Indigenous people with disability had attained a certificate or diploma level qualification compared with non-Indigenous people with disability (13.6 per cent compared with 19.4 per cent, respectively) (table 4A.8.11 and 4A.8.16)
- Indigenous people with disability had completed a bachelor degree or higher qualification at half the rate of non-Indigenous people (2.9 per cent compared with 6.3 per cent respectively) (table 4A.8.11 and 4A.8.16).

Additional data on educational attainment by people with disability by age cohort, states and territories and remoteness areas can be found in the attachment tables (for secondary school attainment refer to tables 4A.8.11–15, for post secondary attainment refer to tables 4A.8.16–20). For data on secondary attainment by the general Indigenous population, refer to sections 4.5, 6.4 and 6.5. For data on post secondary attainment by the general Indigenous population, refer to section 4.7.

Carers of people with disability, long term illness or problems related to old age

Family and friends provide significant assistance, in terms of help or supervision, to people with disability, long term illness or problems related to old age. The provision of informal care allows people with disability to participate more fully and effectively in society. Providing informal care for people with disability also affects the ability of carers to participate fully in the labour force.

Figure 4.8.3 People aged 15 years and older who provided unpaid care to a person with disability, long term illness or problems related to old age, by age group, 2006^{a, b}



AS = age standardised. ^a Excludes overseas visitors. ^b A carer is defined as a person aged 15 years or over who provided unpaid care, help or assistance to family members or others who have a disability, long term illness or problems related to old age.

Source: ABS (unpublished), derived from 2006 Census of Population and Housing; table 4A.8.21–24.

In 2006, younger Indigenous people (aged 15–44 years old) were more likely to provide unpaid care than non-Indigenous people of the same ages. In particular, 15–24 year old Indigenous people were 1.7 times as likely as non-Indigenous people to be unpaid carers (figure 4.8.3).

In 2006, after taking into account the different age structures of the Indigenous and non-Indigenous populations:

- nationally, Indigenous people were 1.2 times as likely as non-Indigenous people to care for a person with disability (figure 4.8.3)
- in very remote areas, Indigenous people were almost twice as likely as non-Indigenous people to provide unpaid care to a person with disability (table 4A.8.21–24)
- the proportion of Indigenous people providing unpaid assistance to people with disability, long term illness or problems related to old age was highest in the ACT (15.4 per cent for Indigenous people and 10.4 per cent for non-Indigenous people). Queensland had the lowest proportion of Indigenous people providing unpaid assistance to people with disability (10.6 per cent for Indigenous people and 9.7 per cent for non-Indigenous people) (table 4A.8.21–24).

ABS 2006 Census data have been used to calculate the labour force participation rate of carers of people with disability — the number of carers of people with disability, long term illness or problems related to old age in the labour force expressed as a percentage of all carers aged 15 to 64 years. This measure of labour force participation of carers should be interpreted carefully as carer status was not stated for 12.8 per cent of Indigenous people and 3.9 per cent of non-Indigenous people.

In 2006, after taking into account the different age structures of the Indigenous and non-Indigenous populations:

- nationally, 55.3 per cent of Indigenous carers were participating in the labour force compared with 69.4 per cent of non-Indigenous carers (table 4A.8.25)
- Indigenous carers had lower labour force participation rates than non-Indigenous carers across remoteness areas and in all states and territories (table 4A.8.26).

Disability service use

The provision of supportive and enabling government services can assist people with disability to participate more fully and effectively in society. The COAG measure of service use by people with disability is the number of people with disability receiving disability services as a proportion of the Indigenous potential population requiring services.

It is difficult to compare rates of service use for populations with different prevalences of disability. If a population has a higher underlying prevalence, all else being equal, service use per 1000 population is likely to be higher. Therefore, a rate per 1000 potential population is used to compare rates of service use across

populations. The potential population is an estimate of the number of people with the potential to require disability support services (that is, those who are eligible for services, whether or not they actually use them).

A detailed description of how the potential population is estimated is available in the *Report on Government Services 2009* (SCRGSP 2009).

This section estimates use of Commonwealth, State and Territory Disability Agreement (CSTDA) funded services using two measures:

- the rate of service use by Indigenous and non-Indigenous people with disability, per 1000 people
- the rate of service use by Indigenous and non-Indigenous people with disability per 1000 potential population.

The CSTDA funded services reported are accommodation support, employment, community access, and community support services.

For both measures, while a markedly lower proportion may indicate reduced access for a special needs group, it may also represent strong alternative support networks (and thus a lower level of need), or a lower tendency of people with disability in a group to choose to access CSTDA funded services. Similarly, a higher proportion may suggest poor service targeting, the lack of alternative support networks or a greater tendency on the part of some people with disability to choose to access CSTDA funded services. In addition, this indicator does not provide information on whether the services are appropriate for the needs of the people receiving them, or accessed by those most in need.

For CSTDA funded accommodation support services in 2006–07:

- the rate of service use in the total Indigenous population (2.8 service users per 1000 people aged under 65 years) was higher than the proportion of the total non-Indigenous potential population who used the services (1.6 service users per 1000 people aged under 65 years) (table 4A.8.27)
- in contrast, the rate of service use in the Indigenous potential population (32.3 service users per 1000 potential population) was lower than the corresponding rate for the non-Indigenous potential population (42.4 service users per 1000 potential population) (table 4A.8.27).

For CSTDA funded community support services in 2006–07:

- the rate of service use in the Indigenous population (9.9 service users per 1000 people aged under 65 years) was higher than the proportion of the

non-Indigenous population who used the services (5.0 service users per 1000 non-Indigenous people aged under 65 years) (table 4A.8.28)

- in contrast, the rate of service use in the Indigenous potential population who used these services in 2006-07 (114.6 service users per 1000 potential population) was lower than the proportion of the non-Indigenous potential population who used the services (129.7 service users per 1000 potential population) (table 4A.8.28).

For CSTDA funded community access services in 2006–07:

- the rate of service use in the Indigenous population (3.0 service users per 1000 people aged under 65 years) was higher than the proportion of the non-Indigenous population who used the services (2.3 service users per 1000 people aged under 65 years) (table 4A.8.29)
- in contrast, the rate of service use in the Indigenous potential population (34.8 service users per 1000 potential population) was lower than the proportion of the non-Indigenous population who used the services (59.1 service users per 1000 potential population) (table 4A.8.29).

For CSTDA funded employment services in 2006–07:

- the rate of service use in the Indigenous population (6.8 service users per 1000 people aged 15–64 years) was higher than the proportion of the non-Indigenous population who used the services (5.7 service users per 1000 people aged 15–64 years) (table 4A.8.30)
- in contrast, the rate of service use in the Indigenous potential population (133.0 service users per 1000 potential population) was lower than the proportion of the non-Indigenous population who used the services (229.5 service users per 1000 potential population) (table 4A.8.30).

Hospitalisation rates by principal diagnosis and chronic disease

Data on the most common principal diagnoses for hospitalisations of Indigenous and non-Indigenous people, including chronic disease, are presented in this section. While hospitalisation rates by principal diagnosis are not a measure of the prevalence of a condition in the community, they do provide an indication of the extent to which serious illnesses are being treated in hospitals. A hospitalisation is an episode of care, so the same patient may be represented more than once in annual data. The principal diagnosis is the diagnosis established to be the problem that was chiefly responsible for the patient’s episode of care in hospital.

Generally chronic diseases persist over long periods of time and are the result of numerous risk factors acting in combination, such as:

- biomedical factors (for example, obesity, high blood pressure and high cholesterol levels)
- genetics (for example, genetic makeup and family history)
- risk behaviours (for example, smoking, excessive alcohol consumption, physical inactivity and poor diet)
- environment (for example, poor living conditions)
- psychological factors (for example, neglect, violence and death of family members)
- socioeconomic factors (for example, poverty, unemployment, low educational attainment, limited access to social services and discrimination/racism) (AIHW 2006).

More information on risk factors such as obesity (see section 7.5) and smoking (see section 7.4) can be found elsewhere in this report. More information on chronic diseases in the Indigenous population can be found in section 7.2 of this report, which presents hospitalisation rates for ‘potentially preventable chronic conditions’ as part of the ‘Access to primary health care’ strategic change indicator.

The age standardised hospitalisation ratios presented in tables 4.8.2 and 4.8.3 are calculated by dividing the Indigenous hospitalisation rate by the non-Indigenous hospitalisation rate. A ratio of one means the underlying rates are the same. A rate of more than one means the Indigenous rate is higher than the non-Indigenous rate.

Table 4.8.1 Hospitalisations rates by principal diagnosis, NSW, Victoria, Queensland, WA, SA and public hospitals in NT, 2006-07^{a, b, c}

Principal diagnosis	<i>Indigenous</i>	<i>Non-Indigenous^d</i>	Ratio ^f
	Rate per 1000 ^e	Rate per 1000 ^e	
Certain infectious and parasitic diseases	9.8	4.6	2.1
Neoplasms	16.0	24.6	0.6
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	4.9	4.5	1.1
Endocrine, nutritional and metabolic diseases	21.2	6.4	3.3
Mental and behavioural disorders	26.4	14.2	1.9
Diseases of the nervous system	10.1	8.2	1.2
Diseases of the eye and adnexa	6.7	9.8	0.7
Diseases of the ear and mastoid process	2.9	2.5	1.2
Diseases of the circulatory system	36.4	21.5	1.7
Diseases of the respiratory system	43.3	15.4	2.8
Diseases of the digestive system	39.1	40.2	1.0
Diseases of the skin and subcutaneous tissue	13.8	5.7	2.4
Diseases of the musculoskeletal system and connective tissue	14.1	18.9	0.7
Diseases of the genitourinary system	20.2	17.3	1.2
Pregnancy, childbirth and the puerperium	34.0	23.7	1.4
Certain conditions originating in the perinatal period	3.1	2.8	1.1
Congenital malformations, deformations and chromosomal abnormalities	1.2	1.7	0.7
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	34.9	23.2	1.5
Injury, poisoning and certain other consequences of external causes	46.5	23.6	2.0
Factors influencing health status and contact with health services ^g	483.7	83.3	5.8
Care involving dialysis	451.6	39.0	11.6
Other	32.1	44.3	0.7
Not reported	0.2	0.3	0.5
Total (excluding care involving dialysis)	416.5	313.3	1.3
Total (including care involving dialysis)	868.3	352.6	2.5

^a Hospitalisations for which the care type was reported as newborn with no qualified days, and records for hospital boarders and posthumous organ procurement have been excluded. ^b Identification of Indigenous patients is not considered to be complete and completeness varies among the jurisdictions. ^c This table includes data for NSW, Victoria, Queensland, WA, SA and public hospitals in the NT. Caution should be used in the interpretation of these data due to jurisdictional differences in data quality. ^d Non-Indigenous includes Indigenous status not reported. ^e Hospitalisation rates by Indigenous status were directly age-standardised, using the projected Indigenous population (low series) as at 30 June 2006 and the estimated resident populations as at 30 June 2006. ^f The rate ratio is equal to the separation rate for Indigenous Australians divided by the separation rate for non-Indigenous Australians. ^g Factors influencing health status and contact with health services includes health examinations and screening of people who may or may not be sick, immunisation, and discussion of problems that are not injuries or diseases.

Source: AIHW National Hospital Morbidity Database (unpublished); table 4A.8.31.

For 2006-07:

- Indigenous people were hospitalised at 2.5 times the rate of non-Indigenous people. Excluding dialysis, Indigenous people were hospitalised at 1.3 times the rate of non-Indigenous people (table 4.8.1)
- Indigenous people were hospitalised at higher rates than non-Indigenous people for all causes listed in table 4.8.1, except for the categories of neoplasms (cancers), diseases of the eye and adnexa, diseases of the musculoskeletal system and connective tissue, congenital malformations, and deformations and chromosomal abnormalities
- the greatest differences between the Indigenous and non-Indigenous hospitalisation rates were for care involving dialysis (11.6 times the rate of non-Indigenous people), factors influencing health status and contact with health services (5.8 times the rate of non-Indigenous people), endocrine, nutritional and metabolic diseases (3.3 times the rate of non-Indigenous people), diseases of the respiratory system (2.8 times the rate of non-Indigenous people), and diseases of the skin and subcutaneous tissue (2.4 times the rate of non-Indigenous people) (table 4.8.1).

The AIHW National Hospital Morbidity Database has assessed four jurisdictions (Queensland, WA, SA and the NT) as having adequate identification of Indigenous people in hospitalisations data for all years from 1998–99 to 2005–06. Attachment tables 4A.8.25-36 compare hospitalisation rates by principal diagnosis for Indigenous and non-Indigenous people for the period 1998–2000 to 2004–06.

Between 1998–2000 and 2004–06:

- hospitalisation rates of Indigenous people increased for care involving dialysis (from 296.9 per 1000 to 550.1 per 1000); symptoms, signs and abnormal clinical findings (from 20.3 per 1000 to 34.1 per 1000); and endocrine, nutritional and metabolic diseases (from 15.8 per 1000 to 23.5 per 1000) (table 4A.8.32)
- hospitalisation rates of Indigenous people for mental and behavioural disorders declined (from 27.1 per 1000 to 21.8 per 1000) (table 4A.8.32)
- Indigenous hospitalisation rates relative to non-Indigenous hospitalisation rates increased for total principal diagnosis (from 2.4 to 2.9), for care involving dialysis (from 13.3 to 15.5) and for diseases of the circulatory system (from 1.6 to 1.9) (table 4A.8.32)
- Indigenous hospitalisation rates relative to non-Indigenous hospitalisation rates decreased for endocrine, nutritional and metabolic diseases (from 4.7 to 4.0), for diseases of the skin and subcutaneous tissue (from 3.2 to 2.8) (table 4A.8.34).

Table 4.8.2 Hospitalisation rate ratios of Indigenous to non-Indigenous people, by type of chronic disease and sex, age standardised, NSW, Victoria, Queensland, WA, SA and public hospitals in the NT, 2006-07^{a, b, c, d}

<i>Type of long term health condition</i>	<i>Male</i>	<i>Female</i>
Cancer (C00–C96)	0.6	0.8
Lung cancer (C33–C34)	1.3	2.3
Cervical cancer (C53)	..	4.7
Mental and behavioural disorders (F00–F99)	2.3	1.4
Circulatory diseases (I00–I99)	1.5	1.9
Ischaemic heart diseases (I20–I25)	1.7	2.8
Stroke (I60–I69)	1.7	1.9
Hypertension (I10–I15)	3.0	2.7
Rheumatic heart diseases (I05–I09)	3.0	6.6
Other		
Diabetes (E10–E14)	3.6	5.4
End stage renal diseases (N18–N19, Z49)	8.4	15.3
Chronic obstructive pulmonary diseases (J41–J44)	3.9	5.5

.. Not applicable. ^a Hospitalisations were based on ICD-10-AM classifications. Principal diagnosis was used to select diseases. ^b Rate ratios were age standardised using 2001 Australian population data. ^c The rate ratio is calculated by dividing the Indigenous age-standardised rate by the 'Other' age standardised rate. 'Other' includes 'Non-Indigenous' and 'Not stated' categories. ^d Indigenous hospitalisations data are reported for NSW, Victoria, Queensland, WA, SA and the NT only.

Source: AIHW National Hospital Morbidity Database (unpublished), tables 4A.8.47 and 4A.8.50.

In 2006–07:

- age standardised hospitalisation rates were higher for Indigenous males and females than non-Indigenous males and females for all chronic diseases listed in table 4.8.2, except for cancer
- for all chronic diseases listed in table 4.8.2, except for mental and behavioural disorders, and hypertension, Indigenous to non-Indigenous rate ratios for females were higher than the corresponding ratios for males (table 4.8.2)
- Indigenous and non-Indigenous hospitalisation rates were highest for end stage renal diseases. The rates for Indigenous males and females were 8.4 and 15.3 times as high as the rates for non-Indigenous males and females, respectively (table 4.8.2).

Data on hospitalisation rates for Indigenous and non-Indigenous people from six jurisdictions (NSW, Victoria, Queensland, WA, SA and the NT) are only available for the three years from 2004–05 to 2006–07 (tables 4A.8.37–42). Due to the short time period, it is difficult to identify trends in these rates for long term health conditions. However, hospitalisation rate ratios for Indigenous and non-Indigenous people from four jurisdictions (Queensland, WA, SA and the NT) are available for

the six years from 2001-02 to 2006-07 (tables 4A.8.25 to 4A.8.36). Between 2001-02 and 2006-07:

- the ratio of Indigenous to non-Indigenous hospitalisation rates for males increased for end stage renal disease (9.6 to 12.3) and stroke (1.5 to 2.1). Hospitalisation rate ratios for males decreased for hypertension (5.4 to 3.4) and rheumatic heart disease (4.5 to 4.0) (tables 4A.8.25 to 4A.8.30)
- the ratio of Indigenous to non-Indigenous hospitalisation rates for females decreased for hypertension (4.7 to 3.6), and increased for cervical cancer (3.6 to 5.8), end stage renal diseases (18.8 to 21.3) and ischaemic heart diseases (2.5 to 3.0) (tables 4A.8.39–44.).

Burden of disease and injury

Vos et al. (2007) quantified the total disease burden for Indigenous people in 2003, and the relative contribution of specific diseases and key health risk factors to the total disease burden. The study also measured the difference in health burdens between Indigenous people and the total Australian population, and identified the health risk factors that most likely contribute to the health gap between the Indigenous population and the total Australian population (the total Australian population includes the Indigenous population).

The total burden of disease was measured by disability-adjusted life years (DALYs). A DALY is equivalent to one lost year of ‘healthy’ life due to death and/or disability. The measure incorporated both fatal and non-fatal health data from hospital records, death registrations, surveys and other sources. Diseases (including acute and chronic diseases, and mental illness) and injuries were classified into more than 170 mutually exclusive categories and 11 common risk factors were assessed.⁸ The key findings of the study were, that in 2003:

- the Indigenous population had an overall age standardised rate of disease burden (measured in DALYs/1000 people) two and a half times greater than the general Australian population
- the Indigenous population had higher DALY rates than the total Australian population for each of the seven leading contributors to total disease burden. Indigenous people had DALY rates attributable to:
 - diabetes at 5.1 times the rate of the Australian population

⁸ The 11 health risk factors included in the study were tobacco, alcohol, illicit drugs, high body mass, inadequate physical activity, low intake of fruit and vegetables, high blood pressure, high cholesterol, unsafe sex, child sexual abuse and intimate partner violence.

-
- cardiovascular disease at 4.6 times the rate of the Australian population
 - intentional injuries at 4.1 times the rate of the Australian population
 - unintentional injuries at 2.5 times the rate of the Australian population
 - chronic respiratory disease at 2.5 times the rate of the Australian population
 - cancers at 1.7 times the rate of the Australian population
 - mental disorders at 1.6 times the rate of the Australian population
- non-communicable diseases explained 70 per cent of the disease burden gap between Indigenous people and the total Australian population, with cardiovascular disease the leading cause (23 per cent of the gap) followed by diabetes (12 per cent of the gap), mental disorders (12 per cent of the gap) and chronic respiratory diseases (9 per cent of the gap)
 - the 11 risk factors identified in the study accounted for half of the gap in disease burden between the Indigenous population and the total Australian population, with tobacco the leading risk factor (17 per cent of the gap) followed by obesity (16 per cent of the gap), physical inactivity (12 per cent of the gap), high blood pressure (7 per cent of the gap) and alcohol (4 per cent of the gap) (Vos et al. 2007).

Chapters 5 (Early child development) and 7 (Healthy lives) provide more information on prevention of disease and ways to improve health outcomes for Indigenous people.

4.9 Household and individual income

Box 4.9.1 Key messages

- Indigenous households' gross weekly equivalised (adjusted) incomes (\$398) were 65.0 per cent of those of non-Indigenous households (\$612) in 2006. After adjusting for inflation, median incomes increased by 8.9 per cent for Indigenous households and 8.5 per cent for non-Indigenous households between 2001 and 2006 (figure 4.9.1).
- Median weekly incomes for Indigenous people aged 15 years and over (\$278) were 58.8 per cent of those of non-Indigenous people aged 15 years and over in 2006 (\$473) (figure 4.9.4).

The economic wellbeing of people is largely determined by their income and wealth. Capacity to own a home or accumulate other assets will depend upon whether people have sufficient disposable income. In the absence of data on wealth,

the extent to which income for Indigenous people is lower than for non-Indigenous people is a major indicator of material disadvantage.

This section contains information on household and individual income. Income is an important determinant of socioeconomic status. It is widely acknowledged that health status is affected by the availability of material resources and the income to buy them. People who have low incomes, or are socially disadvantaged in other ways, tend to live shorter lives and suffer more illness than those who are financially well off. In Australia, men and women with lower socioeconomic status, including many Indigenous people, bear a higher burden of disease (AIHW 2004). Higher incomes can enable the purchase of health-related goods and services such as better food, housing, recreation and health care, and may provide psychological benefits such as a greater sense of security and control. Increasingly, it is also suggested that less favourable social and economic circumstances can cause anxiety, low self-esteem and social isolation, which in turn can influence health-related behaviours and health itself (AIHW 2004).

Chapter 13 of this report discusses in more detail the association between low incomes and poor education outcomes, labour force participation and employment. The 2007 report also examined associations with health risk behaviour (including smoking, risky to high risk alcohol consumption and illicit drug use).

Higher incomes may help to improve individual and family health and other outcomes. However, higher incomes alone will not improve these outcomes unless individuals and families are financially literate. Many people, both Indigenous and non-Indigenous, have poor financial management skills which limit their capacity to improve their own and their family's circumstances. A recent study by the Cape York Institute (CYI 2007) found that several artists in Aurukun earned between \$30 000 and \$50 000 per year (including between \$5000 and \$10 000 in commissions every three to four months, and an average of \$230 per week from Community Development Employment Projects (CDEP)). The study noted that, although these artists had relatively high incomes, they had often spent the commissions within a month. The study contended that poor financial management skills meant that these people were unable to use their incomes to improve their circumstances.

Box 4.9.2 provides examples of some programs that have been successful in improving financial management skills for Indigenous people.

Income management of certain welfare and family payments was introduced in the latter half of 2007, as part of the Northern Territory Emergency Response (NTER). Under the NTER, 50 per cent of certain welfare and family payments are directed towards priority needs such as food, utilities and clothing. Income management in

the NT, along with trials in WA (section 4.10) and Cape York (section 11.1) have led to more money being spent on essentials such as food and clothing, less money being spent on alcohol and cigarettes, less incidence of harassment for money and women in communities report feeling safer. In addition, communities have reported that male family members now have an increased role in the family shopping.

The NTER Review Board (2008) recommended that the compulsory income management program be replaced with a voluntary program. Although the Commonwealth Government accepted the review's overarching recommendations, it did not accept this recommendation and decided that compulsory income management would continue as part of the NTER (Macklin 2008). However, the Government has undertaken to legislate in the first half of 2009 to ensure people in the Northern Territory subject to income management have access to a full range of appeal rights, including through the Social Security Appeals Tribunal and the Administrative Appeals Tribunal.

Box 4.9.2 'Things that work' — income management/financial literacy

The **Cape York Family Income Management (FIM) project** has been operating in the Cape York Welfare Reform communities of Aurukun, Mossman Gorge, Coen and Hope Vale since the commencement of the trial in 2008. Other Cape communities also have access to FIM.

The FIM project was designed by Indigenous people to build financial literacy and implement budgets, stabilise family functioning, improve living standards and reduce household and individual debt in a culturally sensitive and practical way.

The project is run by local people in each location and overseen by a working group comprising representatives from each community, Australian Government agencies, Westpac, and Cape York Partnerships. Westpac employees work alongside local financial management workers for one month every quarter. Local facilitators and resource workers in each site assist families and individuals to negotiate budget and savings agreements, set up direct deductions from accounts and provide bill-paying and purchasing assistance.

Outcomes include debt reduction and debt management, better coverage of essential living costs, increased spending on food and reduced spending on alcohol and gambling, better access to medication, reduction in stress and conflict, and the ability to purchase whitegoods, furniture, televisions, videos and other household items. Some participants have also purchased cars and boats, and set up small businesses. Arrangements with local stores, schools and pharmacies facilitate payment for food, education costs and medications (Queensland Government, unpublished).

(Continued next page)

Box 4.9.2 (continued)

MoneyBusiness, provides Indigenous people and families with money management information and supports them to become self reliant and improve individual, family and community wellbeing in a culturally sensitive and practical way (Australian Government, unpublished).

MoneyBusiness was implemented in partnership with the ANZ Banking Corporation, with input from local workers and community members. It is currently delivered in six sites: Galiwinku, Nguiu, Tennant Creek and Katherine in the NT, and Kununurra and Geraldton in WA. The MoneyBusiness Community Education Workshop Kit was also developed through this partnership.

The majority of MoneyBusiness workers have successfully completed a Certificate III in Financial Services. All sites are running around 12 community education workshops a year to assist in increasing the financial literacy of people within the communities and to promote the assistance of the MoneyBusiness workers. In 2007-08 MoneyBusiness sites supported 1650 clients.

MoneyBusiness has been well received in communities with many clients developing budgets, paying off debts and putting arrangements in place to better manage their money over the pay period to allow for the purchase of essential goods and household furniture; using the internet to pay bills; using education opportunities to learn how to make good choices and obtain better value when receiving one-off payments.

MoneyBusiness is supporting Welfare Payment Reform initiatives in the NT and WA (Australian Government, unpublished).

My Moola is a financial literacy course for Indigenous Australians developed by First Nations Foundation and ANZ in conjunction with the Indigenous community in Shepparton, Victoria. It was piloted in Shepparton throughout 2007 with a view to a national rollout starting in 2008. During the first phase, 30 Indigenous people participated in workshops on topics such as goal setting, budgeting, dealing with credit, internet and telephone banking, and being financially prepared for the future.

The program addresses cultural issues as well as providing technical training.

The course, delivered through local Indigenous community organisations, aims to assist Indigenous people and families to get ahead financially by understanding how to manage money and by understanding the impact of their decisions on their financial goals (IEP 2007).

This indicator examines both household and individual income. While income is usually received by individuals, people living in families or group households generally contribute to the purchase of goods and services shared by other household members, particularly children. Therefore, household income measures the economic resources available to every person in a household, including dependent adults and children. It reflects directly the economic resources available for each household member to maintain his or her standard of living.

The main sources of income for both Indigenous and non-Indigenous people are employment, assets and welfare payments. Levels of income are closely related to paid work (through salaries and wages), though for many people government income support is their main source of income. Individual income directly reflects the earning capacity of adults in the work force, which in turn impacts on household income. In 2004-05, over half of Indigenous adults (51.6 per cent) received most of their individual income from government pensions and allowances (table 3A.6.8 from the 2007 report).

A significant proportion of Indigenous people are employed under CDEP. Many CDEP participants have low incomes. Biddle and Taylor (2008) found that the median weekly income for CDEP participants recorded in the Census was \$210, only slightly higher than the median weekly income recorded for Indigenous adults who were not employed (\$202).

Data for the household and individual income indicator in this report are from the ABS 2006 Census and the ABS 2001 Census. For most income analysis, disposable (after tax) income is the preferred basis of income measurement. However, no attempt is made to adjust for income taxes in the Census. Nor is any adjustment made for the cost of living. This is particularly relevant for people living in remote areas, where costs for some goods and services are high, and the costs for others are low. For example, the cost of fresh food can be high in remote areas, which has an impact on health outcomes. In contrast, rent in remote areas is, on average, less than half the rent levels in major cities.

The household income estimates in ABS Censuses are adjusted by equivalence factors (see box 4.9.3) to take into account household size and composition, and the economies of scale that arise from the sharing of a dwelling. Although equivalised household income refers to household income, it is not a measure of total income for each household. Rather, it is a measure of the income available for each member in a household taking into account the composition of that household. Box 4.9.3 provides more information about the income measures used in this report.

When compared with non-Indigenous people, a higher proportion of Indigenous people had low incomes, and a lower proportion had high incomes in 2006. Lower rates of mainstream (non-CDEP) employment among Indigenous people (see section 4.6), and higher rates of part time work and/or employment in lower skilled occupations (see section 8.1) are the main factors that contribute to the income disparity between Indigenous and non-Indigenous people.

Box 4.9.3 Derivation of income measures

Equivalised household income

The costs of maintaining households and families vary according to household size and composition, and other household characteristics such as the number of employed people in the household. Notwithstanding economies of scale, larger households normally require a greater level of income to maintain the same material standard of living as smaller households, and the needs of adults are normally greater than the needs of children.

The conventional technique for adjusting for the income needs of households with different characteristics is to apply an equivalence scale to the raw household income. The resulting measure of income is gross weekly equivalised household (GWEH) income, and is the measure used for household income in this report. Although GWEH income refers to household income, it is not a measure of total income for each household. Rather, it is a measure which has been adjusted for the size and composition of that household.

Mean versus median income

A mean income value is the average value of a set of income data. Median value is the mid point of a set of income data. If the values in a set of income data are arranged from largest to smallest, the one in the centre is the median income value (if the centre point lies between two numbers, the median value is the average value of the two numbers).

Median value is a better measure for income than the mean, because mean income values are influenced by extreme income values. This is particularly important when comparing incomes of Indigenous and non-Indigenous people, as income distributions within the two populations are very different (see Glossary for examples of how mean and median values are derived and the extent to which the two income measures differ).

Gross weekly equivalised household income

The measure used in this report for household income is gross weekly equivalised household (GWEH) income (box 4.9.3). Although GWEH income calculated for Indigenous people is adjusted for household size and composition may not adequately reflect the household circumstances of Indigenous people. Daly and Smith (1995), Gray (1990), and Hunter, Kennedy and Smith (2003) found substantial differences in family size and composition (structure) between Indigenous households and non-Indigenous households. Compared to non-Indigenous people and/or households:

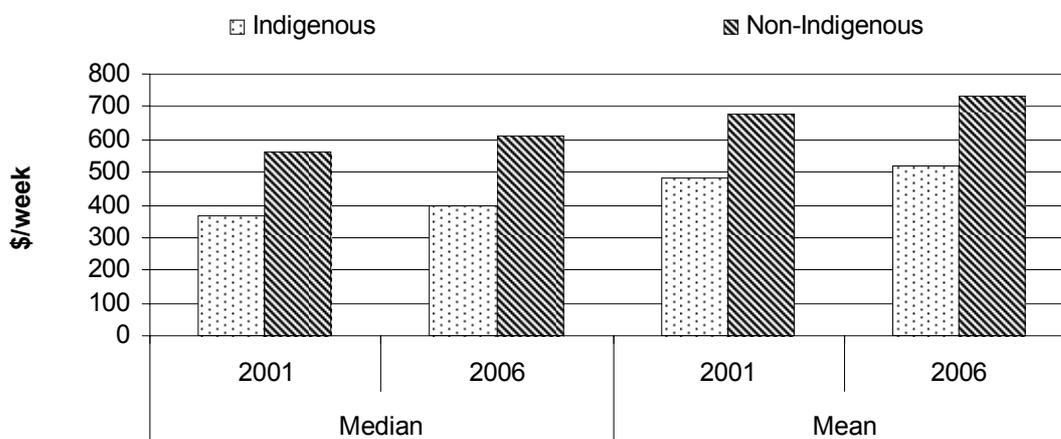
-
- Indigenous people are more likely to live in larger households with large numbers of dependants and smaller incomes
 - Indigenous households are more likely to extend over generations
 - high Indigenous adult mortality at younger ages can impact upon household living arrangements
 - Indigenous people are substantially more likely to live in single parent households
 - Indigenous people, especially those living outside the cities, may live in households with resource commitments to their extended families living elsewhere
 - Indigenous households tend to have a large number of visitors, who may not be accounted for in a data collection that takes a snapshot on a particular day.

Section 9.1 (Overcrowding in housing) provides more information on the housing and living arrangements of Indigenous people and differences between Indigenous and non-Indigenous households.

The median value is the mid point of a set of income data. The difference in median income between Indigenous and non-Indigenous people is an indicator of the income gap between the two populations. A mean income value is the average value of a set of income data.

Figure 4.9.1 presents data on median and mean real gross weekly equivalised household income. Real income is adjusted for the effects of inflation, and allows for comparisons to be made between incomes in different years, by holding purchasing power constant. For more information on median and mean income measures, see box 4.9.3.

Figure 4.9.1 Median and mean real gross weekly equivalised household income (2006 dollars)^{a, b, c, d}



^a Excludes 'Visitor only' and 'Other not classifiable' households. ^b An Indigenous household is any household that had a least one person of any age as a resident at the time of the Census who identified as being of Aboriginal and/or Torres Strait Islander origin. ^c Non-Indigenous households include people who did not state their Indigenous status. ^d Real income is adjusted for the effects of inflation, and allows comparisons to be made between incomes in different years, by holding purchasing power constant. The 2001 data are adjusted for inflation using the Consumer Price Index for the September quarter 2001 and the September quarter 2006.

Source: ABS (unpublished) derived from the 2006 Census of Population and Housing; 2001 Census of Population and Housing; ABS (2009); table 4A.9.1.

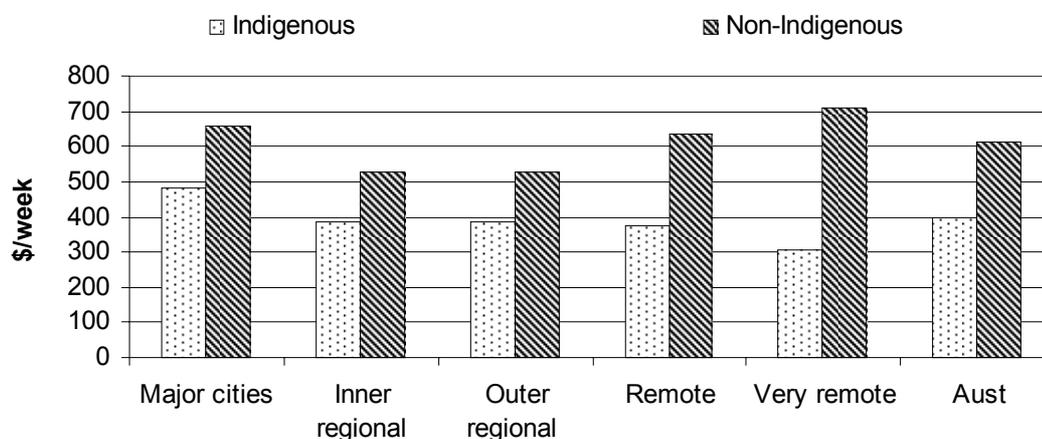
Between 2001 and 2006, after adjusting for inflation:

- there were increases in median gross weekly equivalised income for both Indigenous and non-Indigenous households. In this period, median incomes increased by \$33 (8.9 per cent) for Indigenous households and \$48 (8.5 per cent) for non-Indigenous households (figure 4.9.1)
- mean gross weekly equivalised income for both Indigenous and non-Indigenous households also increased. In this period mean incomes increased by 7.7 per cent for Indigenous households and 7.4 per cent for non-Indigenous households (figure 4.9.1).

In 2006:

- Indigenous household median gross weekly equivalised incomes were 65.0 per cent of non-Indigenous household median gross weekly equivalised incomes (figure 4.9.1)
- Indigenous household mean incomes were 71.4 per cent of non-Indigenous household mean incomes and in 2001 were 71.2 per cent of non-Indigenous household mean incomes (figure 4.9.1).

Figure 4.9.2 **Median gross weekly equivalised household income, by remoteness, 2006^{a, b, c}**



^a Excludes 'Visitor only' and 'Other not classifiable' households. ^b An Indigenous household is any household that had a least one person of any age as a resident at the time of the Census who identified as Indigenous. ^c Non-Indigenous households include people who did not state their Indigenous status.

Source: ABS (unpublished) derived from the 2006 Census of Population and Housing; table 4A.9.2.

Nationally in 2006:

- the median (mid point) gross weekly equivalised household income for Indigenous households was \$398 compared with \$612 for non-Indigenous households (figure 4.9.2)
- the median gross weekly equivalised household income for Indigenous households was lower than for non-Indigenous households in all remoteness areas (figure 4.9.2)
- the gap between median gross weekly equivalised household incomes for Indigenous and non-Indigenous households was greatest in very remote areas (\$309 to \$709) and smallest in inner regional areas (\$386 to \$525) (figure 4.9.2)
- Indigenous median gross weekly equivalised household incomes were highest in major cities and lowest in very remote areas, whereas non-Indigenous median gross weekly equivalised household incomes were highest in very remote areas and lowest in regional areas (figure 4.9.2)
- the median gross weekly equivalised income for Indigenous households was lower in all states and territories than for non-Indigenous households (table 4A.9.3)
- the gap between Indigenous and non-Indigenous median gross weekly equivalised household incomes was greatest in the NT (\$332 to \$848) and smallest in Tasmania (\$420 to \$512, respectively) (table 4A.9.3)

-
- Indigenous and non-Indigenous median gross weekly equivalised household incomes were both highest in the ACT (\$714 and \$927, respectively) (table 4A.9.3).

Box 4.9.4 Income distribution measures

Income ranges

The distribution of household income is another indicator of a population's economic wellbeing. The percentage of households or individuals with incomes in particular ranges is a measure of relative advantage or disadvantage. Income ranges are presented in this report for both Indigenous and non-Indigenous people as measures of both household and individual income distribution.

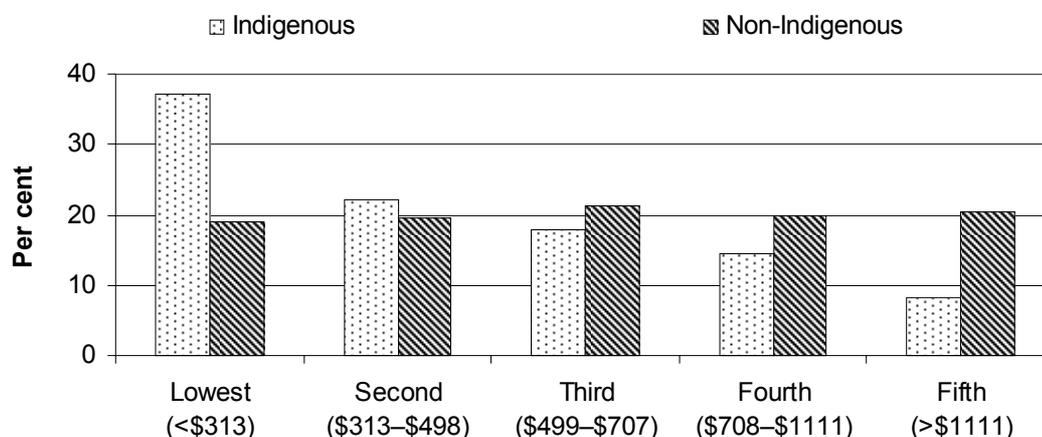
Income quintiles

Income quintiles are another measure of the distribution of income. The income quintiles are groupings that result from ranking all people in the population in ascending order (from lowest to highest) according to their incomes and then dividing the population into five equal groups, each comprising 20 per cent of the population.

The income quintile boundaries in this report are based on income distributions for the total Australian population at the time of the 2006 Census.

The distribution of household incomes is also an important indicator of a population's economic wellbeing, that is, a population with a relatively high proportion of households with low incomes may be disadvantaged. The percentage of households which have incomes that lie in particular ranges is a measure of relative advantage or disadvantage. Income quintiles as measures of income distribution are groupings that result from ranking all households in the population in ascending order according to their gross weekly equivalised household incomes and then dividing them into five equal groups, each comprising 20 per cent of the population. Box 4.9.4 explains how income ranges and quintiles are calculated and how they are used in this report.

Figure 4.9.3 Distribution of gross weekly equivalised household incomes, 2006^{a, b, c}



^a The income quintiles are groupings that result from ranking all households in the population in ascending order (from lowest to highest) according to their incomes and then dividing them into five equal groups, each comprising 20 per cent of the population. Box 4.9.4 provides details of income quintile boundaries used in this report. ^b An Indigenous household is any household that had a least one person of any age as a resident at the time of the Census who identified as Indigenous. ^c Non-Indigenous households include people who did not state their Indigenous status.

Source: ABS (unpublished) derived from the 2006 Census of Population and Housing; table 4A.9.8.

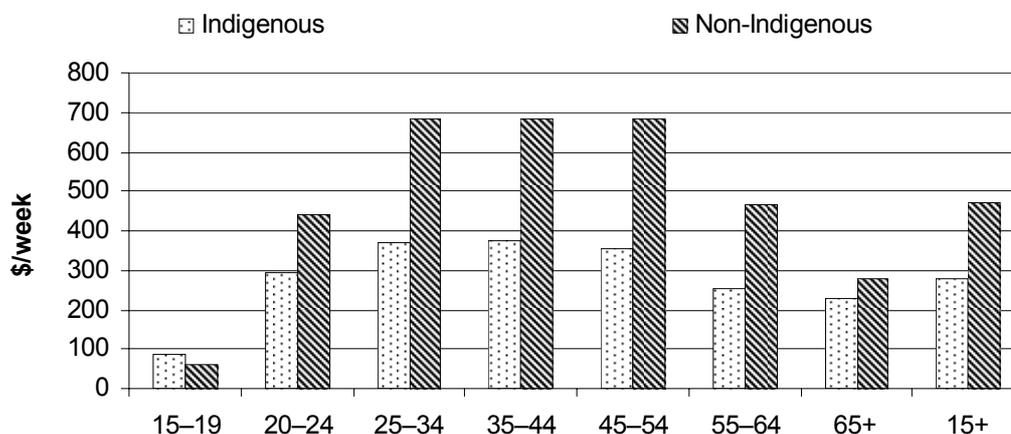
In 2006:

- Indigenous households (37.2 per cent) were almost twice as likely as non-Indigenous households (18.9 per cent) to have equivalised household incomes in the lowest range (quintile) (less than \$313 per week) (figure 4.9.3)
- the proportion of households with an equivalised household income in the second lowest range (\$313–\$498) was also higher for Indigenous households than for non-Indigenous households (22.2 compared to 19.5 per cent) (figure 4.9.3)
- Indigenous households (8.3 per cent) were less than half as likely as non-Indigenous households (20.4 per cent) to have an equivalised household income in the highest range (greater than \$1111 per week) (figure 4.9.3)
- the proportion of households with an equivalised household income in the fourth range (\$708–\$1111 per week) was also lower for Indigenous households than for non-Indigenous households (14.4 compared to 20.0 per cent) (figure 4.9.3).

More information on distributions of gross weekly equivalised household income by State and Territory and remoteness area is in tables 4A.9.8 and 4A.9.9.

Individual income

Figure 4.9.4 Median gross weekly individual income, by age, 2006^a



^a Weekly individual income is the gross amount usually received each week from all sources.

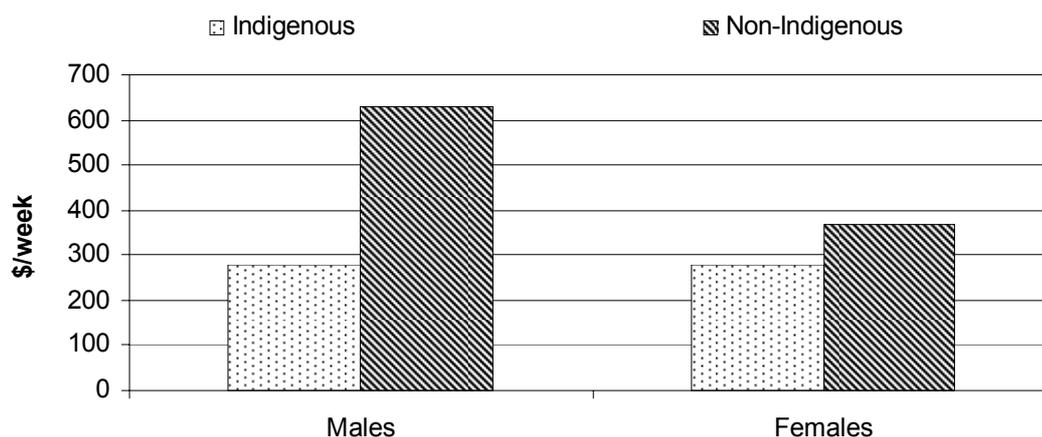
Source: ABS (unpublished) derived from the 2006 Census of Population and Housing; table 4A.9.6.

Data for median gross weekly individual income for 2006 show that:

- incomes for Indigenous people were lower than for non-Indigenous people across all age groups except for people aged 15 to 19 years (figure 4.9.4)
- among people aged 20–24 years, median incomes for Indigenous people were \$142 lower than the median incomes for non-Indigenous people (figure 4.9.4)
- the gap between the median incomes for Indigenous and non-Indigenous people increased as people reached prime working years. Differences were greatest for those aged between 25 and 54 years of age. Indigenous people aged 25–34, 25–44 and 45–54 had median incomes that were \$312, \$307 and \$328 lower than for non-Indigenous people of those ages (figure 4.9.4)
- differences between the median incomes for Indigenous and non-Indigenous people were smaller as people approached and reached retirement age. Indigenous people had incomes \$213 lower and \$52 lower than non-Indigenous people aged 55–64 and 65 years and over (figure 4.9.4). However, the gap between median incomes for Indigenous and non-Indigenous people aged 65 years and over may be understated because the average age of Indigenous people aged 65 years and over is lower due to higher adult mortality rates (see section 4.1 for more information on life expectancy)

- median individual incomes for Indigenous people aged 15 years and over were 58.8 per cent of the incomes of non-Indigenous people aged 15 years and over (figure 4.9.4).

Figure 4.9.5 Median gross weekly individual income by sex, people aged 15 years and over, 2006^a



^a Weekly individual income is the gross amount usually received each week from all sources.

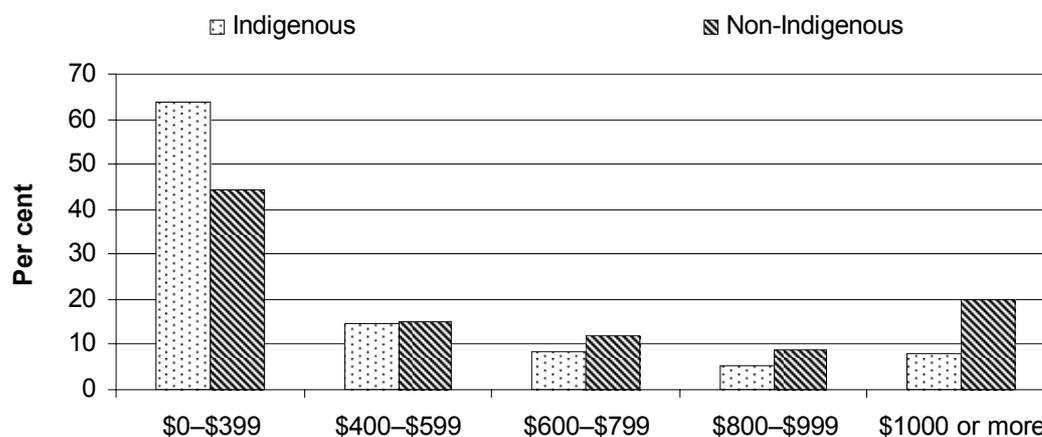
Source: ABS (unpublished) derived from the 2006 Census of Population and Housing; table 4A.9.6.

In 2006:

- there was little difference in median incomes reported for Indigenous males and females aged 15 years and over (\$277 and \$278, respectively) (figure 4.9.5)
- there was little difference in median incomes for non-Indigenous males and females aged 15 years and over (\$627 and \$367, respectively) (figure 4.9.5)
- median incomes for Indigenous males were 44.2 per cent of median incomes for non-Indigenous males (figure 4.9.5)
- median incomes for Indigenous females were 75.7 per cent of median incomes for non-Indigenous females (figure 4.9.5).

Incomes ranges (rather than quintiles, which were used to measure GWEH), are used in this report to measure the distribution of individual income (see box 4.9.4 for detailed definitions of income ranges). Because of the way individual income data are collected in ranges (rather than actual dollar amounts) in the census it is not possible to derive quintiles.

Figure 4.9.6 Distribution of gross weekly individual income (ranges), people aged 15 years and over, 2006^{a, b}



^a The income ranges are based on question 33 of the 2006 Census which asked "What is the total of all wages/salaries, government benefits, pensions, allowances and other income the person usually receives?".

^b The \$0-\$399 income range includes people with negative income.

Source: ABS (unpublished) derived from the 2006 Census of Population and Housing; table 4A.9.11.

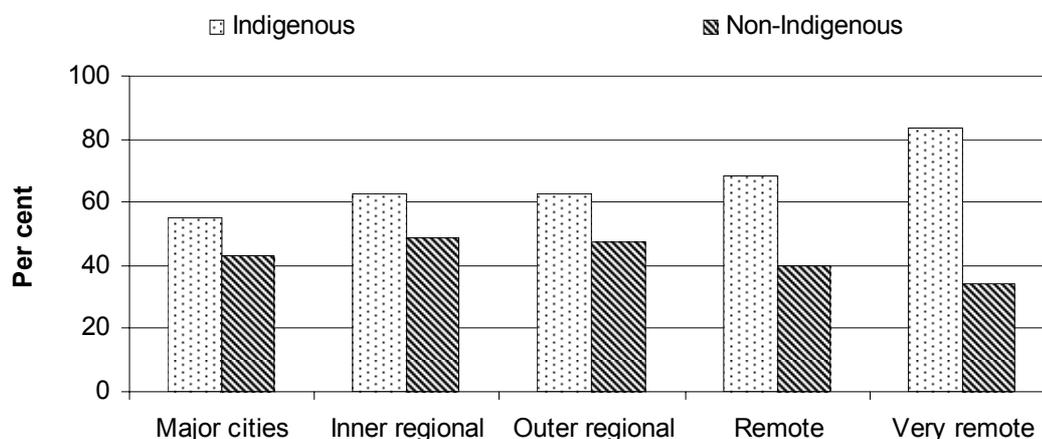
In 2006, data for gross weekly individual income show that:

- a higher proportion of Indigenous people (64.0 per cent) than non-Indigenous people (44.5 per cent) had an income in the lowest range (less than \$400 per week) (figure 4.9.6)
- a lower proportion of Indigenous people (7.8 per cent) than non-Indigenous people (20.0 per cent) had an income in the highest range (\$1000 or more per week) (figure 4.9.6).

Individual income ranges data for 2006 and 2001 are not directly comparable as they are both in nominal terms (2006 dollars and 2001 dollars) and are not easily converted into comparable constant (real) dollar ranges. Furthermore, the questions asked in each Census differ slightly in wording. However, it is clear from the data that Indigenous people were more likely to earn lower incomes and less likely to earn higher incomes than non-Indigenous people in both 2001 and 2006 (table 4A.9.11 and table 4A.9.17).

It is also important to note that the proportion of Indigenous people who did not state their income was significantly higher than for non-Indigenous people in both 2006 (11.6 and 4.4 per cent, respectively) and in 2001 (9.7 and 4.7 per cent, respectively).

Figure 4.9.7 **Proportion of people with gross weekly individual incomes of \$399 or less, by remoteness, 2006^a**



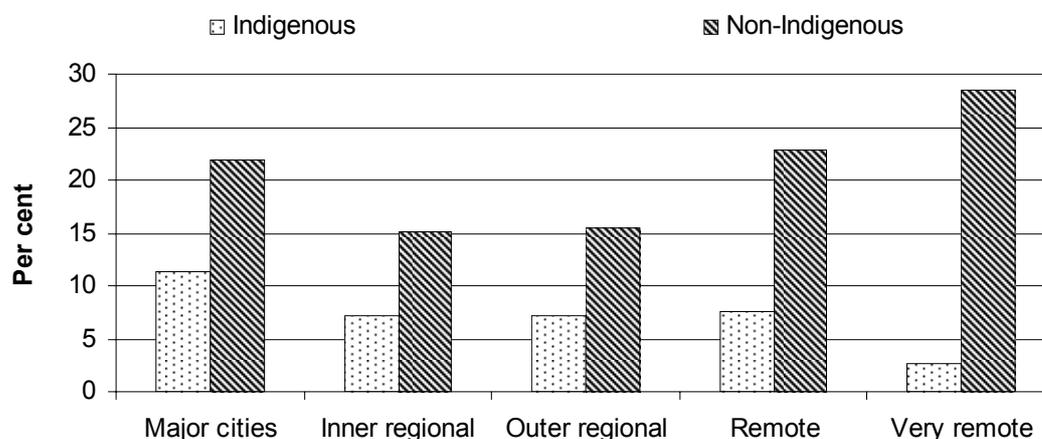
^a The income ranges are based on question 33 of the 2006 Census which asked “What is the total of all wages/salaries, government benefits, pensions, allowances and other income the person usually receives?”.
^b The \$0-\$399 income range includes people with negative income.

Source: ABS (unpublished) derived from the 2006 Census of Population and Housing; table 4A.9.11.

In 2006, data for gross weekly individual income show that:

- Indigenous people were more likely than non-Indigenous people to have incomes of \$399 or below across all remoteness areas (figure 4.9.7)
- Indigenous people were most likely to have incomes of \$399 or below in very remote areas (83.8 per cent) and least likely to have incomes of \$399 or below in major cities (54.8 per cent), whereas non-Indigenous people were most likely to have incomes of \$399 or below in inner regional areas (49.0 per cent) and least likely to have incomes of \$399 or below in very remote areas (34.2 per cent) (figure 4.9.7).

Figure 4.9.8 Proportion of people with gross weekly individual incomes of \$1000 or more, by remoteness, 2006^a



^a The income ranges are based on question 33 of the 2006 Census which asked "What is the total of all wages/salaries, government benefits, pensions, allowances and other income the person usually receives?".

Source: ABS (unpublished) derived from the 2006 Census of Population and Housing; table 4A.9.11.

In 2006 for gross weekly individual income:

- Indigenous people were less likely than non-Indigenous people to have gross weekly individual incomes of \$1000 or more across all remoteness areas (figure 4.9.8)
- Indigenous people were most likely to have incomes of \$1000 or more in major cities (11.3 per cent) and least likely to have incomes of \$1000 or more in very remote areas (2.7 per cent), whereas non-Indigenous people were most likely to have incomes of \$1000 or more in very remote areas (28.6 per cent) and least likely to have incomes of \$1000 or more in inner regional areas (15.1 per cent) (figure 4.9.8).

Further information about the distribution of gross weekly individual income across remoteness areas can be found in table 4A.9.11 and table 4A.9.17. Further information about the distribution of gross weekly individual income by State and Territory can be found in table 4A.9.13 and table 4A.9.19.

4.10 Substantiated child abuse and neglect

Box 4.10.1 Key messages

- The rate of substantiated notifications for child abuse or neglect increased for both Indigenous and non-Indigenous children from 1999-2000 to 2007-08, with the rate for Indigenous children more than doubling over this period (figure 4.10.1):
 - the rate for Indigenous children increased from 16.4 to 35.3 per 1000 children
 - the rate for non-Indigenous children increased from 4.8 to 5.5 per 1000 children.
- Indigenous children were more than six times as likely as non-Indigenous children to be the subject of a substantiation of abuse or neglect in 2007-08 (figure 4.10.1).
- 41.0 out of every 1000 Indigenous children were on care and protection orders, compared to 5.3 per 1000 non-Indigenous children at 30 June 2008 (table 4.10.1).

Child abuse and neglect contribute to the severe social strain under which many Indigenous people live (Keel 2004; Stanley, Tomison and Pocock 2003). Ensuring that Indigenous children are safe, healthy and supported by their families will contribute to building functional and resilient communities. The need for intervention for protective reasons may also reflect the social and cultural stress in many Indigenous communities. In such conditions, the extended networks that could normally intervene in favour of the child may no longer exist. This indicator also includes data on placement of Indigenous children in out-of-home care in accordance with the *Aboriginal Child Placement Principle*. This legislative principle aims to ensure the safety and welfare of Indigenous children and, where possible, achieves this by giving priority to maintaining cultural ties by placing Indigenous children with family or other Indigenous people.

There are no reliable data on actual levels of child abuse and neglect. Substantiated child protection notifications are the primary source data for this indicator. Substantiated notifications record children who come into contact with community services for protective reasons. Information on sexually transmitted infection (STI) diagnoses in Indigenous children and police administrative data on child sexual assault victims have been provided to supplement the child protection data.

Reflecting the issues above, the measures for this headline indicator are:

- the representation of Indigenous children who were the subject of substantiated child protection notifications (compared with non-Indigenous children)
- the representation of Indigenous children on care and protection orders (compared with non-Indigenous children).

Additional information is provided on placement in accordance with the Aboriginal Child Placement Principle, and diagnoses of sexually transmitted infections (STIs) in children, that complements these measures.

Factors underlying child abuse and neglect are well documented (Clapham, Stevenson and Lo 2006; Gordon, Hallahan and Henry 2002; Robertson 2000; UN 2006; UNICEF Innocenti Research Centre 2004). Researchers agree that no single risk factor causes child abuse and neglect (Stanley 2005; Memmott et al. 2001; Gordon, Hallahan and Henry 2002). Acknowledging the shared causal pathways that contribute to child abuse and neglect increases the potential to devise preventative strategies (Stanley 2005; Libesman 2004). Factors acting in combination, include:

- behaviour (for example, domestic violence and alcohol and substance abuse)
- environment (for example, overcrowded home environment and poor living conditions)
- psychological factors (for example, high stress levels, lack of family and community resilience and mental health issues)
- socioeconomic factors (for example, economic deprivation, poverty, unemployment, poor education, limited access to social services and discrimination/racism).

For Indigenous people, these factors sit within a broader context of social and historic issues, such as loss of lifestyle, loss of culture, deterioration of traditional social controls and marginalisation from society (Matthews 1997; Stanley 2005).

In many situations family support, primary prevention and early intervention programs are more successful and cost effective in supporting Indigenous families than statutory interventions. While it is appropriate for government departments to maintain a strong role in statutory intervention where child protection measures are required, there is wide recognition of the positive work of Indigenous community organisations which are more effective in providing early-prevention and out-of-home care services (HREOC 2008).

Substantiated child protection notifications

Care should be taken in interpreting the substantiation data. No data exist on actual levels of child abuse or neglect. The number and rate of substantiations are collected by departments with responsibility for child protection and may under-estimate the true extent of abuse or neglect occurring within the community, because not all cases are reported. Furthermore, each State and Territory has its own

legislation, policies and practices in relation to child protection, so there are differences across jurisdictions in the data provided.

Children who come into contact with community services for protective reasons include those:

- who are suspected of being, have been or are being abused, neglected or otherwise harmed
- whose parents are unable to provide adequate care or protection (AIHW 2009).

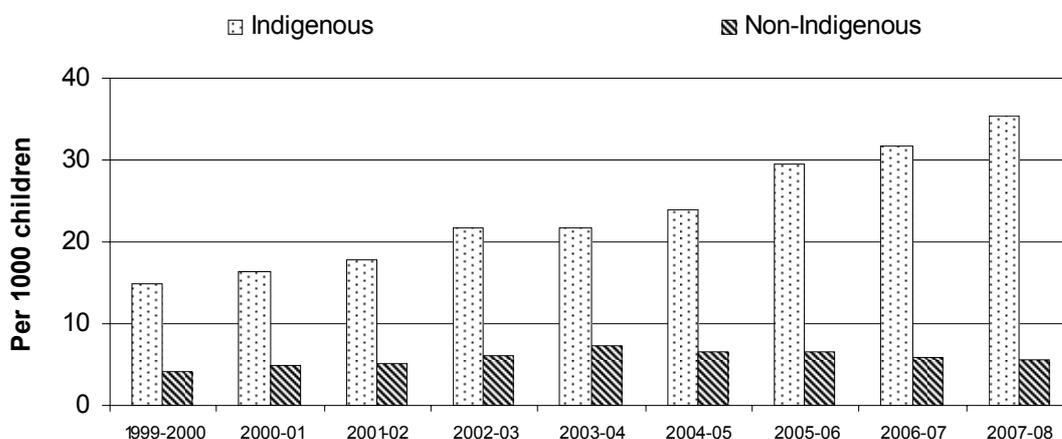
Before a matter is considered ‘substantiated’ by authorities, it must first be notified and investigated. A notification will be substantiated where it is concluded after investigation that the child has been, is being, or is likely to be abused, neglected or otherwise harmed. The criteria for substantiation vary across jurisdictions. All jurisdictions substantiate situations where children have experienced significant harm from abuse and neglect through the actions of parents. Some jurisdictions also substantiate on the basis of the occurrence of an incident of abuse or neglect, independent of whether the child was harmed, and others substantiate on the basis of the child being at risk of harm occurring (AIHW 2009).

In some instances, increases in notifications (and subsequent substantiations) may be a result of reduced tolerance in Indigenous families and the broader Indigenous community of abuse or neglect of children. An increased rate in these instances will signify increased awareness and identification of the problem — which is more desirable than abuse and neglect occurring but not being reported.

Increases in the rates of Indigenous children in the child protection system over time may also be due to a combination of improvements in the identification of Indigenous people as well as increases in the number of Indigenous children requiring protection (AIHW 2009).

Increased government expenditure on child protection may also affect notification and substantiation rates by improving access to services, and services’ ability to respond. Nationally, annual real expenditure on child protection and out-of-home care services increased by \$730.3 million from 2003-04 to 2007-08. This represents an average annual increase over the four year period of 12.3 per cent (SCRGSP 2009).

Figure 4.10.1 Rate per 1000 children aged 0–16 years who were the subject of substantiations^{a, b}



^a Non-Indigenous includes Indigenous status not stated. ^b Rates of children in substantiations were calculated as the number of children aged 0–16 years in each category (including those whose age was not stated) divided by the estimated population of children aged 0–16 years at 31 December, multiplied by 1000. For Indigenous children, the June projections for two years were averaged to obtain a population figure for December of the relevant year.

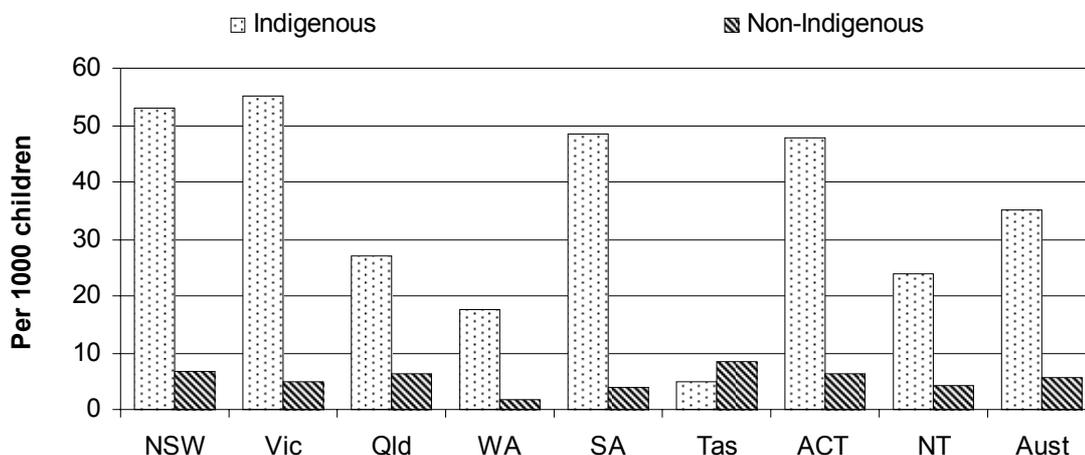
Source: AIHW, *Child Protection Notifications, Investigations and Substantiations, Australia* data collection (unpublished); table 4A.10.1.

From 1999-2000 to 2007-08:

- the substantiation rate for Indigenous children increased from 14.8 per 1000 children to 35.3 per 1000 children.
- the rate for non-Indigenous children increased from 4.2 per 1000 children to 5.5 per 1000 children.

Attachment table 4A.10.1 includes the number and rate per 1000 children aged 0–16 years in substantiations by State and Territory for 1999-2000 to 2007-08.

Figure 4.10.2 Rate per 1000 children aged 0–16 years who were the subject of substantiations, 2007-08^{a, b, c}

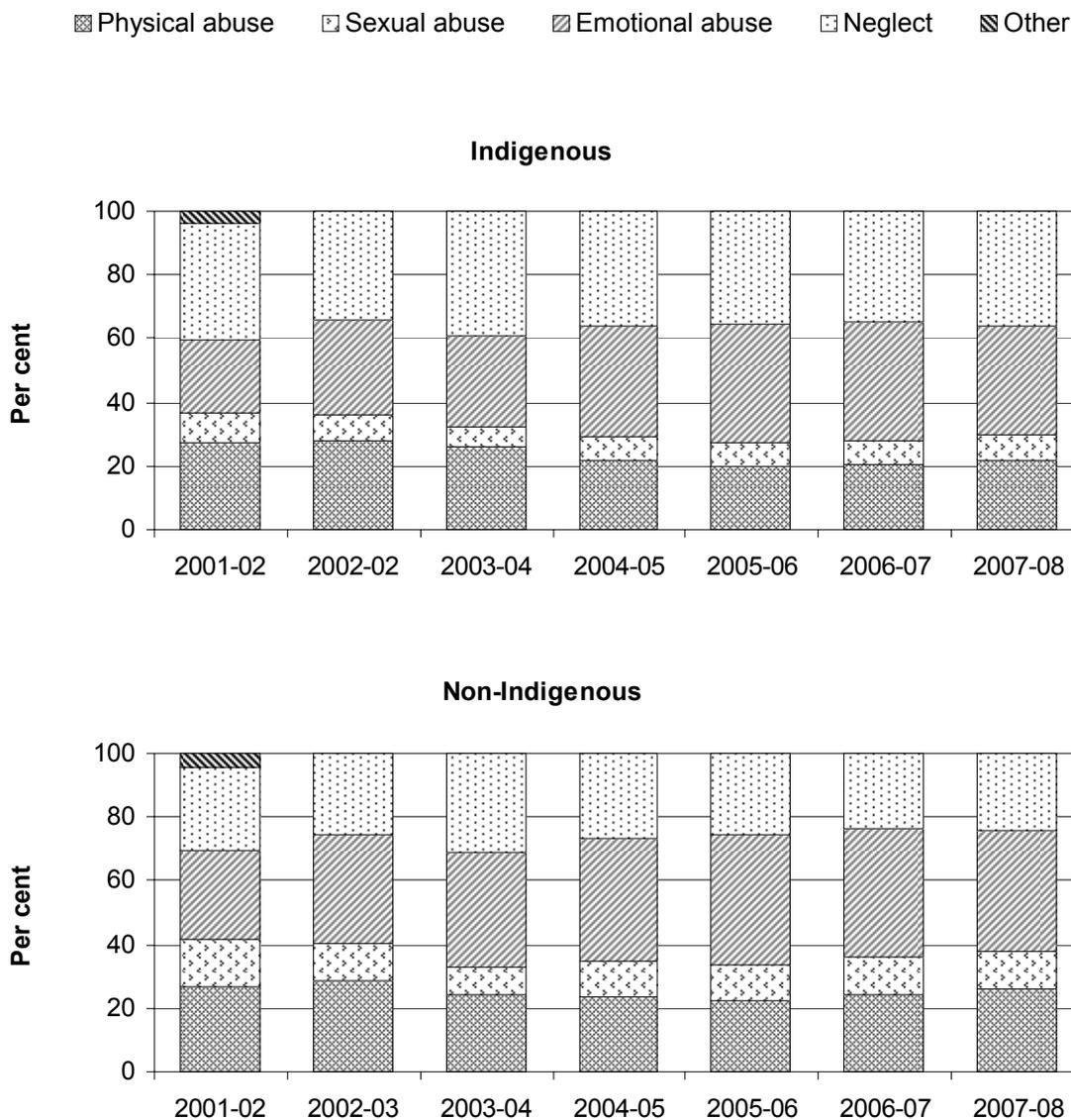


^a Non-Indigenous includes Indigenous status not stated. ^b Rates of children in substantiations were calculated as the number of children aged 0–16 years in each category (including those whose age was not stated) divided by the estimated population of children aged 0–16 years at 31 December 2007, multiplied by 1000. For Indigenous children, the June 2007 and 2008 projections were averaged to obtain a population figure for December 2007. ^c The high number of children in substantiation with an unknown Indigenous status in Tasmania makes the counts for both Indigenous children and non-Indigenous children unreliable.

Source: AIHW (unpublished), derived from *Child Protection Notifications, Investigations and Substantiations, Australia* data collection; table 4A.10.1.

In 2007-08, the substantiation rate for Indigenous children was higher than the rate for non-Indigenous children in all jurisdictions (except Tasmania, where data should be interpreted with care as there were many children for whom Indigenous status was unknown) (figure 4.10.2).

Figure 4.10.3 Children aged 0–16 years who were the subject of a substantiation: type of abuse or neglect^{a, b, c, d}



^a Non-Indigenous includes Indigenous status not stated. ^b If a child was the subject of a substantiation for more than one type of abuse or neglect, then type of abuse and/or neglect is classified as the type most likely to be the most severe in the short term or most likely to place the child at risk in the short term, or if such an assessment is not possible, to the most obvious form of abuse. ^c In 2001-02 and 2002-03, the category 'other' was used in NSW and comprised of children identified as being at high risk but with no identifiable injury; Queensland data related to children aged 0–17 years; Tasmanian data are not included due to the very small Indigenous numbers. ^d NSW data are not included in 2003-04 because NSW was unable to provide data due to the implementation of a new data system.

Source: AIHW (unpublished), derived from *Child Protection Notifications, Investigations and Substantiations, Australia* data collection; tables 4A.10.2–8.

Variations in the distribution of types of abuse or neglect over time are likely to be the result of differences in the classification of substantiations by jurisdictions, as well as differences in the types of incidents that are substantiated (figure 4.10.3).

From 2001-02 to 2007-08, for both Indigenous and non-Indigenous children, the proportion of:

- physical abuse substantiations have decreased (27.5 per cent to 21.9 per cent and 27.0 per cent to 26.1 per cent, respectively) — though over the last two years the proportions have increased
- substantiations for sexual abuse decreased (9.5 per cent to 7.7 per cent and 14.6 per cent to 11.8 per cent, respectively) — though over the last two years the proportions have increased
- emotional abuse substantiations have increased (22.6 per cent to 34.5 per cent and 28.2 per cent to 38.0 per cent, respectively)
- neglect substantiations were relatively stable (36.7 per cent to 35.9 per cent and 25.8 per cent to 24.1 per cent (tables 4A.10.2–8).

Nationally in 2007-08, the substantiation rate was highest for neglect for Indigenous children (12.7 per 1000 children) and for emotional abuse for non-Indigenous children (2.1 per 1000 children) (table 4A.10.2).

Attachment tables 4A.10.2–8 include the number of children and the rate per 1000 children aged 0–16 years who were the subject of a substantiation, by type of abuse or neglect by State and Territory for the period 2001-02 to 2007-08.

Children on care and protection orders

The data on substantiations show those instances where authorities were notified, and subsequently decided, that a child was or could be at risk. Once a matter has been substantiated, the authorities have a number of options available to them:

- working with the family to address protective issues
- developing networks of support for the child
- monitoring and reviewing the safety of the child
- monitoring and reviewing family progress against case planning goals
- case conferences with agencies providing services to the child
- specialist child-focused therapeutic support
- a care and protection order (SCRCSSP 2003).

The Australian and WA governments are working in partnership to provide another avenue for child protection officers in WA to support families. Under the Income Management for Child Protection initiative, the WA Department for Child Protection can request Centrelink to manage a person's income support payments, where they consider a child is being neglected and that poor financial management has contributed to that neglect. Section 8.4 (Income support) has more information on this program.

A care and protection order involves a court order for protective reasons. A range of alternative services can be provided without a court order being granted, so not all substantiations will lead to a care and protection order. The use of court orders could be associated with:

- the speed of response required (that is, an emergency response)
- the family not engaging with the relevant agency over a period of time
- a change of circumstances that increases the risk to the child or young person (SCRCSSP 2003).

Some children are on care and protection orders for reasons other than abuse or neglect; for instance, where there is an irretrievable breakdown in the relationships in the family or where the parents are unwilling or unable to care for the child. However, given that legal intervention is usually a last resort, care and protection orders may provide some insight into the most serious and/or long-term instances of child abuse and neglect.

There are variations across states and territories in the types of care and protection orders that can be issued, but 'care and protection' orders include:

- *Guardianship or custody orders*: these orders involve the transfer of legal guardianship or custody to an authorised department or individual.
- *Third party parental responsibility orders*: these orders transfer all duties, powers, responsibilities and authority, that parents are entitled to by law, to a third party, which may be another individual such as a relative, or an officer of the state.
- *Supervision and other finalised orders*: these orders give the State or Territory department some responsibility for the child's welfare. This category may also include voluntary orders.
- *Interim and temporary orders*: these orders generally provide for a limited period of supervision and/or placement of a child.

- *Administrative arrangements*: these are agreements with the child protection departments, which have the same effect as a court order of transferring custody or guardianship.

Care should be taken in interpreting data on care and protection orders. It is a proxy indicator because no data exist on actual levels of child abuse or neglect. The data collected by state and territory departments may under-estimate the true extent of abuse or neglect occurring within both the Indigenous and non-Indigenous communities.

Table 4.10.1 Children (0–17 years) on care and protection orders, 30 June 2008^a

	Number of children			Rate per 1000 children			Ratio Indigenous to Non- Indigenous
	Indigenous	Non- Indigenous	Total	Indigenous	Non- Indigenous	Total	
NSW	3 380	8 706	12 086	51.9	5.6	7.4	9.3
Victoria	977	6 899	7 876	74.1	5.8	6.5	12.9
Queensland	2 216	4 824	7 040	35.0	4.9	6.8	7.1
WA	1 279	1 815	3 094	41.0	3.7	6.0	11.0
SA	540	1 657	2 197	45.0	4.8	6.2	9.3
Tasmania	139	775	914	16.9	7.0	7.7	2.4
ACT	117	435	552	60.1	5.7	7.0	10.6
NT	363	157	520	14.6	4.2	8.4	3.5
Australia	9 011	25 268	34 279	41.0	5.3	6.9	7.7

^a Non-Indigenous includes Indigenous status not stated.

Source: AIHW (unpublished), derived from *Children on Care and Protection Orders, Australia* data collection; table 4A.10.10.

As at 30 June 2008:

- the rate of children on care and protection orders was 41.0 per 1000 children for Indigenous children and 5.3 per 1000 children for non-Indigenous children (table 4.10.1).

From 1999-2000 to 2007-08:

- the rate of Indigenous children on care and protection orders increased from 19.9 per 1000 children to 41.0 per 1000 children — for non-Indigenous children the rate increased from 3.3 per 1000 children to 5.3 per 1000 children (table 4A.10.9).

Placement in accordance with the Aboriginal Child Placement Principle

The Aboriginal Child Placement Principle outlines a preference for placement when Indigenous children need to be placed in out-of-home care. Children who are in out-of-home care may or may not be subject to a care and protection order.

Subject to an over-riding concern for the safety and wellbeing of Indigenous children, the principle supports the maintenance of the Indigenous child's cultural ties and identity while in out-of-home care, by placing Indigenous children with family or other Indigenous people. According to the Aboriginal Child Placement Principle (NLRC 1997), the following hierarchy or placement preference should be pursued in protecting the safety and welfare of Indigenous children:

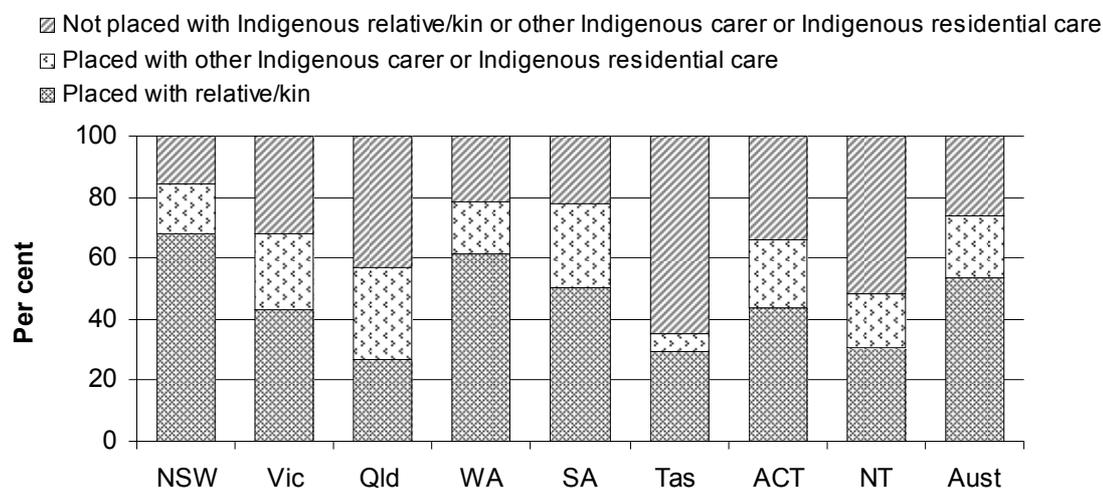
- placement with the child's extended family (which includes Indigenous and non-Indigenous relatives/kin)
- placement within the child's Indigenous community
- placement with other Indigenous people.

All jurisdictions have now adopted this principle in both legislation and policy.

Placing Indigenous children in circumstances consistent with the Aboriginal Child Placement Principle is generally considered to be in their best interests. While it is desirable that children be placed in accordance with the principle, this is one factor among many that must be considered in the placement decision. Consultations with Indigenous people have highlighted that the safety of the child needs to be paramount in applying this principle. This may mean that on occasions, placement with a non-Indigenous carer is warranted.

Data are reported separately for children placed (i) with relative/kin, (ii) with other Indigenous carer or in Indigenous residential care, and (iii) not placed with relative/kin, other Indigenous carer or in Indigenous residential care.

Figure 4.10.4 Placement of Indigenous children in out-of-home care, 30 June 2008^{a, b, c, d, e}



^a The denominator for calculating the percentage of children placed in accordance with the principle excludes Indigenous children living independently and those whose living arrangements were unknown. ^b In WA, a small number of children are placed with externally arranged foster carers who are also their relative and have been recorded in the foster care category. ^c SA can only provide the number of children in out-of-home care where the Department is making a financial contribution to the care of a child. ^d Tasmania is not able to adhere to the new AIHW definition of out-of-home care for 2007-08 to include children in care where a financial payment has been offered but has been declined by the carer. However, the number of carers declining a financial payment is likely to be very low. ^e In the NT, Indigenous children placed with family members have all been included in the 'Indigenous relative/kin' category.

Source: AIHW (unpublished), derived from *Children in Out-of-Home Care, Australia* data collection; table 4A.10.15.

As at 30 June 2008:

- the proportion of Indigenous children in out-of-home care who were placed with Indigenous or non-Indigenous relatives or kin or with another Indigenous carer or in Indigenous residential care varied across jurisdictions (figure 4.10.4).

Sexually transmitted infection diagnoses in children and child sexual assault victims

There is growing awareness of the prevalence of child sexual abuse in some Indigenous communities (ACSAT 2006; Coorey 2001; Dunne et al. 2006; Keel 2004; Lawrence 2006; Memmott et al. 2001; NT 2006; Robertson 2000; SNAICC 2004, 2005; Stanley 2003; Stanley et al. 2002; Stanley, Tomison and Pocock 2003). 'Little Children are Sacred', the final report of the Northern Territory Board of Inquiry into the Protection of Aboriginal Children from Sexual Abuse (2006), identified child sexual abuse as a significant issue for many of the remote NT Aboriginal communities consulted as part of the Inquiry.

A recent report (O'Brien 2008) has noted the increasing problem of Indigenous children engaging in problem sexual behaviour. The familial breakdown, poverty, educational difficulties, violence, prior victimisation, homelessness, isolation and child sexual abuse suffered by some Indigenous children provide the risk scenarios and pathways to both child sexual exploitation, and problem sexual behaviour in childhood. The fact that these precursors are both disproportionately evident and often normalised in Indigenous communities significantly increases the risk that Indigenous children will become involved in childhood problem sexual behaviour and/or sexual exploitation (O'Brien 2008).

Data on the rate of STIs in children is not a reliable measure of the rate of child sexual abuse. A greater rate of STIs in Indigenous children may be a result of the higher prevalence of STIs in the Indigenous adult population rather than a greater rate of abuse. However, as Abbott (2006) commented '...it's hard to see how sexually transmitted diseases in very young patients can be the result of anything other than abuse'.

New diagnoses of genital chlamydia, gonorrhoea and syphilis are notifiable conditions in all states and territories of Australia. However, data limitations mean that information on the number of diagnoses of chlamydia, gonorrhoea and syphilis by Indigenous status are only available for selected jurisdictions (see footnote for table 4.10.2).

Notifications are collated in the Australian National Notifiable Diseases Surveillance System (NNDSS), which records a unique record reference number, State or Territory identifier, disease code, date of onset, date of notification to the relevant health authority, sex, age, Indigenous status and postcode of residence.

Table 4.10.2 Number of diagnoses of chlamydia, gonorrhoea and syphilis in children by age group, 2003–07^a

	<i>Chlamydia</i> ^b		<i>Gonorrhoea</i> ^b		<i>Syphilis</i> ^{b, c}		<i>Total STIs</i>	
	0–4	5–14	0–4	5–14	0–4	5–14	0–4	5–14
Indigenous	18	624	43	767	–	24	61	1415
Non-Indigenous ^d	61	455	7	103	1	9	69	567

^a Data for children aged 0–4 may include children who acquired the infection through non-sexual contact (for example in-utero or at birth). ^b Only jurisdictions for whom greater than 50 per cent of diagnoses included information on Indigenous status are included in this table: chlamydia (Victoria, WA, SA, Tas and the NT); gonorrhoea (Victoria, Queensland, WA, SA and the NT); and, infectious syphilis (all jurisdictions except the ACT). ^c Data for infectious syphilis covers the years 2004–07 only. ^d Includes diagnoses in people whose Indigenous status was not reported. – Nil or rounded to zero.

Source: NNDSS published in NCHECR (2008).

For the period 2003–07:

- numbers of diagnoses of chlamydia, gonorrhoea and syphilis were higher for both Indigenous and non-Indigenous children aged 5 to 14 years than for children aged under four years
- the number of Indigenous children diagnosed with a STI was higher than the number of non-Indigenous children diagnosed, except for children aged under 4 years for diagnoses of chlamydia and syphilis. Given that Indigenous children comprise a small proportion of the total child population they are significantly over-represented in the numbers of children diagnosed with a STI.

Police administrative data on child sexual assault victims for NSW, Victoria, Queensland, WA and the NT are reported in attachment tables 4A.11.37–107. These data are not comparable across jurisdictions. See section 4.11 for more information on family and community violence.

4.11 Family and community violence

Box 4.11.1 Key messages

- Indigenous people were hospitalised as a result of spouse or partner violence at 33.9 times the rate of non-Indigenous people (table 4.11.1) Indigenous females and males were 35.1 and 21.4 times as likely to be hospitalised due to family violence related assaults as non-Indigenous females and males (table 4A.11.2).
- Indigenous females sought Supported Accommodation Assistance Program assistance in 2006-07 to escape family violence at the rate of 45.0 per 1000 population compared with 3.3 per 1000 population for non-Indigenous females (table 4A.11.32).
- Nationally, the Indigenous homicide death rate (5.9 per 100 000 population) was 7.4 times the non-Indigenous homicide death rate (0.8 per 100 000 population) between 2003–2007 (figure 4.11.2).

There is no nationally agreed definition of domestic violence or family violence. To many people, domestic violence implies violence by a partner, and may also be known as intimate partner violence, spousal violence, spousal abuse, wife abuse and personal violence or battering (AIHW 2006). Family violence is often regarded as a broader category, including violence by extended family or household members. The lack of a common definition means that accurately reporting and comparing data on family and community violence is difficult.

Definitions vary between jurisdictions, studies, organisations and cultures. The term ‘family violence’ is the preferred term to identify the experiences of Indigenous people, because it includes the broad range of marital and kin relationships in which violence may occur. Indigenous people may view family violence as occurring between members of their larger family network, including aunts, uncles, grandparents, cousins and others in the wider community, whereas non-Indigenous people may view family violence as violence within the immediate family only (HREOC 2008; Macdonald 2001).

Data on family and community violence in this section include:

- incidence and prevalence data (survey data)
- data on associated harm (deaths resulting from family and intimate partner violence and hospitalisations for family violence related assault)
- data on services for victims of violence (persons accessing the Supported Accommodation Assistance Program (SAAP) because of family violence)
- police data on victims of assault and other violence (including data on the relationship between victim and perpetrator).

These sources under-estimate the true extent of family and community violence as they only capture reported violence. Not all victims report violence or seek assistance.

There is a growing body of literature highlighting the extent of violence in Indigenous communities, particularly family violence (Clapham, Stevenson and Lo 2006; Gordon, Hallahan and Henry 2002; HREOC 2006; Memmott et al. 2001; Mouzos 2001). In the past few years, for example, several reports have been released — the *Little Children are Sacred* report (Anderson and Wild 2007), *Breaking the Silence: Creating the Future* (NSW ACSAT 2006), *Risk factors in Indigenous Violent Victimisation* (Bryant and Willis 2008) and the *Evaluation of the FaCSIA Family Violence Programs: Family Violence Regional Activities Program — Family Violence Partnership Program* (OEA 2007).

Family and community violence problems are complex. They are interrelated with other health issues, and socioeconomic and environmental conditions (Stanley 2005; Clapham, Stevenson and Lo 2006; Matthews 1997). Alcohol and substance use have also been identified as common contributing factors to violence in Indigenous communities (HREOC 2006; Gordon, Hallahan and Henry 2002; Memmott et al. 2001; Mouzos 2001; Weatherburn, Snowball and Hunter 2006). Sections 10.3 and 10.4 provide more information on the role of alcohol and drug and substance misuse in Indigenous homicides.

The presence of family violence is a strong predictor of child abuse (Goddard and Hiller 1992; Stanley and Goddard 2003; Taft, Hegarty and Feder 2006), and partner violence has a damaging effect on children’s emotional, behavioural and cognitive development (ARACY 2008; Stanley and Goddard 2003; Taft, Hegarty and Feder 2006). Family violence is a reason for notification to State and Territory child protection authorities. In NSW and Tasmania, child protection legislation requires mandatory reporting of children affected by domestic violence. In all other states and territories, family violence is categorised as ‘emotional abuse’. For more information on substantiated child abuse and neglect see section 4.10.

There is a lack of information about the extent of family and community violence across different geographic regions. A report on violence in rural and remote Australia acknowledged that, from the limited literature available, there are higher rates of family violence in rural and remote areas, particularly in Indigenous communities (NHMRC 2002). Mouzos (2001) found that, compared to non-Indigenous homicides, Indigenous homicides are more likely to occur in non-urban areas. However, this may be expected because there are proportionally more Indigenous than non-Indigenous people residing in non-urban areas.

Some initiatives that have been successful in reducing family and community violence are described in box 4.11.2. Programs that reduce alcohol misuse can help reduce violent behaviour in Indigenous communities — examples are included in section 10.3. Programs that reduce the involvement of Indigenous people in the criminal justice and corrections systems or that lower rates of reoffending can also contribute to reducing violent crime — for examples see sections 4.12, 10.5 and 10.6.

Prevalence of violence

Survey data provide the best estimates of the prevalence of violence, but available data are somewhat dated. A more detailed presentation of these data was included in the 2005 report. Data from the Australian Bureau of Statistics (ABS) 2002 National Aboriginal and Torres Strait Islander Social Survey found that:

- 18.3 per cent of Indigenous women experienced physical or threatened violence in the previous 12 months, compared with 7.0 per cent of non-Indigenous women (SCRGSP 2005)
- of the 24.3 per cent of Indigenous people aged 15 years or over who had been a victim of violence in the past 12 months, around one third were living in households with Indigenous children under five years of age (ABS 2004).

Box 4.11.2 'Things that work' — reducing violence in Indigenous communities

Rekindling Indigenous Family Relationships in Riverland (SA) is an early intervention project, assisting the Aboriginal community to resolve family violence and child abuse issues. A key component of the project is the delivery of the Family Wellbeing (FWB) Program. The FWB program focuses on understanding conflict, emotions and effective resolution, changing family violence patterns, self development and building healthy relationships. Since the program commenced in 2006, 64 Indigenous people have completed components of the program (most have completed the Certificate II and/or Certificate III in Family Wellbeing). Twelve Indigenous people have also completed a Certificate IV in Training and Assessment and are now qualified to run the program. Many of the participants have gained confidence and vocational skills that have helped them go on to employment and further education for the first time (SA Government unpublished).

The **Family and Community Healing Program (Adelaide, SA)** comprises inter-related group activities for Aboriginal women, men and youth built around community engagement. The focus of the program is to equip people with the skills for effective communication and conflict resolution. The program has been running for over 2 years and was formally evaluated in 2007-08 using participatory action research. Strengths of the program include evidence-based design, holistic approach, clinical focus, peer support, mentoring, and Indigenous cultural focus. Some of the findings from the evaluation were:

- clients reported increased self esteem, confidence and cultural connection. They also stated that the program equipped them with the skills and knowledge to move out of a life of violence and onto a journey of healing
- clients gained communication and conflict resolution skills through participation in the program, which enabled them to address the reasons for, and consequences of, family violence (Kowanko and Power 2008).

The **Kalparrin Spirited Men's Project (SA)** is a male perpetrator's program that aims to encourage positive parenting and educate Indigenous men about the detrimental effects of family violence. The program encourages Indigenous men to talk about family violence, and participate in anger management counselling, substance misuse education and cultural affirmation activities. Participants are referred to the program from the local Community Corrections Offices, the SA Parole Board, the Kalparrin Substance Rehabilitation facility as well as some participants being mandated by courts to attend. There were 15 initial participants in the program, with attendance at one-on-one and group counselling increasing to 27 men. The program has also been extended to 10 prisoners.

Associated harm data

Health records provide some information on instances of family violence that result in hospitalisation or death. These sources are likely to under-estimate the true extent of family and community violence because not all victims seek medical attention and not all hospitalisations resulting from family violence will be recorded as such.

Table 4.11.1 Non-fatal hospitalisations for assault, by relationship of victim to perpetrator, NSW, Victoria, Queensland, WA, SA and public hospitals in the NT, per 1000 people, age standardised, 2006-07^{a, b}

	<i>Indigenous</i>	<i>Non-Indigenous^c</i>	<i>Indigenous to Non-Indigenous ratio^d</i>
Family violence assaults			
Spouse/domestic partner	3.3	0.1	33.9
Parent	0.3	–	12.0
Other family member	1.3	–	31.8
<i>Total family violence assaults</i>	4.8	0.2	30.3
Other assaults ^e	8.3	0.9	9.4
<i>Total assaults^f</i>	13.1	1.0	12.5

^a Non-fatal refers to records where the hospitalisation did not end in death. Separations were based on ICD-10-AM codes for assault X85–Y09. ^b Rate per 1000 population was directly age standardised using the 2001 Australian population. ^c Non-Indigenous includes hospitalisations where Indigenous status was unknown. ^d The ratio is equal to the hospitalisation rate for Indigenous people divided by the hospitalisation rate for non-Indigenous people. ^e 'Other assaults' includes assault by a carer, acquaintance or friend, official authorities, other specified person, person unknown to the victim, multiple persons unknown to the victim or an unspecified person. ^f More than one external cause can be reported for each hospitalisation. – Nil or rounded to zero.

Source: AIHW National Hospital Morbidity Database (unpublished); table 4A.11.2.

In 2006-07:

- Indigenous people were hospitalised as a result of spouse or partner violence at 33.9 times the rate of non-Indigenous people (table 4.11.1). Indigenous females and males were 35.1 and 21.4 times as likely to be hospitalised due to family violence related assaults as non-Indigenous females and males (table 4A.11.2).
- hospitalisation rates for family violence related assault were highest among Indigenous females aged 25–34 years (15.9 per 1000) (table 4A.11.1)
- for Indigenous and non-Indigenous females, approximately half of the hospitalisations for assault were related to family violence (table 4A.11.2).

More hospital data for total assaults by sex and age groups, for 2004-05 to 2006-07 in NSW, Victoria, Queensland, WA, SA and public hospitals in the NT can be found in tables 4A.11.3–4A.11.5.

-
- From 2004-05 to 2006-07 there was no change in hospitalisations rates for assault for Indigenous males, Indigenous females, non-Indigenous males, and non-Indigenous females.

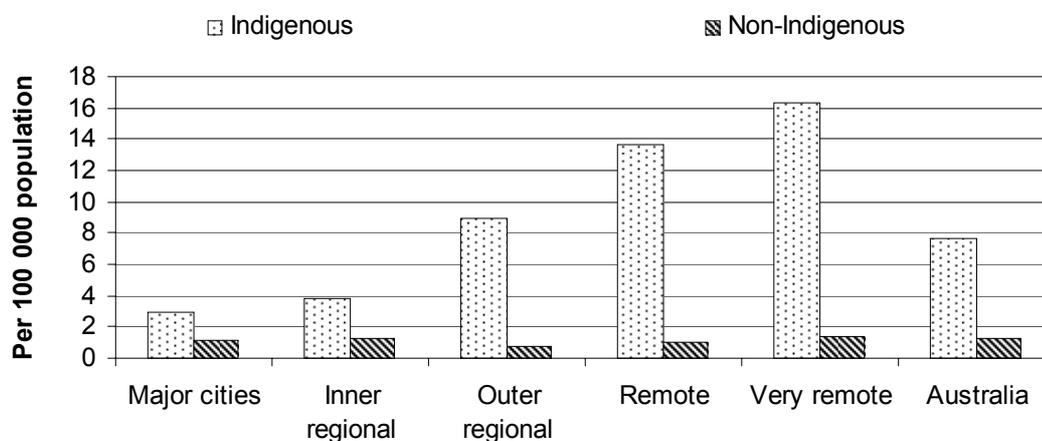
Most hospitalisation data used in this section are for six jurisdictions: NSW, Victoria, Queensland, WA, SA, and the NT. These data have sufficient levels of Indigenous identification for 2004-05 to 2006-07. Longer time series data for Queensland, WA, SA and the NT from 2001-02 to 2006-07 are included in attachment tables 4A.11.6–11. From 2001-02 to 2006-07, there was no clear trend in hospitalisation rates for assault for Indigenous and non-Indigenous people. Hospitalisation data for these four states and territories should not be assumed to represent the hospitalisation experience in the other jurisdictions.

Indigenous people are much more likely to be both victims and perpetrators of homicide than other Australians (AIC 1993; Mouzos 2001). The next part of this section reports data on homicides from the Australian Institute of Criminology (AIC) and the ABS. Australian Institute of Criminology homicide data are based on police records whereas ABS homicide deaths data are based on death registration (see appendix 4). Despite the differences in collections, the AIC and ABS data allow for some detailed examination of the circumstances and characteristics of homicide occurring in the Indigenous and non-Indigenous populations.

Figure 4.11.1 presents homicide rates by remoteness. These data should be interpreted with caution. Data for five years have been combined for this analysis to reduce the effect of fluctuations from year to year in the relatively small annual number of homicides. Homicides have been assigned to remoteness areas by the AIC using an ABS concordance of postcodes to remoteness areas. However, it is not always possible to assign homicides precisely to remoteness areas, because postcode and remoteness area boundaries may not coincide and postcodes, particularly in regional and remote areas, may cover more than one remoteness area. Population denominators derived for this analysis may also have a margin of error.⁹ It is not known whether the likelihood of Indigenous people being identified as Indigenous in the AIC homicide monitoring data varies by remoteness area. In some other data collections, the likelihood of Indigenous people being identified as Indigenous increases with remoteness.

⁹ Population denominators for remoteness areas have been derived by applying the proportions of Indigenous people living in each remoteness area in 2001 to experimental estimates and projections (low series) of the Indigenous population published by the ABS. Non-Indigenous denominators have been derived by applying proportions of non-Indigenous people in each remoteness area in 2001 to non-Indigenous population estimates derived by subtracting ABS Indigenous population projections from the ABS total Estimated Resident Population for each year.

Figure 4.11.1 Homicide rate, by remoteness, 2002-03 to 2006-07^{a, b, c}



^a Indigenous homicides are where both victims and offenders of homicide are Aboriginal and/or Torres Strait Islanders. Non-Indigenous homicides are where neither the victim nor the offender is Indigenous. ^b Excludes cases where Indigenous status of victim is unknown or remoteness area of homicide incident is unknown. ^c Population denominators for remoteness areas have been derived by applying the proportions of Indigenous people living in each remoteness area in 2001 to experimental estimates and projections (low series) of the Indigenous population published by the ABS. Non-Indigenous denominators have been derived by applying proportions of non-Indigenous people in each remoteness area in 2001 to non-Indigenous population estimates derived by subtracting ABS Indigenous population projections from the ABS total Estimated Resident Population for each year. Therefore, data should be used with caution.

Source: Australian Institute of Criminology, National Homicide Monitoring Program, 2006-2007 [computer file]; ABS 2004, *Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians, 1991 to 2009*, Cat. no. 3238.0; table 4A.11.15.

- Data on homicide by remoteness show that, from 2002-03 to 2006-07, the rate of Indigenous homicides increased with remoteness, and was higher than the non-Indigenous homicide rate in all remoteness areas (figure 4.11.1).
- In 2006-07, a higher proportion of Indigenous homicides than non-Indigenous homicides took place within families (77.5 per cent compared with 42.0 per cent) (table 4A.11.19).
- Based on AIC data, in 2006-07, there were 247 homicide incidents where Indigenous status could be determined, of which 31 (12.6 per cent) were Indigenous homicides,¹⁰ 200 (81.0 per cent) were non-Indigenous homicides and the remaining 16 (6.5 per cent) were inter-racial homicides (table 4A.11.19).

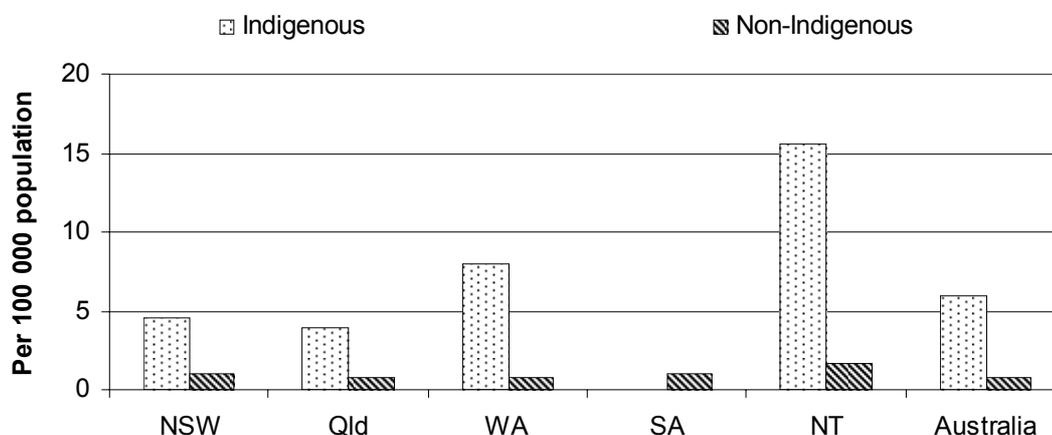
¹⁰ Indigenous homicides refers to homicides where both victims and offenders of homicide are either Aboriginal and/or Torres Strait Islanders; non-Indigenous homicides refers to homicides where both victims and offenders are not Indigenous but are Caucasian, Asian and Maori/Pacific islanders; and inter-racial homicides where either the victim or the offender, but not both, is Indigenous (AIC unpublished 2003).

-
- Nationally, from 2002-2003 to 2006-07, the Indigenous homicide rate (7.7 per 100 000) was much higher than the non-Indigenous homicide rate (1.3 per 100 000) (figure 4.11.1).
 - Most Indigenous victims and offenders (eight out of ten cases in 2006-07 compared to four out of ten for non-Indigenous homicides) were unemployed at the time of the homicide (table 4A.11.19). However, this is not unexpected given the higher unemployment rate for Indigenous people (see section 4.6).
 - In 2006-07, domestic altercation was the most common motive identified in Indigenous homicides (45.2 per cent). Domestic altercation was a much more common motive for Indigenous homicides than for non-Indigenous homicides (22.0 per cent). The most common motive in non-Indigenous homicides was ‘other arguments’ (37.0 per cent) (table 4A.11.19).¹¹

Further information on the circumstances and characteristics of homicide occurring in the Indigenous and non-Indigenous populations is included in tables 4A.11.12–22.

¹¹ Other arguments refers to argument over money/drugs, revenge, and racial/sexual vilification (hate crimes), sexual gratification, envy, and other motives.

Figure 4.11.2 Homicide death rates, age standardised, by jurisdiction, 2003–2007^{a, b, c, d, e}



^a Deaths from homicide are defined as causes of death with ICD codes X85–Y09 and Y87.1. ^b Data on deaths of Aboriginal and Torres Strait Islander Australians are affected by differing levels of Indigenous identification across states and territories. Care should be exercised in analysing these data, particularly in making comparisons across states and territories and between Indigenous and non-Indigenous data. ^c Calculations of rates for the Indigenous population are based on ABS *Experimental Projections, Aboriginal and Torres Strait Islander Australians* (low series, 2001 base). There are no comparable population data for the non-Indigenous population. Calculations of rates for the non-Indigenous population are based on data derived by subtracting Indigenous population projections from total population estimates and should be used with care. ^d Non-Indigenous includes deaths with a 'not stated' Indigenous status. ^e Australia includes NSW, Queensland, WA, SA and the NT combined.

Source: ABS *Causes of Death, Australia*, Cat. no. 3303.0 (unpublished); table 4A.11.23.

- After adjusting for age differences, for those jurisdictions for which data were available, there was a higher rate of homicide in the Indigenous population than the non-Indigenous population.
- From 2003–2007, for those jurisdictions for which data are available, the Indigenous homicide rate was 7.4 times as high as the non-Indigenous homicide rate (the Indigenous homicide death rate was 5.9 per 100 000 population and the non-Indigenous death rate was 0.8 per 100 000) (table 4A.11.23).
- Homicide death rates for Indigenous people were particularly high for people in the age groups 25–34 and 35–44 years (table 4A.11.24).

Non-age standardised homicide death rates for males and females are included in table 4A.11.25.

Victim support data

The Supported Accommodation Assistance Program (SAAP) National Data Collection provides information on the number of people seeking assistance from

agencies funded under the SAAP. Reasons for seeking accommodation support include financial difficulties, substance abuse, homelessness and family violence.

Supported Accommodation Assistance Program data under-estimate the true extent of family violence occurring within the community, because not all victims of violence access these services and victims may be turned away because the support required cannot be provided (AIHW 2006). In August 2006 and May 2007 there were an average of 90 Indigenous people per day with valid unmet requests for assistance (table 4A.11.26).

In 2006-07:

- escaping family violence was the main reason Indigenous and non-Indigenous people sought SAAP assistance (28.8 per cent and 21.9 per cent, respectively) (table 4A.11.30)
- the rate of Indigenous females escaping family violence was 45.0 per 1000 population compared with 3.3 per 1000 population for non-Indigenous females (table 4A.11.32)
- for both Indigenous and non-Indigenous people, domestic violence affects a large proportion of children in SAAP. Of the 42 500 SAAP clients who sought assistance to escape family violence, over half of both Indigenous and non-Indigenous clients had accompanying children (tables 4A.11.28 and 4A.11.30).
- Indigenous children accompanying SAAP clients escaping family violence attended a SAAP agency at a rate of 569 per 10 000 Indigenous children, while for non-Indigenous children it was 66 per 10 000 (table 4A.11.31).

More information on the reasons people sought SAAP support in 2005-06 and 2006-07, by Indigenous status and jurisdiction can be found in tables 4A.11.27–30 and tables 4A.11.33–36.

State and Territory police records

There is no national data collection on Indigenous crime victimisation reported to police. The next part of this section is based on available data from some jurisdictional police collections. Data on crime victimisation for selected offences were available for NSW, Victoria and Queensland. For Victoria and Queensland the offence category ‘assault’ includes ‘domestic violence related assault’ (that is, domestic violence related assault is a subset of assault). Data from other jurisdictions are not published in this report, either because there is no process to

identify Indigenous people in data collections or, where Indigenous status is collected, data are not of sufficient coverage or quality to publish.

However, there are several limitations to using police records to measure family and community violence. For example, data do not represent all victims of crime, just those that come to the attention of, and whose details are recorded by, police. In addition, data presented generally reflect victims of violent criminal incidents where the violent incident was reported to, or otherwise detected by, police. Finally, the tendency to report criminal victimisation to police may differ between Indigenous and non-Indigenous people (and there is no way of estimating the level of under-reporting).

There is no national collection for domestic and family violence statistics for all people, including Indigenous people. Some jurisdictions have data disaggregated by Indigenous status, but there are no standard definitions used to identify cases of domestic and family violence. The police data are not comparable between states and territories and are subject to the caveats included in the attachment tables.

In NSW, in 2007:

- Indigenous people were five and a half times as likely to be a victim of domestic violence as non-Indigenous people (table 4A.11.37)
- Indigenous women were 6.2 times as likely to be a victim of domestic violence as non-Indigenous women (table 4A.11.43)
- for Indigenous people, the spouse was the offender in 38.7 per cent of domestic violence related assault offences (compared with 37.2 per cent for non-Indigenous) (table 4A.11.49)
- for both Indigenous and non-Indigenous people, offences against the person are most likely to occur in residential dwellings (61.4 per cent of offences against Indigenous people occurred in residential dwellings compared with 45.6 per cent for non-Indigenous people) (table 4A.11.52).

More information (from NSW Bureau of Crime Statistics and Research) on murder, assault and sexual assault against victims can be found in tables 4A.11.37–42. More information on female victims is in tables 4A.11.43–48. Information on relationships of offenders to victims is in tables 4A.11.49–54.

In Victoria, in 2007-08:

- Indigenous people were 4.5 times as likely to be a victim of domestic violence related assault as non-Indigenous people (table 4A.11.55)
- for Indigenous females, the rate of domestic violence related assault was five times as high as the rate for non-Indigenous females (table 4A.11.61)

-
- Indigenous juveniles (under 18 years of age) were 2.3 times as likely to be a victim of domestic violence as non-Indigenous juveniles (table 4A.11.67)
 - the offender was a family member in 64.8 per cent of the domestic violence related assault cases for both Indigenous and non-Indigenous people (table 4A.11.73).
 - for Indigenous people most offences against the person occurred in a dwelling (59.2 per cent) (table 4A.11.77).

More information (from Victoria Police) on murder, assault and sexual assault against victims can be found in tables 4A.11.55–80.

In Queensland, in 2007-08:

- Indigenous people were 17.8 times as likely as non-Indigenous people to be a victim of domestic violence related assault (table 4A.11.81)
- The rate of domestic violence for Indigenous females was 21.2 times as high as the rate for non-Indigenous females (table 4A.11.85)
- in 69 per cent of Indigenous domestic violence related assaults, the offender was a family member. For non-Indigenous people, 57 per cent of domestic violence related assaults were committed by a family member (table 4A.11.89)
- for Indigenous people, offences against the person most commonly occurred in a dwelling (60 per cent), while for non-Indigenous people most offences against the person occurred in a non-residential place (47 per cent) (table 4A.11.93).

Tables 4A.11.81–88 contain data on victims of selected crimes in Queensland. Tables 4A.11.89–96 contain data on Indigenous victim-offender relationships and place of offence for victims of offences against the person.

The 2003 and 2005 reports included data on victimisation rates for WA (tables 4A.11.97–101). WA police record the age, Indigenous status and sex of victims of offences against the person. WA was unable to provide data for the 2007 report because the Indigenous status of the victim was not recorded for a large proportion of offences against the person. Victim offender relationship data were also unavailable because in most cases of offences against the person the relationship was not stated.

SA police started recording the Indigenous status of victims in mid-2007 and should be available for future publication.

Indigenous people in the ACT, were 2.7 times as likely to be victims of assault as non-Indigenous people (1180.4 victims per 100 000 Indigenous people compared with 438.9 per 100 000 non-Indigenous people) (ABS 2008).

4.12 Imprisonment and juvenile detention rates

Box 4.12.1 Key messages

- After adjusting for age differences, Indigenous people were 13.3 times as likely as non-Indigenous people to be imprisoned in 2008 (table 4A.12.3).
- The imprisonment rate increased by 45.5 per cent for Indigenous women and by 26.6 per cent for Indigenous men between 2000 and 2008 (table 4A.12.7).
- Indigenous juveniles were 28 times as likely to be detained as non-Indigenous juveniles at 30 June 2007. The Indigenous juvenile detention rate increased by 26.7 per cent between 2001 and 2007 (figure 4.12.5).

This indicator provides an insight into the level of involvement of Indigenous people in the criminal justice system as offenders. Australia's Indigenous people are highly overrepresented in the criminal justice system, with the proportion of Indigenous people in prisons far exceeding their representation in the community (Willis 2008, Woodward 2003). The NSW Bureau of Crime Statistics and Research found that a higher rate of Indigenous offenders were sent to prison than non-Indigenous offenders because of a higher rate of conviction for violent crime and higher rate of re-offending (Snowball and Weatherburn 2006).

The WA Department of Justice (2002a) highlighted that the early involvement of Aboriginal juveniles in the criminal justice system was likely to place them at significantly greater risk of imprisonment as adults. Lynch, Buckman and Krenske (2003) reported that Indigenous juvenile offenders were more likely than non-Indigenous juvenile offenders to progress to the adult criminal justice system and end up in prison. The study found that 86 per cent of Indigenous juvenile offenders entered the adult correction system, with 65 per cent of them serving at least one prison term. For non-Indigenous juvenile offenders, 75 per cent entered the adult correction system with 41 per cent serving at least one prison term.

Putt, Payne and Milner (2005) found that for many Indigenous male offenders, substance abuse, particularly alcohol intoxication, was associated with criminal behaviour. Further, Weatherburn, Snowball and Hunter (2008) reported that alcohol abuse is the strongest correlate with Indigenous representation in the criminal justice system. The 2008 study also suggest a correlation between Indigenous contact with the criminal justice system and factors including economic stress, welfare dependence and unemployment. Other research has shown that alcohol abuse is a strong factor leading to violent crime; and dependence on illicit drugs was found to increase involvement in crime, due in part to the costs of funding the drug habit (Legislative Council, Standing Committee on Social Issues, 2008).

Adverse socioeconomic conditions in Indigenous communities (such as poverty, unemployment, low levels of educational attainment and lack of access to social services) are associated with high crime rates. The 1991 Royal Commission into Aboriginal Deaths in Custody (RCIADIC) identified links between the formal education system, child welfare practices, juvenile justice, health, and employment opportunities as contributors to the disproportionate representation of Aboriginal people in police and custodial facilities (RCIADIC 1991).

The Royal Commission stated that changes to the operation of the criminal justice system alone will not have a significant impact on the number of Indigenous people entering custody (RCIADIC 1991). Nevertheless, there has been some success in reducing the offending rates of Indigenous people by implementing culturally appropriate justice practices. Box 4.12.2 describes the success of alternative sentencing processes for Indigenous people in SA, Victoria, Queensland and Tasmania.

Box 4.12.2 'Things that work'— Culturally appropriate justice practices

Aboriginal sentencing operates within the SA magistrates courts in Port Adelaide (Nunga court), Port Augusta, Murray Bridge, Ceduna and Berri. The aim of these courts is to make the justice system more culturally appropriate to Indigenous people. The sentencing alternative is available to Indigenous defendants who plead guilty and encourages defendants to address offence related problems, such as drug and alcohol dependency.

The courts aim to reduce arrests for non-appearance by defendants on bail and to break the cycle of Indigenous imprisonment for unpaid fines, by applying alternative penalties including community services and allowing the gradual payment of fines. During 2007-08, 212 defendants appeared in these culturally appropriate courts in SA (SA Government, unpublished; Office of Crime Statistics and Research 2004).

In 2007-08, **Aboriginal conferencing** was introduced in the Magistrates Court, supported by the Youth Court, in the Port Lincoln area, SA. After pleading guilty before sentencing, cultural aspects of the incident are considered with involvement of elders in a restorative conference. Conferencing involves the defendant, members of the Aboriginal community (elders), SA Police and victims, encouraging contrition and reparation, provide a restorative opportunity for victims. After the conference, the coordinator writes a report for the court that the magistrate considers when sentencing. The initiative has been strongly supported by the local community and the magistracy. An independent review found that the process provided an opportunity to address issues underlying offending by linking sentencing to rehabilitative services, and gave more relevant information to magistrates, leading to more effective sentencing. Between September 2007 and June 2008 nine matters referred and seven resulted in a conference. Between July 2008 and March 2009, there were 16 conferences (SA Government, unpublished).

The **Koori Court** in Victoria, was first established in Shepparton, and won an Australian Crime and Violence Prevention Award in 2005. The specialised court within the Magistrates Court created an informal atmosphere allowing greater Koori community participation in sentencing and support programs. A review of the Shepparton and Broadmeadows Koori Courts found that recidivism rates in these areas dropped by 12.5 per cent and 15 per cent, respectively, over a two year period.

Koori Courts have become a permanent part of the Victorian justice system. Courts now sit in Shepparton, Broadmeadows, Mildura, the LaTrobe Valley, Swan Hill, Bairnsdale, and a circuit model operates in Warrnambool and services Portland and Hamilton. The success of the Koori Court in the adult jurisdiction of the Magistrates Court has led to the opening of two Children's Koori Courts based in Melbourne and Mildura. In 2008 the Koori Court opened its first Court in the County Court, at the Latrobe Valley Court House (Victorian Government, unpublished).

(Continued next page)

Box 4.12.2 (continued)

The **Murri Court** is a Queensland Magistrates Court, or Children's Court constituted by a magistrate, which sentences Indigenous offenders pleading guilty to an offence. The Murri Court operates in 14 courts across Queensland, including evaluated Murri Courts in Brisbane, Rockhampton, Townsville, Mount Isa and Caboolture, and non-evaluated Murri Courts in Coen, Cherbourg, Caloundra, Cleveland, Ipswich, Cairns, St George, Mackay and Richlands. The Murri Court takes into account cultural factors by providing a forum where Aboriginal and Torres Strait Islander elders and respected persons have a cultural input into the sentencing process and provide insight into the impacts of offending on the local community. The legal processes of the Murri Court are more informal, less intimidating and where possible, sentences have a rehabilitative focus.

A review of the Murri Court (Parker and Pathé 2006) confirmed that the involvement of elders and respected persons assisted the offenders in developing trust in the court. Since January 2007 to December 2008, 1940 referrals have been made to Murri Courts in the five evaluated courts; this is inclusive of both the adult and children's court jurisdictions. Of the 1940 referrals, 1538 have received a final sentence, 74 have absconded subject to warrant, 221 have been remitted back to arrest court, 3 have received post sentence supervision, 3 have died and the remainder are awaiting sentence (these figures are for the five evaluated courts only) (Parker and Pathé 2006 and Department of Justice and Attorney-General, Queensland Government, unpublished).

The **Meenah Mienne** project in Tasmania brings together at-risk Aboriginal young people and Aboriginal artists to prevent crime and provide care for young people in detention. The project achieves its aims through mentoring and supported arts pathways to education and employment. Activities have included: setting up a community arts centre in Launceston; accepting referrals; facilitating matches between young people and mentor-artists and conducting arts skills workshops.

Outcomes include: improvements in the emotional health, wellbeing and self-esteem of Aboriginal young people; and positive perceptions of cultural identity and networks of kinship and community belonging (Tasmanian Government, unpublished).

The information presented in this section on imprisonment and juvenile detention takes account of only one aspect of Indigenous contact with the criminal justice system. By their nature, the offences which result in imprisonment or juvenile detention tend to be more serious. The data do not address:

- arrests that do not proceed to court (for example, as a result of diversion or restitution) (see section 10.5 'Juvenile diversions')
- convictions that lead to outcomes that are not administered by custodial facilities (for example, community service orders and fines)
- police custody (for example, for public drunkenness).

The data on adult Indigenous imprisonment are from the National Prisoner Census, the results of which are published by the ABS in *Prisoners in Australia* (ABS 2008). The census is a count of all prisoners who are held in adult prisons in Australia, as at midnight on 30 June of each year. The Prisoner Census provides a snapshot of the number of people in prison, and is not representative of the flow of prisoners. People held in juvenile institutions, psychiatric facilities or immigration custody are not included.

People under 18 years are treated as juveniles in most Australian courts and are not held in custody in adult prisons, other than in exceptional circumstances (in Queensland ‘adult’ refers to people aged 17 years and over).

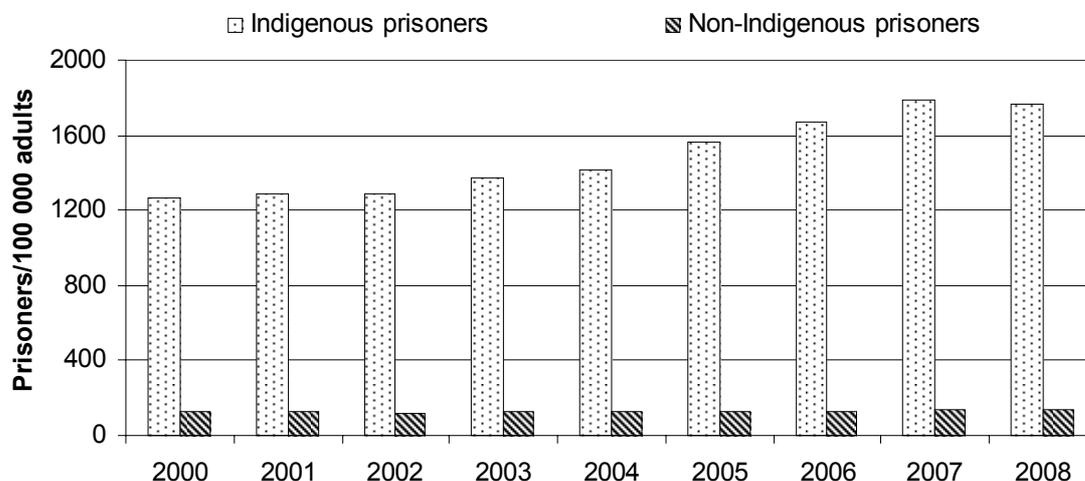
For juvenile detention, the data are sourced from the Australian Institute of Criminology (AIC) publication *Statistics on Juvenile Detention in Australia: 1981–2007* (Taylor 2009). These data contain information on the number of young people in the custody of each jurisdiction’s juvenile justice agency on the last day of each quarter. Only those juveniles detained on each census night are counted, and as such, the count is not necessarily representative of the actual daily average of juvenile detainees in each State and Territory.

While detailed national data are currently available on the number of young people held in juvenile detention centres at the end of each quarter, these data illustrate only one aspect of the juvenile justice system. The vast majority of juveniles in the care of juvenile justice agencies are not placed into detention; rather, they are placed on community service orders or other types of order (Charlton and McCall 2004). In February 2006, the Australian Institute of Health and Welfare (AIHW), in collaboration with the Australasian Juvenile Justice Administrators, released their first report on juvenile justice in Australia for 2000-01 to 2003-04 and has since released three further reports in 2007. These reports publish nationally consistent data on juvenile justice supervision.

Imprisonment

Age standardised imprisonment rates for Indigenous and non-Indigenous people are presented in figure 4.12.1. Age standardisation adjusts for the younger age profile of the Indigenous population compared to the non-Indigenous population (ABS 2004a) — for both populations, younger adults are much more likely to be in prison than older people.

Figure 4.12.1 Age standardised imprisonment rates per 100 000 adult population, by year, Australia^{a, b}



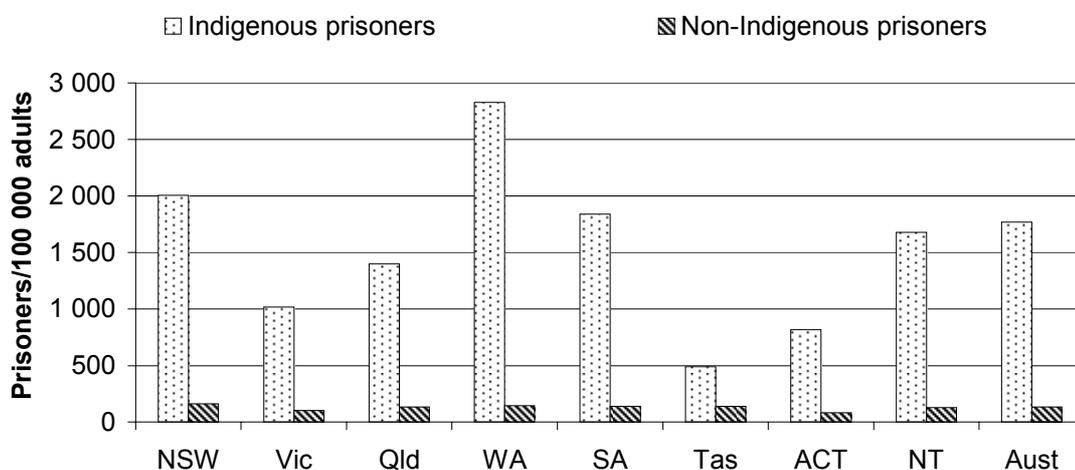
^a Indigenous imprisonment rates are calculated using low series population projections (ABS Cat. no. 3238.0).

^b Rates are based on prisoner census and population data at 30 June each year.

Source: ABS (2008); table 4A.12.4.

- Nationally in 2008, Indigenous people were 13.3 times more likely than non-Indigenous people to be imprisoned, with an age standardised imprisonment rate of 1769.4 prisoners per 100 000 adult Indigenous population compared with 133.3 per 100 000 for non-Indigenous prisoners (figure 4.12.1). This compares to national data from 2000 where Indigenous people were 9.9 times more likely than non-Indigenous people to be imprisoned.
- The number of Indigenous prisoners has increased over the period 30 June 2000 to 30 June 2008. There were 6 706 Indigenous prisoners in Australia at 30 June 2008, increasing over the period from 4 095 Indigenous prisoners counted at 30 June 2000 (table 4A.12.1).

Figure 4.12.2 **Age standardised imprisonment rates per 100 000 adult population, 30 June 2008^{a, b}**



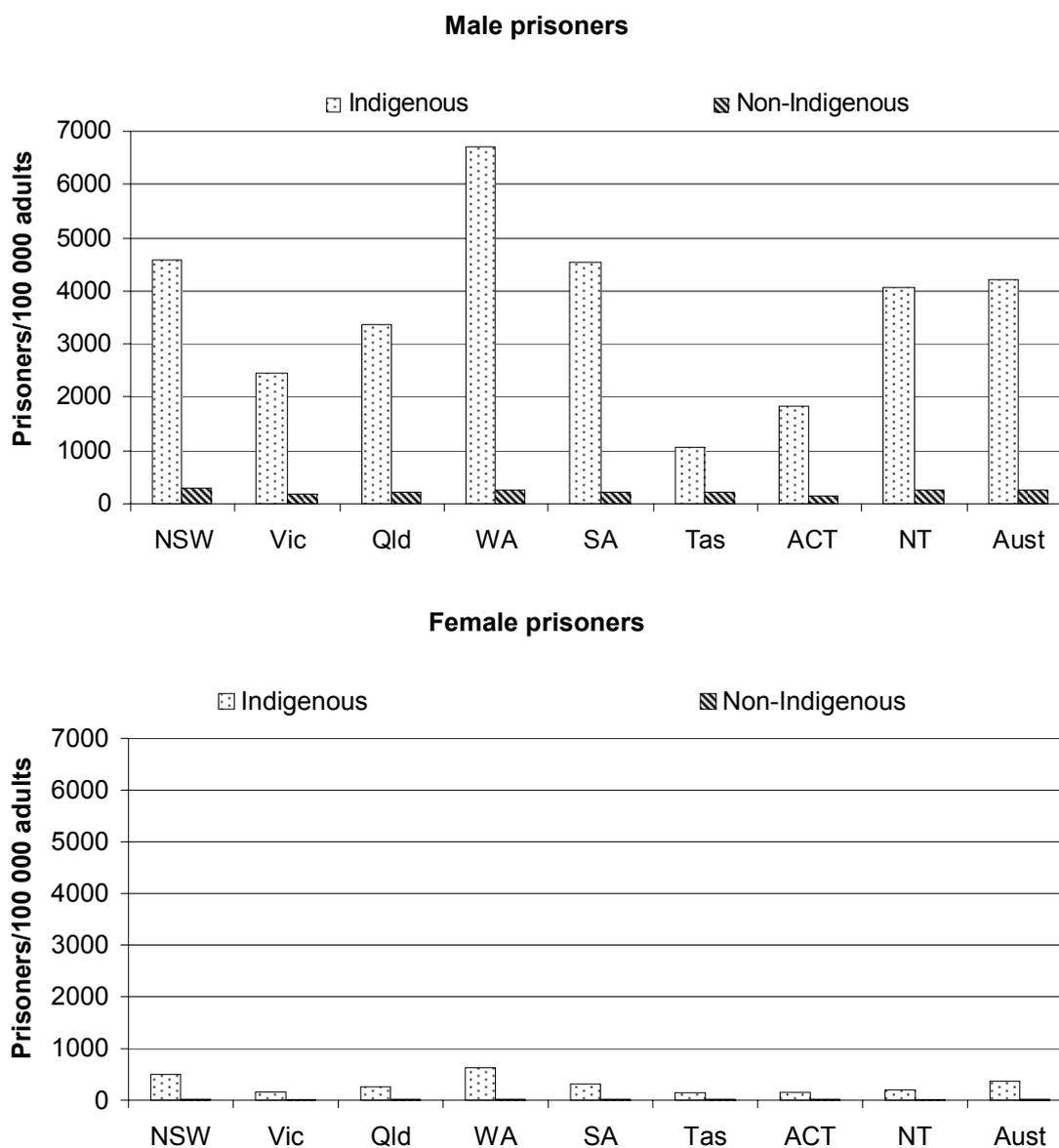
^a Indigenous imprisonment rates are calculated using low series population projections (ABS Cat. no. 3238.0).

^b Rates are based on prisoner census and population data at 30 June each year.

Source: ABS (2008); table 4A.12.4.

- At 30 June 2008 the age standardised imprisonment rate was higher for Indigenous people than non-Indigenous people in all jurisdictions across Australia.
- The difference between Indigenous and non-Indigenous age standardised imprisonment rates varied across jurisdictions in 2008, with WA recording the highest ratio of Indigenous to non-Indigenous at 19.8, and Tasmania reporting the lowest rate ratio of 3.5 (figure 4.12.2).

Figure 4.12.3 Crude imprisonment rates, by gender, 30 June 2008^{a, b, c}



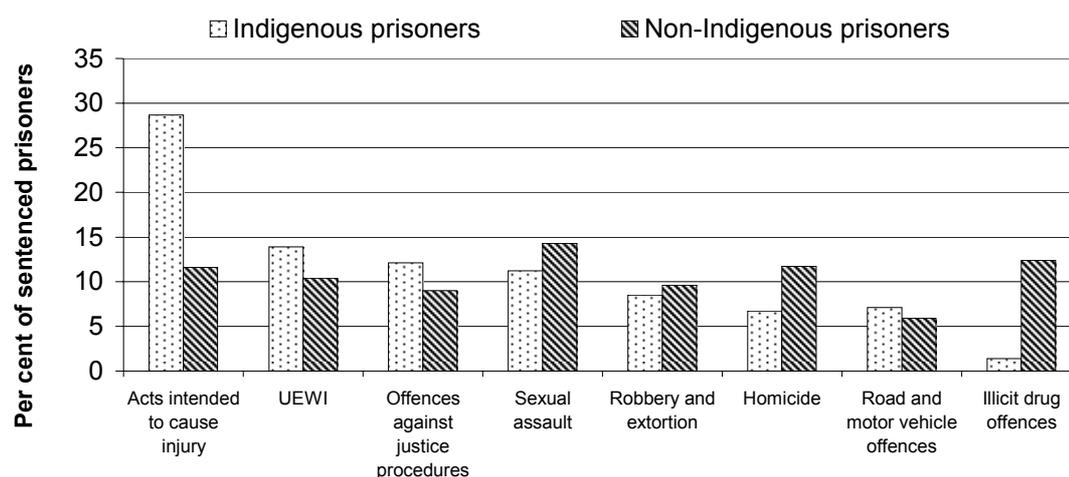
^a Indigenous imprisonment rates are calculated using the low series population projections for June 30 2006 (ABS Cat. no. 3238.0) and are not age standardised. ^b Data for NSW exclude ACT prisoners held in NSW prisons. ^c Data for the ACT includes ACT prisoners held in the ACT as well as ACT prisoners held in NSW.

Source: ABS (unpublished); table 4A.12.7.

- Imprisonment rates for Indigenous and non-Indigenous males are considerably greater than imprisonment rates for Indigenous and non-Indigenous females across all states and territories (figure 4.12.3).
- Nationally, on 30 June 2008, Indigenous males were 17.2 times more likely than non-Indigenous males to be in prison, and Indigenous females were 21.7 times more likely than non-Indigenous females to be in prison (figure 4.12.3).

- Female prisoners comprise a small but growing proportion of the Australian prison population (table 4A.12.6) and have some specific needs not shared by most male prisoners, such as those associated with being a carer for young children. Because there are fewer prisons for women, Indigenous females are often detained in centres far from their children and communities and may also face communication difficulties (ABS 2004b). In a study of women prisoners in WA, the WA Department of Justice (2002b) found that 14 per cent of Indigenous women spoke an Aboriginal dialect as their first language.
- The imprisonment rate for Indigenous females increased by 45.5 per cent between 2000 and 2008. The imprisonment rate for Indigenous males increased by 26.6 per cent over the same period (table 4A.12.7).

Figure 4.12.4 **Sentenced prisoners by most serious offence, 30 June 2008^{a, b}**



^aUEWI = 'Unlawful entry with intent'. ^b Offences against justice procedures, includes offences against government security, government operations, for example, non-payment of fines.

Source: ABS (2008); table 4A.12.9.

- Data on sentenced prisoners by most serious offence provide a picture of people in prison at 30 June 2008. Prisoners serving long-term sentences for serious offences are over-represented in annual prisoner census data. An examination of the flow of offenders in and out of prison during the year would consist primarily of people serving short sentences for lesser offences.
- Of the 5152 Indigenous sentenced prisoners used to calculate the percentages presented in figure 4.12.4, 28.7 per cent had been sentenced with 'acts intended to cause injury' as their most serious offence, 2.5 times the proportion of non-Indigenous prisoners sentenced with the same offence.

-
- In contrast, only 1.4 per cent of Indigenous prisoners had been sentenced for ‘illicit drug offences’ as their most serious offence, a considerably smaller proportion than in the non-Indigenous prisoner population (12.4 per cent) (figure 4.12.4).
 - At 30 June 2008, 12.1 per cent of Indigenous prisoners had been sentenced with ‘offences against justice procedures, government security and government operations as their most serious offence (figure 4.12.4).
 - For Indigenous and non-Indigenous prisoners, only 1.0 per cent and 1.3 per cent respectively had been sentenced for public order offences (table 4A.12.9).

Supporting tables 4A.12.8 and 4A.12.9 show the number and proportion of sentenced prisoners by most serious offence and expected time to serve (mean and median months) at 30 June 2007 and 30 June 2008, respectively. Nationally, Indigenous prisoners were expected to serve shorter sentences than the overall prisoner population in most of the offence categories presented in figure 4.12.4, but were serving longer sentences for sexual assault. According to the ABS (2008), unsentenced Indigenous prisoners spent less time in remand for the majority of the offence categories listed in table 4A.12.9 than non-Indigenous prisoners in 2008 (in mean number of months).

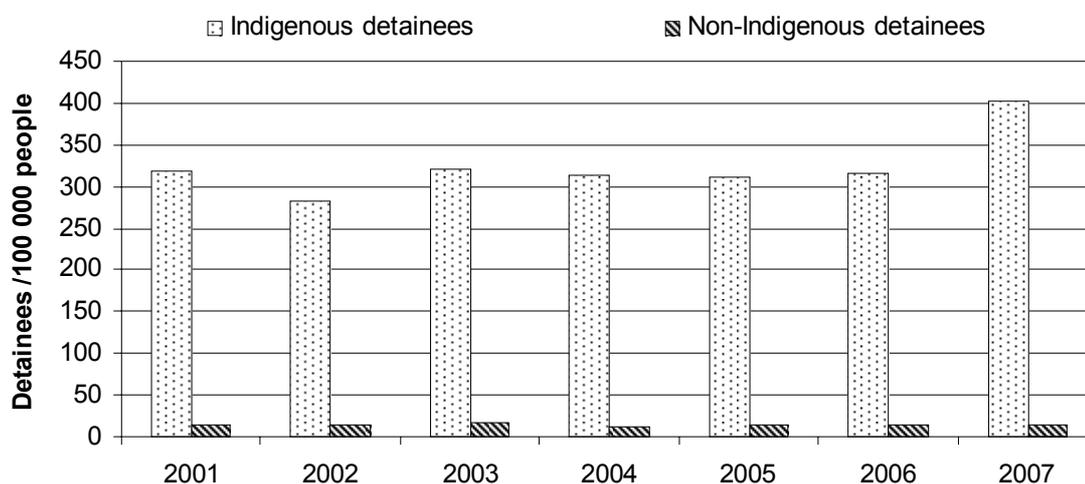
The number of prisoners and rate of imprisonment, by age group, are shown in tables 4A.12.10 (at 30 June 2007) and 4A.12.11 (at 30 June 2008). The mean and median age of prisoners at 30 June 2007 and 30 June 2008 are shown in tables 4A.12.12 and 4A.12.13, respectively. In 2008, the mean (average) age of Indigenous prisoners was 31.6 years, 4.7 years younger than the average age of non-Indigenous prisoners (36.3 years) (table 4A.12.13).

Data by jurisdiction on the proportion of prisoners on remand¹² are contained in tables 4A.12.14 (at 30 June 2007) and 4A.12.15 (at 30 June 2008). Nationally in 2008, the proportion of unsentenced Indigenous prisoners (23.2 per cent) was similar to the proportion of unsentenced non-Indigenous prisoners (22.3 per cent) (table 4A.12.15). From 2007 to 2008, the proportions of unsentenced Indigenous and non-Indigenous prisoners increased slightly on a national basis (tables 4A.12.14 and 4A.12.15).

¹² According to the ABS (2006), remand prisoners are those persons who have been placed in custody while awaiting the outcome of their court hearing. They may be unconvicted (remanded in custody for trial), convicted but awaiting sentence or awaiting deportation.

Juvenile detention

Figure 4.12.5 **Juvenile detention rates, people aged 10–17 years, by year^{a, b}**



^a All data are taken from the census count at 30 June of the relevant year. ^b Indigenous rates were calculated using high series population data (ABS Cat. no. 3238.0). Any variation in derived rates may be due to the assumptions and limitations of the base population data.

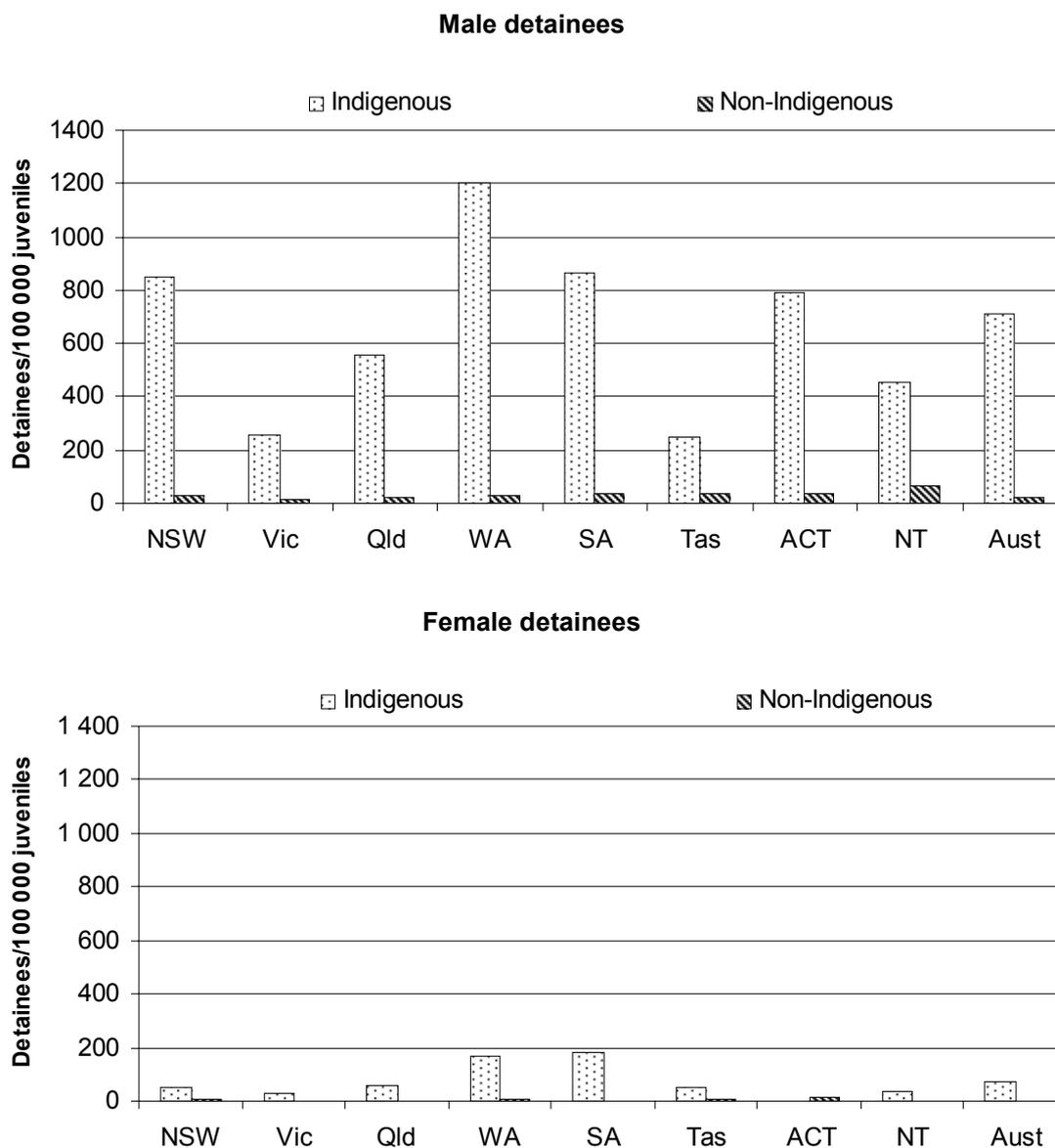
Source: Taylor (2009); table 4A.12.17.

- From 2001 to 2007 Indigenous juveniles were much more likely than non-Indigenous to be in detention. In 2007, Indigenous juveniles were 28 times as likely to be in detention (figure 4.12.5).
- Although detention rates for both Indigenous and non-Indigenous juveniles fluctuated between 2001 and 2007, the gap between Indigenous and non-Indigenous detention rates remained large (figure 4.12.5).
- There were 432 Indigenous juveniles in detention and 310 non-Indigenous juveniles in detention at 30 June 2007 (table 4A.12.16). The number of Indigenous juveniles in detention increased from 261 in 2001 (a 65 per cent increase 2001 to 2007) while the number of non-Indigenous juveniles in detention increased from 306 on 30 June 2001 (a 1.3 per cent increase 2001 to 2007).

Juvenile detention rates can be highly variable in states and territories with small populations of Indigenous people, small numbers of young people in juvenile detention, and/or small numbers of Indigenous people in juvenile detention. This particularly applies in Victoria, Tasmania, the ACT and the NT. Nationally, there were 394 Indigenous males and 38 Indigenous females in juvenile detention on 30 June 2007 (table 4A.12.18). Attachment tables 4A.12.16 and 4A.12.17 present

the numbers and rates of Indigenous and non-Indigenous juveniles (aged 10–17 years) in detention from 2001 to 2007 by State and Territory.

Figure 4.12.6 Juvenile detention rates, aged 10–17 years, by gender, 30 June 2007^a



^a Indigenous rates were calculated using high series population data provided by the ABS (Cat. no. 3238.0). Any variation in derived rates may be due to the assumptions and limitations of the base population data.

Source: Taylor (2009); table 4A.12.19.

- For both Indigenous and non-Indigenous juveniles, males were much more likely to be in detention than females (figure 4.12.6).

-
- Juvenile detention rates for Indigenous males and females per 100 000 people were considerably higher than the detention rates for non-Indigenous males and females in all jurisdictions (except for females in the ACT).
 - Nationally on 30 June 2007, the rate of Indigenous females in juvenile detention was 24.4 times higher than the rate of non-Indigenous females in juvenile detention. Indigenous males were 28.2 times as likely to be in juvenile detention as non-Indigenous males (figure 4.12.6). The ACT had no Indigenous females in detention on 30 June 2007, while the NT had no non-Indigenous females in detention at this time (table 4A.12.18).

To accompany figure 4.12.6, tables 4A.12.18 and 4A.12.19 present the numbers and rates of Indigenous and non-Indigenous juveniles in detention from 2001 to 2007 by State and Territory and gender. The numbers and rates of juveniles in detention, by age category, are reported in tables 4A.12.20 and 4A.12.21, respectively. Data on the proportion of juveniles who were in detention and under sentence (as opposed to being on remand) on 30 June 2007 are reported in table 4A.12.22, while data on the number of people in juvenile detention (all ages) are reported in table 4A.12.23.

4.13 Future directions in data

Early childhood education

There are limited data currently available to inform the COAG National Indigenous Reform Agreement measures for early childhood education. The key challenges include comparable reporting on attendance (including data for 4 year old children), improving alignment of State and Territory data to ensure national comparability and reporting data for preschool and child care services by remoteness area. Interpretation of data on preschool enrolments is complicated by the different ages at which children take part and different ages at which children commence primary school in different jurisdictions. Data on the qualifications of preschool teachers are not available.

The AIHW, under the guidance of the Children's Services Data Working Group, has developed a National Minimum Data Set (NMDS) for children's services, which provides a framework for collecting a set of nationally comparable data for child care and preschool services. The AIHW completed a feasibility study on the implementation of the NMDS, and is awaiting national agreement on the way forward (AIHW 2009).

The ABS and AIHW are currently undertaking further work to develop draft standards and protocols to assist in the collection of more accurate data for the National Partnership Agreement on Early Childhood Education. COAG has agreed to fund improvements in data capacity and availability in the area of early childhood, including work to improve Indigenous data.

Employment

In addition to the five-yearly Census, the ABS program of ongoing Indigenous specific surveys, including the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) and the National Aboriginal and Torres Strait Islander Social Survey (NATSISS), provides labour force data (including CDEP) on a three yearly cycle. Labour force information from the 2008 NATSISS will separately identify CDEP participants. These data will be available from late 2009. Additional estimates of Indigenous labour force data over the period 2002 to 2007 are available, compiled from the monthly Labour Force Survey (ABS 2008). These estimates are annual and hence more frequent than the Census, but, because the estimates are based on a smaller sample, they are of lower quality.

Household and individual income

In addition to the five-yearly Census, the ABS program of ongoing Indigenous specific surveys provides labour force (including CDEP) and income data on a three yearly cycle.

Substantiated child abuse and neglect

Substantiated child protection notifications data and information on care and protection orders have been used to give an insight into the prevalence of child abuse and neglect. Even as proxy measures of abuse and neglect, it is acknowledged that these data do not adequately address the issue. More work is required to develop data on the underlying prevalence of child abuse and neglect, particularly child sexual abuse.

A national project looking at the comparability of child protection data was completed in 2008 (AIFS 2008). The project report noted that multiple factors are likely to exert an influence on rates of notifications, investigations, substantiations, and rates of children on care and protection orders and in out-of-home care. Some factors were thought to exert a national influence on statutory child protection activity (for example, increased public awareness of the issue of child abuse and neglect and the broadened concept of what constitutes child abuse and neglect),

while other factors were suggested to be specific to particular jurisdictions (for example, the implementation of policy reforms and the flow on effects of reviews of child protection services). The project report concluded that further research was necessary to test the extent of the suggested relationships.

Family and community violence

Data on the prevalence of family and community violence are not widely available for Indigenous or non-Indigenous people. The National Information Development Plan for Crime and Justice Statistics (ABS 2005) identifies the development of statistics on family and domestic violence for all people as a priority. The Family and Domestic Violence Statistics Working Group was established to consider issues and develop proposals concerning definitions of family and domestic violence, the scope of statistical requirements, measurement issues and data sources. The Working Group endorsed the development of a conceptual framework. A conceptual framework for domestic and family violence statistics was developed and published in 2009 (ABS 2009). The AIHW prepared a report that examined key national data sources (AIHW 2006). The ABS National Centre for Crime & Justice Statistics is working with police agencies to collect and publish nationally comparable crime victimisation data and data on the relationship between victims and perpetrators, by Indigenous status. This should help generate more comparable information in future years.

The ABS 2008 NATSISS has collected (from Indigenous people 15 years and over) information about victimisation and perceived problems at the neighbourhood or community level, including family violence, neighbourhood conflict and personal safety. These data will be available from late 2009.

4.14 References

4.1 Life expectancy at birth

- ABS (Australian Bureau of Statistics) 2004a, *Deaths Australia 2003*, Cat. no. 3302.0, Canberra.
- 2004b, *Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians 30 June 1991 to 30 June 2009*, Cat. no. 3238.0, Canberra.
- 2006, *Deaths Australia 2005*, Cat. no. 3302.0, Canberra.
- 2008a, *Deaths Australia 2007*, Cat. no. 3302.0, Canberra.
- 2008b, *Discussion Paper: Assessment of Methods for Developing Life Tables for Aboriginal and Torres Strait Islander Australians, Australia, 2006*, Cat. no. 3302.0.55.002, Canberra.
- 2008c, *Information Paper: Census Data Enhancement — Indigenous Mortality Quality Study, Australia*, Cat. no. 4723.0, Canberra.

—2009, *Experimental Life Tables for Aboriginal and Torres Strait Islander Australians, Australia, 2005–2007*, Cat. no. 3302.0.55.003, Canberra.

AHMAC (Australian Health Ministers' Advisory Council) 2008, *Aboriginal and Torres Strait Islander Health Performance Framework Report 2008*, Canberra.

AIHW (Australian Institute of Health and Welfare) 2009, *Aboriginal and Torres Strait Islander Health Performance Framework 2008 Report: Detailed Analyses*, Cat. no. IHW 22, Canberra.

Becker, G., Philipson, P. and Soares, G. 2003, *The Quantity and Quality of Life and the Evolution of World Inequality*, http://economics.uchicago.edu/download/BPS-AER_final_version-06-17.pdf (accessed 12 March 2005).

Carson, B., Dunbar, T., Chenhall, R. and Baillie, R. 2007, *Social Determinants of Indigenous Health*, Allen and Unwin, Sydney.

Condon, J.R., Barnes, T., Cunningham, J. and Smith L. 2004, 'Improvements in Indigenous mortality in the Northern Territory over four decades', *Australian and New Zealand Journal of Public Health*, vol. 28, no. 5, pp. 445–51.

Coory, M. and Baade, P. 2003, 'Is median age at death a useful way to monitor improvements in mortality among Indigenous Australians?', *Australian and New Zealand Journal of Public Health*, vol. 27, no. 6, pp. 627–31.

Fearnley, E. and Li, S.Q. 2007, *Mortality in the Northern Territory 1981–2004*, Health Gains Planning Fact Sheet 4, September 2007, Department of Health and Community Services, Darwin, <http://digitallibrary.health.nt.gov.au/dspace/bitstream/10137/73/1/mortality2007.pdf> (accessed 29 April 2009).

Mitchell, R.; Blane, D. and Bartley, M. 2002, 'Elevated risk of high blood pressure: climate and the inverse housing law', *International Journal of Epidemiology* vol. 31(4), pp. 831–8.

Statistics New Zealand 2008, *New Zealand Period Life Tables: 2005–2007*, <http://www.stats.govt.nz/products-and-services/hot-off-the-press/nz-life-tables/new-zealand-period-life-tables-2005-07-hotp.htm> (accessed 29 April 2009).

Vos, T., Barker, B., Stanley, L. and Lopez A.D. 2007, *The Burden of Disease and Injury in Aboriginal and Torres Strait Islander Peoples 2003*, School of Population Health, the University of Queensland, Brisbane.

Wilson, T., Condon, J. and Barnes, T. 2007, 'Northern Territory Indigenous life expectancy improvements, 1967–2004', in *Australian and New Zealand Journal of Public Health*, vol. 31, no. 2, pp. 184–188.

4.2 Young child mortality

ABS (Australian Bureau of Statistics) 2008a, *Deaths, Australia 2007*, Cat. no. 3302.0, Canberra.

— 2008b, *Information Paper: Census Data Enhancement- Indigenous Mortality Quality Study*, Cat. no. 4723.0, Canberra.

— 2008c, *Births Australia*, Cat. no. 3301.0, Canberra.

— 2007, *Health of Children in Australia: A Snapshot, 2004-05*, Cat. no. 4829.0.55.001, Canberra.

— 2005, *Australian Social Trends, 2005*, Cat. no. 4102.0, Canberra.

— 1996, *Occasional Paper: Mortality and Indigenous Australians*, Cat. no. 3315.0, Canberra.

-
- AHMAC (Australian Health Ministers' Advisory Council) 2008, *Aboriginal and Torres Strait Islander Health Performance Framework Report 2008*, Canberra.
- AIHW (Australian Institute of Health and Welfare) 2009, *Aboriginal and Torres Strait Islander Health Performance Framework 2008 Report: Detailed Analysis*, Cat. no. IHW 22, Canberra.
- AMA (Australian Medical Association) 2008, *Good News and Best Practice 2008*, <http://www.ama.com.au/node/4335> (accessed 9 December 2008).
- ARCHI (Australian Resource Centre for Healthcare Innovations) 2009, *Improving Aboriginal Perinatal Mortality in NSW*, <http://www.archi.net.au/e-library/workforce/midwifery/perinatal> (accessed 12 February 2009).
- COAG 2008, *COAG Communiqué 29 November 2008*, http://www.coag.gov.au/coag_meeting_outcomes/2008-11-29/docs/communique_20081129.pdf (accessed 1 December 2008).
- Queensland Government, 2004, *Information Circular* <http://www.healthqld.gov.au/publications/infocirc/info67.pdf> (accessed 18 February 2009).
- SIDS and Kids Western Australia, Education <http://www.sidsandkids.org/wa/education.html> (accessed 18 February 2009).

4.3 Early childhood education

- ABS (Australian Bureau of Statistics) 2008, *Experimental Estimates of Aboriginal and Torres Strait Islander Australians, Jun 2006*, Cat. No 3238.0.55.001, Canberra.
- AIHW (Australian Institute of Health and Welfare) 2009, *Implementation of the Children's Services National Minimum Data Set: A Feasibility Study*, March 2009, Canberra, <http://www.aihw.gov.au/publications/cfs/cfs-7-10743/cfs-7-10743.pdf> (accessed 24 April 2009).
- ANAO (Australian National Audit Office) 2002, *Indigenous Education Strategies: Department of Education, Science and Training*, Audit Report no. 43 2001–2002, Canberra.
- Biddle, N. 2007, 'Indigenous Australians and Preschool Education', *Australian Journal of Early Childhood*, vol. 32 (3), pp. 9–16.
- COAG (Council of Australian Governments) 2008, *National Partnership Agreement for Indigenous Early Childhood Development*, Communiqué, 2 October 2008, Perth. http://www.coag.gov.au/coag_meeting_outcomes/2008-10-02/docs/indigenous_early_childhood_NPA.pdf (accessed 20 January 2009).
- DEEWR (Department of Education, Employment and Workplace Relations), 2008, *National Preschool Census 2007, Aboriginal and Torres Strait Islanders and All Students: Technical Report, May 2008*, Data Analysis Australia.
- Elliott, A. 2006, 'Rethinking and Reshaping Early Childhood Care and Education Policy — Visions and Directions for the Future', Australian Council for Educational Research, National Education Forum Conference, 2006, Brisbane.
- Fordham, A.M. and Schwab, R.G. 2007, *Education, Training and Indigenous Futures, CAEPR Policy Research: 1990–2007*, Centre for Aboriginal Economic Policy Research, Canberra.
- Frigo, T. and Adams, I. 2002, 'Diversity and learning in the early years of school', paper presented at the Australian Association for Research in Education (AARE) Annual Conference, 2002, Brisbane.
- Heckman, J.J. 2006, 'Skill Formation and the Economics of Investing in Disadvantaged Children', *Science*, vol. 312, pp. 1900–1902.

-
- High, P.C. 2008, 'School Readiness', *Pediatrics*, vol. 121 (4), pp. e1008–e1015.
- HREOC (Human Rights and Equal Opportunity Commission) 2000, *Emerging Themes: National Inquiry into Rural and Remote Education*, Sydney, HREOC, http://www.hreoc.gov.au/pdf/human_rights/emerging_themes.pdf (accessed 28 June 2003).
- McCain, M.N., Mustard, J.F., and Shanker, S. 2007, *Early Years Study 2: Putting Science into Action*, Council for Early Child Development, Toronto Ontario.
- Mustard, J. F., 2007, 'Experience-based brain development: scientific underpinnings of the importance of early child development in a global world', in M. E. Young (ed.), *Early Child Development From Measurement to Action: A Priority for Growth and Action*, World Bank, 2007, pp. 35–63.
- NTDE (Northern Territory Department of Education) 1999, *Learning Lessons, An Independent Review of Indigenous Education in the Northern Territory*, Darwin, http://www.deet.nt.gov.au/education/indigenous_education/learning_lessons_review.pdf (accessed 30 April 2003).
- Ou, S., and Reynolds, A.J. 2004, 'Preschool education and school completion', in Tremblay, R.E., Barr, R.G. and Peters, R.DeV. (eds), *Encyclopaedia on Early Childhood Development*, Montreal, Centre of Excellence for Early Childhood Development, <http://www.excellence-earlychildhood.ca/documents/Ou-ReynoldsANGxp.pdf> (accessed 2 November 2006).
- Reynolds, A.J., Temple, J.A., Robertson, D.L. and Mann, E.A. 2001, 'Long-term effects of an early childhood intervention on educational achievement and juvenile arrest — a 15-year follow-up of low-income children in public schools', *Journal of the American Medical Association*, vol. 285, pp. 2339–2346.
- SCRGSP (Steering Committee for the Review on Government Services), 2009, *Report on Government Service Provision 2009*. Productivity Commission.
- Schweinhart, L.J. 2007, 'Outcomes of the High/Scope Perry Preschool Study and Michigan School Readiness Program', in M. E. Young (ed.), *Early Child Development From Measurement to Action: A Priority for Growth and Action*, World Bank, 2007, pp. 67–79.
- Sims, M., Siggers, S., Hutchins, T., Guilfoyle, A., Targowska, A. and Jackiewicz, S. 2008, 'Indigenous child care – leading the way'. *Australian Journal of Early Childhood*, vol. 33 (1), pp. 56–60.
- Sparling, J., Ramey, C.T., and Ramey, S.L. 2007, 'The Abecedarian Experience' in M. E. Young (ed.), *Early Child Development From Measurement to Action: A Priority for Growth and Action*, World Bank, 2007, pp. 81–99.

4.4 Reading, writing and numeracy

- ACER (Australian Council for Educational Research) 2004, *What do we Know about the Experiences of Australian Youth?*, Victoria.
- Bradley, S., Draca, M., Green, C. and G. Leeves. 2007, 'The magnitude of educational disadvantage of indigenous minority groups in Australia', *Journal of Population Economics*, 20, 547–569.
- COAG (Council of Australian Governments) 2008, *COAG Communiqué 29 November 2008*, http://www.coag.gov.au/coag_meeting_outcomes/2008-11-29/docs/communique_20081129.pdf (accessed 1 December 2008).
- Devine, M. 2006, 'How intolerance can turn the tide', <http://www.smh.com.au/news/opinion/how-intolerance-can-turn-the-tide/2006/09/27/1159337220004.html> (accessed 27 September 2006).

-
- IRUA (Innovative Research Universities Australia) 2006, *Response to DEST Knowledge Transfer Project: Developing a Culture of Engagement in Australian Universities through the Formation of Sustainable Partnerships*, <http://www.irua.edu.au/policy/policy-20060131.pdf> (accessed 28 September 2006).
- Leigh, A. and Gong, X. 2008, *Estimating Cognitive Gaps Between Indigenous and Non-Indigenous Australians*, Centre for Economic Policy Research Discussion paper no. 578, April 2008.
- MCEETYA (Ministerial Council on Education, Employment, Training and Youth Affairs) 2008, *National Assessment Program – Literacy and Numeracy: Achievement in Reading, Writing Language Conventions and Numeracy*, Melbourne.
- (various years), *National Report on Schooling in Australia (various years), Preliminary paper: National Benchmark results — Reading, writing and numeracy, Years 3, 5, and 7*, Melbourne.
- OATSIP (Office for Aboriginal and Torres Strait Islander Partnerships), 2008, *Queensland Closing the Gap Report: 2007-08; Indicators and Initiatives for Aboriginal and Torres Strait Islander Peoples* <http://www.atsip.qld.gov.au/partnerships/partnership-qld/documents/closing-the-gap-report.pdf> (accessed 28 January 2009).
- Ou, S., and Reynolds, A.J. 2004, 'Preschool education and school completion', in Tremblay, R.E., Barr, R.G. and Peters, R.DeV. (eds), *Encyclopaedia on Early Childhood Development*, Montreal, Centre of Excellence for Early Childhood Development, <http://www.excellence-earlychildhood.ca/documents/Ou-ReynoldsANGxp.pdf> (accessed 2 November 2006).
- Reynolds, A.J., Temple, J.A., Robertson, D.L. and Mann, E.A. 2001, 'Long-term effects of an early childhood intervention on educational achievement and juvenile arrest — a 15-year follow-up of low-income children in public schools', *Journal of the American Medical Association*, vol. 285, pp. 2339–2346.
- School for Social and Policy Research (SSPR) Charles Darwin University, 2008, *Student Progress 2007, Accelerated Literacy NT Schools, System Level Summary*, http://www.nalp.edu.au/documents/AL_Student_Progress_2007_web_release.pdf (accessed 30 January 2009).
- Schwab, R.G. and Sutherland, D. 2004, *Literacy for Life: A Scoping Study for a Community Literacy Empowerment Project*, The Fred Hollows Foundation and the Centre for Aboriginal Economic Policy Research, Australian National University.
- Schweinhart, L.J. 2005, *The High/Scope Perry Preschool Study Through Age 40 Summary, Conclusions, and Frequently Asked Questions*, Ypsilanti, High/Scope Press.
- SCRGSP, 2009, *Report on Government Services, 2009*, Productivity Commission, Canberra.
- Zubrick, S.R., Silburn, S.R., De Maio, J.A., Shepherd, C., Griffin, J.A., Dalby, R.B., Mitrou, F.G., Lawrence, D.M., Hayward, C., Pearson, G., Milroy, H., Milroy, J. and Cox, A. 2006, *The Western Australian Aboriginal Child Health Survey: Improving the Educational Experiences of Aboriginal Children and Young People*, Curtin University of Technology and Telethon Institute for Child Health Research, Perth.

4.5 Year 12 attainment

- ABS (Australian Bureau of Statistics) 2009, *Schools Australia 2008*, Cat. no. 4221.0, Canberra.
- ACER (Australian Council for Educational Research) 2003, *Patterns of Participation in Year 12*, Research Report 33, Victoria.

—— 2004, *The Case for Change: A Review of Contemporary Research in Indigenous Education Outcomes*, Victoria.

Barnett, W.S. 1993, 'Benefit-cost Analysis of Preschool Education: Findings from a 25-year Follow-up', *American Journal of Orthopsychiatry*, vol. 63(4), pp. 500-508.

Buckskin, P. 2000, Achieving Educational Equality for Indigenous Australians: a pathway of hope, paper presented at the 2000 Curriculum Corporation Seventh National Conference, Curriculum Corporation (Australia), Carlton South, Victoria, <http://www.curriculum.edu.au/conference/papers/buckskin.pdf> (accessed 1 August 2003).

COAG (Council of Australian Governments) 2009a, *COAG Communiqué 30 April 2009*, http://coag.gov.au/coag_meeting_outcomes/2009-04-30/index.cfm (accessed 18 May 2009).

—— 2009b, *National Indigenous Reform Agreement*, http://www.coag.gov.au/intergov_agreements/federal_financial_relations/docs/IGA_FFR_ScheduleF_National_Indigenous_Reform_Agreement.pdf (accessed 9 February 2009).

Dusseldorp Skills Forum 2006, *How Young People are Faring 2006: An Update about the Learning and Work Situation of Young Australians*, Dusseldorp Skills Forum, Glebe.

Long, M. 2006, *The Flipside of Gen Y: Social Background and Full-time Engagement, Personal and Financial stress, Social Inclusion, Satisfaction with Life*, ACER (Australian Council for Educational Research) Centre for the Economics of Education and Training, Melbourne.

MacKenzie, D.L. 2002, 'Reducing the Criminal Activities of Known Offenders and Delinquents: Crime Prevention in the Courts and Corrections', in L.W. Sherman, D.P. Farrington, B.C. Welsh and D.L. MacKenzie (eds), *Evidence-Based Crime Prevention*, Routledge, London, pp. 330–404.

OECD (Organisation for Economic Co-operation and Development) 2004, *Learning for Tomorrow's World — First Results from PISA 2003*, France.

—— 2005, *Education at a Glance*, France.

Reynolds, A.J., Temple, J.A., Robertson, D.L. and Mann, E.A. 2002, 'Age 21 cost benefit analysis of the Title I Chicago Child-Parent Centers', *Educational Evaluation and Policy Analysis* 2002, vol. 24(4), pp. 267–303.

Weatherburn, D., Snowball, L. and Hunter, B. 2006, *The Economic and Social Factors Underpinning Indigenous Contact with the Justice System: Results from the 2002 NATSISS Survey*, Contemporary Issues in Crime and Justice Bulletin no. 104, New South Wales Bureau of Crime Statistics and Research, Sydney.

WHO (World Health Organisation) 1986, *Ottawa Charter for Health Promotion*, First International Conference on Health Promotion, Ottawa, http://www.who.int/hpr/NPH/docs/ottawa_charter_hp.pdf (accessed 2 November 2006).

4.6 Employment

Altman, J., Buchanan, G., and Biddle, N. 2006, 'The real 'real' economy in remote Australia', In Hunter, B. (ed.) *Assessing the Evidence on Indigenous Socioeconomic Outcomes: A Focus on the 2002 NATSISS*, Research Monograph no. 26, Centre for Aboriginal Economic Policy Research, Australian National University, Canberra, pp. 139–152.

ATSIC (Aboriginal and Torres Strait Islander Commission) 1994, *Annual Report 1993-94*, Canberra.

—— 2003, *Annual Report 2003-04*, Canberra.

-
- ABS (Australian Bureau of Statistics) 2008, *Labour Force Characteristics of Aboriginal and Torres Strait Islander Australians, Estimates from the Labour Force Survey*, Cat. No. 6287.0, Canberra.
- COAG (Council of Australian Governments) 2008, *Communiqué*, Meeting 26 March 2008, Canberra.
- COAG (Council of Australian Governments) 2009, *National Indigenous Reform Agreement*, http://www.coag.gov.au/intergov_agreements/federal_financial_relations/docs/IGA_FFR_ScheduleF_National_Indigenous_Reform_Agreement.pdf (accessed 24 February 2009).
- DEWR (Department of Employment and Work Relations) 2005, *Annual Report 2004-05*, Canberra, <http://www.dewr.gov.au/NR/rdonlyres/80D87EDF-A9A4-4D68-B9D3-417E2292330C/0/DEWRARPart23.pdf> (accessed 12 February 2009).
- 2006, *Indigenous Potential Meets Economic Opportunity*, Discussion Paper, Canberra.
- Hunter, B. and Gray, M. 1999, *Further Investigations into Indigenous Labour Supply: What Discourages Discouraged Workers?* Working Paper no. 2, Centre for Aboriginal Economic Policy Research, Australian National University, Canberra.
- Macklin, J. (Minister for Families, Housing, Community Services and Indigenous Affairs) and O'Connor, B. (Minister for Employment Services), 2008a, *Reforms to Indigenous employment programs*, Media release, 6 October.
- 2008b, *Strengthening Indigenous employment opportunities*, Media release, 19 December.

4.7 Post secondary education — participation and attainment

- ABS (Australian Bureau of Statistics) 2006, *Census Dictionary, 2006*, Cat. No. 2901.0, Canberra
- ACER (Australian Council for Educational Research) 2002, *Education Participation and Outcomes by Geographic Location*, Research Report 26, Victoria.
- ANTA (Australian National Training Authority) 2005, *Annual National Report 2004*, Brisbane.
- Buckskin, P. 2001, *Improving Pathways Outcomes for Young Indigenous Australians*, paper presented at the 2001 ACER Research Conference 'Understanding Youth Pathways: What does the Research tell us?', Melbourne, 15–16 October 2001.
- Callan, V. and Gardner, J. 2005, *Vocational Education and Training Provision and Recidivism in Queensland Correctional Institutions*, NCVER, Adelaide.
- Dusseldorp Skills Forum 2006, *How Young People are Faring 2006: An Update about the Learning and Work Situation of Young Australians*, Dusseldorp Skills Forum, Glebe.
- Gelade, S. and Stehlik, T. 2004, *Exploring Locality: The Impact of Context on Indigenous Vocational Education and Training Aspiration and Outcomes*, NCVER, Adelaide.
- Marks, G. 2006, *The Transition to Full-Time Work of Young People who do not go to University*, Longitudinal Surveys of Australian Youth (LSAY) Research Report 49, ACER, Victoria.
- NCVER (National Centre for Vocational Education Research) 2005, *Australian Vocational Education and Training Statistics: Indigenous Australians' Training Experiences 2004 — First Finding*, Adelaide.
- 2006, *Australian Vocational Education and Training Statistics: Student Outcomes 2006*, Adelaide.
- 2007, *Australian Vocational Education and Training Statistics: Students and Courses 2007*, Adelaide.

-
- O’Callaghan, K. 2005, *Indigenous Vocational Education and Training: At a Glance*, NCVER, Adelaide.
- OECD (Organisation for Economic Co-operation and Development) 2004, *Learning for Tomorrow’s World — First Results from PISA 2003*, France.
- Saunders, J., Jones, M., Bowman, K., Loveder, P. and Brooks, L. 2003, *Indigenous People in Vocational Education and Training: A Statistical Review of Progress*, NCVER, Adelaide.
- SCRGSP (Steering Committee for the Review of Government Service Provision) 2009, *Report on Government Services*, Productivity Commission, Canberra.
- Wolfe, B. and Haveman, R. 2001, ‘Accounting for the social and non-market benefits of education’, in Helliwell, J. (ed.), *The Contribution of Human and Social Capital to Sustained Economic Growth and Well-Being*, OECD and Human Resources Development Canada, University of British Columbia Press, Vancouver.
- Zubrick, S., Silburn, S., De Maio, J., Shepherd, C., Griffin, J., Dalby, R., Mitrou, F., Lawrence, D., Hayward, C., Pearson, G., Milroy, H., Milroy, J. and Cox, A. 2006, *The Western Australian Aboriginal Child Health Survey: Improving the Educational Experiences of Aboriginal Children and Young People*, Curtin University of Technology and Telethon Institute for Child Health Research, Perth.

4.8 Disability and chronic disease

- Aboriginal Disability Network of NSW 2007, *Telling it Like it Is, a Report on Community Conversations with Aboriginal People with Disability and their Associates throughout NSW, 2004–05*, Sydney.
- ABS (Australian Bureau of Statistics) 2006, *Census Dictionary, 2006*, Cat. no. 2901.0, Canberra.
- and AIHW (Australian Institute of Health and Welfare) 2005, *The Health and Welfare of Australia’s Aboriginal and Torres Strait Islander Peoples*, ABS Cat. no. 4704.0, AIHW Cat. no. IHW 14, Canberra.
- and AIHW (Australian Institute of Health and Welfare) 2008, *The Health and Welfare of Australia’s Aboriginal and Torres Strait Islander Peoples*, ABS Cat. no. 4704.0, AIHW Cat. no. IHW 21, Canberra.
- AIHW (Australian Institute of Health and Welfare) 2009, *Chronic Disease and Participation in Work*, Canberra.
- AIHW 2008, Australian Hospital Statistics 2006–07, *Health services series no. 31*, Cat. no. HSE 55, Canberra.
- AIHW, 2006, *Chronic Diseases and Associated Risk Factors in Australia*, Cat no. PHE 81, Canberra.
- and DHFS (Department of Health and Family Services) 1998, *Indigenous Disability Data, Current and Future Prospects*, Canberra.
- Carson, B., Dunbar, T., Chenhall, R. and Bailie, R. 2007, *Social Determinants of Indigenous Health*, Allen and Unwin, Sydney.
- SCRGSP (Steering Committee for the Review of Government Service Provision) 2009, *Report on Government Services 2009*, Productivity Commission, Canberra.
- Vos, T., Barker, B., Stanley, L., Lopez, A.D. 2007, *The Burden of Disease and Injury in Aboriginal and Torres Strait Islander Peoples 2003*, School of Population Health, The University of Queensland, Brisbane.

4.9 Household and individual income

- ABS (Australian Bureau of Statistics) 2009, *Consumer Price Index, Australia, December 2008*, Cat. no. 6401.0, Canberra, <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/6401.0Dec%202008?OpenDocument> (accessed 22 April 2009).
- AIHW (Australian Institute of Health and Welfare) 2004, *Australia's Health 2004*, Canberra.
- Biddle, N. and Taylor, J. 2008, *A Regional Analysis of Indigenous Participation in the Western Australia Labour Market*, CAEPR Working Paper No. 45/2008, Centre for Aboriginal Economic Policy Research, Australian National University, Canberra.
- Cape York Institute (CYI) for Policy and Leadership 2007, *From Hand Out to Hand Up*, <http://www.cyi.org.au> (accessed 3 October 2008).
- Daly, A. and Smith, D. 1995, *The Economic Status of Indigenous Australian Families*, Discussion Paper no. 93, Centre for Aboriginal Economic Policy Research, Australian National University, Canberra.
- Gray, A. (ed) 1990, *A Matter of Life and Death: Contemporary Aboriginal Mortality*, Aboriginal Studies Press, Canberra.
- Indigenous Enterprise Partnership 2007, <http://www.iep.net.au/My%20Moola%20IEP%20Case%20Study.pdf> (accessed 22 April 2009).
- Hunter, B., Kennedy, S. and Smith, D. 2003, 'Household consumption, equivalence scales and the reliability of income distributions: some evidence for Indigenous and other Australians', *Economic Record*, vol. 79 (244), pp. 70–83.
- Macklin, J. (Minister for Families, Housing, Community Services and Indigenous Affairs), 2008, *Response to the NTER Review*, Media release, 23 October.
- The NTER Review Board 2008, *Report of the NTER Review Board*, Australian Government, Canberra.

4.10 Substantiated child abuse and neglect

- Abbott, T. 2006, 'Speech notes for the launch of *Australia's Health 2006*', at the Australian Institute of Health and Welfare Conference, Canberra, 21 June.
- ABS (Australian Bureau of Statistics) 2005, *Information paper: National Information Development Plan for Crime and Justice Statistics, 2005*, Cat. no. 4520.0, Canberra.
- ACSAT (Aboriginal Child Sexual Assault Taskforce) 2006, *Breaking the Silence: Creating the Future: Addressing Child Sexual Assault in Aboriginal Communities in NSW*, Attorney General's Department, ecoDesign ecoPrint, Sydney.
- AIFS (Australian Institute of Family Studies) 2008, *A national approach to child protection: Project report*, Canberra.
- AIHW (Australian Institute of Health and Welfare) 2006, *Family Violence Among Aboriginal and Torres Strait Islander Peoples*, Cat. no. IHW 17, Canberra.
- 2009, *Child Protection Australia 2007-08*, Cat. no. CWS-45, Canberra.
- Clapham, K., Stevenson, M. and Lo, S.K. 2006, 'Injury profiles of Indigenous and non-Indigenous people in New South Wales', *The Medical Journal of Australia*, vol. 184, no. 5, pp. 217–220.
- Coorey, L. 2001, *Child Sexual Abuse in Rural and Remote Australian Indigenous Communities: A Preliminary Investigation*, Report tabled to the Senate Select Committee on the Administration of Indigenous Affairs on its Inquiry into the Administration of Indigenous Affairs,

http://www.aph.gov.au/Senate/committee/indigenousaffairs_ctte/hearings/lyla_coorey_report_march05.pdf (accessed 2 November 2006).

- Dunne, M., Adams, M., Lang, C. and DeKretser, D. 2006, Silence by Men about Early Trauma: Undisclosed Child Sexual Abuse of Indigenous Australian Males, paper presented at the International Congress on Child Abuse and Neglect, York, United Kingdom, 3–6 September.
- Gordon, S., Hallahan, K., Henry, D. 2002, *Putting the Picture Together: Inquiry into Response by Government Agencies to Complaints of Family Violence and Child Abuse in Aboriginal Communities*, Department of Premier and Cabinet, Western Australia.
- HREOC (Human Rights and Equal Opportunity Commission) 2008, *Social Justice Report 2007: Aboriginal and Torres Strait Islander Social Justice Commissioner's Report 1/2008*, HREOC, Sydney.
- Keel, M. 2004, *Family Violence and Sexual Assault in Indigenous Communities*, Australian Institute of Family Studies, Australian Centre for the Study of Sexual Assault, Briefing no. 4, Melbourne.
- Lawrence, C. 2006, 'A national disgrace: violence against women and children in Indigenous communities', *Aboriginal and Islander Health Worker Journal*, vol.30, no.5, pp. 29, 32-33.
- Libesman, T. 2004, *Child Welfare Approaches for Indigenous Communities: International Perspectives*, National Child Protection Clearing House, no. 20 Autumn 2004, Australian Institute of Family Studies, Melbourne.
- Matthews, J. 1997, 'Historical, social and biological understanding is needed to improve Aboriginal health', *Recent Advances in Microbiology*, vol. 5, pp. 257–334.
- Memmott, P., Stacy, R., Chambers, C., and Keys, C. 2001, *Violence in Indigenous Communities*, Crime Prevention Branch, Commonwealth Attorney-General's Department, Canberra.
- NCHECR (National Centre in HIV Epidemiology and Clinical Research) 2008, *HIV/AIDS, Viral Hepatitis and Sexually Transmissible Infections in Australia, Annual Surveillance Report 2008*, NCHECR, The University of New South Wales and AIHW, Sydney.
- NLRC (NSW Law Reform Commission) 1997, *The Aboriginal Child Placement Principle*, Research Report no. 7, Sydney.
- NT (Northern Territory Government) 2006, Inquiry into the Protection of Aboriginal Children from Sexual Abuse, <http://www.nt.gov.au/dcm/inquiryasaac/members.html> (accessed 2 November 2006).
- O'Brien, W. 2008. *Problem Sexual Behaviour in Children: A Review of the Literature*, Australian Crime Commission, Canberra.
- Robertson, B. 2000, *The Aboriginal and Torres Strait Islander Women's Task Force on Violence Report*, Queensland Department of Aboriginal and Torres Strait Islander Policy and Development, Brisbane.
- SCRCSSP (Steering Committee for the Review of Commonwealth/State Service Provision) 2003, *Efficiency Measures for Child Protection and Support Pathways*, Reforms in Government Service Provision, Productivity Commission, Canberra.
- SCRGSP (Steering Committee for the Review of Government Service Provision) 2009, *Report on Government Services 2009*, Productivity Commission, Canberra.
- SNAICC (Secretariat of National Aboriginal and Islander Child Care) 2004, *Research Priorities for Indigenous Children & Youth*, Melbourne.

— 2005, *Through Young Black Eyes: A Handbook to Protect Indigenous Children from the Impact of Family Violence and Child Abuse*, 2nd edn, Australian Government Department of Family and Community Services (FaCS), Melbourne.

Stanley, F. 2005, The linking of records and analysis of population data for epidemiological and public health research, Transcript of lecture to Queensland Conservatorium, Griffith University, http://www.aracy.org.au/pdf/presentations/2006_griffithlecture05transcript.pdf (accessed 2 November 2006).

Stanley, J. 2003, Child sexual abuse in Indigenous communities, paper presented at the Child Sexual Abuse: Justice Response or Alternative Resolution Conference, Adelaide, 1-2 May.

Stanley, J., Kovacs, K., Cripps, K. and Tomison, A.M. 2002, *Child Abuse and Family Violence in Aboriginal Communities: Exploring Child Sexual Abuse in Western Australia*, Report for the Western Australian Government Inquiry into Responses by Government Agencies to Complaints of Family Violence and Child Abuse in Aboriginal Communities, Australian Institute of Family Studies, Melbourne.

Stanley, J., Tomison, A. and Pocock, J. 2003, *Child Abuse and Neglect in Indigenous Australian Communities*, Australian Institute of Family Studies, Child Abuse Prevention Issues, no. 19, Melbourne.

UN (United Nations) 2006, *Study on Violence against Children*, Office of the United Nations High Commissioner for Human Rights, <http://www.ohchr.org/english/bodies/crc/docs/study/SGSVAC.pdf> (accessed 2 November 2006).

UNICEF Innocenti Research Centre 2004, *Ensuring the Rights of Indigenous Children*, Innocenti Digest no. 11, Florence.

4.11 Family and community violence

ABS (Australian Bureau of Statistics) 2004, *National Aboriginal and Torres Strait Islander Social Survey, 2002*, Cat. no. 4714.0, Canberra.

— 2005, *National Information Development Plan for Crime and Justice Statistics*, Cat. no. 4520.0, Canberra.

— 2008, *Recorded Crime – Victims, 2007*, Cat. no. 4510.0, Canberra.

— 2009, *Conceptual Framework for Family and Domestic Violence*, Cat. no. 4529.0, Canberra.

AIC (Australian Institute of Criminology) 1993, Tangentyere Night Patrol, in *Prevention Awards 1993*, Australian Institute of Criminology, Canberra, pp. 34–42.

AIHW (Australian Institute of Health and Welfare) 2006, *Family Violence Among Aboriginal and Torres Strait Islander Peoples*, Cat. no. IHW 17, Canberra.

ARACY (Australian Research Alliance for Children and Youth) 2008, *The Wellbeing of Young Australians : Technical Report*, Canberra.

Anderson, P. and Wild, R. 2007, *Ampe Akelyernemane Meke Mekarle Little Children are Sacred Report of the Northern Territory Board of Inquiry into the Protection of Aboriginal Children from Sexual Abuse*, Northern Territory Government, Darwin.

Bryant, C. and Willis, M. 2008, *Risk Factors in Indigenous Violent Victimization*, Technical and background paper series, No. 30 Australian Institute of Criminology, Canberra.

Clapham, K., Stevenson, M. and Lo, S.K. 2006, 'Injury profiles of Indigenous and non-Indigenous people in New South Wales', *The Medical Journal of Australia*, vol. 184, no. 5, pp. 217–220.

-
- Goddard, C.R. and Hiller, P.C. 1992, *Tracking Physical and Sexual Abuse Cases from a Hospital Setting into Victoria's Criminal Justice and Child Protection Systems: A Report for the Victorian Law Foundation*, Department of Social Work and Department of Anthropology and Sociology, Monash University, Melbourne.
- Gordon, S., Hallahan, K. and Henry, D. 2002, *Putting the Picture Together: Inquiry into Response by Government Agencies to Complaints of Family Violence and Child Abuse in Aboriginal Communities*, Department of Premier and Cabinet, Western Australia.
- HREOC (Human Rights and Equal Opportunity Commission) 2006, *Ending Family Violence and Abuse in Aboriginal and Torres Strait Islander Communities – Key Issues*, Sydney.
- 2008, *Social Justice Report 2007*, Sydney.
- Homel, R., Freiberg, K., Lamb, C., Leech, M., Batchelor, S., Carr, A., Hay, I., Teague, R. and Elias, G. 2006, *The Pathways to Prevention Project: Doing Developmental Prevention in a Disadvantaged Community*, Trends and Issues in Crime and Criminal Justice, No. 323, Australian Institute of Criminology, Canberra.
- Kowanko, I. and Power, C. 2008, *Family and Community Healing Program: Final External Evaluation Report*, Central Northern Adelaide Health Service, Adelaide.
- Macdonald, H. 2001, 'Defining 'domestic violence' and 'homelessness'', *Parity (supplement)*, vol. 14, pp. 15–16.
- Matthews, J. 1997, 'Historical, social and biological understanding is needed to improve Aboriginal health', *Recent Advances in Microbiology*, vol. 5, pp 257–334.
- Memmott, P., Stacy, R., Chambers, C., and Keys, C. 2001, *Violence in Indigenous Communities*, Attorney-General's Department and the Aboriginal Environments Research Centre, Canberra.
- Mouzos, J. 2001, *Indigenous and Non-Indigenous Homicides in Australia: A Comparative Analysis*, Trends and Issues in Crime and Criminal Justice, No. 210, Australian Institute of Criminology, Canberra.
- NHMRC (National Health and Medical Research Council) 2002, *Report on a Review of Literature on the Epidemiology of Violence in Rural and Remote Australia and Resources to the Management of Violence*, Canberra.
- NSW ACSAT (NSW Aboriginal Child Sexual Assault Taskforce) 2006, *Breaking the Silence: Creating the Future*, NSW Attorney General's Department, Sydney.
- OEA (Office of Evaluation and Audit (Indigenous Programs)) 2007, *Evaluation of the FaCSIA Family Violence Programs: Family Violence Regional Activities Program — Family Violence Partnership Program*, Department of Finance and Deregulation, Canberra.
- SCRGSP (Steering Committee for the Review of Government Service Provision) 2005, *Overcoming Indigenous Disadvantage: Key Indicators 2005*, Productivity Commission, Canberra.
- Stanley, F. 2005, The linking of records and analysis of population data for epidemiological and public health research, Transcript of lecture to Queensland Conservatorium, Griffith University, http://www.aracy.org.au/pdf/presentations/2006_griffithlecture05transcript.pdf (accessed 2 November 2006).
- Stanley, J. and Goddard, C. 2003, Hearing only half of the story by leaving out half of the violence, paper presented at the Ninth Australasian Conference on Child Abuse & Neglect, Sydney, 24–27 November.
- Taft, A.J., Hegarty, K.L. and Feder, G.S. 2006, 'Tackling partner violence in families', *The Medical Journal of Australia*, vol. 185, no. 10, pp. 535–536.

Weatherburn, D., Snowball, L. and Hunter, B. 2006, *The Economic and Social Factors Underpinning Indigenous Contact with the Justice System: Results from the 2002 NATSISS Survey*, Contemporary Issues in Crime and Justice Bulletin no. 104, New South Wales Bureau of Crime Statistics and Research, Sydney.

4.12 Imprisonment and juvenile detention rates

ABS (Australian Bureau of Statistics) 2004a, *Experimental Estimates and Projections Aboriginal and Torres Strait Islander Australians*, Cat. no. 3238.0, Canberra.

—2001, *Population Distribution, Aboriginal and Torres Strait Islander Australians*, Cat. no. 4705.0, Canberra.

—2004b, *Australian Social Trends, 2004*, Cat. no. 4102.0, Canberra.

—2008, *Prisoners in Australia*, Cat. no. 4517.0, Canberra.

AIHW (Australian Institute of Health and Welfare) 2006, *Juvenile Justice in Australia, 2000-01 to 2003-04*, Cat. no. JUV4, Canberra.

Charlton, K. and McCall, M. 2004, *Statistics on Juvenile Detention in Australia: 1981-2003*, Technical and Background Paper Series, no. 10, Australian Institute of Criminology, Canberra.

Legislative Council, Standing Committee on Social Issues. 2008, *Overcoming Indigenous Disadvantage in New South Wales*, no. 40, Sydney.

Lynch, M., Buckman, J. and Krenske, L. 2003, *Youth Justice: Criminal Trajectories*, Trends and Issues in Crime and Criminal Justice, no. 265, Australian Institute of Criminology, Canberra.

Office of the Attorney-General (OAG) 2005, *Shepparton Koori Court Gets National Recognition*, Media release, November 10, http://www.dpc.vic.gov.au/domino/Web_Notes/newsmedia.nsf/ (accessed 1 February 2007).

Office of Crime Statistics and Research 2004, *Aboriginal (Nunga) Courts*, Information Bulletin no. 39, Government of SA, Adelaide.

Parker N. and Pathé M. 2006, *Report on the Review of the Murri Court*, State of Queensland, Department of Justice and Attorney-General, Brisbane.

Putt, J., Payne, J. and Milner, L. 2005, *Indigenous Male Offending and Substance Abuse*, Trends and Issues in Crime and Criminal Justice, no. 293, Australian Institute of Criminology, Canberra.

RCIADIC (Royal Commission into Aboriginal Deaths in Custody) 1991, *National Report*, <http://www.austlii.edu.au/au/special/rsjproject/rsjlibrary/rciadid/> (accessed 19 June 2003).

Taylor, N. 2009, *Juveniles in Detention in Australia, 1981–2007*, Technical and Background Paper, Australian Institute of Criminology, Canberra.

WA Department of Justice 2002a, *Strategic Plan for Aboriginal Services, 2002–2005*, Department of Justice, WA.

—2002b, *Profile of Women in Prison*, Department of Justice, WA.

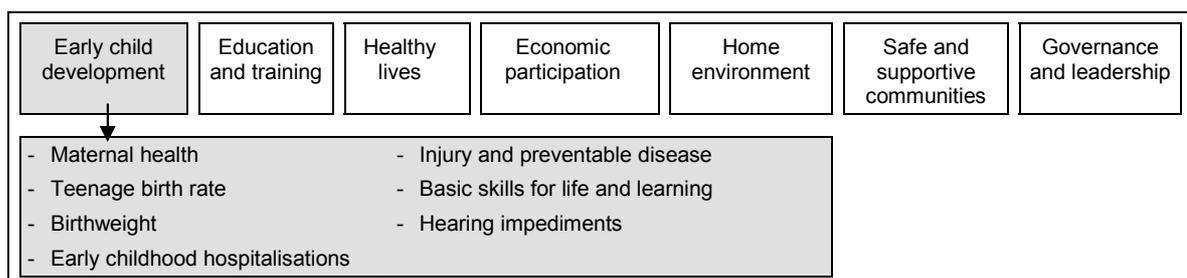
Weatherburn, D., Snowball, L. and Hunter, B. 2008, *Predictors of Indigenous Arrest: An Exploratory Study*, Australian and New Zealand Journal of Criminology, vol. 41, no2, <http://www.atypon-link.com/AAP/doi/abs/10.1375/acri.41.2.307> (accessed 13 May 2009).

Willis, M. 2008, *Reintegration of Indigenous Prisoners: Key Findings*, Trends and Issues in Crime and Criminal Justice, no. 364, Australian Institute of Criminology, Canberra.

Woodward, R. 2003, *Families of Prisoners: Literature Review on Issues and Difficulties*, Occasional Paper no. 10, Australian Government Department of Family and Community Services, Canberra.

5 Early child development

Strategic areas for action



Providing children with a good start can have a long lasting effect on the rest of their lives. This early stage can open up opportunities for the future, but can also create barriers that prevent children achieving their full potential. Growing up in households with multiple disadvantage can affect children's development, health, social and cultural participation, educational attainment and employment prospects.

Many COAG targets and headline indicators reflect the importance of early child development:

- young child mortality (section 4.2)
- early childhood education (section 4.3)
- substantiated child abuse and neglect (section 4.10).

Other headline indicators are important influences on early childhood outcomes:

- household and individual income (section 4.9)
- family and community violence (section 4.11).

Outcomes in the early child development strategic area can be affected by outcomes in several other strategic areas for action:

- healthy lives (access to primary health, obesity and nutrition) (chapter 7)
- economic participation (income support) (chapter 8)
- home environment (overcrowding, access to functioning water, sewerage and electricity services) (chapter 9)

-
- safe and supportive communities (alcohol and drug misuse and harm) (chapter 10).

The indicators in the early child development strategic area for action focus on the drivers of long term advantage or disadvantage — improvements in these indicators can contribute over time to improvements in indicators across the framework:

- maternal health — the health of women during pregnancy, childbirth and the period following birth is important for the wellbeing of both women and children. This section reports on measures including access to antenatal services, and alcohol and tobacco consumption during pregnancy (section 5.1)
- teenage birth rate — pregnancy at a young age is generally associated with higher rates of complications during pregnancy and delivery. Teenage births are also associated with lower incomes and poorer educational attainment and employment prospects for the mother (section 5.2)
- birthweight — low birthweight can indicate lack of nutrients or oxygen during particular stages of pregnancy, and is also a key factor affecting infant mortality. Low birth weight is also correlated with poorer health outcomes later in life, including coronary heart disease and type 2 diabetes. This section reports birthweight for babies born to Indigenous mothers (section 5.3)
- early childhood hospitalisations — admissions to hospital typically relate to more serious conditions, and the hospitalisation rate provides a broad indicator of the scale of serious health issues experienced by Indigenous children. A high rate of hospitalisations may also indicate differential access to primary health care, as many hospital admissions could be prevented if more effective non-hospital care were available (see section on injury and preventable disease). This section reports on hospitalisations for all causes for children aged 0 to 4 years (section 5.4)
- injury and preventable disease — the actions of communities and governments can promote the health of children — most childhood diseases and injuries can be successfully prevented or treated without hospitalisation. High rates of injury and preventable disease may indicate underlying issues with child supervision, the living environment or access to health care. This indicator examines injury and preventable diseases that result in children being hospitalised (section 5.5)
- basic skills for life and learning — basic skills for life and learning include a range of social, emotional, language, cognitive and communication skills, as well as general knowledge. The early social and cognitive development of children provides the foundations upon which later relationships and formal learning depend. Only limited data are available for this indicator (section 5.6)

hearing impediments — Indigenous children tend to have high rates of recurring ear infections, which, if not treated early, can become a chronic disease and lead to hearing impediments. As well as direct health impacts, hearing impediments can affect children’s capacity to learn and socialise. However, only limited information is available on the burden of hearing loss in Indigenous children. High rates of recurring ear infections are associated with poverty, crowded housing conditions, inadequate access to clean water and functional sewerage systems, nutritional problems and access to health care (section 5.7)

Attachment tables

Attachment tables for this chapter are identified in references throughout this chapter by an ‘A’ suffix (for example, table 5A.1.1). These tables can be found on the Review web page (www.pc.gov.au/gsp), or users can contact the Secretariat directly.

5.1 Maternal health

Box 5.1.1 Key messages

- The proportion of low birthweight babies, pre-term babies and perinatal deaths decreased as the number of antenatal visits increased for both Indigenous and non-Indigenous mothers in 2006 (figures 5.1.3, 5.1.4 and 5.1.5). A lower proportion of Indigenous and than non-Indigenous mothers attended at least five antenatal sessions in Queensland, SA and the NT in 2006 (figure 5.1.1).
- The proportion of Indigenous mothers who attended at least one antenatal session remained constant in most states and territories and increased significantly in SA between 1998 and 2006 (figure 5.1.6).
- Around half of Indigenous mothers smoked during pregnancy and the proportion remained relatively constant between 2001 and 2006 (figure 5.1.7).

Maternal health is a new indicator in the revised indicator framework endorsed by COAG for the 2009 report. COAG anticipates that improved maternal health will contribute to the achievement of its target to ‘halve the gap in mortality rates for Indigenous children under five within a decade’. The National Indigenous Reform Agreement agreed by COAG in November 2008 (COAG 2008) included two measures related to maternal health:

- antenatal care
- tobacco smoking during pregnancy.

Maternal health is important both for mothers and their children. Good health during pregnancy contributes to reduced perinatal and infant mortality (section 4.2, Young child mortality) and smaller proportions of low birthweight babies (section 5.3, Birthweight). Good maternal health also reduces the likelihood of maternal death.

This section includes data on use of antenatal care, tobacco use during pregnancy and maternal deaths. There is also discussion of alcohol consumption during pregnancy, but no data are currently available. While much of this section deals with antenatal care, Sivak, Arney and Lewig (2008) found that a family home visiting program for Indigenous babies after birth had positive outcomes for the health and wellbeing of both mothers and babies. Box 5.1.2 includes case studies of some things that are working to improve maternal health and antenatal care.

Box 5.1.2 Things that work — maternal health

The **Koori Maternity Strategy** operates across Victoria with the aim of providing culturally appropriate maternity care to Koori women and aligning their birthing experiences and outcomes with those experienced by all Australian women. The program provides both antenatal and postnatal care, antenatal education, birthing support and a health service for children in early childhood. Transport is provided for mothers to facilitate access to the clinic. Aboriginal women still have their babies in the local hospital, but it is not uncommon for them to be discharged after only two days. The birthing program is able to provide support for mothers in this situation, particularly in relation to continuation of breastfeeding after discharge from hospital.

There has been an increase in Koori women accessing antenatal care and earlier in pregnancy. Social networks have improved and better working relationships with mainstream organisations have been established (Dwyer 2005).

The Winnunga Nimmityjah Aboriginal Health Service Aboriginal Midwifery Access Program (AMAP) in the ACT provides community based antenatal and postnatal care to Indigenous women and their babies. Two midwives provide intensive support and care to Indigenous women in a culturally appropriate environment. Evaluation of the program found a high level of acceptance from the community, with improved access and earlier presentation for antenatal care, and improved management of gestational diabetes. Women who had previously experienced difficult pregnancies reported improvement in subsequent pregnancies and the number of low birth weight children was reduced. In 2007 the program was a finalist in the Department of Health and Ageing's 'National Excellence Awards in Aboriginal and Torres Strait Islander Health — Service Delivery' category (ACT Government unpublished).

(Continued next page)

Box 5.1.2 (continued)

The Community Midwifery Programme (CMP) in Elizabeth, SA, is a midwifery led care model in which a midwife cares for designated clients through the continuum of pregnancy, birth and the period after birth, offering appropriate models of care for Indigenous women. Birthweight of Indigenous babies within the program is generally higher than for those birthed outside of the program (SA Government unpublished).

The Anangu Bibi Family Birthing Program in Port Augusta and Whyalla (SA) was introduced following consultations with Aboriginal women, communities and agencies. Aboriginal Maternal and Infant Care (AMIC) workers and midwives work together in partnership to provide antenatal, birthing and early childhood care to Aboriginal women. Midwives have developed a better appreciation of Aboriginal culture and AMIC workers have improved their clinical skills and knowledge. AMIC workers have encouraged more Aboriginal women to visit midwives for antenatal care and together the AMIC workers and midwives have ensured that Aboriginal women have felt welcome in the hospital and have received appropriate care. There has been an increased use of the services and, anecdotally, reductions in low birthweight babies, decreases in smoking, increases in breastfeeding and increases in the number of women having more than seven antenatal visits (Stamp et al. 2008).

Antenatal care

Antenatal care includes assessment of the health of pregnant women and their developing babies, screening tests, education and advice on healthcare during pregnancy and delivery, and the identification and management of conditions that may be harmful to health during pregnancy (WHO 2009).

Access to primary health care can make a difference to the health of women of childbearing ages and women during pregnancy, as well as fetuses during growth and development, infants and young children (Eades 2004). Antenatal care may be especially important for Indigenous women as they are at higher risk of giving birth to low birthweight babies. Risk factors that can be addressed through antenatal care include anaemia, poor nutrition, hypertension, diabetes and glucose intolerance, genital and urinary tract infections, and smoking (AHMAC 2008). Antenatal care also provides an opportunity to educate mothers about breastfeeding, which has benefits for both the mother and child (Queensland Health 2003). Zubrick et al. (2004) found that mothers of Aboriginal children in WA, particularly those living in more isolated areas, were both more likely to initiate breast feeding and to breast feed for longer than mothers in the general population.

The optimal number of antenatal care visits is the subject of some debate and the commonly used protocols in Australia are not always consistent with research

evidence (Hunt and Lumley 2002). National antenatal care guidelines are being developed. Most guidelines suggest that antenatal care start in the first trimester (first three months) of pregnancy so that risk factors can be identified at an early stage (Mercy Hospital for Women, Southern Health Service and Women's & Children's Health Service 2001). After the first visit, antenatal care often follows the standard schedule monthly visits to 28 weeks, fortnightly visits to 36 weeks and then weekly visits until birth (Dodd, Crowther and Robinson 2002; Hunt and Lumley 2002). However, research shows that seven to ten visits may be sufficient for low risk women (Mercy Hospital for Women, Southern Health Service and Women's & Children's Health Service 2001; Wallace and Oats 2002).

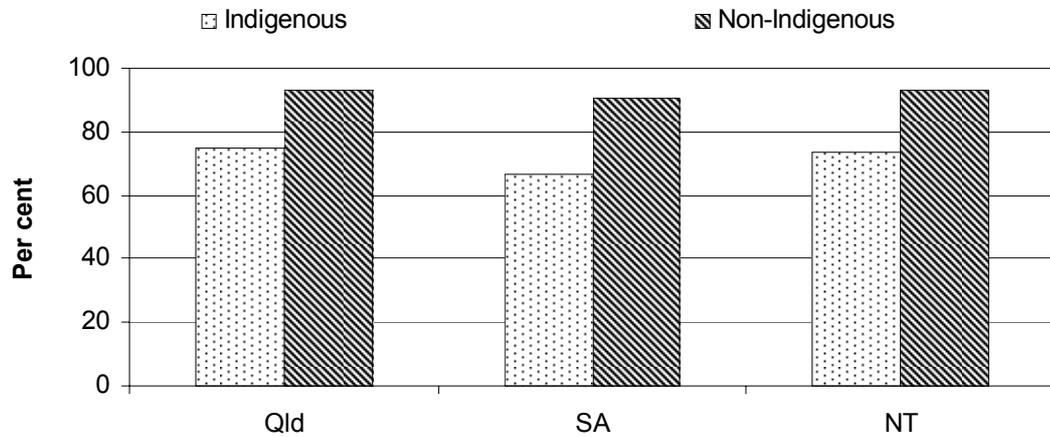
This section provides data on the proportions of women attending their first antenatal visit during the first trimester and the proportion attending at least five antenatal visits during their pregnancy. These are presented as the minimum requirements for good antenatal care.

The proportion of low birthweight babies, pre-term (premature) babies and perinatal deaths decreased as the number of antenatal visits increased for both Indigenous and non-Indigenous mothers in 2006.

- For Indigenous mothers who did not attend any antenatal sessions 41.6 per cent had babies of low birthweight, while for Indigenous mothers who attended five or more antenatal sessions only 8.5 per cent had babies of low birthweight (table 5A.1.3).
- For Indigenous mothers who did not attend any antenatal sessions 40.2 per cent had pre-term babies, while for Indigenous mothers who attended five or more antenatal sessions only 8.6 per cent had pre-term babies (table 5A.1.4).
- For Indigenous mothers who did not attend any antenatal sessions 9.3 per cent resulted in perinatal deaths, while for Indigenous mothers who attended five or more antenatal sessions only 0.7 per cent resulted in perinatal deaths (table 5A.1.5).

Section 5.3 provides more information on birthweight. Perinatal and infant deaths are discussed in more detail in section 4.2 (Young child mortality).

Figure 5.1.1 **Mothers who attended five or more antenatal sessions, by State/Territory, 2006^{a, b}**

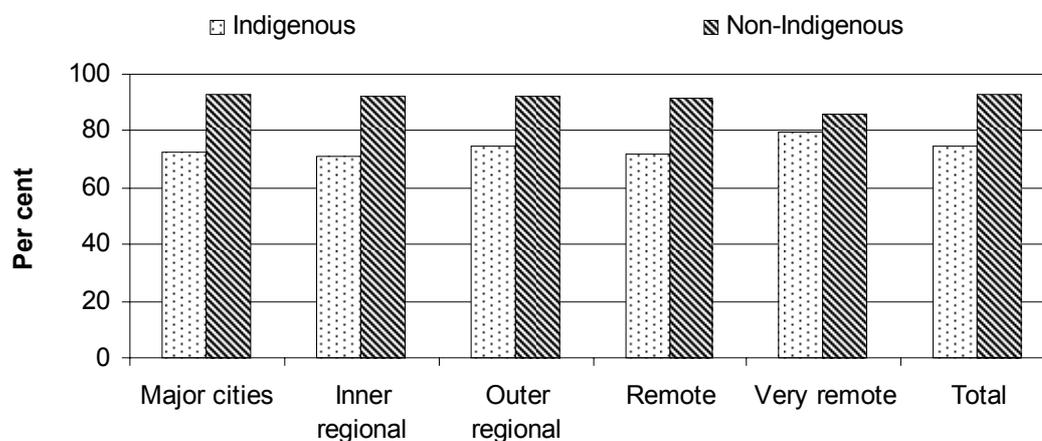


a Per cent of women who gave birth in the period, whether resulting in a live or still birth, if the birthweight was at least 400 grams or the gestational age was 20 weeks or more. Excludes births where mother's Indigenous status was not stated. **b** Data not available for NSW, Victoria, WA and Tasmania. Data are available in the ACT but not of sufficient quality to publish. Jurisdiction level data are based on place where birth occurred, not place of usual residence.

Source: AIHW analysis of State/Territory perinatal collections (unpublished); table 5A.1.1.

- In 2006, a lower proportion of Indigenous than non-Indigenous mothers attended at least five antenatal sessions in Queensland, SA and the NT (figure 5.1.1).
- Data on the duration of pregnancy at the first antenatal visit are only available for NSW. In 2006, 54.0 per cent of Indigenous mothers and 63.7 per cent of non-Indigenous mothers attended their first antenatal session during the first trimester (first 12 weeks) of pregnancy (table 5A.1.1).

Figure 5.1.2 **Mothers who attended five or more antenatal sessions, Queensland, SA and the NT combined by remoteness, 2006^{a, b, c}**



^a Per cent of women who gave birth in the period, whether resulting in a live or still birth, if the birthweight was at least 400 grams or the gestational age was 20 weeks or more. Excludes births where mother's Indigenous status was not stated. ^b Data not available for NSW, Victoria, WA and Tasmania. Data are available in the ACT but not of sufficient quality to publish. ^c Total includes unknown remoteness category.

Source: AIHW analysis of State/Territory perinatal collections (unpublished); table 5A.1.2.

- In 2006, lower proportions of Indigenous than non-Indigenous mothers attended five or more antenatal sessions in all remoteness areas in Queensland, SA and the NT combined. Indigenous mothers were more likely to attend five or more antenatal sessions in very remote areas than in other remoteness areas (figure 5.1.2).
- Data on the duration of pregnancy at the first antenatal visit are only available for NSW. In 2006, 63.8 per cent of Indigenous mothers outer regional areas in NSW attended their first antenatal visit in the first trimester (12 weeks) of pregnancy compared with 43.8 per cent of those in very remote areas of NSW (table 5A.1.2).

Data are available from 1998 to 2006 on the proportion of pregnant mothers attending at least one antenatal care session. Between 1998 and 2006, the proportion of Indigenous mothers who attended at least one antenatal session remained constant in most states and territories and increased significantly in SA. The proportion of both Indigenous and non-Indigenous mothers attending at least one antenatal session was well over 90 per cent in most states and territories except SA over the period (table 5A.1.6).

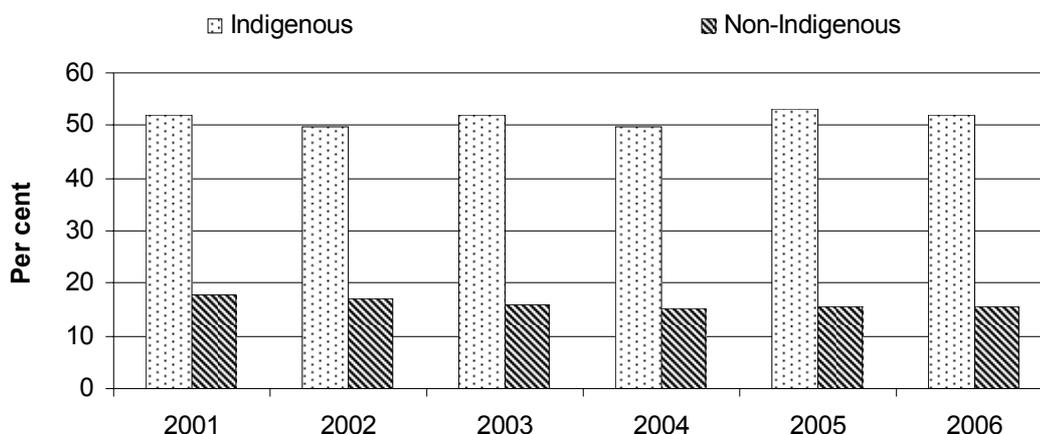
Attendance of at least one antenatal care session has some benefit. However, available data presented demonstrate that attendance at five or more antenatal care sessions by pregnant women has significant positive outcomes for their babies. In

future editions it would be useful to be able to present time series data on the proportion of mothers attending at least five antenatal care sessions.

Tobacco consumption during pregnancy

Smoking in pregnancy can lead to miscarriage, stillbirth or premature birth (Graham et al. 2007; Gilligan et al. 2007; Wills and Coory 2008; Walters 2009) and low birthweight. Low birthweight infants are at a greater risk of dying during the first year of life and are prone to ill health in childhood. The negative health effects of tobacco smoking may continue after birth if one or both parents smoke. Passive smoking has been linked with higher rates of respiratory illness, sudden infant death syndrome (SIDS), asthma and ear infections in children (Jacoby et al. 2008), and lung cancer and heart disease in adults (DHA 2003, 2004). Wood et al. (2008) explored some of the barriers to Indigenous women ceasing smoking during pregnancy.

Figure 5.1.3 Mothers reporting smoking during pregnancy^{a, b, c}



^a 2001 to 2004 data are for NSW, WA, SA, the ACT and NT only. Smoking during pregnancy data were only available for these five jurisdictions. ^b 2005 data are for NSW, WA, SA, Tasmania, the ACT, the NT and include 6 months of Queensland data. For Queensland, smoking status data were collected from 1 July 2005, therefore, 2005 figures only include the July-December period for Queensland. ^c 2006 data exclude Victoria (include NSW, Queensland, WA, SA, Tasmania, the ACT and NT)

Source: AIHW National Perinatal Statistics Unit reports: *Smoking and Pregnancy*, Cat. no. PER 33; *Australia's Mothers and Babies 2004*, Cat. no. PER 34; *Australia's Mothers and Babies 2005*, Cat. no. PER 40; *Australia's Mothers and Babies 2006*, Cat. no. PER 46; table 5A.1.7.

- In 2006, 52.2 per cent of Indigenous mothers and 15.6 per cent of non-Indigenous mothers reported smoking during pregnancy (figure 5.1.3).
- Between 2001 and 2006, around half of Indigenous mothers smoked during pregnancy and the proportion remained relatively constant. The proportion of

non-Indigenous mothers smoking during pregnancy declined slightly from 17.8 to 15.6 per cent (figure 5.1.3). Data on proportions of pregnant mothers smoking over time should be interpreted with caution, as the number of states and territories for which data are available has changed over time.

Zubrick et al. (2004) found that, across all levels of relative isolation in WA, the proportion of mothers of Aboriginal infants who used tobacco during their pregnancy was twice that of mothers in the general population.

Alcohol consumption during pregnancy

It is well documented that heavy alcohol consumption during pregnancy is a risk factor for fetal alcohol syndrome (O'Leary et al. 2007; NHMRC 2001; World Bank 2000). Fetal alcohol syndrome is characterised by various combinations of growth restriction of the fetus, facial anomalies, microcephaly and central nervous system impairment, including intellectual disability and behaviour problems (O'Leary 2004; Rothstein, Heazlewood and Fraser 2007; World Bank 2000). Abstaining from drinking alcohol during pregnancy will prevent fetal alcohol syndrome. Alcohol exposure can also cause a range of other alcohol related birth defects, known as fetal alcohol spectrum disorder (O'Leary et al. 2007). Fetal alcohol spectrum disorder may lead to a range of a range of physical, behavioural, and cognitive effects.

There are few data available on alcohol consumption by Indigenous females during pregnancy. One study gathered data through a survey administered as part of a health screening program conducted from 1998 to 2000 at 45 rural and remote locations in north Queensland. The 'Well Persons Health Check' found that 25 per cent of pregnant Indigenous women reported drinking at hazardous and harmful levels in the week prior to the survey (Queensland Health Tropical Population Health Network unpublished).

In Australia, the lack of data on the prevalence of fetal alcohol syndrome or fetal alcohol spectrum disorder is a barrier to obtaining a true estimate of its prevalence in the Indigenous population. However, these disorders can be difficult to diagnose. One study in far north Queensland estimated a fetal alcohol spectrum disorder prevalence of 1.5 per cent in the Aboriginal child population, with a prevalence of 3.6 in one Cape York community (Rothstein, Heazlewood and Fraser 2007). In contrast, the highest reported prevalence outside Australia is 0.5 per cent in South Africa (Abel and Hannigan 1995).

Elliott et a. (2008) reported on an active national case finding study of fetal alcohol syndrome. The data are based on monthly reporting of incident cases aged less than

15 years by over 1150 paediatricians between January 2001 and December 2004. Ninety-two cases of fetal alcohol syndrome were reported during the period, of which 65 per cent were Indigenous.

Maternal deaths

Data on Indigenous maternal mortality should be interpreted with caution as Indigenous identification is incomplete and numbers of deaths are small and a small variation in numbers from one year to the next can significantly alter rates. Small numbers of both Indigenous and non-Indigenous women die during pregnancy and childbirth. For the period 2003–05, there were six maternal deaths of Indigenous women. Two were directly related to complications of pregnancy and childbirth, while the other four were from causes not related to pregnancy or childbirth, but which may have been aggravated by the effects of pregnancy (AIHW 2009).

Table 5.1.1 Indigenous maternal mortality rates 1991–1993 to 2003–2005

Years	Deaths	Total Indigenous confinements ^a	Indigenous maternal mortality rate ^a	Non-Indigenous maternal mortality rate ^{a, b}	Rate ratio ^c
1991–1993	5	21 539	23.2	5.9	3.9
1994–1996	4	22 996	17.4	8.3	2.1
1997–1999	6	25 530	23.5	6.7	3.5
2000–2002	12	26 128	45.9	8.7	5.3*
2003–2005	6	27 901	21.5	7.4	2.9

* Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons at the $p < 0.05$ level.

^a Rate per 100 000 confinements calculated using direct and indirect deaths only. Excludes incidental deaths.

^b For 1991–1993 and 1994–1996, the non-Indigenous maternal mortality rate includes non-Indigenous deaths and deaths where Indigenous status is unknown. For 1997–1999, 2000–2002 and 2003–2005, deaths where Indigenous status is unknown have been excluded. ^c Maternal mortality rate for Indigenous mothers divided by maternal mortality rate for non-Indigenous mothers.

Source: AIHW (2009) *Aboriginal and Torres Strait Islander Health Performance Framework 2008 Report: Detailed Analyses*.

- The maternal mortality rate for Indigenous women between 1991–1993 and 2003–2005 ranged from 17.4 per 100 000 to 45.9 per 100 000 (table 5.1.1).
- Although maternal mortality rates for Indigenous women were between two and five times the rates for non-Indigenous women between 1991–1993 and 2003–2005, these differences were generally not statistically significant (table 5.1.1).

5.2 Teenage birth rate

Box 5.2.1 Key messages

- Teenage birth rates were much higher for Indigenous females than non-Indigenous females in both 2004 and 2007 (figure 5.2.1).
- 18.0 per cent of Indigenous births were to teenage mothers in 2007. In contrast, 3.2 per cent of non-Indigenous births were to teenage mothers (figure 5.2.3).
- The proportion of Indigenous births to teenage mothers increased with remoteness and was highest in very remote areas between 2001 and 2007 (figure 5.2.4).

Teenage birth rate has been included as a new indicator in the 2009 report because of the additional risks associated with teenage births — risks to both the mother and the baby. Indigenous teenagers have a much higher birth rate than non-Indigenous teenagers. In 2007, 18.0 per cent of Indigenous births were to teenage mothers (figure 5.2.3). In contrast, 3.2 per cent of non-Indigenous births were to teenage mothers (figure 5.2.3).

This section analyses patterns in teenage births by the Indigenous status of the baby and of the mother, by the mother's age, by remoteness area, and by State and Territory.

Australia's teenage birth rate of 16.3 babies per 1000 females in 2003 was low compared to other English speaking countries, including the United States (51.1 per 1000), New Zealand (29.8 per 1000), United Kingdom (29.7), and Canada (20.1) (Morehead and Soriano 2005). However, Australia's teenage birth rate is moderate compared to other OECD countries. In 2005, of 36 OECD countries Australia had the 15th highest teenage birth rate (OECD 2008). Teenage birth rates are much higher in less developed countries and are in excess of 100 babies per 1000 women in some developing countries (UNFPA 2004).

As the data in this section demonstrate, Indigenous birth rates are much higher in Australia than non-Indigenous birth rates. Indigenous births are also much more likely to be to teenage mothers, relative to non-Indigenous births. Luong (2008), notes that for Canadian Aboriginals, teenage pregnancy is much more common than for other Canadians. Teenage pregnancy is also much more common for Maori than other New Zealanders (Dickson et al. 2000).

Many studies have measured the association between teenage pregnancy and the likelihood that the mother or child will experience socio-economic disadvantage both at the time of birth and later in the mother's or child's life. Jeon, Kalb and Vu (2008) examined welfare participation among Australian teenage mothers and

found a strong association between welfare participation and being a teenage mother. They found that, on average, teenage mothers left school much earlier than females who did not become teenage mothers. The study found that 165 (19.7 per cent) of 839 teenage mothers in the sample left school at the age of becoming a mother or a year before the event. Most teenage mothers in the study left school at the age of 15 or 16, before they were pregnant. In Australia, teenage mothers are overrepresented among recipients of the main income support payment for single mothers (Morehead and Soriano 2005). In Britain, teenage mothers are more likely to experience socio-economic disadvantage later in life, including being more likely to partner an unemployed or low income earning man and being much less likely to own a home (Ermisch 2003).

There are also concerns about heightened physical health risks to teenage mothers and their babies. Research shows that mothers aged over 35 are more likely to have complications (Jolly et al. 2000) relative to mothers in their 20s and early 30s. However, teenagers, especially younger teenagers who are not fully grown, have much higher risks of complications for themselves and their baby. Younger teenage mothers are more likely to give birth to low birthweight babies (Hendrickson 1998). Babies who are born with a low birthweight (under 2500 grams) have heightened risks for a number of health complications (for more discussion of low birthweight babies see section 5.3).

There are also concerns about how the emotional maturity of teenager mothers and the support they receive from their families affects their capacity to care for their children. Evidence suggests that teenage mothers are less likely to attend antenatal clinics (NSW Health 2009) (section 5.1 discusses antenatal care in more detail). Teenage mothers are also more likely to experience depression than older mothers (Liao 2003). In Australia, teenage mothers are overrepresented among disability support payment recipients (Jeon, Kalb and Vu 2008). Zubrick et al. (2004) found that the care of children born to early teenage mothers was more likely to be transferred to others, which poses risks to the child.

Research suggests that daughters of teenage mothers are much more likely to become teenage mothers themselves (Anderson and Kahn 1992).

Teenage mothers are more likely to come from disadvantaged backgrounds and are more likely to be disadvantaged later in life. Notwithstanding the strong association between socio-economic disadvantage and teenage motherhood, causation is difficult to determine (Bradbury 2006; Hotz, McElroy and Sanders 2005).

This section defines a teenage birth as a birth where the mother is under the age of 20 at the time of birth. There are a small number of births to girls under the age of

13 which are counted as teenage births in this section. This section examines the following three types of births:

- Indigenous births — births where at least one parent is Indigenous
- births to Indigenous mothers — births where the mother is Indigenous
- non-Indigenous births — births where both the mother and father are non-Indigenous.

Births to Indigenous mothers is a subset of Indigenous births. In 2007, births to Indigenous mothers comprised 71.8 per cent of Indigenous births (table 5A.2.7).

Programs have been developed to assist teenage and young mothers to care for their children. Box 5.2.2 provides an example of a program designed to assist young Indigenous mothers.

Box 5.2.2 ‘Things that work’ — The Nunga Young Mums Program

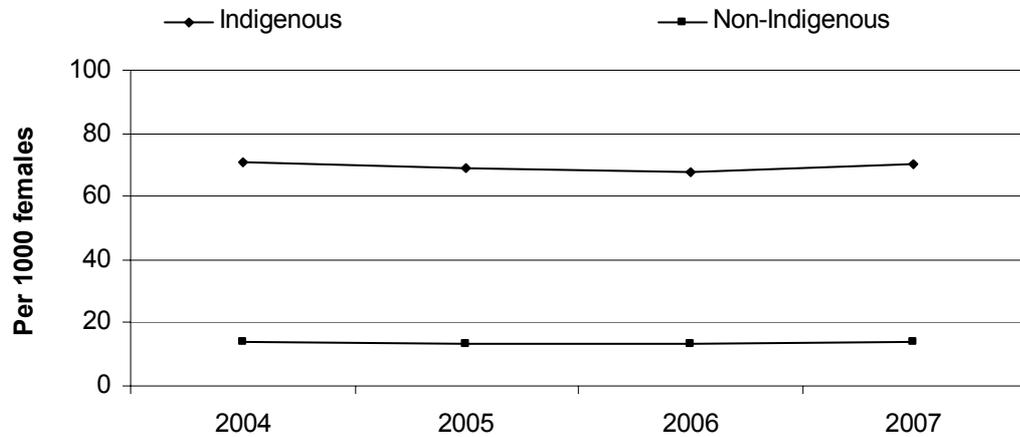
The Nunga Young Mums Program is based on the Incredible Years Program, an evidence based program from the United States. The program targets young mums (under 25s), uses a place that is already familiar and promotes the program in a way that is personal and sensitive to possible shame issues around parenting.

The Nunga Young Mums Program promotes the use of principles of play and attention, praise and rewards, limit setting, ignoring and distracting and then time out. The principles are ranked in order of importance, the greatest focus being on the play and attention and least focus on time out. In consultation with Nunga program leaders the principles are focussed by the use of an adapted parenting pyramid depicting a fruit tree with its roots representing the child.

The program was developed using a partnership approach and the language has been adapted to be culturally appropriate. Child and Adolescent Mental Health Services are currently exploring opportunities to expand this program in 2009.

The initial 16 week program was commenced with 7 Indigenous mums and 13 Indigenous children. The children were involved through the content, conversation and homework tasks of the parents each week. One family outing was held during the school holidays which 7 children attended. The initial program goal was to learn about children and how to participate as part of a group. A number of participants from the initial program have requested to join the program this year, so that they can continue developing their parenting skills and support other mums in the program (SA Government, unpublished).

Figure 5.2.1 Teenage birth rate (females aged 15–19 years), by Indigenous status of mother, 2004–07^a



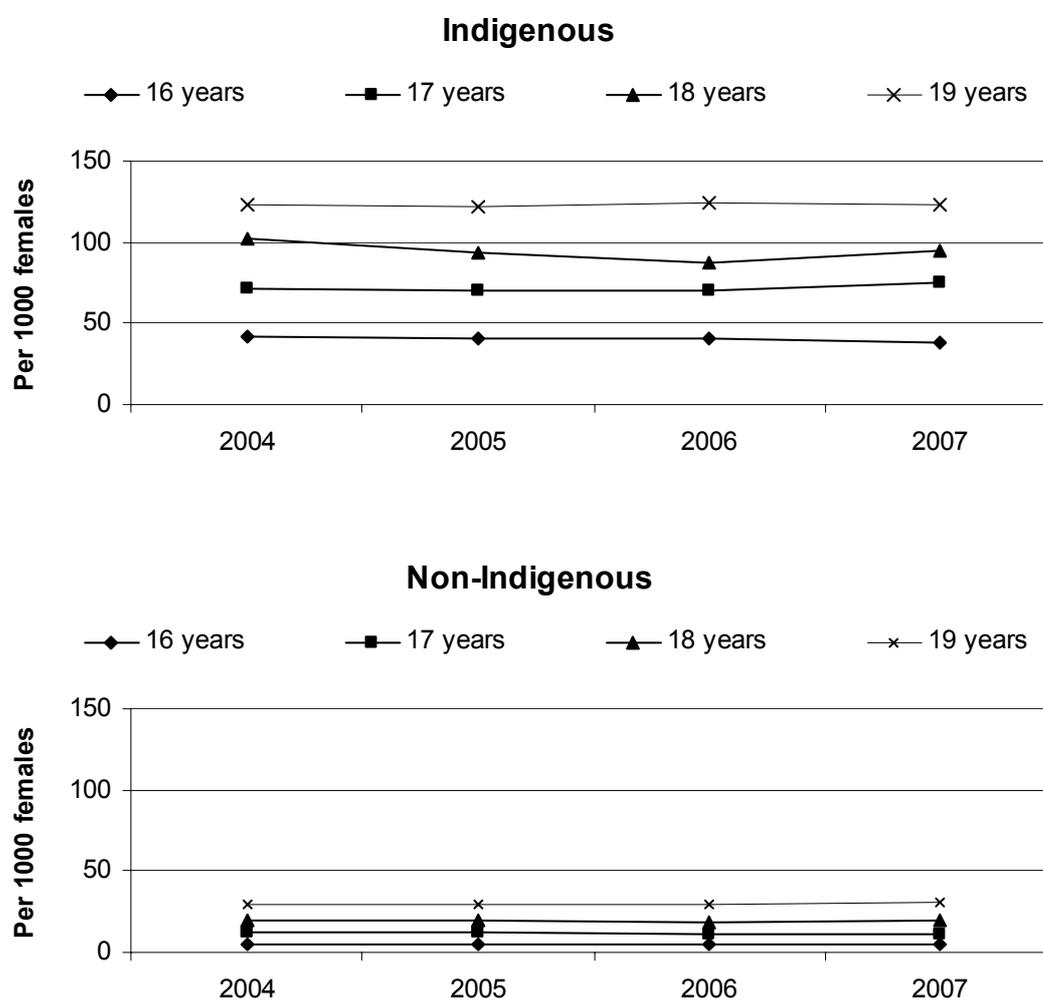
^a The teenage birth rate in this analysis is calculated using the total number of births to females aged under 20 at the time of birth divided by the female population aged 15 to 19 years. A small number of births are to females under the age of 15. This means that teenage birth rates are slightly inflated.

Source: ABS *Births, Australia 2004–07*; ABS (unpublished) derived from *Experimental Estimates of the Aboriginal and Torres Strait Islander Population* Cat no. 3238.0; ABS (unpublished) derived from *Australian Demographic Statistics* Cat no. 3101.0; table 12A.2.23.

Between 2004 and 2007:

- teenage birth rates were much higher for Indigenous teenagers than all teenagers (figure 5.2.1)
- the teenage birth rate for Indigenous teenagers remained stable (70.9 per 1000 in 2004 and 70.1 per 1000 in 2007). The teenage birth rate for non-Indigenous teenagers also remained stable (13.8 per 1000 in 2004 and 13.7 in 2007) (figure 5.2.1).

Figure 5.2.2 Teenage birth rate, by age of mother, 2004–07



Source: ABS *Births, Australia 2004–07*; ABS (unpublished) derived from *Experimental Estimates of the Aboriginal and Torres Strait Islander Population*; table 5A.2.21.

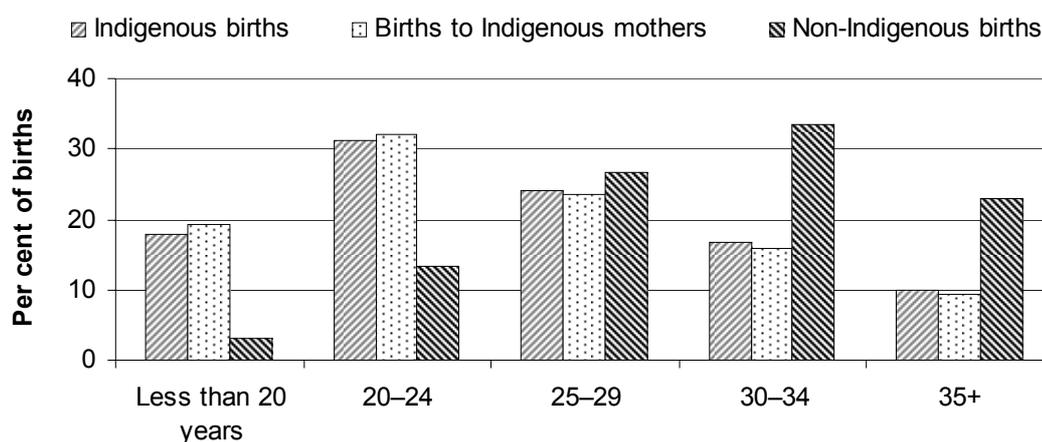
Between 2004 and 2007:

- birth rates for Indigenous females aged 16–19 years increased for each single year of age, and were much higher than birth rates for non-Indigenous females (figure 5.2.2)
- birth rates for Indigenous females or non-Indigenous females aged 16, 17, 18 and 19 years were relatively stable over time (figure 5.2.2).

Birth rates for Indigenous females aged 16, 17, 18 and 19 years are reported for some states and territories for 2004–07 in attachment table 5A.2.21. A similar proportion of Indigenous births and births to Indigenous mothers were to mothers aged under 16 years (1.3 per cent and 1.5 per cent, respectively, in 2007)

(table 5A.2.7). A much smaller proportion of non-Indigenous births were to mothers under the age of 16 (0.1 per cent) (table 5A.2.7).

Figure 5.2.3 Births, by Indigenous status of baby and mother, and age of mother, 2007^a



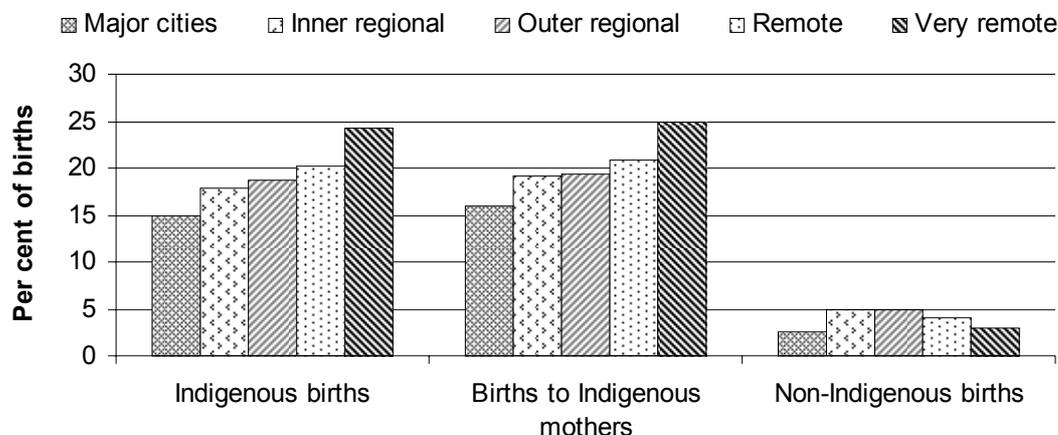
^a Indigenous births are births where at least one parent is Indigenous.

Source: ABS *Births, Australia 2007* (unpublished); table 5A.2.18.

In 2007:

- the distribution of mothers' age at birth was similar for Indigenous births and births to Indigenous females, but very different for non-Indigenous births (figure 5.2.3)
- 18.0 per cent of Indigenous births and 19.3 per cent of births to Indigenous mothers were to teenage mothers (figure 5.2.3). In contrast, 3.2 per cent of non-Indigenous births were to teenage mothers (figure 5.2.3)
- Indigenous births and births to Indigenous mothers were also much more likely than non-Indigenous births to be to mothers aged 20–24 years and much less likely to be to mothers aged 30 years and over (figure 5.2.3).

Figure 5.2.4 Proportion of births to teenage mothers, by Indigenous status of baby and remoteness, 2007^{a, b}



^a Indigenous births are births where at least one parent is Indigenous. ^b Remoteness area data exclude births where place of usual residence is undefined, overseas, offshore and migratory and where data are otherwise uncodeable. Remoteness areas are approximated due to converting births by statistical local area to remoteness areas.

Source: ABS *Births, Australia 2001–07* (unpublished); table 5A.2.8.

In 2007:

- for all remoteness areas, similar proportions of Indigenous births and births to Indigenous women were to teenage mothers. In contrast, a much lower proportion of non-Indigenous births were to teenage mothers (figure 5.2.4)
- the proportion of Indigenous births to teenage mothers increased with remoteness and was highest in very remote areas (24.3 per cent of births) (figure 5.2.4). The proportion of births to Indigenous teenage mothers also increased with remoteness and was highest in very remote areas (24.9 per cent) (figure 5.2.4). In contrast, the proportion of non-Indigenous births to teenage mothers was highest in inner regional and outer regional areas (4.9 per cent and 4.8 per cent, respectively) and lowest in major cities and very remote areas (2.5 per cent and 2.9 per cent, respectively) (figure 5.2.4).

Between 1998 and 2007:

- the proportion of Indigenous births to teenage mothers and births to Indigenous teenage mothers was much higher than the proportion of non-Indigenous births to teenagers in all years and in all states and territories (tables 5A.2.9–18)
- the proportion of Indigenous births to teenage mothers fell slightly in the NT but exhibited no clear trend in other jurisdictions (tables 5A.2.9–18). In contrast, the

proportion of non-Indigenous births to teenage mothers fell in NSW, Victoria, Queensland, WA, the ACT and the NT (tables 5.2.9–18)

- the proportion of Indigenous births to teenage mothers was higher in the NT and WA and lowest in Victoria (tables 5.2.9–18). The proportion of births to Indigenous mothers where the mother was a teenager was also higher in the NT and WA and lower in Victoria (tables 5.2.9–18). In contrast, the proportion of non-Indigenous births to teenage mothers was highest in Tasmania (tables 5.2.9–18).

5.3 Birthweight

Box 5.3.1 Key messages

- Indigenous mothers (12.9 per cent) were almost twice as likely as non-Indigenous mothers (6.1 per cent) to have a low birthweight baby in the period 2004–06 (table 5.3.2).
- The average birthweight of babies born to Indigenous mothers during 2004–06 was 3162 g, compared with 3379 g for babies born to non-Indigenous mothers — a difference of 217 g, or 6.4 per cent (table 5.3.2).

The birthweight of a baby is a key indicator of health status. Children with low birthweights require longer periods of hospitalisations after birth and are more likely to have poor health, or even die in infancy (ABS and AIHW 2008). Low birthweight can also have long-term influences on the development of chronic diseases in adulthood, including diabetes and heart disease (Mackerras 1998; Fall et al. 1995). For many Indigenous children, health risks associated with low birthweight are compounded by high rates of infectious disease and poor infant nutrition (Singh and Hoy 2003).

Low birthweight is defined as less than 2500 g. Within this category, babies weighing less than 1500 g are considered to be of very low birthweight, and those less than 1000 g, of extremely low birthweight (AIHW 2008b). Generally, a higher proportion of female infants are born with a low birthweight than male infants. However, female infants tend to do better than male infants of the same weight.

Low birthweight may be a result of being born early (pre-term), although the infant may be within the expected size range for its gestational age. Alternatively, the infant may be small for its gestational age (fetal growth retardation). Low birthweight can also result from a combination of these two factors (ABS and AIHW 2008). Mackerras (1998) and Sayers and Powers (1997) identified

fetal growth retardation as the main cause of low birthweight among Indigenous babies born in non-remote areas. Conversely, Rousham and Gracey (2002), in a study of Indigenous infants in the Kimberley region of WA, identified pre-term birth as the more likely cause of low birthweight in this rural population.

Predictors for fetal growth retardation and pre-term birth are listed in table 5.3.1. Some predictors cannot be altered, for example, infant sex or race, while others may take at least a generation to change, including maternal birthweight. Other predictors might be influenced in the short-term, including maternal weight or cigarette smoking (ABS and AIHW 2003). There is incontrovertible evidence that smoking harms unborn babies (Wills and Coory 2008). Indigenous mothers smoked during pregnancy at more than three times the rate for non-Indigenous mothers (section 5.1). Teenage pregnancies are also associated with lower birth weights and Indigenous teenagers have a much higher birth rate than non-Indigenous teenagers. In 2007, 18.0 per cent of Indigenous births were to teenage mothers while in contrast 3.2 per cent of non-Indigenous births were to teenage mothers (section 5.2).

Table 5.3.1 Predictors of fetal growth retardation and pre-term birth^a

	<i>Fetal growth retardation</i>	<i>Pre-term birth</i>
Direct	infant sex, race/ethnic origin, maternal height, maternal pre-pregnancy weight, paternal height and weight, maternal birthweight, parity ^b , prior low birthweight infant, gestational weight gain, energy intake, general morbidity, malaria, maternal cigarette smoking, alcohol consumption, and tobacco chewing.	maternal pre-pregnancy weight, prior preterm birth, prior spontaneous abortion, maternal cigarette smoking, in utero diethylstilboestrol ^c exposure, maternal diabetes, urogenital infections, bacterial vaginosis, and placental, cervical or uterine abnormalities.
Indirect	very young maternal age, socio-economic status (including maternal education)	

^a Excludes deliveries in women with an underlying chronic illness. ^b Parity is the number of previous pregnancies resulting in live births or stillbirths (of 20 weeks gestation or 400g birthweight). ^c Diethylstilboestrol is a drug prescribed widely from the 1940s to 1970s that has been associated with increased risks of vaginal and cervical cancers and other disorders in people who were exposed to the drug in the uterus when their mothers were given it while pregnant.

Source: Mackerras 1998.

One factor that may reduce the incidence of low birthweight in the long term is increased access to antenatal care. Although most Indigenous women are known to access antenatal care at some point during pregnancy, access generally occurs later in the pregnancy and less frequently than for non-Indigenous women (Plunkett et al. 1996). Increased antenatal care in the first trimester may allow opportunities for the identification and possible modification of health risk factors (such as smoking). Section 5.1 provides data on Indigenous mothers' use of antenatal care services.

Some Indigenous women face difficulties in accessing antenatal care, such as a lack of local facilities or suitable transport, cost, and a lack of culturally appropriate programs. The effectiveness of Aboriginal culturally specific antenatal programs has been illustrated through Australian research. Culturally specific programs delivered by Aboriginal health care workers, together with perinatal health care professionals, deal with prevalent risk factors to reduce the incidence of low birthweight (SA Health 2009). A study undertaken by the Nganampa Health Council on people residing in the Anangu Pitjantjatjara Lands in the far north-west of SA found that better antenatal care for expectant mothers led to positive outcomes in perinatal mortality and improved birthweights (ABS and AIHW 2003).

In addition to antenatal care the following factors may also assist in reducing low birthweight in the long term:

- introducing nutritional assessment and monitoring into prenatal care, with evaluation of their use and effectiveness
- better targeted and more effective health promotion programs
- evaluating strategies to improve maternal nutrition by increased weight gain during pregnancy (Mackerras 1998).

The analyses in this section are based on data from the AIHW National Perinatal Statistics Unit. Each jurisdiction has a perinatal data collection in which midwives and other staff, using information obtained from mothers and from hospital or other records, complete notification forms for each birth. Information on Indigenous people based on hospital records is limited by the accuracy with which Indigenous people are identified in these records (see appendix 3). Not all Indigenous mothers are identified as Indigenous, therefore, not all births to Indigenous mothers are recorded as Indigenous. There are also problems with the reliability of data from jurisdictions with small numbers of babies born to Indigenous mothers. Caution needs to be exercised when examining data from these jurisdictions.

The perinatal statistics do not record any information about the father. Therefore, births in the Indigenous population reported here only include births to Indigenous mothers, and do not include births to Indigenous fathers and non-Indigenous mothers. Hence, these figures underestimate the total number of Indigenous babies born in a given period. Over the period 2003–2005, for example, 28 per cent of registered Indigenous births were to Indigenous fathers and non-Indigenous mothers (AIHW 2008a and Leeds et al. 2007).

Table 5.3.2 Birthweight, by live births and fetal deaths, 2004–2006^{a, b}

<i>Births to Indigenous mothers^c</i>	<i>Live births</i>		<i>Fetal deaths^d</i>		<i>Total births</i>	
Mean birthweight (grams)	3 162		1 261		3 140	
	no.	%	no.	%	no.	%
Low birthweight (<2500g)	3 743	12.9	274	81.3	4 017	13.7
Very low birthweight (<1500g)	700	2.4	230	68.2	930	3.2
Extremely low birthweight (<1000g)	327	1.1	196	58.2	523	1.8
All births	28 961	100.0	337	100.0	29 298	100.0
<i>Births to non-Indigenous mothers</i>	<i>Live births</i>		<i>Fetal deaths</i>		<i>Total births</i>	
Mean birthweight (grams)	3 379		1 237		3 364	
	no.	%	no.	%	no.	%
Low birthweight (<2500g)	47 350	6.1	4 353	78.2	51 703	6.7
Very low birthweight (<1500g)	7 873	1.0	3 668	65.9	11 541	1.5
Extremely low birthweight (<1000g)	3 425	0.4	3 283	59.0	6 708	0.9
All births	770 564	100.0	5 564	100.0	776 128	100.0
<i>All births^e</i>	<i>Live births</i>		<i>Fetal deaths</i>		<i>Total births</i>	
Mean birthweight (grams)	3 371		1 232		3 356	
	no.	%	no.	%	no.	%
Low birthweight (<2500g)	51 141	6.4	4 672	78.5	55 813	6.9
Very low birthweight (<1500g)	8 580	1.1	3 940	66.2	12 520	1.6
Extremely low birthweight (<1000g)	3 753	0.5	3 520	59.1	7 273	0.9
All births	800 321	100.0	5 952	100.0	806 273	100.0

^a Birthweight is collected at birth and includes stillbirths of at least 20 weeks gestation or 400g birthweight.

^b Data are presented in a three year grouping due to small numbers from year to year. ^c Indigenous data relate to babies born to Indigenous mothers only, and exclude babies born to non-Indigenous mothers and Indigenous fathers. Thus, the information is not based on the total count of Indigenous babies. ^d The denominator for the fetal death percentages is fetal deaths rather than births. ^e Includes babies to mothers of unknown Indigenous status. The number of all births is greater than the sum of births to Indigenous plus non-Indigenous mothers because births for Tasmania are included in the total births but were not available by Indigenous status for Tasmania in 2004 and so are not included in the Indigenous and non-Indigenous totals for Australia for 2004, but they were included for 2005 and 2006.

Source: AIHW National Perinatal Data Collection, National Perinatal Statistics Unit (unpublished); table 5A.3.1.

The data on Indigenous babies relate to babies born to Indigenous mothers only, as the data collection excludes babies born to non-Indigenous mothers and Indigenous fathers.

During 2004–2006:

- there were 800 321 live births in Australia, of which 96.3 per cent were babies born to non-Indigenous mothers, 3.6 per cent were babies born to Indigenous mothers and 0.1 per cent were of unknown Indigenous status (table 5.3.2)
- the mean birthweight of live births to Indigenous mothers was 3162 g, compared with 3379 g for babies born to non-Indigenous mothers — a difference of 217 g (non-Indigenous births were 6.9 per cent heavier) (table 5.3.2)

- the proportion of live births to Indigenous mothers with low birthweight was more than twice that of non-Indigenous mothers (12.9 per cent compared with 6.1 per cent). Further, the proportion of live births to Indigenous mothers with very low and extremely low birthweights (2.4 and 1.1 per cent, respectively) was higher than for babies born to non-Indigenous mothers (1.0 and 0.4 per cent, respectively) (table 5.3.2)
- of all live births, 6.4 per cent had low birthweight compared with 78.5 per cent of all fetal deaths (table 5.3.2)
- there were 5952 fetal deaths in Australia, of which 93.5 per cent were babies with non-Indigenous mothers, 5.7 per cent were births to Indigenous mothers and 0.9 per cent were of unknown Indigenous status. Fetal deaths comprised 1.2 per cent of babies to Indigenous mothers, compared with 0.7 per cent of babies born to non-Indigenous mothers (table 5.3.2)
- of those fetuses that died — for both Indigenous and non-Indigenous mothers — over half had extremely low weights (58.2 and 59.0 per cent, respectively). Furthermore, for both Indigenous and non-Indigenous mothers, around 80 per cent of fetal deaths were of low birthweight babies (81.3 and 78.2 per cent, respectively) (table 5.3.2).

Mean birthweights and proportions of low birthweight babies to Indigenous and non-Indigenous mothers remained relatively constant (with some minor fluctuations) between 1998–2000 and 2004–2006 (table 5A.3.8). Similarly, a relatively constant pattern has been reported from 1998–2000 to 2004–2006 for fetal deaths, average weights and proportions of low birthweights (table 5A.3.9).

5.4 Early childhood hospitalisations

Box 5.4.1 Key messages

- Hospitalisation rates for Indigenous 0–4 year olds (320.0 per 1000) were higher than those for non-Indigenous 0–4 year olds (232.0 per 1000) in 2006-07 (figure 5.4.1).
- Hospitalisation rates for both Indigenous and non-Indigenous 0–4 year olds remained relatively constant between 2004-05 and 2006-07 (figure 5.4.1).

Early childhood hospitalisation rates are an indicator of the health of young children. However, they do not measure the actual prevalence of injury and disease, as many children suffering disease and injury do not require hospital treatment — most are treated by doctors, nurses and other primary health care providers outside

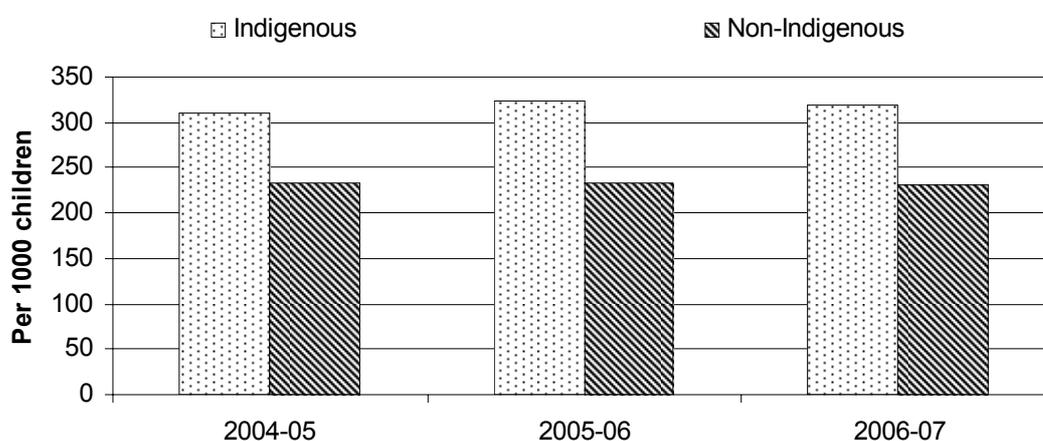
of hospital, or do not require formal medical treatment. Hospitalisations, therefore, represent the most serious cases.

The Council of Australian Governments (COAG) National Indigenous Reform Agreement includes hospitalisation rates by principal diagnosis as an indicator of progress towards its target of ‘halving the gap in mortality rates for Indigenous children under five within a decade’ (COAG 2009). Data on young child mortality are included in section 4.2.

This section and the next section (5.5 Injury and preventable diseases) should be read together. This section provides a measure of the hospitalisation rate and health of young children for all health conditions, while section 5.5 provides data on a subset of hospitalisations that are potentially preventable.

This section uses data from the AIHW National Hospital Morbidity Database for NSW, Victoria, Queensland, WA, SA and public hospitals in the NT. As explained in chapter 2 and appendix 4, hospitalisation data for Indigenous people in Tasmania and the ACT are not of sufficient quality for reporting.

Figure 5.4.1 Hospitalisations per 1000 children aged 0–4 years, NSW, Victoria, Queensland, WA, SA and public hospitals in the NT, 2004-05 to 2006-07 ^{a, b, c, d}

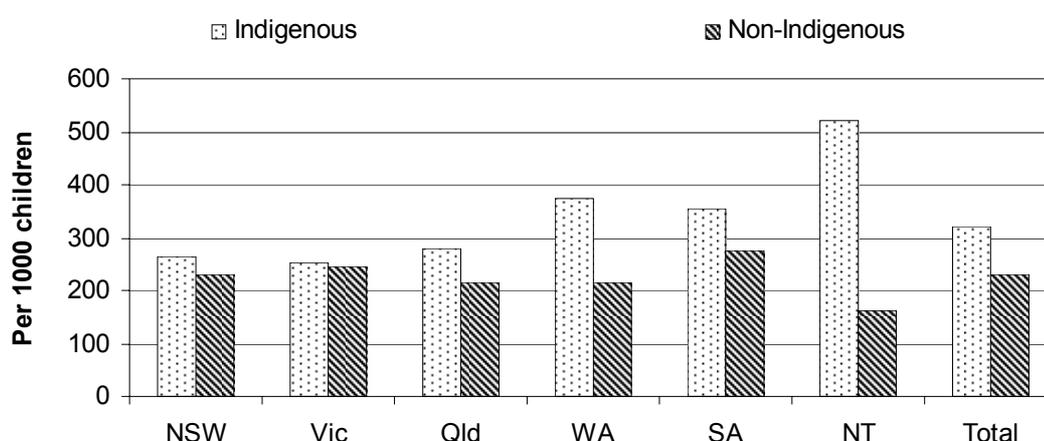


^a Data are based on principal diagnosis as classified by the International Classification of Diseases, 10th Edition, Australian Modification (ICD-10-AM) code and description. ^b Data are based on state of usual residence. ^c Age specific rates are per 1000 people in that age group (based on ABS Indigenous population projections). ^d Hospitalisations of children for whom Indigenous status was not stated are included in the non-Indigenous numbers and rates.

Source: AIHW National Hospital Morbidity Database (unpublished); tables 5A.4.1–5A.4.3.

- Hospitalisation rates for Indigenous children aged 0–4 years (320.0 per 1000) were higher than rates for non-Indigenous children aged 0–4 years (232.0 per 1000) in 2006-07 (figure 5.4.1).
- Hospitalisation rates for both Indigenous and non-Indigenous children aged 0–4 years did not change significantly between 2004-05 and 2006-07 (figure 5.4.1).

Figure 5.4.2 **Hospitalisations per 1000 children aged 0–4 years, by State/Territory, 2006-07^{a, b, c, d}**



^a Data are based on principal diagnosis as classified by the International Classification of Diseases, 10th Edition, Australian Modification (ICD-10-AM) code and description. ^b Data are based on state of usual residence. ^c Age specific rates are per 1000 people in that age group (based on ABS Indigenous population projections). ^d Hospitalisations of children for whom Indigenous status was not stated are included in the non-Indigenous numbers and rates.

Source: AIHW National Hospital Morbidity Database (unpublished); table 5A.4.3.

- Hospitalisation rates for Indigenous children aged 0–4 years were higher than rates for non-Indigenous children aged 0–4 years in 2006-07 in all states and territories with adequate coverage of Indigenous hospitalisations, except Victoria where the rates were similar (figure 5.4.2).

Table 5.4.1 Hospitalisations of children aged 0–4 years, NSW, Victoria, Queensland, WA, SA and public hospitals in the NT, by principal diagnosis, 2006-07^{a, b, c}

<i>Health condition</i>	<i>No. of hospitalisations</i>		<i>Age-specific rate</i>		<i>Rate ratio</i>
	<i>Indigenous</i>	<i>Non-Indigenous^d</i>	<i>Indigenous</i>	<i>Non-Indigenous^d</i>	
Diseases of the respiratory system	5 067	52 863	86.0	43.7	2.0
Conditions originating in the perinatal period	2 726	50 647	46.3	41.8	1.1
Infectious and parasitic diseases	2 674	27 002	45.4	22.3	2.0
Other symptoms, signs and abnormal findings	1 174	22 594	19.9	18.7	1.1
Contact with health services	1 056	22 047	17.9	18.2	1.0
Injury and poisoning	1 486	20 887	25.2	17.2	1.5
Diseases of the digestive system	1 056	17 114	17.9	14.1	1.3
Congenital abnormalities	689	14 943	11.7	12.3	0.9
Diseases of the ear	537	13 854	9.1	11.4	0.8
Diseases of the nervous system	310	10 922	5.3	9.0	0.6
Diseases of the genitourinary system	391	7 135	6.6	5.9	1.1
Diseases of the skin and subcutaneous tissue	926	4 533	15.7	3.7	4.2
Total hospitalisations	18 850	280 947	320.0	232.0	1.4

^a Data are based on principal diagnosis as classified by the International Classification of Diseases, 10th Edition, Australian Modification (ICD-10-AM) code and description. ^b Data are based on state of usual residence. ^c Age specific rates are per 1000 people in that age group (based on ABS Indigenous population projections). ^d Hospitalisations of children for whom Indigenous status was not stated are included in the non-Indigenous numbers and rates.

Source: AIHW National Hospital Morbidity Database (unpublished); table 5A.4.3.

- The most common causes for hospitalisation of both Indigenous and non-Indigenous children aged 0–4 years in 2006-07 were respiratory diseases, conditions originating in the perinatal period, and infectious and parasitic diseases (table 5.4.1).
- Indigenous children aged 0–4 years were 4.2 times as likely as non-Indigenous children to be hospitalised for diseases of the skin and subcutaneous tissue, twice as likely to be hospitalised for respiratory diseases and infectious and parasitic diseases, and 1.5 times as likely to be hospitalised for injury and poisoning. For most other conditions, Indigenous and non-Indigenous rates were similar, (table 5.4.1).

5.5 Injury and preventable disease

Box 5.5.1 Key messages

- Indigenous children under five were 1.9 times as likely to be hospitalised for potentially preventable diseases and injuries as non-Indigenous children (195.4 per 1000 compared to 104.9 per 1000) in NSW, Victoria, Queensland, WA, SA and the NT combined, in 2006-07 (table 5.5.1).
- The death rate from external causes and preventable diseases for children aged less than five years was 2 to 5 times as high for Indigenous than for non-Indigenous children (3.1 to 8.6 per 10 000 compared to 1.4 to 1.7 per 10 000) in NSW, Queensland, WA, SA and the NT, during 2003–2007 (figure 5.5.2).

This indicator reports on hospitalisations and death rates attributable to injury and potentially preventable disease, with additional information on recurring infection drawn from the 2001-02 WA Aboriginal Child Health Survey.

Until the second half of the 20th century, infectious diseases were a prominent cause of death in Australia. Between 1921 and 1995, age standardised death rates from infectious diseases fell from 185 per 100 000 population to 6 per 100 000 (ABS 1997). In 2007, the death rate from certain infectious and parasitic diseases in Australia (total persons, both Indigenous and non-Indigenous) was 8.1 per 100 000 population (ABS 2009).

Infectious diseases range in severity from minor conditions such as the common cold, to serious illnesses such as meningococcal infection and tuberculosis, which can result in death. Disease is caused by organisms such as bacteria, viruses or parasites, and can be transmitted directly (for example, through droplet infection) between people, or from insects and animals to people. Disease can also be transmitted indirectly (for example, through contaminated food or water) and through the environment. Infection can also result from the pathological growth of organisms already present in a person's body (ABS 1997).

Some infections that may appear minor can have serious longer term health effects. Recurring skin and throat infections (caused by group A streptococcal bacteria) in some Aboriginal communities are associated with the highest worldwide rates of acute rheumatic fever (Currie and Carapetis 2000).¹ The major pathogen of skin

¹ The role of group A streptococcal bacteria (in skin and throat infections) leading to acute rheumatic fever is contentious but it appears likely in Australia that it plays a role. Interventions which aim to reduce group A streptococcal throat and skin infection are likely to reduce the rate of acute rheumatic fever. The importance of acute rheumatic fever is its major complication, rheumatic heart disease. After an initial episode of acute rheumatic fever, a person is at risk of

infection, group A streptococcus, is also associated with chronic renal failure — a prevalent and highly burdensome condition among Aboriginal adults (Zubrick et al. 2004).

In Australia, many childhood diseases are generally prevented or successfully treated without hospitalisation. The main focus of this indicator is to examine the range of diseases and injuries experienced by children that result in a hospital admission, which represent the most serious cases of diseases and injury. However, there are few data on the incidence of injury and disease in young children that do not require hospitalisation. Survey data on the incidence of infectious diseases in Indigenous children in WA are included later in this section.

A wide range of social, cultural, physical and economic factors influence the health of children. Health initiatives of communities and governments can assist in the prevention of disease and promote the health of children. These initiatives include education on the benefits of good nutrition and sanitation, and the provision of adequate housing (see chapter 9 for more information on diseases associated with poor environmental health). The benefits of breastfeeding are also widely acknowledged and can reduce the risk of a range of acute childhood illnesses which may result in hospitalisation, including gastrointestinal diseases, infections, and chronic diseases such as diabetes and obesity (Queensland Health 2003).

Access to effective and appropriate health care services (including dental and immunisation services) can also influence the health of children in the short and long term. More information on immunisation rates in children and the prevalence of vaccine preventable diseases as well as access to primary health care in general, is included in section 7.1. Section 5.7 includes information on ear infections in children and section 7.6 covers tooth decay in children (and adults).

Box 5.5.2 describes programs to reduce rates of preventable disease for Indigenous people.

recurrent episodes, each of which can increase the risk of rheumatic heart disease. Rheumatic heart disease is caused by the damage done to the heart muscle or heart valves during an episode of acute rheumatic fever (ABS and AIHW 2008; Online Medical Dictionary 2005). Acute rheumatic fever and rheumatic heart disease are now rare in populations with good living conditions — optimal hygiene and minimal household overcrowding — and easy access to quality medical care (things that Indigenous people often lack).

Box 5.5.2 'Things that work' — Injury and preventable disease

The **Nganampa Health Council**, SA, provides primary healthcare services for the Anangu people of SA. Nganampa Health operates nine clinics with more than 120 staff, the majority being Anangu residents. Programs in the region relate to health worker training, substance abuse prevention, and sexual, environmental, dental, women's, men's and children's health programs. The primary health care service and related programs have had positive outcomes on the health of the community, including in 2005:

- infant birthweight had increased
- screening coverage for HIV and sexually transmitted infections was the most thorough to date
- 99 per cent of children under five, 89 per cent of 6–14 year olds and 77 per cent of 15–19 year olds had been immunised for Meningococcal C by August 2005 (Oxfam Australia 2007).

The **Jalaris Health Outreach service** provides public health services and programs to Aboriginal families in Derby, WA, targeting marginalised families disengaged from services. Early intervention, engagement and education of families and awareness of nutrition and preventable diseases are all key aspects of the corporation's work. The Jalaris Health Outreach service operates in collaboration with health practitioners engaging with the families of children involved in the Kids Futures Club (also provided by Jalaris Aboriginal Corporation). The Outreach service visits households at least twice a year providing health support, information and access to mobile clinics. A variety of programs have been implemented including:

- a nutrition program providing nutritious meals to children of parents who are heavy alcohol users
- the Building Stronger Families in Derby project, involving homemaking and environmental health education for families.

Evaluation of the Jalaris programs has shown that they have had positive impacts on health and have increased the interactions with mainstream health services (AMA 2008; PHAA 2008).

The **East Arnhem Healthy Skin project** was a three-year project completed in August 2007. The project aimed to reduce the prevalence of scabies, skin sores and tinea in five East Arnhem communities in the NT. Through a combination of community treatment days, routine screening at health clinics and home visits, the skin sore burden among children in these communities almost halved — from 46 to 28 per cent of the children seen (Cooperative Research Centre for Aboriginal Health 2008).

The conditions included in table 5.5.1 are based on AIHW advice and include conditions that could have potentially been prevented by the provision of appropriate non-hospital health services, as well as injuries that could potentially have been prevented (usually outside the health system in broader society). Some of the disease codes included may also include some non-preventable conditions.

Table 5.5.1 Potentially preventable hospitalisations for children aged less than 5 years, NSW, Victoria, Queensland, WA, SA, and public hospitals in the NT, 2006-07^{a, b, c}

ICD-10-AM code and description	Hospitalisations (number)			Age specific rate (per 1000 population)	
	Indigenous	Non-Indigenous ^d	Total	Indigenous	Non-Indigenous ^d
Certain infectious and parasitic diseases (A00–B99)	2 674	27 002	29 676	45.4	22.3
Nutritional anaemias (D50–D53) and malnutrition (E40–E46)	100	119	219	1.7	0.1
Diseases of the ear and mastoid process (H60–H95)	562	14 144	14 706	9.5	11.7
Diseases of the respiratory system (J00–J99)	5 067	52 863	57 930	86.0	43.7
Diseases of oral cavity, salivary glands and jaws (K00–K14)	699	7 493	8 192	11.9	6.2
Diseases of the skin and subcutaneous tissue (L00–L99)	926	4 533	5 459	15.7	3.7
Injury, poisoning and certain other consequences of external causes (S00–T98) ^e	1486	20 887	22 373	25.2	17.2
Transport accidents (V01–V99) ^e	84	875	959	1.4	0.7
Other external causes of accidental injury (W00–X59) ^e	1222	18 107	19 329	20.7	15.0
Assault (X85–Y09)	94	224	318	1.6	0.2
Complications of medical and surgical care (Y40–Y84) ^e	70	1 588	1 658	1.2	1.3
Other ^e	16	93	109	0.3	0.1
Total potentially preventable hospitalisations	11 514	127 041	138 555	195.4	104.9

^a Data are based on principal diagnosis as classified by the International Classification of Diseases-10th Edition-Australian Modification code and description. ^b Data are based on state of usual residence. ^c Age specific rates are per 1000 people in that age group (based on ABS Indigenous population projections). ^d Hospitalisations where Indigenous status was not stated are included in the non-Indigenous numbers and rates. ^e External causes sub-categories classified by first external cause.

Source: AIHW National Hospital Morbidity Database (unpublished); table 5A.5.1.

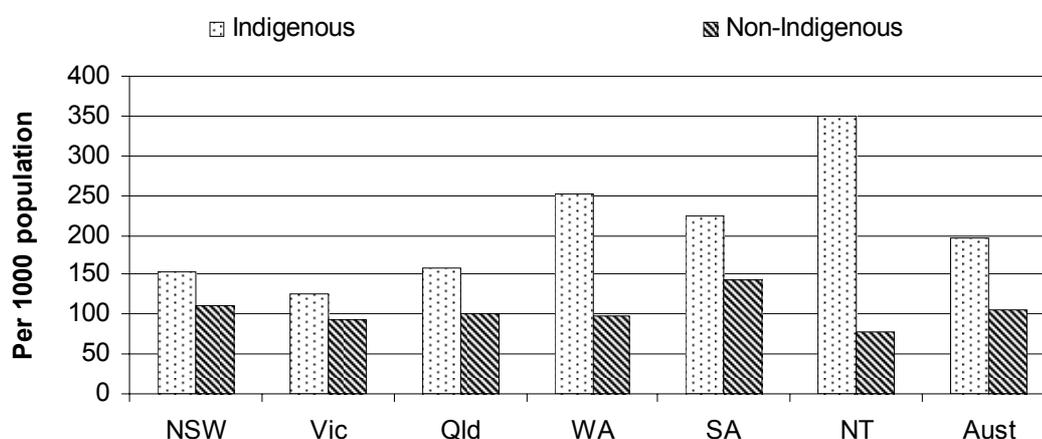
In NSW, Victoria, Queensland, WA, SA and public hospitals in the NT in 2006-07:

- Indigenous children aged less than five years were 1.9 times as likely to be hospitalised for potentially preventable diseases and injuries than non-Indigenous children (195.4 per 1000 compared to 104.9 per 1000) (table 5.5.1).
- diseases of the respiratory system were the most common cause of potentially preventable hospitalisations for both Indigenous and non-Indigenous children aged less than five years, but the rate for Indigenous children (86.0 per 1000) was twice as high as the rate for non-Indigenous children (43.7 per 1000) (table 5.5.1).

- certain infectious and parasitic diseases was the second most common cause of potentially preventable hospitalisations for both Indigenous (45.4 per 1000) and non-Indigenous (22.3 per 1000) children aged less than five years of age.

Data on hospitalisations of children aged less than five years for potentially preventable diseases and injuries remained relatively constant throughout the period 2004-05 to 2006-07 for both Indigenous and non-Indigenous populations (tables 5A.5.1–5A.5.3).

Figure 5.5.1 Potentially preventable hospitalisations for children aged less than five years, 2006-07^{a, b, c, d}



^a Data are based on principal diagnosis as classified by the ICD-10-AM code and description. ^b Data are based on state of usual residence. ^c Age specific rates are per 1000 people in that age group (based on ABS Indigenous population projections). ^d Hospitalisations where Indigenous status was not stated are included in the non-Indigenous numbers and rates.

Source: AIHW National Hospital Morbidity Database (unpublished); table 5A.5.1.

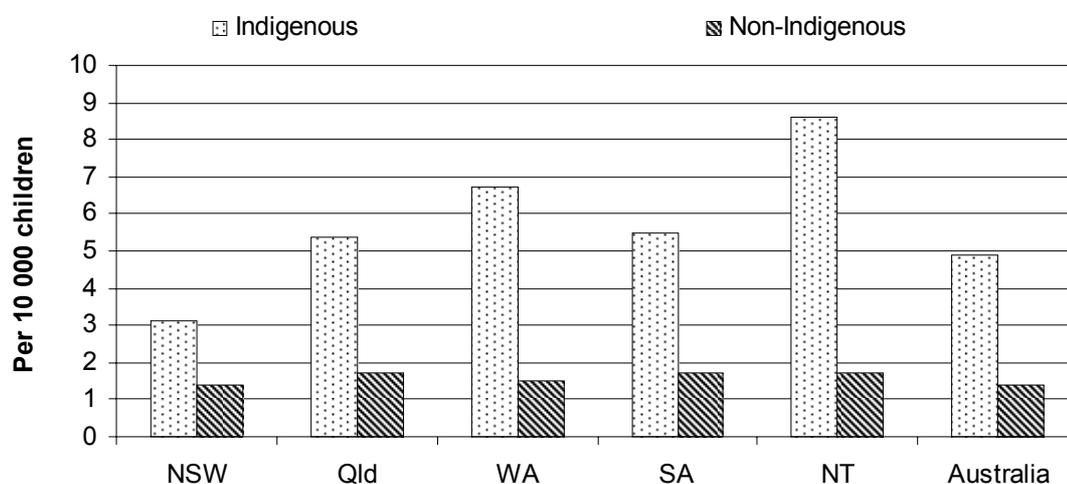
- In NSW, Victoria, Queensland, WA, SA and the NT combined, Indigenous children under five were 1.9 times more likely to be hospitalised for potentially preventable diseases and injuries than non-Indigenous children (195.4 per 1000 compared to 104.9 per 1000) in 2006-07 (table 5A.5.1).
- Hospitalisations rates for potentially preventable diseases and injuries were higher for Indigenous than non-Indigenous children aged less than five years in 2006-07 for each of the six states and territories for which data are available (figure 5.5.1).

The WA Aboriginal Child Health Survey (Zubrik et al. 2004) collected information in 2001 and 2002 on recurring infections — these conditions did not necessarily result in hospitalisation.

-
- Recurring chest infections affected 12.3 per cent of Indigenous children aged 0–17 years, with infection rates highest for children aged 0–3 years and lowest for children aged 12–17 years. There was no association between infection rates and levels of relative isolation.²
 - An estimated 8.5 per cent of Indigenous children had recurring skin infections such as school sores or scabies. Children aged 4–11 years were the most likely to have recurring skin infections. The prevalence was 17.6 per cent in extremely isolated areas, more than twice the rate in all other areas.
 - An estimated 5.6 per cent of Indigenous children suffered from recurring gastrointestinal infections, with infection rates twice as high in extremely isolated areas as in other areas. Prevalence decreased significantly after 12 years of age.
 - Some 18.1 per cent of Indigenous children had recurring ear infections. Older children aged 12–17 years were significantly less likely to have recurring ear infections (13.6 per cent) than children aged 0–3 years (20.4 per cent) and children aged 4–11 years (19.9 per cent).
 - An estimated 9.7 per cent of Indigenous children reported more than one of recurring chest, skin, gastrointestinal and/or ear infections, with 6.9 per cent suffering from two types, 2.3 per cent suffering from three types and 0.5 per cent suffering from all four types. Significantly more children in areas of extreme isolation (17.9 per cent) had more than one type of recurring infection than children in less isolated areas.
 - An estimated 16.3 per cent of children in households where their primary carer reported financial strain suffered from more than one type of recurring infection, which was significantly higher than the prevalence in households where the primary carer could ‘save a bit now and again’ (8.4 per cent) or could ‘save a lot’ (7.2 per cent). There was no association between the primary carer’s educational attainment and either recurring infections or ear infections in children under their care.

² Zubrick et al. (2004) used a different series of geographic region (remoteness) categories than the standard ABS categories used elsewhere in this report and discussed in chapter 2. Both sets of categories are based on the Accessibility Remoteness Index of Australia (ARIA). The ABS categories are a widely used version known as ARIA+, whereas the version used by Zubrick et al. (2004) is known as ARIA++, which has been designed to allow greater distinction between locations that are all classified as very remote in the ABS ARIA+ version. The five ARIA++ categories used by Zubrick et al. (2004) are called levels of relative isolation and comprise the categories: none (Perth metropolitan area), low, moderate, high and extreme.

Figure 5.5.2 Deaths rates from external causes and preventable diseases for children aged less than five years, 2003–2007^{a, b, c}



^a Data on deaths of Indigenous people are affected by different levels of coverage of deaths identified as Indigenous across states and territories. Care should be exercised in analysing these data, particularly in making comparisons across states and territories between Indigenous and non-Indigenous data.

^b Denominators used in calculations of rates for the Indigenous population are Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians (low series, 2001 base). There are no comparable data for the non-Indigenous population. Denominators used in the calculation of rates for comparison with the Indigenous population have been derived by subtracting Indigenous population estimates/projections from total estimated resident population and should be used with care, as these data include population units for which Indigenous status was not stated. ^c Non-Indigenous includes deaths with 'not stated' Indigenous status.

Source: ABS *Causes of Death, Australia*, Cat. no. 3303.0 (unpublished); table 5A.5.4.

- During 2003–2007, the death rate from external causes and preventable diseases for children aged less than five years was 2 to 5 times higher for Indigenous (from 3.1 to 8.6 per 10 000 children) than non-Indigenous (from 1.4 to 1.7 per 10 000 population) people for NSW, Queensland, WA, SA and the NT (the jurisdictions for which data were available) (figure 5.5.2).

5.6 Basic skills for life and learning

Box 5.6.1 Key messages

- 67.3 per 1000 Indigenous children aged 0–14 years received a Medicare funded voluntary health check/assessment in 2007–08 (table 5.6.1).
- The Australian Early Development Index is being implemented in 2009 and will provide information on Indigenous children at a State and national level.

This indicator focuses on the developmental health and learning of children before they enter primary school. It contains two measures:

- children with developmental health checks at 6, 12 and 18 months, and at 4 years
- Australian Early Development Index (AEDI).

Data for these two measures are currently either very limited or unavailable. However, some data are available on health checks for Indigenous children aged 0–4 years.

Box 5.6.2 provides an example of a project aimed at improving life opportunities for Aboriginal children aged 0–4 years.

Box 5.6.2 Things that work— Basic skills for life and learning

Best Start is a WA Department for Communities program that aims to improve life opportunities for Aboriginal children aged from 0–5 years, with co-operation from health, welfare and Indigenous agencies. Several factors differentiate this program from other ‘supported playgroup’ models. Improving school readiness through play based activities is a key objective, but the program starts from birth and transitions through to school enrolment. Parents and carers (including fathers) must attend, and are an integral part of all activities. Support and referrals are also provided to ‘at risk’ and/or socially isolated families experiencing family violence, addiction, accommodation or legal problems.

There are three metropolitan and ten regional/remote services operating across WA, and in 2009 there were 14 new community requests for the program. Two examples are:

- Moora has a population of 2410, and 16.6 per cent of children aged 0–4 years are Indigenous. Best Start engages local Indigenous families through a group activity program for babies, toddlers and preschoolers that runs three days per week at a local resource centre. Feedback from local schools is very positive about the school readiness and confidence levels of Best Start graduates, and anecdotal evidence shows increased attendance and successful participation in early education.
- Armadale is a large inner city Perth suburb, where 5.5 per cent of children aged 0–4 years are Indigenous. Best Start operates as an outreach program providing family support, advocacy, playgroups, parenting and cultural activities. Playgroups are located in several school and community venues which broadens access. Parents, especially young mothers, support Best Start because of the support and nurturing they receive from the program. Close partnerships with non-Indigenous service providers broaden family access to services and networks (WA Department for Communities, unpublished).

(Continued next page)

Box 5.6.2 (continued)

The **Welcome Baby to Country project** (Vic) is based on the Aboriginal tradition of ‘Tandurrum’, a ceremony performed by traditional owners to welcome other visiting Aboriginal people entering traditional lands. The project facilitates a positive engagement of traditional owners and the broader Aboriginal community to celebrate the birth of Indigenous babies in the Wimmera/Mallee region.

This project has focused attention on children’s needs and achievements and acknowledge the role of parents, carers and families in their growth and development. It has also been successful in increasing the engagement of relevant support services with Indigenous parents, carers and families and in providing an opportunity to supply information, resources and assistance to Indigenous parents and families. The project won the 2008 Minister for Children and Early Childhood Development Early Years Award. (Victorian Government unpublished).

Developmental health checks

The Australian Government has introduced a number of new Indigenous health checks and health assessments within the Medicare Benefits Schedule (MBS) to improve early intervention and diagnosis for treatable conditions. The MBS provides items for regular health checks or assessments for Aboriginal and Torres Strait Islander people of various ages.

The Aboriginal and Torres Strait Islander Health Checks are categorised into three age groups:

- Child Health Check, MBS item number 708, for people aged 0–14 years
- Adult Health Check, MBS item number 710, for people aged 15–54 years
- Older Person’s Health Check, MBS item numbers 704 and 706, for people at least 55 years of age.

In addition, Indigenous people may receive health checks available to all people:

- Four year old Child Health Check, MBS item numbers 709 and 711, for a child receiving or who received four year old immunisations
- Older Person’s Health Check, MBS item numbers 700 and 702, for people age 75 years and over
- Health Checks for people in their forties at risk of type 2 diabetes or chronic disease, MBS item numbers 71 and 717.

Medicare Australia collects data and reports on the use of MBS item numbers. Data for this indicator are only available for the Indigenous Child Health Check, MBS

item number 708 (table 5.6.1). Child health checks for four year old children (MBS item numbers 709 and 711) were only introduced in 2008 and reliable data are not yet available.

Table 5.6.1 illustrates that in 2007–08:

- 67.3 per 1000 Indigenous children aged 0–14 years received a voluntary health check/assessment under MBS item number 708
- the NT had the highest and Tasmania had the lowest rates of health checks for Indigenous children aged 0–14 years.

The Northern Territory Emergency Response (NTER) announced by the former Australian Government on 21 June 2007 introduced a Child Health Check (CHC) program. Indigenous children aged 15 years or less who live in the prescribed areas of the Northern Territory are eligible for a NTER CHC. The CHC data collection contains information on:

- the child's medical history
- the family medical history
- the child's housing situation
- health status at the time of the health check.

These checks were undertaken from mid-July 2007 and data collection relating to these checks continued until 30 June 2009. The NTER CHC are based on the MBS item number 708, which covers health checks for children and can be claimed every nine months. As at 17 October 2008, an estimated 12 263 CHCs had been performed in the NT through the NTER and MBS item 708 health checks since mid July 2007 (AIHW 2008b). Some but not all NTER CHCs were the subject of the MBS Item 708 claims. Duplicates have been removed from the above estimate.

Many babies and young children receive regular developmental health checks from maternal and child health nurses. These services are often provided by State and Territory or local governments. While no data currently exist for health checks conducted by maternal and child health nurses, many jurisdictions are intending to commence such collections.

Table 5.6.1 Indigenous children aged 0–14 years who received a voluntary health check or assessment, 2007–08^{a, b}

	Unit	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust ^b
Child health checks (0–14 years) ^c										
Number of health checks conducted	no.	2 561	264	3 341	1 823	300	4	39	4 065	12 397
Target population	no.	54 652	10 879	53 077	26 112	9 975	6 844	1 648	20 814	184 076
Health checks per 1000 children	no.	46.9	24.3	62.9	69.8	30.1	0.6	23.7	195.3	67.3

^a Excludes services that qualify under the Department of Veterans' Affairs National Treatment Account and services provided in public hospitals.
^b Includes other territories. ^c Health checks under MBS item number 708.

Source: Medicare Australia (unpublished), derived from Medicare Benefits Schedule Item Statistics Reports, available: http://www.medicareaustralia.gov.au/statistics/dyn_mbs/forms/mbs_tab4.shtml (accessed 9 October 2008); ABS (2004), Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians, Cat. no. 3238.0.

WA provides a universal maternal and child health service that offers health and developmental screening and surveillance for children 0–4 years. The service has introduced Parents Evaluation of Developmental Status (PEDS) as a developmental screening tool, offered at the 3–4 month, 8 month, 18 month and 3 years health checks. In WA, community health client data are collected for both individual and group contacts, but do not allow for individual client tracking or the ability to identify if a developmental screening was offered. Tasmania is intending to start collecting health check data for children at 12 months.

Australian Early Development Index (AEDI)

The importance of improving education outcomes for children has attracted significant international interest and is recognised as crucial in building resilience and improving outcomes across the life-span (AIHW 2008a).

The AEDI is a population measure of children's development as they enter full time school. The AEDI assists communities to understand the development of local children compared to other children nationally. The AEDI highlights the strengths of community resources and services and identifies how they could be improved. The AEDI is measured by a checklist completed for each child by their teacher. The checklist consists of over 100 questions in the developmental areas of:

- physical health and well being
- social competence
- emotional maturity
- language and cognitive skills
- communication skills and general knowledge.

Between 2004 and 2007, 60 geographic areas across all Australia, except for NT, have been involved in testing the AEDI. Within these communities, 2157 teachers from 1012 schools, government and non-government, completed the AEDI checklist for 37 420 children in the first year of full time school (RCH 2008b).

The AEDI will be implemented nationally in 2009 and will be able to provide data on Indigenous children both at a state and national level.

The AEDI Indigenous Adaptation Study was initiated to ensure the AEDI is relevant and sensitive to the needs of Indigenous children. Adaptations arising from the study include:

-
- modifications to the AEDI Guide for Teachers so that particular cultural considerations could be taken into account on certain checklist items
 - teachers complete the AEDI Checklists for Indigenous children collaboratively with an Indigenous cultural consultant (where available); and
 - additional checklist questions to provide contextual information to aid in interpreting the AEDI results

WA participated in a trial of these adaptation in 2008. The checklists were completed by teachers and, where available, Aboriginal and Islander Education Workers (AIEW). The trial involved 49 schools from the Armadale, Carnarvon and Meekatharra (Gascoyne/Murchison/Midwest) and Pilbara regions and checklists were completed for 568 Indigenous children in those participating schools (RCH 2008d).

In the Northern Territory, the second phase of the Adaptation study has commenced with commitment from the NT Government to continue trialling the community engagement and mobilisation activities in 2009 (RCH 2008d)

The 2009 AEDI data collection will evaluate the additional questions developed through the Adaption study as part of the standard AEDI checklist.

5.7 Hearing impediments

Box 5.7.1 Key message

- Despite strong evidence of the high prevalence rates for hearing impediments in Indigenous children, particularly in remote areas, the hospitalisation rate for middle ear and mastoid disease for Indigenous 0–3 year olds (8.9 per 1000) was below that for non-Indigenous 0–3 year olds (9.7 per 1000) in 2006-07 (table 5.7.1).

The most common causes of hearing loss among Indigenous people are disorders of the middle ear. Otitis media, which is an inflammation of the middle ear, is a common childhood disease and often occurs as a result of another illness (such as a cold), caused by bacterial and viral infections (Burrow and Thomson 2006; Morris et al. 2005; Couzos, Metcalf and Murray 2001). There are various forms of otitis media. Generally accepted definitions can be found in Burrow and Thomson (2006) and box 5.4.2 of SCRGSP (2007).

Otitis media in non-Indigenous children typically resolves with age and is rarely seen amongst non-Indigenous children over the age of eight (Burrow and

Thompson 2003). In contrast, Indigenous children living in remote communities have the highest internationally published prevalence rates for otitis media (Morris et al. 2006).

Studies spanning 30 years have consistently found that, in Indigenous children, otitis media typically starts at a younger age, is much more common and is more likely to result in hearing loss than in non-Indigenous children (Boswell and Nienhuys 1996; Couzos, Metcalf and Murray 1999; Leach et al. 1994; Lehmann et al. 2003; Moran et al. 1979; Morris et al. 2005). More recently, a study by a paediatric outreach service in far north Queensland identified chronic suppurative otitis media as the most prevalent health problem in Aboriginal children (Rothstein, Heazlewood and Fraser 2007).

The impact of hearing loss, due to otitis media, on the quality of life of Indigenous children and their caregivers is well documented (Brouwer et al. 2005; Howard and Hampton 2006; Nienhuys 1992; Thorne 2004; Zubrick et al. 2004). Indigenous children under three are at the highest risk of ear disease. Unfortunately, this is also the most critical development period for speech and language development, underpinning communication, learning, and social and emotional development (Brouwer et al. 2005; Nienhuys 1992; Zubrick et al. 2004).

Identifying risk factors for otitis media will inform the development of early prevention and intervention strategies. Risk factors for otitis media are outlined below.

- There is relatively higher bacterial colonisation in Indigenous infants, which is strongly correlated with the onset of middle ear effusion (this tended to occur within the first 12 weeks of life in 66 per cent of Indigenous infants). No corresponding correlation is found between colonisation and the onset of otitis media in non-Indigenous infants. Further, once the bacterial colonisation is established, Indigenous infants are significantly less likely than non-Indigenous infants to clear the bacterial pathogens (Morris et al. 2006; Smith-Vaughan et al. 2008). Early bacterial colonisation in Indigenous infants is exacerbated by overcrowded living conditions, poor hygiene and insanitary living conditions (Smith-Vaughan et al. 2008).
- Some studies have found a link between the early first onset of otitis media and the increased risk of recurrent infections (that is, ‘early and often’ appears to be the rule). Indigenous infants tend to have persistent acute otitis media and other ear infections that are rarely resolved (Boswell and Nienhuys 1996; Morris et al. 2006).
- The incidence of acute otitis media in other family members may significantly increase the risk of ear infection, especially in children.

-
- Although few studies have evaluated this relationship, malnutrition in Indigenous children may be associated with the development of chronic otitis media (Jones and Smith 2006).
 - Passive smoking can increase the risk of ear infections (Di Franza and Lew 1996; Jacoby et al. 2008). By limiting exposure to tobacco smoke, it is estimated that ear infections would drop by 27 per cent in Aboriginal children and 16 per cent in non-Aboriginal children (Jacoby et al. 2008). Section 7.4 discusses the high rates of smoking within the Indigenous population.

To a large extent, otitis media is preventable and treatable either through surgery or a long-term course of antibiotics. A surgical procedure (myringotomy) can be performed to assist in restoring hearing. This is achieved by releasing the fluid that builds up in the middle ear (NSW DoH 2002). A randomised control trial of at risk Aboriginal infants found that infants receiving long-term antibiotics (antibiotics for 24 weeks) had more normal ears, fewer perforations and less bacterial colonisation (Leach et al. 2008).

Box 5.7.2 provides examples of programs that have improved hearing outcomes for Indigenous children.

Box 5.7.2 ‘Things that work’ — improving hearing outcomes

‘**Can’t hear? Hard to Learn**’ is an education and screening program for otitis media in Aboriginal children. The program operates across Eurobodalla, Bega Valley, Monaro and Southern Tablelands Health Clusters in NSW. The program is achieving results and is improving hearing and communication in Aboriginal children (ARCHI 2008).

Evaluation of the program revealed otitis media screening targets were exceeded in 2005-06 (93 per cent of eligible children were screened). The evaluation identified positive clinical outcomes, including:

- improved access of Aboriginal children to specialist services through addressing and reducing barriers
- a culturally appropriate health service for Aboriginal children
- improved access to early intervention and early treatment for ear disease
- improved hearing and learning for children
- improved health status of children (ARCHI 2008).

(Continued next page)

Box 5.7.2 (continued)

Swimming pools in remote communities have improved child health outcomes. Previous reports (2005 and 2007) presented outcomes in WA of a study into the health benefits of a swimming pool in the WA Burringurrah Aboriginal community (Lehmann et al. 2003; TICHR 2006). The study compared the health status of children before and after the swimming pool was opened, and found that there was a reduced prevalence of skin infections and reduced rates of ear disease (TICHR 2006).

Silva et al. (2008) examined the impact of swimming pools on rates of skin, ear and chest infections in two remote WA Aboriginal communities, Jigalong and Mugarinya. After examining seven years of clinical records in the two communities, Silva et al. found that infections were more than halved in both communities. Clinic attendance rates for skin infections fell by 68 per cent in Jigalong and by up to 77 per cent in Mugarinya. In Jigalong, prescriptions for antibiotics fell by 45 per cent, clinic attendance for middle-ear infections dropped by 61 per cent and attendance for chest infections was halved (Silva et al. 2008).

An ear health program in Leonora (WA) has been successful in teaching people how to keep the ear canals clean and people who learned this as children are now teaching their own children. Many of the Aboriginal students in the local school had runny infected ear discharge. An Aboriginal health worker since 1983, Geraldine Hogarth, realised that children with this problem needed their ears syringed up to 4 times a day. She visited school and homes regularly to do this making sure parents, teachers and caregivers were educated about ear health. (Department of Indigenous Affairs (Western Australia) 2007). Geraldine's program was recognised in the 2007 National Excellence Awards in Aboriginal and Torres Strait Islander Health Awards.

The 2007 report included a study by the **Education Queensland Indigenous Schooling Support Unit** (previously called the Townsville Learning and Engagement Centre). The study found that 44.8 per cent of year 2 students in a local Townsville primary school had possible conductive hearing loss (a high proportion of the students assessed were Indigenous). The Indigenous Schooling Support Unit developed in-class hearing assessment tools for teaching staff, hearing assessment games for parents and professional development for both teachers and parents to identify any hearing loss. These strategies have been successful in early identification of students with conductive hearing loss. Early identification of hearing problems has meant students receive educational support and referral for treatment as soon as possible. Teachers also noted that addressing hearing loss issues often improved behavioural issues. One teacher commented 'Now that I understand why this child behaves this way I can put strategies in place to support the student' (Queensland Government unpublished).

Data on hearing loss

The Northern Territory Emergency Response (NTER) announced by the former Australian Government on 21 June 2007 introduced a Child Health Check (CHC) initiative. Indigenous children aged 15 years or less who live in the prescribed areas of the NT are eligible for a NTER CHC. These checks were undertaken from mid-July 2007 and data collection relating to these checks continued until 30 June 2009. A progress report on the findings on health conditions identified during CHC found that middle ear disease was common in NT Indigenous children. Almost 30 per cent of Indigenous children aged 0 to 15 years were diagnosed with ear disease (AIHW and Department of Health and Ageing 2008).

Ear and hearing problems are often treated by general practitioners. Data on general practitioner encounters for ear and hearing problems are available from the Bettering the Evaluation and Care of Health survey. For the 5 year period, 2002-03 to 2006-07, there was no statistically significant difference between rates of ear and hearing problems managed by a GP for Indigenous and non-Indigenous children aged 0–14 years (13.1 per 100 encounters compared with 10.8 per 100 encounters, respectively) (AIHW 2008).

The Australian Health Ministers' Advisory Council (2006) identified children's hearing loss as a health issue that needs improvement. Children's hearing loss is a performance measure in the Aboriginal and Torres Strait Islander Health Performance Framework (ATSIHPF) (AHMAC 2008). The ATSIHPF reported on hospitalisations for tympanoplasty. Tympanoplasty is reconstructive surgery for a perforated eardrum due to middle ear infection. Over the period July 2004 to June 2006, Indigenous children aged 0–14 years were hospitalised for tympanoplasty procedures at almost four times the rate of other children (AIHW 2008). Previously (between July 2002 and June 2004), Indigenous children were hospitalised for tympanoplasty procedures at a rate five times as high as other children (AHMAC 2006).

Data on the prevalence of hearing conditions in Indigenous children are limited. At a national level, surveys in 2001 and 2004-05 reported much higher prevalence of hearing conditions, including total/partial hearing loss and otitis media, in Indigenous children compared with non-Indigenous children (tables 5A.7.1 and 5A.7.2). In 2004-05, rates of otitis media were four times as high among Indigenous children aged 0–14 years as non-Indigenous children in this age group (table 5A.7.5). Data on long term hearing problems in Indigenous and non-Indigenous people, by remoteness, are shown in tables 5A.7.3 and 5A.7.4.

Data presented below are ear or hearing problems that resulted in admission to a hospital for NSW, Victoria, Queensland, WA, SA and public hospitals in the NT.

Table 5.7.1 Age specific hospitalisations (per 1000) where the principal diagnosis was diseases of the ear and mastoid process, NSW, Victoria, Queensland, WA, SA and public hospitals in the NT^{a, b, c}

Principal diagnosis	Indigenous			Non-Indigenous ^c		
	2004-05	2005-06	2006-07	2004-05	2005-06	2006-07
People aged 0–3 years						
Diseases of external ear	0.5	0.3	0.5	0.3	0.2	0.2
Diseases of middle ear and mastoid	8.7	7.9	8.9	12.7	10.9	9.7
Suppurative and unspecified otitis media	4.7	4.4	4.5	4.0	3.4	3.1
Diseases of inner ear	–	np	np	–	–	–
Other disorders of ear	0.5	0.5	0.4	0.8	0.7	0.6
People aged 4–14 years						
Diseases of external ear	0.3	0.3	0.2	0.2	0.2	0.2
Diseases of middle ear and mastoid	6.2	6.3	5.9	5.1	4.9	5.3
Suppurative and unspecified otitis media	1.5	1.5	1.2	1.0	1.0	1.1
Diseases of inner ear	–	np	np	–	–	–
Other disorders of ear	0.2	0.3	0.3	0.2	0.2	0.2

^a Hospitalisation is the discharge, transfer, death or change of episode of care of an admitted patient (see glossary for a detailed definition) ^b Data are based on state of usual residence. ^c Includes hospitalisations where Indigenous status was not reported. – Nil or rounded to zero. np Not published.

Source: AIHW National Hospital Morbidity Database (unpublished); tables 5A.7.12 to 5A.7.14.

Hospitalisations data only include those who have accessed medical services, and have been diagnosed and admitted to hospital for the specified conditions. Cases that result in a visit to a general practitioner or to an emergency department, but do not lead to hospitalisation, are excluded. There may also be a large share of 0–3 year olds where parents may not be aware that their children have an ear or hearing problem or where access to hospitals may be limited.

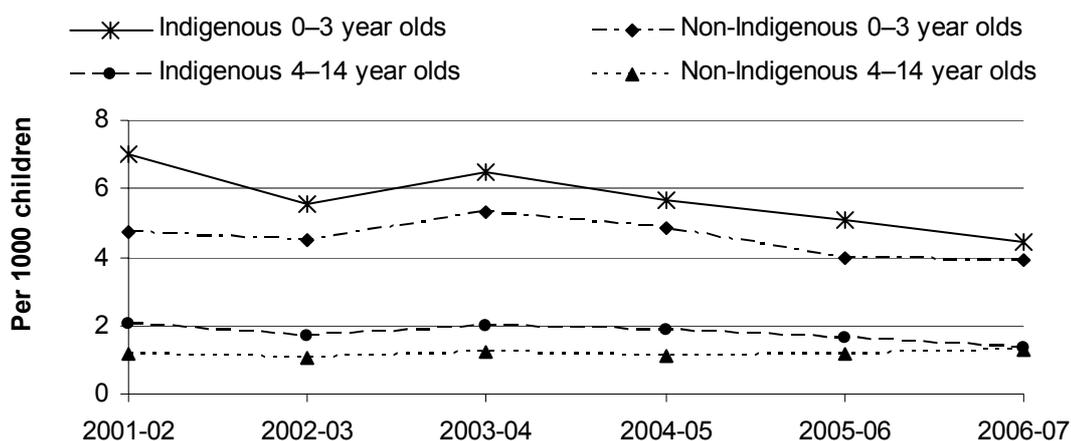
Hospitalisation data used in this section are for six jurisdictions: NSW, Victoria, Queensland, WA, SA, and the NT. These data have sufficient levels of Indigenous identification for three years (from 2004-05 to 2006-07). Table 5.7.1 shows that over this period:

- the most common principal diagnosis (for both populations and age groups) was for diseases of the middle ear and mastoid
- the Indigenous 0–3 year olds hospitalisation rate for middle ear and mastoid disease remained relatively unchanged (8.7 per 1000 to 8.9 per 1000). However, the hospitalisation rate for non-Indigenous 0–3 year olds decreased from 12.7 per 1000 in 2004-05 to 9.7 per 1000 in 2006-07.

In 2006-07:

- Indigenous children up to and including the age of three years had a higher hospitalisation rate for suppurative and unspecified otitis media than non-Indigenous children (4.5 per 1000 compared with 3.1 per 1000) but a lower rate of hospitalisation than non-Indigenous children for all diseases of the middle ear and mastoid (table 5.7.1)
- for both Indigenous and non-Indigenous children, the hospitalisation rate for suppurative and unspecified otitis media for children aged 0–3 was higher than the hospitalisation rate for children 4–14 years (table 5.7.1).

Figure 5.7.1 **Age specific hospitalisations (per 1000) where the principal diagnosis was suppurative and unspecified otitis media, Qld, WA, SA and public hospitals in NT^{a, b, c, d}**



^a Hospitalisation is the discharge, transfer, death or change of episode of care of an admitted patient (see glossary for a detailed definition). ^b Data are based on state of usual residence. ^c Identification of Indigenous patients is incomplete and completeness varies across jurisdictions. ^d Non-Indigenous includes hospitalisations where Indigenous status was not reported.

Source: AIHW National Hospital Morbidity Database (unpublished); tables 5A.7.6 to 5A.7.11.

Longer time series data on hospitalisation rates for suppurative and unspecified otitis media for Queensland, WA, SA and the NT from 2001-02 to 2006-07 are presented in figure 5.7.1. Hospitalisation rates for these jurisdictions for other diseases of the ear and mastoid can be found in tables 5A.7.6–11.

From 2001-02 to 2006-07, for the four jurisdictions:

- the hospitalisation rate for suppurative and unspecified otitis media fluctuated for both Indigenous and non-Indigenous children aged 0–3 years old
- the hospitalisation rate for suppurative and unspecified otitis media decreased for both Indigenous children (from 7.0 per 1000 to 4.5 per 1000) and non-Indigenous children (from 4.8 per 1000 to 3.9 per 1000) aged 0–3 years old (tables 5A.7.6 to 5A.7.11)
- the hospitalisation rate for suppurative and unspecified otitis media decreased slightly for Indigenous 4–14 year olds (from 2.0 per 1000 in 2001-02 to 1.3 per 1000 in 2006-07), while the non-Indigenous rate remained stable (tables 5A.7.6–11).
- hospitalisation rates for other diseases of the ear and mastoid followed a similar trend to rates for suppurative and unspecified otitis media (tables 5A.7.6–11).

5.8 Future directions in data

Maternal health

Data on attendance at antenatal care sessions are available only for NSW, Queensland, SA and the NT, and, there are comparability issues with some NSW data. (Some data were available for the ACT in previous years.) A nationally consistent collection of data on attendance at antenatal care sessions by Indigenous status for all jurisdictions would be valuable. Data on the number of mothers attending at least five antenatal care sessions and the number attending their first session in the first trimester of pregnancy are particularly relevant to improving health outcomes for Indigenous babies. Data on attendance at antenatal sessions by age of mother may also be useful and may provide a link to outcomes for teenage mothers (section 5.2).

Data on smoking during pregnancy are available for all jurisdictions except Victoria. There is a lack of data on alcohol consumption during pregnancy and on FAS/FASD (although some are available for north Queensland).

It is anticipated that the 2008 ABS National Aboriginal and Torres Strait Islander Social Survey (NATSISS) will improve the availability of information on use of tobacco, alcohol and illicit substances during pregnancy nationally and, where possible, for each jurisdiction. The likelihood of obtaining robust data for Victoria has been improved by the Victorian Government's collaboration with the ABS to expand the Victorian NATSISS sample, fulfilling a 2006 Government commitment

to undertake an Aboriginal Child Health and Wellbeing Survey. The NATSISS results are expected to be available from late 2009.

Teenage birth rate

Births, Australia, is published annually and provides data on Indigenous births, births to Indigenous women and non-Indigenous births.

Future editions of the report could investigate the availability of data on teenage fathers and discuss teenage fathers and the risks they and their children face relative to non-teenage fathers.

Birthweight

Reported births in the Indigenous population only include births to Indigenous mothers, and do not include births to Indigenous fathers and non-Indigenous mothers. Hence, these figures underestimate the total number of Indigenous babies born in a given period. From January 2009 Victoria commenced recording the Indigenous status of babies, as distinct from that of the mother. The mother is asked if the baby is Aboriginal or Torres Strait Islander.

Basic skills for life and learning

There are limited data on child health checks. Child health checks for four year old children (MBS item numbers 709 and 711) were only introduced in 2008. Data on these items may be available for future reports.

The national roll out of the AEDI commenced this year. Indigenous and non-Indigenous data should be available for the next report.

Hearing impediments

Only limited data are available on the burden of hearing loss in Indigenous children. Comprehensive, up-to-date data need to be collected to enable the assessment of the type and severity of ear infections in the Indigenous population and the resulting hearing loss.

The Longitudinal Study of Indigenous Children (LSIC) is being conducted by the Department of Families, Housing, Community Services and Indigenous Affairs. The LSIC will track the long term development of 2200 Indigenous children from

communities across Australia. The LSIC will invite Indigenous families to participate in a series of annual interviews to better understand what affects their children's lives over time. The LSIC will collect data on hearing loss. These data may be available for the next report (Branch Manager, Research and Analysis, FaHCSIA, pers. comm., 13 January 2009).

In the first wave of the LSIC, parents will be asked whether their child has had any problems with ears or hearing in the past year. In wave two, parents will be asked whether the hearing problem their child was experiencing in wave one is still occurring. In wave two, parents will also be asked whether their child's hearing condition has been diagnosed by a doctor. The LSIC will also collect data on children hospitalised for ear and hearing problems and whether parents have had any health problems (including problems with ears and hearing) in the last year that have made it difficult for them to look after their child. These data could be useful to see whether there is a relationship between the incidence of ear and hearing problems in parents and their children (Branch Manager, Research and Analysis, FaHCSIA, pers. comm., 13 January 2009).

The 2008 NATSISS collected information about the prevalence and treatment of ear and hearing problems in Indigenous children. These data will be available from late 2009.

5.9 References

5.1 Maternal health

- Abel, E.L. and Hannigan, J.H. 1995, 'Maternal risk factors in fetal alcohol syndrome: provocative and permissive influences', *Neurotoxicol Teratol*, vol. 17 pp. 445–462.
- AHMAC (Australian Health Ministers' Advisory Council) 2008, *Aboriginal and Torres Strait Islander Health Performance Framework, 2008 Report*, Canberra.
- AIHW (Australian Institute of Health and Welfare) 2009, *Aboriginal and Torres Strait Islander Health Performance Framework 2008 Report: Detailed Analyses*, Cat. no. IHW 22, Canberra.
- DHA (Department of Health and Ageing) 2003, *National Drug Strategy, Aboriginal and Torres Strait Islander Peoples, Complementary Action Plan 2003–2006*, Canberra.
- DHA (Department of Health and Ageing) 2004, *The National Drug Strategy: Australia's Integrated Framework 2004–2009*, Canberra.
- Dodd, J.M., Crowther, C.A. and Robinson, J.S. 2002, 'Guiding antenatal care', *Medical Journal of Australia*, vol 176 (6), pp. 253–254.
- Dwyer, G. 2005, 'Koori Maternity Services', presentation to the Rural Health Conference, 18–19 May, Beechworth, Victoria, http://www.vha.org.au/content/Presentations/2005/Rural%20Health_2005/A1_Gil%20Dwyer.pdf (accessed 29 March 2007).
- Eades, S. 2004, *Maternal and Child Health Care Services: Actions in the Primary Health Care Setting to Improve the Health of Aboriginal and Torres Strait Islander Women of Childbearing*

Age, Infants, Young Children, Aboriginal and Torres Strait Islander Primary Health Care Review: Consultant Report no. 6, Menzies School of Health Research, Casuarina, NT.

- Elliott, E.J., Payne, J., Morris, A., Haan, E. and Bower, C. 2008, 'Fetal alcohol syndrome: a prospective national surveillance study', *Archives of Disease in Childhood*, vol. 93, pp. 732–737, <http://adc.bmj.com/cgi/content/abstract/93/9/732> (accessed 17 April 2009).
- Graham, S., Jackson Pulver, L.R., Wang, Y.A., Kelly, P.M., Laws, P.J., Grayson, N. and Sullivan, E.A. 2007, 'The Urban–Remote Divide for Indigenous Perinatal Outcomes', *The Medical Journal of Australia*, vol. 186, no. 10, pp. 509–512.
- Gilligan, C., Sanson-Fisher, R. Eades, S. and D'Este, C. 2007, Antenatal smoking in vulnerable population groups: an area of need, *Journal of Obstetrics and Gynaecology*, vol. 27, no. 7, pp. 664–671.
- Herceg, A. 2005, *Improving Health in Aboriginal and Torres Strait Islander Mothers, Babies and Young Children: a Literature Review*, Department of Health and Ageing, Canberra.
- Hunt, J.M. and Lumley, J. 2002, 'Are recommendations about routine antenatal care in Australia consistent and evidence-based?', *Medical Journal of Australia*, vol. 176 (6), pp. 255–259.
- Jacoby, P.A., Coates, H.L., Arumugaswamy, A., Elsbury, D., Stokes, A., Monck, R., Finucane, J.M., Weeks S.A. and Lehmann, D. 2008, 'The effect of passive smoking on the risk of otitis media in Aboriginal and non-Aboriginal children in the Kalgoorlie–Boulder region of Western Australia', *The Medical Journal of Australia*, vol. 188, no. 10, pp. 599–603.
- Mercy Hospital for Women, Southern Health Service and Women's & Children's Health Service 2001, *Three Centres Consensus Guidelines on Antenatal Care Project*, Melbourne, quoted in AHMAC (2008).
- NHMRC (National Health and Medical Research Council) 2001, *Australian Alcohol Guidelines: Health Risks and Benefits*, Canberra.
- O'Leary, C.M. 2004, 'Fetal alcohol syndrome: diagnosis, epidemiology, and developmental outcomes', *Journal of Paediatrics and Child Health*, vol. 40, pp. 2–7.
- O'Leary, C.M., Heuzenroeder, L., Elliott, E.J. and Bower, C. 2007, 'A review of policies on alcohol use during pregnancy in Australia and other English-speaking countries 2006', *The Medical Journal of Australia*, vol. 186, no. 9, pp. 466–471.
- Panaretto, K.S., Mitchell, M.R., Anderson, L., Larkins, S.L., Manassis, V., Buettner, P.G. and Watson, D. 2007, 'Sustainable antenatal care services in an urban Indigenous community: the Townsville experience', *Medical Journal of Australia*, vol. 187 (1), pp. 18–22.
- Queensland Health 2003, *Optimal Infant Nutrition: Evidence-Based Guidelines 2003–2008*, Brisbane, http://www.health.qld.gov.au/health_professionals/childrens_health/docs.pdf (accessed 19 April 2009).
- Rothstein, J., Heazlewood, R. and Fraser, M. 2007, 'Health of Aboriginal and Torres Strait Islander children in remote Far North Queensland: Findings of the Paediatric Outreach Service', *The Medical Journal of Australia*, vol. 186, no. 10, pp. 519–521.
- Sivak, L., Arney, F. and Lewig, K. 2008, *A Pilot Exploration of a Family Home Visiting Program for Families of Aboriginal and Torres Strait Islander Children. Report and Recommendations: Perspectives of Parents of Aboriginal Children and Organisational Considerations*, Australian Centre for Child Protection, University of South Australia, Adelaide, <http://www.unisa.edu.au/childprotection/documents/FHV.pdf> (accessed 16 May 2009).
- Stamp, G.E., Champion, S., Anderson, G., Warren, B., Stuart-Butler, D., Doolan, J., Boles, C., Callaghan, L., Foale, A. and Muyambi, C. 2008, 'Aboriginal maternal and infant care workers:

partners in caring for Aboriginal mothers and babies', *Rural and Remote Health*, vol 8 (883), http://www.rrh.org.au/publishedarticles/article_print_883.pdf (accessed 23 February 2009).

Wallace, E.M. and Oats, J.J.N. 2002, 'National guidelines for antenatal testing', *Medical Journal of Australia*, vol. 177 (9), p.468.

Walters, B.N. 2009, The effect of smoking among Indigenous and non-Indigenous mothers on preterm birth and full-term birthweight, *Medical Journal of Australia*, vol. 190, no. 7, p. 400.

Wills, R. and Coory, M.D. 2008, The effect of smoking among Indigenous and non-Indigenous mothers on preterm birth and full-term birthweight, *Medical Journal of Australia*, vol. 189, no. 9, pp. 490–494.

WHO (World Health Organization 2009, 'Health Services Coverage Statistics. Antenatal Care Coverage', <http://who.int/healthinfo/statistics/indantenatal/en/index.html> (accessed 13 February 2009).

Wood, L., France, K., Hunt, K., Eades, S. and Slack-Smith, L. 2008, Indigenous women and smoking during pregnancy: knowledge, cultural contexts and barriers to cessation, *Social Science and Medicine*, vol. 66, no. 11, pp. 2378–2389.

World Bank 2000, *Health, Nutrition and Population, Sourcebook for the Poverty Reduction Strategy Paper, Part 2, Technical Notes*, 5 June 2000, <http://www.worldbank.org/poverty/health/library/hnptechnotes.pdf> (accessed 15 August 2003).

Zubrick, S.R., Lawrence, D.M., Silburn, S.R., Blair, E., Milroy, H., Wilkes, T., Eades, S., D'Antoine, H., Read, A., Ishiguchi, P., Doyle, S. 2004, *The Western Australian Aboriginal Child Health Survey: the Health of Aboriginal Children and Young People*, Telethon Institute for Child Health Research, Perth.

5.2 Teenage birth rate

ABS (Australian Bureau of Statistics) 2008, *Births, Australia, 2007*, Cat. no 3301.0, ABS, Canberra.

Anderson, K. Kahn, J. 1992, 'Intergenerational patterns of teenage fertility', *Demography* Vol. 29, No. 1.

Bradbury, B. 2006, *The Impact of Young Motherhood on Education, Employment and Marriage*, SPRC Discussion Paper No. 148, University of New South Wales.

Dickson, N. et al. 2000, 'Pregnancies among New Zealand teenagers: trends, current status and international comparisons', *NZ Med J.* vol. 113 no. 1112, pp. 241-245.

Ermisch, J. 2003, *Does a 'Teen-Birth' Have Longer-Term Impacts on the Mother? Suggestive Evidence from the British Household Panel Study*, Working Papers of the Institute for Social and Economic Research, Paper 2003-32, University of Essex, Colchester.

Hotz, G. McElroy, S. Sanders, S. 2005, 'Teenage childbearing and its life cycle consequences', *The Journal of Human Resources*.

Hendrickson, J. 1998, 'The risk of teen mothers having low birth weight babies: implications of recent medical research for school health personnel', *Journal of School Health*, vol. 68 No. 7, pp. 271-75.

Jeon, S. Kalb, G. and Vu, H. 2008, *The Dynamics of Welfare Participation among Women Who Experienced Teenage Motherhood in Australia*, Melbourne Institute Working Paper Series, Working Paper No. 22/08, Melbourne Institute of Applied Economic and Social Research, Melbourne.

-
- Jolly, M. Sebire, N. Harris, J. Robinson, S. Regan, L. 2000, 'The risks associated with pregnancy in women aged 35 years or older', *Human Reproduction*, vol. 15, no. 11, pp. 2433-2437, <http://humrep.oxfordjournals.org/cgi/content/full/15/11/2433> (accessed 4 March).
- Liao, T. 2003, *Mental Health, Teenage Motherhood, and Age at First Birth among British Women in the 1990s*, Working Papers of the Institute for Social and Economic Research, Paper 2003-33, University of Essex, Colchester.
- Luong, M. 2008, *Life After Teenage Motherhood*, Statistics Canada, Cat. no. 75-001-X.
- OECD (Organisation for Economic Cooperation and Development) 2008, *Share of Births Outside Marriage and Teenage Births*, <http://www.oecd.org/dataoecd/38/6/40278615.pdf> (accessed 28 February 2009).
- Morehead, A. and Soriano, G. 2005, 'Teenage mothers: constructing family: what are the supports, pressures and additional labour that shape decisions teenage mothers make about family life?' *Family Matters*, vol. 72, pp. 64–71.
- UNFPA (United Nations Population Fund) 2004, *State of World Population 2003*, <http://www.unfpa.org/swp/2003/english/ch1/index.htm> (accessed 1 March 2009).
- NSW Health 2009, *Antenatal care by Local Government Area* http://www.health.nsw.gov.au/publichealth/chorep/mum/mum_ante_lgamap.asp (accessed 1 March 2009).
- Zubrick S., Lawrence D., Silburn S., Blair E., Milroy., Wilkes., Eades S., D'Antoine H., Read A., Ishiguchi P., and Doyle S. 2004, *The Western Australian Aboriginal Child Health Survey: the Health of Aboriginal Children and Young People*, Telethon Institute for Child Health Research, Perth.

5.3 Birthweight

- ABS (Australian Bureau of Statistics) and AIHW (Australian Institute of Health and Welfare) 2008, *The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples*, Cat. no. 4704.0, Canberra.
- 2003, *The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples*, Cat. no. 4704.0, Canberra.
- Ah Chee, D., Alley, S. and Milera, S. 2001, 'Congress Alukura — women's business', *Proceedings of the 4th Australian Women's Health Conference*, Adelaide, 19–21 February, pp. 167–174.
- AIHW 2008a, *Aboriginal and Torres Strait Islander Health Performance Framework 2008 Report*, Cat. no. IHW 22, Canberra
- 2008b, *Australia's Mothers and Babies 2006*, Cat. no. PER 46, National Perinatal Statistics Unit Sydney, [http://www.npsu.unsw.edu.au/NPSUweb.nsf/resources/AMB_2008/\\$file/ps22.pdf](http://www.npsu.unsw.edu.au/NPSUweb.nsf/resources/AMB_2008/$file/ps22.pdf) (accessed 19 January 2009)
- Fall, C., Vijayakumar, M., Barker, D., Osmond, C. and Duggelby, S. 1995 'Weight in infancy and prevalence of coronary heart disease in adult life', *British Medical Journal*, no. 310, pp.17–19.
- Leeds, K.L., Gourley, M., Laws, P.J., Zhang, J., Al-Yaman, F., and Sullivan, E.Z. 2007, *Indigenous Mothers and their Babies, Australia 2001–2004*, AIHW, Cat. no. per 38. Perinatal statistics series no. 19 Canberra.
- Mackerras D 1998, *Evaluation of the Strong Women, Strong Babies, Strong Culture Program: Results for the Period 1990-1996 in the Three Pilot Communities*, Menzies Occasional Papers, Issue No 2/98, Menzies School of Health Research, Darwin.

-
- Plunkett, A., Lancaster, P. and Huang, J. 1996, *Indigenous Mothers and their Babies Australia 1991–1993*, AIHW National Perinatal Statistics Unit: Perinatal Statistics Series No. 4, Sydney.
- Rousham, E. and Gracey, M. 2002 ‘Factors affecting birthweight of rural Australian Aborigines’, *Annals of Human Biology*, vol. 29, no. 4, pp. 363–372.
- SA Health 2009, Health Targets <http://www.health.sa.gov.au/Default.aspx?tabid=385> *Health Targets* (accessed on 19 January 2009)
- Sayers, D. and Powers, J. 1997, ‘Risk factors for Aboriginal low birthweight, intrauterine growth retardation and preterm birth in the Darwin Health Region’, *Australian and New Zealand Journal of Public Health*, 21(5):524–530.
- Singh, G. and Hoy, W. 2003, ‘The association between birthweight and current blood pressure: a cross-sectional study in an Australian Aboriginal community’, *Medical Journal of Australia*, vol. 179, pp. 532–535, November.
- Wills, R., Coory, MD., 2008 *Effect of smoking among Indigenous and non-Indigenous mothers on preterm birth and full-term low birthweight*: Medical Journal of Australia 189(9), pp. 490–494.

5.4 Early childhood hospitalisations

COAG (Council of Australian Governments) 2009, *National Indigenous Reform Agreement*.

5.5 Injury and preventable disease

- ABS (Australian Bureau of Statistics) 1997, *Australian Social Trends 1997 Health - Mortality & Morbidity: Infectious Diseases*, <http://www.abs.gov.au/Ausstats/abs@.nsf/0/61bbd6935d9ef749ca2569bb00164f67?OpenDocument> (accessed 20 August 2003).
- 2009 *Causes of Death, Australia 2007*, Cat. no. 3303.0, Canberra.
- ABS and AIHW (Australian Institute of Health and Welfare) 2008, *The Health and Welfare of Australia’s Aboriginal and Torres Strait Islander Peoples, 2003*, ABS Cat. no. 4704.0, AIHW Cat. no. IHW11, Canberra.
- AMA (Australian Medical Association) 2008, *Good News and Best Practice 2008*, <http://www.ama.com.au/node/4335> (accessed 9 December 2008).
- Cooperative Research Centre for Aboriginal Health 2008, *CRC for Aboriginal Health Annual Report 2007-08*, http://www.crcah.org.au/publications/downloads/CRCAH07_08AnnualReportLR.pdf (accessed 20 April 2009).
- Currie, B.J. and Carapetis, J.R. 2000, ‘Skin Infection and Infestations in Aboriginal Communities in Northern Australia’, *Australian Journal of Dermatology*, vol. 41, pp. 139–145, quoted in Zubrick et al. (2004).
- On-line Medical Dictionary, <http://cancerweb.ncl.ac.uk/omd/> (accessed 26 June 2005).
- Oxfam Australia, 2007 *Close the Gap, Solutions to the Indigenous Health Crisis facing Australia*, <http://www.ahmrc.org.au/Downloads/CTG.pdf> (accessed 9 December 2008).
- PHAA (Public Health Association Australia) 2008, *The Project– Jalaris Kids Future Club*, <http://www.phaa.net.au/theProject.php> (accessed 9 December 2008).
- Queensland Health, Queensland Government 2003, *Optimal Infant Nutrition: Evidence Based Guidelines 2003-2010*, http://www.health.qld.gov.au/health_professionals/childrens_health/docs/Infant_Nutrition.pdf (accessed 20 April 2009).
- Zubrick, S.R., Lawrence, D.M., Silburn, S.R., Blair, E., Milroy, H., Wilkes, T., Eades, S., D’Antoine, H., Read, A., Ishiguchi, P., Doyle, S. 2004, *The Western Australian Aboriginal*

Child Health Survey: the Health of Aboriginal Children and Young People, Telethon Institute for Child Health Research, Perth.

5.6 Basic skills for life and learning

AIHW (Australian Institute of Health and Welfare) 2008a, *Aboriginal and Torres Strait Islander Health Performance Framework: Detailed Analysis*, Cat. no. IHW 22, Canberra.

— 2008b, *Progress of the Northern Territory Emergency Response Child Health Check Initiative*, Cat. no. IHW 25, Canberra.

RCH (The Royal Children's Hospital Melbourne) 2008a *About the AEDI*, The Royal Children's Hospital Melbourne, http://www.rch.org.au/australianedi/com.cfm?doc_id=6211 (accessed 1 March 2009)

— (The Royal Children's Hospital Melbourne) 2008b *How the AEDI was developed*, The Royal Children's Hospital Melbourne, http://www.rch.org.au/australianedi/com.cfm?doc_id=11314 (accessed 1 March 2009)

— (The Royal Children's Hospital Melbourne) 2008c *I-AEDI Adaptation Study*, The Royal Children's Hospital Melbourne, http://www.rch.org.au/australianedi/com.cfm?doc_id=12429 (accessed 1 March 2009)

— (The Royal Children's Hospital Melbourne) 2008d *Newsletter November 2008*, The Royal Children's Hospital Melbourne, http://www.rch.org.au/emplibrary/australianedi/IAEDI_e_newsletter_Nov08.pdf (accessed 1 March 2009)

SCRGSP (Steering Committee for the Review of Government Service Provision) 2009, *Report on Government Services 2009*, Productivity Commission, Canberra

5.7 Hearing impediments

AIHW (Australian Institute of Health and Welfare) 2008, *Aboriginal and Torres Strait Islander Health Performance Framework, 2008 Report: Detailed Analyses*, Cat. no. IHW 22, Canberra.

AIHW (Australian Institute of Health and Welfare) and Department of Health and Ageing 2008, *Progress of the Northern Territory Emergency Response Child Health Check Initiative: Preliminary Results from the Child Health Check and Follow-up Data Collections*, Cat. no. IHW 25, Canberra.

AHMAC (Australian Health Ministers' Advisory Council) 2006, *Aboriginal and Torres Strait Islander Health Performance Framework Report 2006*, Canberra.

— 2008, *Aboriginal and Torres Strait Islander Health Performance Framework Report 2008*, Canberra.

ARCHI (Australian Resource Centre for Healthcare Innovations) 2008, *Can't Hear, Hard to Learn*, <http://www.archi.net.au/e-library/awards/awards07/primary-health/chhl> (accessed 23 September 2008).

Boswell, J. and Nienhuys, T. 1996, 'Patterns of persistent otitis media in the first year of life in Aboriginal and non-Aboriginal infants', *The Annals of Otolaryngology, Rhinology and Laryngology*, vol. 105, no. 11, pp. 898–900.

Brouwer, C.N., Rovers, M.M., Maille, A.R., Veenhoven, R.H., Grobbee, D.E., Sanders, E.A. and Schilder, A.G. 2005, 'The impact of recurrent acute otitis media on the quality of life of children and their caregivers', *Clinical Otolaryngology*, vol. 30, no. 3, pp. 258–65.

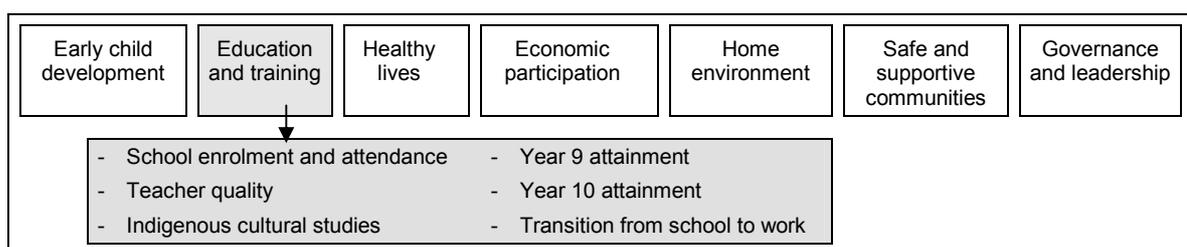
Burrow, S. and Thomson, N. 2003, 'Ear Disease and Hearing Loss', in Thomson, N. (ed), *The Health of Indigenous Australians*, Oxford University Press, South Melbourne, pp. 247–272.

-
- Burrow, S. and Thomson, N. 2006, 'Summary of Indigenous health: ear disease and hearing loss', *Aboriginal and Islander Health Worker Journal*, vol. 30, no. 1, pp. 10–11.
- Couzos, S., Metcalf, S. and Murray, R.B. 1999, 'Ear health', in Couzos, S. and Murray, R. (eds), *Aboriginal Primary Health Care: An Evidence-based Approach*, Oxford University Press, South Melbourne, pp. 240–320.
- Couzos, S. Metcalf, S. and Murray, R.B. 2001, *Systematic Review of Existing Evidence and Primary Care Guidelines on the Management of Otitis Media in Aboriginal and Torres Strait Islander Populations*, National Aboriginal Community Controlled Health Organisation (NACCHO) for the Office of Aboriginal and Torres Strait Islander Health, Commonwealth Department of Health and Ageing, Canberra.
- Department of Indigenous Affairs (Western Australia) 2007, *Aboriginal Health Worker Geraldine Hogarth a Finalist for 2007 Health Awards*, <http://www.dia.wa.gov.au/Information/Tarwanging/30-November-2007/#625> (accessed 18 April 2009).
- Di Franza, J.R. and Lew, R.A. 1996, 'Morbidity and mortality in children associated with the use of tobacco products by other people' *Pediatrics*, vol. 97, pp. 560–568.
- Howard, D. and Hampton, D. 2006, 'Ear disease and Aboriginal families', *Aboriginal and Islander Health Worker Journal*, vol. 30, no. 3, pp. 9–11.
- Jacoby, P.A., Coates, H.L., Arumugaswamy, A., Elsbury, D., Stokes, A., Monck, R., Finucane, J.M., Weeks S.A. and Lehmann, D. 2008, 'The effect of passive smoking on the risk of otitis media in Aboriginal and non-Aboriginal children in the Kalgoorlie–Boulder region of Western Australia', *The Medical Journal of Australia*, vol. 188, no. 10, pp. 599–603.
- Jones, R. and Smith, F. 2006, 'Are there health benefits from improving basic nutrition in a remote Aboriginal community?', *Australian Family Physician*, vol. 35, no. 6, pp. 453–4.
- Leach, A.J., Boswell, J.B., Asche, V., Nienhuys, T.G. and Mathews, J.D. 1994, 'Bacterial colonisation of the nasopharynx predicts very early onset and persistence of otitis media in Australian Aboriginal infants', *The Pediatric Infectious Disease Journal*. vol.13, pp. 983–989.
- Leach, A.J., Morris, P.S., Mathews, J.D. and the Chronic Otitis Media Intervention Trials Group 2008, 'Compared to placebo, long-term antibiotics resolve otitis media with effusion (OME) and prevent acute otitis media with perforation (AOMwiP) in high-risk population: A randomized controlled trial', *BMC Pediatrics*, vol. 8, article 23.
- Lehmann, L., Tennant, M., Silva, D., McAullay, D., Lannigan, F., Coates, H. and Stanley, F. 2003, 'Benefits of swimming pools in two remote Aboriginal communities in Western Australia: intervention study', *British Medical Journal*; 327(7412):415–419.
- Moran, D.J., Waterford, J.E., Hollows, F. and Jones, D.L. 1979, 'Ear disease in rural Australia', *The Medical Journal of Australia*, vol. 2, pp. 210–212.
- Morris, P.S., Leach A.J., Silberberg P., Mellon G., Wilson C., Hamilton E. and Beissbarth J. 2005, 'Otitis media in young Aboriginal children from remote communities in Northern and Central Australia: a cross-sectional survey', *BMC Pediatrics*, vol. 20, no. 5, pp. 27–36.
- Morris, P.S., Leach, A.J., Halpin, S., Mellon, G., Gadil, G., Wigger, C., Mackenzie, G., Wilson, C., Gadil, E. and Torzillo, P. 2006, 'An overview of acute otitis media in Australian Aboriginal children living in remote communities', *Vaccine*, September 22.
- Nienhuys, T.G. 1992, 'The significance of prelingual conductive hearing loss for auditory and linguistic development of Aboriginal infants', *Conference Proceedings Medical Options for Prevention and Treatment of Otitis Media in Australian Aboriginal Infants*, Menzies School of Health Research and the Australian Doctors Fund Darwin, 16–18 February, http://www.adf.com.au/archive.php?doc_id=137 (accessed 9 June 2005).

-
- New South Wales Department of Health (NSW DoH) 2002, *Report of the New South Wales Chief Health Officer Aboriginal and Torres Strait Islander Peoples Otitis Media and Myringotomy by Indigenous Status*, http://www.health.nsw.gov.au/public-health/chorep/atsi/atsi_om.pdf (accessed 21 July 2003).
- Rothstein, J., Heazlewood, R. and Fraser, M. 2007, 'Health of Aboriginal and Torres Strait Islander children in remote Far North Queensland: Findings of the Paediatric Outreach Service', *The Medical Journal of Australia*, vol. 186, no. 10, pp. 519–521.
- SCRGSP (Steering Committee for the Review of Government Service Provision) 2007, *Overcoming Indigenous Disadvantage: Key Indicators 2007*, Productivity Commission, Canberra.
- Silva, D.T., Lehmann, D., Tennant, M.T., Jacoby, P., Wright H. and Stanley, F.J. 2008, 'Effect of swimming pools on antibiotic use and clinic attendance for infections in two Aboriginal communities in Western Australia', *The Medical Journal of Australia*, vol. 188, no. 10, pp. 594–598.
- Smith-Vaughan, H., Byun, R., Halpin, S., Nadkarni, M.A., Jacques, N.A., Hunter, N., Morris, P.S. and Leach, A.J. 2008, 'Interventions for prevention of otitis media may be most effective if implemented in the first weeks of life', *International Journal of Pediatric Otorhinolaryngology*, vol. 72, pp. 57–61.
- TICHR (Telethon Institute for Child Health Research) 2006, *The Swimming Pool Study, 2000–2006*, Western Australian Department of Housing and Works and Western Australian Department of Health, Perth.
- Thorne, J.A. 2004, 'Middle ear problems in Aboriginal school children cause developmental and educational concerns', *Contemporary Nurse*, vol. 16, no. 1–2, pp. 145–150.
- Zubrick, S.R., Lawrence, D.M., Silburn, S.R., Blair, E., Milroy, H., Wilkes, T., Eades, S., D'Antoine, H., Read, A., Ishiguchi, P. and Doyle, S. 2004, *The Western Australian Aboriginal Child Health Survey: the Health of Aboriginal Children and Young People*, Telethon Institute for Child Health Research, Perth.

6 Education and training

Strategic areas for action



Education is a life-long activity, beginning with learning and development in the home through to the more formal settings of school education, vocational education and training (VET) and higher education. Education and training aims to develop the capacities and talents of students, so they have the necessary knowledge, understanding, skills and values for a productive and rewarding life. Actions in this strategic area can help strengthen communities and regions economically and socially through learning and employment, and there are strong links between higher levels of education and improved health outcomes.

Many COAG targets and headline indicators reflect the importance of education and training:

- early childhood education (section 4.3)
- reading, writing and numeracy (section 4.4)
- year 12 attainment (section 4.5)
- post-secondary education — participation and attainment (section 4.7).

Other COAG targets and headline indicators can be directly influenced by education and training outcomes:

- employment (section 4.6)
- household and individual income (section 4.9).

Outcomes in the education and training strategic area can be affected by outcomes in several other strategic areas for action, or can influence outcomes in other areas:

-
- early child development (basic skills for life and learning, hearing impediments) (chapter 5)
 - healthy lives (access to primary health and fewer preventable hospitalisations will affect education outcomes, while education outcomes can influence tobacco consumption and harm, and obesity and nutrition) (chapter 7)
 - economic participation (labour market participation, home ownership) (chapter 8)
 - governance and leadership (governance capacity and skills) (chapter 11).

The indicators in this strategic area for action focus on the key factors that contribute to positive education and training outcomes, as well as measures of the outcomes themselves:

- school enrolment and attendance — there is a direct relationship between the number of days absent from school and academic performance. This section includes information on both enrolment and actual attendance (section 6.1)
- teacher quality — the quality of teaching is a key determinant of student learning outcomes. However, defining and measuring teacher quality is contentious. This section discusses research into the determinants of teacher quality, and identifies measures that might be reported once data become available (section 6.2)
- Indigenous cultural studies — culturally appropriate education for Indigenous students can contribute to good ‘mainstream’ academic outcomes, as well as consolidating community teachings and knowledge. It can also help preserve Indigenous languages. Indigenous cultural studies also provide an opportunity for Indigenous people to share their knowledge with the wider community. Approaches to incorporating Indigenous content into the school curriculum vary widely between education systems and between schools, and data for this indicator are very limited (section 6.3)
- Year 9 attainment — anecdotal evidence suggests that many Indigenous children are leaving school in years 9 and 10 with poor literacy and numeracy skills and with limited post-school options. This section supplements information about retention and participation rates with data on the proportion of people with year 9 as their highest level of schooling, and data on student performance in international testing programs (section 6.4)
- Year 10 attainment — year 10 generally signifies the end of compulsory schooling, and there is a significant drop off in Indigenous enrolments. This section supplements information about retention and participation rates with data on the proportion of people with year 10 as their highest level of schooling, by age groups (section 6.5)

-
- transition from school to work — the transition from school to work is a critical period. Young people who are not actively engaged in education and training, or employed, are at risk of long term disadvantage. This section reports on the number of ‘at risk’ 15 to 24 years olds (those neither employed nor studying), and employment outcomes for those with different levels of education (section 6.6).

Attachment tables

Attachment tables for this chapter are identified in references throughout this chapter by an ‘A’ suffix (for example, table 6A.1.1. These tables can be found on the Review web page (www.pc.gov.au/gsp), or users can contact the Secretariat directly.

6.1 School enrolment and attendance

Box 6.1.1 Key messages

- Attendance rates in government schools for years 1–10 were lower for Indigenous students than non-Indigenous students, in all states and territories in 2007 (figure 6.1.1).
- Attendance rates in government schools declined from year 1 to year 10 for both Indigenous and non-Indigenous students in 2007. The decline was generally greater for Indigenous students (between 2 and 14 percentage points) than non-Indigenous students (between 3 and 7 percentage points) (figure 6.1.1).

COAG has identified student attendance as one of the performance indicators to measure progress against the Closing the Gap target of halving the gap for Indigenous students in year 12 attainment or equivalent attainment rates by 2020. This indicator reports student attendance rates for students in years 1–10. Supplementary material on student enrolment rates provides contextual information.

Studies have found that Australia’s Indigenous children have lower school enrolment rates and lower school attendance rates than non-Indigenous children (UNICEF Innocenti Research Centre 2004; Schwab and Sutherland 2004; Taylor 2004). Further, Indigenous school children are less likely to have parental support, for example, help with homework, compared with non-Indigenous children (UNICEF Innocenti Research Centre 2004).

Comparable attendance data for school students in years 1–10 were available for the first time for this report. However, student attendance data are based on enrolments and do not provide an indication of student attendance for those children not enrolled.

This section also presents data on student enrolments rates (based on enrolments by age compared to the equivalent projected age cohort in the population). These rates indicate whether there are children in the community who are not enrolled at school. However, they do not reflect whether a child actually attends school on a daily basis.

Student attendance

The Western Australian Aboriginal Child Health Survey has shown a direct relationship between the number of days absent from school and academic performance (Zubrick et al. 2006). This survey also found that attendance of Aboriginal students was well below that of non-Aboriginal students.

During 2006, the Australian Government trialled a scheme in Hall’s Creek in WA that docked welfare payments for parents if their children were regularly absent from school. The trial was stopped due to concerns about whether this approach was legal (DEWR 2006). In evaluating the trial, DEWR found three main contributing factors to low school attendance:

- lack of parental insistence that children go to school in the morning
- teacher quality
- bullying and teasing (DEWR 2006).

More recent programs linking receipt of welfare payments to children’s attendance at school include the NT Emergency Response and the Cape York Welfare Reform project, both of which contain provisions for managing welfare payments of parents whose children do not attend school regularly. More information on these programs is included in sections 8.4 and 11.1.

Analysis of the 2002 National Aboriginal and Torres Strait Islander Social Survey by Hunter (2007) found that arrest of Indigenous youth is strongly associated with low school attendance rates for 13 to 17 year olds. Having been arrested in the last five years is associated with a reduction in attendance at school by around 25 percentage points.

Some remote Indigenous communities have introduced ‘no school no pool’ policies to encourage children to attend school. Those who do not attend school are not

allowed to use the swimming pool. Section 5.7 includes more information on swimming pools in remote communities.

An example of an initiative that has been found to increase attendance for Indigenous children at school is outlined in box 6.1.2.

Box 6.1.2 'Things that work' — increasing school attendance

The **Alice Springs Football Academy (Clontarf Foundation) Program** (NT) (originally launched in WA in 2000) was set up in three middle schools in Alice Springs in March 2007 (Anzac High School, Yirara College and Alice Springs High School) (Clontarf Foundation, 2007). Members of an academy (young Indigenous males between the ages of 13 and 18 years) are provided with high quality coaching, specialist physical conditioning, health education and mentoring in life skills, while the school caters for their educational needs. In order to remain in an academy, participants must consistently endeavour to:

- attend school regularly
- apply themselves to the study of appropriate courses
- embrace the academy's requirements for behaviour and self discipline.

Henderson (NT Chief Minister) 2009 stated that with the introduction of the Clontarf program, average attendance rates for the Alice Springs schools increased from 70 per cent in 2007 to 87 per cent in 2008 (Government media release).

During 2008, academies were also established Palmerston, Katherine and the Tiwi Islands (in the NT).

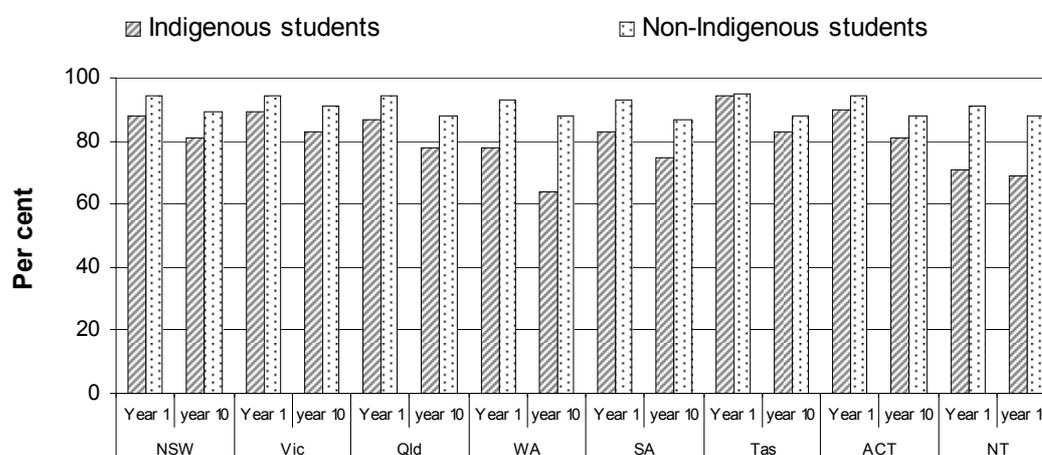
The **Community Festivals for Education Engagement** program (an Australian Government initiative) targets events that encouraged students, particularly Aboriginal and Torres Strait Islander students, to attend school and lead healthy lifestyles. In 2008, five organisations signed to fund 15 festivals around Australia, eight more than 2007. These organisations included Music Outback Foundation; Broome Aboriginal Media Association; Wakakirri Limited; TAFE NSW and Vibe Australia. Festivals were held at Yuendumu, Laramba, Tanami, and Alice Springs in the NT; Kalgoorlie and Broome in WA; Rockhampton, Bloomfield and Cunnamulla in Queensland; Coonamble, Lismore, Coffs Harbour and Taree in NSW; Port Augusta in SA and Mildura in Victoria. Students were able to participate in concerts and cultural activities that endorsed education, health, culture and potential vocational pathways.

Data on student attendance (in addition to enrolments) were first collected in 2007 through the MCEETYA national student attendance collection, and are the most recent data available for this report. Student attendance is defined as the number of actual full time equivalent student days attended over the collection period as a percentage of the total number of possible student days (see SCRGSP 2009, p. 4.20 for more details on the scope and definitions for this indicator).

In Australia in 2007, school attendance was compulsory for people between 6 and 15 years of age with the following variations:

- to 16 years of age in SA
- to 16 years of age or completing year 10 in Queensland
- from 5 to 16 years of age in Tasmania
- from the beginning of the year in which the child reaches 6 years and 6 months, to the end of the year in which the student turns 16 years of age in WA.

Figure 6.1.1 Student attendance in government schools, by Indigenous status, by selected year levels, 2007^a



^a See table 6A.1.1 for detailed explanatory notes on data.

Source: MCEETYA (2009) *2007 National Report on Schooling in Australia: Participation, attainment and attendance chapter*; table 6A.1.1.

Figure 6.1.1 presents data on student attendance rates for government schools in 2007.

- Attendance rates for Indigenous students were lower than for non-Indigenous students for years 1–10 in all states and territories (table 6A.1.1)
- Attendance rates declined from year 1 to year 10 for both Indigenous and non-Indigenous students (figure 6.1.1)
- The extent of decline in attendance from year 1 to year 10 was greater for Indigenous students (between 2 and 14 percentage points), compared to non-Indigenous students (between 3 and 7 percentage points) — with the exception of the NT where the decline was 2 percentage points for Indigenous students and 3 percentage points for non-Indigenous students (figure 6.1.1 and table 6A.1.1).

Data on student attendance rates were also available for Catholic schools and independent schools for 2007 (tables 6A.1.2-3). In summary:

- Attendance rates for Indigenous students were generally lower than for non-Indigenous students for years 1–10 across most states and territories
- Attendance rates were variable for Indigenous students from year 1 to year 10 with increases in some jurisdictions and decreases in other jurisdictions, however, for non-Indigenous students the rates were relatively stable.

Student enrolments

The number of children enrolled in primary school in 2008 was sourced from the MCEETYA National Schools Statistics Collection (NSSC). The NSSC considered students enrolled in year one minus one (prep, or pre-year one) to be in primary school.

School enrolment rates are based on enrolment numbers and do not measure whether enrolled children attend school. Enrolment rates have been derived by dividing the number of children enrolled at school with the population estimate for that age group. The most recent data on Indigenous population estimates are for 30 June 2006 (based on the 2006 ABS Census of Population and Housing). The Indigenous population projections based on the 2001 ABS Census of Population and Housing are considered too unreliable for use (revised Indigenous population projections based on the 2006 ABS Census were not available for this report).

Data on student enrolment rates should be interpreted with caution because of the Indigenous undercount in the Census. For example, most rates calculated for WA are greater than 100 per cent.

Nationally in 2006, the school enrolment rate was slightly lower for Indigenous and non-Indigenous children in the 5–9 year age group (90.2 per cent and 93.9 per cent respectively), than for the 10–14 year age group (93.3 per cent and 98.9 per cent respectively) (table 6A.1.4). However, the difference between Indigenous and non-Indigenous enrolment rates was slightly less for the 5–9 year age group (3.7 percentage points), compared to the 10–14 year age group (5.6 percentage points).

Enrolments data are also available by individual year of age for 2006, 2007 and 2008 (tables 6A.1.5–7). However, appropriate population data are not available for 2007 and 2008, therefore enrolment rates are unable to be provided for these years.

6.2 Teacher quality

Box 3.4.1 Key message

- Teacher quality is important for improving Indigenous student outcomes. COAG has agreed to a National Partnership on Improving Teacher Quality, but no data were available for this report.

Defining and measuring teacher quality has been made a priority under the Council of Australian Governments (COAG) National Education Agreement (COAG 2009a). As part of COAG's wider strategy to close the gap in educational outcomes between Indigenous and non-Indigenous students, the National Partnership Agreement (NP) on Improving Teacher Quality targets a series of reforms aimed at improving teacher and school leader quality for all students, and in particular, for students in disadvantaged Indigenous, rural/remote and hard to staff schools (COAG 2009b).

Evidence presented in other sections of this report shows that Indigenous students underperform relative to non-Indigenous students on a range of measures. In 2008, the proportion of Indigenous year 3, 5, 7 and 9 students who did not achieve the national minimum standard for reading, writing and numeracy was substantially higher than was the proportion of all students (section 4.4). This gap in learning outcomes between Indigenous students and all students increased as the degree of remoteness increased (section 4.4). A higher proportion of Indigenous students complete schooling only to year 9 or year 10 than non-Indigenous students (sections 6.4 and 6.5). Indigenous students are much less likely to leave school with a year 12 certificate compared with non-Indigenous students (section 4.5).

Student outcomes are determined by a number of factors including family background, school resourcing, class size, and student motivation and ability. An additional determinant of student learning outcomes is the quality of classroom teaching (OECD 2005; Dinham, Ingvarson and Kleinhenz 2008). How teacher quality is defined and measured is a contentious area of research with differing approaches. Generally, research indicates that teacher quality depends not only on the quality of the people in the teaching profession, but also their initial teacher education, their continuing professional development, and their work practices and working environment (OECD 2005).

Research indicates there are large differences in the quality of school teachers and that this variation has a significant impact on student achievement (Rockoff 2004, Rivkin, Hanushek and Kain 2005). The academic literature points to a number of teacher characteristics which may explain the variation in teacher quality. The

academic aptitude of a teacher — taken as the literacy and numeracy performance of teachers whilst they were studying — is a strong predictor of student learning outcomes (Leigh 2007a; Leigh and Ryan 2006; OECD 2005). Research suggests there has been a decline in the academic aptitude of Australian teachers between 1983 and 2003, as measured by school literacy and numeracy test results (Leigh and Ryan 2006).

At secondary school level, evidence indicates that traditional measures of teacher quality, such as years of teaching experience and the level of a teacher's tertiary qualification (bachelors or masters) are not significant predictors of student achievement. Teachers studying at university level the subjects they teach, and receiving training in how to teach, were more important factors in improving student grades (Monk 1994; Goldhaber and Brewer 1997; Wenglinsky 2002). Being taught by a teacher with a sound knowledge of the subject matter, particularly at the secondary level, is a strong predictor of student performance (Wayne and Youngs 2003; Goldhaber and Brewer 2002; Hill, Rowan and Loewenberg Ball 2005). The Senate Standing Committee on Employment, Workplace Relations and Education (2007) noted research finding that maths and science teachers with degrees in these disciplines had students who achieved higher results.

There is recognition that a high quality of initial teacher education is necessary, but not sufficient, for ongoing teacher effectiveness (OECD 2004). Ongoing professional development is important for teachers, particularly with teaching increasingly being seen in the context of providing 'lifelong learning'. Continual professional learning is the central means for capacity building in the teaching profession (Dinham, Ingvarson and Kleinhenz 2008). Other research indicates that students taught by new teachers underperform compared to students taught by more experienced teachers, with the gains from additional classroom experience peaking after several years. Retaining new teachers in the profession to ensure they gain classroom experience improves teacher quality and improves student outcomes (Rivkin, Hanushek and Kain 2005, Leigh 2007b).

An alternative to the input approach of identifying the characteristics of quality teachers would be to measure the effect a teacher has on student outcomes (for example, grades.). However, the NP on Improving Teacher Quality focuses on outcomes and outputs (COAG 2009c). Therefore, this report does not explore output and outcome measures of teacher quality.

Measures of teacher quality and future data sources

COAG has identified two broad measures of teacher quality:

- teacher and school leader quality at Indigenous schools
- the numbers of high quality teachers and school leaders attracted to and retained in Indigenous schools.

Few or no data are currently available for these measures. The Teacher Quality NP includes reforms to improve the quality and availability of teacher workforce data by undertaking a Longitudinal Teacher Workforce Study. Data will also become available from the national reporting by states and territories under national partnership processes. These data sources, as well as other data collected under additional reforms, should allow the measures to be reported on in future years.

The Teacher Quality NP states that Commonwealth, State and Territory governments will share responsibility for ensuring that non-government school authorities participate appropriately in teacher quality reforms (COAG 2009b). This is an important issue for states and territories with significant numbers of Indigenous students in non-government schools. For example, in the NT, in 2007, 18.1 per cent of Indigenous students attended non-government schools (SCRGSP 2009, table 4A.22). Further work is required on how to define and identify Indigenous and non-Indigenous schools.

6.3 Indigenous cultural studies

Box 6.3.1 Key message

- Many schools have introduced Indigenous language, culture and history programs to improve education outcomes for Indigenous students and to improve all students' knowledge and appreciation of Indigenous peoples and cultures.

In consultations on the 2007 report (SCRGSP 2007), differing views on the Indigenous cultural studies indicator were expressed by various Indigenous groups, governments and agencies. Some Indigenous organisations and communities were concerned that the attention was on culturally appropriate education for Indigenous people rather than good academic outcomes that are comparable to all students. Other Indigenous groups considered that cultural studies consolidated community teaching and could assist in preserving Indigenous language. Indigenous cultural studies also provide an opportunity for Indigenous people to share their knowledge

with the wider community and help overcome ignorance and misunderstanding that may lead to racism and discrimination.

Approaches to incorporating Indigenous content into curriculum vary between education systems and between schools. Schools exist in varied contexts and have varying numbers of Indigenous students. A quarter of schools had no Indigenous students in 2007 (22.8 per cent) and the remainder had some Indigenous students enrolled (48.0 per cent of schools had 0.1 to 5.0 per cent Indigenous students). In 2.0 per cent of schools, more than 95 per cent of students were Indigenous and in 1.1 per cent of schools all students were Indigenous (DEEWR unpublished).

Data for reporting against this indicator are very limited. The *National Report to Parliament on Indigenous Education and Training, 2006* (DEEWR 2008b) provides some relevant qualitative and quantitative information.

The Department of Education, Employment and Workplace Relations (DEEWR) also collects limited information related to this indicator from Indigenous Education Strategic Initiatives Programme (IESIP) reports completed by individual education systems and schools. A suite of performance indicators was developed for the Indigenous Education Program (2005–2008) — Supplementary Recurrent Assistance — and DEEWR plans to include a measure in this reporting process to encourage more extensive Indigenous involvement in developing and delivering Indigenous studies.

Culturally inclusive curricula

Many states and territories have implemented strategies to ensure Indigenous perspectives are incorporated into school curriculum and programs. DEEWR (2008a) reported that in 2006 over 16 000 Indigenous students and 13 000 non-Indigenous students located in 260 Australian schools were involved in an Indigenous language program. Most participating students attended government schools located in the NT, WA, NSW and SA.

The following case studies (box 6.3.2) illustrate how some schools and education providers are including Indigenous culture and perspectives into their curricula. Some case studies demonstrate programs created primarily for Indigenous students to increase their knowledge of their own culture and to improve their motivation to attend and succeed at school. Other case studies aim to improve the knowledge and understanding of all students (both Indigenous and non-Indigenous).

Box 6.3.2 Things that work— Indigenous Cultural Studies

The **‘Dare to Lead’** Program at the Bendigo Senior Secondary College was included in the 2007 report. The program continued successfully across the nation in 2008, and is currently in its third phase, with over 53 per cent of all Australian schools participating. In 2008, as part of the Dare to Lead program, six Indigenous students from Djarragun College in far north Queensland, accompanied by school staff and representatives from the Dare to Lead program, visited the United Arab Emirates to showcase Aboriginal and Torres Strait Islander culture (APCAPDC 2008).

The **Broulee Public School** in Eurobodalla, NSW was included in the 2007 report. The Dhurga Djamanji language program has been strongly embedded into Broulee Public School’s Human Society and its Environment curriculum. It is now being taught concurrently with other subject topics on a two year cycle. Broulee Public School has maintained a strong community partnership with the local Aboriginal community which underpins the sustainability of the program (NSW Government, unpublished).

Specialist language training to teach NSW Aboriginal languages in NSW public schools is being provided by the NSW Department of Education and Training’s Aboriginal Education and Training Directorate, in collaboration with the University of Sydney’s Koori Centre. In 2008 the Department provided sponsorship to two teachers undertaking the Masters of Indigenous Languages Education (NSW Government, unpublished).

A **Stage 4 Aboriginal language program** was in place in 10 NSW schools in 2008, including Nambucca Heads High School, Vincentia High School, Bourke High School, Parkes High School, Tamworth High School, Bonalbo Central School, Bowraville Central School, Chifley College Dunheved Campus, Bellingen High School and Shoalhaven High School. In many of these schools, the program means that the local Indigenous language can be studied to meet the mandatory language requirement for the School Certificate. The implementation of the Aboriginal languages K–10 syllabus, the increasing numbers of qualified teachers of Aboriginal languages and the regular professional development opportunities offered to all members of Aboriginal languages teams, has facilitated this development (NSW Government, unpublished).

(Continued next page)

Box 6.3.2 (continued)

The **Teacher Education Scholarship Program** encourages and supports Aboriginal people to become secondary or primary teachers in NSW public schools. The graduates are appointed as permanent teachers following successful completion of all university requirements of the teacher education program and fulfilling the Department's recruitment requirements. From 2002, the Department awarded 30 scholarships each year, with this number doubling to at least 60 scholarships annually from 2006. Currently, 201 Aboriginal scholarship holders are undertaking teacher training and a further 61 scholarships have been offered in 2009 (NSW Government, unpublished).

The Connecting with Country, Culture and Community program in Tasmania engages Indigenous students with their culture through meaningful and relevant cultural learning experiences as part of their academic schooling. Support materials based on the cultural activities undertaken by the students involved in the program have been developed to assist teachers integrate Aboriginal perspectives into the curriculum. These include DVDs, learning sequences, puzzles and booklets (Tasmanian Government, unpublished).

The Tasmanian Aboriginal Sharers of Knowledge Program (ASK) equips teachers and students with awareness and understanding of Tasmanian Aboriginal peoples and their cultures from an historical and contemporary perspective. The ASK Program provides cross cultural training for teaching and education staff and provides professional development and curriculum planning.

The Program provides schools with Indigenous artists; a selection of accredited Indigenous Cultural Ambassadors; access to Indigenous resources and tools of learning and a wide spectrum of cultural experiences in a variety of learning environments (Tasmanian Government, unpublished).

Indigenous employment in schools

While no specific data are available on Indigenous teachers teaching Indigenous studies, some data on Indigenous employment in schools have been included to provide information on Indigenous involvement in school education. Indigenous cultural perspectives are important across the curriculum and the presence of Indigenous staff provides positive role models and contributes to bringing Indigenous perspectives to students.

Table 6.3.1 Indigenous employment in schools

	2003	2004	2005	2006	2007
Government schools					
Number of Indigenous teachers ^{a, b}	1 473	1 493	1 459	1 649	1 691
Indigenous teachers as a proportion of all teachers (%) ^{a, b}	0.8	0.8	0.9	1.0	1.0
Indigenous students as a proportion of all students (%)	4.9	5.1	5.2	5.4	5.6
Number of AIEWs in schools ^{a, b, c}	1 435	1 459	1 570	1 745	1 649
Ratio of Indigenous students to Indigenous teachers and AIEWs ^{a, b}	37.9	38.6	38.8	35.8	38.1
Number of Indigenous staff in schools ^{a, b, d}	3 507	3 618	3 924	4 395	4 627
Total number of staff in schools ^d	232 545	236 869	235 037	238 891	249 615
Indigenous staff as a proportion of all staff in schools (%) ^{a, b}	1.5	1.5	1.7	1.8	1.9
Indigenous administrative and clerical staff as a proportion of all administrative and clerical staff (%)	4.8	5.0	4.0	4.1	4.1
Catholic schools^e					
Number of Indigenous teachers ^{a, b}	72	73	106	110	126
Indigenous teachers as a proportion of all teachers (%) ^{a, b}	0.2	0.2	0.2	0.2	0.3
Indigenous students as a proportion of all students (%) ^f	1.5	1.6	1.7	1.7	2.0
Number of AIEWs in schools ^{a, b, c}	495	523	461	463	407
Ratio of Indigenous students to Indigenous teachers and AIEWs ^{a, b, f}	27.8	27.6	18.7	19.3	23.4
Number of Indigenous staff in schools ^{a, b, d}	552	562	548	608	613
Total number of staff in schools ^d	63 186	64 886	64 205	68 978	67 652
Indigenous staff as a proportion of all staff in schools (%) ^{a, b}	0.9	0.9	0.9	0.9	0.9
Indigenous administrative and clerical staff as a proportion of all administrative and clerical staff (%)	2.7	2.6	3.2	3.5	3.4

AIEWs = Aboriginal and Islander Education Workers. ^a For some states and territories, these data are based on actual numbers and for some others, it is based on full time equivalent (FTE). ^b Figures are not to be considered as nationally reflective because not all states and territories reported on employment in any one year. ^c Includes school and non school based AIEWs. ^d Includes teachers, specialist support staff (including teacher aides and AIEWs), administrative and clerical staff. ^e The number of Indigenous students in Catholic schools is based on the number in all Catholic schools, not just IESIP funded Catholic systems. Staff numbers are those in IESIP funded Catholic systems. ^f Catholic schools' enrolment data include some other non-government schools, including many Indigenous run schools that have greatly influenced the results.

Source: DEST IESIP performance reports 2003–2007 (unpublished).

In 2000, the Ministerial Council on Education, Employment, Training and Youth Affairs agreed to include an Indigenous identifier for staff in the National Schools Statistics Collection (NSSC). In 2006, the decision to use the ABS standard definition for the collection and reporting on Indigenous staffing was implemented

and became part of the NSSC reporting requirements. No data are yet available from the NSSC.

A general indication of the number of Indigenous teachers and Aboriginal and Islander education workers is available from DEEWR IESIP reports:

- Between 2003 and 2007 there have been increases in the number of Indigenous teachers and other staff in schools (table 6.3.1) but Indigenous teachers and staff in schools continue to be a much smaller proportion of all teachers and staff than Indigenous students are of all students (table 6.3.1).
- The number of Aboriginal and Islander Education Workers (AIEWs) employed in the government system and the Catholic system fluctuated between 2003 and 2007 (table 6.3.1).
- The ratio of Indigenous students to Indigenous teachers and AIEWs increased from 36.4 in 2001 to 38.1 in 2007, indicating that numbers of Indigenous students rose faster than numbers of Indigenous teachers and AIEWs (table 6A.3.1).

Table 6A.3.2 shows that 49.7 per cent of AIEWs in government schools and 86.0 per cent of AIEWs in Catholic schools had completed or were studying towards formal qualifications in 2007. The proportion who had completed or were studying towards formal qualifications has increased in government schools and Catholic schools since 2001 (31.3 per cent and 47.1 per cent, respectively).¹

6.4 Year 9 attainment

Box 6.4.1 Key messages

- Much higher proportions of Indigenous than non-Indigenous people aged 15 years and older reported year 9 or below as their highest level of schooling in every age group in 2006 (figure 6.4.1).
- A higher proportion of Indigenous students than non-Indigenous students did not achieve the minimum proficiency level in international tests for science, mathematics and reading literacy (tables 6.4.2–6).

Evidence suggests that many Indigenous children are leaving school in years 9 and 10 with poor literacy and numeracy skills and with limited post school options.

¹ Smaller numbers of AIEWs in Catholic systems can mean that small changes in numbers studying or total AIEWs can cause proportions to vary from year to year without necessarily indicating a trend.

Early school leaving is associated with poor employment and income in later life. In 2006, Indigenous people who had completed schooling only to year 9 or below were less likely to be employed than those who went on to attain a year 12 certificate (31.3 per cent and 68.2 per cent, respectively) (table 4A.5.19). A much higher proportion of Indigenous people who only attained year 9 were found in the lowest income quintile, compared to Indigenous people who went on to complete year 12 (55.5 per cent compared 22.7 per cent) (table 4A.5.19).

There is evidence to suggest that the causes of early school leaving include:

- poor literacy and numeracy skills
- lack of student engagement in learning
- poverty
- the quality of teaching staff (ACER 2002; Purdie and Corrigan 2004).

More recent research emphasises that academically weaker students are far more likely to leave school early to enter the labour market or participate in post-school education. Other significant factors associated with early school leaving include the socioeconomic background of the students, coming from non-metropolitan areas, and students living in non-traditional families (Marks 2007).

The Western Australian Aboriginal Child Health Survey conducted in 2001 and 2002 (Zubrick et al. 2006) found that when the period of compulsory education ends the proportion of Indigenous children who no longer attend school is substantially higher than that for non-Indigenous children. Of those Indigenous children who left school soon after the period of compulsory education one-third were neither working nor undertaking any form of education. Section 6.6 provides more information on the transition from school to work.

Some programs that have been successful in encouraging Indigenous students to stay at school can be found in section 4.5, box 4.5.2.

To give a comprehensive picture of Indigenous year 9 attainment, this section presents:

- student enrolment rates for 10–14 year olds
- apparent retention rates from years 7 or 8 to year 9
- year 9 or below as the highest level of schooling for people 15 years and older
- maths, science and reading test results as indicators of academic attainment.

Student enrolments

The number of children enrolled in secondary school in 2008 was obtained from the MCEETYA National Schools Statistics Collection (NSSC). School enrolment rates are based on enrolment numbers and do not measure whether enrolled children attend school. Information on methods for calculating enrolment rates and definitional issues are addressed in section 6.1.

Nationally in 2006, the school enrolment rate was slightly lower for Indigenous than non-Indigenous children aged 10–14 years (93.3 per cent and 98.9 per cent, respectively) (table 6A.1.4). High enrolment rates are to be expected in this age group because, in 2006, school education was compulsory in all states and territories for people between 6 and 15 years of age (extending to 16 years of age in SA and Tasmania).

Indigenous enrolment rates were significantly lower for those aged 15–19 years compared with children aged 10–14 years (93.3 per cent and 37.9 per cent, respectively). The difference between Indigenous and non-Indigenous enrolment rates was greater for the 15–19 year age group (13.8 percentage points), compared to the 10–14 year age group (5.6 percentage points) (table 6A.1.4).

Enrolments data are also available by single year of age for 2006, 2007 and 2008 (tables 6A.1.5–7). However, appropriate population data are not available for 2007 and 2008, therefore, enrolment rates are unable to be provided for these years.

Student retention

The available retention data for year 9 do not fully reflect the high rate of early school leaving amongst Indigenous students, because apparent retention rates are based on enrolment numbers, and high rates are to be expected because normal year level progression means students in year 9 are generally of an age at which school education is compulsory. Apparent retention rates do not reflect school attendance or whether the student completed the school year (because data are collected in August). Some information on methods for calculating retention rates and definitional issues are addressed in section 4.5.

Table 6.4.1 Apparent retention rates of full time secondary students to year 9, all schools, 2008 (per cent)^{a, b, c, d, e}

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
Indigenous									
Male	98.3	98.4	98.7	97.4	103.0	101.3	110.0	91.1	98.0
Female	101.7	96.4	99.7	98.8	99.0	104.4	102.8	90.4	99.2
Total	100.0	97.5	99.2	98.0	101.0	102.9	106.6	90.8	98.6
Non-Indigenous									
Male	98.8	100.1	100.8	101.4	100.5	100.0	100.2	97.3	100.0
Female	99.8	101.7	101.6	102.0	100.8	100.0	99.4	100.5	100.9
Total	99.3	100.9	101.2	101.7	100.6	100.0	99.8	98.8	100.4

^a The apparent retention rate is the percentage of full time students who continued to year 9 from respective cohort groups at the commencement of their secondary schooling (year 7/8). ^b Retention rates are affected by factors that vary across jurisdictions, so variations in apparent retention rates over time within jurisdictions may be more useful than comparisons across jurisdictions. Retention rates can exceed 100 per cent for a variety of reasons, including student transfers between jurisdictions after the base year. ^c The exclusion of part time students from standard apparent retention rate calculations has implications for the interpretation of results for all jurisdictions, but particularly for SA, Tasmania and the NT where there is a high proportion of part time students. ^d The small number of Indigenous students in some jurisdictions (the ACT and Tasmania) can result in large fluctuations in the apparent retention rates when disaggregated by gender. ^e Ungraded students are not included in the calculation of apparent retention rates. This exclusion has particular implications for the NT and as a result, Indigenous apparent retention rates may misrepresent the retention of students in secondary schooling in the NT.

Source: ABS (2009); table 4A.5.30.

High apparent retention rates from years 7 or 8 to year 9 are to be expected because normal year level progression means students in year 9 are generally of an age at which school education is compulsory. For a discussion on the interpretation of apparent retention rates refer to section 6.5.

In 2008:

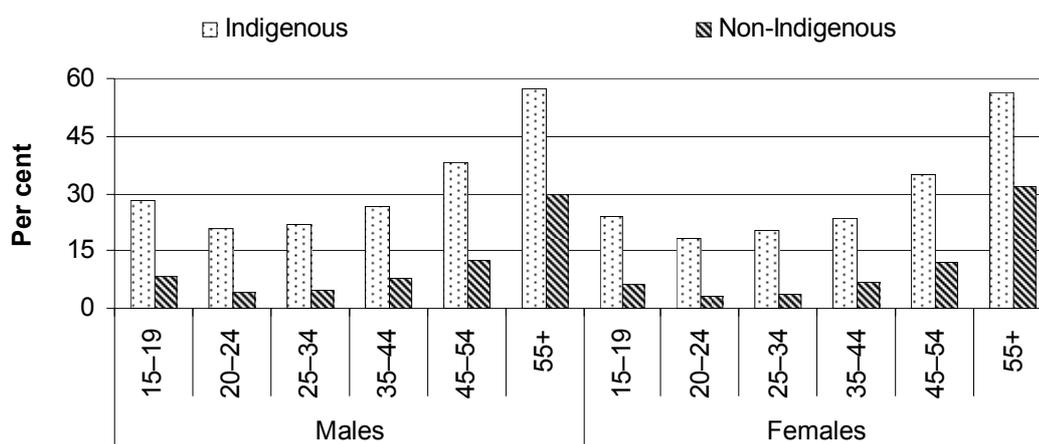
- nationally, the apparent retention rate from years 7 or 8 to year 9 for Indigenous students was 98.6 per cent compared with 100.4 per cent for non-Indigenous students (table 6.4.1)
- apparent retention rates from years 7 or 8 to year 9 for Indigenous students were higher than those for non-Indigenous students in NSW, SA, Tasmania and the ACT and lower than those for non-Indigenous students in Victoria, Queensland, WA and the NT (table 6.4.1).

Nationally, from 2002 to 2008 apparent retention rates from years 7 or 8 to year 9 for Indigenous students have remained relatively constant (table 4A.5.23).

Further data on apparent retention rates from 2002 to 2008 by jurisdiction and gender are included in tables 4A.5.24–30. For a comparison of apparent retention rates from years 7/8 to years 9, 10, 11 and 12 refer to section 4.5.

Highest level of schooling

Figure 6.4.1 **Year 9 or below as highest level of schooling by persons aged 15 years and over (excluding persons still attending secondary school), 2006^{a, b}**



^a The ABS 2006 Census questionnaire asked respondents for the highest level of schooling completed by persons aged 15 years and over (excluding persons still attending secondary school). ^b National totals are not included here as these data have not been age adjusted.

Source: ABS (unpublished), derived from *2006 Census of Population and Housing*; table 4A.5.16.

Nationally, in 2006:

- the proportions of Indigenous males and females aged 15 years and older who had left school before completing Year 10 were much higher than the corresponding proportions of non-Indigenous males and females (figure 6.4.1).
- the same pattern was evident in all jurisdictions and remoteness areas (tables 4A.5.17 and 4A.5.18).

More data on completion to year 9 or below by jurisdiction and remoteness area are available in tables 4A.5.17 and 4A.5.18.

Internationally comparable learning outcomes

Australia participates in two international tests: the OECD Program for International Student Assessment (PISA) and the Trends in International Mathematics and Science Study (TIMSS). Both tests report results for Indigenous and non-Indigenous students.

TIMSS focuses on the mathematics and science curriculum and reports learning outcomes data for year 4 and year 8 students. As an approximation of year 9

academic attainment, data for year 8 students for 2002-03 and 2006-07 are presented in this section. There is currently no nationally agreed proficiency level set for the TIMSS. This section reports on student attainment to the intermediate mathematics and science benchmarks. Detailed information about TIMSS is available at <http://www.acer.edu.au/timss> and tables 6A.4.1 and 2.

TIMSS and PISA tables in this section include 95 per cent confidence intervals in brackets. Confidence intervals are a standard way of expressing the degree of uncertainty associated with survey estimates. An estimate of 80 with a confidence interval of ± 2 , for example, means that if another sample had been drawn, or if another combination of test items had been used, there is a 95 per cent chance that the result would lie between 78 and 82. The learning outcomes proportion for a given level can be thought of in terms of a range. If one outcome level ranges from 78–82 and another’s from 77–81, then it is not possible to say with confidence that one differs from the other (because there is an overlap and there is unlikely to be a statistically significant difference). Where ranges do not overlap, there is a high likelihood that there is a statistically significant difference between the two estimates.

Table 6.4.2 Proportion of year 8 students reaching the international benchmarks for mathematics, by Indigenous status (TIMSS)^{a, b}

	<i>Indigenous students (%)</i>	<i>Non-Indigenous students (%)</i>
2006-07		
Advanced benchmark	1.6 (± 2.6)	6.1 (± 2.6)
High benchmark	5.7 (± 4.1)	19.3 (± 2.5)
Intermediate benchmark	26.1 (± 9.6)	37.3 (± 2.7)
Low benchmark	29.3 (± 7.8)	27.5 (± 2.7)
Not at low benchmark	37.3 (± 10.2)	9.8 (± 1.7)
<i>At or above the intermediate benchmark^b</i>	<i>33.0 (± 10.0)</i>	<i>63.0 (± 3.7)</i>
2002-03		
Advanced benchmark	0.5 (± 0.6)	7.0 (± 2.3)
High benchmark	7.8 (± 6.6)	23.4 (± 3.9)
Intermediate benchmark	24.5 (± 11.5)	36.3 (± 3.8)
Low benchmark	34.0 (± 9.9)	24.1 (± 3.6)
Not at low benchmark	33.4 (± 11.7)	9.3 (± 2.4)
<i>At or above the intermediate benchmark^b</i>	<i>32.8 ($\pm na$)</i>	<i>66.7 ($\pm na$)</i>

^a The TIMSS mathematics scale has four defined proficiency levels, from the advanced benchmark (the highest) to the low benchmark (the lowest) with an additional level referred to as ‘Not at low benchmark’ which covers those students who are unable to reach even the first threshold of the skills that TIMSS seeks to measure. ^b Students at the intermediate benchmark are able to recognise, apply and communicate basic mathematical and scientific knowledge in straightforward situations and across a range of topics. **na** not available.

Source: ACER (unpublished); table 6A.4.1.

In 2006-07, for year 8 mathematics, 33.0 per cent of Indigenous students attained the intermediate benchmark or above compared with 63.0 per cent of non-Indigenous students (table 6.4.2).

Between 2002-03 and 2006-07, for year 8 mathematics, the proportion of Indigenous students who attained the intermediate benchmark or above remained largely unchanged (32.8 per cent and 33.0 per cent). The proportion of non-Indigenous students attaining the intermediate benchmark or above decreased from 66.7 per cent to 63.0 per cent over the same period (table 6.4.2).

Table 6.4.3 Proportion of year 8 students reaching the international benchmarks for science, by Indigenous status (TIMSS)^{a, b}

	<i>Indigenous students (%)</i>	<i>Non-Indigenous students (%)</i>
2006-07		
Advanced benchmark	1.6 (± 2.3)	8.8 (± 2.9)
High benchmark	12.2 (± 6.5)	26.1 (± 2.1)
Intermediate benchmark	23.4 (± 9.6)	37.0 (± 2.7)
Low benchmark	32.1 (± 8.5)	21.1 (± 2.7)
Not at low benchmark	30.8 (± 9.0)	6.9 (± 1.4)
At or above the intermediate benchmark^b	37.0 (± 10.0)	72.0 (± 3.1)
2002-03		
Advanced benchmark	2.4 (± 4.0)	9.2 (± 2.3)
High benchmark	12.7 (± 7.1)	31.9 (± 3.1)
Intermediate benchmark	31.6 (± 10.2)	36.6 (± 2.6)
Low benchmark	32.7 (± 11.4)	17.4 (± 2.7)
Not at low benchmark	20.7 (± 11.9)	4.9 (± 1.5)
At or above the intermediate benchmark^b	46.7 (± na)	77.7 (± na)

^a The TIMSS science scale has four defined proficiency levels, from the advanced benchmark (the highest) to the low benchmark (the lowest) with an additional level referred to as 'Not at low benchmark' which covers those students who are unable to reach even the first threshold of the skills that TIMSS seeks to measure.

^b Students at the intermediate benchmark are able to recognise, apply and communicate basic mathematical and scientific knowledge in straightforward situations and across a range of topics. **na** not available.

Source: ACER (unpublished); table 6A.4.2.

In 2006-07, for year 8 science, 37.0 per cent of Indigenous students attained the intermediate benchmark or above compared with 72.0 per cent of non-Indigenous students (table 6.4.3).

Between 2002–03 and 2006–07, for year 8 science, the proportion of Indigenous students who attained the intermediate benchmark or above decreased from 46.7 per cent to 37.0 per cent. The proportion of non-Indigenous students attaining the intermediate benchmark or above also decreased from 77.7 per cent to 72.0 per cent (table 6.4.3).

The PISA provides learning outcomes data for 15 year olds in three core assessment domains: reading literacy, mathematical literacy and scientific literacy. The National Education Agreement set a nationally agreed proficiency level at level 3 on PISA reading literacy, PISA mathematical literacy and PISA scientific literacy assessments (COAG 2009). Level 3 or above can be described as a level of achievement that is reasonably challenging and which requires students to demonstrate more than minimal or elementary skills.

Care should be taken when making comparisons between the results across the three PISA cycles. Comparisons should only be made between a major and minor assessment domain once the domain has become the major assessment domain for the first time. For this section:

- Scientific literacy was the major assessment domain in PISA 2006. Therefore, scientific literacy data are presented only for 2006.
- Mathematical literacy was the major assessment domain in PISA 2003. Therefore, mathematical literacy data for 2003 and 2006 are presented.
- Reading literacy was the major assessment domain in PISA 2000. Therefore, reading literacy results from 2000, 2003 and 2006 are presented.

Detailed information about PISA 2006 is available in Thomson and Bortoli (2007) and OECD (2007).

Table 6.4.4 Proportion of 15 year old secondary students achieving each level of the overall science literacy scale (PISA)^{a, b}

	<i>Indigenous students (%)</i>	<i>Non-Indigenous students (%)</i>
2006		
Level 6	0.4 (± 0.6)	2.9 (± 0.6)
Level 5	3.3 (± 2.4)	12.0 (± 1.0)
Level 4	11.6 (± 3.3)	25.0 (± 1.0)
Level 3	19.1 (± 3.9)	28.1 (± 1.0)
Level 2	26.2 (± 5.1)	20.0 (± 1.2)
Level 1	23.0 (± 5.9)	9.4 (± 0.8)
Below level 1	16.5 (± 5.9)	2.6 (± 0.4)
<i>At or above level 3^b</i>	<i>34.3 (± 2.8)</i>	<i>68.0 (± 0.9)</i>

^a The PISA science literacy scale has six defined proficiency levels, from level 6 (the highest) to level 1 (the lowest) with an additional level referred to as 'Below level 1' which covers those students who are unable to reach even the first threshold of the skills that PISA seeks to measure. The COAG National Education Agreement (COAG 2009) set a benchmark for the PISA as the proportion of students achieving at or above the nationally agreed proficiency level (level 3). ^b Level 3 or above can be described as a level of achievement that is reasonably challenging and which requires students to demonstrate more than minimal or elementary skills to be regarded as reaching it.

Source: ACER (unpublished); table 6A.4.3.

In 2006, for science literacy, 34.3 per cent of Indigenous 15 year olds achieved the national proficiency level (level 3) or above compared with 68.0 per cent of non-Indigenous students (table 6.4.4).

Table 6.4.5 Proportion of 15 year old secondary students achieving each level of the overall mathematics literacy scale (PISA)^{a, b}

	<i>Indigenous students (%)</i>	<i>Non-Indigenous students (%)</i>
2006		
Level 6	0.5 (± 0.6)	4.4 (± 1.0)
Level 5	2.4 (± 1.6)	12.4 (± 1.0)
Level 4	9.7 (± 2.9)	23.6 (± 1.0)
Level 3	19.8 (± 3.7)	27.1 (± 1.2)
Level 2	28.5 (± 5.1)	20.3 (± 1.2)
Level 1	21.9 (± 5.1)	9.3 (± 0.8)
Below level 1	17.1 (± 6.5)	2.9 (± 0.4)
At or above level 3^b	32.4 (± 2.6)	67.5 (± 0.9)
2003		
Level 6	0.9 (± 1.0)	5.9 (± 1.0)
Level 5	3.7 (± 1.8)	14.2 (± 1.0)
Level 4	8.4 (± 2.9)	23.6 (± 1.2)
Level 3	17.1 (± 3.9)	24.2 (± 1.4)
Level 2	26.8 (± 6.1)	18.4 (± 1.2)
Level 1	25.0 (± 10.2)	9.7 (± 1.0)
Below level 1	18.1 (± 7.4)	4.0 (± 0.8)
At or above level 3^b	30.1 (± 3.2)	67.9 (± 0.9)

^a The PISA mathematics literacy scale has six defined proficiency levels, from level 6 (the highest) to level 1 (the lowest) with an additional level referred to as 'Below level 1' which covers those students who are unable to reach even the first threshold of the skills that PISA seeks to measure. The COAG National Education Agreement (COAG 2009) set a benchmark for the PISA as the proportion of students achieving at or above the nationally agreed proficiency level (level 3). ^b Level 3 or above can be described as a level of achievement that is reasonably challenging and which requires students to demonstrate more than minimal or elementary skills to be regarded as reaching it.

Source: ACER (unpublished); table 6A.4.4.

In 2006, for mathematics literacy, 32.4 per cent of Indigenous 15 year olds achieved the national proficiency level (level 3) or above compared with 67.5 per cent of non-Indigenous students (table 6.4.5).

Between 2003 and 2006, for mathematics literacy, the proportion of Indigenous 15 year olds who attained the national proficiency level (level 3) or above, increased from 30.1 per cent to 32.4 per cent. The proportion of non-Indigenous 15 year olds attaining the national proficiency level (level 3) or above remained largely unchanged (changing from 67.9 per cent to 67.5 per cent) (table 6.4.5).

Table 6.4.6 Proportion of 15 year old secondary students achieving each level of the overall reading literacy scale (PISA)^{a, b}

	<i>Indigenous students (%)</i>	<i>Non-Indigenous students (%)</i>
2006		
Level 5	3.3 (± 1.8)	10.8 (± 1.2)
Level 4	8.9 (± 2.7)	25.4 (± 1.4)
Level 3	21.3 (± 4.1)	30.3 (± 1.4)
Level 2	28.1 (± 6.5)	20.8 (± 1.4)
Level 1	22.5 (± 4.7)	9.2 (± 0.8)
Below level 1	15.9 (± 4.7)	3.4 (± 0.6)
At or above level 3^b	33.5 (± 2.5)	66.5 (± 0.9)
2003		
Level 5	4.0 (± 2.2)	14.9 (± 1.4)
Level 4	11.5 (± 3.7)	27.3 (± 1.6)
Level 3	22.9 (± 6.9)	28.5 (± 1.6)
Level 2	23.6 (± 6.5)	18.2 (± 1.2)
Level 1	23.2 (± 10.6)	7.9 (± 0.8)
Below level 1	14.9 (± 9.4)	3.4 (± 0.6)
At or above level 3^b	38.4 (± 3.9)	70.6 (± 0.9)
2000		
Level 5	4.2 (± 2.5)	17.4 (± 2.4)
Level 4	8.4 (± 3.9)	26.2 (± 2.2)
Level 3	25.6 (± 7.6)	26.2 (± 2.4)
Level 2	29.1 (± 7.4)	18.5 (± 1.8)
Level 1	20.1 (± 5.9)	8.8 (± 1.6)
Below level 1	12.7 (± 5.1)	2.9 (± 0.6)
At or above level 3^b	38.1 (± 3.4)	69.9 (± 1.3)

^a The PISA reading literacy scale has five defined proficiency levels, from level 5 (the highest) to level 1 (the lowest) with an additional level referred to as 'Below level 1' which covers those students who are unable to reach even the first threshold of the skills that PISA seeks to measure. The COAG National Education Agreement (COAG 2009) set a benchmark for the PISA as the proportion of students achieving at or above the nationally agreed proficiency level (level 3). ^b Level 3 or above can be described as a level of achievement that is reasonably challenging and which requires students to demonstrate more than minimal or elementary skills to be regarded as reaching it.

Source: ACER (unpublished); table 6A.4.5.

In 2006, for reading literacy, 33.5 per cent of Indigenous 15 year olds achieved the national proficiency level (level 3) or above compared with 66.5 per cent of non-Indigenous students (table 6.4.6).

Between 2000 and 2006, for reading literacy, the proportion of Indigenous 15 year olds who attained the national proficiency level (level 3) or above, decreased from 38.1 per cent to 33.5 per cent. The proportion of non-Indigenous 15 year olds attaining the national proficiency level (level 3) or above also declined from 69.9 per cent to 66.5 per cent (table 6.4.6).

6.5 Year 10 attainment

Box 6.5.1 Key messages

- The apparent retention rate from years 7 or 8 to year 10 for Indigenous students was 89.2 per cent compared with 99.8 per cent for non-Indigenous students in 2008 (table 6.5.1).
- The school enrolment rate was much lower for Indigenous 15–19 year olds (37.9 per cent) than for non-Indigenous people in that age group (51.7 per cent) in 2006 (table 6A.1.4). For both Indigenous and non-Indigenous people, enrolment rates declined as students exceeded the compulsory school age.

Attempts to increase Indigenous school attainment have been made a priority under the Council of Australian Governments (COAG) National Education Agreement (COAG 2009). In general, schooling in Australia is compulsory until 15 or 16 years of age, which equates to year 10. Section 6.4 examines the proportion of Indigenous people who did not complete compulsory schooling (that is, their highest level of schooling was year 9 or below.) This section examines the proportion of Indigenous people who reported year 10 or below as their highest level of schooling.

There is a strong correlation between the level of schooling attained and a person's employment prospects. In 2006, the employment rate of Indigenous people increased with the level of schooling they had attained. The employment rate of Indigenous people who had completed schooling only to year 8 or below was 26.5 per cent, while 52.8 per cent of Indigenous people who completed schooling to year 10 reported being employed. Of the Indigenous people who attained year 12, 68.2 per cent reported having a job (table 4A.5.19).

Household income also increases with the level of education attained. ABS 2006 Census data show that 59.1 per cent of Indigenous people who had completed schooling to year 8 or below were in the lowest income quintile. The corresponding proportions for Indigenous people who had completed schooling to years 10 and 12 were 37.8 per cent and 22.7 per cent, respectively (table 4A.5.19). Conversely, the proportions of Indigenous people who had completed schooling to year 8 or below, year 10 and year 12 who were in the highest income quintile, were 2.7 per cent, 7.3 per cent and 16.5 per cent, respectively (table 4A.5.19).

A body of evidence points to the benefits of continuing school after the period of compulsory schooling ends. (See sections 4.5 and 6.4).

To provide a comprehensive picture of Indigenous year 10 attainment, this section includes student enrolment rates for 15–19 year olds, and year 10 retention and

attainment data. Programs that have been successful in encouraging Indigenous students to stay at school can be found in section 4.5, box 4.5.2.

Student enrolments

The number of children enrolled in secondary school in 2008 was obtained from the MCEETYA National Schools Statistics Collection (NSSC). School enrolment rates are based on enrolment numbers and do not measure whether enrolled children attend school. Information on methods for calculating enrolment rates and definitional issues is provided in section 6.1.

Nationally in 2006, the school enrolment rate was much lower for Indigenous people than non-Indigenous people in the 15–19 year age group (37.9 per cent and 51.7 per cent, respectively) (table 6A.1.4). Table 6A.1.4 shows that for both Indigenous and non-Indigenous people, enrolment rates declined as students exceeded the compulsory school age.

Enrolment data are also available by single year of age for 2006, 2007 and 2008 (tables 6A.1.5–7). However, appropriate population data are not available for 2007 and 2008, therefore, enrolment rates are unable to be provided for these years.

Student retention

Information on methods for calculating retention rates and definitional issues are addressed in sections 4.5 and 6.4.

Table 6.5.1 Apparent retention rates of full time secondary students to year 10, all schools, 2008 (per cent)^{a, b, c, d, e}

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>ACT</i>	<i>NT</i>	<i>Aust</i>
Indigenous									
Male	83.2	83.8	94.8	91.7	94.4	103.8	100.0	68.5	88.1
Female	86.1	80.5	96.9	95.1	97.0	103.6	65.4	76.0	90.3
Total	84.7	82.2	95.8	93.3	95.6	103.7	81.4	71.9	89.2
Non-Indigenous									
Male	97.5	97.5	101.2	102.2	101.5	99.9	100.6	97.3	99.2
Female	98.0	100.5	102.6	103.4	102.1	100.4	97.8	95.5	100.4
Total	97.8	99.0	101.9	102.8	101.8	100.1	99.2	96.3	99.8

^a The apparent retention rate is the percentage of full time students who continued to year 10 from respective cohort groups at the commencement of their secondary schooling (year 7/8). See notes to table 4A.5.30 for more detail. Retention rates are affected by factors that vary across jurisdictions. For this reason, variations in apparent retention rates over time within jurisdictions may be more useful than comparisons across jurisdictions. Retention rates can exceed 100 per cent for a variety of reasons, including student transfers between jurisdictions after the base year. ^b The exclusion of part time students from standard apparent retention rate calculations has implications for the interpretation of results for all jurisdictions, but particularly for SA, Tasmania and the NT where there is high proportion of part time students. ^c Ungraded students are not included in the calculation of apparent retention rates. This exclusion has particular implications for the NT and as a result, Indigenous apparent retention rates may misrepresent the retention of students in secondary schooling in the NT.

Source: ABS (2009); table 4A.5.30.

Apparent retention rates from years 7 or 8 to year 10 are lower than from years 7 or 8 to year 9 because normal year level progression means students in year 10 are generally of an age at which school education is no longer compulsory. In 2008:

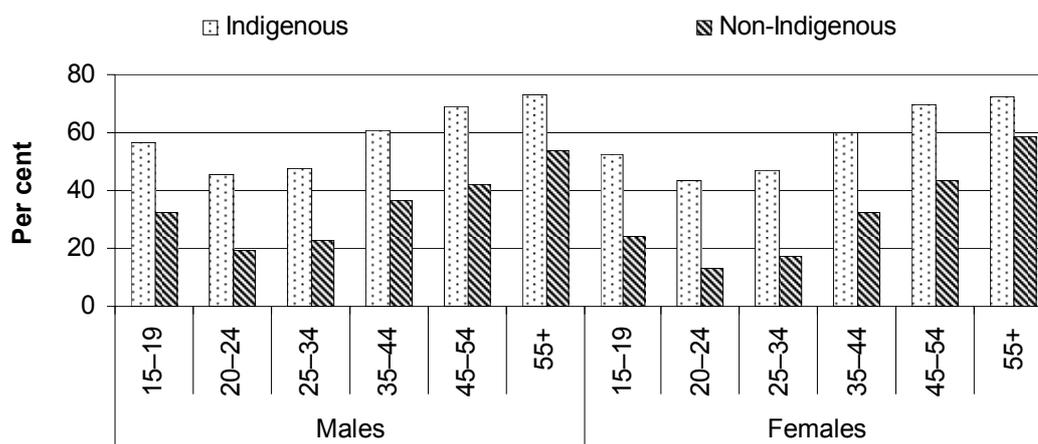
- nationally, the apparent retention rate from years 7 or 8 to year 10 for Indigenous students was 89.2 per cent compared with 99.8 per cent for non-Indigenous students (table 6.5.1)
- apparent retention rates from years 7 or 8 to year 10 for Indigenous students were lower in all State and Territories, except Tasmania, where it was higher (table 6.5.1).

Nationally, from 2002 to 2008 apparent retention rates from years 7 or 8 to year 10 for Indigenous and non-Indigenous students increased slightly (from 86.4 per cent to 89.2 per cent for Indigenous students and from 98.5 per cent to 99.8 per cent for non-Indigenous students) (table 4A.5.23).

Further data on apparent retention rates from 2002 to 2008 by jurisdiction and gender are included in tables 4A.5.24–30. For a comparison of apparent retention rates from years 7 or 8 to years 9, 10, 11 and 12 refer to section 4.5.

Highest level of schooling

Figure 6.5.1 Year 10 or below as highest level of schooling for people aged 15 years and over (excluding people still attending secondary school), 2006^{a, b}



^a The ABS 2006 Census questionnaire asked respondents for the highest level of schooling completed by people aged 15 years and over (excluding people still attending secondary school). ^b National totals are not included here as these data have not been age standardised.

Source: ABS (unpublished), derived from 2006 Census of Population and Housing; table 4A.5.16.

Nationally, in 2006:

- Indigenous males and females aged 15 years and older had higher rates of completion to year 10 or below than their non-Indigenous counterparts in every age group (figure 6.5.1)
- the same pattern was evident in all States and Territories and remoteness areas (tables 4A.5.17 and 4A.5.18).

6.6 Transition from school to work

Box 6.6.1 Key messages

- Indigenous people aged 15 to 24 years were more than three times as likely as non-Indigenous people to be neither employed nor studying in 2006 (29.1 and 9.0 per cent respectively) (figure 6.6.1).
- The proportion of Indigenous people aged 15 to 24 years who were neither employed nor studying decreased between 2001 and 2006. The gap between Indigenous and non-Indigenous people also decreased (from 20.3 to 16.7 percentage points for males, and from 26.7 to 23.6 percentage points for females) (figure 6.6.2).

This indicator reports on the status of young Indigenous people's participation in either the work force or the education/training system. Two approaches are used to examine the transition from education to work — the 'at risk' and the 'outcome from education' approaches. The 'at risk' approach examines the number of young Indigenous people who are neither participating in education and training nor employed. These people are considered as being at risk of long term disadvantage. The 'outcome from education' approach looks into labour force outcomes for Indigenous people, aged 18 years and over, who have achieved a certain level of education.

A study by McMillan and Marks (2003) found that young people who are not achieving well at secondary school and leave without a school qualification may have few opportunities for work. As time passes, their chances of gaining employment or re-entering full time education appear to decline even further.

Studies examining labour market outcomes of non-graduates and graduates from university or TAFE have concluded that the transition from study to work was generally smoother for graduates, and that tertiary qualifications worked to protect young people from many of the difficulties involved with making this transition (Lamb 2001; Lamb and McKenzie 2001). The authors also found that university and TAFE graduates earned significantly more than those who entered the workforce directly from school. Most students who moved into employment immediately after completing Year 12 were in low level positions, primarily in the areas of retail trades, accommodation, cafes and restaurants, and manufacturing (Thomson 2005).

Sections 4.5, 6.4 and 6.5 contain more information on secondary school retention for Indigenous students. Unemployment and labour force participation for Indigenous people aged 18 to 64 years are discussed in section 4.6. More

information related to employment undertaken by Indigenous people, including employment by full time and part time status, by sector, industry and skill level are examined in section 8.1. Self employment and Indigenous business are reported in section 8.2.

In this section, data are reported on:

- people, aged 15 to 24 years, who were neither participating in education and training nor employed
- labour force status of people, aged 25 to 64 years, who have, and have not, achieved a qualification of certificate level III or higher.

Box 6.6.2 provides examples of programs that aim to encourage Indigenous youth to complete year 12 and then progress to tertiary education or employment.

Box 6.6.2 'Things that work' — transition from school to work

Follow the Dream, run by the Western Australian Department of Education and Training, is designed to increase the number of Aboriginal students completing year 12 and gaining university entrance. The program targets high achieving Aboriginal students enrolled in years 6 to 12 and operates in 24 sites across WA. In 2008, 634 students from 57 schools participated.

A coordinator manages after-school learning centres at each site, where students are assisted by tutors. Coordinators promote effective learning strategies for the students, and help students develop support networks with tutors, school staff, parents, industry and universities. Program partners include the Department of Education, Employment and Workplace Relations, Edith Cowan University, the Graham (Polly) Farmer Foundation, and other corporate supporters.

Between 2004 and 2007, of the 179 participating students who completed year 12, 24 achieved direct university entry, 34 entered university bridging courses, 28 obtained entry to TAFE, 29 gained employment, 24 took up traineeships, 20 entered apprenticeships, and two students were successful in being admitted into the Indigenous Aerospace Initiative, a program that enables young Aboriginal people to train as commercial airline pilots (WA Department of Education and Training 2009).

The **Will and A Way** (NSW) program arose from a small research program in 2004 that looked at why Indigenous students were not transitioning from secondary school to local universities, despite the availability of appropriate courses designed specifically for Indigenous students. The study found that there were multiple barriers to Indigenous students completing year 12 successfully and gaining entry to university.

(Continued next page)

Box 6.6.2 (continued)

The Will and a Way program was developed to address the barriers and targets youth in years 10–12, both Indigenous and non-Indigenous, identified as ‘at risk’. The program aims to keep these students at school, or otherwise help them into the workforce. The program provides individualised support and helps students find casual and full-time employment.

The program includes pledge ceremonies, where students in the program make an undertaking that by the following year they would be continuing with studies at school or in TAFE, participating in traineeship or apprenticeships or be in full-time work. 339 students have participated in the program to date, 237 of those students were Indigenous (Australian Government, unpublished).

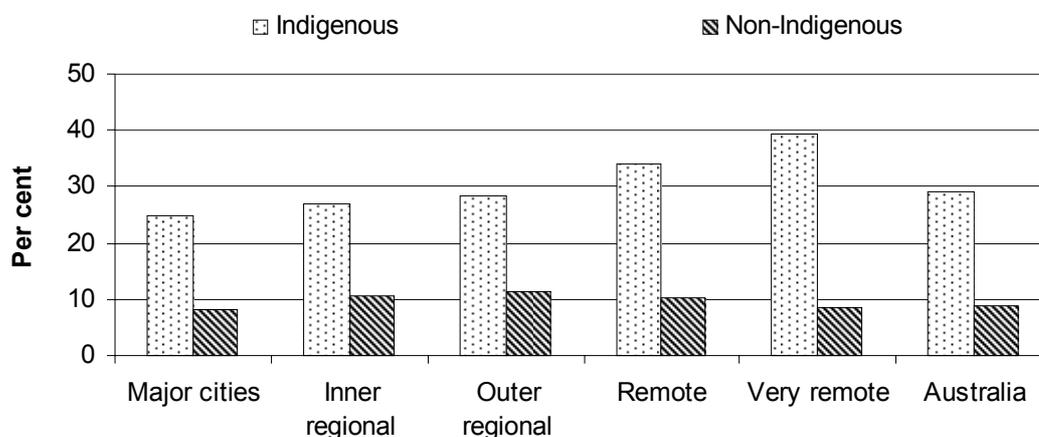
The ‘at risk’ approach

This approach looks at the participation in the work force and education system of people aged 15 to 24 years. It examines the proportion of people in this age group who are neither in full or part time employment, nor in full or part time study.

Young people who spend extended periods of time outside the work force and full time education may be missing out on employment experience, the development of work skills and familiarity with new technologies, all of which decrease their chances of finding employment in the future.

A research report based on the Longitudinal Surveys of Australian Youth (LSAY) found that over 64 per cent of the young people who participated in the LSAY spent some time outside the labour force and full time education over the years they were surveyed (from 1997 up to the end of 2003). For the majority of young people, the period of time spent outside the labour force and full time education was quite short, around one month. Young people who had not achieved highly at secondary school, did not have a year 12 certificate, were female, or who had a health problem or disability were more likely to report extended periods of time (longer than 12 months) outside the labour force and full time education (Hillman 2005).

Figure 6.6.1 Proportion of people aged 15 to 24 years who were not employed and not studying, 2006^{a, b}



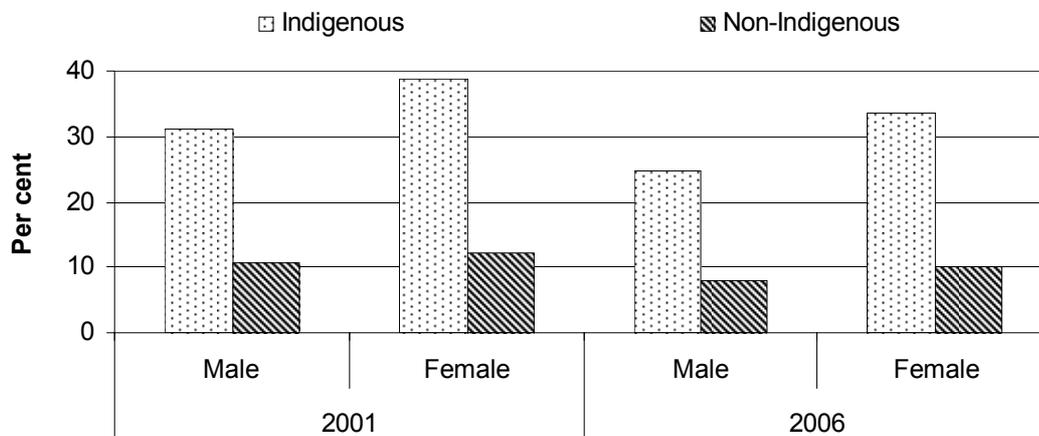
^a Not employed comprises people unemployed or not in the labour force. Not in the labour force comprises people who are not employed or unemployed. Not in the labour force includes people who do not have a job and are not actively looking for work or not available to start work, are retired, pensioners and people engaged solely in home duties (ABS 2006). ^b CDEP participants were counted as employed in the 2006 Census (ABS 2006).

Source: ABS (unpublished), derived from 2006 Census of Population and Housing; table 6A.6.2.

In 2006:

- nationally, Indigenous people aged 15 to 24 years were around three times as likely to be neither employed (unemployed or not in the labour force) nor studying as non-Indigenous people in the same age group (29.1 per cent compared with 9.0 per cent) (figure 6.6.1)
- the proportion of Indigenous people aged 15 to 24 years who were neither employed nor studying increased with remoteness. In very remote areas, 39.5 per cent of Indigenous people aged 15 to 24 years were neither employed nor studying, compared with 24.8 per cent in major cities (figure 6.6.1)
- the proportion of Indigenous people aged 15 to 24 years who were neither employed nor studying was highest in the NT (42.1 per cent for Indigenous people compared with 7.3 per cent for non-Indigenous people), and lowest in the ACT (19.6 per cent for Indigenous people compared with 5.4 per cent for non-Indigenous people) (table 6A.6.4).

Figure 6.6.2 Proportion of people aged 15 to 24 years who were not employed and not studying, 2001 and 2006^{a, b}



^a Not employed comprises people unemployed or not in the labour force. Not in the labour force comprises people who are not employed or unemployed. Not in the labour force includes people who do not have a job and are not actively looking for work or not available to start work, are retired, pensioners and people engaged solely in home duties (ABS 2006). ^b CDEP participants were counted as employed in the 2006 Census (ABS 2006).

Source: ABS (unpublished), derived from 2006 Census of Population and Housing and 2001 Census of Population and Housing; tables 6A.6.4 and 6A.6.6.

Between 2001 and 2006:

- the proportions of Indigenous and non-Indigenous males and females, aged 15 to 24 years, who were not employed and not studying decreased (figure 6.6.2)
- the proportion of Indigenous males, aged 15 to 24, who were not employed and not studying decreased from 31.0 per cent to 24.7 per cent. The proportion of Indigenous females who were not employed and not studying decreased from 38.8 per cent to 33.6 per cent (figure 6.6.2)
- the gap between the proportions of Indigenous and non-Indigenous males, aged 15 to 24, who were not employed and not studying decreased from 20.3 to 16.7 percentage points. The gap for Indigenous and non-Indigenous females decreased from 26.7 to 23.6 percentage points (figure 6.6.2).

State and Territory data from 2001 and 2006 and remoteness data from 2006, on people, aged 15 to 24 years, who were not employed and not studying are included in tables 6A.6.3–6.

Figure 6.6.3 Main activities of Census respondents aged 15 to 24 years, 2006^{a, b, c}



^a Studying comprises people who are attending government, Catholic, other non-government secondary schools, technical or further educational institutions (including TAFE colleges), universities or other tertiary institutions (ABS 2006). ^b Employed comprises people in full-time work, part-time work and away from work. CDEP participants were included in the employed category in the 2006 Census (ABS 2006). ^c Not in the labour force comprises people who are not employed or unemployed. This includes people who do not have a job and are not actively looking for work or not available to start work, are retired, pensioners and people engaged solely in home duties (ABS 2006).

Source: ABS (unpublished), derived from 2006 Census of Population and; table 6A.6.10.

Figure 6.6.3 shows the main activities of 2006 Census respondents aged 15 to 24 years. In 2006:

- Indigenous people were less likely to be studying than non-Indigenous people (42.4 per cent of Indigenous males and 42.5 per cent of Indigenous females were studying compared with 55.9 per cent of non-Indigenous males and 58.6 per cent of non-Indigenous females) (figure 6.6.3)
- Indigenous people were less likely to be employed than non-Indigenous people (32.4 per cent of Indigenous males and 23.3 per cent of Indigenous females were employed compared with 36.0 per cent of non-Indigenous males and 31.4 per cent of non-Indigenous females) (figure 6.6.3)
- Indigenous people were more likely to be unemployed than non-Indigenous people (9.8 per cent of Indigenous males and 7.2 per cent of Indigenous females were unemployed compared with 4.1 per cent of non-Indigenous males and 3.0 per cent of non-Indigenous females) (figure 6.6.3)
- Indigenous people were less likely to be in the labour force than non-Indigenous people (15.5 per cent of Indigenous males and 27.1 per cent of Indigenous females were not in the labour force compared with 3.9 per cent of

non-Indigenous males and 7.1 per cent of non-Indigenous females) (figure 6.6.3).

Between 2001 and 2006, for people aged 15 to 24 years:

- the proportions of Indigenous males and females who were studying increased (for Indigenous males from 37.7 per cent to 42.4 per cent and for Indigenous females from 38.4 per cent to 42.5 per cent) (tables 6A.6.8 and 6A.6.10)
- the proportions of Indigenous males and females who were employed remained constant (at around 30 per cent for Indigenous males and 22 per cent for Indigenous females) (tables 6A.6.8 and 6A.6.10)
- the proportions of Indigenous males and females who were unemployed decreased (for Indigenous males from 13.3 per cent to 9.8 per cent and for Indigenous females from 8.3 per cent to 7.2 per cent) (tables 6A.6.8 and 6A.6.10)
- the proportions of Indigenous males and females who were not in the labour force decreased (for Indigenous males from 18.3 per cent to 15.5 per cent and for Indigenous females from 31.1 per cent to 27.1 per cent) (tables 6A.6.8 and 6A.6.10).

Some people are not working or studying because of childcare responsibilities. Young Indigenous females are more likely to be outside the labour force and full time education due to home duties. In 2007, the fertility rate of Indigenous teenage females aged 15 to 19 years (70 babies per 1000 females) was more than four times the fertility rate of all teenage females of the same age (16 babies per 1000 females). For Indigenous females aged 20 to 24 years, the fertility rate (142.5 babies per 1000 females) was 2.6 times the rate for all females aged 20 to 24 years (55.8 babies per 1000) (ABS 2008). Teenage birth rates for Indigenous and non-Indigenous females are examined in more detail in section 5.2.

In 2006, Indigenous and non-Indigenous females, aged 15 to 24 years, who were unemployed or not in the labour force, provided unpaid child care at higher rates than employed females of the same age (48.7 per cent of Indigenous females and 44.9 per cent of non-Indigenous females, who were unemployed or not in the labour force, provided unpaid child care, compared to 29.0 per cent of Indigenous females and 14.0 per cent of non-Indigenous females, who were employed) (table 6A.6.13).

Data on people, aged 15 to 24 years, who provided unpaid child care, are included in tables 6A.6.11–16. Refer to section 4.7 for data on the post secondary participation and attainment.

The 'outcome from education' approach

This approach examines the labour force status of people who have, and have not, achieved qualifications of various levels. It shows the relationship between employment outcomes and attainment of a certain level of educational qualification. Certificate level 3 is usually considered the minimum qualification necessary to substantially improve a person's employment outcomes (see section 4.7 for more information on post secondary education, participation and attainment).

Table 6.6.1 Labour force status, people aged 25–64 years, 2001 and 2006^{a, b}

	2001		2006	
	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous
<i>Labour force participation as a proportion of the population aged 25–64 years (%)</i>				
No non-school qualification ^a	51.8	66.9	53.0	68.5
Certificate I & II	70.7	77.7	72.1	78.8
Certificate III & IV	79.7	85.1	81.0	86.1
Advanced diploma & diploma	78.9	82.5	79.4	82.7
Bachelor degree of higher ^b	85.0	87.7	86.2	87.5
<i>Employed people as a proportion of the labour force aged 25–64 years (%)</i>				
No non-school qualification ^a	81.0	92.3	84.2	94.4
Certificate I & II	83.6	93.9	84.4	92.8
Certificate III & IV	88.0	95.1	91.8	96.8
Advanced diploma & diploma	92.0	95.9	92.9	96.9
Bachelor degree or higher ^b	94.4	96.9	95.7	97.5

^a Comprises people who have a qualification that is out of scope of the Australian Standard Classification of Education, people with no qualification, and people still studying for a first qualification. ^b Includes bachelor degree level, graduate diploma & graduate certificate level, and postgraduate degree level.

Source: ABS (unpublished), derived from 2006 Census of Population and Housing and 2001 Census of Population and Housing; tables 6A.6.22 and 6A.6.28.

In 2006, for people aged 25 to 64 years:

- labour force participation and employment rates for Indigenous people were lower than for non-Indigenous people, for all levels of qualifications (table 6.6.1)
- the gaps between labour force participation rates for Indigenous and non-Indigenous people, and employment rates for Indigenous and non-Indigenous people, narrowed as qualification levels increased. For example, the employment rate for Indigenous people holding a certificate I or II was 84.4 per cent compared with 92.8 per cent for non-Indigenous people — a gap of 8.4 percentage points. The employment rate for Indigenous people holding a bachelor degree or higher was 95.7 per cent compared with 97.5 per cent for non-Indigenous people — a gap of 1.8 percentage points (table 6.6.1)

-
- for both Indigenous and non-Indigenous people, the labour force participation rates for those with certificate III or higher were significantly higher than for those with lower or no qualifications (table 6.6.1)
 - increases in qualifications from no qualification to bachelor degree or higher were associated with greater increases in labour force participation and employment rates for Indigenous people (33.2 percentage points and 11.5 percentage points, respectively) than for non-Indigenous people (19.0 percentage points and 3.1 percentage points, respectively) (table 6.6.1).

Between 2001 and 2006, for people aged 25 to 64 years:

- there was an increase in labour force participation and employment rates for Indigenous people with all levels of qualifications (table 6.6.1)
- there was an increase in labour force participation and employment rates for non-Indigenous people with most levels of qualifications (except for a decrease in the employment rate for non-Indigenous people with a certificate level I or II and non-Indigenous people with a bachelor degree or higher) (table 6.6.1)
- the gaps between labour force participation rates for Indigenous and non-Indigenous people, and employment rates for Indigenous and non-Indigenous people, decreased slightly for most levels of qualifications (with bigger decreases in the gaps between Indigenous and non-Indigenous employment rates for people with a certificate I and II (from 10.4 to 8.5 percentage points), and for people with a certificate III and IV (from 7.1 to 5.0 percentage points) (table 6.6.1).

Tables 6A.6.17–28 provide data on labour force status by level of qualifications for 2001 and 2006. Section 4.6 contains information on employment of people in Community Development Employment Projects (CDEP).

Examples of successful programs in increasing Indigenous higher education attainment are described in box 4.7.2 in chapter 4. Box 8.1.2 in chapter 8 provides some examples of successful programs in improving Indigenous employment outcomes.

The Report on Government Services (SCRGSP 2009) contains data on the proportion of TAFE graduates who reported being in employment and/or continued on to further study after completing a TAFE course.

Nationally, in 2007:

- 69.1 per cent of Indigenous TAFE graduates indicated that they were employed after completing a course (compared with 78.8 per cent of all TAFE graduates)

-
- 30.8 per cent of Indigenous TAFE graduates reported they had continued on to further study (compared with 32.8 per cent of all TAFE graduates) (SCRGSP 2009, figure 5.43).

Data on TAFE graduates' employment and/or further study outcomes is also available by state and territory (SCRGSP 2009, figure 5.43).

6.7 Future directions in data

Indigenous cultural studies

Currently, there are very limited data on Indigenous curriculum and staff, with no change in data since the 2007 report. The 2008 NATSISS asked Indigenous respondents whether they had been taught anything about Aboriginal culture at school, or as part of the post-school studies. These data will be available from late 2009.

Transition from school to work

The ABS program of ongoing specific Indigenous household surveys will continue to provide selected education and labour data on a three-yearly cycle to report on this indicator. NATSISS results for 2008 are expected to be available from late 2009.

A potential source of NT specific data is the Department of Education and Training (DET) 'Down the Track' student destination survey on 2006 school leavers for which results were distributed within the department in 2007 (DET 2008).

Data on young people, aged 15 to 24 years, who are at risk of long-term disadvantage, are available at national and State and Territory level through the 2002 NATSISS, 2004–05 NATSIHS and the 2006 Census. The ABS program of ongoing specific Indigenous household surveys will continue to provide selected education and labour data on a three-yearly cycle to report on this indicator. NATSISS results for 2008 are expected to be available in October 2009.

6.8 References

6.1 School enrolment and attendance

Clontarf Foundation. 2007. Annual Report 2007, accessed 10 March 2009 at http://www.clontarffootball.com/img/file/Clontarf_AR07.pdf

-
- DEWR (Department of Employment and Workplace Relations) 2006, *Halls Creek Engaging Families Trial February–July 2006 — Evaluation Report*, Australian Government, Canberra.
- Hunter, B. H. 2007b. ‘Cumulative Causation and the Productivity Commission’s Framework for Overcoming Indigenous Disadvantage’ in the *Australian Journal of Labour Economics*, 10(3), pp. 185–202.
- Henderson, P. (NT Chief Minister) 2009, *Business Support for Alice Clontarf*, 27 February, accessed 10 March 2009 at <http://newsroom.nt.gov.au/index.cfm?fuseaction=viewRelease&id=5183&d=5>.
- Schwab, R.G. and Sutherland, D. 2004, *Literacy for Life: A Scoping Study for a Community Literacy Empowerment Project*, The Fred Hollows Foundation and the Centre for Aboriginal Economic Policy Research, Australian National University, Canberra.
- SCRGSP (Steering Committee for the Review of Government Service Provision) 2009, *Report on Government Services 2009*, Productivity Commission, Canberra.
- Taylor, J. 2004, *Social Indicators for Aboriginal Governance: Insights from the Thamarrurr Region, Northern Territory*, Research Monograph no. 24, Centre for Aboriginal Economic Policy Research, Australian National University, Canberra.
- UNICEF Innocenti Research Centre 2004, *Ensuring the Rights of Indigenous Children*, Innocenti Digest no. 11, Florence.
- Zubrick S., Silburn S., De Maio J., Shepherd C., Griffin J., Dalby R., Mitrou F., Lawrence D., Hayward C., Pearson G., Milroy H., Milroy J., Cox A., 2006 *The Western Australian Aboriginal Child Health Survey: Improving the Educational Experiences of Aboriginal Children and Young People*, Curtin University of Technology and Telethon Institute for Child Health Research, Perth.

6.2 Teacher quality

- COAG (Council of Australian Governments) 2009a, *National Education Agreement*, Canberra.
- 2009b, *National Partnership Agreement on Improving Teacher Quality*, Canberra.
- 2009c, *National Partnership Agreement on Improving Teacher Quality Fact Sheet*, Canberra.
- Dinham, S. Ingvarson, L. and Kleinhenz, E. 2008, *Investing in Teacher Quality: Doing What Matters Most*, paper prepared for the Business Council of Australia, April 2008, Australian Council of Educational Research (ACER), Melbourne.
- Goldhaber, D.D. & Brewer, D.J. 1997 ‘Why Don’t Schools and Teachers Seem to Matter?’ Assessing the Impact of Unobservables on Educational Productivity. *Journal of Human Resources*, 32(3), 505-520.
- Goldhaber, D.D., and Brewer, D. J., 2002, ‘Does Teacher Certification Matter? High School Teacher Certification Status and Student Achievement,’ *Educational Evaluation and Policy Analysis*, 22, 129-145.
- Hill, H. C., Rowan, R. and Loewenberg Ball, D., 2005, Effects of Teachers’ Mathematical Knowledge for Teaching on Student Achievement, *American Educational Research Journal*, vol. 42, no. 2, 371-406.
- Leigh, A. & Ryan, C. 2006. *How and Why Has Teacher Quality Changed in Australia?* Centre for Economic Policy and Research discussion paper, Australian National University, Canberra.
- Leigh, A. 2007a, How Can We Improve Teacher Quality? *The Melbourne Review*, vol. 3, no. 2, November 2007, pp. 31–36.

-
- 2007b *Estimating Teacher Effectiveness From Two-Year Changes in Students' Test Scores* Research School of Social Sciences Australian National University, Canberra.
- Monk, D.H., 1994, Subject-area Preparation of Secondary Mathematics and Science Teachers and Student Achievement,” *Economics of Education Review*, 13, 125-145, 1994.
- OECD (Organisation for Economic Cooperation and Development) 2004, *The Quality of the Teaching Workforce*, OECD Policy Brief, February 2004, Paris.
- OECD 2005, *Teachers Matter: Attracting, Developing and Retaining Effective Teachers*, Paris.
- SCRGSP (Steering Committee for the Review of Government Service Provision) 2009, *Report on Government Services*, Productivity Commission, Canberra.
- Rivkin, S.G., Hanushek, E.A., and Kain, J.F., 2005, ‘Teachers, Schools, and Academic Achievement’, *Econometrica*, 73(2): 417-458.
- Rockoff, J. E. 2004, ‘The Impact of Individual Teachers on Student Achievement: Evidence from Panel Data,’ *American Economic Review*, vol. 94 no. 2, pp. 247-252.
- Senate Standing Committee on Employment, Workplace Relations and Education, 2007, *Quality of School Education*, Canberra.
- Wayne, A.J., Youngs, P., 2003 ‘Teacher Characteristics and Student Achievement Gains: A Review’, *Review of Educational Research*, vol. 73, no. 1, pp 89-122.
- Wenglinsky, H., 2002, ‘How Schools Matter: The Link Between Teacher Classroom Practices and Student Academic Performance’, *Education Policy Analysis Archives*, 10(12), <http://epaa.asu.edu/epaa/v10n12/>, (accessed 18 February 2009).

6.3 Indigenous cultural studies

- APCAPDC 2008, *Dare to lead...making the difference*, Adelaide, <http://www.daretolead.edu.au> (accessed 11 February 2009).
- DEEWR (Department of Education, Employment and Workplace Relations) 2008a, *Indigenous Languages Programmes in Australian Schools*; Canberra.
- 2008b, *National Report to Parliament on Indigenous Education and Training 2006*, Canberra.
- SCRGSP (Steering Committee for the Review of Government Service Provision 2007, *Framework for Reporting on Indigenous Disadvantage (Report on Consultations 2006)*, Productivity Commission, Melbourne.

6.4 Year 9 attainment

- ABS (Australian Bureau of Statistics) 2009, *Schools Australia 2008*, Cat. no. 4221.0, Canberra.
- ACER (Australian Council for Educational Research) 2007, *Highlight from TIMSS 2007 from Australia's perspective*, http://www.acer.edu.au/documents/TIMSS_2007-AustraliaHighlights.pdf (accessed 18 February 2009).
- 2002, *Education Participation and Outcomes by Geographic Location*, Research Report 26, Victoria.
- COAG (Council of Australian Governments) 2009, *National Education Agreement*, Canberra.
- Marks, G. N. 2007, ‘Do Schools Matter for Early School Leaving? Individual and School Influences in Australia’, *School Effectiveness and School Improvement An International Journal of Research, Policy and Practice*, vol. 18, no. 4, 429-450.

OECD (Organisation for Economic Co-operation and Development) 2007, *PISA 2006: Science competencies for tomorrow's world*, Paris, OECD.

Purdie, N. and Corrigan, M. 2004, *Completing Twelve Years of Schooling*, Paper presented at the 3rd National Australian Indigenous Education Conference, Ballarat, 15–18 November.

Thomson, S. and De Bortoli, L. 2007, *Exploring scientific literacy: How Australia measures up*, Camberwell, Australian Council for Educational Research.

Zubrick, S.R., Silburn, S.R., De Maio, J.A., Shepherd, C., Griffin, J.A., Dalby, R.B., Mitrou, F.G., Lawrence, D.M., Hayward, C., Pearson, G., Milroy, H., Milroy, J. and Cox, A. 2006, *The Western Australian Aboriginal Child Health Survey: Improving the Educational Experiences of Aboriginal Children and Young People*, Curtin University of Technology and Telethon Institute for Child Health Research, Perth.

6.5 Year 10 attainment

ABS (Australian Bureau of Statistics) 2009, *Schools Australia 2008*, Cat. no. 4221.0, Canberra.

COAG (Council of Australian Governments) 2009, *National Education Agreement*, Canberra.

6.6 Transition from school to work

ABS (Australian Bureau of Statistics) 2008, *Births, Australia 2007*, Cat. no. 3301.0. Canberra.

— 2006, *Census Dictionary, 2006*, Cat. no. 2901.0, Canberra.

DET (Northern Territory Department of Education and Training) 2008, *Annual Report 2007-2008*, Northern Territory Department of Education and Training, Darwin.

Hillman, K. 2005, *Young People outside the Labour Force and Full-time Education: Activities and Profiles*, LSAY Research Report no. 45, ACER, Melbourne.

Lamb, S. 2001, *The Pathways from School to Further Study and Work for Australian Graduates*, LSAY Research Report no. 19, ACER, Melbourne.

Lamb, S. and McKenzie, P. 2001, *Patterns of Success and Failure in the Transition from School to Work in Australia*, LSAY Research Report no. 18, ACER, Melbourne.

McMillan, J. and Marks, G. N. 2003, *School Leavers in Australia: Profiles and Pathways*, LSAY Research Report no. 31, ACER, Melbourne.

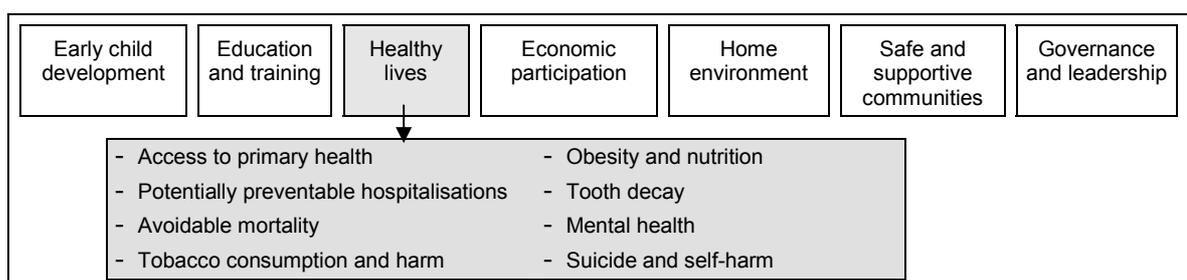
SCRGSP (Steering Committee for the Review of Government Service Provision) 2009, *Report on Government Services 2009*, Productivity Commission, Canberra.

Thomson, S. 2005, *Pathways from School to Further Education or Work: Examining the Consequences of Year 12 Course Choices*, LSAY Research Report no. 42, ACER, Melbourne.

Western Australian Government, Department of Education and Training 2009, *Follow the Dream*, <http://www.det.wa.edu.au/education/abled/docs/followthedream.pdf> (accessed 25 February 2009).

7 Healthy lives

Strategic areas for action



Indigenous people experience very high rates of a variety of physical and mental illnesses, which contribute to poorer quality of life and higher mortality rates. Physical health outcomes can be related to various factors, including a healthy living environment, access to health services, and lifestyle choices. Health risk behaviours, such as smoking and poor diet, are strongly associated with many aspects of socioeconomic disadvantage. Mental health issues can be related to a complex range of medical issues, historical factors, the stressors associated with entrenched disadvantage and drug and substance misuse.

Health outcomes directly affect the quality of people's lives, including their ability to socialise with family and friends and participate in the community, and to work and earn an income. Many COAG targets and headline indicators reflect the importance of healthy lives:

- life expectancy (section 4.1)
- infant mortality (section 4.2)
- disability and chronic disease (section 4.8).

Other COAG targets and headline indicators can be directly influenced by health outcomes:

- employment (section 4.6)
- household and individual income (section 4.9).

Outcomes in the healthy lives strategic area can be affected by outcomes in several other strategic areas for action, or can influence outcomes in other areas:

-
- early child development (maternal health, birthweight, early childhood hospitalisations, injury and preventable disease, hearing impediments) (chapter 5)
 - education and training (school attendance and attainment) (chapter 6)
 - economic participation (labour market participation, income support) (chapter 8)
 - home environment (overcrowding, poor environmental health, access to functional water, sewerage and electricity) (chapter 9)
 - safe and supportive communities (participation in sport, art or community group activities, alcohol, drug and other substance misuse and harm) (chapter 10).
 - governance and leadership (engagement with service delivery) (chapter 11).

The indicators in this strategic area for action focus on the key factors that contribute to positive health outcomes (such as access to primary health services), as well as measures of the outcomes themselves:

- access to primary health — primary health care is the first point of contact with the health system and enables prevention, early intervention, case management and ongoing care. It can help address and modify health risk behaviours and contribute to improved health outcomes. This section reports expenditure on health care services for Indigenous people, data on Indigenous people accessing primary health care services, information about the Indigenous health workforce and health infrastructure in discrete Indigenous communities (section 7.1)
- potentially preventable hospitalisations — in many cases, hospital admissions can be prevented if more effective non-hospital care were available, either at an earlier stage in the disease progression or as an alternative to hospital care. Hospitalisations for injury and poisoning may also be preventable, although not necessarily through better primary health care. This section reports data on hospitalisations for potentially preventable chronic and acute conditions, vaccine-preventable conditions, sexually transmitted infections and injury and poisoning (section 7.2)
- avoidable mortality — avoidable mortality counts untimely and unnecessary deaths from diseases for which effective public health, medical and other interventions are available. This section reports avoidable mortality by major causes (section 7.3)
- tobacco consumption and harm — tobacco use is a significant contributor to premature death and ill health among Indigenous people. In addition to long term health risks, tobacco use among low income groups can divert scarce family resources away from beneficial uses. This section reports on tobacco consumption, and tobacco-related hospitalisations and deaths (section 7.4)

-
- obesity and nutrition — obesity and poor nutrition are significant contributors to poor health outcomes. Obesity is a risk factor for diseases and conditions such as diabetes, heart disease, high blood pressure, osteoarthritis and some cancers. ‘Nutrition’, or healthy eating, can contribute to better health outcomes. This section reports limited available data (section 7.5)
 - tooth decay — healthy teeth are an important part of overall good health. Historically, Indigenous people had less tooth decay due to their traditional diet. The current level of tooth decay reflects changed diet, dental hygiene practices and access to dental care. This section reports available data on tooth decay, as well as data on hospitalisations for dental problems (section 7.6)
 - mental health — mental health plays an important role in the social and emotional wellbeing of Indigenous people. This section reports available data on the prevalence of psychological distress, treatment rates for mental health related services, death rates for mental and behavioural disorders, information on the mental health of prisoners and juveniles in detention, and the risk of clinically significant emotional and behavioural difficulties in children (section 7.7)
 - suicide and self-harm — suicide and self-harm cause great grief in both Indigenous and non-Indigenous communities. Studies suggest that Indigenous suicide is influenced by a complex set of factors relating to history of dispossession, removal from family, discrimination, resilience, social capital and socio-economic status. This section reports on suicide rates and hospitalisation rates for self-harm (section 7.8).

Attachment tables

Attachment tables for this chapter are identified in references throughout this chapter by an ‘A’ suffix (for example, table 7A.1.1). These tables can be found on the Review web page (www.pc.gov.au/gsp), or users can contact the Secretariat directly.

7.1 Access to primary health

Box 7.1.1 Key messages

- Expenditure per person on primary health care was 27 per cent higher for Indigenous people than for non-Indigenous people in 2004-05 (table 7.1.2).
- Immunisation rates for one year old Indigenous children (82.7 per cent) were lower than for non-Indigenous children of the same age (91.8 per cent) in 2007. Immunisation rates were similar for all children aged two and six years (table 7.1.3).
- Sixty per cent of Indigenous people reported that they usually went to the same general practitioner or health service. A further 30 per cent reported they usually went to an Aboriginal medical service (AHMAC 2008).
- Indigenous people represent a small proportion (1.0 per cent) of people working in health-related occupations in Australia, and even smaller proportions for occupations such as nurses (0.6 per cent), doctors (0.2 per cent) and dentists (0.2 per cent) (table 7A.1.21).

Indigenous people, like other Australians, experience a variety of physical and mental illnesses. Primary health care services (for example, doctors in private practice and Aboriginal and Torres Strait Islander primary health care services) influence the health status of Indigenous people by detecting and treating illness, managing chronic conditions and managing prevention programs. Access to primary health care can affect outcomes in a range of headline indicators and strategic areas for action, including life expectancy, infant mortality, disability and chronic disease, early child development and growth, substance use and misuse, and functional and resilient families and communities. Poor health can also affect people's educational attainment and ability to work.

Health services can be divided into primary health care services, which include public and community health services and those flowing from a patient-initiated contact (general practitioner consultations, hospital emergency attendances, general practitioner ordered investigations and prescriptions, over the counter medicines) and secondary/tertiary services, which involve a referral within the health system or a hospital admission. Appropriate use of primary health services can reduce the need for secondary/tertiary health services. Section 7.2 includes data on hospitalisations for chronic, acute and vaccine preventable conditions that may be potentially preventable with appropriate primary health care.

From consultations with Indigenous people and health policy makers in the preparation of the 2005 report, there was general agreement that distance is only one aspect influencing access to primary health care and that a more comprehensive

measure was required to reflect the barriers faced by Indigenous people including cultural, language and racism barriers. Cutcliffe (2004) reported examples of racism and cultural insensitivity in mainstream health services and found that these were not uncommon experiences for Indigenous people. Paradies (2007) and Paradies, Harris and Anderson (2008) reviewed a range of research that found that a majority of Indigenous people experience racism during their lives. Racism and cultural barriers lead to some Indigenous people not being diagnosed and treated for disease in the early stages, when it is often more easily and effectively treated. Paradies (2007) and Paradies, Harris and Anderson (2008) found that racism (from all sources and not only related to health care) had negative impacts on Indigenous health outcomes.

This indicator includes data on:

- the incidence and prevalence of disease and injury
- expenditure on health care services for Indigenous people in 2004-05
- immunisation rates
- Indigenous people's use of primary health care services
- the Indigenous health workforce.

In addition to data, this section presents case studies of programs to improve primary health care services for Indigenous people (see box 7.1.2). Other examples of successful health care initiatives are included in sections 5.1, 5.3, and 5.5.

Section 11.3, Engagement with service delivery, examines more broadly Indigenous people's use of services, the barriers they face in accessing services and case studies of programs that are improving accessibility. Section 11.3 also contains data on patients discharged from hospital against medical advice.

Box 7.1.2 'Things that work' — improving access to primary health care

The **Kimberley Satellite Dialysis Centre** (WA) is an Aboriginal Community Controlled Health Service run dialysis unit, which provides a culturally safe environment for Aboriginal patients. Attendance and patient acceptance of the service have been excellent. The Centre treats patients on-site in Broome and teaches patients about home-based dialysis so they do not have to attend the clinic so many times a week (C. Hayward pers. comm. 2009). It was a winner of a 2007 National Excellence Award in Aboriginal and Torres Strait Islander Health (DOHA 2007).

(Continued next page)

Box 7.1.2 (continued)

After the Centre opened in 2002, the proportion of Kimberley haemodialysis patients receiving treatment in the region increased from 10 to 65 per cent. These patients were more likely to correctly follow haemodialysis therapy and care guidelines, and had similar age standardised death rates as non-Indigenous patients in WA and the rest of Australia, excluding the NT (Marley et al. 2008).

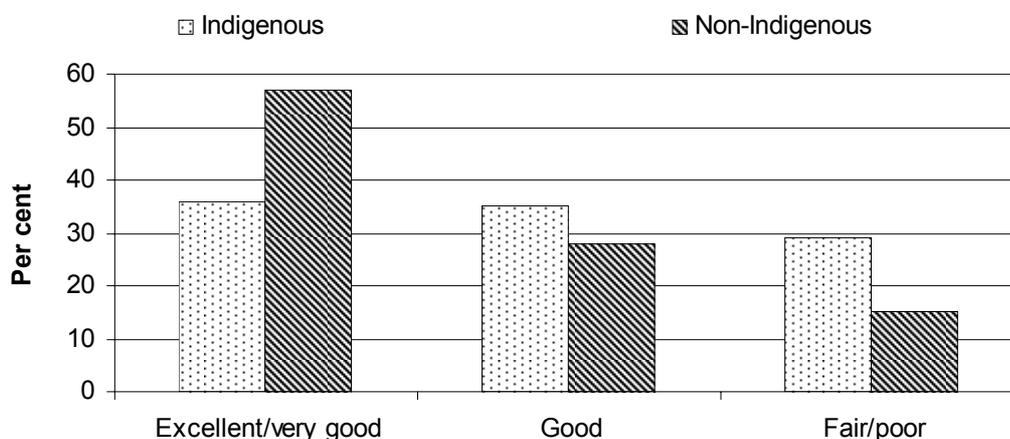
The **Healthy Heart Cardiac Rehabilitation Program** has been provided by the Wuchopperen Health Service in partnership with the Cardiac Rehabilitation Department of Cairns Base Hospital since July 2006. The Australian Medical Association 2007 Indigenous Health Report Card found that this initiative had had a significant positive impact on Indigenous participation in cardiac rehabilitation programs. Close to 100 Indigenous patients had been referred to the Wuchopperen Cardiac Rehabilitation program within a short period of time, with at least half of these referrals more than 200 km from Cairns. Before the program started, participation of Indigenous people in Cardiac Rehabilitation was poor (2–5 per cent). Since the program started, 100 per cent of referrals receive follow up, with 40 per cent of referrals attending the program requiring further investigation and potential surgery. There has been a 21 per cent participation rate in the exercise component and a 26 per cent participation rate in the cardiac education sessions (AMA 2007).

Incidence and prevalence of preventable diseases and injury

The 2004-05 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) and the 2004-05 National Health Survey (NHS) collected data on people's self-perceived health status and long term health conditions. The available data do not distinguish between preventable and non-preventable conditions. Section 4.8 contains more information on the burden of disease for Indigenous people.

Administrative data on the incidence and prevalence of disease and injury are difficult to obtain, as some people do not seek treatment and others seek treatment from general practitioners and other primary health care providers who do not provide data to national collections about the conditions treated. Hospitalisation data provide information about the most serious cases of disease and injury. Section 7.2 includes data on hospitalisations for potentially preventable diseases and injury, including chronic, acute, vaccine preventable and sexually transmitted conditions, and injury and poisoning.

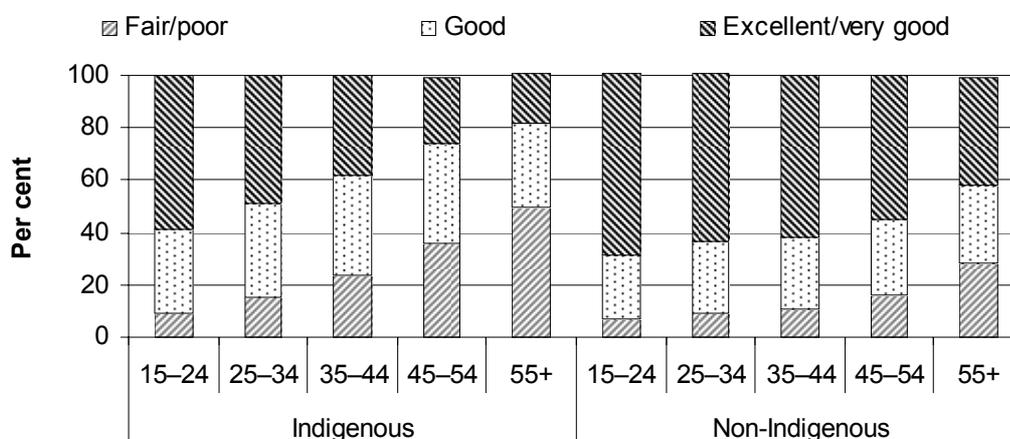
Figure 7.1.1 Age standardised self-assessed health status, people aged 15 years and over, 2004-05



Source: Derived from ABS (2006), ABS 2004-05 NATSIHS and ABS 2004-05 NHS; table 7A.1.1.

- In 2004-05, after adjusting for differences in age structure, Indigenous people were almost twice as likely as non-Indigenous people to report their health as fair or poor (figure 7.1.1).
- Non-age-standardised data for 2004-05, show that 43 per cent of Indigenous people aged 15 years and over reported their health as being very good or excellent, 35 per cent reported their health as being good and 22 per cent reported their health as being poor or fair (AHMAC 2008).

Figure 7.1.2 Self-assessed health status, by age, people aged 15 years and over, 2004-05



Source: AIHW from ABS (2006), ABS 2004-05 NATSIHS and ABS 2004-05 NHS; table 7A.1.1.

In 2004-05:

- the proportions of both Indigenous and non-Indigenous people rating their health as fair or poor increased with age. However, the gap between Indigenous and non-Indigenous people with fair/poor health increased significantly with age, particularly for people aged 35 years and over (figure 7.1.2)
- the proportions of Indigenous people reporting fair/poor or excellent/very good health was similar across states and territories and remoteness areas (tables 7A.1.3–4)
- Indigenous people's reported health status varied according to other socioeconomic characteristics. Those whose highest level of schooling was year 9 or below were more likely to rate their health as fair or poor compared to those who had completed years 11 or 12. A higher proportion of those who were employed rated their health as excellent or very good. Those in the lowest income quintile were more likely to rate their health as fair or poor than those in the highest quintile (table 7A.1.5).

Table 7A.1.6 includes information on how Indigenous people with different numbers of long term health conditions rated their health.

Access to health care compared to need

The data above show that Indigenous people generally have poorer self-perceived health status than non-Indigenous people. Other sections in this report confirm Indigenous people's poorer health outcomes — 4.1 (life expectancy), 4.2 (young child mortality), 4.8 (disability and chronic disease), 5.1 (maternal health), 5.3 (birthweight), 5.4 (early childhood hospitalisations), 5.5 (injury and preventable disease), 5.7 (hearing impediments), 7.2 (potentially preventable hospitalisations), 7.3 (avoidable mortality), 7.7 (mental health) and 9.2 (rates of diseases associated with poor environmental health).

There is no straightforward measure of Indigenous people's access to primary health care services compared to need. Indigenous people use many health services at a higher rate than non-Indigenous people. However, as Indigenous people's health is poorer than non-Indigenous people's health on a range of measures, Indigenous people could reasonably be expected to make greater use of health services than non-Indigenous people. AHMAC (2008) and AIHW (2009) explored Indigenous people's access to health care compared to need in more detail, comparing people's use of health services with their self-reported health status and number of long term health conditions.

Expenditure on health care services for Indigenous people

Expenditure per person on health services by type of service provides an indication of the relative use of health care services by Indigenous and non-Indigenous people. The most recently published data on health expenditure for Indigenous people are for 2004-05 (AIHW 2008).

It is not always possible to make accurate estimates of health expenditure for Indigenous people and their corresponding service use. For example, the Indigenous status of service users is not always clearly stated or recorded. Data on Indigenous status are often unavailable for privately funded services (although they are available for many publicly funded health services). The scope and definition of health expenditures also have some limitations. Other (non-health) agency contributions to health expenditure, such as those incurred within education departments and prisons are not included. There may also be some inconsistencies across data providers resulting from limitations of financial reporting systems and different reporting mechanisms (AIHW 2008).

Table 7.1.1 compares the total expenditure and expenditure per person on all health care services for Indigenous and non-Indigenous people. Data on expenditure split into primary and secondary/tertiary health care services are shown in table 7.1.2. Some of the health goods or services listed in table 7.1.1 fit entirely within either the primary or secondary/tertiary categories but other services are split between the two categories, as shown in table 7.1.2.

Table 7.1.1 Total expenditure on health services for Indigenous and non-Indigenous people, by type of health good or service, current prices, Australia, 2004-05

Health good or service type	Total expenditure (\$ million)			Expenditure per person (\$)		
	Indigenous	Non-Indigenous	Indigenous share (%)	Indigenous	Non-Indigenous	Ratio
Hospitals	1 080.7	27 337.6	3.8	2 213	1 386	1.60
Public hospital ^a	1 048.6	21 042.7	4.7	2 147	1 067	2.01
Admitted patient services	799.4	16 226.8	4.7	1 637	823	1.99
Non-admitted patient services	249.2	4 815.8	4.9	510	244	2.09
Private hospital	32.1	6 295.0	0.5	66	319	0.21
High-level residential care	41.7	6 283.4	0.7	85	319	0.27
Patient transport	103.5	1 369.9	7.0	212	69	3.05
Medical services	164.6	14 483.5	1.1	337	734	0.46
Community health services	497.8	3 052.7	14.0	1 019	155	6.59
Dental and other health practitioners	78.0	7 811.8	1.0	160	396	0.40
Medications	109.4	11 056.4	1.0	224	561	0.40
Aids and appliances	18.6	2 591.4	0.7	38	131	0.29
Public health	88.9	1 350.3	6.2	182	68	2.66
Research	46.0	1 669.0	2.7	94	85	1.11
Health administration (nec)	74.6	2 254.5	3.2	153	114	1.34
Total	2 304.0	79 260.4	2.8	4 718	4 019	1.17

^a Public hospital services exclude any dental services, community health services, patient transport services, public health and health research undertaken by the hospital. .. Not applicable.

Source: AIHW 2008, *Expenditures on Health for Aboriginal and Torres Strait Islander Peoples 2004-05*, Cat. no. HWE 40, Health and welfare expenditure series no. 33, AIHW, Canberra; table 7A.1.7.

In 2004-05 across all health services:

- total expenditure on health care for Indigenous people was \$4718 per person compared with \$4019 per non-Indigenous person (table 7.1.1)
- expenditure per person was lower for Indigenous people on dental services (\$160 compared to \$396), medical services (\$337 compared to \$734), medications (\$224 compared to \$561) and aids and appliances (\$38 compared to \$131) (table 7.1.1)
- expenditure per person on community health services was 6.6 times greater for Indigenous people than non-Indigenous people (\$1019 compared to \$155) (table 7.1.1).

Table 7.1.2 Expenditure per person on primary and secondary/tertiary health services for Indigenous and non-Indigenous people, by type of health good or service, current prices, Australia, 2004-05^{a, b}

Health good or service type	Primary			Secondary/tertiary		
	Expenditure per person (\$)			Expenditure per person (\$)		
	Indigenous	Non-Indigenous	Ratio	Indigenous	Non-Indigenous	Ratio
Hospitals	255	122	2.09	1958	1264	1.55
Admitted patient services	na	na	na	1703	1142	1.49
Non-admitted patient services	255	122	2.09	255	122	2.09
High-level residential care	na	na	na	85	319	.27
Patient transport	106	14	7.63	106	56	1.91
Medical services	285	488	0.58	52	246	0.21
Community health services	1019	155	6.59	na	na	na
Dental services	116	256	0.45	na	na	na
Other health practitioners	22	70	0.31	22	70	0.31
Medications	203	465	0.44	21	96	0.22
Aids and appliances	35	109	0.32	4	22	0.16
Public health	182	68	2.66	na	na	na
Total	2223	1747	1.27	2248	2073	1.08

^a Excludes expenditure on health administration not elsewhere included and research. ^b Primary health services include public and community health services and those flowing from a patient-initiated contact (general practitioner consultations, hospital emergency attendances, general practitioner ordered investigations and prescriptions, over the counter medicines etc.). Secondary/tertiary services involve a referral within the health system or a hospital admission.

Source: AIHW 2008, *Expenditures on Health for Aboriginal and Torres Strait Islander Peoples 2004-05*, Cat. no. HWE 40, Health and welfare expenditure series no. 33, AIHW, Canberra; table 7A.1.8.

In 2004-05, for health services excluding research and administration:

- expenditure on primary health care for Indigenous people was \$2223 per person compared with \$1747 per non-Indigenous person (table 7.1.2)
- primary health care expenditure on medical services¹ per Indigenous person was a little over half of the expenditure per non-Indigenous person in 2004-05. For dental services, expenditure per Indigenous person was less than half of the expenditure per non-Indigenous person (table 7.1.2).

¹ Medical services are listed in the Medical Benefits Schedule and are provided by registered medical practitioners. Most medical services attract benefits under Medicare. They include services provided to private patients in hospitals and those funded by injury compensation insurers. Excluded are expenditures on medical services provided to public patients in public hospitals and medical services provided at out-patient clinics in public hospitals (AIHW 2008).

- expenditure per person on pharmaceuticals for Indigenous people was less than half that for non-Indigenous people (\$203 compared to \$465) (table 7.1.2)
- expenditure on secondary/tertiary health services was \$2248 per Indigenous person and \$2073 per non-Indigenous person (table 7.1.2).

Immunisation rates

Immunisation is highly effective in preventing sickness and death from vaccine preventable diseases. The Australian Government provides free childhood vaccines for children up to the age of seven. Burgess (2003) found that since the introduction of vaccination for children in 1932, deaths from vaccine preventable diseases have fallen by 99 per cent despite the Australian population nearly tripling.

Data on immunisation rates for children from the Australian Childhood Immunisation Register (ACIR) are shown in table 7.1.3. Childhood immunisation data are only available for NSW, Victoria, WA, SA and the NT. Indigenous status data are not routinely reported to the ACIR by Queensland, Tasmania or the ACT.

Table 7.1.3 Vaccination coverage estimates for children, NSW, Victoria, WA, SA and the NT combined, 31 December 2007^a

Vaccine	1 year			2 years			6 years		
	Indigenous	Non-Indigenous	Ratio ^c	Indigenous	Non-Indigenous	Ratio ^c	Indigenous	Non-Indigenous	Ratio ^c
	%	%		%	%		%	%	
Hepatitis B	91.8	94.6	1.0	96.7	96.1	1.0	..	..	..
DTP	83.5	92.3	0.9*	94.0	95.4	1.0	86.1	89.9	1.0
Polio	83.4	92.3	0.9*	93.9	95.4	1.0	86.1	90.0	1.0
HIB	91.2	94.6	1.0	92.2	95.2	1.0	..	..	..
MMR	..	..	..	93.3	94.4	1.0	86.6	89.9	1.0
All vaccines	82.7	91.8	0.9*	90.6	93.2	1.0	85.2	89.3	1.0

DTP = diphtheria, tetanus, pertussis. HIB = *Haemophilus influenzae* type b. MMR = measles, mumps, rubella.
* Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons.

^a Three-month cohorts, for cohorts born between 1 July and 30 September 2006, 1 July and 30 September 2005, and 1 July and 30 September 2001, respectively. ^bData from the ACT, Queensland and Tasmania have not been included in this measure because Indigenous status data from these jurisdictions are not routinely reported or transferred to the Australian Childhood Immunisation Register. ^cRatio — coverage estimate for Indigenous children divided by coverage estimate for non-Indigenous children. .. Not applicable.

Source: AIHW (2009) derived from ACIR Medicare Australia data; table 7A.1.9.

- In 2007, immunisation rates for one year old Indigenous children (82.7 per cent) were lower than for non-Indigenous children of the same age (91.8 per cent). Immunisation rates for children aged two years and six years were similar for Indigenous and non-Indigenous children (table 7.1.3).

- Between 2001 and 2007, there were no significant changes in the proportions of one year old Indigenous and non-Indigenous children who were fully immunised. Over the same period there was no significant change in the proportion of Indigenous children fully immunised at two years but a significant increase in the proportion of non-Indigenous children. The proportions of both Indigenous and non-Indigenous children who were fully immunised at six years increased significantly (AIHW 2009).
- Data on childhood immunisation rates by State and Territory are shown in tables 7A.2.9–12.

Vaccination against influenza and pneumonia is recommended for Indigenous people aged 50 years and over, Indigenous people aged 15 to 49 years with medical conditions putting them at high risk of disease, and non-Indigenous people aged 65 years and over. Influenza and pneumonia vaccinations for people in these categories are provided free by the Australian Government (AIHW 2009).

Data on immunisation of Indigenous adults aged 50 years and over from the ABS 2004-05 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) and immunisation of non-Indigenous adults aged 65 years and over from the ABS 2004-05 National Health Survey (NHS) are shown in table 7.1.4.

Table 7.1.4 Immunisation rates, Indigenous people aged 50 years and over and non-Indigenous people aged 65 years and over, 2004-05

	<i>Indigenous</i>		<i>Non-Indigenous</i>
	<i>50–64 years</i>	<i>65 + years</i>	<i>65 + years</i>
	Per cent		
Had influenza vaccination in last 12 months	52	84	73
Had influenza vaccination but not in last 12 months	18	7*	11
Had influenza vaccination but not known if in last 12 months ^a	0*	1**	1*
Never had vaccination for influenza	30	9*	15
Total	100	100	100
Had pneumonia vaccination in last 5 years	30	48	43
Had pneumonia vaccination but not in last 5 years	1*	np	1
Had pneumonia vaccination but not known if in last 5 years ^b	7	np	3
Never had pneumonia vaccination	63	45	53
Total	100	100	100
Total number	36 900	12 200	2 430 300

* Estimate has a relative standard error of 25 to 50 per cent and should be used with caution. ** Estimate has a relative standard error of greater than 50 per cent and is considered too unreliable for general use.

a Includes not known if ever had influenza vaccination. **b** Includes not known if ever had pneumonia vaccination.

Source: AIHW (2008), derived from ABS 2004-05 NATSIHS and ABS 2004-05 NHS; table 7A.1.13.

In 2004-05:

- 52 per cent of Indigenous people aged 50–64 years had been vaccinated against influenza in the previous 12 months and 30 per cent had been vaccinated against pneumonia in the previous five years (table 7.1.4)
- 84 per cent of Indigenous people and 73 per cent of non-Indigenous people aged 65 years and over had been vaccinated against influenza in the previous 12 months. Forty-eight per cent of Indigenous people and 43 per cent of non-Indigenous people aged 65 years and over had been vaccinated against pneumonia in the previous five years (table 7.1.4).

Indigenous people accessing primary health care services

Data are available from the ABS 2004-05 NATSIHS on where Indigenous people usually go when they have a health problem. A more detailed presentation of these data was included in the 2007 report. The data compare the use of different primary health care services by Indigenous people in non-remote and remote areas.

- In 2004-05, 91 per cent of Indigenous people reported that they usually went to the same general practitioner or medical service. Sixty per cent of Indigenous people went to a doctor if they had a problem with their health and 30 per cent reported they went to an Aboriginal medical service. Aboriginal medical services were used as the regular source of health care by 15 per cent of Indigenous people in major cities but by 76 per cent in very remote areas. The proportion of Indigenous people using a doctor for their regular health care decreased with remoteness from 80 per cent in major cities to 6 per cent in very remote areas (AHMAC 2008).
- Indigenous people living in remote areas were around four times as likely as those living in non-remote areas to use Aboriginal medical services (66.0 per cent compared with 17.4 per cent) or to go to hospital (16.1 per cent compared with 3.7 per cent) (table 7A.1.14).
- Around two per cent of Indigenous people living in non-remote areas stated that they did not seek health care when they had a health problem, compared with 1.2 per cent in remote areas (table 7A.1.14).

In 2004-05, after taking into account the different age structures of the Indigenous and non-Indigenous populations, the times since Indigenous and non-Indigenous adults had last consulted a general practitioner (GP)/specialist were similar

(7A.1.15). A slightly higher proportion of Indigenous than non-Indigenous adults had visited a GP/specialist in the two weeks prior to the survey (28.7 per cent compared with 25.1 per cent) (table 7A.1.15). A greater proportion of Indigenous than non-Indigenous adults had not consulted a GP/specialist in the past 12 months in 2004-05 (17.8 per cent and 14.5 per cent, respectively) (table 7A.1.15). A higher proportion of Indigenous adults living in remote areas had not consulted a GP/specialist in the past 12 months than Indigenous adults living in non-remote areas, in both 2001 and 2004-05 (table 7A.1.15).

There are various reasons why Indigenous people in remote and non-remote areas did not go to a GP when they had a health problem. More than a third of Indigenous adults living in remote and non-remote areas reported ‘personal reasons’² for not visiting a GP when they had a health problem (table 7A.1.17). For Indigenous adults living in remote areas in 2004-05, the most commonly reported reason(s) for not going to a GP were logistical³, more than twice as high as Indigenous adults in non-remote areas (table 7A.1.17).

Table 7A.1.16 compares the length of time since Indigenous and non-Indigenous people last consulted a dentist. A lower proportion of Indigenous than non-Indigenous people had visited a dentist in the two years prior to the survey being completed in 2001 and 2004-05. Further, a greater proportion of Indigenous than non-Indigenous people had not consulted a dentist for two years or more in 2001 and 2004-05. Indigenous people living in remote areas were more likely to have never consulted a dentist compared to Indigenous people living in non-remote areas in 2001 and 2004-05 (table 7A.1.16). Information on dental health outcomes for Indigenous people is included in section 7.6.

Table 7A.1.18 compares the various reasons why Indigenous adults in remote and non-remote areas did not go to a dentist when they had a dental problem. In 2004-05, Indigenous adults in remote areas were twice as likely as those in non-remote areas to report ‘logistical reasons’³ for not going to a dentist (52.9 per cent compared with 26.6 per cent). Indigenous adults in non-remote areas were twice as likely as those in remote areas to report ‘cost’ as a reason for not seeking dental treatment (33.7 per cent compared with 16.2 per cent).

Data on reasons for not going to ‘other health professionals’ and to hospital by remoteness are reported in tables 7A.1.19 and section 11.3.

² Personal reasons include: too busy (work, personal or family responsibilities), discrimination, service not culturally appropriate, language problems, dislikes service or health professional, afraid, embarrassed, or felt service would be inadequate.

³ Logistical reasons includes transport/distance, service not available in area, waiting time too long, or service not available at the time required.

Access to health services in discrete Indigenous communities

The ABS 2006 Community Housing and Infrastructure Needs Survey (CHINS) collected information on the number of Aboriginal primary health care centres and state-funded community health centres located in discrete Indigenous communities.⁴ Information was also collected on access to medical professionals and whether any Indigenous health workers had visited or worked within these communities (ABS 2007). Data were collected from a total of 1187 discrete Indigenous communities with a combined population of approximately 92 960 people.

Aboriginal primary health care centres are community-controlled health facilities that provide health care services and support to Aboriginal and Torres Strait Islander people. In 2006, 107 communities (41 450 people) reported that an Aboriginal primary health care centre was located in their community (45 per cent of the total population participating in the 2006 CHINS). Seventy-one per cent of Aboriginal primary health care centres were located in very remote communities, 9 per cent in remote communities and 20 per cent in non-remote communities.

One hundred and four discrete Indigenous communities (7743 people) had an Aboriginal primary health care centre located within 10 kilometres of their community (8 per cent of the total population participating in the 2006 CHINS). However, a larger number of Indigenous communities (417), with an aggregate population of 25 486, reported being 100 kilometres or more from the nearest Aboriginal primary health care centre (27 per cent of the total CHINS population).

Almost half of all the communities located 100 kilometres or more from the nearest Aboriginal primary health care centre were in the NT, followed by 35 per cent in WA.

Indigenous health workers are trained to certificate III, IV or diploma level, and generally provide a first point of contact for Indigenous people accessing health care services. They provide assistance and information on health issues such as alcohol and mental health, diabetes, ear and eye health, sexual health and hospital education. Indigenous health workers also act as liaison officers with other medical professionals. Table 7A.1.20 presents the number and proportion of discrete Indigenous communities that reported having a female or male Indigenous health worker, registered nurse or doctor visit or work within their community in 2006.

⁴ Discrete Indigenous communities are defined by the ABS as geographic locations inhabited by or intended to be inhabited predominantly (greater than 50 per cent of usual residents) by Aboriginal or Torres Strait Islander peoples, with housing or infrastructure that is managed on a community basis.

-
- A greater proportion of discrete Indigenous communities reported having had a female Indigenous health worker visit or work within their community on a daily basis than a male Indigenous health worker (10.2 per cent compared with 6.3 per cent) (table 7A.1.20).
 - Nearly half of the survey population (49 per cent) reported having had a female Indigenous health worker visit or work within their community on a daily basis (table 7A.1.20).
 - A greater proportion of discrete Indigenous communities reported having a registered nurse visit or work within their community on a daily basis than a doctor (10.1 per cent compared with 1.2 per cent) (table 7A.1.20). Doctors were more likely than registered nurses to visit or work within a discrete Indigenous community on a weekly to monthly basis (table 7A.1.20).
 - Only 1.0 per cent of the CHINS population reported that registered nurses did not frequently visit or work in their community and 2.0 per cent reported that doctors did not frequently visit or work in their community (less than 3-monthly) (table 7A.1.20).

The Indigenous health workforce

Due to cultural differences, language barriers and racism experienced when accessing some mainstream health services, some Indigenous people feel more comfortable seeing Indigenous health professionals and accessing Indigenous-controlled medical services. However, Indigenous people represent a small proportion (1.0 per cent) of people working in health-related occupations in Australia (ABS and AIHW 2008, 7A.1.21). For some particular occupations this proportion is even lower (for example, nurses — 0.6 per cent, medical practitioners/doctors — 0.2 per cent and dentists — 0.2 per cent) (ABS and AIHW 2008, table 7A.1.21). Consequently, many Indigenous people needing health care will be treated by non-Indigenous health professionals. Therefore, it is important that non-Indigenous health professionals treating Indigenous people to have an awareness and respect for Indigenous culture.

There is potential for the number of Indigenous people in occupations such as nursing to increase where Indigenous health workers have opportunities to progressively upgrade their qualifications with further training. The Marr Mooditj Aboriginal Health Training College in WA provides health worker training at certificate III, IV and diploma levels and a bridging course for those wishing to study nursing (Marr Mooditj 2007).

7.2 Potentially preventable hospitalisations

Box 7.2.1 Key messages

- In 2006-07, in NSW, Victoria, Queensland, WA, SA and public hospitals in the NT:
 - the Indigenous hospitalisation rate for potentially preventable chronic conditions was 6.4 times the rate for non-Indigenous people (table 7.2.1). The Indigenous hospitalisation rate in 2006-07 was 21.2 per cent higher than the rate in 2004-05 (186.9 compared to 154.2 hospitalisations per 1000 people) (table 7A.2.1)
 - the Indigenous hospitalisation rate for type 2 diabetes (with and without complications) was 5.2 times the rate for non-Indigenous people (table 7.2.2). Complications of diabetes accounted for 88.5 per cent of hospitalisations of Indigenous people for potentially preventable chronic conditions (table 7.2.1)
 - the Indigenous hospitalisation rate for potentially preventable acute conditions was 2.3 times the rate for non-Indigenous people. Hospitalisation rates for vaccine preventable and sexually transmitted diseases were also higher for Indigenous than non-Indigenous people (tables 7.2.3–5).
- Indigenous people were 45.8 times as likely as non-Indigenous people to be hospitalised for injury and poisoning and other external causes in 2005–2007 in NSW, Victoria, Queensland, WA, SA and public hospitals in the NT (table 7.2.6).

Potentially preventable hospitalisations include hospitalisations that could have been prevented if people had received appropriate primary health care, and hospitalisations that result from external causes, such as accidents, assault and poisoning that could potentially have been prevented by other means.

The extent of potentially preventable hospitalisations can indicate whether people are receiving adequate primary health care. In many cases, hospital admissions can be prevented if more effective non-hospital care were available, either at an earlier stage in the disease progression or as an alternative to hospital care (AHMAC 2008). The variation in potentially preventable hospitalisation rates between Indigenous and non-Indigenous people demonstrates considerable potential for improving Indigenous access to non-hospital care.

In addition to data on hospitalisations, this section includes a case study of a successful program working to prevent unnecessary hospitalisations (box 7.2.2).

Box 7.2.2 Things that work —reducing potentially preventable hospitalisations

The **Burns SA** Aboriginal Burns Program brings together government and non-government agencies, Aboriginal and non-Aboriginal organisations and people to address Aboriginal health. The program was developed by the Central Northern Adelaide Health Service and the Children, Youth and Women's Health Service in response to the overrepresentation of Aboriginal people admitted to the South Australian Burns Service.

The Program extends from prevention and pre-hospital care through to acute care and rehabilitation. Burns education and prevention is provided to school children and Aboriginal community members, and clinical burns emergency management training is provided for Aboriginal health workers, nurses and doctors. Appropriate discharge strategies and the delivery of culturally aware training is provided to improve the hospital journey of Aboriginal burns patients and their escorts. Early evaluation of the program indicates that in SA, Aboriginal burns patients admissions to the Burns Service are decreasing (SA Government unpublished).

This section explores preventable illness by looking at hospitalisations for potentially preventable chronic (tables 7.2.1 and 7.2.2) and acute conditions (table 7.2.3), vaccine preventable conditions (table 7.2.4), and infections with a predominantly sexual mode of transmission (table 7.2.5). It also contains data on hospitalisations for injury and poisoning (table 7.2.6).

The availability of hospitalisation data for Indigenous people has significantly increased in the 2009 report compared to the 2007 report. AIHW analysis of the completeness of Indigenous identification in hospital statistics has shown that data from NSW and Victoria now have sufficient identification of Indigenous status. Therefore, data now available for NSW, Victoria, Queensland, WA, SA and the NT. Nevertheless, Indigenous identification in hospitalisation data remains incomplete in most jurisdictions. The AIHW (2005) found that the quality of Indigenous hospitalisation data varied between jurisdictions and hospitals and was poorest in regions where Indigenous people are a small proportion of the population and poor in private hospitals. Tasmania and the ACT are working with the AIHW to improve the quality of their Indigenous hospitalisation data.

Because data for NSW and Victoria only included adequate Indigenous identification for 2004-05 to 2006-07, data from four states and territories (Queensland, WA, SA and the NT) are included in the attachment tables to provide a longer time series from 2001-02 to 2006-07. Hospitalisation data for these four jurisdictions should not be assumed to represent the hospitalisation experience in the other jurisdictions.

In 2006-07, Indigenous people had much higher hospitalisation rates than non-Indigenous people for a range of potentially preventable chronic diseases (diseases that typically persist for at least 6 months) and for complications associated with diabetes (tables 7.2.1 and 7.2.2).

Table 7.2.1 Age standardised hospitalisation rates for potentially preventable chronic conditions, per 1000 people, NSW, Victoria, Queensland, WA, SA and public hospitals in the NT, 2006-07^{a, b, c}

		<i>Indigenous</i>	<i>Non-Indigenous^d</i>	<i>Rate ratio</i>
Asthma	rate	4.08	1.74	2.34
Congestive cardiac failure	rate	6.29	2.12	2.97
Diabetes complications	rate	165.42	20.81	7.95
Chronic obstructive pulmonary diseases	rate	12.00	2.64	4.54
Angina	rate	5.71	1.86	3.06
Iron deficiency anaemia	rate	1.79	1.27	1.41
Hypertension	rate	0.80	0.30	2.63
Nutritional deficiencies ^e	rate	0.03	0.01	3.93
Total for potentially preventable chronic conditions^f	rate	186.94	29.27	6.39
Total hospitalisations for all conditions	rate	833.08	358.06	2.33

^a Hospitalisation rates are directly age standardised to the Australian population at 30 June 2001. ^b Data are based on State or Territory of usual residence. ^c See table 7A.2.16 for the ICD-10-AM codes used to classify potentially preventable conditions. ^d Non-Indigenous includes hospitalisations of people identified as not Indigenous as well as those with a 'not stated' Indigenous status. ^e The Indigenous nutritional deficiencies standardised rate is based on only a small number of hospitalisations and should be used with caution. ^f The total is not the sum of the individual conditions because diabetes complications overlap other categories.

Source: AIHW National Hospital Morbidity Database (unpublished); table 7A.2.1.

For NSW, Victoria, Queensland, WA, SA and public hospitals in the NT:

- hospitalisation rates for Indigenous people with potentially preventable chronic conditions were 6.4 times as high as the rates for non-Indigenous people in 2006-07 (186.94 hospitalisations per 1000 Indigenous people compared to 29.27 hospitalisations per 1000 non-Indigenous people) (table 7.2.1)
- hospitalisation rates for Indigenous people with diabetes complications were 8.0 times as high and for chronic obstructive pulmonary diseases 4.5 times as high as the rates for non-Indigenous people. Hospitalisations for complications of diabetes accounted for 88.5 per cent of hospitalisations for potentially preventable chronic conditions (table 7.2.1)
- hospitalisations for potentially preventable chronic conditions were a higher proportion of all hospitalisations for Indigenous people (22.4 per cent) than for

non-Indigenous people (8.2 per cent), which suggests that inadequate use of, or access to, primary health care services is a major contributor to Indigenous hospitalisation (table 7A.2.1).

- From 2004-05 to 2006-07, hospitalisations for potentially preventable chronic conditions increased every year for Indigenous people (table 7A.2.1). The hospitalisation rate for potentially preventable chronic conditions in 2006-07 was 21.2 per cent higher than the rate in 2004-05 (186.94 hospitalisations per 1000 people compared to 154.2 hospitalisations per 1000 people) (table 7A.2.1).

For Queensland, WA, SA and public hospitals in the NT, for 2001-02 to 2006-07:

- hospitalisation rates for Indigenous people for potentially preventable chronic conditions was 2.6 times as high in 2006-07 as in 2001-02. Hospitalisations for diabetes complications accounted for most of the increase in hospitalisations (tables 7A.2.2–4)
- non-Indigenous hospitalisations for potentially preventable chronic conditions also increased over this period, but, the increase was much lower than that for Indigenous people (82.1 per cent compared with 155.8 per cent) (tables 7A.2.2–4).

Data in table 7.2.2 are different to those relating to diabetes in table 7.2.1. Data in table 7.2.1 show hospitalisation rates for all types of diabetes (Type 1, Type 2 and unspecified) and where diabetes may have been an additional diagnosis (that is, it could be associated with other reasons for going to hospital). Data in table 7.2.2 only include Type 2 diabetes as a principal diagnosis. Thus, the data in table 7.2.2 are more narrowly specified and hospitalisation rates are lower.

Table 7.2.2 Age standardised hospitalisation rates for Type 2 diabetes as principal diagnosis by complication, per 1000 people, NSW, Victoria, Queensland, WA, SA, and public hospitals in the NT, 2006-07^{a, b, c, d, e}

	<i>Indigenous</i>	<i>Non-Indigenous^e</i>	<i>Rate ratio</i>
Circulatory	0.47	0.22	2.09
Renal	2.60	0.22	11.83
Ophthalmic	3.16	1.22	2.59
Other specified	4.75	0.62	7.64
Multiple	3.25	0.45	7.25
No complications	0.14	0.04	3.99
Total^g	14.40	2.77	5.19

^a Hospitalisation rates are directly age standardised to the Australian population at 30 June 2001. ^b Figures are based on the ICD-10-AM classification. The codes used were E11.x, where x=2 (renal complications), x=3 (ophthalmic complications), x=5 (peripheral circulatory complications), x=7 (multiple complications), x=8 (unspecified complications), x=9 (without complications), and x=0, 1, 4, 6 (other specified complications). ^c Results for individual complications may be affected by small numbers, particularly for Indigenous people, and should be interpreted with caution. ^d Although same day admission for dialysis is not normally coded with a principal diagnosis of Type 2 diabetes, the data contain a significant number in several jurisdictions. ^e Data are based on State or Territory of usual residence. ^f Non-Indigenous includes hospitalisations identified as not Indigenous as well as those with a 'not stated' Indigenous status. ^g Totals include hospitalisations for unspecified complications.

Source: AIHW National Hospital Morbidity Database (unpublished); table 7A.2.5.

For NSW, Victoria, Queensland, WA, SA and public hospitals in the NT:

- hospitalisations for Indigenous people with Type 2 diabetes as a principal diagnosis were 5.2 times the rates for non-Indigenous people in 2006-07 (14.40 hospitalisations per 1000 Indigenous people compared with 2.77 hospitalisations per 1000 non-Indigenous people) (table 7.2.2)
- hospitalisations for renal (kidney-related) complications of diabetes were 11.8 times as high for Indigenous people as non-Indigenous people (table 7.2.2).
- the hospitalisation rate for complications associated with Type 2 diabetes as a principal diagnosis increased for Indigenous people 40.6 per cent from 2004-05 to 2006-07 (from 10.24 per 1000 people in 2004-05 to 14.40 per 1000 people in 2006-07) (table 7A.2.5)
- the hospitalisation rate for type 2 diabetes also increased for non-Indigenous people between 2004-05 and 2006-07 but more slowly than for Indigenous people (19.9 per cent compared with 40.6 per cent (table 7A.2.5).

Queensland, WA, SA and public hospitals in the NT showed similar patterns for type 2 diabetes over a longer period (2001-02 to 2006-07) (tables 7A.2.6–7).

Table 7.2.3 presents hospitalisation rates for a variety of conditions which cause serious short term illness and could possibly be prevented, or their severity minimised, through access to effective primary health care services.

Table 7.2.3 Age standardised hospitalisation rates for potentially preventable acute conditions, per 1000 people, NSW, Victoria, Queensland, WA, SA, and public hospitals in the NT, 2006-07^{a, b, c}

	<i>Indigenous</i>	<i>Non-Indigenous^d</i>	<i>Rate ratio</i>
Dehydration and gastroenteritis	3.36	2.58	1.30
Pyelonephritis ^e	6.33	2.28	2.77
Perforated/bleeding ulcer	0.43	0.24	1.79
Cellulitis	4.58	1.56	2.93
Pelvic inflammatory disease	0.55	0.24	2.31
Ear, nose and throat infections	3.36	1.57	2.14
Dental conditions	3.95	2.62	1.51
Appendicitis	1.53	1.38	1.11
Convulsions and epilepsy	7.08	1.48	4.79
Gangrene	1.08	0.20	5.35
Total^f	32.18	14.15	2.27

^a Hospitalisation rates are directly age standardised using the 2001 Australian population. ^b Data are based on State/Territory of usual residence. ^c See table 7A.2.16 for the ICD-10-AM codes used to classify potentially preventable conditions. ^d Non-Indigenous includes hospitalisations of people identified as not Indigenous as well as those with a 'not stated' Indigenous status. ^e Kidney inflammation caused by bacterial infection. ^f Totals may not equal the sum of the individual conditions due to rounding.

Source: AIHW National Hospital Morbidity Database (unpublished); table 7A.2.8.

For NSW, Victoria, Queensland, WA, SA and public hospitals in the NT:

- hospitalisation rates for Indigenous people with potentially preventable acute conditions were 2.3 times the rates for non-Indigenous people in 2006-07 (32.18 hospitalisations per 1000 Indigenous people compared to 14.15 hospitalisations per 1000 non-Indigenous people) (table 7.2.3).
- hospitalisation rates for Indigenous people with gangrene were 5.4 times as high and for convulsions and epilepsy 4.8 times as high as the rates for non-Indigenous people (table 7.2.3).
- Indigenous and non-Indigenous hospitalisation rates for potentially preventable acute conditions fluctuated from year to year but there was no clear increase or decrease between 2004-05 and 2006-07 (table 7A.2.8). A similar fluctuation with no clear trend is also apparent in data for Queensland, WA, SA and the NT for the six years from 2001-02 to 2006-07 (tables 7A.2.9–11).

Table 7.2.4 presents the hospitalisation rates for influenza and ‘other vaccine preventable conditions’ from 2004-05 to 2006-07.

Table 7.2.4 Age standardised hospitalisation rates for vaccine-preventable conditions, per 1000 people, NSW, Victoria, Queensland, WA, SA, and public hospitals in the NT^{a, b, c}

	<i>Indigenous</i>	<i>Non-Indigenous^d</i>	<i>Rate ratio</i>
2006-07			
Influenza	0.23	0.08	2.68
Other vaccine preventable conditions	2.32	0.49	4.73
2005-06			
Influenza	0.32	0.12	2.53
Other vaccine preventable conditions	2.49	0.52	4.78
2004-05			
Influenza	0.36	0.10	3.81
Other vaccine preventable conditions	2.35	0.56	4.22

^a Hospitalisation rates are directly age standardised using the 2001 Australian population. ^b Data are based on State or Territory of usual residence. ^c See table 7A.2.16 for the ICD-10-AM codes used to classify potentially preventable conditions. ^d Non-Indigenous includes hospitalisations of people identified as not Indigenous as well as those with a ‘not stated’ Indigenous status.

Source: AIHW National Hospital Morbidity Database (unpublished); table 7A.2.12.

For NSW, Victoria, Queensland, WA, SA and public hospitals in the NT:

- hospitalisation rates for influenza and other vaccine-preventable conditions were higher for Indigenous people than non-Indigenous people in all years (table 7.2.4)
- in 2006-07, hospitalisation rates for influenza and other vaccine-preventable conditions for Indigenous people were 2.7 and 4.7 times the non-Indigenous hospitalisation rates for the same conditions (table 7.2.4)
- hospitalisation rates for influenza decreased for both Indigenous and non-Indigenous people between 2004-05 and 2006-07. However, the extent of the reduction in the hospitalisation rate for influenza was greater for Indigenous people, reducing from 0.36 per 1000 people in 2004-05 to 0.23 per 1000 people in 2006-07 (table 7.2.4)
- for ‘other vaccine-preventable conditions’, the hospitalisation rate for Indigenous people fluctuated but with no apparent trend between 2004-05 and 2006-07, while the non-Indigenous rate decreased slightly (table 7.2.4).

For Queensland, WA, SA and public hospitals in the NT, between 2001-02 and 2006-07, Indigenous hospitalisation rates for influenza and other vaccine

preventable conditions were much higher than for non-Indigenous people. Both Indigenous and non-Indigenous hospitalisation rates for influenza declined over the period, while hospitalisation rates for other vaccine-preventable conditions fluctuated (table 7A.2.13).

Table 7.2.5 presents data on hospitalisations for infections with a predominantly sexual mode of transmission. Hospitalisations for sexually transmitted infections may be preventable both by appropriate of primary health care and by the adoption of safe sexual practices.

Table 7.2.5 Age standardised hospitalisation rates for infections with a predominantly sexual mode of transmission, per 1000 people, NSW, Victoria, Queensland, WA, SA, and public hospitals in the NT, 2006-07^{a, b, c}

	<i>Indigenous</i>	<i>Non-Indigenous^d</i>	<i>Rate ratio</i>
Syphilis	0.35	0.03	12.50
Gonococcal infection	0.33	0.01	41.95
Chlamydial infection	0.19	0.02	9.63
Other sexually transmitted diseases	0.48	0.20	2.35

^a Hospitalisation rates are directly age standardised using the 2001 Australian population. ^b Data are based on State or Territory of usual residence. ^c Includes principal or additional diagnosis based on ICD-10-AM classification. ^d Non-Indigenous includes hospitalisations of people identified as not Indigenous as well as those with a 'not stated' Indigenous status.

Source: AIHW National Hospital Morbidity Database (unpublished); table 7A.2.14.

For NSW, Victoria, Queensland, WA, SA and public hospitals in the NT:

- hospitalisation rates for sexually transmitted infections were greater for Indigenous people than non-Indigenous people in 2006-07 (table 7.2.5)
- hospitalisation rates for Indigenous people with gonococcal infection were 42.0 times as high, for syphilis 12.5 times as high and for chlamydial infections 9.6 times as high as the rates for non-Indigenous people (table 7.2.5)
- for Indigenous people, the hospitalisation rate for syphilis decreased from 2004-05 to 2006-07 (from 0.42 hospitalisations per 1000 people in 2004-05 to 0.35 hospitalisations per 1000 people in 2006-07. Hospitalisation rates for gonococcal infections, chlamydial infections and other sexually transmitted diseases all remained fairly constant over the period (table 7A.2.14).

Similar patterns are apparent for Queensland, WA, SA and public hospitals in the NT, from 2001-02 to 2006-07 — a decrease in hospitalisation rates for syphilis and fluctuations with no apparent trend for other diseases (table 7A.2.15).

Hospitalisations for injury and poisoning

Table 7.2.6 **Age standardised hospitalisations of Indigenous people for injury and poisoning and other consequences of external causes, by sex, NSW, Victoria, Queensland, WA, SA, and the NT, July 2005 to June 2007^a**

External cause	Males		Females		Persons	
	Rate per 1000 ^b	Rate ratio ^c	Rate per 1000 ^b	Rate ratio ^c	Rate per 1000 ^b	Rate ratio ^c
Assault (X85–Y09)	11.2	10.8	11.5	11.1	11.3	11.1
Falls (W00–W19)	9.9	9.4	9.1	8.6	9.6	9.3
Exposure to inanimate mechanical forces (W20–W49)	6.2	6.0	2.8	2.6	4.4	4.3
Complications of medical and surgical care (Y40–Y84)	7.1	6.6	6.8	6.5	6.9	6.7
Transport accidents (V01–V99)	5.1	4.9	2.4	2.2	3.7	3.6
Other accidental exposures	3.8	3.6	2.4	2.2	3.1	3.0
Intentional self-harm ((X60–X84)	2.6	2.4	2.9	2.8	2.8	2.6
Exposure to animate mechanical forces (W50–W64)	2.0	1.9	1.0	0.9	1.5	1.4
Exposure to electric current/smoke/fire/venomous animals and plants/forces of nature (W85–W99, X00–X39)	1.9	1.7	0.9	0.8	1.4	1.3
Accidental poisoning by and exposure to noxious substances (X40–X49)	0.8	0.7	0.9	0.8	0.9	0.8
Other external causes	0.7	0.6	0.6	0.5	0.6	0.6
Total	51.3	50.4	41.5	40.7	46.4	45.8

^a External causes (ICD-10-AM codes V01–Y98) are based on the first external cause reported where the principal diagnosis was 'injury, poisoning and certain other consequences of external causes' (ICD-10-AM codes S00–T98). Data are based on State or Territory of usual residence. ^b Directly age standardised rate using the Australian 2001 standard population. ^c Ratio Indigenous rate divided non-Indigenous rate, where non-Indigenous includes people of unknown Indigenous status.

Source: AIHW National Hospital Morbidity Database (unpublished); table 7A.2.17.

From 2005 to 2007, in NSW, Victoria, Queensland, WA, SA and the NT:

- Indigenous people were 45.8 times more likely than non-Indigenous people to be hospitalised for injury and poisoning and other consequences of external causes (table 7.2.6)
- assaults and falls were the most common external causes of hospitalisations of Indigenous people. Indigenous people were 11.1 times more likely to be

hospitalised for assault and 9.3 times more likely to be hospitalised for falls than non-Indigenous people (table 7.2.6).

For Queensland, WA, SA and public hospitals in the NT, hospitalisation rates for injury and poisoning and other consequences of external causes increased between 1998-99 and 2006-07 (table 7A.2.18).

7.3 Avoidable mortality

Box 7.3.1 Key messages

- For the period 2002–2006 in Queensland, WA, SA and the NT combined:
 - Indigenous females were 3.8 times as likely as non-Indigenous females and Indigenous males were 4.5 times as likely as non-Indigenous males to die from avoidable causes (table 7.3.2)
 - Indigenous people were 4.6 times as likely to die from heart attack, 1.9 times as likely to die from cancer, 17.7 times as likely to die of diabetes, and 2.4 times as likely to die from suicide as non-Indigenous people (table 7.3.3).
- Mortality rates from avoidable causes declined for both Indigenous and non-Indigenous people, and the Indigenous gap decreased between 1998 and 2006 in Queensland, WA, SA and the NT combined (figure 7.3.1).

Avoidable mortality is an important indicator of Indigenous people's health. Reducing avoidable deaths is a key component of improving Indigenous life expectancy (section 4.1). Avoidable mortality sits alongside potentially preventable hospitalisations (section 7.2) as a measure of health outcomes. Avoidable mortality could potentially be improved with better use of health care. However, factors outside the health system also contribute to health and mortality — including socioeconomic factors (education, employment and income) described in parts of chapters 4, 6 and 11; lifestyle factors (substance use, obesity and nutrition — described in sections 7.4, 7.5, 10.3 and 10.4); environmental factors (sections 9.1, 9.2 and 9.3); functional communities (chapter 10) and interactions with the justice system (sections 4.11, 4.12, 10.5 and 10.6).

This section uses data from the Australian Institute of Health and Welfare (AIHW) National Mortality Database to examine avoidable mortality for Indigenous and non-Indigenous people. Avoidable causes of death used to define avoidable mortality in this section are from Page et al. (2006) who identified conditions causing death that were either preventable or treatable.

Avoidable mortality can be due to conditions that could be potentially prevented from occurring at all (such as conditions caused by substance misuse, injury and poisoning and obesity), and amenable conditions where death could be avoided with early diagnosis and effective treatment (such as various cancers) (AHMAC 2008).

Box 7.3.2 ‘Things that work’ — reducing avoidable mortality

Heart attack survival rates have improved for Indigenous people in the NT. For Indigenous people in the NT incidence of acute myocardial infarction (AMI) (heart attack)

... was similar to the national rates in the early 1990s, but increased over subsequent years at a time when the national rate was falling, to be more than the national rate. The increase in incidence was offset by an improvement [in] AMI survival for [the] NT Indigenous population. This improvement was a result of both a reduction of pre-hospital mortality and improved hospitalised survival rates (death rates reduced by 56 per cent and 50 per cent respectively). The change in pre-hospital survival indicates a substantial improvement in the early management of patients, a combination of patients' response to their condition, initial primary health care management and access to hospital care. Tempering this positive outcome, there remains much room for further improvement, with NT Indigenous AMI cases having 44 per cent higher risk of death than non-Indigenous cases ... the combination of AMI data demonstrates that the increasing IHD [ischaemic heart disease] death rate among the NT Indigenous population was a result of increased incidence, which has been moderated by improvements in survival. (You et al. 2009, p.301)

Avoidable mortality data included in this section are for people aged 0–74 years. People aged 75 years and over often suffer chronic disease or multiple causes of ill health, which make it difficult to assign a cause of death that can be clearly defined as avoidable or unavoidable (Page et al. 2006).

Table 7.3.1 Avoidable mortality, age standardised, by State/Territory, people aged 0–74 years, 2002–2006^{a, b, c, d, e, f}

	<i>Indigenous</i>	<i>Non-Indigenous</i>	<i>Ratio^g</i>
	<i>per 100 000</i>	<i>per 100 000</i>	
Qld	567.3	168.1	3.4
WA	632.6	151.5	4.2
SA	599.6	168.5	3.6
NT	906.3	210.8	4.3
Qld, WA, SA & the NT	656.3	164.5	4.0

^a Data are reported for Queensland, WA, SA and the NT only. These four states/territories are considered to have adequate levels of Indigenous identification in mortality data. ^b Data are presented in five year groupings because of the small numbers each year. ^c Although most deaths of Indigenous people are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these data are likely to underestimate the Indigenous mortality rate. ^d Deaths are by year of registration and State/Territory of usual residence. ^e The ABS calculated the completeness of identification of Indigenous deaths for the period 2002–2006 using population estimates of 51 per cent for Queensland, 72 per cent for WA, 62 per cent for SA and 90 per cent for the NT. The completeness of Indigenous identification for avoidable deaths may differ from the estimates for all causes. ^f Directly age-standardised using the 2001 Australian standard population. ^g Rate ratio Indigenous: non-Indigenous.

Source: AIHW (2009), *Aboriginal and Torres Strait Islander Health Performance Framework: Detailed Analyses*, Cat. no. IHW 22; table 7A.3.1.

- From 2002 to 2006 after adjusting for the different age structures of the populations, Indigenous people in each of Queensland, WA, SA and the NT had higher death rates from avoidable causes than non-Indigenous people (table 7.3.1).

Table 7.3.2 Avoidable mortality, by age and sex, people aged 0–74 years, Queensland, WA, SA and the NT, 2002–2006^{a, b, c, d}

Age (years)	Males			Females		
	Deaths per 100 000 ^e		Rate ratio ^f	Deaths per 100 000 ^e		Rate ratio ^f
	Indigenous	Non-Indigenous		Indigenous	Non-Indigenous	
Less than 1	699.7	239.6	2.9	517.3	217.7	2.4
1–4	34.1	15.7	2.2	38.2	10.9	3.5
5–14	15.1	5.9	2.6	12.5	4.4	2.9
15–24	150.7	55.8	2.7	68.7	19.8	3.5
25–34	325.5	74.9	4.3	135.2	25.4	5.3
35–44	606.5	98.5	6.2	330.3	51.1	6.5
45–54	1066.6	196.9	5.4	616.5	116.1	5.3
55–64	1891.1	476.0	4.0	1271.3	261.8	4.9
65–74	3808.0	1313.8	2.9	2699.7	716.8	3.8
Total^{g, h}	812.1	214.1	3.8	519.1	115.0	4.5

^a Data are reported for Queensland, WA, SA and the NT only. These four states/territories are considered to have adequate levels of Indigenous identification in mortality data. The completeness of identification of Indigenous deaths can vary by age. ^b Data are presented in five year groupings because of the small numbers each year. ^c Although most deaths of Indigenous people are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these data are likely to underestimate the Indigenous mortality rate. ^d Deaths are by year of registration and State/Territory of usual residence. ^e Rates per 100 000 population. Total rates have been directly age-standardised using the 2001 Australian standard population. ^f Rate ratio Indigenous: non-Indigenous. ^g Totals exclude those aged 75 years and over and those for whom age was not stated. ^h Directly age-standardised using the 2001 Australian standard population.

Source: AIHW (2009), *Aboriginal and Torres Strait Islander Health Performance Framework: Detailed Analyses*, Cat. no. IHW 22; table 7A.3.2.

In the period 2002–2006 in Queensland, WA, SA and the NT:

- Indigenous females were 4.5 times as likely and Indigenous males were 3.8 times as likely as non-Indigenous females and males to die from avoidable causes (table 7.3.2)
- Indigenous males and females of all ages had higher death rates from avoidable causes than non-Indigenous people (table 7.3.2)
- the ratio of Indigenous avoidable deaths over non-Indigenous deaths was greatest for people aged between 25 and 64 years, where the Indigenous avoidable mortality rate was between 4.0 and 6.5 times the non-Indigenous rate (table 7.3.2).

Table 7.3.3 Avoidable mortality, by cause of death, people aged 0–74 years, Queensland, WA, SA and the NT, 2002–06^{a, b, c, d, e, f}

<i>Cause of death</i>	<i>Indigenous</i>	<i>Non-Indigenous</i>	<i>Ratio^g</i>
	<i>per 100 000</i>	<i>per 100 000</i>	
Ischaemic heart disease	149.7	32.7	4.6
Cancer	115.2	60.8	1.9
Lung cancer ^h	47.0	21.3	2.2
Diabetes	94.5	5.3	17.7
Suicide	26.3	11.1	2.4
Road traffic injuries	26.3	8.2	3.2
Alcohol-related disease	37.1	4.1	9.0
Selected invasive bacterial and protozoal infections	27.2	3.6	7.6
Cerebrovascular disease	36.5	9.8	3.7
Chronic obstructive pulmonary disease	39.2	8.0	4.9
Nephritis and nephrosis	27.0	1.6	16.4
Violence	9.0	0.9	10.0
Birth defects	5.9	2.7	2.2
Complications of perinatal period	4.2	1.4	3.1
Rheumatic and other valvular heart disease	10.7	0.5	22.7
Other avoidable ⁱ	47.6	13.6	3.5
Total avoidable	656.3	164.5	4.0

^a Data are reported for Queensland, WA, SA and the NT only. These four states/territories are considered to have adequate levels of Indigenous identification in mortality data. ^b Data are presented in five year groupings because of the small numbers each year. ^c Although most deaths of Indigenous people are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these data are likely to underestimate the Indigenous mortality rate. ^d Deaths are by year of registration and State/Territory of usual residence. ^e Different causes of death may have levels of completeness of identification that differ from the all-cause under-identification (coverage) estimates. ^f Directly age-standardised using the 2001 Australian standard population. ^g Rate ratio Indigenous: non-Indigenous. ^h Data for lung cancer are a subset of data for all cancers presented in this table. ⁱ Other avoidable includes: tuberculosis; hepatitis, HIV/AIDS, viral pneumonia and influenza, thyroid disorders, illicit drug disorders, epilepsy, hypertensive heart disease, aortic aneurism, obstructive uropathy and prostatic hyperplasia, deep vein thrombosis with pulmonary embolism, asthma, peptic ulcer disease, acute abdomen/appendicitis/intestinal obstruction/cholecystitis/lithiasis/pancreatitis/hernia, chronic liver disease, falls, fires/burns, accidental poisoning, drowning. For a full list of ICD10 codes see Page et al. (2006).

Source: AIHW (2009), *Aboriginal and Torres Strait Islander Health Performance Framework: Detailed Analyses*, Cat. no. IHW 22; table 7A.3.3.

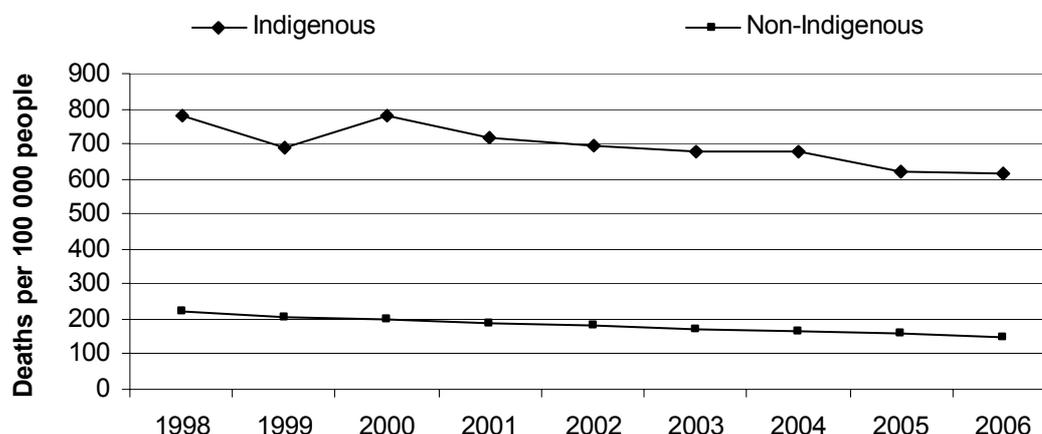
Chronic diseases and injury (including suicide) cause the greatest proportion of avoidable deaths for Indigenous people and are amenable to both prevention and treatment. The greatest reductions in excess deaths could be achieved by reducing deaths from chronic disease and injury.

In 2002 to 2006 in Queensland, WA, SA, and the NT:

- Indigenous people had higher death rates than non-Indigenous people for all of the avoidable causes listed in table 7.3.3

- Indigenous people were 4.6 times as likely to die from ischaemic heart disease (heart attack) than non-Indigenous people (table 7.3.3)
- Indigenous people were 1.9 times as likely to die from cancer than non-Indigenous people (table 7.3.3).
- Indigenous people were 17.7 times as likely to die of diabetes than non-Indigenous people (table 7.3.3)
- Indigenous people were 2.4 times as likely to die from suicide than non-Indigenous people (table 7.3.3).

Figure 7.3.1 Age-standardised avoidable mortality rates, people aged 0–74 years, Queensland, WA, SA and the NT



^a Rates have been directly age-standardised using the 2001 Australian standard population. ^b Rates exclude deaths of people for whom Indigenous status was not stated.

Source: AIHW (2009), *Aboriginal and Torres Strait Islander Health Performance Framework: Detailed Analyses*, Cat. no. IHW 22; table 7A.3.4.

Between 1998 and 2006, in Queensland, WA, SA and the NT combined:

- mortality rates from avoidable causes declined for both Indigenous and non-Indigenous people (figure 7.3.1)
- The gap between Indigenous and non-Indigenous death rates from avoidable causes decreased from 557.1 per 100 000 in 1998 to 465.6 per 100 000 in 2006 (figure 7.3.1).

7.4 Tobacco consumption and harm

Box 7.4.1 Key messages

- In 2004-05, half of Indigenous Australians aged 18 years and over reported that they were current smokers (table 7A.4.10). This figure had not changed significantly since 1995 (table 7A.4.7). It remains twice that of the non-Indigenous population (figure 7.4.1).
- Hospitalisation rates related to tobacco use were consistently higher for Indigenous people than for non-Indigenous people in 2006-07 (table 7.4.1).

Studies have found that smoking tobacco increases the risk of numerous cancers, heart and vascular diseases, and depression (AHMAC 2006, 2008; Cunningham et al. 2008; Pasco et al. 2008). Among Indigenous people, tobacco use is the leading risk factor contributing to disease and death (Vos et al. 2007). This section examines patterns of tobacco use and its related harm, including hospitalisations and deaths related to tobacco use. A 2001 review highlighted the problem of tobacco use among Aboriginal and Torres Strait Islander people and identified a lack of evidence on the effectiveness of tobacco control initiatives in Indigenous communities (Ivers 2001, 2003). In 2008, a National Indigenous Tobacco Control Research Roundtable was held. A roundtable report was published which identified research questions and approaches to guide assessment of priorities (CEITC 2008). Programs that have been effective in reducing tobacco use among Indigenous people are discussed in box 7.4.2.

Tobacco use is often associated with other lifestyle related health risk factors, such as excessive alcohol drinking and poor diet. ABS (2006) found that long term risky/high risk drinkers (both males and females) were more likely to be current smokers than those who drank at a low risk level. The effects of alcohol are often worsened by other risk factors, such as smoking and poor diet (NHMRC 2001). See section 10.3 for alcohol consumption and harm.

According to WHO (2004), tobacco and poverty are inextricably linked world wide. Higher incomes and less disadvantage in a range of other areas are associated with being a non-smoker (Thomas et al. 2008).

In addition to the long term health risks, low income groups (such as Indigenous families and communities) are also affected by the financial strain of tobacco use. Expenditure on tobacco can divert scarce family resources away from other needs, such as housing, nutrition and health care (Briggs, Lindorff and Ivers 2003).

Recently published data from the AIHW 2007 National Drug Strategy Household Survey (NDSHS) suggest that, in 2007, Indigenous people were more likely than non-Indigenous people to smoke (34.1 per cent compared with 19.0 per cent) (AIHW 2008; table 7A.4.1). The NDSHS provides comparable data from 2001–2007 on a person’s smoking status (never smoked, ex-smoker, smoker) and the average number of cigarettes smoked per week by current smokers (table 7A.4.1). Care should be taken in interpreting these data due to the small size of the Indigenous sample (fewer than 500 respondents) in the NDSHS.

Box 7.4.2 ‘Things that work’ — reducing tobacco use

The Maningrida (NT) **‘Smoke-busters’** campaign involved the establishment of an Aboriginal steering group of non-smoking community elders and the appointment of a community-based public health officer. The public health officer was responsible for training a non-smoking community-based tobacco support worker and reorienting tobacco cessation services to improve access and support clients through tailored counselling and nicotine replacement therapy (Burgess et al. 2008).

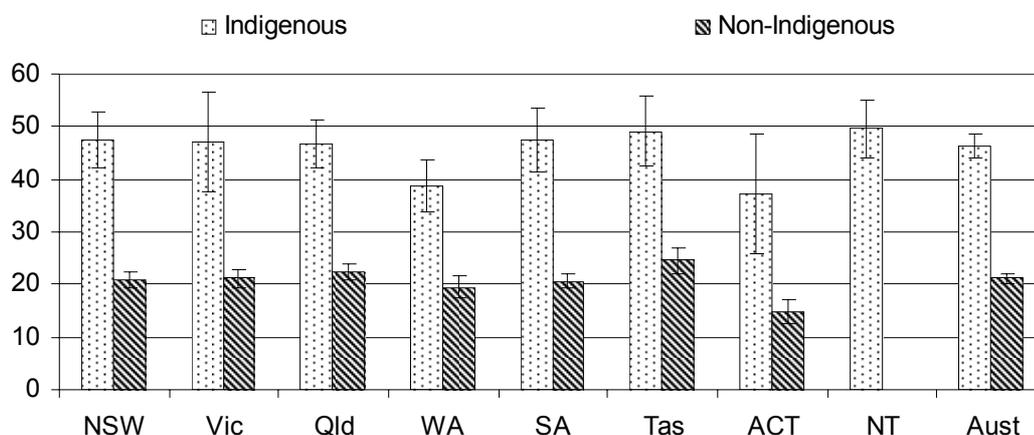
The Menzies School of Health Research evaluated the program and found:

- tobacco consumption declined by 8 per cent over a six-month period
- community awareness increased on issues such as the dangers of tobacco, second hand smoke, strategies to stop smoking, and non-smokers rights (particularly the benefits of not smoking near children)
- children were more aware of their right to a smoke-free environment (Burgess et al. 2008).

Tobacco consumption

Rates of current daily smokers is a performance measure in the National Indigenous Reform Agreement (COAG 2009). The ABS 2004-05 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) and the 2004-05 National Health Survey (NHS) collected data on current daily adult smokers. Current daily smokers are people who smoked one or more cigarettes (or pipes or cigars) per day at the time of interview.

Figure 7.4.1 Current daily smokers aged 18 years or over, age standardised, 2004-05^{a, b, c}



^a This refers to smoking of tobacco, including manufactured (packet) cigarettes, roll-your-own cigarettes, cigars and pipes, but excludes chewing tobacco and smoking of non-tobacco products. Current daily smokers refers to people who smoked one or more cigarettes (or pipes or cigars) per day at the time of interview. ^b The sample size in the NT was considered too small to produce reliable non-Indigenous estimates for the NT in the ABS 2004-05 NHS, but NT records in the survey have been attributed appropriately to national estimates. ^c Error bars represent 95 per cent confidence intervals around each estimate (see chapter 2 for more information).

Source: ABS 2004-05 NATSIHS and NHS (unpublished); table 7A.4.8.

After adjusting for age, in 2004-05:

- Indigenous adults were more than twice as likely as non-Indigenous adults to be current daily smokers (46.3 per cent compared to 21.1 per cent) (figure 7.4.1 and table 7A.4.5).
- Across all states and territories, and remoteness areas, rates of current daily smokers were higher for Indigenous people than non-Indigenous people (figure 7.4.1; table 7A.4.5).
- Non-age-standardised data show that, in 2004-05, half of Indigenous adults smoked daily (table 7A.4.10) and the prevalence of smoking in Indigenous adults was high across all age groups (although lower after 55 years of age) (table 7A.4.9).
- There has been no apparent decline in smoking among Indigenous adults from 1995 to 2004-05 (tables 7A.4.6-7).

The 2008 National Aboriginal and Torres Strait Islander Social Survey (NATSISS) will provide information on current daily adult smokers. The NATSISS results are expected to be available from late 2009.

Tobacco related hospitalisations and deaths

Tobacco smoking is the primary cause of premature and preventable death and disease for all people in Australia. There is a strong causal relationship between tobacco consumption and multiple chronic diseases, including coronary heart disease, stroke and chronic respiratory tract diseases. Smoking in pregnancy can lead to miscarriage, stillbirth or premature birth (Graham et al. 2007). See section 5.1 for rates on mothers reporting smoking during pregnancy.

Data on hospitalisations related to tobacco use reported for this indicator are sourced from the AIHW National Hospital Morbidity Database. These data only cover tobacco related illnesses resulting in admission to a hospital. Further, data are only available for conditions directly attributable to tobacco and do not include most conditions where tobacco may be a contributing factor but where the link is not direct and immediate.

The availability of hospitalisation data for Indigenous people has significantly improved in the 2009 report compared with the 2007 report. AIHW analysis of the quality of Indigenous identification in hospital statistics has shown that the quality of data from NSW and Victoria has improved and data are now available for NSW, Victoria, Queensland, WA, SA and the NT. Nevertheless, Indigenous identification in hospitalisation data remains incomplete in most jurisdictions. The AIHW (2005) found that the quality of Indigenous hospitalisation data varied between jurisdictions and hospitals. Tasmania and the ACT are working with the AIHW to improve the quality of their Indigenous hospitalisation data.

Most hospitalisation data used in this section are for six jurisdictions: NSW, Victoria, Queensland, WA, SA, and the NT. These data have sufficient levels of Indigenous identification for 2004-05 to 2006-07. Longer time series data for Queensland, WA, SA and the NT from 2001-02 to 2006-07 are included in attachment table 7A.4.2. Hospitalisation data for these four jurisdictions should not be assumed to represent the hospitalisation experience in the other jurisdictions.

Non-Indigenous data from the AIHW include hospitalisations of people with a 'not stated' Indigenous status as well as those identified as non-Indigenous.

Table 7.4.1 Age standardised hospitalisations related to tobacco use in NSW, Victoria, Queensland, WA, SA and public hospitals in the NT, 2006-07 (per 1000 population)^{a, b, c, d, e}

	<i>Males</i>		<i>Females</i>		<i>People</i>	
	<i>Indigenous</i>	<i>Non-Indigenous</i>	<i>Indigenous</i>	<i>Non-Indigenous</i>	<i>Indigenous</i>	<i>Non-Indigenous</i>
NSW	4.3	1.4	4.2	0.8	4.2	1.1
Victoria	1.4	1.2	6.8	0.7	4.1	0.9
Queensland	2.1	0.7	1.1	0.4	1.6	0.5
WA	2.8	1.3	2.7	0.7	2.7	1.0
SA	4.0	1.1	7.6	1.7	5.7	1.4
NT (public hospitals only)	8.2	5.7	4.6	1.1	6.2	3.3
Total	3.7	1.2	3.5	0.8	3.6	1.0

^a The hospital separation rates (per 1000 population) were directly age standardised to the Australian population as at 30 June 2001. ^b A hospitalisation is the discharge, transfer, death or change of episode of care of an admitted patient (see glossary for a detailed definition). ^c Principal diagnoses of hospitalisations are based on codes of the International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Australian Modification (ICD-10-AM). ^d Non-Indigenous data include separations where Indigenous status was not reported. ^e Data are based on state of usual residence.

Source: AIHW National Hospital Morbidity Database (unpublished); table 7A.4.3.

In 2006-07, for NSW, Victoria, Queensland, WA, SA and public hospitals in the NT:

- the rate of hospitalisations related to tobacco use for Indigenous people was almost 4 times as high as that for non-Indigenous people (3.6 per 1000 for Indigenous people compared with 1.0 per 1000 for non-Indigenous people) (table 7.4.1)
- the hospitalisation rate for Indigenous males was three times as high as for non-Indigenous males (3.7 per 1000 for Indigenous males compared with 1.2 per 1000 for non-Indigenous males); and Indigenous females had a rate more than four times as high as non-Indigenous females (3.5 per 1000 for Indigenous females compared with 0.8 per 1000 for non-Indigenous females)
- over the period 2004-05 to 2006-07, hospitalisation rates related to tobacco use for both Indigenous and non-Indigenous people remained stable (table 7A.4.3).

Between the 1970s and 1990s, in the NT, Indigenous mortality for lung and other smoking-related cancers more than doubled (Cunningham et al. 2008). No comparable Indigenous and non-Indigenous data on smoking related deaths are available for inclusion in this report.

7.5 Obesity and nutrition

Box 7.5.1 Key messages

- In non-remote areas in 2004-05, 30.9 per cent of Indigenous adults were obese and, after adjusting for differences in the age structure of the two populations, Indigenous adults were twice as likely to be obese as non-Indigenous adults (table 7.5.2).
- In non-remote areas in 2004-05, after adjusting for age, similar proportions of Indigenous and non-Indigenous people aged 12 years and over were eating the recommended usual daily intake of vegetables; 45 per cent of Indigenous people were eating the recommended usual daily intake of fruit compared with 54 per cent of non-Indigenous people, and 71 per cent of Indigenous people usually consumed whole milk compared with 45 per cent of non-Indigenous people (figure 7.5.1).

Obesity and nutrition is a new indicator in the revised indicator framework endorsed by COAG for the 2009 report. Addressing issues of obesity (and nutrition) can contribute to the achievement of COAG's life expectancy target. The National Indigenous Reform Agreement (COAG 2009) includes obesity — body mass index as an indicator. This section includes data on body mass index (BMI) and dietary behaviours.

Public health nutrition is designated a national health priority area for Australia, and Indigenous nutrition is the subject of a national strategy and action plan, the *National Aboriginal and Torres Strait Islander Nutrition Strategy and Action Plan 2000–2010*⁵ (National Aboriginal and Torres Strait Islander Nutrition Working Party 2001).

Among Indigenous people, high body mass is the second leading risk factor contributing to disease and death (Vos et al. 2007). Body fat distribution for Indigenous people is significantly different to that for non-Indigenous people. Indigenous people have a naturally lighter build than non-Indigenous people (O'Dea 2008). Having a lighter build means Indigenous people have a tendency for central obesity and a greater concentration of fat around their stomach means an increased risk of developing certain chronic diseases such as type 2 diabetes and heart disease (O'Dea 2008; Piers et al. 2003). See section 4.8 for rates of disability and chronic disease.

O'Dea (2008) found that a traditional Indigenous lifestyle can protect against obesity and chronic diseases. A 1982 study involving Indigenous people returning

⁵ Approved by the Australian Health Ministers Conference August 2001.

to traditional country showed that after just seven weeks there were improvements in risk factors for type 2 diabetes and cardiovascular disease (O’Dea 1984). See section 10.2 for more information on access to traditional lands.

Regular exercise and an intake of fibre-rich foods, such as fruit and vegetables, can have a protective effect against obesity related diseases (AMA 2005; NHMRC 2003a). Section 10.1 provides more information on participation in organised sport, arts or community group activities. Good nutrition is important during pregnancy (see section 5.1, Maternal health) because pathways to chronic diseases can begin in utero (O’Dea 2008; WHO 2005). Low birthweight (see section 5.3) is associated with a higher risk of central obesity, type 2 diabetes, kidney failure, high blood pressure, and heart disease in later life. Good nutrition is also important for infant and childhood growth and development and for establishing healthy habits for life (ARACY 2008; Tomkins 2001; WHO 2008).

Studies have found links between obesity and factors such as poverty and diet (WHO 2008; Harrison et al. 2007). (Section 4.9 provides more information on individual incomes.) Poverty is a key driver of food choice within remote Aboriginal communities, where the cost of fresh food is typically high. The 2006 Queensland Healthy Food Access Basket (HFAB) survey found that extra expenditure was needed to purchase basic healthy food by families living in outer regional, remote and very remote areas compared to those living in major cities and inner regional centres (Queensland Health 2006). In 2006, in Queensland, the price of fruit, vegetables and legumes was 20.6 per cent higher in very remote locations than in major cities (Queensland Health 2006).

Box 7.5.2 provides an example of a program that has improved nutrition and health outcomes for Indigenous people.

Box 7.5.2 'Things that work' — improving nutrition

The **Outback Stores** model in remote and very remote communities has improved food availability and food security in the communities, enhanced health outcomes, increased awareness of healthy food, provided employment, and supported the long term sustainability of the community store as a business enterprise.

For people living in remote communities and outstations, the local store is often the only source for food and other basic commodities. A study on community stores by the Desert Knowledge Cooperative Research Centre found that the Outback Stores model operates successfully in remote and very remote communities. In the three communities included in the study, respondents indicated that the availability and quality of fresh foods increased since Outback Stores managed the community stores. Prices were also reported to have fallen for fresh food products. In one community, the health worker commented that children were healthier and that the incidence of a nutrition-related disease in children had decreased in the past year (Ferguson, Rola-Rubzen and McGregor 2009).

Obesity

Obesity is most commonly measured using the body mass index (BMI). The BMI is calculated using the formula weight (kg) divided by the square of height (m). BMI values are grouped according to World Health Organization and National Health and Medical Research Council (NHMRC) guidelines (WHO 2000; NHMRC 2003a). Among adults, a person with a BMI of 25 to less than 30 is considered overweight, while a BMI of 30 or more is considered obese (table 7.5.1).

Table 7.5.1 Body mass index categories for adults in Australia

<i>Category</i>	<i>BMI range (kg/m²)</i>
Underweight	Less than 18.5
Normal range	20.0 to less than 25.0
Overweight	25.0 to less than 30.0
Obese	30.0 and greater

Source: WHO (2000); NHMRC (2003a).

The ABS 2004-05 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) collected self-reported height and weight information from Indigenous people and, using the BMI formula, grouped them into BMI ranges as defined in table 7.5.1.

Table 7.5.2 Body mass index groups for people aged 18 years and over, by age, non-remote areas, 2004-05 (per cent)^a

	18-24	25-34	35-44	45-54	55+	Total non-age-standardised	Total age standardised ^b
Indigenous							
Underweight	7.4	3.9	4.1 ^c	3.2 ^{*d}	2.3	4.4	3.8 [*]
Normal range	49.4 [*]	37.6 [*]	31.0 [*]	28.0 [*]	24.1 [*]	35.5	32.1 [*]
Overweight	25.1	29.4 [*]	28.1 [*]	32.1 [*]	34.2 [*]	29.2	30.5 [*]
Obese	18.0 [*]	29.1 [*]	36.8 [*]	36.7 [*]	39.4 [*]	30.9	33.6 [*]
Non-Indigenous							
Underweight	6.5	2.7	2.0	1.2 [*]	2.2	2.6	2.6 [*]
Normal range	61.9 [*]	47.9 [*]	41.6 [*]	38.1 [*]	39.0 [*]	43.9	44.0 [*]
Overweight	24.0	33.7 [*]	36.8 [*]	38.2 [*]	39.1 [*]	35.5	35.5 [*]
Obese	7.5	15.7 [*]	19.6 [*]	22.5 [*]	19.8 [*]	17.9	17.9 [*]
Rate ratio^c							
Underweight/ Normal range	0.8	0.8	0.8	0.8	0.6	..	0.8
Overweight/ Obese	1.4	1.2	1.2	1.1	1.2	..	1.2

* Represents results with statistically significant difference in Indigenous and non-Indigenous comparisons.

^a Proportions exclude those for whom BMI was unknown (39 583 or 15 per cent for Indigenous and 1 175 132 or 8 per cent for non-Indigenous). ^b Directly age standardised proportions using the 2001 Australian population. ^c The rate ratio is calculated by dividing the Indigenous rate by the non-Indigenous rate. ^d Estimate has a relative standard error of between 25 per cent and 50 per cent and should be used with caution. .. Not applicable.

Source: ABS 2004-05 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) and National Health Survey (NHS) cited in AIHW (2009); table 7A.5.1.

- In non-remote areas in 2004-05, 30.9 per cent of Indigenous adults were obese and after adjusting for age:
 - Indigenous adults were 1.2 times as likely as non-Indigenous adults to be overweight/obese
 - 33.6 per cent of Indigenous adults had a BMI greater than 30 (which is considered obese) compared with 17.9 per cent of non-Indigenous adults, and the overall proportion of Indigenous adults who were overweight or obese was 64.1 per cent compared with 53.4 per cent of non-Indigenous adults
 - around one third (32.1 per cent) of Indigenous adults were in the normal BMI range compared with 44.0 per cent of non-Indigenous adults (table 7.5.2).
- In 2004-05, overweight and obese Indigenous men and women had higher rates of smoking and short-term risky/high risk alcohol consumption than overweight and obese non-Indigenous men and women (ABS 2008). Section 7.4 provides more information on tobacco consumption and harm and section 10.3 provides more information on alcohol consumption and harm.

-
- Generally, for both Indigenous and non-Indigenous adults, obesity levels increased with age (table 7A.5.1).
 - Between 2001 and 2004-05, the proportion of Indigenous adults who were overweight or obese did not change significantly (59 per cent in 2001 and 60 per cent in 2004-05) (AIHW 2009).
 - There are no current data on the prevalence of obesity among Indigenous children.

Nutrition

The NHMRC's Australian dietary guidelines recommend eating a wide variety of nutritious food and drinking plenty of water. This means eating plenty of vegetables, legumes and fruits, cereals, lean meat, fish, poultry, milks, yoghurts, cheeses (reduced-fat varieties should be chosen, where possible) (NHMRC 2003a). The guidelines also recommend limiting consumption of saturated fat, salt, alcohol and sugars (NHMRC 2003a).

Insufficient fruit and vegetable consumption contributed to 3.5 per cent of the total burden of disease in Indigenous people in 2003 (Vos et al. 2007). Poor nutrition increases the risk of obesity-linked diseases such as cancer, diabetes and heart attack, and compromises children's development (AHMAC 2008; Tomkins 2001).

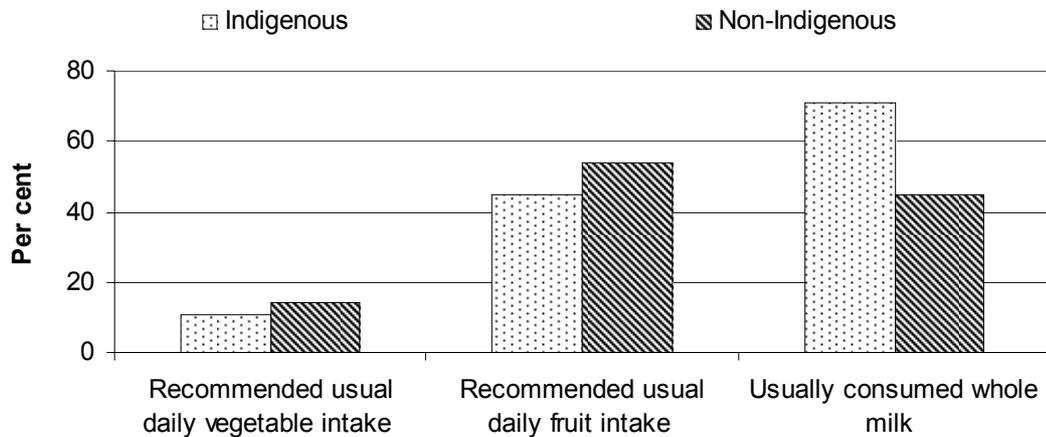
For adults, the NHMRC's Australian dietary guidelines recommend a minimum of five serves of vegetables and two serves of fruit per day (NHMRC 2003a). For children, the daily food consumption guidelines for fruit and vegetable intake recommend one serve of fruit and two serves of vegetables for children aged 4–7 years, one serve of fruit and three serves of vegetables for children aged 8–11 years and three serves of fruit and three serves of vegetables for adolescents aged 12–18 years (NHMRC 2003b).

The Western Australian Aboriginal Child Health Survey, conducted in 2000-01, found that an estimated 70 per cent of Aboriginal children were reported to usually eat fresh fruit every day, but that most Aboriginal children were not even approaching the recommended vegetable intake, and for the majority this was not because fresh vegetables were unavailable (Zubrick et al. 2004). In 2004-05, in non-remote, areas 24 per cent of Indigenous children aged 12–14 years met the recommended daily fruit intake and 59 per cent met the recommended daily vegetable intake (ABS and AIHW 2008). Twenty per cent of Indigenous children aged 15–17 years met the daily recommended fruit intake and 61 per cent met the recommended daily vegetable intake (ABS and AIHW 2008). There was no statistically significant difference in the proportion of Indigenous and

non-Indigenous children who met the daily fruit and vegetable consumption guidelines (ABS and AIHW 2008).

Survey data provide information on consumption of recommended daily vegetable and fruit intake and whole milk consumption, but data for Indigenous and non-Indigenous people are for non-remote areas only. Dietary behaviours by remoteness for Indigenous people can be found in table 7A.5.5, but are not disaggregated by recommended usual daily intake of vegetables and fruit.

Figure 7.5.1 Dietary behaviours for people aged 12 years and over, non-remote areas, age-standardised, 2004-05^{a, b}



^a The National Health and Medical Research Council's (NHMRC) Australian dietary guidelines recommend a minimum of five serves of vegetables and two serves of fruit per day (NHMRC 2003a). ^b The NHMRC's Australian dietary guidelines for adults has been applied to adolescents aged 12–18 years. For adults, the NHMRC's Australian dietary guidelines recommend a minimum of five serves of vegetables and two serves of fruit per day (NHMRC 2003a). For adolescents aged 12–18 years, the daily food consumption guidelines for fruit and vegetable intake recommend three serves of fruit and three serves of vegetables (NHMRC 2003b).

Source: ABS 2004-05 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) and ABS 2004-05 National Health Survey (NHS) cited in AIHW (2009); table 7A.5.2.

- After adjusting for age, in 2004-05, in non-remote areas:
 - similar proportions of Indigenous and non-Indigenous people were eating the recommended usual daily intake of vegetables
 - 45 per cent of Indigenous people were eating the recommended usual daily intake of fruit compared with 54 per cent of non-Indigenous people
 - 71 per cent of Indigenous people usually consumed whole milk compared with 45 per cent of non-Indigenous people (figure 7.5.2).
- Between 2001 and 2004-05, the dietary behaviours of Indigenous people did not change significantly (table 7A.5.3).

More data by age groups can be found in attachment table 7A.5.2. The 2008 ABS National Aboriginal and Torres Strait Islander Social Survey (NATSISS) will provide information on child nutrition. The NATSISS results are expected to be available from late 2009.

- The cost of fresh food can be high in remote areas, which may make fruit and vegetables less accessible to Indigenous people. In remote areas, in 2004-05:
 - 15 per cent of Indigenous people had no daily vegetable intake compared with 2 per cent of Indigenous people in non-remote areas
 - 20 per cent of Indigenous people had no daily fruit intake compared with 12 per cent in non-remote areas (table 7A.5.5).

7.6 Tooth decay

Box 7.6.1 Key messages

- The proportion of adults with untreated tooth decay was significantly higher for Indigenous than for non-Indigenous people across all age groups for 2004–2006 (figure 7.6.5).
- Potentially preventable hospitalisations for dental conditions were higher for Indigenous people than non-Indigenous people from 2004-05 to 2006-07 (figure 7.6.6).

Healthy teeth are an important part not only of oral health, but of overall health and wellbeing. The prevention and early treatment of tooth decay is central to the maintenance of healthy teeth. Unless treated early, tooth decay may result in pain, infection and destruction of soft tissue in the mouth. This may contribute to the development or exacerbation of other diseases. In addition, eating difficulty or pain may lead to modification of eating habits and subsequent nutritional problems. Poor dental health can affect speech and language development, as well as school attendance and performance, self-esteem, employment and social wellbeing (NACOH 2004).

Indigenous children generally have more decay than non-Indigenous children, and that decay is less likely to have been treated (AHMAC 2008). The prevalence of untreated tooth decay is also significantly higher among Indigenous adults than among non-Indigenous adults (AIHW 2009; Roberts-Thomson and Do 2007). The need to improve access to appropriate and affordable dental health services among Indigenous people is reflected in one of seven specific action areas in *Healthy Mouths Healthy Lives: Australia's National Oral Health Plan 2004–2013*

(NACOH 2004). The plan emphasises the need for services that are culturally appropriate and accessible, in order to address inequities in oral health.

Factors in the prevention of tooth decay include diet, dental hygiene and environmental factors, such as water fluoride levels. Access to dental services is also a factor in prevention, as well as in the treatment of tooth decay (AHMAC 2008).

Historically, traditional diets of Indigenous people were associated with low levels of tooth decay. A marked rise in the consumption of food and drinks containing high levels of sugar and other refined carbohydrates over recent decades — particularly in remote communities and among children — has occurred at the same time as an increase in levels of tooth decay among Indigenous people (Jamieson, Armfield and Roberts-Thomson 2007; NACOH 2004).

Preventative oral health behaviours such as tooth brushing and flossing are developed mainly through education and modelling by adults in the home environment, and/or education outside the home (for example, in schools) (Jamieson, Armfield and Roberts-Thomson 2007). Among Indigenous children, levels of preventative oral health behaviours are relatively low. A survey of children in remote Indigenous communities found that fewer than 20 per cent brushed their teeth (Jamieson, Armfield and Roberts-Thomson 2007). Of children aged five years or under, fewer than five per cent brushed their teeth.

Regular dental check-ups are an important element in both prevention and early treatment of tooth decay. A national survey of adult oral health conducted between 2004 and 2006 found that Indigenous adults were less likely than non-Indigenous adults to have visited a dentist in the last five years (Spencer and Harford 2007). Cost, geographic and cultural barriers to accessing dental services are experienced by Indigenous Australians. For example, the national survey found that Indigenous adults were 1.6 times more likely to have foregone recommended dental treatment due to cost than non-Indigenous adults (Spencer and Harford 2007).

Box 7.6.2 ‘Things that work’ — Dental care services

The Wuchopperen Health Service provides care to approximately 20 000 Aboriginal and Torres Strait Islander people in and around Cairns (far north Queensland). In response to a severe, long-term shortage of dentists and waiting lists of more than a year for basic dental care prior to 2005, the **‘Filling the Gap’ Indigenous Dental Program** was developed. The privately funded program supplies volunteer dental health professionals from around Australia to Wuchopperen’s Oral Health Care

(Continued next page)

Box 7.6.2 (continued)

Unit, and operates as a partnership between Wuchopperen, the community it serves, the 'Filling the Gap' Steering Committee, and dental volunteers. It commenced operation in January 2006.

The program, evaluated by the University of NSW's Muru Marri Indigenous Health Unit for the period January 2006 to November 2007, was found to greatly improve access to services:

- 24 weeks of service were provided by 20 volunteer dentists in 2006
- 55 weeks of service were provided by 40 volunteer dentists in 2007, in addition to 15 weeks provided by other dental health professionals and dental students
- services were provided to 1088 patients, including 133 new patients, in 2006
- services were provided to 1485 patients, including 163 new patients, in 2007
- community members were confident to use the service and accepted the turnover of dental volunteers, in part because:
 - the dental unit is part of the community's own health service
 - the long-term Indigenous Practice Manager and Dental Assistants provide continuity and support culturally appropriate, effective communication between volunteers and patients
 - the program was able to recruit highly skilled dental volunteers because it provided professional and personal satisfaction as well as a car and accommodation making it an attractive working holiday (Jackson Pulver et al. 2009).

The **SA Dental Service Aboriginal Liaison Program** was established in late 2005 to improve oral health outcomes for Aboriginal and Torres Strait Islander people through improving access to dental care. Five Aboriginal Liaison Officers are working with local Aboriginal Health Services and Aboriginal communities to develop sustainable pathways for referring clients to dental services and to increase knowledge about oral health care. One of the barriers to care identified was the two-year waiting list for general dental care at community dental clinics. Aboriginal people attending diabetes camps in the Northern Adelaide suburbs during 2007-08 received an oral health assessment. Of the 142 Aboriginal people who received an oral health assessment 133 were identified as needing a dental visit. Of those people, 96 began a course of care in 2008 (SA government unpublished).

The **Great Southern Aboriginal Health — Dental Health Program** in WA was developed to improve the dental health of children and the access to dental services of 0–4 year olds. The program comprises tooth brushing programs in the Noongar pre-schools and playgroups in the towns of Albany, Mount Barker, Tambellup, Gnowangerup, Katanning and Kojonup (which has reached 62 per cent of Aboriginal children aged 3–5 years); dental health checks and treatment for 0–4 year olds; which

(Continued next page)

Box 7.6.2 (continued)

enables community initiatives to improve oral health by improving diet and personal dental care; and cultural awareness programs for dentists and dental students.

The success of the program is underpinned by its response to needs identified by the community, the collaboration between key support groups, and the willingness of the local dentist to bulk bill or charge a minimal fee (WA unpublished 2008).

Data are presented for Indigenous children and adults. Children's data are from the Child Dental Health Survey, conducted by State and Territory School Dental Services. Statistically reliable Indigenous data were available for NSW, SA and the NT only (Jamieson, Armfield and Roberts-Thomson 2007).

National adult data are from the National Survey of Adult Oral Health, conducted between 2004 and 2006.

Indigenous children's dental health in NSW, SA and the NT

Data are reported for tooth decay among Indigenous and non-Indigenous children in metropolitan and rural/remote areas of NSW, SA and the NT combined. The most recent data available are from the Child Dental Health Survey (CDHS) and are for the calendar years 2000 (NSW), 2003 (SA) and 2002 (NT).⁶ Of the 326 099 children examined, 10 743 (3.2 per cent) were Indigenous (Jamieson, Armfield and Roberts-Thomson 2007).

CDHS data are available only for children who are both enrolled in, and attend, the School Dental Service (SDS) (Jamieson, Armfield and Roberts-Thomson 2007). Dental health attitudes and school attendance affect SDS enrolment and attendance. Eligibility criteria, such as age, may vary across jurisdictions (AIHW 2008).

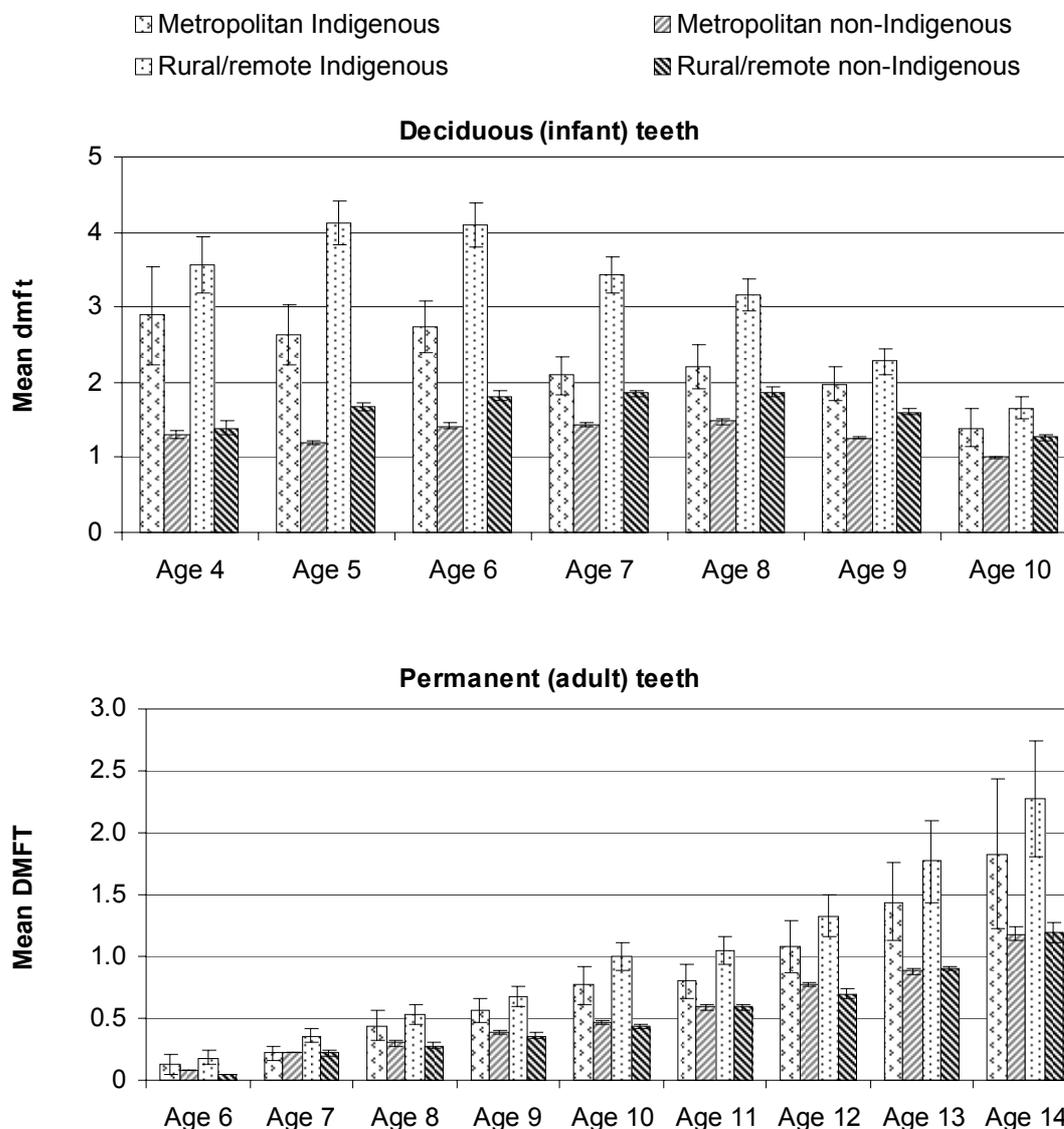
Three measures of tooth decay in children by Indigenous status and geographical location are reported:

- mean number of teeth affected by decay
- proportion of children with no tooth decay
- mean proportion of decayed teeth that are untreated.

The mean (average) number of teeth affected by decay reflects how effectively tooth decay is prevented (figure 7.6.1).

⁶ Additional data for SA and the NT were reported in the 2007 report, and are provided in tables 7A.6.7–7A6.11.

Figure 7.6.1 Mean number of teeth affected by decay, by age and location, NSW, SA and the NT, selected years between 2000 and 2003^{a, b, c}



^a Geographical locations are based on the Rural, Remote and Metropolitan Areas (RRMA) classification. Data for rural and remote areas have been combined. ^b dmft=d+m+f and refers to deciduous (infant) teeth, where: d=number of untreated decayed teeth; m=number of missing teeth; f=number of filled teeth. Uppercase letters denote permanent (adult) teeth. ^c Error bars represent 95 per cent confidence intervals around each estimate and are computed by multiplying the standard error by 1.96 (see chapter 2 for more information).

Source: Jamieson, Armfield and Roberts-Thomson (2006); tables 7A.6.1 and 7A.6.2.

Between 2000 and 2003 in NSW, SA and the NT:

- the mean number of decay-affected deciduous (infant) teeth was significantly higher for Indigenous children than for non-Indigenous children across all ages (from 4 to 10 years) and in both metropolitan and rural/remote areas — in some age groups, more than twice as high (figure 7.6.1)

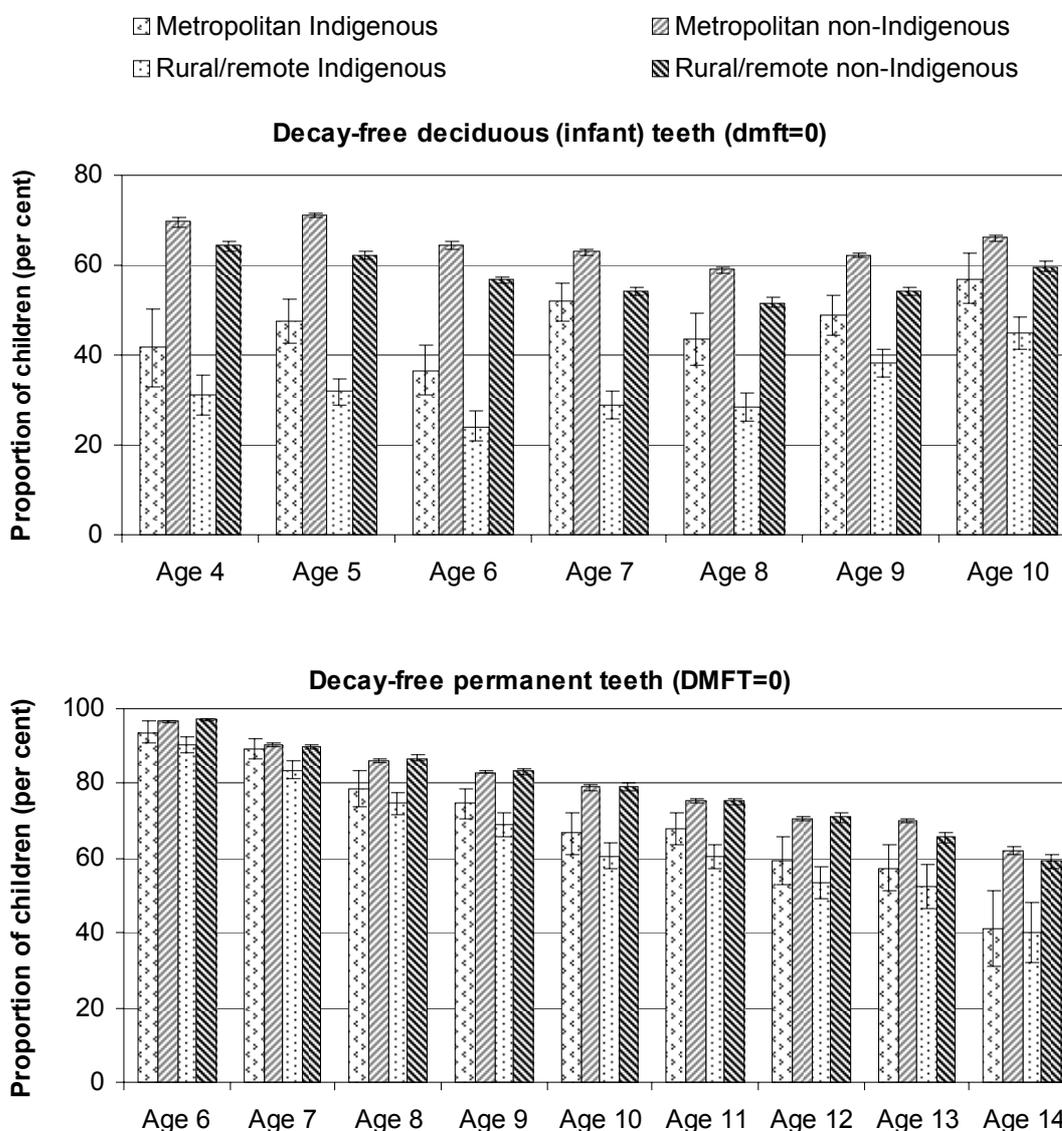
-
- levels of deciduous tooth decay were higher in rural/remote than in metropolitan areas for Indigenous children
 - levels of deciduous tooth decay were higher for Indigenous children in metropolitan areas than for non-Indigenous children in both metropolitan and rural/remote areas (figure 7.6.1)
 - the mean number of decay-affected permanent (adult) teeth was significantly higher for Indigenous children than for non-Indigenous children across all ages (from 6 to 14 years) in rural/remote areas, and across most ages in metropolitan areas (figure 7.6.1).

The proportion of children with teeth free of decay is a measure of how effectively tooth decay is prevented (figure 7.6.2).

Between 2000 and 2003:

- the proportion of children with decay-free deciduous (infant) teeth was lower for Indigenous children than for non-Indigenous children, across all age groups (from 4 to 10 years) and in both metropolitan and rural/remote areas (figure 7.6.2)
- the proportion of children with decay-free permanent (adult) teeth was lower for Indigenous children than for non-Indigenous children across all age groups (from 6–14 years) in rural/remote areas (figure 7.6.2)
- the proportion of children with decay-free permanent (adult) teeth was lower for Indigenous children than for non-Indigenous children in metropolitan areas for children aged 8–14 years (figure 7.6.2).

Figure 7.6.2 Children with decay-free teeth by location and age, NSW, SA and the NT, selected years between 2000 and 2003^{a, b, c}

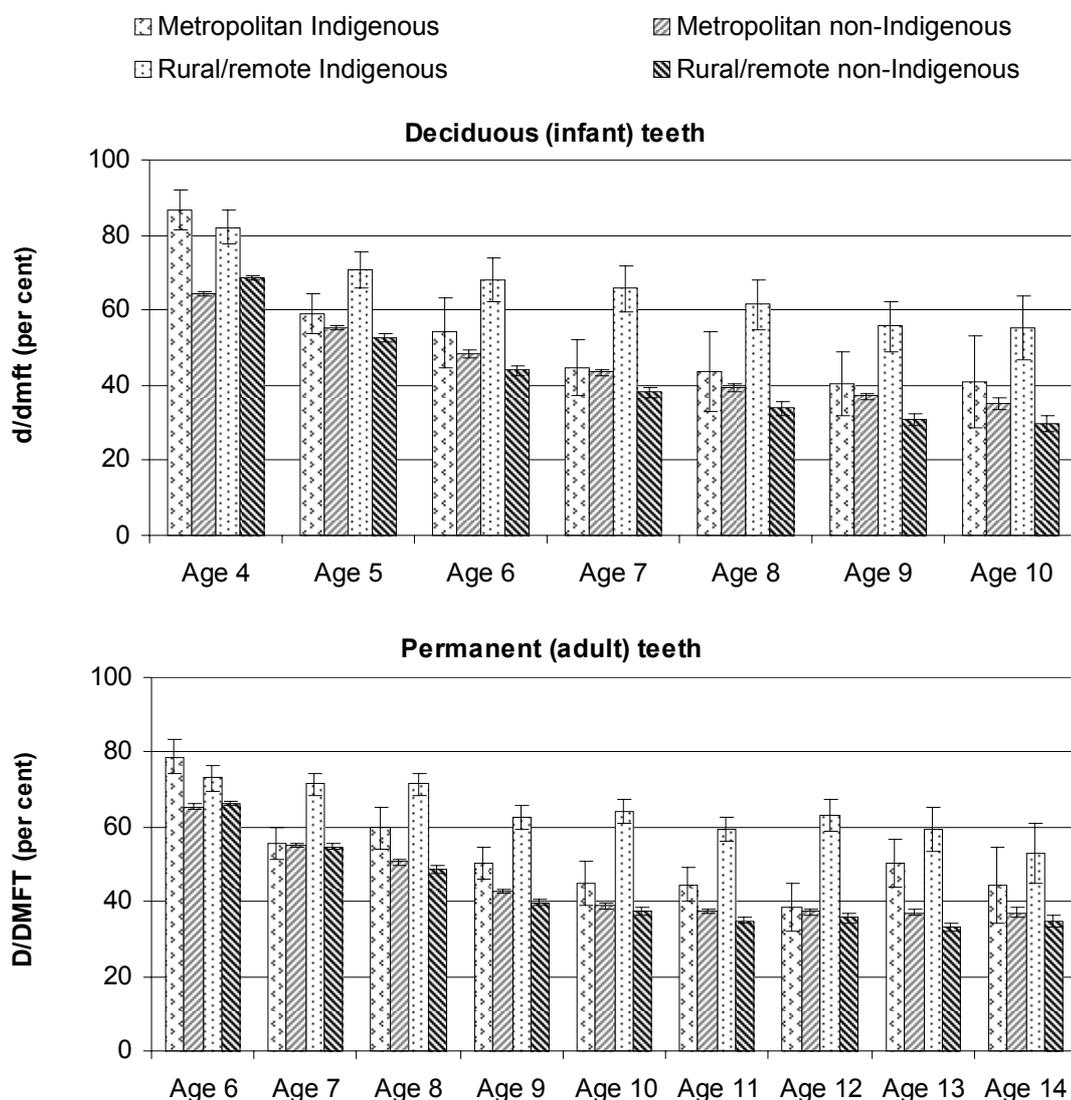


^a Geographical locations are based on the Rural, Remote and Metropolitan Areas (RRMA) classification. Data for rural and remote areas have been combined. ^b $dmft=d+m+f$ and refers to deciduous (infant) teeth, where: d =number of untreated decayed teeth; m =number of missing teeth; f =number of filled teeth. Uppercase letters denote permanent (adult) teeth. ^c Error bars represent 95 per cent confidence intervals around each estimate and are computed by multiplying the standard error by 1.96 (see chapter 2 for more information).

Source: Jamieson, Armfield and Roberts-Thomson (2006); tables 7A.6.1 and 7A.6.2.

The proportion of decay-affected teeth that are untreated provides a measure of unmet need for dental services. Where more decay-affected teeth have been treated (extracted or filled), treatment services may be more accessible. Where the proportion of decayed teeth that are untreated is high, access to services may be more difficult. Figure 7.8.3 contains data are presented for Indigenous and non-Indigenous children in metropolitan and rural/remote areas (figure 7.6.3).

Figure 7.6.3 Proportion of untreated decay-affected teeth, NSW, SA and the NT, selected years between 2000 and 2003^{a, b, c, d}



^a Geographical locations are based on the Rural, Remote and Metropolitan Areas (RRMA) classification. Data for rural and remote areas have been combined. ^b $dmft=d+m+f$ and refers to deciduous (infant) teeth, where: d =number of untreated decayed teeth; m =number of missing teeth; f =number of filled teeth. Uppercase letters denote permanent (adult) teeth. ^c The proportion of decay-affected teeth that are untreated is computed as the number of untreated decayed teeth (d) divided by the total number of decayed teeth ($dmft$). ^d Error bars represent 95 per cent confidence intervals around each estimate and are computed by multiplying the standard error by 1.96 (see chapter 2 for more information).

Source: Jamieson, Armfield and Roberts-Thomson (2006); tables 7A.6.1 and 7A.6.2.

Between 2000 and 2003:

- the proportion of decayed deciduous (infant) teeth that were untreated was significantly higher for Indigenous children than for non-Indigenous children across all ages (from 4 to 10 years) in rural/remote areas and for four-year-olds in metropolitan areas (figure 7.6.3)

-
- the proportion of decayed permanent (adult) teeth that were untreated was higher for Indigenous children than for non-Indigenous children across all ages (from 6–14 years) in rural/remote areas, and for children aged 6, 8, 9, 11 and 13 years in metropolitan areas (figure 7.6.3)
 - in several age groups, particularly in rural/remote areas, more than 50 per cent of decay-affected teeth in Indigenous children were untreated.

A study of the oral health of 831 Indigenous children in remote communities in all jurisdictions was conducted between 2000 and 2003 (Jamieson, Armfield and Roberts-Thomson 2007; tables 7A.6.3 and 7A.6.4). Results were compared with CDHS data for Indigenous children in all areas of NSW, SA and the NT (figure 7.6.4).

Between 2000 and 2003:

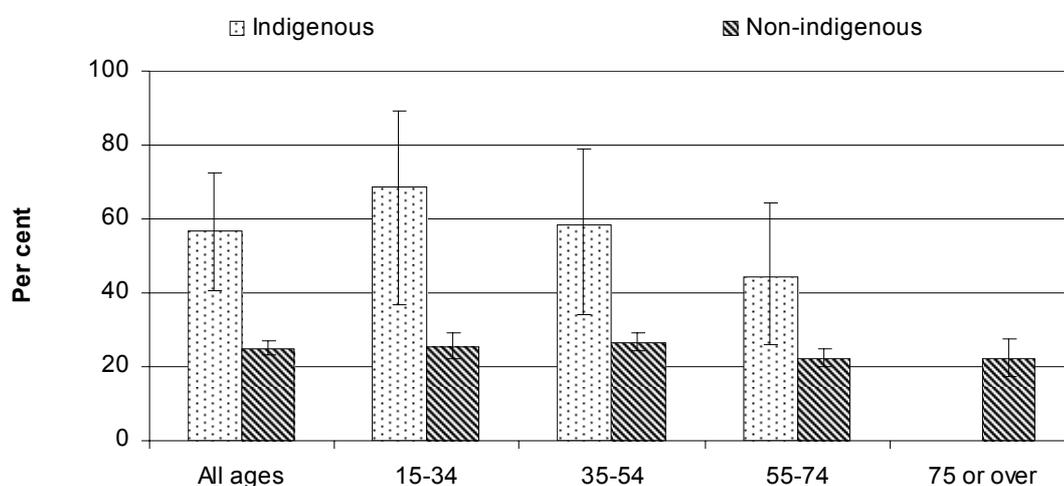
- The proportion of six year old Indigenous children with deciduous teeth affected by decay was higher in remote communities across Australia, than in all areas of NSW and SA (table 7A.6.4)
- For both six and 12 year olds, the proportion of Indigenous children with teeth affected by decay in remote communities across Australia was similar to that in all areas of the NT (table 7A.6.4).

Indigenous adults' dental health

Adult dental health data are from the National Adult Oral Health Survey, conducted between 2004 and 2006. Of 14 123 people aged 15 years or over who participated in telephone interviews, 229 were Indigenous (AIHW 2009). Of 5505 people who also underwent an oral examination, 87 were Indigenous (Slade, Spencer and Roberts-Thomson 2007).

The proportion of the population with untreated tooth decay is a measure of unmet need for treatment (figure 7.6.5). A lower proportion is suggestive of better access to dental treatment services.

Figure 7.6.4 Proportion of the population with untreated tooth decay, 2004–2006^a



^a Error bars represent 95 per cent confidence intervals around each estimate (see chapter 2 for more information).

Source: Roberts-Thomson, K.F. and Do, L. (2007); table 7A.6.5.

- The proportion of people aged 15–54 years with untreated tooth decay was more than twice as high for Indigenous people than non-Indigenous people (figure 7.6.4).
- The average number of teeth affected by decay, a measure of prevention, was similar for Indigenous and non-Indigenous adults (table 7A.6.5).

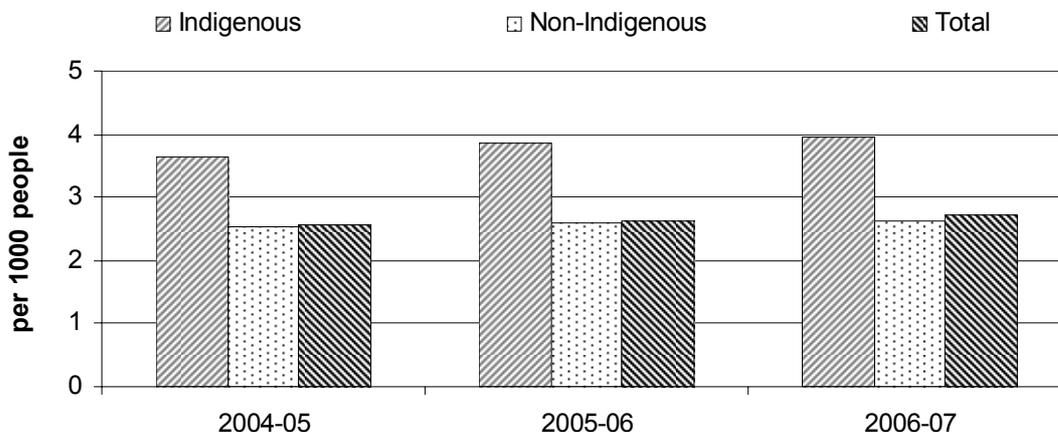
Potentially preventable hospitalisation for dental conditions

Hospitalisation may be required to treat complications arising from preventable dental conditions such as untreated tooth decay (AIHW 2009).

In the two year period July 2004 to June 2006 there were 65 633 hospitalisations for dental problems in NSW, Victoria, Queensland, WA, SA and the NT combined. Of these, 2495 (3.8 per cent) were for Indigenous people (AIHW 2009).

In 2005-06, 54 per cent of admissions of Indigenous people for diseases of the oral cavity, salivary glands and jaw were for treatment of tooth decay (ABS and AIHW 2008).

Figure 7.6.5 Potentially preventable hospitalisations for dental conditions^{a, b, c, d, e}



^a Hospitalisation rates are directly age standardised using the 2001 Australian population. ^b Data are based on State/Territory of usual residence. ^c Separations for which care type was reported as newborn with no qualified days, and records for hospital boarders and posthumous organ procurement have been excluded. ^d Includes ICD-10-AM codes K02, K03, K04, K05, K06, K08, K09.8, K09.9, K12 and K13. ^e Non-Indigenous includes hospitalisations identified as 'not Indigenous' as well as those with a 'not stated' Indigenous status.

Source: AIHW National Hospital Morbidity Database (unpublished); table 7A.6.6.

- Potentially preventable hospital admissions for dental conditions were higher for Indigenous people than for non-Indigenous people from 2004-05 to 2006-07 (figure 7.6.5).

Data on hospitalisation rates for Indigenous and non-Indigenous children for dental procedures in 2002-03 were reported in the 2007 OID Report (SCRGSP 2007) and are provided in attachment tables 7A.6.12–7A.6.15.

7.7 Mental health

Box 7.7.1 Key messages

- Indigenous people had higher treatment rates for mental health issues in community clinics, residential care facilities and hospitals compared with non-Indigenous people in 2005-06 (table 7.7.1).
- 'Life stress events' have been identified as the factor most strongly associated with a high risk of clinically significant emotional or behavioural difficulties in Aboriginal children (Zubrick et al. 2005). In WA, in 2000-01, more than one in five Aboriginal children aged 0–17 years were living in families that had been exposed to 7 to 14 major life stress events, such as death, incarceration, violence and severe hardship, in the previous 12 months (Silburn et al. 2006).

The Indigenous view of health, including mental health, is holistic — 'health does not just mean the physical wellbeing of the individual but refers to the social, emotional and cultural wellbeing of the whole community' (Swan and Raphael 1995, p. 7). However, this indicator focuses on the mental health of individuals as data on the mental wellbeing of Indigenous communities are not available.

Mental health data, in combination with other health data presented in this report, provide a comprehensive picture of Indigenous health. This indicator includes data on the:

- prevalence of psychological distress
- treatment rates for mental health related services (including hospitals, community mental health care clinics, and doctors)
- death rates for mental and behavioural disorders
- mental health of prisoners and juveniles in detention
- risk of clinically significant emotional and behavioural difficulties in Aboriginal children.

Within the mental health domain, diverse views exist and terms are used in different ways. This report uses terms that are consistent with the *National Mental Health Plan 2003–2008* (Australian Health Ministers 2003). Broadly, mental health is defined as an individual's ability to negotiate the daily challenges and social interactions of life without experiencing undue emotional or behavioural incapacity (DHAC and AIHW 1999). Mental health encompasses a spectrum from:

- mental wellbeing (a person may have diminished cognitive, emotional and/or social abilities, but not to the extent that the criteria for a mental illness are met)

-
- mental illness (a diagnosable illness that significantly interferes with an individual's cognitive, emotional and/or social abilities (DHA 2002)).

Mental wellbeing problems are distinct from mental illness, although the two interact and influence each other:

- Mental wellbeing covers a broad range of problems which can be the result of domestic violence, substance misuse, physical health problems, incarceration, family breakdown and social disadvantage (AHMAC 2004). For Indigenous people there are also broader social and historic issues, such as forced separation or forced relocation, which influence mental wellbeing (Blair, Zubrick and Cox 2005; Procter 2005).
- Mental illness includes anxiety and depression, post traumatic stress, suicidal ideation and self-harm behaviour, as well as psychotic disorders, affective disorders, and organic and degenerative disorders (DHA 2002). Suicide and self-harm are explored in more detail in section 7.8. Mental illness clearly impacts upon and can contribute to the wellbeing of individuals, families and communities.

Co-occurrence of depression and anxiety along with substance use are risk factors for suicide in all age groups (Harris and Barraclough 1997; Moscicki 1997; Rajkumar and Hoolahan 2004). A number of studies have found that the use of inhalants is a particular mental health concern among young Indigenous people (James 2004; NT Select Committee on Substance Abuse 2004, 2007; Siegel 2003). More information on substance use is included in sections 10.3 and 10.4.

Mental health is designated a national health priority area for Australia, and Indigenous mental health is the subject of a national strategy and action plan, the *National Strategic Framework for Aboriginal and Torres Strait Islander Health* (NATSIHC 2003) and the *National Strategic Framework for Aboriginal and Torres Strait Islander Mental Health and Social and Emotional Wellbeing 2004–2009* (NATSIHC 2004). Box 7.7.2 provides examples of programs that have been successful in improving Indigenous mental health and wellbeing.

Box 7.7.2 'Things that work' — improving mental wellbeing

The school-based **Family Wellbeing Program** was included in the 2007 report. The program was piloted in primary schools in Hope Vale and Wujul Wujul in far north Queensland. The program aimed to develop the analytical and problem solving skills of the students, to enhance psychosocial development and, in particular, to build personal identity and to encourage students to recognise their future potential.

A program evaluation noted the significant social and emotional growth for the participating students. Other outcomes included greater ability to think for oneself and set goals, less teasing and bullying in the school environment, and enhanced friendships and social relatedness (Tsey et al. 2005). On the basis of these findings, Apunipima and James Cook University worked with Queensland Department of Education, Training and the Arts to develop a curriculum focusing on the family wellbeing empowerment principles for Year 7 students over a school term. This led to the establishment of the Making My Way Through unit within the Cape York Bound for Success Education Strategy. This strategy is aimed at preparing remote area primary students for transition to high school away from home (Queensland unpublished).

The **Aboriginal Mental Health Worker Training Program** in NSW aims to develop the Aboriginal mental health workforce and increase the education, retention and representation of Aboriginal people in specialist mental health service delivery. At the end of their training, the graduates are fully qualified Aboriginal mental health professionals in mainstream mental health services. Ten trainee positions were offered in 2006-07 and another nine positions will be offered in 2008-09. This will increase the number of Aboriginal Mental Health Workers in NSW to 70 — in addition to the 15 Aboriginal Mental Health Workers in Aboriginal Community Controlled Health Services.

In late 2007, an evaluation by the Cooperative Research Centre for Aboriginal Health found that the program is building a sustainable workforce by coordinating work and study for the trainees within a system of peer support, supervision and mentoring (Harrison and Watson 2009).

Prevalence of psychological distress

The ABS 2004-05 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) collected data for the first time on mental wellbeing. The 2007 report included detailed findings on these data. Some of the findings from the NATSIHS reveal that in 2004-05:

-
- after adjusting for age, 26.6 per cent of Indigenous adults had experienced a high to very high level of psychological distress compared with 13.1 per cent of non-Indigenous adults (table 7A.7.1)⁷
 - in almost all age groups Indigenous people were twice as likely as non-Indigenous people to have experienced high to very high levels of distress. For 18–24 year olds, Indigenous people were 1.6 times as likely as non-Indigenous people to have experienced high to very high levels of distress (table 7A.7.3).

More data on psychological distress, positive mental wellbeing and psychological distress according to selected health characteristics (such as alcohol consumption) by State and Territory, by sex, by age groups and remoteness areas can be found in attachment tables 7A.7.4–17.

Treatment rates in mental health related services

This section reports information on the use of mental health services such as hospitals, doctors, emergency departments and community clinics. Table 7.7.1 includes 2005-06 treatment rates in mental health related services (except for general practitioners) and 2006-07 treatment rates by general practitioners and hospitals.

Treatment rates are not comparable across mental health services. The rates presented in table 7.7.1 are derived from survey data and various administrative data sets. See tables 7A.7.42, 7A.7.45 and 7A.7.51–54 for more information.

⁷ The 2004-05 NATSIHS included five Kessler 10 (K10) questions. The Kessler 10 (K10) is a 10-item questionnaire which provides a measure of psychological distress based on questions about the level of anxiety and depressive symptoms in the most recent four-week period.

Table 7.7.1 Treatment rates in mental health related services^a

		<i>Unit</i>	<i>Indigenous</i>	<i>Non-Indigenous^b</i>	<i>Rate ratio^c</i>
2005-06					
General practitioners ^d	crude rate (per 100 encounters)		na	na	na
Emergency departments in public hospitals	% of total mental health related occasions ^e		5.0	96.5	..
Community mental health service ^f	rate (per 1000 population) ^g		531.7	270.3	2.0
Residential mental health care service ^e	rate (per 10 000 population) ^g		1.9	1.1	1.7
Hospitalisations ^h	rate (per 1000 population) ^g		24.7	13.9	1.8
2006-07					
General practitioners ^d	crude rate (per 100 encounters)		17.6	10.6	1.5
Hospitalisations ^h	rate (per 1000 population) ^g		25.4	14.1	1.8

^a Treatment rates are not comparable across mental health services. Rates are derived from survey data and various administrative data sets. See tables 7A.7.42, 7A.7.45 and 7A.7.51 – 54 for more detail. ^b Includes non-Indigenous patients and patients for whom Indigenous status was 'not stated' ^c The rate ratio is calculated by dividing the Indigenous rate by the non Indigenous rate. ^d Classified according to ICPC-2 codes: P01–P13, P15–P20, P22–P25, P27–P29, P70–P82, P85–P86, P98–P99. ICPC-2 = International Classification of Primary Care, 2nd edition, Oxford. ^e Includes emergency department occasions of service that had a principal diagnosis based on ICD-10-AM codes F00–F99 or the equivalent ICD-9-CM codes. ICD-10-AM = International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Australian Modification. ICD-9-CM = International Classification of Diseases, Ninth Revision, Clinical Modification. ^f These data should be interpreted with caution due to likely under identification of Indigenous people. ^g Rates were directly age standardised. ^h Data are reported for NSW, Victoria, Queensland, WA, SA and public hospitals in the NT. Hospitalisation rates are for all mental and behavioural disorders (ICD-10-AM codes F00–F99). **na** Not available. **..** Not applicable.

Source: AIHW (Australian Institute of Health and Welfare) 2008, *Mental Health Services in Australia 2005–06*, Cat. no. HSE 56, Canberra; AIHW 2009, *Measuring the Social and Emotional Wellbeing of Aboriginal and Torres Strait Islander Peoples*, Cat. no. IHW 24, Canberra; tables 7A.7.42, 7A.7.45 and 7A.7.51 – 54.

In 2005-06:

- 5.0 per cent of mental health related emergency department visits were by Indigenous people (for comparative purposes, 4.3 per cent of emergency department visits for all causes were by Indigenous people) (table 7A.7.52)
- after adjusting for age, Indigenous people were twice as likely to be treated by a community mental health service as non-Indigenous people (531.7 and 270.3 per 1000 population respectively) (table 7A.7.53)
- after adjusting for age, Indigenous people had a slightly higher rate of residential care episodes than non-Indigenous people (1.7 and 1.1, respectively) (table 7A.7.54).

Table 7.7.1 also includes 2006-07 treatment rates for general practitioners and hospitals.

- In 2006-07, Indigenous people had a higher rate of mental health related general practitioner encounters than non-Indigenous people (17.6 per cent compared with 10.6 per cent) (table 7.7.1).

The general practitioner data are based on a small sample of general practitioner encounters involving Indigenous Australians. A much larger sample, which produces more reliable results, can be achieved by combining data for a five year period. Combined financial year data for 2002-03 to 2006-07 show that:

- after adjusting for age, the rate of mental health related problems managed by general practitioners was similar for Indigenous and non-Indigenous people (table 7A.7.51)
- Indigenous patients were around three times as likely as non-Indigenous patients to have alcohol misuse, drug abuse and tobacco misuse managed by a general practitioner (AIHW 2009).

After adjusting for age, for NSW, Victoria, Queensland, WA, SA and public hospitals in the NT:

- the hospitalisation rate ratio for mental and behavioural disorders was the same in 2005-06 and 2006-07, that is, Indigenous people were 1.8 times as likely to be hospitalised for mental and behavioural disorders as non-Indigenous people (table 7.7.1)
- from 2004-05 to 2006-07, in NSW, Victoria, Queensland, WA, SA and public hospitals in the NT, the hospitalisation rate for mental and behavioural disorders for both Indigenous and non-Indigenous people remained stable (tables 7A.7.39, 7A.7.42, 7A.7.45).

More hospital data by sex and age groups, for 2004-05 to 2006-07 in NSW, Victoria, Queensland, WA, SA and public hospitals in the NT can be found in tables 7A.7.39–7A.7.50. Longer time series data for Queensland, WA, SA and the NT from 2001-02 to 2006-07 are included in the attachment tables 7A.7.18–7A.7.38. Hospitalisation data for these four states and territories should not be assumed to represent the hospitalisation experience in the other jurisdictions.

Death rates for mental and behavioural disorders

Table 7.7.2 Average annual deaths from mental and behavioural disorders, 2003–2007 (per 100 000 population)^{a, b, c}

	Under 25	25–34	35–44	45 and over
Indigenous				
NSW	–	2.0	10.1	36.7
Queensland	–	7.8	11.8	25.7
WA	1.0	1.9	17.7	72.4
SA	–	–	28.7	41.3
NT	–	9.7	20.3	108.3
Non-Indigenous^e				
NSW	0.2	1.1	2.1	56.4
Queensland	0.1	0.8	1.0	42.8
WA	0.1	0.8	1.2	42.2
SA	0.1	0.7	1.2	65.2
NT	–	–	1.6	24.1

ICD–10 = International Classification of Diseases, 10th Revision.

^a These data are based on ICD–10 codes F00–F99. ^b Care should be taken when using these data as the rates are based on a small number of deaths. ^c Denominators used in the calculation of rates for the Indigenous population are from ABS 2004, *Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians*, Cat. no. 3238.0 (low series). There are no comparable population data for the non-Indigenous population. Denominators used in the calculation of rates for comparison with the Indigenous population have been derived by subtracting Indigenous population estimates/projections from total estimated resident population and should be used with care, as these data include population units for which Indigenous status were not stated. ^d Data on deaths of Indigenous people are affected by differing levels of coverage of deaths identified as Indigenous across states and territories. Care should be exercised in analysing these data, particularly in making comparisons across states and territories and between the Indigenous and non-Indigenous data. ^e Non-Indigenous includes deaths with a 'Not stated' Indigenous status. – Nil or rounded to zero.

Source: ABS *Causes of Death, Australia*, Cat. no. 3303.0 (unpublished); table 7A.7.61.

- For NSW, Queensland, WA, SA and the NT, in 2003–2007, death rates for mental and behavioural disorders were highest for both Indigenous and non-Indigenous people aged 45 years and over (table 7.7.2).
- In 2003–2007, for those jurisdictions for which data are available, death rates for mental and behavioural disorders were higher for Indigenous people aged 25–44 years than non-Indigenous people (except in SA for people aged 25–34 years) (table 7.7.2).
- From the data available in 2003–2007, compared to non-Indigenous rates, mental and behavioural disorders accounted for:
 - 2.4 times as many deaths as expected in NSW
 - 2.1 times as many deaths as expected in Queensland
 - 4.1 times as many deaths as expected in WA

-
- 2.4 times as many deaths as expected in SA
 - 6.0 times as many deaths as expected in the NT (table 7A.7.64).

More data on death rates for mental and behavioural disorders by age and gender can be found in tables 7A.7.55–64.

Mental health of prisoners and juveniles in detention

Prisoners

Data on the health of prisoners (including mental health) in Australia is sporadic, inconsistent and incomplete (AIHW 2001; AMA 2006). Comprehensive Indigenous prisoners' health data (including mental health) are almost nonexistent.

No comparable Indigenous and non-Indigenous data on rates of mental illness and emotional or mental health problems among prisoners are available for inclusion in this report. From the few Australian and international surveys that have been conducted on prisoner health, the common finding is that prisoners have high rates of mental illness and emotional or mental wellbeing problems (ABS 1998; ABS 2008; Brooke et al. 1996; Butler 1997; Butler and Allnutt 2003; Butler and Milner 2003; Fazel and Danesh 2002; Hockings et al. 2002; Victorian Department of Justice 2003). These surveys do not take into account how the prison environment influences the mental health of prisoners.

The 2007 report included findings from a WA study on prisoner health and mental health (Hobbs et al. 2006). The study found that rates of hospital admissions for mental disorders were approximately twice as high for Indigenous male prisoners and three times as high for Indigenous female prisoners as in the Indigenous population of WA (Hobbs et al. 2006). The high prevalence of mental health problems in prisoners highlighted in the study by Hobbs et al. (2006) is consistent with studies of prisoners in the United Kingdom (Brooke et al. 1996).

The Australian Institute of Criminology (AIC) National Deaths in Custody Program (NDICP) database collects information on the prevalence of mental illness reported among people who die in custody. There were 1344 deaths recorded between 1990 and 2006. Information on the prevalence of mental illness was available in 525 cases (AIC NDICP unpublished). Of these, there were 257 deaths in custody of people with a mental illness and 48 (18.7 per cent) were Indigenous deaths (AIC NDICP unpublished). Indigenous prisoners comprised 23.6 per cent of the prisoner population in 2006 (table 4A.12.5).

Possible future sources of data include:

- a census conducted over a period of two weeks every two years, of people entering prisons and their characteristics. The development work of the census is being undertaken by the Prisoner Health Information Group (AIHW 2006)
- a research project, conducted in Queensland, that collected information on the prevalence of mental illness and disorders such as anxiety, depression and post traumatic stress disorder among Indigenous people in custody (Queensland Government unpublished).

Juveniles in detention

There is no systematic collection of data on the health status of juveniles in detention. Research shows that juvenile detainees are at high risk of suffering mental health problems (BMA 2006; Kessler 2002; Vermeiren 2003). No comparable Indigenous and non-Indigenous data on the rates of mental illness and emotional or mental health problems of juveniles in detention are available for inclusion in this report. The 2007 report included findings from two NSW health surveys that examined the mental health of young people in custody and on community orders (Fasher et al 1997; Kenny et al. 2006; NSW Department of Juvenile Justice 2003).

Some of the findings from the NSW surveys include:

- in 2003, 88 per cent of young people in custody reported mild, moderate or severe symptoms consistent with a clinical mental disorder; 33 per cent reported high or very high psychological distress (implying that they may have a greater than 50 per cent chance of an anxiety or depressive disorder). Population norms suggest that between 11 per cent and 12 per cent of the general population have high to very high scores on the K-10 (NSW Department of Juvenile Justice 2003)⁸
- between 2003 and 2005, 25 per cent of young people serving community orders had experienced a high to very high level of psychological distress. Young people on community orders reported fewer mental health issues and fewer suicide or self-harm attempts than young people in custody (Kenny et al. 2006).⁹

⁸ A total of 319 young people were eligible to participate in the survey. Of this group, 242 young people in custody were surveyed, 102 of whom were Indigenous (42 per cent).

⁹ Indigenous juveniles comprised 20 per cent of the young people surveyed.

Risk of clinically significant emotional and behavioural difficulties in Aboriginal children

The mental wellbeing of children is intimately connected to the emotional and physical wellbeing of their parents (BMA 2006). Risk factors for vulnerability to both mental and physical illness are often transmitted across generations in the absence of interventions to break the cycles of vulnerability (BMA 2006).

There is a paucity of data to describe the mental health and wellbeing of Indigenous children. The 2007 report included findings from the Western Australian Aboriginal Child Health Survey (WAACHS). The WAACHS, conducted in 2000-01, collected data on emotional and behavioural difficulties in Aboriginal children. Some of the findings from the WA study include:

- Indigenous children in remote communities had better mental health than children living in Perth, suggesting that growing up in very remote communities, where adherence to traditional culture and ways of life are strongest, may be protective against emotional and behavioural difficulties in Aboriginal children (Zubrick et al. 2005)
- life stress events were the factor most strongly associated with high risk of clinically significant emotional or behavioural difficulties in Aboriginal children (Zubrick et al. 2005). Families of Aboriginal children report extraordinary levels of stress from events including, death, incarceration, violence and severe hardship. Over one in five Aboriginal children aged 0–17 years (22 per cent) were living in families that had been exposed to 7–14 major life stress events in the 12 months prior to the survey (Silburn et al. 2006).

7.8 Suicide and self-harm

Box 7.8.1 Key messages

- Suicide death rates were higher for Indigenous people (between 10.9 and 42.2 per 100 000 population) than non-Indigenous people (between 8.3 and 15.1 per 100 000 population) in NSW, Queensland, WA and SA and the NT in 2003–07 (figure 7.8.1). Indigenous people aged 25–34 had particularly high suicide rates (between 26.0 and 100.4 per 100 000 people) (figure 7.8.2).
- Suicide rates were significantly higher for Indigenous males (between 19.4 and 76.4 per 100 000) than for non-Indigenous males (between 13.3 and 24.4 per 100 000), and for Indigenous females (between 6.7 and 17.1 per 100 000) than non-Indigenous females (between 3.5 and 5.0 per 100 000) (figure 7.8.3).
- The hospitalisation rate for non-fatal intentional self-harm (age standardised) was higher for Indigenous people (3.5 per 1000) than non-Indigenous people (1.4 per 1000) in 2006-07 (table 7.8.1). There was a slight increase in hospitalisations of Indigenous people for self-harm between 2004-05 and 2006-07 (figure 7.8.4).

Suicide and self-harm cause great grief in both Indigenous and non-Indigenous communities. Studies investigating suicide in Indigenous communities have been undertaken in NSW and the ACT (Tatz 1999), North Queensland (Hunter et al. 2001; Hunter and Harvey 2002), the NT (Measey et al. 2006; Parker and Ben-Tovim 2001) and extensive cross cultural, comparative research carried out in SA in Adelaide's state housing areas (Radford et al. 1991, 1999; Brice 1994).

Many studies (Elliott Farrelly 2004; Hunter et al. 2001; Hunter and Harvey 2002; Parker and Ben-Tovim 2001; Tatz 1999) have suggested that there are significant differences in suicidal behaviour not only between the Indigenous and non-Indigenous populations, but also between different Indigenous communities. This indicates that Indigenous suicide is influenced by a complex set of factors relating to history of dispossession and intergenerational trauma, removal from family, discrimination, resilience, social capital and socio-economic status.

Radford et al. (1999) found high reported attempted suicide levels in non-Aboriginal sole parents living in public housing in Adelaide that were slightly higher than for their Aboriginal equivalents in the same areas — which was associated for both groups with past abuse experience as well as housing and other social and economic issues.

Studies have found that Indigenous suicides appear to occur in clusters, and that the victims may share common age groups, genders and methods

(Elliott-Farrelly 2004). Non-Indigenous suicides also appear to occur in clusters (Marsden 2001). Suicide frequently occurs in communities that have experienced similar losses in the past, and where ‘lifestyles of risk’ are common. Suicide is often impulsive, and may be preceded by interpersonal conflicts (Hunter et al. 2001; Tatz 1999).

Evidence indicates that suicide is most common among young Indigenous men, while suicide attempts seem to be more prevalent for Indigenous women (Elliott-Farrelly 2004).

A study on self-harming behaviour among young Indigenous people (Hunter 1993) found that those who had attempted suicide reported a high level of anxiety and depression. Other researchers have found that mental and behavioural disorders are often associated with an increased risk of self-harm, as is alcohol and substance abuse (Swan and Raphael 1995; Vicary and Westerman 2004). However, other researchers have disputed the purported relationship between mental illness and Aboriginal suicide (Tatz 1999; Reser 1991, cited in Elliott-Farrelly 2004). Section 7.7 of the report presents data on mental health and sections 10.3 and 10.4 of the report presents data on alcohol and drug and other substance abuse.

Environmental, sociocultural and economic risk factors have also been associated with a higher rate of suicide. Relevant family factors may include having parents who are substance dependent, have been imprisoned, or have violent tendencies, particularly if this translates into family violence.

Evidence suggests that intergenerational trauma is a risk factor for Indigenous suicide. This trauma leads to, and results in, poor parenting skills, lack of positive role models, disintegration of family and cultural life, a lack of support networks, and alcohol and substance abuse. Young people growing up in these circumstances have had diminished access to identity-forming structures which help the transition from childhood to adolescence into adulthood and provide a young person, particularly males, with positive role models and coping behaviours in times of conflict (Proctor 2005).

Qualitative research of Indigenous young people in the East Kimberley (Wunan 2008) found that low self esteem, being a victim of sexual abuse and untreated depression were all factors in Indigenous youth suicide. Feelings of hopelessness, loss of culture and discrimination were also associated with suicides by Indigenous young people. Other research in the Kimberley Region found that Aboriginal adolescents were four times more likely (than non-Aboriginal adolescents) to report that a family member had committed suicide (29 per cent to 8 per cent) (Ralph, Hamaguchi and Cox 2006).

Canadian research has found evidence that the presence of certain socio-cultural factors in discrete Indigenous communities, such as efforts to secure land rights, evidence of some community control over education, policing and health significantly reduced the risk of youth suicide in those communities (Chandler and Lalonde 2008).

Unemployment and poor long-term job prospects are considered risk factors for suicide, particularly in regional and remote areas, where a substantial proportion — 67.9 per cent in 2006 — of Indigenous people live (appendix 3, table A.2). Section 4.6 presents data showing the higher unemployment rates and lower labour force participation rates of Indigenous compared to non-Indigenous people.

Programs exist to prevent suicide and mitigate community risk factors. For example, following three suicide clusters between the mid 1980s and mid 1990s, the Yarrabah community in Queensland developed a set of strategies for suicide prevention, intervention, aftercare and life promotion. More information is contained in box 7.8.2.

Box 7.8.2 ‘Things that work’ — Suicide prevention

The **Yarrabah Family Life Promotion Program** (Queensland), established in 1995 is facilitated by the locally-controlled Community Council and Primary Health Care service, and external resources engaged by the community. Life promotion strategies seek to mitigate community risk factors, through training community members in crisis intervention and counselling, a crisis centre and crisis line, one-on-one grief and loss counselling, and family and men’s support groups. Other measures include information for suicide survivors, families of suicide victims, and people who self-harm, workshops on parenting and relationships and the promotion of sport, recreation and cultural activities. Numbers of suicides and incidents of self harm have fallen, as have hospital presentations for accidental trauma and police interventions for alcohol-related problems.

Community ownership of the problem and the solution was fundamental in the success of the Yarrabah program. The community ‘identified the reclamation of ‘spirit’ or responding to the experience of hopelessness, as fundamental to the achievement of health improvement’. While the apparent lack of structure of the program had sometimes been a barrier when applying for funding, formal structure may work to inhibit community engagement where community ownership has not already been established. The program is ongoing with two Life Promotion Officers. One position is currently filled and the second program needs to be recruited due to a vacancy (Baird, Mick-Ramsamy and Percy 1998; Clapham 2004, pp. 68–72, 126–7; Hunter et al. 2001; Mitchell 2000, p. 22; Mitchell 2005, pp. 16–18).

(Continued next page)

Box 7.8.2 (continued)

The Koori Kids Wellbeing Project in Shoalhaven, NSW, is part of the National Suicide Prevention Strategy, funded by the Australian Government Department of Health and Ageing. This project provides a promotion, prevention and early intervention approach to mental health support and suicide prevention for Aboriginal children aged between 3–12 years. There are five key components in the Koori Kids Wellbeing Program. These are:

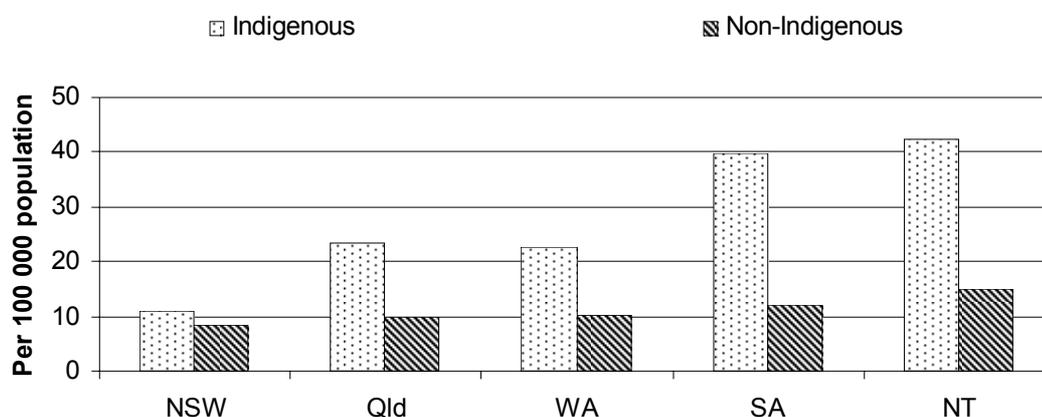
- cultural awareness; programs in primary schools focussing on building cultural identity and pride
- Aussie Optimism — mental health education in classrooms
- individual counselling and psychological support for children with emotional and behavioural difficulties
- parenting education and support
- staff support and training for Aboriginal education officers and other school, health and welfare staff with a focus on child protection, child mental health, Aboriginal mental health and cultural competency.

The Koori Kids project has approximately 60 individual clients but sees up to 200 children per week through parenting, group and classroom education. The project is under constant demand as the area it covers consists of a population of about 100 000, including nearly 1000 Aboriginal children of primary school age. It provides services that are flexible to the community's needs (Australian Government, unpublished).

In SA, **LivingWorks**, offers two suicide intervention programs, which have been delivered to the Indigenous community since 2007. ASIST (Applied Suicide Intervention Skills Training) is a two day workshop and SafeTALK (Suicide Alertness for Everyone — Tell, Ask, Listen, KeepSafe) is a half day workshop for caregivers. LivingWorks programs train a range of people in the community to be able to intervene with someone at risk of suicide.

Feedback from participants, which is collected after each training program, has indicated that SafeTALK and ASIST are effective tools in building capacity to intervene with someone at risk of suicide. An internal program evaluation completed in June 2008 found that the LivingWorks courses help to break down the stigma and taboo surrounding suicide and provide participants with a range of resources, strategies and support to keep people safe. This is consistent with the international body of evidence relating to the initiative. International information on the program is available at <http://www.livingworks.net> (SA Government, unpublished).

Figure 7.8.1 **Average annual intentional self-harm (suicide) deaths indirectly age standardised rate per 100 000, 2003–07**^{a, b, c, d, e}

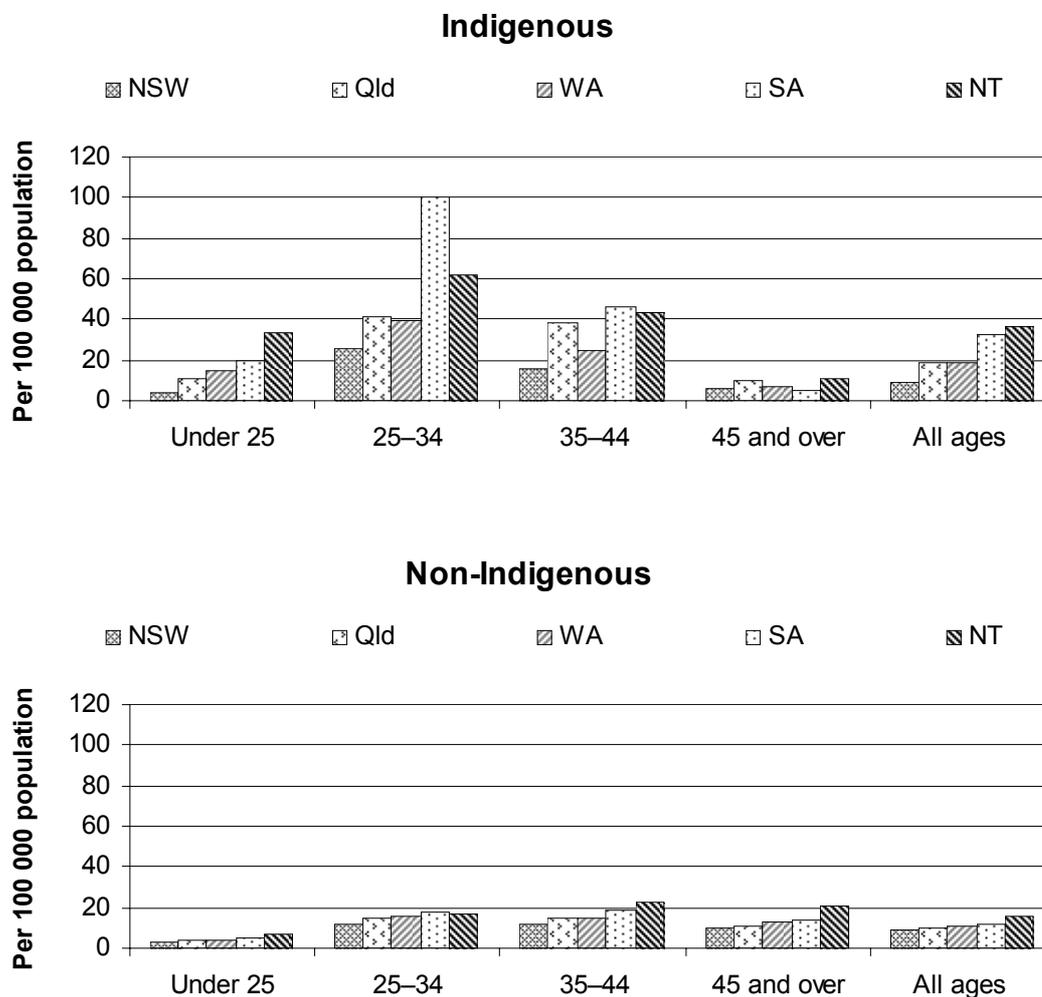


^a Data on deaths of Aboriginal and Torres Strait Islander Australians are affected by differing levels of coverage of deaths identified as Indigenous across states and territories. Care should be exercised in analysing these data, particularly in making comparisons across states and territories and between Indigenous and non-Indigenous data. ^b Data on Indigenous causes of death are not available separately from the ABS for Victoria, Tasmania and the ACT due to a combination of comparatively small numbers and relatively low coverage of Indigenous deaths. ^c Deaths from intentional self-harm are defined as causes of death with ICD 10 codes X60–X84, Y87.0. ^d Data are subject to a degree of uncertainty and apparent differences in mortality estimates between jurisdictions may not be statistically significant. ^e Calculations of rates for the Indigenous population are based on ABS Experimental Projections, Aboriginal and Torres Strait Islander Australians (low series, 2001 base). There are no comparable population data for the non-Indigenous population. ‘Non-Indigenous’ includes deaths with ‘Not stated’ Indigenous status. Calculations of rates for the non-Indigenous population are based on data derived by subtracting Indigenous population projections from total population estimates and should be used with care.

Source: ABS *Causes of Death, Australia*, Cat. no. 3303.0 (unpublished); table 7A.8.1.

- Suicide death rates were higher for Indigenous people (between 10.9 and 42.2 per 100 000 population) than non-Indigenous people (between 8.3 and 15.1 per 100 000 population) in NSW, Queensland, WA and SA and the NT between 2003 and 2007 (figure 7.8.1). Non-age-standardised data are included in table 7A.8.3.

Figure 7.8.2 Average annual intentional self-harm (suicide) death rate by age, 2003–07^{a, b, c, d, e, f, g}

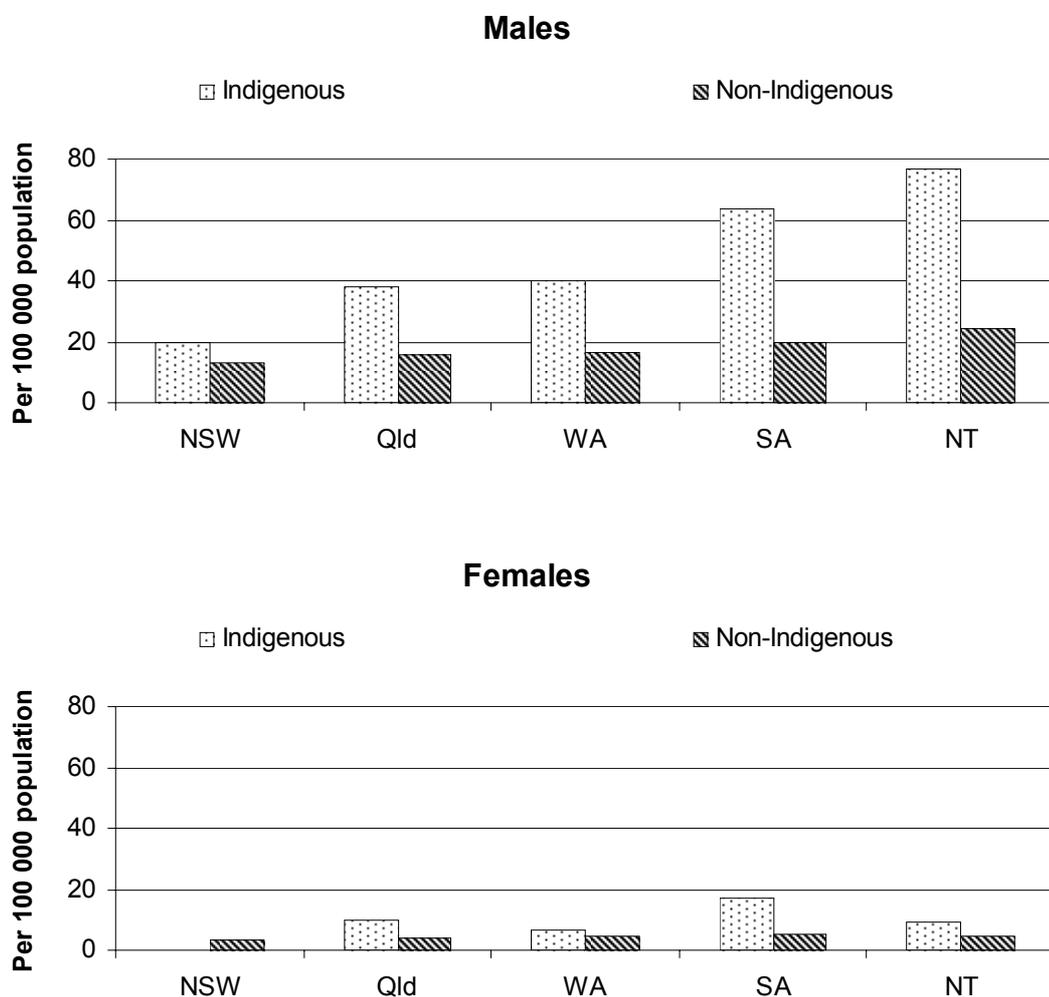


^a Rates are crude rates. ^b All ages includes age not stated. ^c Data on deaths of Aboriginal and Torres Strait Islander Australians are affected by differing levels of coverage of deaths identified as Indigenous across states and territories. Care should be exercised in analysing these data, particularly in making comparisons across states and territories and between Indigenous and non-Indigenous data. ^d Data on Indigenous causes of death are not available separately from the ABS for Victoria, Tasmania and the ACT due to a combination of comparatively small numbers and relatively low coverage of Indigenous deaths. ^e Deaths from intentional self-harm are defined as causes of death with ICD 10 codes X60–X84, Y87.0. ^f Data are subject to a degree of uncertainty and apparent differences in mortality estimates between jurisdictions may not be statistically significant. ^g Calculations of rates for the Indigenous population are based on ABS Experimental Projections, Aboriginal and Torres Strait Islander Australians (low series, 2001 base). There are no comparable population data for the non-Indigenous population. ‘Non-Indigenous’ includes deaths with ‘Not stated’ Indigenous status. Calculations of rates for the non-Indigenous population are based on data derived by subtracting Indigenous population projections from total population estimates and should be used with care.

Source: ABS *Causes of Death, Australia*, Cat. no. 3303.0 (unpublished); table 7A.8.2.

- Suicide death rates varied by age group in 2003–07, with Indigenous people aged 25–34 having particularly high suicide rates (between 26.0 and 100.4 per 100 000 people) (figure 7.8.2).

Figure 7.8.3 **Average annual suicide death rates by sex, indirectly age standardised rate, 2003–07^{a, b, c, d, e}**



a Data on deaths of Aboriginal and Torres Strait Islander Australians are affected by differing levels of coverage of deaths identified as Indigenous across states and territories. Care should be exercised in analysing these data, particularly in making comparisons across states and territories and between Indigenous and non-Indigenous data. **b** Data on Indigenous causes of death are not available separately from the ABS for NSW (for females), Victoria, Tasmania and the ACT due to a combination of comparatively small numbers and relatively low coverage of Indigenous deaths. **c** Deaths from intentional self-harm are defined as causes of death with ICD 10 codes X60–X84, Y87.0. **d** Data are subject to a degree of uncertainty and apparent differences in mortality estimates between jurisdictions may not be statistically significant. **e** Calculations of rates for the Indigenous population are based on ABS Experimental Projections, Aboriginal and Torres Strait Islander Australians (low series, 2001 base). There are no comparable population data for the non-Indigenous population. ‘Non-Indigenous’ includes deaths with ‘Not stated’ Indigenous status. Calculations of rates for the non-Indigenous population are based on data derived by subtracting Indigenous population projections from total population estimates and should be used with care.

Source: ABS *Causes of Death, Australia*, Cat. no. 3303.0 (unpublished); tables 7A.8.1.

In the period 2003–07, after taking into account the different age structures of the two populations, in the five states and territories for which data are available:

-
- suicide rates for Indigenous males were significantly higher (between 19.4 and 76.4 per 100 000) than those for non-Indigenous males (between 13.3 and 24.4 per 100 000) (figure 7.8.3)
 - suicide death rates were also higher for Indigenous females (between 6.7 and 17.1 per 100 000) than non-Indigenous females (between 3.5 and 5.0 per 100 000) (figure 7.8.3)
 - suicide death rates were higher for males than females for non-Indigenous people (figure 7.8.3)
 - suicides as a proportion of all deaths were higher for Indigenous people than for non-Indigenous people (2.4 to 6.7 per cent compared to 1.2 to 4.7 per cent) (table 7A.8.4).

Data on suicides for the period 2001-05 (which were published in the 2007 report) are available in the attachment tables for this section (tables 7A.8.7–10).

Measey et al. (2006) conducted a study of NT suicides between 1981 and 2002, using data from ABS death registrations and the NT's Coroner's office. In the article, the authors' advise caution must be exercised in making any generalisations from their findings, given small numbers, the unusual age distribution of the NT population, the relatively high proportion of Indigenous people in the NT, and the high proportion of the NT population living in remote and very remote areas. They found that:

- the age-adjusted rate of suicide in the NT has been higher than the national rate since 1996, and is rising
- between 1981 and 2002:
 - the incidence of Indigenous suicide had increased since low levels in the early 1980s and had become an increasing problem
 - averaged over the whole period, Indigenous and non-Indigenous rates were similar but Indigenous suicide rates had risen rapidly and were now significantly higher than non-Indigenous rates
 - the suicide rate for Indigenous males rose by 800 per cent while the rate for non-Indigenous males rose by 30 per cent
 - the overall rate of suicide by Indigenous males increased by an annual average of 17.4 per cent, while the Indigenous females rate increased by an annual average of 25.8 per cent
 - amongst Indigenous people, males aged 25–44 years had the highest suicide rate, and males aged 10–24 had the second highest rate

- analysis of data from the Top End¹⁰ between 2000 and 2002 found:
 - a history of diagnosed mental illness (including depression) in 49 per cent of all suicides
 - use of alcohol around the time of death in 56 per cent of all cases, and drug use in a further 16 per cent of all cases
 - 41 per cent of all suicides were by unemployed people.

Table 7.8.1 Age standardised non-fatal hospitalisations for intentional self-harm, NSW, Victoria, Queensland, WA, SA, and public hospitals in the NT, 2006-07^{a, b}

	<i>Number of hospitalisations</i>				<i>Age standardised hospitalisation rate^c</i>	
	<i>Indigenous</i>	<i>Non-Indigenous</i>	<i>Not stated</i>	<i>Total</i>	<i>Indigenous</i>	<i>Non-Indigenous^d</i>
Males	690	10 334	258	11 282	3.2	1.1
Females	881	16 645	320	17 846	3.7	1.7
All people	1 571	26 982	578	29 131	3.5	1.4

^a Non-fatal refers to records where the end of hospitalisation was not equal to 'Died'. Intentional self-harm refers to hospitalisations with at least one external cause reported in X60–X84, based on the ICD-10 classification. ^b Data based on state of usual residence. ^c The rates per 1000 population were directly age standardised using the 2001 Australian standard population. ^d Includes hospitalisations where Indigenous status was recorded as non-Indigenous or not stated.

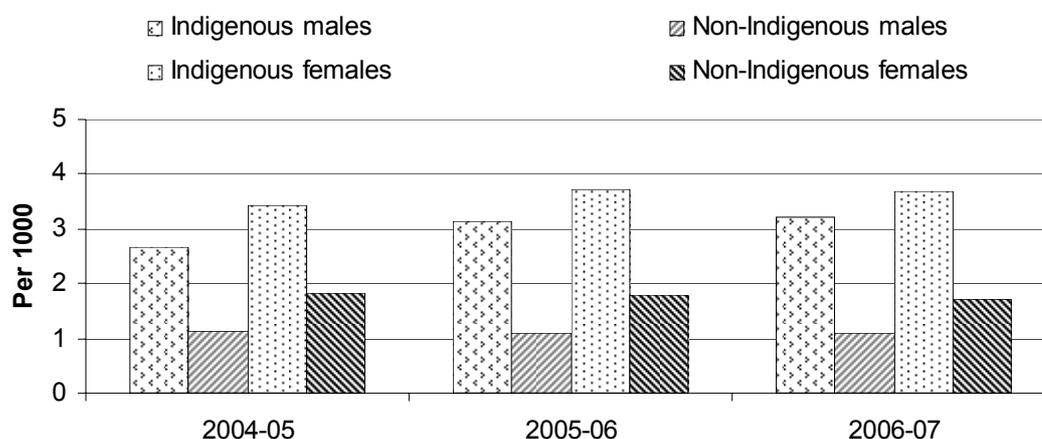
Source: AIHW National Hospital Morbidity Database (unpublished); table 7A.8.5.

In 2006-07:

- the age standardised non-fatal hospitalisation rate for intentional self-harm was higher for Indigenous people (3.5 per 1000) than non-Indigenous people (1.4 per 1000) (table 7.8.1)
- Indigenous females (3.7 per 1000) had a higher age standardised hospitalisation rate for self-harm than Indigenous males (3.2 per 1000). Non-Indigenous females also had a higher age standardised hospitalisation rate for self-harm than non-Indigenous males (1.7 and 1.1, respectively) (table 7.8.1).

¹⁰ The Top End refers to the northern part of the NT.

Figure 7.8.4 Age standardised non-fatal hospitalisations for intentional self-harm, NSW, Victoria, Queensland, SA, WA, and public hospitals in the NT^{a, b, c, d, e}



^a Non-fatal refers to records where the hospitalisation was not equal to 'Died'. Intentional self-harm refers to hospitalisations with at least one external cause in X60–X84, based on the ICD-10 classification. ^b The rates per 1000 population were directly age standardised using the 2001 Australian standard population. ^c Indigenous data are reported for NSW, Victoria, Queensland, WA, SA and the NT only. These six jurisdictions are considered to have the highest level of accuracy of Indigenous identification, although the level of accuracy varies by jurisdiction and hospital. ^d Data based on state of usual residence. ^e Includes hospitalisations where Indigenous status was unknown.

Source: AIHW National Hospital Morbidity Database (unpublished); table 7A.8.5.

- Between 2004-05 and 2006-07, age standardised hospitalisation rates for intentional self-harm increased slightly for Indigenous males and females and did not change much for non-Indigenous males and females, but it is not possible to discern any trends (figure 7.8.4).
- Numbers of Indigenous non-fatal hospitalisations for intentional self-harm are small and changes in rates over time must be interpreted with caution. A longer time series of hospitalisations for intentional self-harm from 2001-02 to 2006-07 for Queensland, WA, SA and the NT showed fluctuations in rates for Indigenous and non-Indigenous males and females, but with no discernible trend (table 7A.8.6).

7.9 Future directions in data

Tobacco consumption and harm

There are limited data on current daily adult Indigenous smokers. This report and previous reports (2005 and 2007) use data on current daily adult smokers from ABS

surveys. The report, *Drug Use among Aboriginal and Torres Strait Islander Peoples: an Assessment of Data Sources* (AIHW 2006) suggested many ways to improve current collections of data on substance use. Some of the suggested improvements are outlined in section 10.7.

The 2008 NATSISS will provide updated information on this topic, with data available from late 2009.

Obesity and nutrition

There are no current data on the prevalence of obesity among Indigenous children, and only limited data are available on their dietary behaviours. The proposed Longitudinal Study of Indigenous Children (LSIC) may collect data on BMI and nutrition.

The 2008 ABS National Aboriginal and Torres Strait Islander Social Survey (NATSISS) included questions on child nutrition. The NATSISS results are expected to be available from late 2009. The 2008 ABS NATSISS did not collect BMI data or information on adult nutrition. The 2010-11 ABS National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) will again provide information on BMI and nutrition for Indigenous people.

Mental health

There are few data from which to draw conclusions about the scope, prevalence and burden of mental health problems in Indigenous people (especially for vulnerable groups of the Indigenous population, such as prisoners, juveniles in detention and children). The key challenges are to improve existing collections, such as improving reporting for rural/remote areas, and to expand data collection instruments, such as Indigenous specific surveys and longitudinal studies of Indigenous children, to incorporate mental health modules. One of the potential benefits of the Juvenile Justice National Minimum Data Set is the possible links with other social and health related data (AIHW 2004).

7.10 References

7.1 Access to primary health care

AHMAC (Australian Health Ministers' Advisory Council) 2008, *Aboriginal and Torres Strait Islander Health Performance Framework 2008 Report*, Department of Health and Ageing, Canberra.

ABS (Australian Bureau of Statistics) 2006, *National Aboriginal and Torres Strait Islander Health Survey 2004-05*, Cat no. 4715.0, Canberra.

— 2007, *Housing and Infrastructure in Aboriginal and Torres Strait Islander Communities, Australia, 2006*, Cat. no. 4710.0, Canberra.

ABS and AIHW 2008, *The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples*, AIHW Cat. no. IHW14, Cat no. 4704.0, Canberra.

AIHW (Australian Institute of Health and Welfare) 2009, *Aboriginal and Torres Strait Islander Health Performance Framework 2008 Report: Detailed Analyses*, Cat. no. IHW 22, Canberra.

— 2008, *Expenditures on Health for Aboriginal and Torres Strait Islander Peoples 2004-05*, Cat. no. HWE 40, AIHW Australian Department of Health and Aged Care, AIHW, Canberra.

— 2005, *Improving the Quality of Indigenous Identification in Hospital Separations Data*, Cat. no. HSE 101, Canberra.

AMA (Australian Medical Association) 2007, *Good News and Best Practice 2007*, <http://www.ama.com.au/node/3229> (accessed 9 December 2008).

Burgess, M. 2003, 'Immunisation: a public health success', *NSW Public Health Bulletin*, vol. 14, no.s 1-2, pp. 1-5.

Cutcliffe, T. 2004, *Take it or Leave it*, Eureka Project, Melbourne.

DOHA (Department of Health and Ageing) 2007, *Awards Showcase Excellence in Indigenous Health Care*, Media release, Canberra, [http://www.health.gov.au/internet/main/publishing.nsf/Content/AC4197BC45E74C47CA25739B0077BB43/\\$File/dept007.pdf](http://www.health.gov.au/internet/main/publishing.nsf/Content/AC4197BC45E74C47CA25739B0077BB43/$File/dept007.pdf), (accessed 22 April 2009).

Marie Stopes International Australia 2005, *Condom Social Marketing Initiative*, <http://www.mariestopes.org.au/country-aust-proj2.html> (accessed 29 March 2007)

Marley, J., Dent, H., Wearne, M., Fitzclarence, C., Siu, K., Nelson, C., Warr, K. and Atkinson, D. 2008, *Better Haemodialysis Outcomes for Kimberley Patients – Aboriginal Community Control in Partnership with a Proactive Urban Tertiary Centre*, Primary Health Care Research and Information Service, <http://www.phcris.org.au/elib/render.php?params=6330> (accessed 4 March 2009).

Marr Mooditj 2007, *Courses Available at Marr Mooditj*, <http://www.marr-mooditj.com.au/courses.htm>, (accessed 22 April 2009).

Paradies, Y. 2007, 'Racism' in Carson, B., Dunbar, T., Chenhall, R.D. and Baillie, R. (eds), *Social Determinants of Indigenous Health*, Allen and Unwin, Sydney.

Paradies, Y., Harris, R. and Anderson, I. 2008, *The Impact of Racism on Indigenous Health in Australia and Aotearoa: Towards a Research Agenda*, Cooperative Research Centre for Aboriginal Health, Darwin.

SCRGSP (Steering Committee for the Review of Government Service Provision) 2007, *Overcoming Indigenous Disadvantage: Key Indicators 2007*, Productivity Commission, Canberra.

7.2 Potentially preventable hospitalisations

AHMAC (Australian Health Ministers' Advisory Council) 2008, *Aboriginal and Torres Strait Islander Health Performance Framework*, Department of Health and Ageing, Canberra.

7.3 Avoidable mortality

- AHMAC (Australian Health Ministers' Advisory Council) 2008, *Aboriginal and Torres Strait Islander Health Performance Framework, 2008 Report*, Canberra.
- AIHW (Australian Institute of Health and Welfare) 2009, *Aboriginal and Torres Strait Islander Health Performance Framework 2008 Report: Detailed Analyses*, Cat. no. IHW 22, Canberra.
- Page, A., Tobias, M., Glover, J., Wright, C., Hetzel, D. and Fisher, E. 2006, *Australian and New Zealand Atlas of Avoidable Mortality*, Public Health Information Development Unit, University of Adelaide, Adelaide and Ministry of Health, New Zealand.
- You, J., Condon, J.R., Zhao, Y. and Guthridge, S. 2009, 'Incidence and survival after acute myocardial infarction in Indigenous and non-Indigenous people in the Northern Territory, 1992–2004', *Medical Journal of Australia*, vol. 190(6), pp. 298302.

7.4 Tobacco consumption and harm

- ABS (Australian Bureau of Statistics) 2006, *Alcohol Consumption in Australia: A Snapshot, 2004-05*, Cat. no. 4832.0.55.001, Canberra.
- AIHW (Australian Institute of Health and Welfare) 2005, *Improving the Quality of Indigenous Identification in Hospital Separations Data*, Cat. no. HSE 101, Canberra.
- 2008, *National Drug Strategy Household Survey: detailed findings 2007*, Cat. no. PHE 107, Canberra.
- AHMAC (Australian Health Ministers' Advisory Council) 2006, *Aboriginal and Torres Strait Islander Health Performance Framework Report 2006*, Canberra.
- 2008, *Aboriginal and Torres Strait Islander Health Performance Framework Report 2008*, Canberra.
- Briggs, V.L., Lindorff, K.J., and Ivers, R.G. 2003, 'Aboriginal and Torres Strait Islander Australians and tobacco', *Tobacco Control*, vol. 12, supplement 2, pp. 5–8.
- Burgess, P., McDonald, J., Djabibba, S., Namunurki, S., Magaldagi, L., Connors, C., Matthews, H. and Thomas, D. 2008, 'Smoke-busters: Maningrida's experience implementing a tobacco control program', *The Chronicle*, vol. 11, no. 4, pp. 8–10.
- CEITC (Centre for Excellence in Indigenous Tobacco Control) 2008, *Indigenous Tobacco Control in Australia: Everybody's Business*, http://www.ceitc.org.au/system/files/CEITC+Roundtable+Report_web_0.pdf (accessed 18 May 2009)
- COAG (Council of Australian Governments) 2009, *National Indigenous Reform Agreement*, http://www.coag.gov.au/intergov_agreements/federal_financial_relations/docs/IGA_FFR_ScheduleF_National_Indigenous_Reform_Agreement.pdf (accessed 9 February 2009).
- Cunningham, J., Rumbold, A.T., Zhang, X. and Condon, J.R. 2008, 'Incidence, aetiology, and outcomes of cancer in Indigenous peoples in Australia', *The Lancet Oncology*, vol. 9, no. 6, pp. 585–595.
- Graham, S., Jackson Pulver, L.R., Wang, Y.A., Kelly, P.M., Laws, P.J., Grayson, N. and Sullivan, E.A. 2007, 'The Urban–Remote Divide for Indigenous Perinatal Outcomes', *The Medical Journal of Australia*, vol. 186, no. 10, pp. 509–512.
- Ivers, R. 2001, *Indigenous Australians and Tobacco: A Literature Review*, Cooperative Research Centre for Aboriginal and Tropical Health, Darwin.
- Ivers, R. 2003, 'A review of tobacco interventions for Indigenous Australians', *Australian and New Zealand Journal of Public Health*, vol. 27, no. 3, pp. 294–299.

-
- NHMRC (National Health and Medical Research Council) 2001, *Australian Alcohol Guidelines, Health Risks and Benefits*, Australian Government, Canberra, <http://www.nhmrc.gov.au/publications/synopses/ds9syn.htm>, (accessed 30 March 2005).
- Pasco, J.A., Williams, L.J., Jacka, F.N., Ng, F., Henry, M.J., Nicholson, G.C. and Kotowicz, M.A. 2008, 'Tobacco smoking as a risk factor for major depressive disorder: population-based study', *The British Journal of Psychiatry*, vol. 193, pp. 322–326.
- Thomas, D.P., Briggs, V., Anderson, I. and Cunningham, J. 2008, 'The social determinants of being an Indigenous non-smoker', *Australian and New Zealand Journal of Public Health*, vol. 32, no. 2, pp. 110–116.
- Vos, T., Barker, B., Stanley, L. and Lopez, A.D. 2007, *The Burden of Disease and Injury in Aboriginal and Torres Strait Islander Peoples 2003*, School of Population Health, The University of Queensland, Brisbane.
- WHO (World Health Organization) 2004, *The Millennium Development Goals and Tobacco Control: An Opportunity for Global Partnership*, Geneva, Switzerland, http://www.who.int/tobacco/research/economics/publications/mdg_book/en/index.html (accessed 29 August 2006).

7.5 Obesity and nutrition

- ABS (Australian Bureau of Statistics) 2008, *Overweight and Obesity – Aboriginal and Torres Strait Islander People: A Snapshot, 2004-05*, Cat. no. 4722.0.55.006, Canberra.
- and AIHW (Australian Institute of Health and Welfare) 2008, *The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples*, ABS Cat. no. 4704.0, AIHW Cat. no. IHW 21, Canberra.
- AHMAC (Australian Health Ministers' Advisory Council) 2008, *Aboriginal and Torres Strait Islander Health Performance Framework Report 2008*, Canberra.
- AIHW (Australian Institute of Health and Welfare) 2009, *Aboriginal and Torres Strait Islander Health Performance Framework, 2008 Report: Detailed Analyses*, Cat. no. IHW 22, Canberra.
- AMA (Australian Medical Association) 2005, *Position Statement on Nutrition*, <http://www.ama.com.au/node/2237> (accessed 26 February 2009).
- ARACY (Australian Research Alliance for Children and Youth) 2008, *The Wellbeing of Young Australians : Technical Report*, Canberra.
- COAG (Council of Australian Governments) 2009, *National Indigenous Reform Agreement*, http://www.coag.gov.au/intergov_agreements/federal_financial_relations/docs/IGA_FFR_ScheduleF_National_Indigenous_Reform_Agreement.pdf (accessed 9 February 2009).
- Ferguson, J., Rola-Rubzen, F. and McGregor, M. 2009, Desert Knowledge Cooperative Research Centre Submission to The House of Representatives Standing Committee on Aboriginal and Torres Strait Islander Affairs Inquiry into Community Stores in Remote Aboriginal and Torres Strait Islander Communities, http://desertknowledgecrc.com.au/news/downloads/DKCRC_Submission-to-The-House-of-Representatives-Standing-Committee-on-Aboriginal-and-Torres-Strait-Islander-Affairs-Inquiry-into-Community-Stores-in-Remote-Aboriginal-and-Torres-Strait-Islander-Communities.pdf (accessed 4 March 2009).
- Harrison, M.S., Coyne, T., Lee, A.J., Leonard, D., Lawson, S., Groos, A. and Ashton, B.A. 2007, 'The increasing cost of the basic foods required to promote health in Queensland', *The Medical Journal of Australia*, vol. 186, no. 1, pp. 9–14.

-
- National Aboriginal and Torres Strait Islander Nutrition Working Party 2001, *National Aboriginal and Torres Strait Islander Nutrition Strategy and Action Plan 2000–2010*, National Public Health Partnership, Melbourne.
- NHMRC (National Health and Medical Research Council) 2003a, *Dietary Guidelines for Australian Adults*, Canberra.
- 2003b, *Dietary Guidelines for Children and Adolescents in Australia*, Canberra.
- O’Dea, K. 1984, ‘Marked improvement in carbohydrate and lipid metabolism in diabetic Australian Aborigines after temporary reversion to traditional lifestyle’, *Diabetes*, vol. 33, pp. 596–603.
- 2008, Reducing the burden of diabetes among Aborigines and Torres Strait Islanders, Presentation given at the Aboriginal Health Research Conference ‘Strong Foundations... Strong Future’, Sydney, 29–30 April.
- Piers, L.S., Rowley, K.G., Soares, M.J., O’Dea, K. 2003, ‘Relation of adiposity and body fat distribution to body mass index in Australians of Aboriginal and European ancestry’, *European Journal of Clinical Nutrition*, vol. 58, no. 8, pp. 956–963.
- Queensland Health 2006, *The 2006 Queensland Health Food Access Basket Survey*, <http://www.health.qld.gov.au/ph/documents/hpu/33125.pdf> (accessed 26 February 2009).
- Tomkins, A. 2001, ‘Vitamin and Mineral Nutrition for the Health and Development of the Children of Europe’, *Public Health Nutrition*, vol. 4, no. 1A, pp. 91–99.
- Vos, T., Barker, B., Stanley, L. and Lopez, A.D. 2007, *The Burden of Disease and Injury in Aboriginal and Torres Strait Islander Peoples 2003*, School of Population Health, The University of Queensland, Brisbane.
- WHO (World Health Organization) 2000, *Obesity: Preventing and Managing the Global Epidemic*, WHO Technical Report Series No. 894, Geneva.
- 2005, *World Health Report 2005: Make Every Mother and Child Count*, Geneva.
- 2008, *Closing the Gap in a Generation: Health Equity through Action on the Social Determinants of Health*, Final Report of the Commission on Social Determinants of Health, Geneva.
- Zubrick, S.R., Lawrence, D.M., Silburn, S.R., Blair, E., Milroy, H., Wilkes, T., Eades, S., D’Antoine, H., Read, A., Ishiguchi, P., Doyle, S. 2004, *The Western Australian Aboriginal Child Health Survey: the Health of Aboriginal Children and Young People*, Telethon Institute for Child Health Research, Perth.

7.6 Tooth decay

- ABS and AIHW 2008, *The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples 2008*, ABS Cat. no. 4704.0, AIHW Cat. no. IHW 21, Canberra.
- AHMAC (Australian Health Ministers’ Advisory Council) 2008, *Aboriginal and Torres Strait Islander Health Performance Framework Report 2008*, Canberra.
- AIHW 2009, *Aboriginal and Torres Strait Islander Health Performance Framework, 2008 Report: Detailed analyses*, Cat. no. IHW 22, Canberra.
- Jackson Pulver L. R., Fitzpatrick S., Ritchie J., Norrie M., Kennedy G. and Windt U. 2009, *Evaluation of the ‘Filling the Gap’ Indigenous Dental Program*, Sydney, University of NSW (forthcoming).

-
- Jamieson, L., Armfield, J.M., Roberts-Thomson, K.F., 2006, 'The role of location in Indigenous and non-Indigenous child oral health', *Journal of Public Health Dentistry*, 66, pp. 123–30.
- Jamieson, L.M., Armfield, J.M. and Roberts-Thomson, K.F. 2007, *Oral Health of Aboriginal and Torres Strait Islander Children*, AIHW Cat. no. DEN 167, Canberra.
- NACOH (National Advisory Committee on Oral Health) 2004, *Healthy Mouths Healthy Lives: Australia's National Oral Health Plan 2004–2013*, South Australian Department of Health, Adelaide.
- Roberts-Thomson, K.F. and Do, L. 2007, 'Oral health status', in Slade, G.D., Spencer, A.J., Roberts-Thomson, K.F. (eds), *Australia's Dental Generations: the National Survey of Adult Oral Health 2004–06*, AIHW Cat. no. DEN 165. AIHW, Canberra, pp. 81–142.
- Slade, G.D., Spencer, A.J., Roberts-Thomson, K.F. (eds) 2007, *Australia's Dental Generations: the National Survey of Adult Oral Health 2004–06*, AIHW Cat. no. DEN 165. AIHW, Canberra, pp. 11–36.
- Spencer, J.A. and Harford J. 2007, 'Dental care', in Slade, G.D., Spencer, A.J., Roberts-Thomson, K.F. (eds), *Australia's Dental Generations: the National Survey of Adult Oral Health 2004–06*, AIHW Cat. no. DEN 165. AIHW, Canberra, pp. 163–172.
- SCRGSP (Steering Committee for the Review of Government Service Provision) 2007, *Overcoming Indigenous Disadvantage: Key Indicators 2007*, Productivity Commission, Canberra.

7.7 Mental health

- ABS (Australian Bureau of Statistics) 1998, *Mental Health and Wellbeing: Profile of Adults, Australia, 1997*, Cat. no. 4326.0, Canberra.
- 2008, *National Survey of Mental Health and Wellbeing: Summary of Results, 2007*, Cat. no. 4326.0, Canberra.
- AHMAC (Australian Health Ministers' Advisory Council) 2004, *National Strategic Framework for Aboriginal and Torres Strait Islander Mental Health and Social and Emotional Wellbeing 2004–2009*, South Australia.
- AMA (Australian Medical Association) 2006, *Undue Punishment? Aboriginal and Torres Strait Islanders in Prison: An Unacceptable Reality*, AMA Report Card, Canberra.
- AIHW (Australian Institute of Health and Welfare) 2001, *A Prisoner Health Information System*, Cat. no. PHE 32, Canberra.
- 2004, *Juvenile Justice: A New National collection*, AIHW Cat. no. AUS 52, Canberra.
- 2005, *Improving the Quality of Indigenous Identification in Hospital Separations Data*, Cat. no. HSE 101, Canberra.
- 2006, *Towards a National Prisoner Health Information System*, Cat. no. PHE 79, Canberra.
- 2008, *Mental Health Services in Australia 2005–06*, Cat. no. HSE 56, Canberra.
- 2009, *Measuring the Social and Emotional Wellbeing of Aboriginal and Torres Strait Islander Peoples*, Cat. no. IHW 24, Canberra.
- Australian Health Ministers 2003, *National Mental Health Plan 2003–2008*, Canberra.
- Blair, E., Zubrick, S. and Cox, A. 2005, 'The Western Australian Aboriginal Child Health Survey: findings to date on adolescents', *The Medical Journal of Australia*, vol. 183, no. 8, pp. 433–435.

-
- BMA (British Medical Association) 2006, *Child and Adolescent Mental Health: A Guide for Healthcare Professionals*, United Kingdom.
- Brooke, D., Taylor, C., Gunn, J. and Maden, A. 1996, 'Point prevalence of mental disorder in unconvicted male prisoners in England and Wales', *British Medical Journal*, vol. 313, pp. 1524–1527.
- Butler, T. 1997, *Preliminary Findings of the New South Wales Inmate Health Survey*, Corrections Health Service, Sydney.
- and Allnut, S. 2003, *Mental Illness Among New South Wales' Prisoners*, Corrections Health Service, Sydney.
- and Milner, L. 2003, *The 2001 New South Wales Inmate Health Survey*, Corrections Health Service, Sydney.
- DHA (Department of Health and Ageing) 2002, *National Mental Health Report 2002*, Australian Government, Canberra.
- DHAC (Australian Government Department of Health and Aged Care) and AIHW (Australian Institute of Health and Welfare) 1999, *National Health Priority Areas Report: Mental Health 1998*, AIHW Cat. no. PHE 13, Canberra.
- Fazel, S. and Danesh, J. 2002, 'Serious mental disorder in 23,000 prisoners: a systematic review of 62 surveys', *The Lancet*, vol. 359, pp. 545–550.
- Fasher, A.M., Dunbar, M., Rothenbury, B.A., Bebb, D.K. and Young S.J.W. 1997, 'The health of a group of young Australians in a New South Wales juvenile justice detention centre: a pilot study', *Journal of Paediatrics and Child Health*, vol. 33, pp. 426–442.
- Harris, E.C. and Barraclough, B. 1997, 'Suicide as an outcome for mental disorders: a meta-analysis', *The British Journal of Psychiatry*, vol. 170, pp. 205–28.
- Harrison, N. and Watson, C. 2009, *New South Wales Aboriginal Mental Health Worker Training Program: Implementation Review*, Cooperative Research Centre for Aboriginal Health, Darwin.
- Hobbs, M., Krazlan, K., Ridout, S., Mai, Q., Knuiman, M. and Chapman, R. 2006, *Mortality and Morbidity in Prisoners After Release from Prison in Western Australia 1995–2003*, Trends and Issues in Crime and Criminal Justice, No. 320, Australian Institute of Criminology, Canberra.
- Hockings, B.A., Young, M., Falconer, A. and O'Rourke, P.K. 2002, *Queensland Women Prisoners' Health Survey*, Department of Corrective Services, Brisbane.
- James, M. 2004, 'Strategies to Support Indigenous Young People', *Australian Prospect*, <http://www.australianprospect.com.au> (accessed on 29 April 2004).
- Kenny, D.T., Nelson, P., Butler, T., Lennings, C., Allerton, M., and Champion, U. 2006, *NSW Young People on Community Orders Health Survey 2003-2006: Key Findings Report*, The University of Sydney, Sydney.
- Kessler, C. 2002, 'Need for attention to mental health of young offenders: commentary', *The Lancet*, vol. 359, pp. 1965–7.
- Moscicki, E.K. 1997, 'Identification of suicide risk factors using epidemiologic studies', *Psychiatric Clinics of North America*, vol. 20, no. 3, pp. 499–517.
- NATSIHC (National Aboriginal and Torres Strait Islander Health Council) 2003, *National Strategic Framework for Aboriginal and Torres Strait Islander Health*, Australian Health Ministers' Advisory Council, Canberra.

— 2004, *National Strategic Framework for Aboriginal and Torres Strait Islander Mental Health and Social and Emotional Wellbeing 2004–2009*, Australian Health Ministers' Advisory Council, Canberra.

NSW Department of Juvenile Justice 2003, *NSW Young People in Custody Health Survey. Key Findings Report, 2003*, NSW.

Procter, N. 2005, 'Parasuicide, self-harm and suicide in Aboriginal people in rural Australia: a review of the literature with implications for mental health nursing practice', *International Journal of Nursing Practice*, vol. 11, no. 5, pp. 237–241.

Rajkumar, S. and Hoolahan, B. 2004, 'Remoteness and issues in mental health care: experience from rural Australia', *Epidemiologia e Psichiatria Sociale*, vol. 13, no. 2, pp. 78–82.

NT Select Committee on Substance Abuse in the Community 2004, *Petrol Sniffing in Remote Northern Territory Communities*, Legislative Assembly of the Northern Territory, Darwin.

— 2007, *Substance Abuse in Remote Communities: Confronting the Confusion and Disconnection*, Legislative Assembly of the Northern Territory, Darwin.

Siegel, N. 2003, The interaction between petrol sniffers and bush court in Aboriginal communities, paper presented at the Inhalant Use and Disorder Conference convened by the Australian Institute of Criminology, Townsville, 7–8 July.

Silburn, S.R., Zubrick, S.R., De Maio, J.A., Shepherd, C., Griffin, J.A., Mitrou, F.G., Dalby, R.B., Hayward, C. and Pearson, G. 2006, *The Western Australian Aboriginal Child Health Survey: Strengthening the Capacity of Aboriginal Children, Families and Communities*, Curtin University of Technology and Telethon Institute for Child Health Research, Perth.

Swan, P. and Raphael, B. 1995, *Ways Forward: National Consultancy Report on Aboriginal and Torres Strait Islander Mental Health*, Australian Government Publishing Service, Canberra.

Tsey, K., Whiteside, M., Daly, S., Deemal, A., Gibson, T., Cadet-James, Y., Wilson, A., Santhanam, R. and Haswell-Elkins, M. 2005, 'Adapting the "Family Wellbeing" empowerment program to the needs of remote Indigenous school children', *Australian and New Zealand Journal of Public Health*, vol. 29, no. 2, pp. 112–116.

Vermeiren, R. 2003, 'Psychopathology and delinquency in adolescents: a descriptive and developmental perspective', *Clinical Psychology Review*, vol. 23 no. 2, pp. 277–318.

Victorian Department of Justice 2003, *Victorian Prisoner Health Study*, Department of Justice, Melbourne.

Zubrick, S.R., Silburn, S.R., Lawrence, D.M., Mitrou, F.G., Dalby, R.B., Blair, E.M., Griffin, J., Milroy, H., De Maio, J.A., Cox, A. and Li, J. 2005, *The Western Australian Aboriginal Child Health Survey: The Social and Emotional Wellbeing of Aboriginal Children and Young People*, Curtin University of Technology and Telethon Institute for Child Health Research, Perth.

7.8 Suicide and self-harm

Baird, L., Mick-Ramsamy, L. and Percy, F. 1998, *Yarrabah Community Multi-purpose Primary Health Care Service Feasibility Study: Final Report*. Yarrabah Health Council, Yarrabah.

Brice G. 1994, *Investigating Self-harm: a Reflexive and Historical, Sociological Analysis of Aboriginal and Non-Aboriginal Social Health in Urban Australia* (abbr.), Research Masters thesis, Flinders University of South Australia (Sociology Discipline).

Chandler, M. and Lalonde, C. 2008, 'Cultural continuity as a moderator of suicide risk among Canada's First Nations', in Kirmayer, L. & Valaskakis, G. (eds.), *Healing Traditions, The Mental Health of Canadian Aboriginal Peoples: Transformations, Identity, and Community*,

-
- University of British Columbia Press, draft chapter available on web at <http://web.uvic.ca/~lalonde/manuscripts/2004Transformations.pdf> (accessed 20 February 2009).
- Clapham, K. 2004, *Injury Prevention Activity Among Aboriginal and Torres Strait Islander Peoples, Volume II: Programs, Projects and Actions*, Department of Health and Ageing, Canberra, pp. 68–72, 126–7.
- Elliott-Farrelly T. 2004, 'Australian Aboriginal suicide: the need for an Aboriginal suicidology?', *Australian e Journal for Advancement of Mental Health* 3(3), <http://www.auseinet.com/journal/vol3iss3/elliottfarrelly.pdf> (accessed 8 April 2005).
- Hunter, E. 1993, *Aboriginal Health and History: Power and Prejudice in Remote Australia*, Cambridge University Press, Melbourne.
- Hunter, E. and Harvey, D. 2002, 'Indigenous suicide in Australia, New Zealand, Canada and the United States', *Emergency Medicine*, vol. 14 (1), pp.14–23.
- Hunter, E., Reser, J., Baird, M. and Reser, P. 2001, *An Analysis of Suicide in Indigenous Communities of North Queensland: the Historical, Cultural and Symbolic Landscape*, Commonwealth Department of Health and Aged Care, Canberra.
- Marsden, P. 2001, 'Is Suicide Contagious? A Case Study in Applied Memetics Journal of Memetics', *Evolutionary Models of Information Transmission*, 2001, vol. 5 issue 1.
- Measey, M.L., Li, S.Q., Parker, R. and Wang, Z. 2006, 'Suicide in the Northern Territory, 1981–2002', *Medical Journal of Australia*, vol. 185 (6), pp. 315–9.
- Mitchell, P. 2000, 'Yarrabah, a success story in community empowerment', *Youth Suicide Prevention Bulletin No. 4*, Australian Institute of Family Studies, <http://www.aifs.gov.au/institute/pubs/ysp/bulletin4.pdf> (accessed 5 January 2006).
- Mitchell, S. (ed.) 2005, *Mental Health and Wellbeing: Small Grants Storybook*, Adelaide: The Australian Network for Promotion, Prevention and Early Intervention for Mental Health (Auseinet), pp. 16–18.
- Parker, R. and Ben-Tovim, D.I. 2001, 'A study of factors affecting suicide in Aboriginal and 'other' population in the Top End of the Northern Territory through an audit of coronial records', *Australian and New Zealand Journal of Psychiatry*, vol. 36, no. 3, pp. 404–410.
- Proctor, N. 2005. 'Parasuicide, self-harm and suicide in Aboriginal people in rural Australia: a review of the literature with implications for mental health nursing practice', *International Journal of Nursing Practice* vol. 23, no. 1, pp. 237–341.
- Radford, J., Brice, G., Harris, R., Van Der Byl, M., Monten, H., McNeece-Neeson, M. and Hassan, R. 1999, The 'Easy Street' myth: self harm among Aboriginal and non-Aboriginal female sole parents in urban state housing', *Australian and New Zealand Journal of Public Health*, vol. 23, no. 1, pp. 77–85.
- Radford J., Harris D., Brice G., Van der Byl, M., Monten, H., Matters D., Neeson, M., Bryan, L. and Hassan, R. 1991, *Taking Control: a Joint Study of Aboriginal Social Health in Adelaide with Particular Reference to Stress & Destructive Behaviours*, Department of Primary Health Care, Flinders University of South Australia.
- Ralph, N., Hamaguchi, K., and Cox, M. 2006, *Transgenerational Trauma, Suicide and Healing from Sexual Abuse in the Kimberley Region, Australia*, http://www.pimatisiwin.com/index.php?articles_id=70&act=descriptor (accessed 22 April 2009).
- Reser, J. 1991, 'Aboriginal mental health: conflicting cultural perspectives', cited in Elliott Farrelly T. 2004, 'Australian Aboriginal suicide: the need for an Aboriginal suicidology?', *Australian*

e Journal for Advancement of Mental Health 3(3), <http://www.auseinet.com/journal/vol3iss3/elliottfarrelly.pdf> (accessed 8 April 2005).

Swan, P. and Raphael, B. 1995, *Ways Forward, National Aboriginal and Torres Strait Islander Mental Health Policy*, National Consultancy Report, AGPS, Canberra.

Tatz, C. 1999, *Aboriginal Suicide is Different — Aboriginal Youth Suicide in New South Wales, the Australian Capital Territory and New Zealand: Towards a Model of Explanation and Alleviation*, Criminology Research Council, <http://www.aic.gov.au/crc/reports/tatz/> (accessed on 8 April, 2005).

Vicary, D. and Westerman, T. 2004, 'That's just the way he is: some implications of Aboriginal mental health beliefs', *Australian e-Journal for the Advancement of Mental Health*, vol. 3, issue 3, www.auseinet.com/journal/vol3iss3/vicarywesterman.pdf (accessed 27 October 2006).

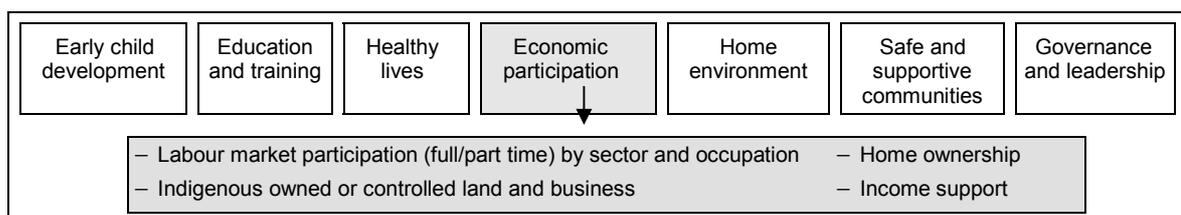
Wunan, 2008, *Job Aspirations of Young People in the East Kimberley: Making New Tracks*, http://www.wunan.org.au/research/JobAspirations_2008.pdf (accessed 22 April 2009).

7.9 Future directions in data

AIHW (Australian Institute of Health and Welfare) 2006, *Drug Use Among Aboriginal and Torres Strait Islander Peoples: An Assessment of Data Sources*, Cat. no. PHE 76, Canberra.

8 Economic participation

Strategic areas for action



The extent to which people participate in the economy is closely related to their living standards. Many aspects of work affect people's wellbeing, such as hours worked, job satisfaction and security, levels of remuneration, opportunities for self development and interaction with people outside the home. Having a job or being involved in a business activity not only leads to improved incomes for families and communities (which has a positive influence on health and education of children), it also enhances self-esteem and reduces social alienation. Home ownership is an important positive indicator of wealth and saving, while reliance on income support is correlated with the disadvantages that accompany low socioeconomic status, and can contribute to long term welfare dependency.

Many COAG targets and headline indicators reflect the importance of economic participation:

- employment (section 4.6)
- household and individual income (section 4.9).

Other COAG targets and headline indicators can directly influence economic development outcomes:

- early childhood education (section 4.3)
- reading, writing and numeracy (section 4.4)
- disability and chronic disease (section 4.8)
- imprisonment and juvenile detention rates (section 4.12).

Outcomes in the economic development strategic area can be affected by outcomes in several other strategic areas for action, or can influence outcomes in other areas:

-
- early child development (basic skills for life and earning) (chapter 5)
 - education and training (school attendance and attainment, transition from school to work) (chapter 6)
 - healthy lives (access to primary health, potentially preventable hospitalisations, avoidable mortality) (chapter 7)
 - safe and supportive communities (alcohol and drug and substance misuse and harm) (chapter 10)
 - governance and leadership (governance capacity and skills) (chapter 11).

The indicators in this strategic area for action focus on the key factors that contribute to positive economic outcomes, as well as measures of the outcomes themselves:

- labour market participation — this section reports on the types of employment undertaken by Indigenous people, including employment by full time and part time status, by sector, industry and occupation (section 8.1)
- Indigenous owned or controlled land and business — land can be important to Indigenous people for a range of cultural, social and economic reasons. The economic benefits flowing from land will depend on factors such as location, property rights, governance arrangements of landholding bodies, and the aspirations of the Indigenous landowners. Not all Indigenous businesses are necessarily associated with land — Indigenous entrepreneurship has flourished in areas including art, tourism and native foods, but also in more mainstream industries. This section reports data on Indigenous owned and controlled land, and some case studies on Indigenous business (section 8.2)
- Home ownership — home ownership, although not an aspiration of all Indigenous people, is an important indicator of wealth and saving. (The availability of appropriate, affordable and secure housing, which is a more immediate concern for many Indigenous people, is covered in section 9.1, Overcrowding in housing). Measuring Indigenous home ownership can be complex, and this section reports on the proportion of Indigenous people living in a home owned or being purchased by a member of their household (section 8.3)
- Income support — a high proportion of Indigenous people receive most of their individual income from government pensions and allowances. Although provision of income support can prevent individuals from experiencing deprivation, recipients of income support fall within the poorest socio-economic groups, with associated disadvantages (see discussion of individual and household income in section 4.9). There is also a risk that high rates of able bodied people of working age on income support can induce long term

dependence. This section reports on the main sources of household and individual income (section 8.4).

Attachment tables

Attachment tables for this chapter are identified in references throughout this chapter by an 'A' suffix (for example, table 8A.1.1). These tables can be found on the Review web page (www.pc.gov.au/gsp), or users can contact the Secretariat directly.

8.1 Labour market participation (full time/part time) by sector and occupation

Box 8.1.1 Key messages

- Employment rates for Indigenous people in the labour force increased from 80.0 per cent to 84.4 per cent between 2001 and 2006. Employment rates for non-Indigenous people also increased, from 92.7 per cent to 94.9 per cent. Overall, the gap narrowed from 12.7 to 10.5 percentage points (figure 8.1.1).
- In 2006:
 - employment rates for Indigenous people were lower than for non-Indigenous people in all age groups, states and territories, and remoteness areas (figures 8.1.3, 8.1.4 and table 8A.1.2)
 - 25.8 per cent of employed Indigenous people worked in the public sector, compared to 14.7 per cent of employed non-Indigenous people (figure 8.1.5)
 - 59.2 per cent of employed Indigenous people were employed full time, compared to 69.1 per cent of employed non-Indigenous people (figure 8.1.7)
 - Indigenous people were less likely than non-Indigenous people to be employed as managers and administrators and professionals, and more likely to be employed as labourers (figure 8.1.6).

Employment is an important indicator of economic participation. Outcomes commonly associated with employment include increased income levels, better health and improved education outcomes, leading to enhanced self esteem and increased social integration. COAG has identified closing the gap in employment outcomes between Indigenous and non-Indigenous people in a decade as one of its six key targets. A number of issues associated with unemployment and labour force participation are discussed in section 4.6. This indicator examines employment in more detail by full time or part time status, sector, industry and occupation.

The types of employment that people are engaged in may influence their wellbeing, by affecting remuneration and job satisfaction. Employment in certain industries and occupations could also provide an indication of people's skill levels and education. High levels of part time employment could mask high levels of underemployment, which has been found to be particularly common among Indigenous employees (Hunter 2002).

Box 8.1.2 provides examples of some positive steps that have been taken to improve Indigenous employment outcomes.

Box 8.1.2 'Things that work' — Improving Indigenous employment

The **Workstart Program** is an intensive, self paced 13 week pre-employment program for Indigenous trainees in the Pilbara. It is part of a memorandum of understanding (MOU) between the Aboriginal Economic Development directorate of the Department of Commerce (formerly the Department of Industry and Resources) and Rio Tinto Iron Ore (RTIO).

The Workstart Program includes literacy, drivers' licences, alcohol and drug training, fitness for work, safety training, self development and personal financial management.

Successful completion of the Workstart Program secures the trainee a job with RTIO or a contractor, or trainees may choose to secure employment elsewhere.

'Aboriginal work ambassadors', who are culturally respected and accepted by traditional land owners, provide a link between RTIO and the traditional owners. The ambassadors promote employment and other economic opportunities to traditional owners as individuals, families and groups, and provide mentoring and support to Aboriginal people who commit to work or programs that prepare them for work.

RTIO and AED have developed a flexible employment arrangement for traditional owners to work on mine sites, and is trialling it at RTIO's West Angelas operation in the Pilbara.

In the first year of the MOU, 59 Aboriginal trainees completed the Workstart Program and 58 were placed in employment with RTIO or other local employers (WA Government, unpublished).

Rio Tinto Indigenous employment programs have helped increase the proportion of Indigenous employees in Rio Tinto's Australian workforce from 0.5 per cent in the mid 1990's to eight per cent (1500 employees) in 2008. Rio Tinto has included education and training as part of employment, helping Indigenous employees overcome educational barriers. Rio Tinto's retention rate for new Indigenous employees beyond 26 weeks is 80 per cent.

(Continued next page)

Box 8.1.2 (continued)

Rio Tinto has specifically tailored recruitment practices, including one and a half day assessment programs, which provide applicants with feedback on their skill levels and guidance on the training they would require to be employed. Rio Tinto has also been involved in the Australian Government's National Indigenous Cadetship Project (NICP). Since 2000, Rio Tinto has supported 58 students in various fields of study. 13 cadets have now graduated and are working in professional roles, eight of which are at Rio Tinto (Rio Tinto 2008).

The **Learning to Earning** program (WA) is a twelve week pre-vocational course that includes structured workplace experience with industry as part of the accredited Certificate I training in engineering and plant processing. The Learning to Earning program was piloted in 2008 in the Kwinana Industrial area, 30 km south of Perth, due to the region's high number of resident Aboriginal jobseekers (there are an estimated 400 jobseekers out of a population of 1350 Aboriginal people living in the Kwinana/Rockingham region).

The pilot program was established by the Kwinana Industry Education Partnership (KIEP)¹ and the registered training organisation, Challenger TAFE. Participants were supported during the course by an Indigenous Programs Support Officer employed through KIEP.

Of the 16 participants in the first course delivered in 2008, nine found entry level employment. A further 17 Aboriginal people, who did not participate in the program but contacted KIEP, found employment in Kwinana Industrial Centre (KIC) member companies, associated businesses, or in the local commercial sector (WA Government, unpublished).

The **Aboriginal Employment Strategy (AES)** was established in Moree in 1997 by Dick Estens, with the support of the Gwydir Valley Cotton Growers Association. The strategy has been supported under the Australian Government's Indigenous Employment Program, and its predecessor, since 1996. The AES integrated and holistic employment model recognises the significant barriers faced by Aboriginal people in gaining and sustaining employment.

The AES provides tailored employment services to unemployed Indigenous Australians from eight sites in NSW, and Alice Springs in the NT.

(Continued next page)

¹ KIEP is an incorporated not for profit organisation, initiated in 1995 by major industry members of the Kwinana Industry Council to collaborate with local senior high schools in transitioning youth from education to industry.

Box 8.1.2 (continued)

The AES has achieved over 3000 employment commencements.

- In 2005-06, AES found jobs for more than 500 Aboriginal people.
- In 2006-07, AES secured more than 900 jobs for Aboriginal people.
- In 2007-08, over 1100 jobs were achieved.
- From July 2008 to March 2009, over 550 job placements were achieved.

The AES has a strong relationship with the banking industry who support school-based apprenticeships. The AES School Based Traineeship program targets Aboriginal students in the last two years of high school, offering part time traineeships during their schooling so students will have jobs to move into after high school.

- In 2006, 10 of 12 Aboriginal students successfully completed the School Based Traineeship Program in the ANZ and Commonwealth banks in Sydney.
- In 2007, 81 Aboriginal School Based trainees commenced their two-year Certificate II business services traineeship with 34 expected to complete the program.
- In 2008, 141 Aboriginal School Based trainees commenced their two-year Certificate. At the 26 week milestone 135 participants were still engaged (DEEWR, unpublished).

The Accor Asia Pacific Corporate Leaders for Indigenous Employment Project encourages private sector companies to generate job opportunities. It allows them to use elements of the Australian Government's Indigenous Employment Program to develop and tailor their Indigenous employment strategies to meet their business needs.

Accor developed an Indigenous Employment Program in 2000 that aimed to encourage more Indigenous Australians to take up jobs in the tourism industry. In 2000, Accor placed 12 participants into employment. Since that time, Accor have placed over 130 participants with over 100 participating hotels nationally.

Accor has a strategy to deliver services that are culturally appropriate, that cater to the needs of Indigenous clients and that foster meaningful and effective partnerships with Indigenous communities.

Accor also provide Indigenous School Based Traineeship opportunities. Accor open days in Queensland attracted over 150 Indigenous year 10, 11 and 12 students and teachers. Since these open days, six Indigenous students have begun their School Based Traineeships and six others are about to commence. By providing opportunities to school based youth, Accor aims to encourage positive work practices, provide a strong focus on career goals and minimise the number of unemployed Indigenous job seekers (DEEWR, unpublished).

(Continued next page)

Box 8.1.2 (continued)

The **ACT Indigenous Traineeship Program** provides an opportunity for 15 Indigenous youth to commence traineeships each year, with a view to permanent full time employment with various ACT Government agencies when they have completed the 12 month training program.

Of the 15 young Indigenous people who commenced the program in August 2007, 11 successfully completed the program and became full time permanent employees in the ACT Public Service. A new ACT Indigenous Traineeship Program commenced on 1 May 2009.

The Program features a structured mentoring component for each of the participants, and mandatory cultural awareness training for those staff who will be working with the trainees in the workplace. The successful applicants spend one day in training each week and four days in the workplace. They achieve workplace experience, formal administrative training and extensive mentoring. They also receive IT training to Certificate II level in a structured program over two phases in formal ACT workplace settings (ACT Government, unpublished).

The **VicRoads Indigenous Traineeship Program** commenced in 2006 and operates in 14 rural and metropolitan Customer Service Centre locations across Victoria where there is a corresponding local Indigenous community. Trainees receive primary support throughout their traineeship from three sources:

- daily communication with their supervisor who coordinates workplace training
- regular trainee and supervisor contact with the Indigenous Employment Coordinator both in the workplace, by phone and by email
- dedicated key staff at the employer group training company, assigned to the VicRoads Indigenous Traineeship Program who provide tutoring on-site in rural locations for studies in the Certificate III in Business Administration

Outcomes from this program include successful recruitment of 27 Indigenous customer service trainees since early 2006, six Indigenous staff working in on-going roles as customer service staff and one participant was a finalist in the Victorian State Training Awards 2007 (Victorian Government, unpublished).

Warakurna Artists (WA) was established in 2004 in the remote WA community of Warakurna. Best practice management has earned Warakurna Artists, Reconciliation Australia's 2008 National Indigenous Governance Award for organisations established for less than ten years. Prior to the inception of Warakurna Artists, there were no jobs in the community apart from the Community Development Employment Project (CDEP). The art centre has 150 artists on its registry and has developed to provide significant benefits to the community, contributing financially with approximately \$500 000 turnover per year and delivering a range of social welfare outcomes.

(Continued next page)

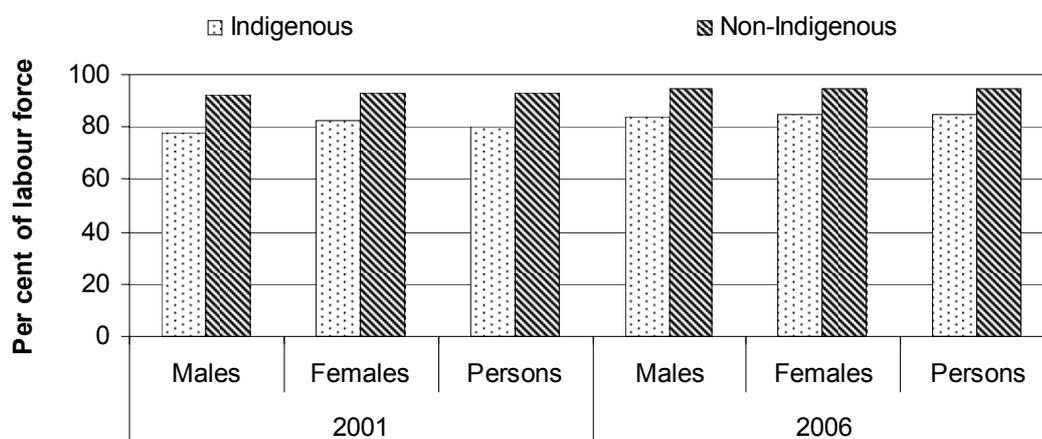
Box 8.1.2 (continued)

Warakurna Artists is also a member of the award winning Western Desert Mob Alliance. Western Desert Mob showcases works from six Aboriginal owned and managed art centres supporting Ngaanyatjarra artists. The alliance highlights the significance and value of purchasing authentic Aboriginal art. This initiative has been replicated in the Kimberley and there is interest to copy the model in SA (WA Government, unpublished).

Most employment data in this section are from the ABS 2006 Census and the ABS 2001 Census. These data are influenced by the Community Development Employment Projects (CDEP) program (see section 4.6 for more detailed discussion). In the 2004-05 National Aboriginal and Torres Strait Islander Health Survey, the CDEP program accounted for 21.9 per cent of all Indigenous employment, ranging from 4.0 per cent in major cities to 68.0 per cent in very remote areas. While CDEP employment and participation are beneficial for Indigenous people (Hunter 2004), there are greater economic and employment opportunities for Indigenous people, particularly in non-remote areas, in the mainstream economy in either the private or public sectors. The ABS classified participants in CDEP as employed rather than as unemployed or not in the labour force in both 2001 and 2006. CDEP participation can only be identified in Census data for a minority of CDEP participants, and so cannot be easily disaggregated in this analysis.

The employment rates in this chapter are the number of employed people as a proportion of the labour force, unless otherwise specified. This is different to the employment to population ratios included in section 4.6. The labour force comprises those who are employed (including CDEP participants for) and those who are unemployed and looking for work.

Figure 8.1.1 **Employment rates, people aged 15 to 64 years**^{a, b}



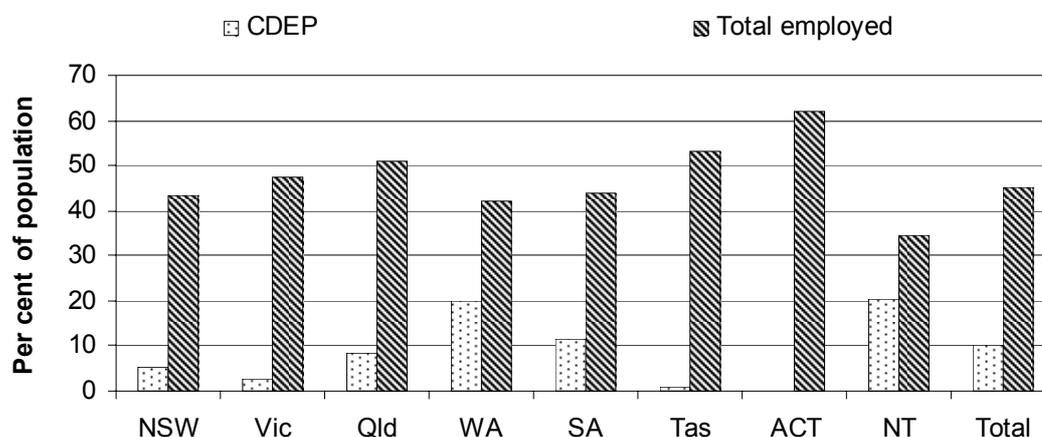
^a The labour force includes both employed and unemployed people. ^b Employment rates for Indigenous people included CDEP participants in both 2001 and 2006.

Source: ABS (unpublished) derived from the 2006 *Census of Population and Housing*; 2001 *Census of Population and Housing*; tables 8A.1.1 and 8A.1.2.

Between 2001 and 2006:

- employment rates for Indigenous people in the labour force increased from 80.0 per cent to 84.4 per cent. Employment rates for non-Indigenous people in the labour force also increased, from 92.7 per cent to 94.9 per cent. Overall, the gap between employment rates for Indigenous and non-Indigenous people narrowed from 12.7 percentage points to 10.5 percentage points (figure 8.1.1)
- employment rates for Indigenous males in the labour force increased from 78.1 per cent to 84.2 per cent. Employment rates for non-Indigenous males in the labour force also increased, from 92.1 per cent to 94.9 per cent (figure 8.1.1)
- employment rates for Indigenous females in the labour force increased from 82.4 per cent to 84.6 per cent. Employment rates for non-Indigenous females in the labour force also increased, from 93.5 per cent to 94.8 per cent (figure 8.1.1).

Figure 8.1.2 CDEP and total employment as a proportion of the Indigenous population aged 15 years and over, by State/Territory, 2006^a



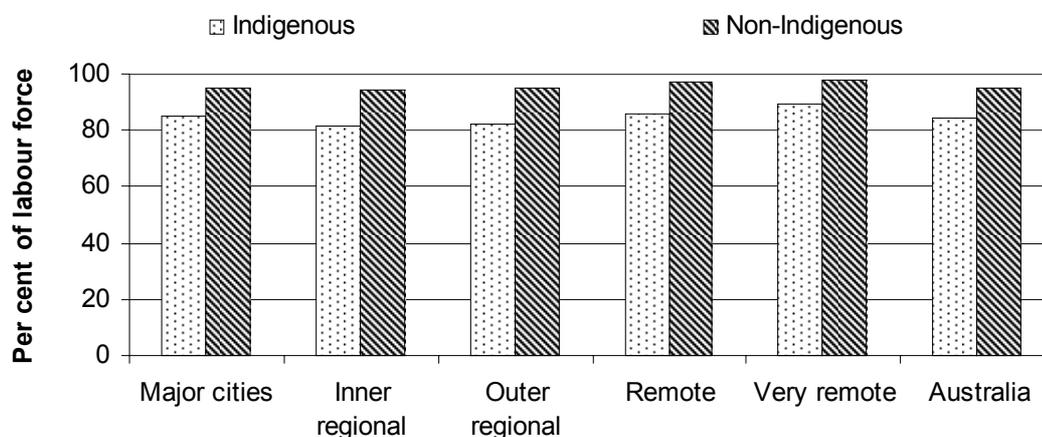
a No CDEP programs exist in the ACT. **b** CDEP are administrative data and are assumed for this analysis to cover 100 per cent of CDEP participants. CDEP participation data are from August 2006. CDEP to population ratios are calculated using *Experimental Estimates of Aboriginal and Torres Strait Islander Australians*. These estimates of the Indigenous population are for June 2006. Employment to population data use Census counts for Indigenous employment and population from the 2006 Census. Coverage is incomplete for the Census. The Census undercount is discussed further in Chapter 2 of this report and Appendix 4.

Source: FACHSIA (unpublished) 2008; ABS 2008, *Experimental Estimates of Aboriginal and Torres Strait Islander Australians*, Jun 2006, Cat. no. 3238.0.55.001, Canberra; ABS (unpublished) derived from the *2006 Census of Population and Housing*; table 8A.1.20.

In 2006:

- reflecting the location of most CDEP programs in remote parts of Australia, a much larger proportion of the Indigenous population aged 15 years and over in the NT (20.3 per cent) and WA (20.1 per cent) participated in CDEP (figure 8.1.2)
- overall employment to population ratios for Indigenous people aged 15 years and over were lowest in the NT (34.6 per cent) and WA (42.2 per cent) (figure 8.1.2)
- overall employment to population ratios for Indigenous people aged 15 years and over were highest in the ACT (62.2 per cent) and Tasmania (52.9 per cent) (figure 8.1.2).

Figure 8.1.3 **Employment, by remoteness area, people aged 15 to 64 years, 2006^{a, b}**



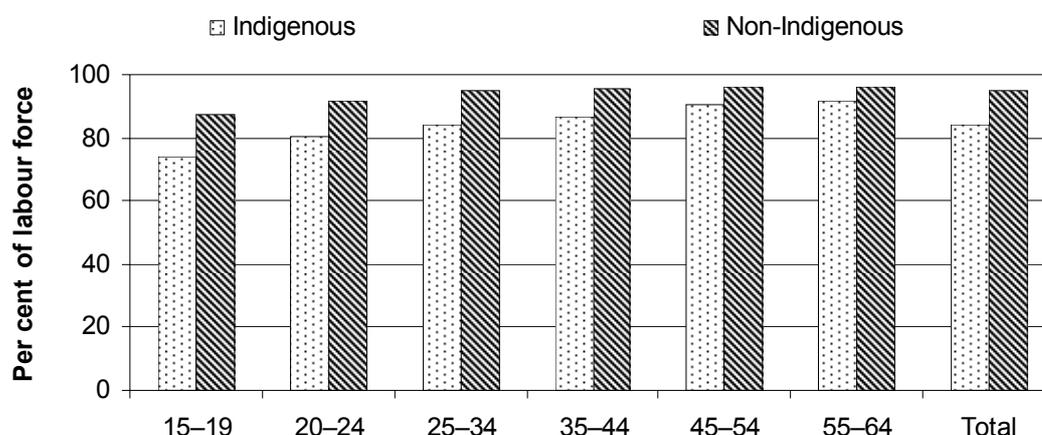
^a The labour force includes both employed and unemployed people. ^b Employment rates for Indigenous people included CDEP participants in 2006.

Source: ABS (unpublished) derived from the 2006 Census of Population and Housing; table 8A.1.2.

Across remoteness areas, in 2006:

- Indigenous people in the labour force had lower rates of employment than non-Indigenous people in the labour force, in all remoteness areas (figure 8.1.3)
- for Indigenous people in the labour force, employment rates were highest in very remote areas and lowest in inner regional areas (89.7 per cent and 81.5 per cent, respectively) (Indigenous employment rates in remote areas are likely to include high rates of CDEP participation) (figure 8.1.3)
- for non-Indigenous people in the labour force, employment rates were also highest in very remote areas and also lowest in inner regional areas (97.6 per cent and 94.3 per cent, respectively) (figure 8.1.3).

Figure 8.1.4 Employment, by age group, 2006^{a, b}



^a The labour force includes both employed and unemployed. ^b Employment rates for Indigenous people included CDEP participants in 2006.

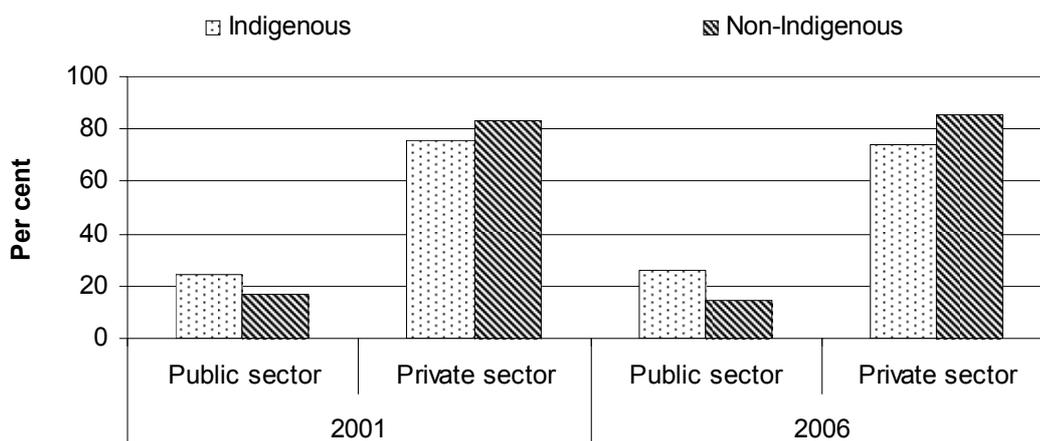
Source: ABS (unpublished) derived from the 2006 Census of Population and Housing; table 8A.1.2.

In 2006:

- employment rates for those in the labour force increased with age for both Indigenous and non-Indigenous people (figure 8.1.4). For Indigenous people, employment rates ranged from 74.3 per cent for those aged 15–19 years to 91.9 per cent for those aged 55–64 years. For non-Indigenous people, employment rates followed a similar pattern, ranging from 87.3 per cent for those aged 15–19 years to 96.5 per cent for those aged 45–54 years (figure 8.1.4)
- Indigenous people in the labour force had lower rates of employment than non-Indigenous people in all states and territories (figure 8A.1.2). Indigenous employment rates were highest in the ACT (88.8 per cent) and lowest in NSW (80.6 per cent), while non-Indigenous employment rates were highest in the NT (97.3 per cent) and lowest in Tasmania (93.5 per cent) (table 8A.1.2).

Employment by public/private sector, industry, occupation and full time/part time

Figure 8.1.5 **Employment by public/private sector, people aged 15 to 64 years, 2001 and 2006^a**



^a CDEP participants are included in the private sector for both 2001 and 2006.

Source: ABS (unpublished) derived from the 2006 Census of Population; tables 8A.1.15 and 8A.1.18.

In both 2001 and 2006, the majority of employed Indigenous and non-Indigenous people worked in the private sector (figure 8.1.5). However, Indigenous people were more likely than non-Indigenous people to be employed in the public sector (25.8 per cent compared to 14.7 per cent in 2006).

Table 8.1.1 Employment by industry, 2006

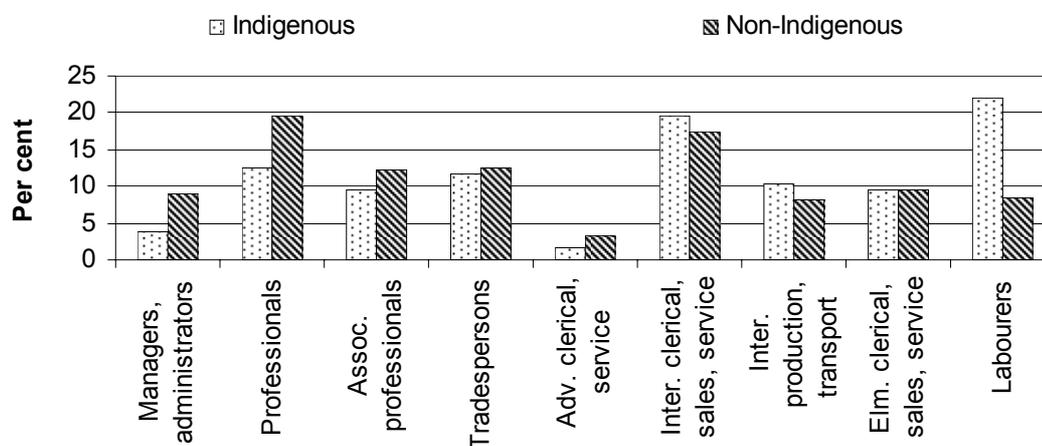
	<i>Indigenous</i>			<i>Non-Indigenous</i>		
	<i>Males</i>	<i>Females</i>	<i>Persons</i>	<i>Males</i>	<i>Females</i>	<i>Persons</i>
Agriculture, forestry and fishing	4.7	1.5	3.2	3.7	1.9	2.9
Mining	3.4	0.7	2.2	1.9	0.4	1.2
Manufacturing	12.2	3.5	8.1	15.6	6.5	11.3
Electricity, gas and water supply	0.9	0.2	0.6	1.2	0.4	0.8
Construction	12.6	1.4	7.3	12.9	2.3	8.0
Wholesale trade	3.8	1.9	2.9	6.1	3.6	4.9
Retail trade	8.7	13.4	10.9	12.8	17.2	14.8
Accommodation, cafes and restaurants	3.2	6.8	4.9	3.9	6.0	4.9
Transport and storage	5.7	1.5	3.7	6.4	2.4	4.5
Communication services	1.3	0.9	1.1	1.9	1.1	1.5
Finance and insurance	0.7	1.8	1.2	3.4	4.7	4.0
Property and business services	5.9	7.8	6.8	11.0	11.2	11.0
Government administration and defence	16.3	15.6	16.0	5.3	5.7	5.5
Education	4.3	13.7	8.7	4.3	11.6	7.7
Health and community services	9.1	22.6	15.5	4.3	18.7	11.0
Cultural and recreational services	2.3	2.1	2.2	2.1	2.4	2.3
Personal and other services	4.9	4.7	4.8	3.4	3.9	3.6
Total classifiable/stated	100.0	100.0	100.0	100.0	100.0	100.0

Source: ABS (unpublished) derived from the 2006 Census of Population and Housing; table 8A.1.10.

In 2006:

- employed Indigenous people were more likely than employed non-Indigenous people to be employed in the ‘government administration and defence’ industries (16.0 per cent and 5.5 per cent, respectively) and ‘health and community services’ industry (15.5 per cent and 11.0 per cent, respectively) (table 8.1.1)
- employed Indigenous people were less likely than employed non-Indigenous people to be employed in the ‘property and business services’ industries (6.8 per cent and 11.0 per cent, respectively) and ‘finance and insurance’ industry (1.2 per cent and 4.0 per cent, respectively) (table 8.1.1).

Figure 8.1.6 **Employment by occupation, people aged 15 to 64 years, 2006^a**



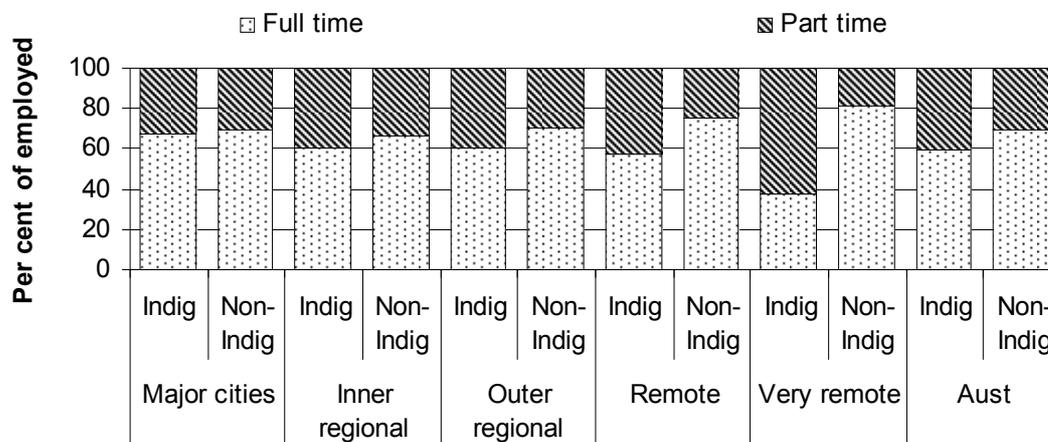
^a The category labels are abbreviations of labels the ABS uses to classify different occupations. 'Managers, administrators' = 'Managers and administrators'. 'Assoc. professionals' = 'Associate professionals'. 'Tradespersons' = 'Tradespersons and related workers'. 'Adv. clerical, service' = 'Advanced clerical and service workers'. 'Inter. clerical, sales, service' = 'Intermediate clerical, sales and service workers'. 'Inter. production, transport' = 'Intermediate production and transport workers'. 'Elm. clerical, sales, service' = 'Elementary clerical, sales and service workers'. 'Labourers' = 'Labourers and related workers'.

Source: ABS (unpublished) derived from the 2006 Census of Population; table 8A.1.8.

In 2006:

- employed Indigenous people were less likely than employed non-Indigenous people to be working as managers and administrators (3.8 per cent compared to 8.9 per cent), professionals (12.4 per cent compared to 19.7 per cent), associate professionals (9.4 per cent compared to 12.3 per cent), tradespersons and related workers (11.7 per cent compared to 12.4 per cent), advanced clerical and service workers (1.5 per cent compared to 3.2 per cent) and elementary clerical, sales and service workers (9.4 per cent compared to 9.6 per cent) (figure 8.1.6)
- employed Indigenous people were more likely than employed non-Indigenous people to be working as intermediate clerical, sales and service workers (19.5 per cent compared to 17.3 per cent), intermediate production and transport workers (10.3 per cent compared to 8.2 per cent) and labourers and related workers (22.0 per cent compared to 8.3 per cent) (figure 8.1.6).

Figure 8.1.7 Employment, by full time/part time status and remoteness area as a proportion of employed aged 15–64, 2006^a



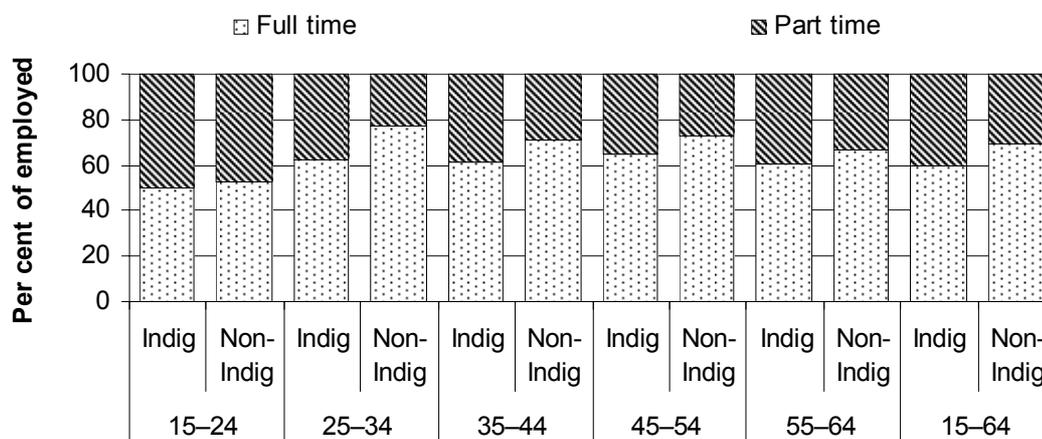
^a People who were employed but 'Away from work' were excluded from this analysis.

Source: ABS (2008) *Population Characteristics, Aboriginal and Torres Strait Islander Australians, 2006*. ABS Cat. no 4713.0; table 8A.1.22.

In 2006, for those aged 15–64:

- 59.2 per cent of employed Indigenous people were employed full time (40.8 per cent were employed part time) (figure 8.1.7)
- 69.1 per cent of employed non-Indigenous people were employed full time (30.9 per cent were employed part time) (figure 8.1.7)
- full-time employment comprised a smaller share of total employment for Indigenous people than for non-Indigenous people in all remoteness areas (figure 8.1.7)
- full-time employment comprised the largest share of total employment for Indigenous people in major cities (67.2 per cent) and the smallest share in very remote areas (37.1 per cent, respectively) (figure 8.1.7)
- full-time employment comprised the largest share of total employment for non-Indigenous people in very remote areas (81.2 per cent) and the smallest share in inner regional areas (66.0 per cent) (figure 8.1.7).

Figure 8.1.8 **Employment, by full time/part time status and age as a proportion of employed aged 15–64, 2006^a**



^a People who were employed but 'Away from work' were excluded from this analysis.

Source: ABS (2008) Population Characteristics, Aboriginal and Torres Strait Islander Australians, 2006. ABS Cat. no 4713.0; table 8A.1.21.

Among employed people in 2006:

- the proportion of Indigenous people who were employed full time was lower than for non-Indigenous people in all age groups (figure 8.1.8)
- the proportion of Indigenous people who were employed full time was highest for the 45–54 age group and lowest for the 15–24 age group (65.2 per cent and 49.7 per cent, respectively) (figure 8.1.8)
- the proportion of non-Indigenous people who were employed full time was highest for the 25–34 age group and lowest for the 15–24 age group (76.8 per cent and 52.9 per cent, respectively) (figure 8.1.8).

8.2 Indigenous owned or controlled land and business

Box 8.2.1 Key messages

- Indigenous people obtain a variety of economic, social and cultural benefits from land they own or control. Nationally, in 2008:
 - Indigenous owned or controlled land comprised 17.3 per cent of the area of Australia (figure 8.2.2). Virtually all of this land (99.4 per cent) was in remote or very remote areas of Australia (tables 8A.2.2, 8A.2.4 and 8A.2.7).
 - native title had been determined to exist in full or in part in 11.1 per cent of the total area of Australia, compared with 4.7 per cent in June 2004 (figure 8.2.3)
 - registered Indigenous Land Use Agreements (ILUAs) covered 13.1 per cent of the total area of Australia (table 8A.2.6).
- Self-employment rates decreased slightly for Indigenous people (from 6.0 per cent to 5.4 per cent) and non-Indigenous people (from 16.6 per cent to 16.0 per cent) between 2001 and 2006 (figure 8.2.6).

In the revised Overcoming Indigenous Disadvantage indicator framework endorsed by COAG in November 2008, two previous indicators covering ‘Indigenous owned or controlled land’ and ‘self-employment and Indigenous business’ have been combined into this indicator of ‘Indigenous owned or controlled land and business’.

Ownership and control of land can provide a range of benefits to Indigenous people. Land ownership may lead to greater autonomy and economic independence, increased commercial leverage and political influence. It can also deliver commercial benefits like increased income, employment and profits (Altman and Dillon 2004).

The focus of this section is on Indigenous owned or controlled land as a measure of economic participation. The social and cultural importance of land to Indigenous people is discussed in section 10.2, ‘access to traditional land’.

Indigenous owned business provides a potential source of employment and income for individuals and communities. Indigenous business may or may not be associated with Indigenous owned or controlled land.

Indigenous owned or controlled land

Indigenous people may own or control land in a variety of ways. Individuals may buy, or otherwise gain freehold title to land — such as a rural property or urban block. Individual title is available to all people, and there is no way to identify this

form of land ownership by individual Indigenous people. Some aspects of individual land ownership are addressed in section 8.3 ‘home ownership’.

In other cases, ownership or control of land by Indigenous people has not been achieved through individual land purchase, but by political and legal processes, and government programs designed to protect or create Indigenous land interests. These processes usually result in communal (rather than individual) rights over land.

Indigenous people have retained or gained ownership, control or rights over land through three main ways, each of which results in a different set of rights to land: land rights legislation; native title; and land purchase or acquisition.

Pollack (2001) and the ILC (2001a–g) explain in detail the legislative basis and government programs for Indigenous land ownership in each jurisdiction.

Land rights

The Australian and State and Territory governments have enacted various forms of land rights legislation, under which groups of Indigenous people were granted or were able to claim ownership of their traditional lands. Land granted under land rights legislation has various forms of land tenure. More than half is held under inalienable freehold tenure (that is, the land cannot be sold or mortgaged).

Most land rights and native title legislation does not grant Indigenous land owners ownership or control of sub-surface materials (such as mineral deposits). However under some land ownership arrangements, Indigenous land owners are entitled to economic benefits from mining developments, such as ‘royalty payments’.

The greatest area of land granted to Indigenous people under land rights legislation has been granted under the *Aboriginal Land Rights (NT) Act 1976* (Cwlth), which results in one of the strongest form of Indigenous land ownership, and gives traditional owners rights in relation to proposed land uses such as mining.

‘Inalienable’ title protects Indigenous people’s ownership of land but can create barriers to using land for housing or business. Inalienable title might prevent individuals from obtaining a long enough or secure enough lease or tenure to justify investment in buildings and infrastructure. Consequently, some jurisdictions have sought to create greater flexibility in tenure on Indigenous land.

In September 2006, the Australian Government passed the *Aboriginal Land Rights (Northern Territory) Amendment Act 2006*. The Act was intended to encourage individual property rights in town areas on Indigenous communally owned land in the NT. The legislation enabled 99 year head leases to government entities, which

could subsequently make sub-leases for private home ownership, business or other purposes. The first township lease was entered into for Nguuu on the Tiwi Islands in August 2007. In June 2008, the Australian Government passed the *Indigenous Affairs Legislation Amendment Act 2008*. The Act included additional flexibility for township leasing, allowing for lease terms between 40 and 99 years. In December 2008, a township lease was entered into for the communities of Angurugu, Umbakumba and Milyakburra in the Groote Eylandt region, for an effective 80 year period through an initial lease of 40 years and the option of a 40 year renewal.

In 2008, the Queensland Government amended its legislation to provide for up to 99-year leases, to enable individuals to secure interest in land on Indigenous deed of grant in trust (DOGIT), reserve, transferred or granted land.

Native title

Native title provides Indigenous people with communal rights and interests, with varying levels of control and management of lands.

The National Native Title Tribunal (NNTT) manages the legal process to register native title claims and mediate outcomes. Claims to land are determined through the court system, under the *Native Title Act 1993* (Cwlth). Native title is a bundle of rights rather than a form of underlying title. In certain circumstances, these rights may amount to exclusive possession, but native title amounts more to rights and interests that co-exist with those of the underlying title holder. The NNTT (2002b) provides a plain language description of native title:

Native title is the recognition in Australian law that Indigenous people had a system of law and ownership of their lands before European settlement. Where that traditional connection to land and waters has been maintained and where government acts have not removed it, the law recognises aspects of this as native title. The native title of a particular group will depend on the traditional laws and customs of those people. The way native title is recognised and practised may vary from group to group.

The rights recognised in a determination of native title vary according to both the rights and interests under the relevant group's traditional laws and customs, and the extent to which a government has created or asserted rights that are inconsistent with any claimed native title right. The courts determine whether particular acts concerning the land have had the effect of extinguishing native title in full or in part. The courts have determined, for example, that granting of freehold title completely extinguishes native title. On the other hand, when a pastoral lease does not give a lessee exclusive possession, native title is only partially extinguished (for further information, see NNTT 2002a).

Some determinations of native title have recognised that native title holders retain extensive rights over land, while in other determinations very few rights remain. The extent of native title rights varies greatly across a continuum and the NNTT has not been able to supply data distinguishing areas of land according to the strength of the remaining rights.

Indigenous Land Use Agreements (ILUAs) provide an alternative option to resolving native title issues. ILUAs are registered with the NNTT and are agreements about the use and management of land and waters, made between one or more native title groups and other groups such as mining companies. The large majority of ILUAs (around 90 per cent) are made under the ‘area agreement’ category. The native title group for an area agreement can be a combination of registered claimants, persons and/or representative Indigenous bodies claiming to hold native title for the area.

ILUAs are made possible by the *Native Title Act 1993*, but are less formal and less time consuming than the process of a native title determination. ILUAs may be used:

- as a step on the way to a native title determination
- in place of a native title determination
- to agree on matters such as mining developments, sharing land and exercising native title rights and interests (NNTT 2006).

ILUAs allow for more flexible, relatively speedy and less costly resolutions between land users. Indigenous people may negotiate agreements that lead to economic benefits, like employment and compensation, or to meet their aspirations in ways not possible under native title (NNTT 2006). However, ILUAs are not costless. Hooke (2004) outlined some of the costs incurred by mining companies in meeting their own costs (and often those of native title representative bodies) in negotiating agreements.

The number and coverage of ILUAs are included later in this section. However, the numbers of agreements and the areas they cover provides only limited information on the economic and social benefits to Indigenous people.

Land acquisition

Some land has been acquired by governments on behalf of Indigenous people. Land purchases often comprise smaller parcels of land than those granted under land rights legislation (Pollack 2001).

Nationally, the role of the ILC is to purchase land, on behalf of Indigenous people, that cannot be acquired via other means — for example, land held under freehold or leasehold title is generally not available for claim under native title or land rights (Altman and Dillon 2004). The ILC has a legislated responsibility to develop and review regularly a National Indigenous Land Strategy (NILS). The scope of the current NILS is 2007 to 2112, setting out strategies, policies and priorities for land acquisition and management. Box 8.2.2 includes more information on the ILC.

Box 8.2.2 Case study — Indigenous Land Corporation

The Indigenous Land Corporation (ILC) purchases land on behalf of registered or incorporated Indigenous organisations with the aim of delivering a range of social and cultural benefits. Applications for land acquisition must demonstrate benefits to Indigenous people across four areas, connected with the main purpose of the land:

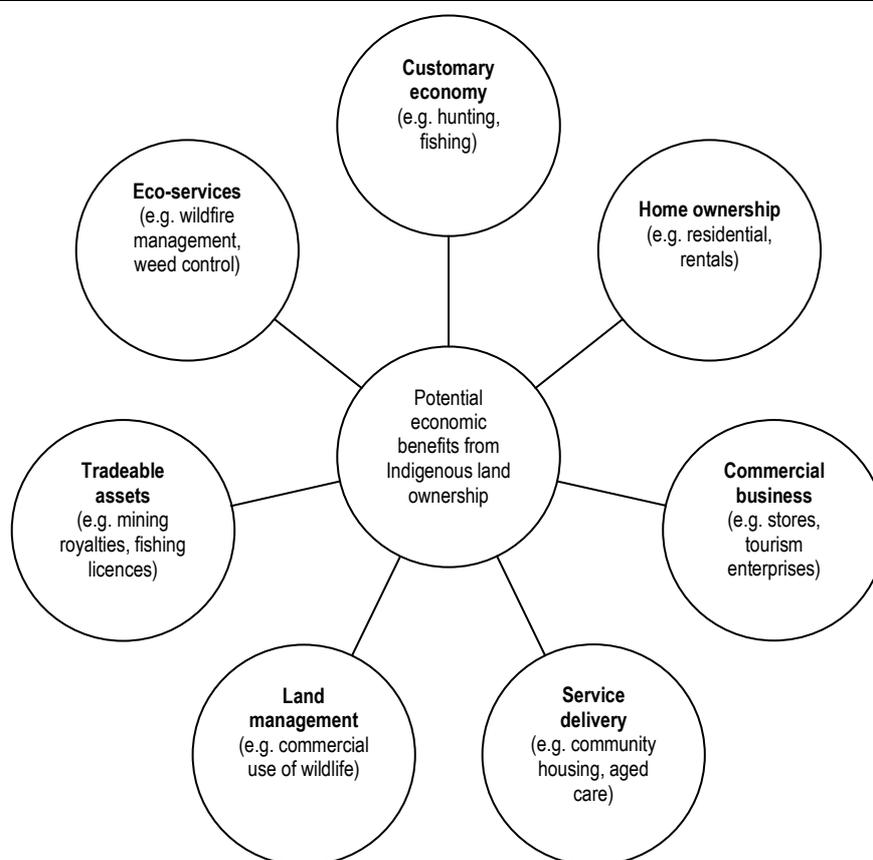
1. economic — to establish land-based businesses
2. environmental — to derive environmental benefits
3. social — for social and welfare purposes
4. cultural — to access land of high cultural significance.

The ILC 'Land Management Program' assists with managing Indigenous-held land. The program aims to improve the wellbeing of Indigenous people, with benefits in the same four economic, environmental, social and cultural areas, and a particular emphasis on training and employment. The program is not restricted to Indigenous people, but assistance is only granted where programs actively involve Indigenous landholders (ILC 2007; 2008a).

The economic benefits of land

Figure 8.2.1 outlines the potential economic benefits that may accrue to Indigenous people from owning and/or controlling land.

Figure 8.2.1 **Potential economic benefits from Indigenous owned or controlled land**



Source: Adapted from Altman and Dillon (2004).

The potential to derive economic benefits from activities on land may depend on:

- the location of the land — remoteness from markets and population centres adds to the costs of delivering products and services
- the nature of the land — opportunities to profit from mining, agriculture and tourism depend, respectively, on the presence of certain minerals, rainfall and soil fertility, and places and activities that appeal to tourists
- the extent of ownership and control over the land — some land is held communally and/or with a restricted title, which may limit some economic activities (for example, leasing or selling the land, or restrictions on land use).

The customary economy

The customary economy (fishing, hunting and gathering) can provide Indigenous people with fresh and healthy food, and remains an important part of some

Indigenous communities, particularly for those living in the tropical savannas and wetlands (Altman 2001).

Box 8.2.3 Case study — Utopia health improvements

A longitudinal study conducted of residents of 16 Utopia outstations in central Australia found that outstation residents had lower rates of diabetes, cardiovascular risk factors, hospitalisations and deaths from cardiovascular disease, compared to those living in centralised communities (McDermott et al. 1998). Follow up with the same residents 10 years later found consistent results. Residents maintained lower hospitalisations and death due to cardiovascular disease, and lower overall mortality compared to the wider Indigenous population in the NT, although, by some observed measures of health, prevalence rates were not significantly different to the non-Indigenous population in the NT (Rowley et al. 2008).

Utopia residents share some common characteristics that may help explaining the positive health outcomes observed in the study. There has been long-standing traditional ownership by residents of the Utopia lands, with freehold land granted more than 30 years ago under the *Aboriginal Land Rights (NT) Act 1976*. Residents live in outstations dispersed over a large area, with no centralised settlement. Primary health is accessed through a community-controlled health service, the Urapuntja Health Service, which delivers services to the outstations. There is limited access to food stores, and hunting and gathering of wildlife is common (Rowley et al. 2008).

The initial study explored the comparative good health of Utopia residents in terms of increased exercise from hunting and gathering. These activities fostered a dependence on bush tucker (native foods), and resulted in a diet more varied than those accessing store-bought foods (McDermott et al. 1998). Results from the follow-up study indicated that the decentralised nature of the Utopia settlement (the essence of 'outstation' living), and access to an outreach community-controlled primary health service, are also likely contributors to the observed health improvements (Rowley et al. 2008).

In SA, the Kuka Kanyini project, on Anangu Pitjantjatjara Land, was initiated as a pilot around the remote community of Watarru. The project is a partnership between Watarru Community and the Department of Environment and Heritage and focuses on restoring and protecting threatened animal and plant species and the land. The work involves removing feral animals, controlling fire, improving water supply and replanting — focusing on plants that provide bush tucker to local communities. A survey by the Department of Environment and Heritage found that the area supported 700 different plant species (44 of them new) and 33 previously unrecorded reptiles. The study also confirmed that there could be up to 18 species extinct. The project employs a minimum of 12 people full time, and the increased physical activity has assisted in the control of diabetes (PY Media 2009; SA Government unpublished).

Residential use and home ownership

Many Indigenous people live in community housing built on Indigenous land (see section 8.3). Section 10.2 provides some information on the numbers of Indigenous people who live on their homelands or traditional country (although this is not necessarily the same as the numbers of people living on Indigenous owned or controlled land). People who own their homes may gain economic benefits from living in, renting out, selling or borrowing against the property.

Commercial business

Commercial businesses sell goods or services to the general public and include enterprises like shops and eco-tourism ventures. Examples of Indigenous-owned businesses can be found in box 8.2.4.

The ILC operates and manages 14 businesses throughout Australia, and in 2007-08 employed 271 Indigenous people in a range of roles (ILC 2008b). These businesses are mainly large scale beef cattle enterprises, but also include tourism businesses and orchards. The ILC is currently focusing its programs on employment, training and education opportunities, particularly in the pastoral and tourism industries.

Box 8.2.4 Pastoral business on Indigenous land

The **Indigenous Pastoral Program** commenced in 2003, expanded in 2006 and is currently funded until 2011. The IPP has assisted 36 properties with pastoral advice, infrastructure, and training and employment opportunities. Key benefits of the IPP include: bringing Aboriginal-held land back into production; and developing the capacity of landholders to manage land to deliver benefits to Aboriginal people.

Since 2006 the IPP has:

- established the Indigenous Trainee Scheme, with 60 Aboriginal trainees employed on commercial cattle stations across the northern region of NT
- provided governance training and mentoring to six IPP properties via the Department of Agriculture, Fisheries and Forestry/ILC Farmbis agreement
- transitioned CDEP positions to 13 'real' jobs (seven full time equivalent and six part time) and provided meaningful work and training to 45 CDEP participants across 16 properties.

In 2008, the ILC secured funding from the FaHCSIA Real Jobs program for 150 land management positions (24 of these are planned to be on IPP priority properties); and IBA funded two Business Development Officers to join the IPP team and assisted with establishing corporations and committees on three properties.

(Continued next page)

Box 8.2.4 (continued)

The Kimberley Indigenous Management Support Service (KIMSS) is a collaboration between the Indigenous Land Corporation (ILC), the WA Government and Kimberley Indigenous pastoral lease holders. It began in 2002 and has been refunded through two phases: 2002–2005 and 2005–2010.

The project has focuses on developing the technical and management skills of Indigenous directors, managers and workers on Indigenous-owned Kimberley cattle stations. The project builds on current expertise to conduct sustainable cattle enterprises and to generate ongoing jobs and related training. Assistance is provided to 15 pastoral leases with a combined potential herd size of over 80 000 head.

KIMSS has resulted in increased commercial pastoral activity and provides an example of good governance and effective management, having won a Prime Minister's Award for Excellence in 2005 and a WA Premier's Award in 2004.

During 2006-07, nationally accredited governance training was conducted for new pastoral properties joining the KIMSS project. A further 22 people completed individual accredited training courses such as computer skills, horsemanship, beef cattle production, grazing for profit, first aid, welding and building maintenance.

During 2007-08, 65 people undertook Certificates I, II, III, & IV level training courses; 17 people attended a low stress stock handling course at Roebuck Plains Station; 90 people completed corporate governance training and 18 full time jobs and 56 part time jobs were created (ILC unpublished).

Service delivery

Land can be used to site and deliver services to Indigenous communities, such as community housing, aged care and postal services.

The Wunan Foundation is a not-for-profit Indigenous organisation in the East Kimberley (WA). It provides a range of services aimed at improving socio-economic outcomes for Indigenous people, including:

- training and development programs
- a wilderness adventure tourism business in partnership with Australian Pacific Touring
- land-based investments for capital growth and the provision of community housing (Wunan Foundation 2009).

The Larrakia Development Corporation (LDC) was established in 2002 with the assistance of the Northern Land Council, to manage the development of land

exchanged as part of a native title claim settlement with the NT Government. The LDC has completed a housing development on land in Palmerston in the NT. The Corporation is debt free and LDC projects have paid financial dividends to the Larrakia people. Income is divided evenly between the Larrakia Development Trust (established to coordinate community projects for the Larrakia people) and the LDC. In addition, the LDC has generated employment and training opportunities for local Aboriginal people both through its own development activities and through its employment placement agency. Three new businesses have been established by the LDC — Saltwater Constructions, Larrakia Turf Farm and Cox Peninsula Enterprises. See section 11.1, box 11.1.11 for more information on the LDC.

Land management/tradeable assets

Indigenous people have negotiated agreements with governments and others (for example, mining companies and pastoralists) over land use. These agreements can yield benefits in the form of monetary payments; support for community services, facilities and infrastructure; employment and training programs and protection of cultural sites. Some agreements have provided substantial benefits for Indigenous people, while the benefits from others have been more modest (O’Faircheallaigh and Corbett 2005, O’Faircheallaigh 2006, and Altman and Levitus 1999).

Altman and Smith (1994, 1999) provided examples of how different approaches have influenced the economic benefits of mining royalties to Indigenous people. Sections 11.1 and 11.2 explore some aspects of governance and capacity building that can affect the way royalties are negotiated and used.

Many Commonwealth, State and Territory programs recognise and employ Indigenous peoples’ land management skills. For example:

- In NSW, the *National Parks and Wildlife Act 1974* provides for Aboriginal people to be owners and joint managers of certain conservation reserves.
- By 2009, ownership of five conservation reserves had been handed back to Aboriginal people and the areas were co-managed (NSW Government unpublished).
- In Victoria, a cooperative land management agreement between the Victorian Government and the Yorta Yorta National Aboriginal Corporation provides the Yorta Yorta people with an advisory role in the management of designated areas. An ILUA with native title claimants in the Wimmera region provides for co-management of Crown land. In 2007-08, ownership of the Lake Condah Reserve and the Lake Condah mission site was handed back to the Gunditjmarra people (Victorian Government unpublished).

-
- In Queensland, the *Cape York Peninsula Heritage Act 2007* provides for a new form of land tenure called National Park (Cape York Peninsula Aboriginal Land) whereby agreements for joint management of new national parks may be made between the State and Aboriginal landowners. The legislation allows for the declaration of Indigenous community use areas for the clearance of vegetation for primary industry (cattle, forestry, and horticulture) purposes (Queensland Government unpublished).
 - An Indigenous Protected Area (IPA) is an area of Indigenous-owned land or sea where traditional owners have agreed with the Australian Government to promote biodiversity and cultural resource conservation. Management of an IPA involves partnership arrangements (joint management) between Indigenous peoples and conservation agencies (Gilligan 2006). The first IPA was declared in 1998, and as at February 2009, there were 25 agreements in place (DEWHA 2009).

Eco-services

Eco-services aim to support sustainable natural resource management and include feral animal control, quarantine inspection, bush fire management and weed eradication programs (Altman and Dillon 2004).

In Queensland and the NT, the Carpentaria Ghost Nets Programme seeks to address the problem of fishing nets that have been lost or abandoned at sea, but continue to fish indiscriminately. The Ghost Nets Programme is funded to clean the Gulf of Carpentaria coastline of nets, to stop them re-entering the ocean.

Also in the NT, the Arnhem Land Bushfire Council District applies Indigenous knowledge and skills to fire management on land owned and controlled by the traditional owners. Indigenous membership on the Northern Territory Bushfires Council has expanded and an Indigenous Fire Controller has been appointed. Benefits to Indigenous people have included improved community access to equipment and training.

Measuring areas of Indigenous owned or controlled land

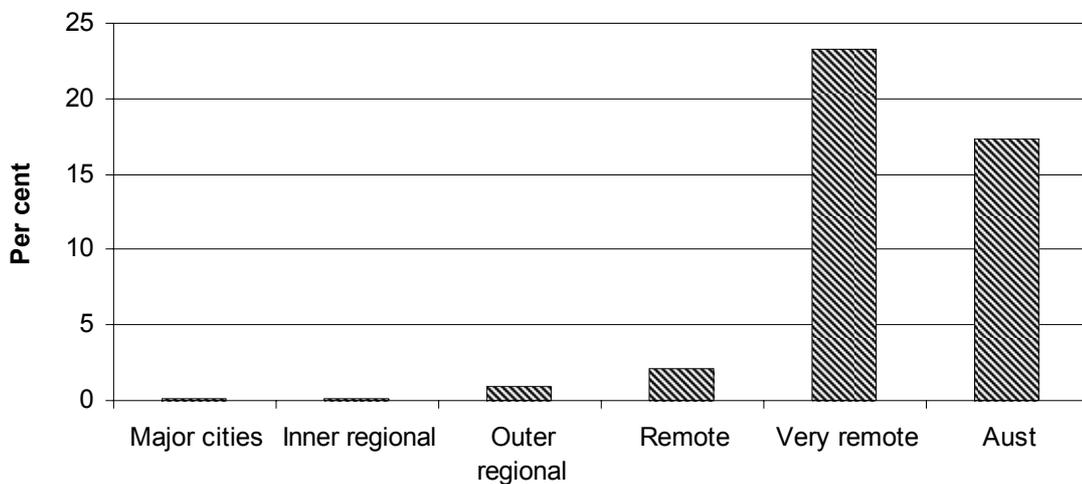
Land area alone is an imperfect indicator of the benefits Indigenous people derive from owning land. The commercial value of land varies widely and much of the Indigenous owned or controlled land in Australia is of low commercial value. There are only limited data on the extent to which Indigenous people use their land for various economic or other purposes and the benefits they obtain.

Land areas and proportions reported for this indicator are for communally owned or controlled Indigenous land. Communally owned Indigenous land can be identified from land registers and other sources. Some Indigenous individuals and families also own land in their own right, but no data are available on the ownership of land by individual Indigenous people, because State and Territory land registers do not contain an Indigenous identifier. Related information on home ownership is included in section 8.3.

Area of Indigenous owned or controlled land

The area and distribution of Indigenous owned or controlled land in Australia largely reflect the decisions of governments in the 1970s and 1980s. In recent decades, the rate of land grants has slowed significantly. However, native title decisions, ILC land purchases and land rights programs continue to add to the total amount of land owned or controlled by Indigenous people. Table 8A.2.14 shows Indigenous landholdings by different forms of tenure. Related data are reported in tables 8A.2.1 and 8A.2.2.

Figure 8.2.2 Indigenous owned or controlled land as a proportion of each remoteness area, December 2008



Source: ILC (unpublished); table 8A.2.2.

In 2008:

- Indigenous owned or controlled land comprised 17.3 per cent of the area of Australia (figure 8.2.2)

-
- Indigenous owned or controlled land comprised 23.3 per cent of the land area of very remote areas of Australia in 2008, but only 0.1 per cent of inner regional areas and 0.2 per cent of major cities (figure 8.2.2)
 - nearly all (97.8 per cent) Indigenous owned or controlled land was in very remote areas of Australia (table 8A.2.2)
 - the bulk of Indigenous owned or controlled land was in the NT (49.5 per cent), WA (28.9 per cent) and SA (15.4 per cent) (table 8A.2.1)
 - Indigenous owned or controlled land made up 48.8 per cent of the NT, but less than 1 per cent of the area of NSW, Victoria, Tasmania and ACT (table 8A.2.1).

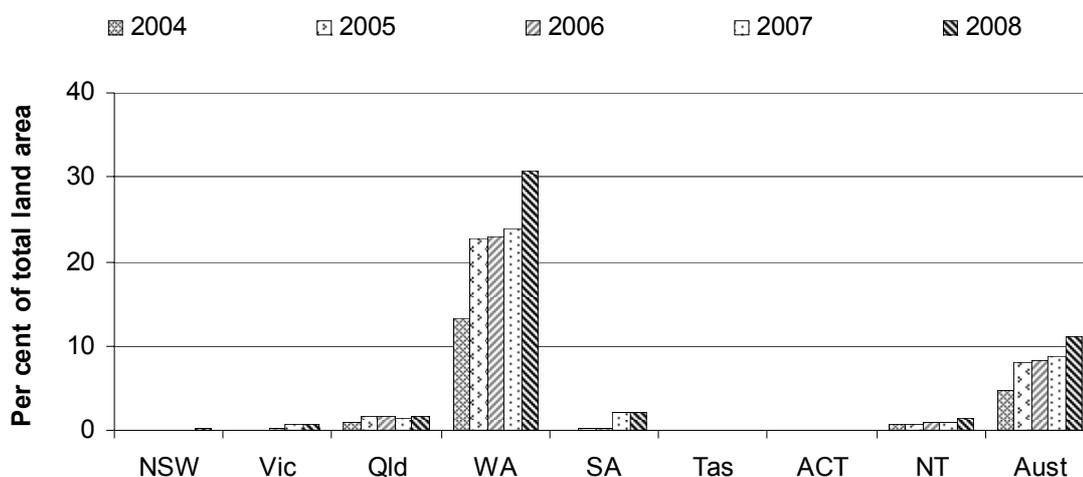
Between 1995 and 2008, the ILC acquired 221 properties in remote, rural and urban locations covering more than 5.9 million hectares, at a total cost of approximately \$216 million (ILC 2008b) (see table 8A.2.13 for a map of the ILC's land acquisition activity).

Determinations of native title

The majority of native title applications that have been lodged by Indigenous people are yet to be determined by the Federal Court of Australia. As at 31 December 2008, 513 active native title claimant applications were in the system, and 117 native title determinations had been made (NNTT 2009).

Data are not readily available to compare areas of native title giving exclusive possession of land with areas of partially extinguished native title.

Figure 8.2.3 Determinations that native title exists^{a, b c, d, e}



^a At 30 June. ^b Areas are based on the geographic extent of the determination area as per the court's decision. Parts of these determinations may not be included on the National Native Title Register at this time. Where native title has been extinguished within a determination area and it has been possible to map these areas then they have been included in the calculations. ^c Area for SA includes areas subject to appeal. ^d Total land areas of states and territories include islands adjacent to the mainland — figures sourced by the NNTT from Geoscience Australia. ^e Australian total includes Jervis Bay Territory and Commonwealth waters where determinations of native title have been made.

Source: NNTT (unpublished); table 8A.2.3.

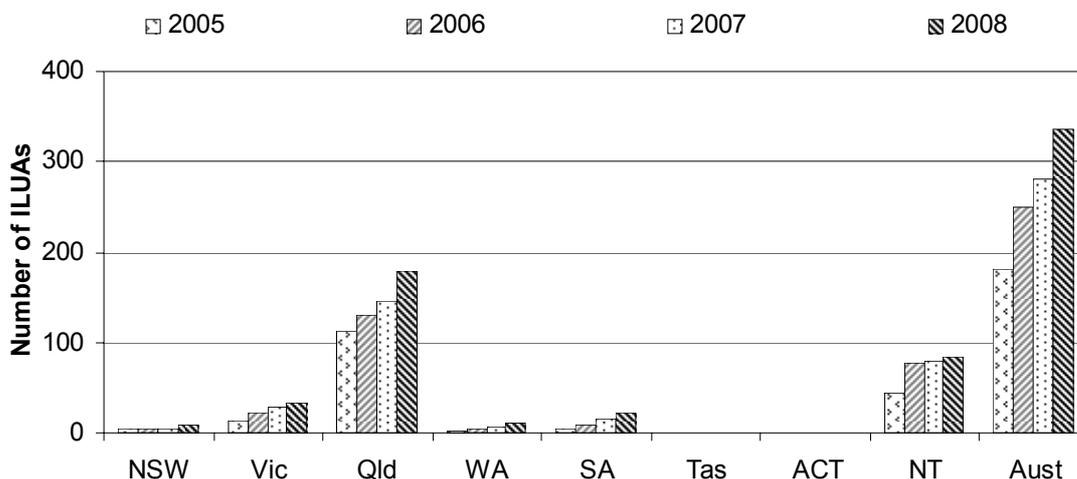
As at June 2008:

- native title had been determined to exist in full or in part in about 11.1 per cent of the total area of Australia, compared with 4.7 per cent in June 2004 (figure 8.2.3). The national increase was around 489 790 km², with the major increase occurring in WA (table 8A.2.3)
- native title had been determined to exist in full or in part in 30.9 per cent of WA, but there had been no determinations of native title in Tasmania or the ACT
- most land where native title had been determined to exist in full or in part was in very remote areas (99.2 per cent). Native title had been found to exist in 15.2 per cent of land in very remote areas (table 8A.2.4).

Tables 8A.2.9 and 8A.2.10 show maps of determinations of native title by State and Territory and remoteness area.

Indigenous Land Use Agreements

Figure 8.2.4 The growth of Indigenous Land Use Agreements (cumulative)^a



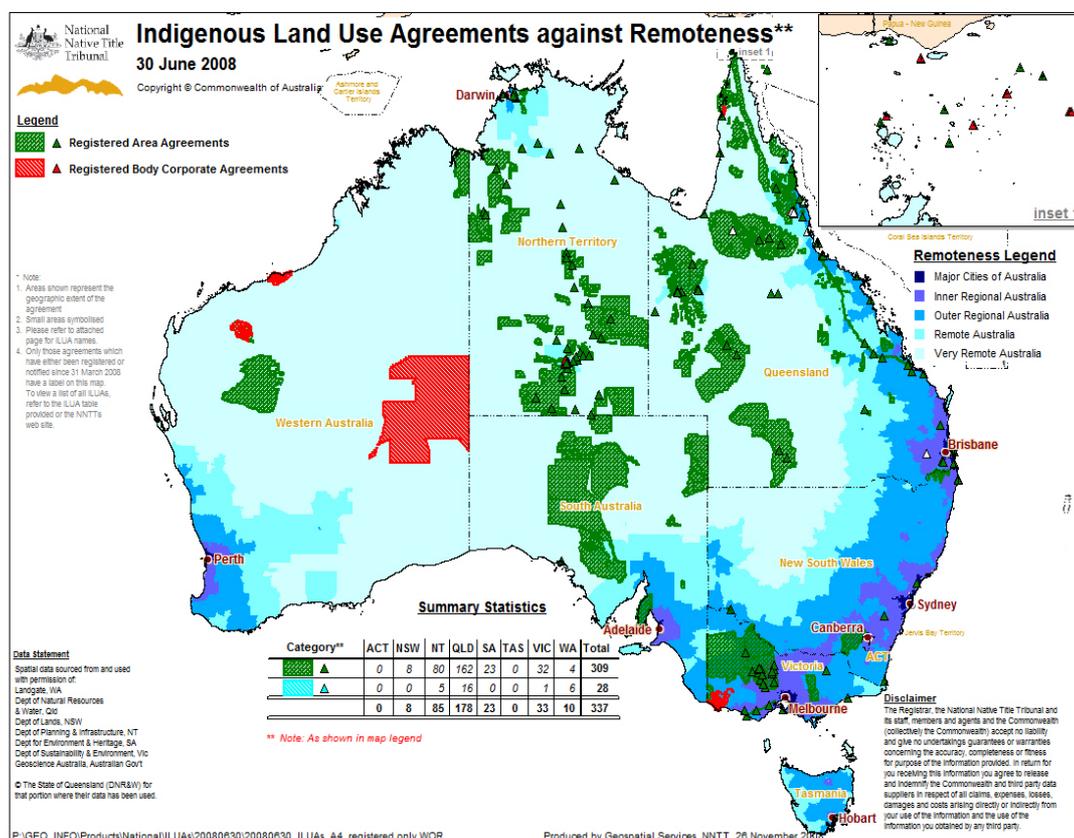
^a Total number of ILUAs in place as at 30 June in each year; totals are cumulative.

Source: NNTT (unpublished); table 8A.2.6.

- The number of registered Indigenous Land Use Agreements (ILUAs) increased from 182 in June 2005 to 337 in June 2008 (figure 8.2.5). Over the same period, the total land area covered by registered ILUAs (not counting overlapping ILUAs), grew from 490 035 km² to 1 007 235 km² (representing 13.1 per cent of the total area of Australia).
- In 2008, most ILUAs were in Queensland (178) and the NT (85). Other states had relatively few, with none in Tasmania and the ACT (table 8A.2.6).
- Most of the area of land covered by registered ILUAs in 2008 (91.7 per cent) was in remote and very remote areas (table 8A.2.7).

Figure 8.2.5 and tables 8A.2.11 and 8A.2.12 contain maps showing the areas covered by registered ILUAs.

Figure 8.2.5 Registered Indigenous Land Use Agreements by remoteness area



Source: NNTT (unpublished); table 8A.2.12.

Indigenous owned business

Self employment and participation in ownership of enterprises can allow people to reduce reliance on government welfare and improve self sufficiency. It also can improve the overall level of economic participation, which affects many aspects of people's wellbeing. Indigenous Business Australia (2003) noted that the number of Indigenous people who are self employed as a proportion of the labour force is significantly lower than for the rest of the population. Australia's Indigenous people also lag behind New Zealand's Maori people in terms of self employment.

Several factors may influence the low rates of Indigenous self employment and ownership of enterprises. Hunter (1999) noted that governments have typically emphasised business opportunities at the Indigenous community level, rather than self employment. In addition, Indigenous people may have difficulty accessing capital (for example, because of restrictions on mortgaging communal land) and

infrastructure and opportunities may be limited in remote areas. Indigenous people are also more likely than non-Indigenous people to have poor education, and to lack training in relation to business enterprises (see sections 4.5, 4.7 and 11.2).

Self employment

Data for self employment are available from both the 2001 and 2006 Censuses. The data in this section are for self employment as a proportion of total employment. Self employment data for 2001 and 2006 are not fully comparable because of differences in the way that responses were coded in the two Censuses.

Figure 8.2.6 Self employment as a proportion of total employed, people aged 15 to 64 years^{a, b}



^a 'Self employed' in the 2006 Census comprises people who identified themselves as 'owner manager of an unincorporated enterprise' or 'owner manager of an incorporated enterprise'. ^b 'Self employed' in the 2001 Census comprises people who identified themselves as 'own account worker' or 'employer'.

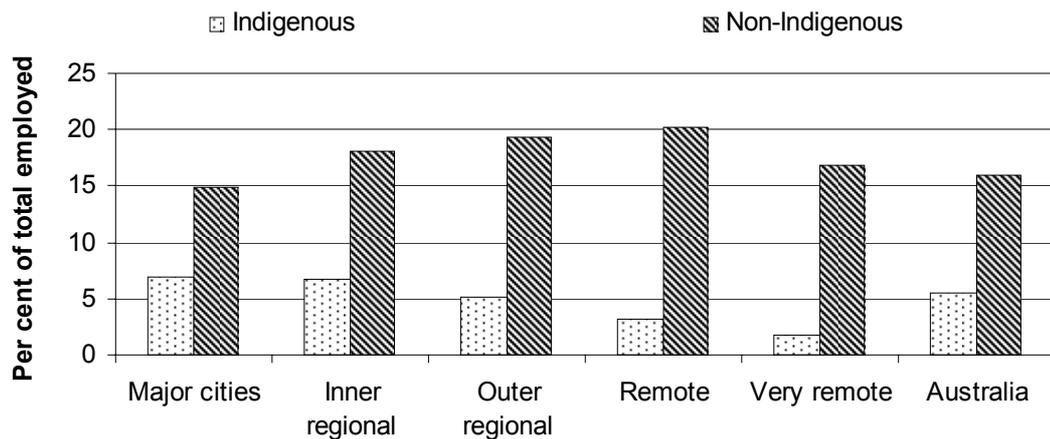
Source: ABS (unpublished) derived from the *2001 Census of Population and Housing*; *2006 Census of Population and Housing*; tables 8A.2.15 and 8A.2.16.

In 2006, of employed people:

- Indigenous people had much lower rates of self employment than non-Indigenous people (5.4 per cent compared with 16.0 per cent) (figure 8.2.6)
- Indigenous males and females had lower rates of self employment than non-Indigenous males and females (figure 8.2.6)
- Indigenous and non-Indigenous males had higher rates of self employment than Indigenous and non-Indigenous females, respectively (figure 8.2.6)

Between 2001 and 2006, self employment rates did not change greatly for either Indigenous or non-Indigenous people (figure 8.2.6).

Figure 8.2.7 Self employment as a proportion of total employed, by remoteness area, 2006^a



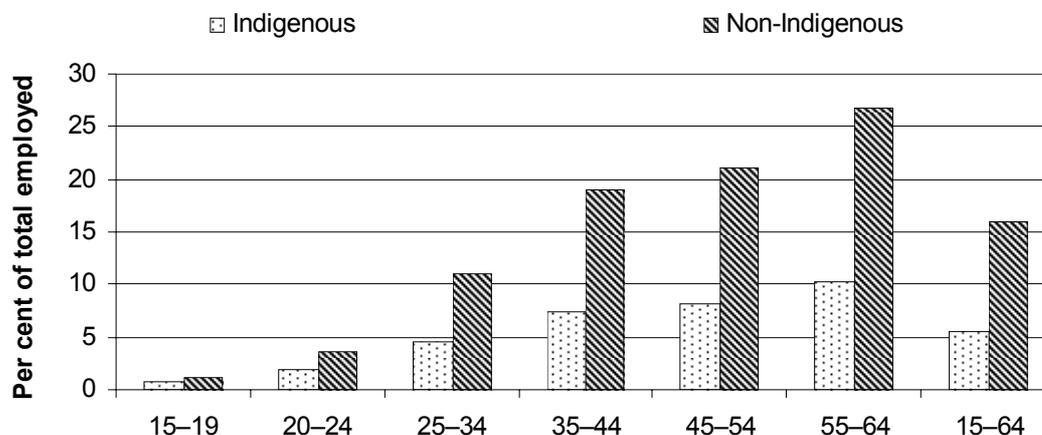
^a 'Self employed' comprises people who identified themselves as 'owner manager of unincorporated enterprise' or 'owner manager of an incorporated enterprise'.

Source: ABS (unpublished) derived from the *2006 Census of Population and Housing*; table 8A.2.16.

In 2006:

- Indigenous people had much lower rates of self employment than non-Indigenous people in all remoteness areas (figure 8.2.7)
- self employment rates were highest for Indigenous people in major cities (6.9 per cent) and lowest in very remote areas (1.8 per cent), while self employment rates were highest for non-Indigenous people in remote areas (20.1 per cent) and lowest in major cities (14.9 per cent) (figure 8.2.7).

Figure 8.2.8 Self employment as a proportion of total employed, by age, 2006^a

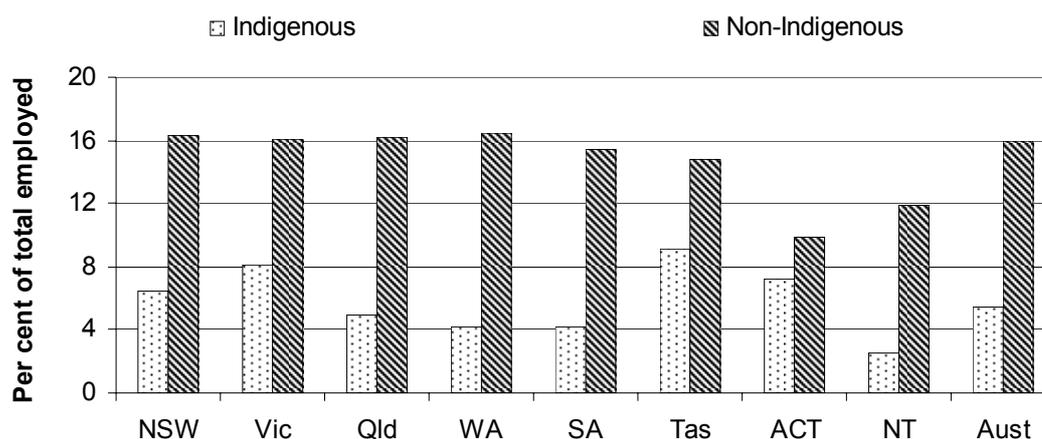


^a 'Self employed' comprises people who identified themselves as 'owner manager of unincorporated enterprise' or 'owner manager of an incorporated enterprise'.

Source: ABS (unpublished) derived from the 2006 Census of Population and Housing; table 8A.2.16.

- In 2006, for both Indigenous and non-Indigenous people, self employment rates increased with age, but Indigenous people had lower rates of self employment in all age groups (figure 8.2.8).

Figure 8.2.9 Self employment as a proportion of total employed, by State and Territory, 2006^a



^a 'Self employed' comprises people who identified themselves as 'owner manager of an unincorporated enterprise' or 'owner manager of an incorporated enterprise'.

Source: ABS (unpublished) derived from the 2006 Census of Population and Housing; table 8A.2.16.

In 2006:

- rates of self employment for Indigenous people were lower than for non-Indigenous people in all states and territories (figure 8.2.9)
- self employment rates were highest for Indigenous people in Tasmania (9.1 per cent) and lowest in the NT (2.5 per cent) (figure 8.2.9)
- self employment rates were highest for non-Indigenous people in WA (16.4 per cent) and lowest in the ACT (9.9 per cent) (figure 8.2.9).

Indigenous business

Case studies of Indigenous businesses are presented in box 8.2.5.

Box 8.2.5 Case studies — Indigenous businesses

Indigenous Business Australia's (IBA) Business Development Programme, known as IBA Enterprises, directly assists Indigenous individuals, families and partnerships to succeed in business, by supporting clients preparing to go into business, and providing business loans and mentoring to Indigenous business people. IBA Enterprises also undertakes economic development initiatives that encourage Indigenous people into business and provides them with information and training. For the period 2007-08, IBA:

- approved 102 business loans, valued at \$17.2 million
- spent \$5.7 million on business support
- supported 46 economic development initiatives (IBA unpublished).

In **Galiwin'ku (Northern Arnhem Land, NT)**, in 2007, a project that provides an intensive, place based approach to Indigenous business development has been piloted. Economic development officers, including a local part time Indigenous employee, provided practical support for Indigenous people to turn business ideas into reality. Twenty-four small businesses have been established and eight full time and 42 part time jobs in Galiwin'ku and surrounding communities have been created. Businesses established through the project include Slush Puppy Sales, Dingu Wangurri Family Farm, Lightning Didgeridoo sales, Bultjimarra Mobile BBQ Van Enterprise and Gapuwiyak Community Markets. An independent review, in 2008, recommended that the project continue and be expanded to other Indigenous communities in regional and remote locations (IBA unpublished).

8.3 Home ownership

Box 8.3.1 Key messages

- The proportion of Indigenous people living in home owner/purchaser households increased from 26.2 per cent to 28.9 per cent between 2001 and 2006 (figure 8.3.1).
- In 2006:
 - a much lower proportion of Indigenous people lived in home owner/purchaser households (28.9 per cent) than non-Indigenous people (72.1 per cent) (figure 8.3.1)
 - the proportion of Indigenous people living in home owner/purchaser households was much lower in very remote (4.8 per cent) and remote areas (19.7 per cent) than in major cities (35.3 per cent) and inner and outer regional areas (35.7 and 32.3 per cent, respectively) (figure 8.3.2).

Home ownership is included in this report primarily as an economic indicator of wealth and saving. The availability of appropriate, affordable and secure housing, which is a more immediate concern for many Indigenous people, is covered in section 9.1, Overcrowding in housing.

Home ownership is an important indicator of wealth and saving, and provides a secure asset base that can contribute to financial stability and against which people can borrow. A home can be passed from one generation to another. Home ownership also provides security of tenure, which is not always available with rental housing. Home ownership also allows households to build or modify a dwelling to suit their particular needs.

Improvements in other indicators in this report, particularly those relating to education and economic participation and development, are the main drivers of home ownership and could increase the level of Indigenous home ownership in the future.

During consultations for the 2007 report, many Indigenous people said that home ownership was an important part of improving Indigenous wellbeing and an essential indicator in the framework. Some Indigenous people said that home ownership was important to them as a connection to the land, particularly in closely settled regions where native title has been extinguished and there are limited opportunities for land grants. Others suggested that not all Indigenous people want to own their own homes, and that those in more remote areas and living more traditional lifestyles may prefer a more communal form of ownership. Information on communally owned Indigenous land is included in section 8.2 of this report.

Indigenous people who move frequently for family and cultural reasons may prefer to rent accommodation.

The significant number of Indigenous people living on Indigenous communally owned or controlled land influences the rates of Indigenous home ownership. Although some land in regional areas is communally owned, most communally owned land is located in remote and very remote areas. Usually, such land cannot be sold and the land itself cannot be mortgaged. This ensures its continuing ownership by Indigenous people, but means that developments on the land, including home ownership and private sector financing, need to be pursued through sub-leasing arrangements. Unlike the United States and Canada, where similar situations arise on Indigenous communally owned land, in Australia the legislative provisions which provide for sub-leasing and private sector financing have yet to be fully utilised. Information on Indigenous owned or controlled land is included in section 8.2.

Governments across Australia have been active in enabling and encouraging home ownership amongst Indigenous people. For example, in 2008, the Queensland Government amended the *Aboriginal Land Act 1991* and the *Torres Strait Islander Land Act 1991* to provide for up to 99-year leases, which enables individuals to secure interest in land on Indigenous deed of grant in trust, reserve, transferred or granted land. The Queensland Government has also established an Indigenous Leasing Support Unit in Cairns to provide advice and training to trustees who are responsible for granting leases.

In September 2006, the Australian Government passed the *Aboriginal Land Rights (Northern Territory) Amendment Act 2006*. The Act was intended to encourage individual property rights in town areas on Indigenous communally owned land in the NT. The Act enables 99 year head leases to government entities, which can subsequently make sub-leases, which can be used for private home ownership, business or other purposes. In June 2007, the Australian Government passed the *Aboriginal Land Rights (Northern Territory) Amendment (Township Leasing) Act 2007* which established the independent statutory office of the Executive Director of Township Leasing as the government entity to hold head leases. The first township lease was entered into for Nguuu on the Tiwi Islands in August 2007. In June 2008, the Australian Government passed the *Indigenous Affairs Legislation Amendment Act 2008*. The Act included additional flexibility for township leasing allowing for lease terms between 40 and 99 years. In December 2008 a township lease was entered into for the communities of Angurugu, Umbakumba and Milyakburra in the Groote Eylandt region for an effective 80 year period through an initial lease of 40 years and the option of a 40 year renewal.

The amendments to the Act only affect the NT. Land ownership in other states and territories is determined by separate legislation in each jurisdiction. Long term leases for home ownership on Indigenous communal land are possible under land tenure arrangements in some states and territories but are not common. More information on Indigenous land tenure is included in section 8.2.

Szava and Moran (2008), in their study of the perception of home ownership among 58 Indigenous Business Australia clients, note Indigenous people's perception of the positive and negative aspects of home ownership. The most commonly mentioned positive aspects of home ownership were independence and control (55 per cent), makes financial sense (40 per cent) and pride and sense of ownership (36 per cent). The most commonly mentioned negative aspects of home ownership were maintenance and repairs (33 per cent) and paying rates and utilities (22 per cent). The study also observed that, despite widespread problems of maintenance across the Indigenous community, the houses in the study were in a reasonable standard of repair, and had been improved or extended.

Box 8.3.2 'Things that work' — home ownership

The home ownership program now marketed as **IBA Homes** was established in 1975 under the Aboriginal Loans Commission, and was transferred to Indigenous Business Australia in 2005. IBA offers a concessional lending product and tailored after care support targeting those in most need.

Since its inception, the program has assisted 13 540 Indigenous families to buy their own home. In 2007-08, IBA approved 474 new loans, valued at \$114 million, enabling 1307 Indigenous people to purchase homes. IBA currently has 3370 active home loans across Australia.

Loans are generally for the purchase or construction of a home. Loans may also be provided for purchasing land, essential home improvements or home maintenance and repairs. IBA also has a deposit gap loan which assists families with limited deposits to access mainstream home loan finance. IBA approved 21 deposit gap loans in 2007-08, totalling \$1.38 million.

IBA's typical borrower is a first home buyer purchasing a modest home valued at less than \$300 000. Approximately 85 per cent of new loans approved in 2007-08 were to first home owners. Loan repayments are based on a concessional commencing interest rate in early 2009, currently set at 4.25 per cent, a historical low for the program. The rate increases 0.5 per cent annually until it reaches the IBA Home Loan Rate. IBA adjusts its Home Loan Rate relative to the RBA cash and Commonwealth Bank's standard variable rate (Indigenous Business Australia, unpublished).

(Continued next page)

Box 8.3.2 (continued)

The **NSW Aboriginal Housing Office (AHO)** works with IBA and contributes \$1 million each year and pays any legal costs associated with the purchase of a property by a tenant up to a maximum of \$2500. Further, the sale of AHO houses is exempt from Stamp Duty.

In early 2009, the AHO/IBA Home Ownership Scheme has funded 32 home loans valued at approximately \$5.8m (Indigenous Business Australia, unpublished; NSW, unpublished).

The **HomeStart Nunga Home Loan** program, in SA, was officially launched on 29 April 2004. The Nunga Loan was designed to specifically meet the needs of the Indigenous community and address financial, educational and experiential issues that often stand in the way of successful and sustainable home ownership.

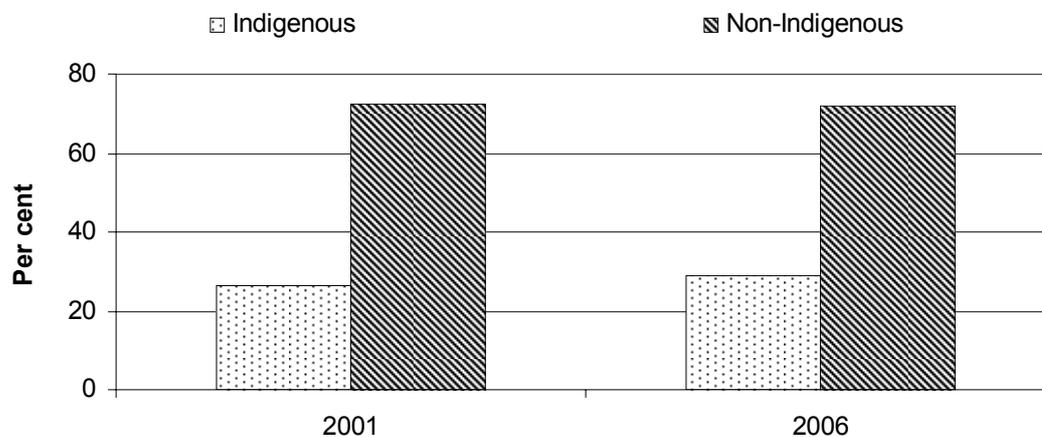
The loan program targeted an improvement in home ownership rates for Aboriginal people in South Australia. HomeStart has written 393 Nunga loans (\$63m) since the program's inception and there are currently 296 active loans for a total of \$47.6m. Indigenous home ownership in South Australia has grown from 30 per cent in 1996 to 36 per cent in 2006 (according to 2006 census data) (SA Government, unpublished).

Home ownership is measured in this report by looking at the proportion of Indigenous people living in a home owned or being purchased by a member of their household. These households are referred to as home owner/purchaser households. Measuring Indigenous home ownership is complex.

Not all people living in a household owned by someone in the household (for example, boarders) will share in the long-term economic benefits of home ownership. Some Indigenous people counted this way may be in households where the owner is non-Indigenous. However, the approach used is reasonably simple to derive and provides a good approximation of levels of home ownership in the Indigenous population.

Data on home ownership in this report are taken from the 2001 and 2006 Censuses. The charts and commentary in this section are for Indigenous people of all ages and are therefore not comparable to the 2007 report which used data for people aged 18 years and over from the 2004-05 NATSIHS.

Figure 8.3.1 Proportion of people living in home owner/purchaser households, 2001 and 2006^a



^a Includes homes being purchased under a rent/buy scheme.

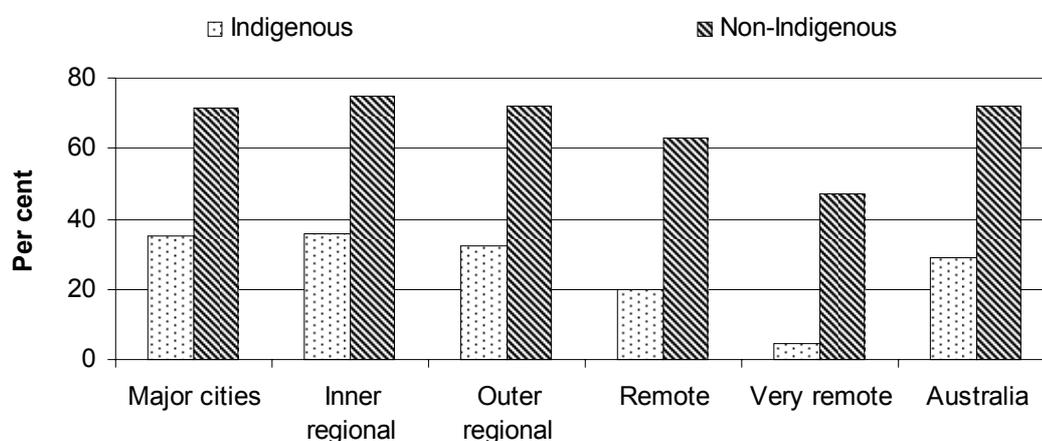
Source: ABS (unpublished) derived from the *2006 Census of Population and Housing*; *2001 Census of Population and Housing*; table 8A.3.6.

Between 2001 and 2006:

- the proportion of Indigenous people living in home owner/purchaser households increased from 26.2 per cent to 28.9 per cent. In contrast, the proportion of non-Indigenous people living in home owner/purchaser households decreased slightly from 72.3 to 72.1 per cent (figure 8.3.1).

Data on the proportions of Torres Strait Islander and Aboriginal people living in home owner/purchaser households in 2001 and 2006 are included in table 8A.3.1–6. Section 9.1 on housing overcrowding discusses the median weekly mortgage for Indigenous people and rent payments by tenure type for Indigenous people.

Figure 8.3.2 **Proportion of Indigenous people living in home owner/purchaser households, by remoteness area, 2006^a**



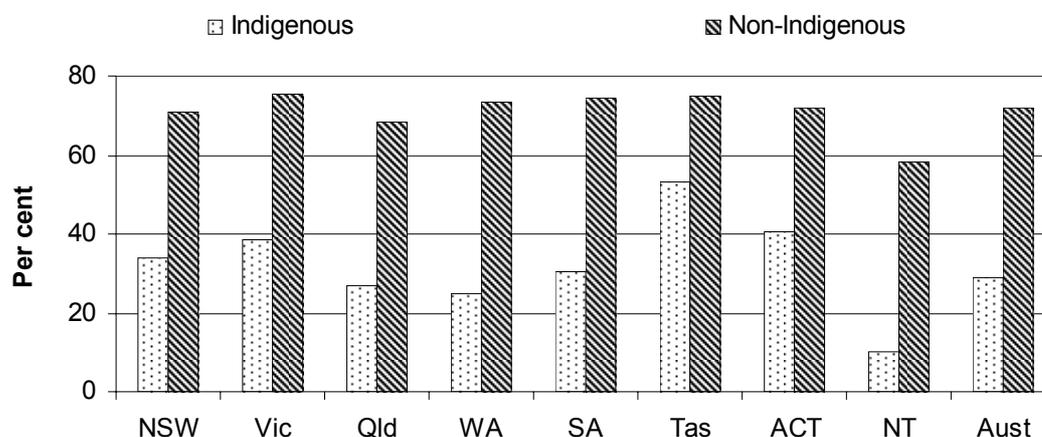
^a Includes homes being purchased under a rent/buy scheme.

Source: ABS (unpublished) derived from the 2006 Census of Population and Housing; table 8A.3.5.

In 2006:

- the proportion of Indigenous people living in home owner/purchaser households was much lower than for non-Indigenous people in all remoteness areas (figure 8.3.2)
 - the proportion of Indigenous people living in a home owner/purchaser household was similar in major cities (35.3 per cent), inner regional (35.7 per cent) and outer regional areas (32.3 per cent). The rate was lower in remote areas (19.7 per cent) and lower again in very remote areas (4.8 per cent) (figure 8.3.2)
 - the proportion of non-Indigenous people living in a home owner/purchaser household was similar in major cities, inner regional and outer regional areas. The rate was lower in remote areas and lower again in very remote areas (figure 8.3.2)
- 7.8 per cent of Indigenous people lived in homes fully owned by someone living in their household and 21.1 per cent lived in homes being purchased by someone living in their household (table 8A.3.4).

Figure 8.3.3 Proportion of Indigenous people living in home owner/purchaser households, by State/Territory, 2006^{a, b}



^a Includes homes being purchased under a rent/buy scheme. ^b Australia includes 'Other territories'.

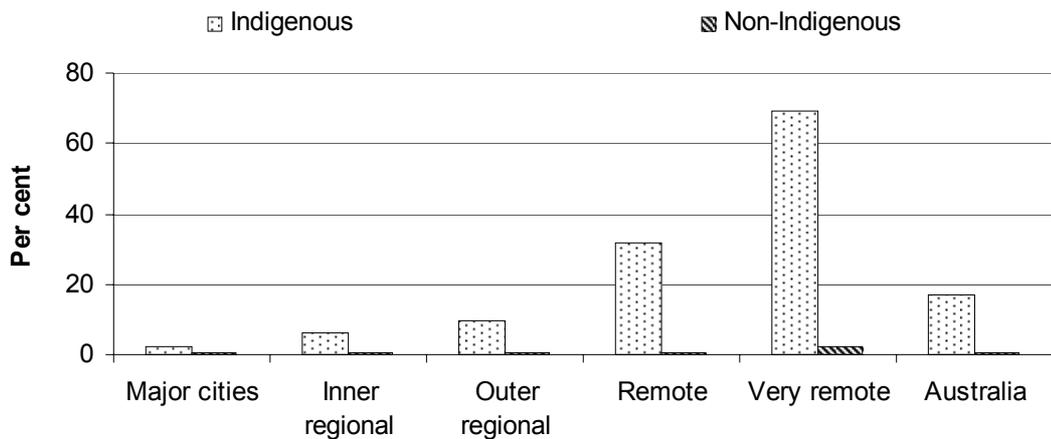
Source: ABS (unpublished) derived from the 2006 Census of Population and Housing; table 8A.3.6.

In 2006:

- the proportion of Indigenous people living in home owner/purchaser households was much lower than for non-Indigenous people in all states and territories (figure 8.3.3)
- the proportion of Indigenous people living in home owner/purchaser households varied greatly across states and territories, reflecting the geographic distribution of Indigenous people (i.e. between non-remote and remote areas) within those jurisdictions. In contrast, the proportion for non-Indigenous people did not vary greatly across most states and territories and was between 68.6 and 75.5 per cent for all states and territories except for the NT, where the proportion was 58.2 per cent (figure 8.3.3)
- the proportion of Indigenous people living in home owner/purchaser households was highest in Tasmania (52.9 per cent). In contrast, the proportion for non-Indigenous people was highest in Victoria (75.5 per cent) (figure 8.3.3)
- the proportion of Indigenous people living in home owner/purchaser households was lowest in the NT (10.3 per cent). The proportion for non-Indigenous people was also lowest in the NT (58.2 per cent) (figure 8.3.3)
- the gap between Indigenous and non-Indigenous people living in a home owner/purchaser household was largest in the Northern Territory and smallest in Tasmania (figure 8.3.3).

Most housing on Indigenous communally owned land is owned by Indigenous community or cooperative housing organisations, which rent houses to families and individuals. Community rental housing is different to home ownership by individual households and families. It is, however, a communal form of Indigenous ownership and control of housing.

Figure 8.3.4 Proportion of people living in community housing, by remoteness, 2006^a



^a Comprises 'Housing co-operative/community/church group'; 'Community or co-operative housing group'.

Source: ABS (unpublished) derived from the 2006 Census of Population and Housing; table 8A.3.5.

Across remoteness areas, in 2006:

- a much larger proportion of Indigenous people (17.3 per cent) than non-Indigenous people (0.4 per cent) lived in community housing (figure 8.3.4)
- the proportion of Indigenous people living in community housing was much higher in remote areas than non-remote areas. The proportion was largest in very remote areas (69.1 per cent) and was smallest in major cities (2.5 per cent) (figure 8.3.4).

More detail on community rental housing is included in tables 8A.3.1, 8A.3.2 and 8A.3.3.

Tables 8A.3.1 to 8A.3.3 include data on those living in rental housing as well as more detail on people living in homes owned by someone in the household. Many Indigenous people live in public housing provided by State and Territory government housing authorities. Information on public housing provided to Indigenous people is included in the annual Report on Government Services (SCRGSP 2009).

8.4 Income support

Box 8.4.1 Key messages

- In 2004-05:
 - government pensions and allowances (70.7 per cent) were the most common source of cash income for Indigenous households, followed by employee income (56.9 per cent), other cash income (21.7 per cent) and income from Community Development Employment Projects (5.9 per cent) (figure 8.4.1)
 - 47.7 per cent of Indigenous people aged 15 to 64 years received government pensions and allowances as their main source of personal cash income, compared to 17.3 per cent of non-Indigenous people aged 15 to 64 years (figure 8.4.2).
- Higher proportions of Indigenous than non-Indigenous people aged 15–64 years received the most common income support payment types in 2006. Parenting payment single was the most common income support payment received by Indigenous people aged 15–64 years (11.2 per cent), followed by Newstart allowance (10.8 per cent), disability support pension (7.9 per cent) and youth allowance (4.7 per cent) (figure 8.4.4).

Income support is a new indicator in the revised OID framework endorsed by COAG in November 2008. The key measures are the proportion of welfare payments as part of overall household income, and the number of people on workforce age income support payments.

This section uses data from the ABS 2004-05 National Aboriginal and Torres Strait Islander Health Survey and the ABS 2004-05 National Health Survey on sources of household and individual income to identify proportions of Indigenous and non-Indigenous people receiving income support payments. This section also uses Centrelink administrative data on the number of Indigenous and non-Indigenous people of working age receiving income support payments. When interpreting the survey and administrative data it is important to consider their different collection methods and definitions which may lead to variations in results.

Income support is available to all eligible Australians to ensure that they have adequate levels of income to support themselves and their dependents. Income support accounts for the largest component of welfare provided by the Australian Government, with more than 4.2 million direct beneficiaries at any one time (ABS 2008). Income support payments are paid by Centrelink to: the aged; people with a disability; carers; youth and students; families with children; the unemployed; and the homeless (ABS 2007).

Indigenous people are overrepresented in the Australian income support system, with 47.7 per cent reporting government cash pensions and allowances as their main source of personal income in 2004-05, compared to 17.3 per cent of non-Indigenous people (table 8A.4.1). A range of adverse socioeconomic conditions contribute to a high dependence on income support by Indigenous people, including poor standards of health, lack of employment opportunities in the local labour market and low levels of educational attainment (DEEWR 2009).

The Cape York Institute has argued that government services introduced specifically to counter Indigenous social problems have had the opposite effect — increasing reliance and eroding personal responsibility, leading to a disengagement from the real economy (CYI 2009). The term ‘negative welfare’ has been used by some commentators, in the context that negative welfare involves government payments to an able bodied individual, without reciprocity. Pearson (1999) said that this negative welfare has resulted in third and fourth generations dependent on income assistance.

Several government programs specifically target passive reliance on income support by Indigenous people. The longest running program is the Community Development Employment Projects (CDEP) program (section 4.6). Welfare reform and welfare payment reform for the Australian Indigenous population have been a key component of government policy (where welfare payment reform relates to the way welfare payments are paid to people, while welfare reform relates more broadly to the structure of welfare entitlements).

The Welfare to Work initiative implemented from 2005 (under the former Australian Government) aimed to move people off income support and into employment opportunities. It did not specifically target Indigenous communities although they were a large proportion of recipients in the targeted cohorts (DEEWR 2006). The intensity of the Australian Government’s focus on Indigenous welfare reform and welfare payment reform has increased more recently. On 19 December 2008, further reforms were announced by the Australian Government, including the restructure, and in some cases, removal, of CDEP. These reforms aim to reduce reliance on income support payments (Macklin and O’Connor 2008).

There are three main welfare payment reform initiatives in which Indigenous people are participating:

- The ‘welfare reform and employment’ measure under the Northern Territory Emergency Response (NTER) (initiated by the former Australian Government) is supported by specific legislation on income management. This measure involves the income management of a proportion (usually 50 per cent) of welfare payments for all recipients in selected NTER communities. The managed

proportion can be spent only on priority needs such as food, shelter and education and cannot be used for alcohol, tobacco, pornography or gambling (NTER Review 2008). This measure is coordinated by Centrelink through mechanisms including the government's BasicsCard, direct deductions and direct payments to community stores. More information on the NTER is included in section 11.1 (Case studies in governance).

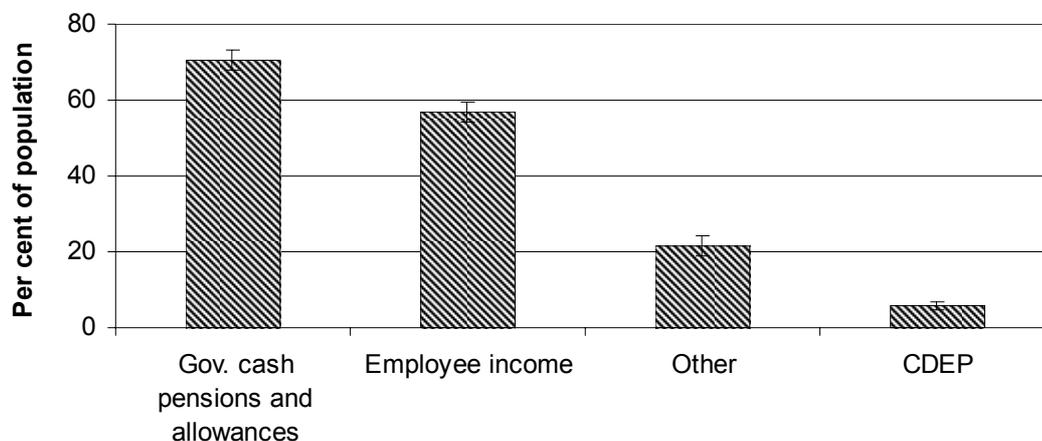
- The Cape York Welfare Reform Project trial commenced in selected communities in July 2008 and is coordinated by the Cape York Institute, in partnership with the Queensland and Australian Governments. Under this trial, a list of obligations have been tied to welfare payments, including: making sure children attend school; keeping children safe from harm and neglect; not committing drug, alcohol or family violence offences; and abiding by tenancy agreements. The Queensland Government Family Responsibilities Commission (FRC) was established to ensure that these obligations are followed, and has the power to manage welfare payment income in the case of a breach. Where a quarantine of welfare payments occurs, the FRC removes an individual's discretion over their welfare payments (or, in the case of family payments, directs some of it to another adult) so that the essential needs of children and family members are met. Payments can then only be used for items such as food, rent, electricity bills and education expenses (CYI 2009). This is coordinated by Centrelink through the same mechanisms as used in the NTER communities. More information on the Cape York Welfare Reform project is included in section 11.1 (Case studies in governance).
- The Child Protection Initiative is being implemented in selected communities across WA. WA Department for Child Protection case managers can refer all income support recipients in the community to Centrelink to have their income support managed to ensure the priority needs of children are met (Centrelink 2008). During the period of income management, the WA government provides case management support services, including parenting support (Macklin and McSweeney 2008). Voluntary income management is also available in these communities in WA, enabling people on welfare payments to volunteer for their payments to be managed for a twelve month period.

None of these welfare payment reform programs have operated long enough to determine their impact on outcomes for Indigenous people.

Sources of household income

Figure 8.4.1 contains ABS 2004-05 National Aboriginal and Torres Strait Islander Health Survey data on sources of household cash income for Indigenous people.

Figure 8.4.1 **Source(s) of household cash income for Indigenous people, 2004-05^a**



^a Households may report more than one source of income.

Source: ABS 2004-05 NATSIHS (unpublished); table 8A.4.2.

Figure 8.4.1 illustrates the sources of *household* cash income for Indigenous people. It is not possible to produce a non-Indigenous comparator. Households may report more than one source of income.

In 2004-05:

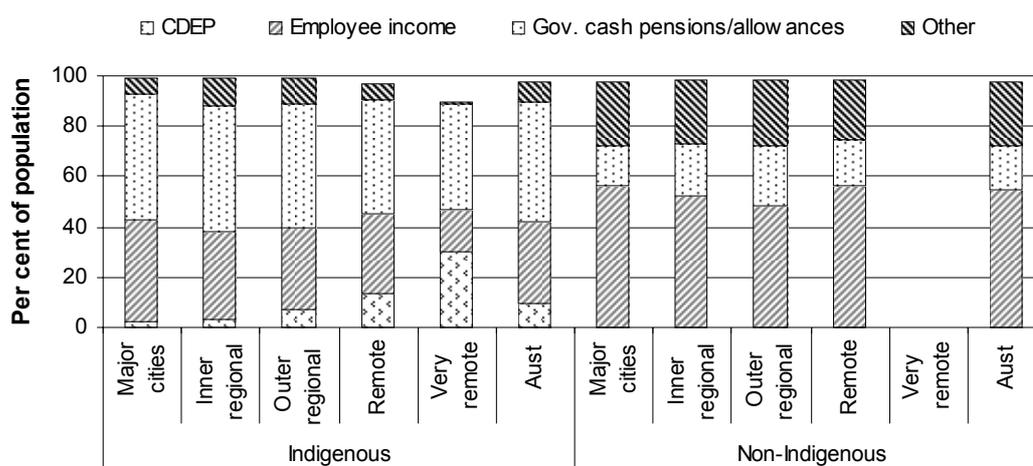
- 70.7 per cent of Indigenous households reported government cash pensions and allowances as a source of household income, 56.9 per cent of households reported employee income, 21.7 per cent reported other cash income and 5.9 per cent reported CDEP income (figure 8.4.1)
- there was little difference across remoteness areas in the proportions of Indigenous households receiving income from government cash pensions and allowances, with the proportions for total remote (69.4 per cent) and the total non-remote areas (70.8 per cent) being similar. In contrast, the percentage of Indigenous households reporting CDEP as a source of cash income increased with remoteness, from 3.1 per cent in major cities to 28.2 per cent in very remote areas (table 8A.4.2).

Table 8A.4.7 shows Indigenous household cash income sources by State and Territory.

Personal income

Figure 8.4.2 contains 2004-05 National Aboriginal and Torres Strait Islander Health Survey and National Health Survey data on people's main source of personal cash income.

Figure 8.4.2 Main source of personal cash income, people aged 15–64 years, 2004-05^{a, b, c}



^a Categories may not add to 100 per cent as the total includes people whose main source of cash income was not stated or not known. ^b Non-Indigenous data are not available for very remote areas as they were not collected in the 2004-05 NHS. The records for the very remote areas have been attributed appropriately to national estimates. ^c Respondents could only identify a single main source of personal cash income.

Source: ABS 2004-05 NATSIHS and NHS (unpublished); table 8A.4.1.

For the *main* source of personal cash income in 2004-05:

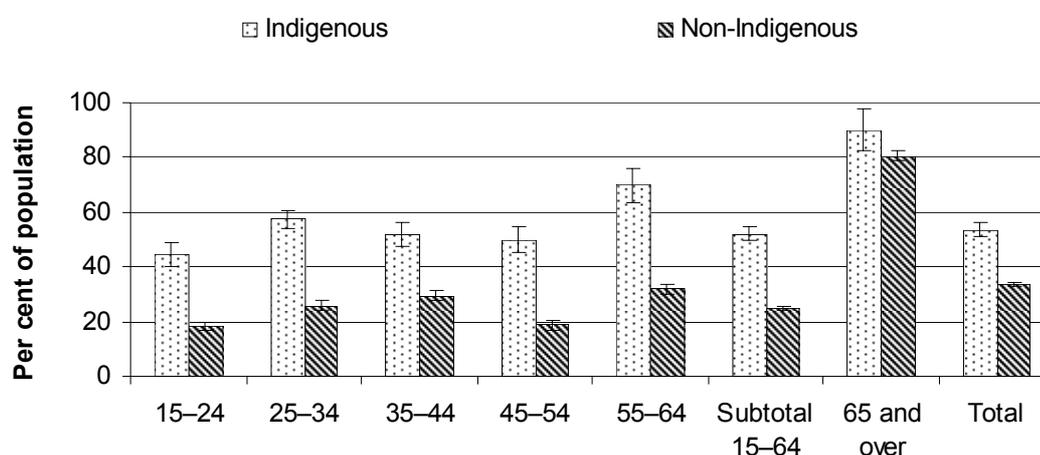
- nearly half of Indigenous people aged 15–64 years (47.7 per cent), received government pensions and allowances as their main source of personal cash income, while a further 9.6 per cent received CDEP payments as their main source of personal cash income. In contrast, only 17.3 per cent of non-Indigenous people aged 15–64 years received most of their personal cash income from government cash pensions and allowances
- the proportion of Indigenous people receiving most of their personal cash income from employee income was 32.7 per cent. In contrast, 54.9 per cent of non-Indigenous people reported employee cash income as their main source of personal income (figure 8.4.2)
- the proportion of Indigenous people aged 15–64 years with employee income as the main source of personal cash income decreased with remoteness, while the

proportion with CDEP income as their main source of personal cash income increased with remoteness (figure 8.4.2).

Table 8A.4.6 presents the *main* sources of personal cash income by State and Territory for Indigenous and non-Indigenous people aged 15–64 years in 2004-05.

Figure 8.4.3 presents data on all people aged 15–64 years receiving income support payments as either main or secondary source of income. These are distinct from data presented in figure 8.4.2 on the main source of personal cash income, where only one main source could be nominated.

Figure 8.4.3 People receiving income support payments, as a main or secondary source of income, by age, 2004-05^a



^a The proportion of people in receipt of income support, according to their Indigenous status and age group. People could nominate multiple sources of income.

Source: ABS 2004-05 NATSIHS and NHS (unpublished); table 8A.4.4

In 2004-05:

- a higher proportion of Indigenous people aged 15–64 years received income support payments compared to non-Indigenous people (51.9 per cent compared with 24.7 per cent) (figure 8.4.3)
- for both Indigenous and non-Indigenous people aged 15–64 years, a greater proportion of females than males received income support payments (65.9 per cent of Indigenous females and 36.5 per cent of Indigenous males and 34.5 per cent and 14.9 per cent for non-Indigenous females and males) (table 8A.4.3)
- a higher proportion of Indigenous than non-Indigenous people aged 15–64 years received income support in all states and territories. The largest variation

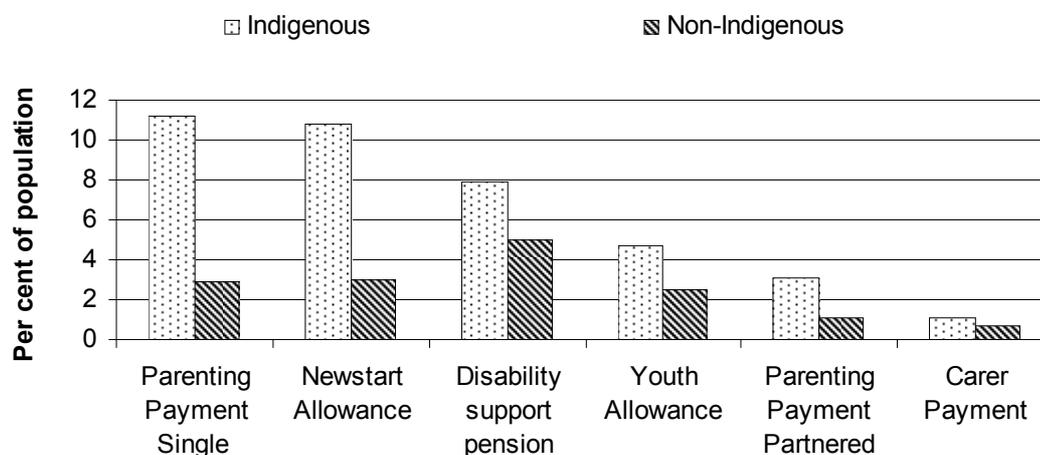
between Indigenous and non-Indigenous rates was in the NT, with an Indigenous to non-Indigenous rate ratio of 3.4 (table 8A.4.5)

- in all remoteness areas a higher proportion of Indigenous than non-Indigenous people aged 15–64 years received income support payments. The most significant difference was in major cities (50.7 per cent compared with 22.1 per cent) (table 8A.4.3)
- for all age groups over 15 years, Indigenous people were more likely to receive income support payments than non-Indigenous people. The greatest Indigenous to non-Indigenous rate ratio was for those aged 45–54 years (2.6) (figure 8.4.3).

People receiving income support payments — administrative data

Figures 8.4.4 and 8.4.5 contain Centrelink administrative data on the proportion of Indigenous and non-Indigenous people aged 15–64 years receiving income support payments. Indigenous identification in Centrelink data is voluntary. People whose Indigenous status is unknown are included here as non-Indigenous. Proportions of the population receiving income support payments have only been calculated for 2006 as updated population estimates and projections for other years have not yet been published by the ABS. Time series data for 2003 to 2008 are presented in attachment tables as numbers of people receiving income support payments.

Figure 8.4.4 **People aged 15–64 years receiving income support payments, by selected payment types, 2006** ^{a, b, c}



^a Non-Indigenous includes people whose Indigenous status was unknown. ^b All data is point in time data. Depending on the particular payment type, data are reported as at various days in June and July 2006. ^c Definitions of payment types and other information about these data are in table 8A.4.26.

Source: Centrelink (unpublished); 8A.4.10.

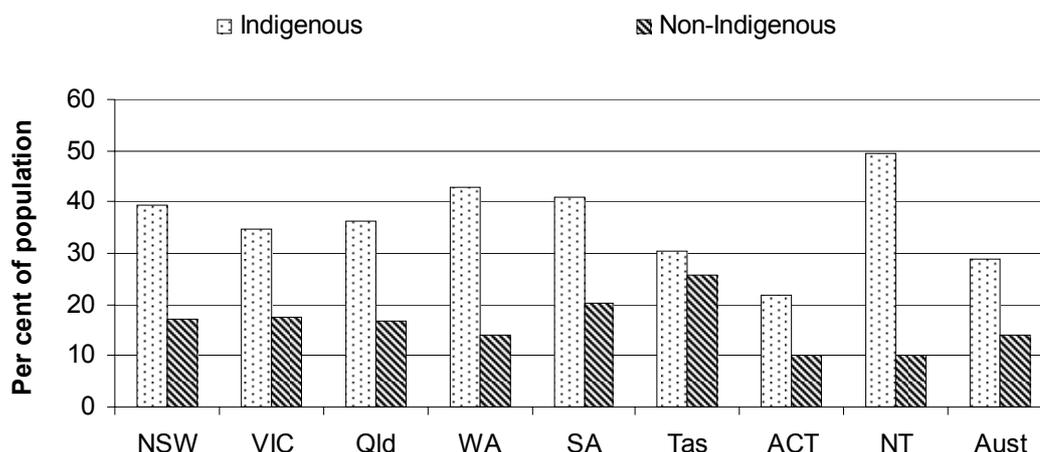
In 2006:

- Indigenous people aged 15–64 years received a higher proportion of each of the selected income support payments, presented in figure 8.4.4.
- parenting payment single was the most common income support payment received by Indigenous people aged 15–64 years (11.2 per cent), followed by newstart allowance (10.8 per cent), disability support pension (7.9 per cent) and youth allowance (4.7 per cent) (figure 8.4.4)
- disability support pension was the most common income support payment received by non-Indigenous people aged 15–64 years (5.0 per cent), followed by newstart allowance (3.0 per cent) and parenting payment single (2.9 per cent) (figure 8.4.4)
- a higher proportion of Indigenous females than Indigenous males aged 15–64 years received parenting payment single, parenting payment partnered and carer payment. In contrast, for the same age group a higher proportion of Indigenous males than Indigenous females received disability support pension, newstart allowance and youth allowance (table 8A.4.10).

Information on the proportions of Indigenous and non-Indigenous people on income support are reported for additional payment types for 2006 in table 8A.4.10. Attachment tables 8A.4.8 to 8A.4.13 present numbers of Indigenous and

non-Indigenous people, by sex, on income support by payment types for 2003 to 2008.

Figure 8.4.5 People aged 15–64 years receiving income support payments, by State/Territory, 2006^{a, b, c, d}



^a Non-Indigenous includes people whose Indigenous status was unknown. ^b Each State and Territory total is the sum of the number reported against each individual payment type. Payment types with fewer than 20 Indigenous or non-Indigenous recipients are not included in totals. All data are point in time data. Depending on the particular payment type, data are reported as at various days in June and July 2006. ^c The Australian total includes people where State/Territory was unknown or where a person resides outside Australia. ^d Definitions of payment types and other information about these data are in table 8A.4.26.

Source: Centrelink (unpublished); table 8A.4.16

In 2006:

- in all states and territories there was a higher proportion of Indigenous people than non-Indigenous people aged 15–64 years on income support payments. Indigenous proportions were 2 to 3 times non-Indigenous proportions for all states and territories, except Tasmania (1.2) and the NT (4.9) (figure 8.4.5)
- the NT reported the largest difference between Indigenous people (49.4 per cent) and non-Indigenous people (10.0 per cent) aged 15–64 years on income support, with newstart allowance being the most common payment for Indigenous people in the NT (19.2 per cent of Indigenous people aged 15–64 years) (figure 8.4.5).

State and Territory data on the proportions of Indigenous and non-Indigenous people on income support are reported for additional payment types for 2006 in table 8A.4.16. Attachment tables 8A.4.14 to 8A.4.19 present the number of Indigenous and non-Indigenous people, on income support by payment types for 2003 to 2008, by State and Territory. To supplement these data, the number of Indigenous and non-Indigenous people on income support by payment types for 2003 to 2008, by remoteness are presented at tables 8A.4.20 to 8A.4.25.

8.5 Future directions in data

Labour market participation (full time /part time) by sector and occupation

In addition to the five-yearly Census, the ABS program of ongoing Indigenous specific surveys, including the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) and the National Aboriginal and Torres Strait Islander Social Survey (NATSISS), provides labour force data (including CDEP) on a three yearly cycle. Labour force information from the 2008 NATSISS will separately identify CDEP participants. These data will be available from late 2009.

Additional estimates of Indigenous labour force data over the period 2002 to 2007 are available, from the monthly Labour Force Survey (ABS 2008). These estimates are annual and hence more frequent than the Census, but, because the estimates are based on a smaller sample, they are of lower quality.

8.6 References

8.1 Labour market participation (full time /part time) by sector and occupation

Australian Bureau of Statistics 2008, *Labour Force Characteristics of Aboriginal and Torres Strait Islander Australians*, Cat. no 6287.0, ABS, Canberra.

Hunter, B. 2004, *Indigenous Australians in the Contemporary Labour Market*, Cat. no. 2052.0, ABS, Canberra.

—2002, *Institutional Factors Underpinning Indigenous Labour Force Participation: The Role of the CDEP Scheme and Education*, Working paper no. 14, Centre for Aboriginal Economic Policy Research, Australian National University, Canberra.

Rio Tinto 2008, *Aboriginal Policy and Programs in Australia*, Bluestar Print Group, Melbourne.

8.2 Indigenous owned or controlled land

Altman, J.C. 2001, *Sustainable Development Options on Aboriginal Land: the Hybrid Economy in the Twenty-first Century*, Discussion Paper no. 226/2001, Centre for Aboriginal Economic Policy Research, Australian National University, Canberra.

Altman, J.C. and Dillon, M.C. 2004, *A profit-related investment scheme for the Indigenous estate*, Discussion Paper Discussion Paper no. 270/2004, Centre for Aboriginal Economic Policy Research, Australian National University, Canberra.

Altman, J.C. and Levitus, R.I. 1999, *The Allocation and Management of Royalties under the Aboriginal Land Rights (Northern Territory) Act: Options for Reform*, Discussion Paper no. 191/1999, Centre for Aboriginal Economic Policy Research, Australian National University, Canberra.

-
- Altman, J.C. and Smith, D.E. 1994, *The Economic Impact of Mining Moneys: the Nabarlek Case, Western Arnhem Land*, Discussion Paper no. 63/1994, Centre for Aboriginal Economic Policy Research, Australian National University, Canberra.
- 1999, *The Ngurratjuta Aboriginal Corporation: a Model for Understanding Northern Territory Royalty Associations*, Discussion Paper no. 185/1999, Centre for Aboriginal Economic Policy Research, Australian National University, Canberra.
- DEHWA (Department of the Environment, Water, Heritage and the Arts) 2009, *Indigenous Protected Areas*, <http://www.environment.gov.au/indigenous/ipa/index.html>, accessed 6 March 2009.
- Gilligan, B. 2006, *The Indigenous Protected Areas Programme: 2006 Evaluation*, Department of the Environment and Heritage, Canberra.
- Hooke, M.S. 2004, Submission by the Minerals Council of Australia to the Parliamentary Joint Committee on Native Title Inquiry into Native Title Representative Bodies, http://www.aph.gov.au/senate/committee/ntlf_ctte/rep_bodies/submissions/sub20.pdf (accessed 5 April 2005).
- Hunter, B. 1999, *Indigenous Self-employment: Miracle Cure or Risky Business*, Discussion paper no. 176, Centre for Aboriginal Economic Policy Research, Australian National University, Canberra.
- IBA (Indigenous Business Australia) 2003, *Report on Support for Indigenous Business*, Australian Government, Canberra.
- ILC (Indigenous Land Corporation) 2001a, *Regional Indigenous Land Strategy 2001–2006: New South Wales*, Adelaide.
- 2001b, *Regional Indigenous Land Strategy 2001–2006: Northern Territory*, Adelaide.
- 2001c, *Regional Indigenous Land Strategy 2001–2006: Queensland*, Adelaide.
- 2001d, *Regional Indigenous Land Strategy 2001–2006: South Australia*, Adelaide.
- 2001e, *Regional Indigenous Land Strategy 2001–2006: Tasmania*, Adelaide.
- 2001f, *Regional Indigenous Land Strategy 2001–2006: Victoria*, Adelaide.
- 2001g, *Regional Indigenous Land Strategy 2001–2006: Western Australia*, Adelaide.
- 2007, *National Indigenous Land Strategy 2007–2012*. Indigenous Land Corporation, Adelaide.
- 2008a, *Land Acquisition Program Handbook*, http://www.ilc.gov.au/webdata/resources/files/LA_HandbookandGuidelines_Apr08.pdf (accessed 22 April 2008)
- 2008b, *Indigenous Land Corporation Annual Report 2007–08*, Adelaide.
- McDermott, R., O’Dea, K., Rowley, K., Knight, S. and Burgess, P, 1998, ‘Beneficial impact of the homelands movement on health outcomes in central Australian Aborigines’, *Australian and New Zealand Journal of Public Health*, vol. 22, no. 6, pp. 653–658.
- NNTT (National Native Title Tribunal) 2002a, *10 Years of Native Title Information Kit*, Perth, http://www.nntt.gov.au/media/data/files/10_years_of_Native_Title.pdf (accessed 6 August 2003).
- 2002b, *What is native title?*, Fact Sheet No. 1a, http://www.nntt.gov.au/publications/1035773354_1456.html, (accessed 6 August 2003).

-
- 2006, *What is an indigenous land use agreement (ILUA)?*, Fact Sheet No. 2b, http://www.nntt.gov.au/publications/1021435535_10212.html, (accessed 30 October 2006).
- 2009, *National Report: Native Title*, <http://www.nntt.gov.au/Applications-And-Determinations/Procedures-and-Guidelines/Documents/National20Report20Card20-20March202009.pdf> (accessed 28 April 2009).
- O’Faircheallaigh, C. 2006, ‘Mining agreements and Aboriginal economic development in Australia and Canada’, *The Journal of Aboriginal Economic Development*, vol. 5, no. 1, pp. 74–91.
- O’Faircheallaigh, C. and Corbett, T. 2005, ‘Indigenous participation in environmental management of mining projects: the role of negotiated agreements’, *Environmental Politics*, vol. 14, no. 5, pp. 629–647.
- Pollack, D.P. 2001, *Indigenous Land in Australia: A Quantitative Assessment of Indigenous Landholdings in 2000*, Discussion Paper no. 221/2001, Centre for Aboriginal Economic Policy Research, Australian National University, Canberra.
- PY Media 2009, *Watarru Land Management: Kuka Kanyini*, <http://www.waru.org/communities/watarru/land.php> (accessed 29 April 2009).
- Rowley, K.G., O’Dea, K., Anderson, I., McDermott, R., Saraswati, K., Tilmouth, R., Roberts, I., Fitz, J., Wang, Z., Jenkins, A., Best, J.D., Wang, Z., and Brown, A. 2008, ‘Lower than expected morbidity and mortality for an Australian Aboriginal population: 10-year follow-up in a decentralised community’, *Medical Journal of Australia*, vol. 188, no. 5, pp. 283–287.
- Wunan Foundation 2009, Wunan Foundation: About us, Kununurra, <http://www.wunan.org.au/about.html> (accessed 29 April 2009).

8.3 Home ownership

- SCRGSP (Steering Committee for the Review of Government Service Provision) 2009, *Report on Government Services 2007*, Productivity Commission, Canberra.
- Szava, A. Moran, M. 2008. *Perceptions of Home Ownership among IBA Home Loan Clients*, Centre for Appropriate Technology and Indigenous business Australia, Alice Springs.

8.4 Income Support

- ABS (Australian Bureau of Statistics) 2008, *Year Book Australia, 2008*, Cat. no. 1301.0, Canberra.
- 2007, *Australian Capital Territory in Focus, 2007*, Cat. no. 1307.8, Canberra.
- DEEWR 2009, *Job Seeker Classification Instrument Factors*, Australian Workplace Portal, <http://www.workplace.gov.au/workplace/Programmes/JobNetwork/JobSeekerClassificationInstrumentJSCIFactors.htm> (accessed 16 February 2009).
- 2006, *About Welfare to Work Reforms*, Australian Workplace Portal, <http://www.workplace.gov.au/workplace/Programmes/MovingIntoWork/AboutWelfaretoWorkreforms.htm> (accessed 16 February 2009).
- Centrelink 2008, *Income Management for Child Protection Factsheet*, <http://www.centrelink.gov.au/internet.nsf/publications/co497.htm> (accessed 2 February 2009).
- CYI (Cape York Institute for Policy and Leadership) 2009, *Welfare Reform*, <http://cyi.org.au/welfarereform.aspx> (accessed 2 February 2009).

Macklin, J. (Minister for Families, Housing, Community Services and Indigenous Affairs) and McSweeney, R. (WA Minister for Child Protection) 2008, *Income Management Program*, media release, 12 January 2009.

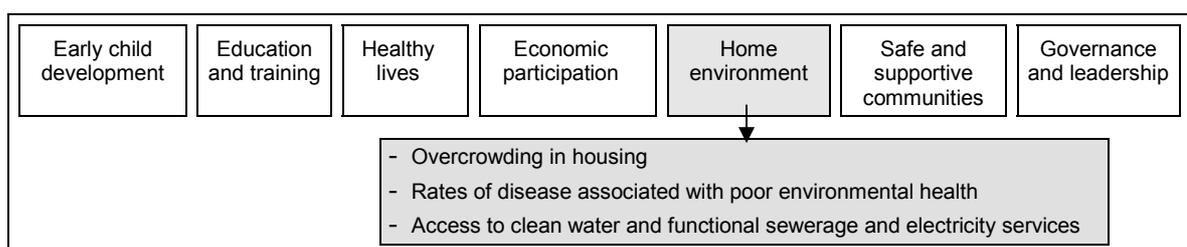
Macklin, J. (Minister for Families, Housing, Community Services and Indigenous Affairs) and O'Connor, B. (Minister for Employment Services, 2008, *Strengthening Indigenous Employment Opportunities*, media release, 19 December 2008.

NTER (Northern Territory Emergency Response) Review, 2008, *Report of the NTER Review Board- October 2008*, http://www.nterreview.gov.au/docs/report_nter_review/chz.htm (accessed 2 February 2009).

Pearson, N. 1999 'Positive and Negative Welfare in Australia's Indigenous Communities', *Family Matters*, <http://www.aifs.gov.au/institute/pubs/fm54np.html> (accessed 16 February 2009).

9 Home environment

Strategic areas for action



A wide range of factors influence people's health and wellbeing. This chapter covers some of the key environmental influences on health, such as appropriate housing conditions and access to clean water and functional sewerage and electricity services. Many other environmental factors also influence health; for example, air quality, noise pollution, occupational health, food quality and pest control.

Many COAG targets and headline indicators reflect the importance of the home environment:

- life expectancy (section 4.1)
- young child mortality (section 4.2)
- disability and chronic disease (section 4.8)
- family and community violence (section 4.11).

Other COAG targets and headline indicators can directly influence home environment outcomes:

- employment (section 4.6)
- post secondary education (section 4.7)
- household and individual income (section 4.9).

Outcomes in the home environment strategic area can be affected by outcomes in several other strategic areas for action, or can influence outcomes in other areas:

- early child development (birth weight, early childhood hospitalisations, injury and preventable disease, hearing impediments) (chapter 5)

-
- healthy lives (access to primary health, potentially preventable hospitalisations, avoidable mortality, mental health) (chapter 7)
 - economic participation (labour market participation, home ownership, income support) (chapter 8)
 - governance and leadership (engagement with service delivery) (chapter 11).

The indicators in this strategic area focus on some key outcomes of healthy environments, as well as some factors that contribute to a healthy home environment:

- overcrowding in housing — overcrowding can have negative effects on health, family relationships and even children’s education. If a house is not appropriately designed for the number of residents, the bathroom, kitchen and laundry facilities may be inadequate, making it more difficult to prevent the spread of infectious diseases. Cramped living conditions can increase domestic tensions and contribute to domestic violence. Overcrowding also affects the ability of children to do homework or study, or even to gain sufficient sleep and relaxation. This section reports Census data on overcrowding (section 9.1)
- rates of disease associated with poor environmental health — many rural and remote Indigenous communities still struggle to achieve the basic level of environmental health that has been achieved for the rest of the population. Poor environmental health can contribute to the spread of diseases that tend to have environmental causes, including tuberculosis, rheumatic heart disease, respiratory diseases, urinary tract infections, kidney stones, intestinal worms, trachoma and intestinal infectious diseases. This section reports on hospitalisations for environment related diseases. Hospitalisations data reflect more serious cases of diseases, but do not necessarily show overall incidence of disease (section 9.2)
- access to clean water and functional sewerage and electricity services — many rural and remote Indigenous communities rely on localised water, sewerage and electricity systems. Each community needs a clean, adequate and reliable supply of water for drinking, cooking and washing; a functional sewerage system to prevent sewage from contaminating drinking water and food; and functional electricity services for refrigeration of foods and power for hot water, cooking and lighting. Access to these basic services requires a combination of both functioning community infrastructure and functioning household hardware. This section reports available data on community and household infrastructure for discrete Indigenous communities (section 9.3).

Attachment tables

Attachment tables for this chapter are identified in references throughout this chapter by an 'A' suffix (for example, table 9A.1.1). These tables can be found on the Review web page (www.pc.gov.au/gsp), or users can contact the Secretariat directly.

9.1 Overcrowding in housing

Box 9.1.1 Key messages

- Indigenous people were 4.8 times as likely as non-Indigenous people to live in overcrowded housing in 2006 (figure 9.1.1). Overcrowding was highest in very remote areas (65.1 per cent) (figure 9.1.2).
- The proportion of Indigenous people living in overcrowded housing decreased from 30.7 per cent in 2001 to 27.2 per cent in 2006 (figure 9.1.1).

A much higher proportion of Indigenous people live in overcrowded conditions than other Australians. Overcrowding places pressure on the household infrastructure that supports health (for example, septic tanks, sewerage pipes and washing machines), sometimes referred to in the literature as health hardware (Torzillo et al. 2008), and can be a contributor to poor health. Overcrowding can also contribute to poor educational outcomes (Biddle 2007) and family violence.

Reasons for overcrowding

Cultural and social factors influence the way housing is used in Indigenous communities. Households with many members, often of multiple generations and including extended family, are not unusual. Living in large family groupings is not a problem; it can be the cultural norm (Keys Young 1998). Large households need not be overcrowded provided sufficient bedrooms, bathrooms and kitchen spaces are available. Indigenous household and community populations may fluctuate quite dramatically for social, cultural or seasonal reasons. Indigenous people are often mobile, and sharing homes with visiting relations and kin is common (ABS 2004). A 1993 study in the north-west of South Australia found that some houses had relatively stable numbers of residents, while others had wide variations in numbers. The numbers in one house varied from zero to 32 at various times of the year (Pholeros, Rainow and Torzillo 1993). While such fluctuations may result in periodic overcrowding in some households, it can be the cultural norm (Keys Young 1998).

Taylor (2004), in a study of Wadeye and the Thamarrurr Regional Council area in the NT, reported both short-term and long-term variations in the numbers of people living in each house as people moved between houses, to and from outstations, and in and out of the region. The average number of people per house was 16, with one residence having an average occupancy of 22 people. Houses in the Thamarrurr region averaged three bedrooms each, giving an average occupancy rate of approximately five people per bedroom.

Overcrowding can also be due to inadequate, inappropriate or poorly maintained housing stock (DHAC 1999). In remote and very remote areas in particular, it is more expensive and logistically more difficult to construct and maintain infrastructure.

The Western Australian Aboriginal Child Health Survey (Silburn et al. 2006) identified factors associated with Aboriginal children living in overcrowded housing. Overcrowded housing was associated with:

- housing quality — there was a significantly greater likelihood of high household occupancy in houses with one or more indicators of poor housing quality relative to those with none
- higher levels of life stress events — those households that had experienced seven or more life stress events in the 12 months prior to the survey were almost twice as likely to have high household occupancy than households reporting 0–2 life stress events
- overuse of alcohol — when overuse of alcohol was causing problems in the household, there was an increased likelihood of overcrowded conditions relative to other households.

Associations between labour force status and education, and housing overcrowding for Indigenous and non-Indigenous people are discussed in chapter 13 of this report.

Income and housing affordability also play a role in overcrowding. Indigenous people have substantially lower incomes than non-Indigenous people, which is discussed in section 4.9 of this report.

Although Indigenous people have access to a range of housing assistance programs, housing costs are high relative to incomes (ABS and AIHW 2008). The ABS found that in 2006, the median weekly mortgage payment for Indigenous home owners with a mortgage was \$264. The median weekly rent for Indigenous private/other renters was \$190, for Indigenous renters of public housing, \$100, and for Indigenous renters of Indigenous or mainstream community housing, \$60.

Racial discrimination in obtaining rental housing may also lead to overcrowding for Indigenous people (EOC 2004).

Housing overcrowding is associated with homelessness for both Indigenous and non-Indigenous people. The Supported Accommodation Assistance Program (SAAP) is the major response by the Australian Government and State and Territory governments to address homelessness. Indigenous people are overrepresented among SAAP clients. Of the 109 900 SAAP clients, in Australia, in 2006-07, 20 100 (18.3 per cent) were Indigenous (AIHW 2009).

Data issues

Overcrowding data in this report were derived using the Canadian National Occupancy Standard for housing appropriateness (box 9.1.2), which is the preferred standard used by the ABS to measure overcrowding, especially for Indigenous people. This occupancy standard will reflect the culture and preferences of some but not all Indigenous people. For example, it does not account for the influence of climate and culture on living arrangements. In warmer rural areas people may live outside their houses rather than inside them at certain times of the year, and the standard does not take into account how verandas or larger living spaces might be used (Pholeros, Rainow and Torzillo 1993). Indigenous cultures and lifestyles vary widely across Australia, as do climates.

The occupancy standard determines overcrowding by comparing the number of bedrooms with the number and characteristics of people in a dwelling (other measures of overcrowding include the proportion of people living in dwellings with less than one bedroom per person (Biddle 2008)). In addition, the number of bathrooms and toilets, and the size of kitchens, bedrooms and other living spaces may be as important as, or more important than, the number of bedrooms, particularly in larger households. If a house has sufficient working taps, tubs, showers, toilets, insect screens and protection from the weather it will be better equipped to prevent the disease transmission that is often more prevalent in overcrowded households. These issues are further discussed in section 9.3.

Box 9.1.2 Housing occupancy standard used by ABS^a

There is no single standard measure for housing overcrowding. The ABS uses a standard which is sensitive to both household size and composition. Based on the following criteria used to assess bedroom requirements, households requiring at least one additional bedroom are considered to be overcrowded:

- there should be no more than two persons per bedroom
- a household of one unattached individual may reasonably occupy a bed-sit (that is, have no bedroom)
- couples and parents should have a separate bedroom
- children less than five years of age of different sexes may reasonably share a bedroom
- children five years of age or over of different sexes should not share a bedroom
- children less than 18 years of age and of the same sex may reasonably share a bedroom
- single household members aged 18 years or over should have a separate bedroom.

^a Based on the Canadian National Occupancy Standard for housing appropriateness.

Source: ABS (2004).

Overcrowding in housing for both Indigenous and non-Indigenous people is reported here using data from the ABS 2001 Census and the ABS 2006 Census. The 2007 report used data for Indigenous people from the National Aboriginal and Torres Strait Islander Social Survey (NATSISS) to measure housing overcrowding, which are not comparable to the data in this report.

Housing utilisation cannot be determined for all households in the Census as the required information on the number of bedrooms and the demographic composition of the household was not always provided. Therefore, overcrowding rates in this report are based on the number of people who were living in households for which utilisation could be determined.

Figure 9.1.1 **Proportion of people living in overcrowded housing, 2001 and 2006^a**



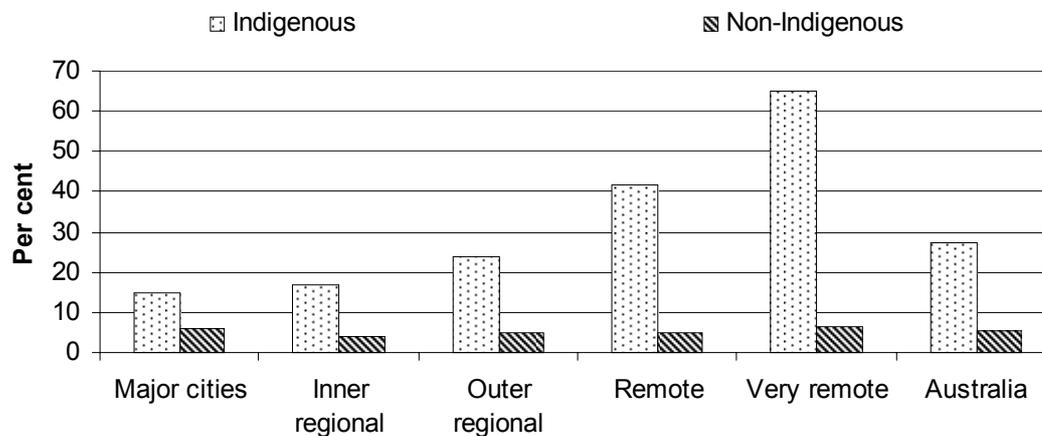
^a Based on the Canadian National Occupancy Standard for housing appropriateness.

Source: ABS (unpublished) derived from the *2006 Census of Population and Housing*; *2001 Census of Population and Housing*; table 9A.1.5.

Between 2001 and 2006:

- the proportion of Indigenous people living in overcrowded housing decreased from 30.7 per cent to 27.2 per cent and the proportion of non-Indigenous people living in overcrowded housing also decreased, from 6.3 per cent to 5.7 per cent. The gap between Indigenous and non-Indigenous proportions fell from 24.4 percentage points to 21.5 percentage points (figure 9.1.1)
- the average size of Indigenous households decreased from 3.5 to 3.4 people. The average size of a non-Indigenous household was the same in both years at 2.6 people (table 9A.1.1)
- the average number of people per bedroom remained at 1.3 in Indigenous households and remained at 1.1 for non-Indigenous households (table 9A.1.1).

Figure 9.1.2 Proportion of people living in overcrowded housing, by remoteness area, 2006^a



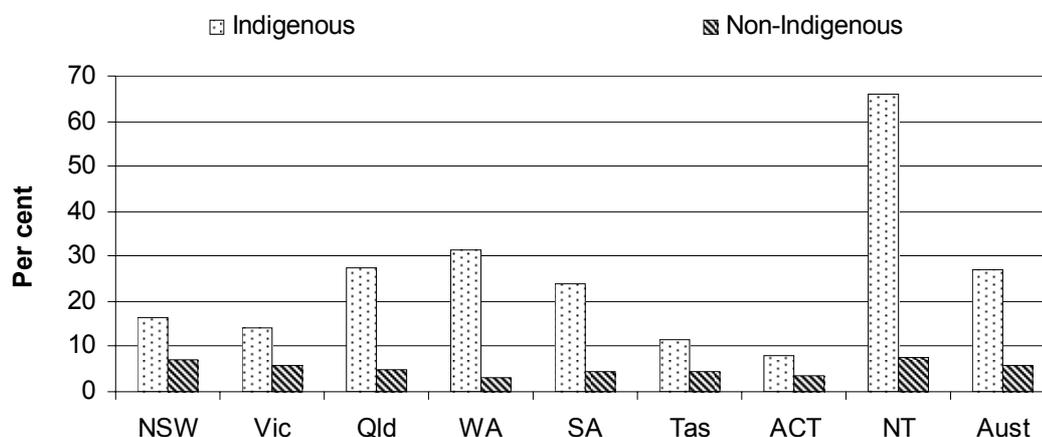
^a Based on the Canadian National Occupancy Standard for housing appropriateness.

Source: ABS (unpublished) derived from the 2006 Census of Population and Housing; table 9A.1.2.

In 2006:

- Indigenous people were more likely than non-Indigenous people to live in overcrowded housing in all remoteness areas (figure 9.1.2)
- the proportion of Indigenous people living in overcrowded housing was highest in very remote areas (65.1 per cent) and lowest in major cities (15.1 per cent) (figure 9.1.2)
- the proportion of non-Indigenous people living in overcrowded housing did not vary greatly with remoteness (figure 9.1.2).

Figure 9.1.3 Proportion of people living in overcrowded housing, by State/Territory, 2006^{a, b}



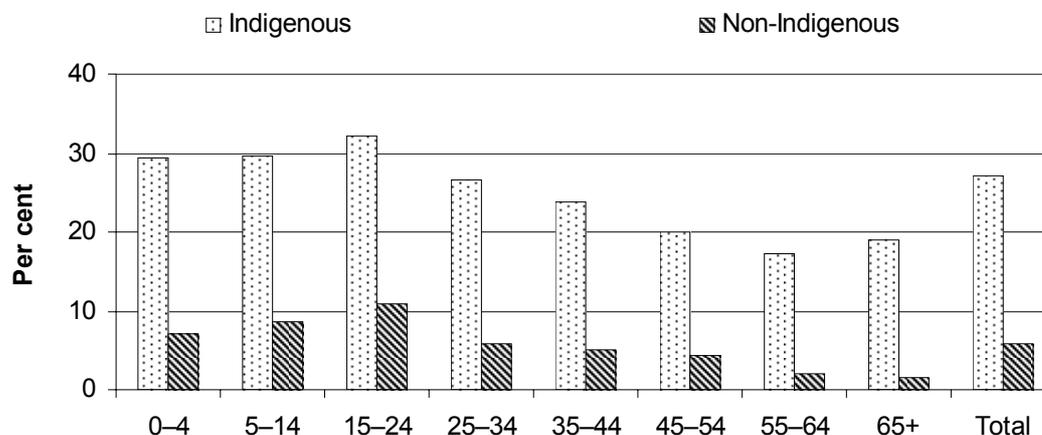
^a Based on the Canadian National Occupancy Standard for housing appropriateness. ^b Australia includes 'Other territories'.

Source: ABS (unpublished) derived from the 2006 Census of Population and Housing; table 9A.1.3.

Across states and territories, in 2006:

- Indigenous people were more likely than non-Indigenous people to live in overcrowded housing in all states and territories (figure 9.1.3)
- the proportion of Indigenous people living in overcrowded housing varied greatly across states and territories and was highest in the NT (65.9 per cent) and lowest in the ACT (8.7 per cent) (figure 9.1.3)
- the ratio between housing overcrowding rates for Indigenous and non-Indigenous people was highest in WA (10.2 times the non-Indigenous rate) and lowest in NSW (2.3 times the non-Indigenous rate) (figure 9.1.3).

Figure 9.1.4 Proportion of people living in overcrowded housing, by age, 2006^a



^a Based on the Canadian National Occupancy Standard for housing appropriateness.

Source: ABS (unpublished) derived from the 2006 Census of Population and Housing; table 9A.1.5.

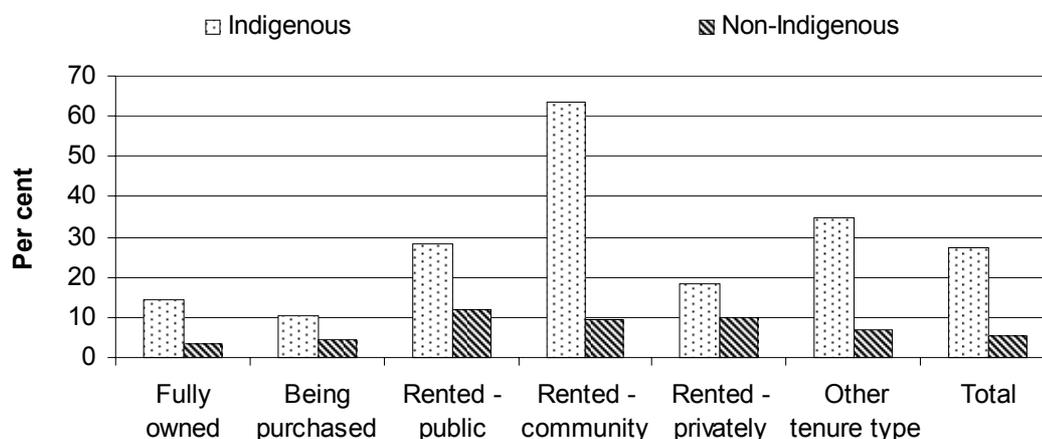
Across age groups, in 2006:

- Indigenous people of all ages were more likely than non-Indigenous people to live in overcrowded housing (figure 9.1.4)
- the proportion of Indigenous people living in overcrowded housing varied across age cohorts and was highest for children and adults aged up to 24 years (30.4 per cent) and lowest for those aged 55 to 64 (17.2 per cent) (figure 9.1.4 and table 9A.1.5).

In 2006:

- Indigenous people were more likely than non-Indigenous people to live in overcrowded housing, regardless of their housing tenure. Overcrowding rates were highest for those living in rented community housing (63.6 per cent) (figure 9.1.5), which was the dominant tenure type for Indigenous people in remote areas (ABS and AIHW 2008).

Figure 9.1.5 Proportion of people living in overcrowded housing, by tenure type, 2006^a



^a Based on the Canadian National Occupancy Standard for housing appropriateness.

Source: ABS (unpublished) derived from the 2006 Census of Population and Housing; table 9A.1.4.

9.2 Rates of disease associated with poor environmental health

Box 9.2.1 Key messages

- Hospitalisation rates for Indigenous people for all diseases associated with poor environmental health (scabies, influenza and pneumonia, asthma, intestinal infectious diseases, bacterial diseases and acute upper respiratory infections) were higher than for non-Indigenous people in 2006-07 (table 9.2.1). There was little significant change in these hospitalisation rates from 2004-05 to 2006-07 (figure 9.2.2).
- Death rates for diseases associated with poor environmental health were much higher for Indigenous people than non-Indigenous people between 2003-07 (figure 9.2.4).

During the late 1800s and early 1900s, most public health efforts focused on the control of infectious diseases, particularly epidemics. In the following century improvements in sanitation, drinking water quality, food safety, disease control and housing conditions resulted in big improvements to public health and longevity for most Australians (DHAC 1999). However, many rural and remote Indigenous communities still struggle to achieve the basic level of environmental health that has been achieved for the rest of the population (enHealth 2007; DHAC 1999).

A list of diseases associated with poor environmental health was developed in consultation with the Australian Institute of Health and Welfare (AIHW). Hospitalisations and death rates for these diseases are discussed in this chapter. Some of these diseases can be attributed to overcrowding in housing (section 9.1) and drinking water and sewerage services (section 9.3). Hospitalisation data indicate that diseases associated with poor environmental health are much more common among Indigenous people than non-Indigenous people (table 9.2.1). Some diseases, such as acute rheumatic fever and scabies, continue to exist in Indigenous communities with very few occurrences evident in hospitalisations data for the non-Indigenous population.

The data used in this section are for hospitalisations, defined by the AIHW as discharges, transfers, deaths or changes in care type. Hospitalisations data reflect more serious cases of diseases, but do not necessarily show overall incidence of disease. Many people may not go to a hospital for treatment. In addition, a patient in a remote area may be admitted to hospital whereas in an urban area the same patient could be managed as an outpatient. Hospital data can also include some duplication, as patients can have multiple admissions for some chronic conditions, as well as changes in conditions (such as transfer from a medical ward to a rehabilitation centre within a hospital) (AIHW 2008).

Most hospitalisation data used in this section are for six jurisdictions: NSW, Victoria, Queensland, WA, SA, and the NT. These data have sufficient levels of Indigenous identification for 2004-05, 2005-06 and 2006-07. Longer time series data for Queensland, WA, SA and the NT from 2001-02 to 2006-07 are discussed briefly in this section.

Box 9.2.2 provides an example of a program that assists in improving environmental health for Indigenous people.

Box 9.2.2 ‘Things that work’ — Improving environmental health for Indigenous people

An **Animal Management Program** (Queensland) aims to control animal populations, reduce negative health, social, economic and environmental effects and improve animal health and welfare. Negative effects from unmanaged animals include disease and parasite transmission to people and domestic animals, contamination of water supply, spillage and distribution of rubbish, increased fly breeding from faecal deposits and damage to the natural environment.

One community with the program in place for only eight months reported high community acceptance, with 85 per cent of dogs registered, and a 60 per cent reduction in dog bites (Queensland Government, unpublished).

Table 9.2.1 Age standardised hospitalisation rates (per 1000) for selected types of diseases associated with poor environmental health, by Indigenous status, NSW, Victoria, Queensland, WA, SA, and public hospitals in the NT, 2006-07^{a, b, c, d}

ICD-10 diagnosis codes and descriptions	Indigenous			Non-Indigenous ^d			Total Australians		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
Intestinal infectious diseases (A00–A09)	4.71	5.01	4.88	2.52	2.62	2.67	2.60	2.73	2.67
Tuberculosis (A15–A19)	0.43	0.14	0.27	0.07	0.05	0.06	0.08	0.05	0.06
Bacterial diseases (A20–A49)	7.31	7.91	7.62	2.66	1.88	2.25	2.73	1.86	2.25
Diphtheria (A36)	np	np	0.02	–	–	–	–	–	–
Whooping cough (A37)	0.06	0.09	0.07	0.02	0.02	0.02	0.02	0.02	0.02
Meningococcal infection (A39)	0.04	0.05	0.05	0.02	0.02	0.02	0.02	0.02	0.02
Trachoma (A71)	np	np	np	np	np	np	np	np	–
Acute hepatitis A (B15)	np	np	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Acute hepatitis B (B16)	0.16	0.09	0.12	0.03	0.01	0.02	0.03	0.01	0.02
Scabies (B86)	2.48	3.01	2.76	0.04	0.03	0.10	0.10	0.10	0.10
Acute rheumatic fever (I00–I02)	0.21	0.30	0.26	0.01	0.00	0.01	0.01	0.01	0.01
Chronic rheumatic heart diseases (I05–I09)	0.26	0.73	0.51	0.09	0.11	0.10	0.09	0.12	0.10
Acute upper respiratory infections (J00–J06)	2.51	3.22	2.89	1.62	1.38	1.56	1.65	1.47	1.56
Influenza and pneumonia (J10–J18)	12.37	11.16	11.70	3.19	2.46	2.86	3.35	2.48	2.86
Asthma (J45)	2.35	4.43	3.46	1.54	1.52	1.58	1.55	1.59	1.58
Lung disease due to external agents (J60–J70)	0.78	0.33	0.54	0.45	0.24	0.32	0.46	0.22	0.32
Pneumonitis due to solids and liquids (J69)	0.66	0.32	0.48	0.41	0.22	0.30	0.42	0.20	0.30
Toxic effects of metals (T56)	np	–	np	0.01	0.01	0.01	0.01	0.01	0.01

– Nil or rounded to zero. **np** not published. ^a Any diagnosis was used to select the infectious diseases (ICD-10 codes A00–B99), principal diagnosis was used to select the other conditions. ^b Identification of Indigenous patients is incomplete and completeness varies across jurisdictions. ^c Data are based on state of usual residence. ^d Non-Indigenous includes hospitalisations identified as non-Indigenous as well as those with a 'not stated' Indigenous status.

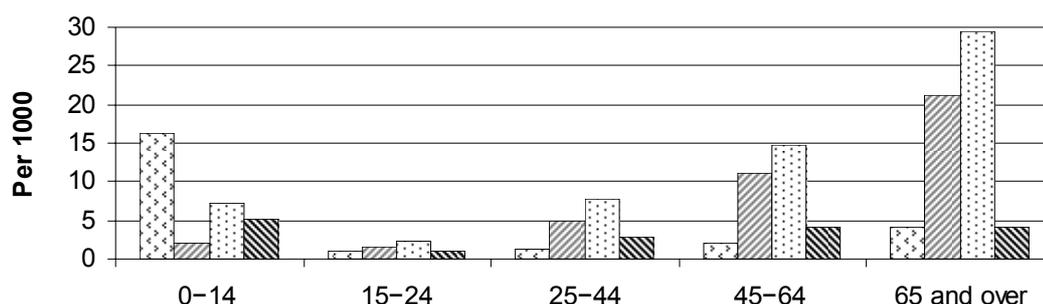
Source: AIHW National Hospital Morbidity Database (unpublished); tables 9A.2.1–3.

In 2006-07, after adjusting for age differences in the Indigenous and non-Indigenous populations, in NSW, Victoria, Queensland, WA, SA and the NT hospitalisation rates for all diseases associated with poor environmental health were higher for Indigenous than non-Indigenous people:

- the hospitalisation rate for influenza and pneumonia was 11.7 per 1000 for Indigenous people — 4 times the rate for non-Indigenous people (2.9 per 1000) (table 9.2.1)
- the hospitalisation rate for bacterial diseases was 7.6 per 1000 for Indigenous people — 3.4 times the hospitalisation rate for non-Indigenous people (2.3 per 1000) (table 9.2.1)
- the hospitalisation rate for intestinal infectious diseases was 4.9 per 1000 for Indigenous people — 1.8 times the hospitalisation rate for non-Indigenous people (2.7 per 1000) (table 9.2.1)
- the biggest difference in hospitalisation rates between Indigenous and non-Indigenous people was for scabies. Indigenous people were 28 times more likely to present with scabies (2.8 per 1000) than non-Indigenous people (0.1 per 1000) (table 9.2.1)
- Indigenous people also had much higher hospitalisation rates for chronic rheumatic heart diseases (0.5 per 1000 compared with 0.1 per 1000). Acute rheumatic fever appears to be a problem only in the Indigenous population (0.3 per 10 000 people) with almost no occurrences evident in hospitalisations data for non-Indigenous people (table 9.2.1)
- acute upper respiratory infections were a problem for both the Indigenous and non-Indigenous populations, but were more prevalent for Indigenous people. The Indigenous hospitalisation rate was 1.9 times that for non-Indigenous people (2.9 per 10 000 compared with 1.6 per 1000) (table 9.2.1).

Figure 9.2.1 Hospitalisation rates for selected diseases associated with poor environmental health, Indigenous people, by age group, NSW, Victoria, Queensland, WA, SA, and public hospitals in the NT, 2006-07^{a, b}

☒ Intestinal infectious diseases ☒ Bacterial diseases ☒ Influenza and pneumonia ☒ Asthma



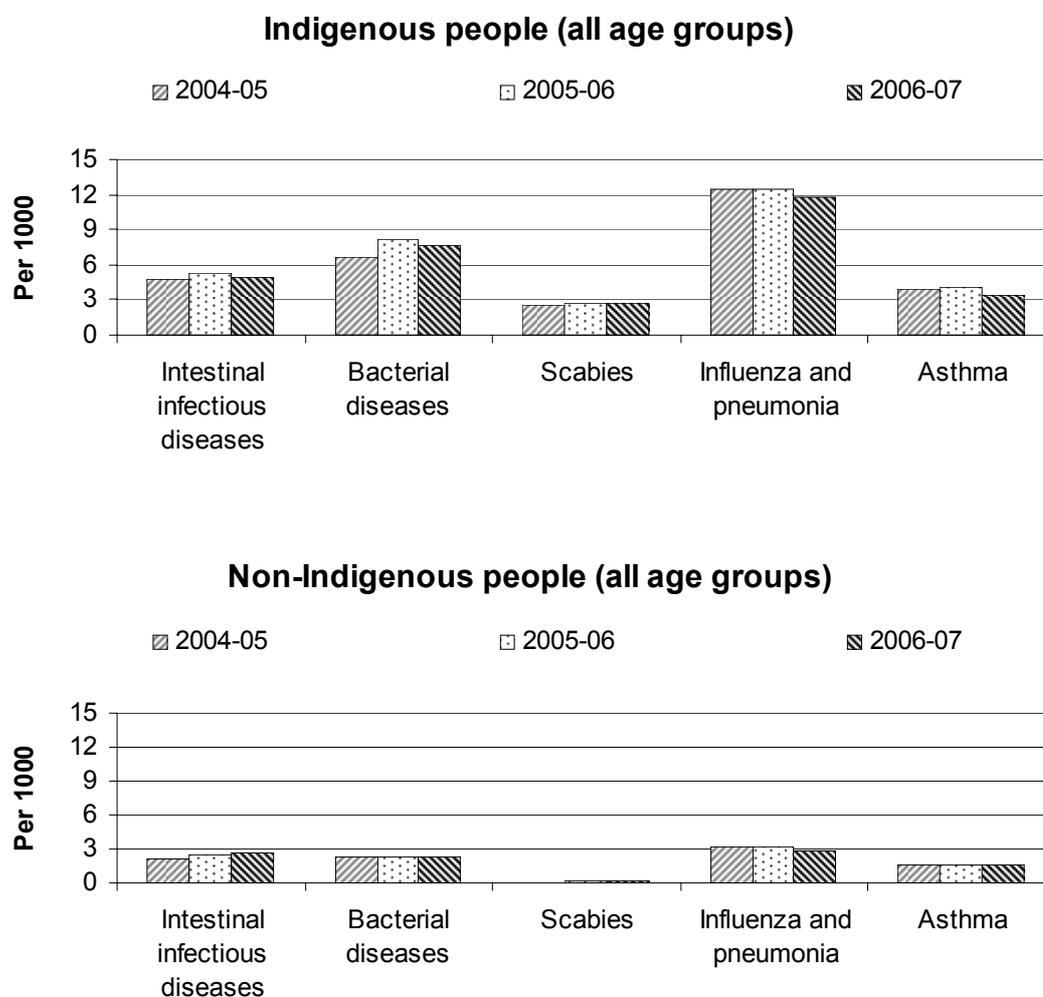
^a Any diagnosis was used to select the infectious diseases (ICD-10 codes A00–B99), principal diagnosis was used to select the other conditions. ^b Identification of Indigenous patients is incomplete and completeness varies across jurisdictions.

Source: AIHW National Hospital Morbidity Database (unpublished); tables 9A.2.1–3.

In 2006-07, in NSW, Victoria, Queensland, WA, SA and the NT:

- for the most common infectious diseases associated with poor environmental health, Indigenous children (0–14 years), Indigenous people aged 45–64 and the Indigenous elderly (65 years and over) had higher hospitalisation rates than other age groups (figure 9.2.1). These age groups were also the most at risk in the non-Indigenous population (tables 9A.2.1–3)
- Indigenous children had the highest rate for intestinal infectious disease (16.3 per 1000), while Indigenous people aged 65 and over had the highest rates for bacterial diseases (21.3 per 1000) and influenza and pneumonia (29.6 per 1000).

Figure 9.2.2 Age standardised hospitalisation rates for selected diseases associated with poor environmental health, NSW, Victoria, Queensland, WA, SA, and public hospitals in the NT^{a, b, c, d}



^a Any diagnosis was used to select the infectious diseases (ICD-10 codes A00–B99), principal diagnosis was used to select the other conditions. ^b Identification of Indigenous patients is incomplete and completeness varies across jurisdictions. ^c Directly age standardised using the 2001 Australian population. ^d 'Non-Indigenous' includes cases where Indigenous status was 'Not stated'.

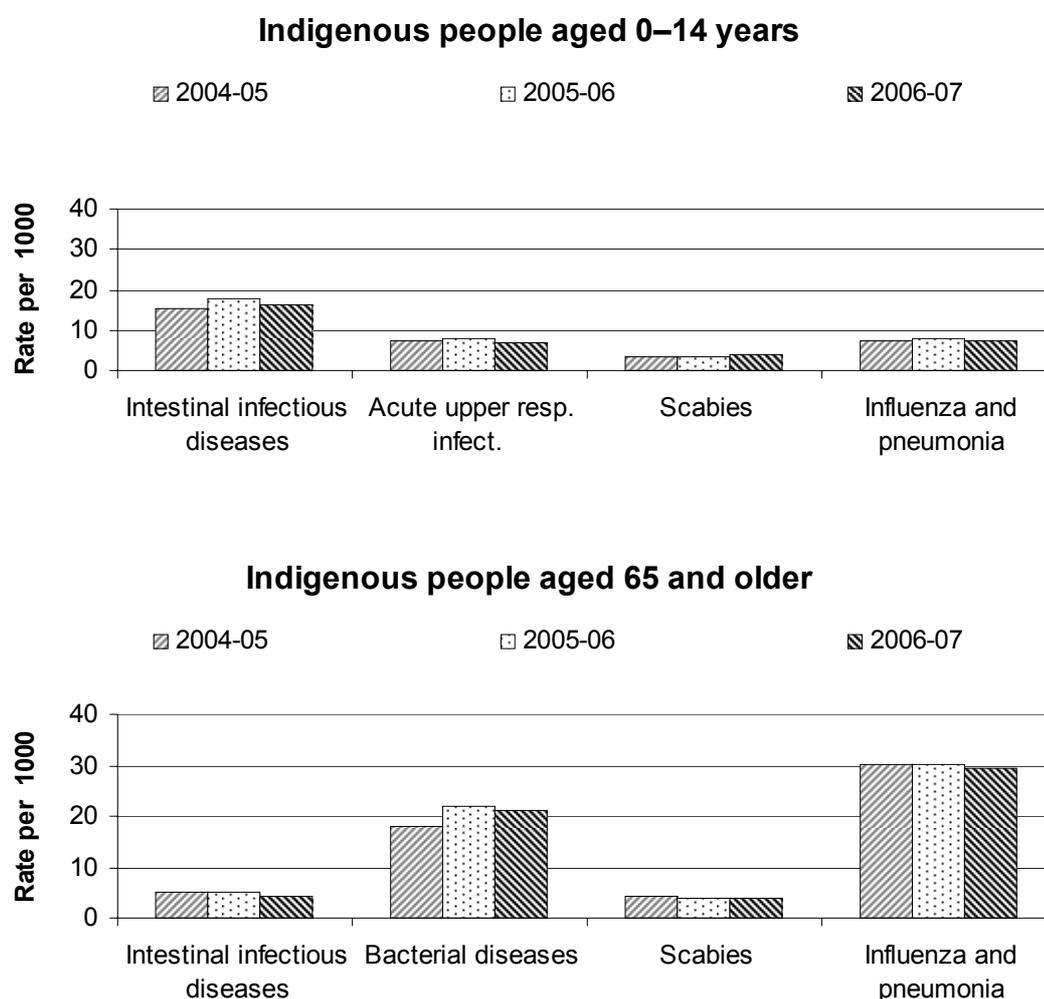
Source: AIHW National Hospital Morbidity Database (unpublished); tables 9A.2.3, 9A.2.6 and 9A.2.9.

Hospitalisation rates for selected diseases associated with poor environmental health were much higher for Indigenous people than non-Indigenous people between 2004-05 and 2006-07 (figure 9.2.2). Over time, rates of the most common environmentally based diseases remained fairly constant for both Indigenous and non-Indigenous people, with no clear overall trend.

- Data for Queensland, WA, SA, and NT for a longer period of time (from 2001-02 to 2006-07) are contained in tables 9A.2.10–16. In all years, Indigenous

people had much higher rates of hospitalisation rates for intestinal infectious diseases, bacterial diseases, scabies, influenza and pneumonia and asthma than non-Indigenous people. Over time rates fluctuated with no clear trend (table 9A.2.10).

Figure 9.2.3 Hospitalisation rates for selected diseases associated with poor environmental health, vulnerable age groups of Indigenous people, NSW, Victoria, Queensland, WA, SA, and public hospitals in the NT^{a, b, c}



^a Any diagnosis was used to select the infectious diseases (ICD-10 codes A00–B99), principal diagnosis was used to select the other conditions. ^b Identification of Indigenous patients is incomplete and completeness varies across jurisdictions – Nil or rounded to zero. ^c ‘Acute upper rep. infect’. = ‘Acute upper respiratory infection’.

Source: AIHW National Hospital Morbidity Database (unpublished); tables 9A.2.3, 9A.2.6 and 9A.2.9.

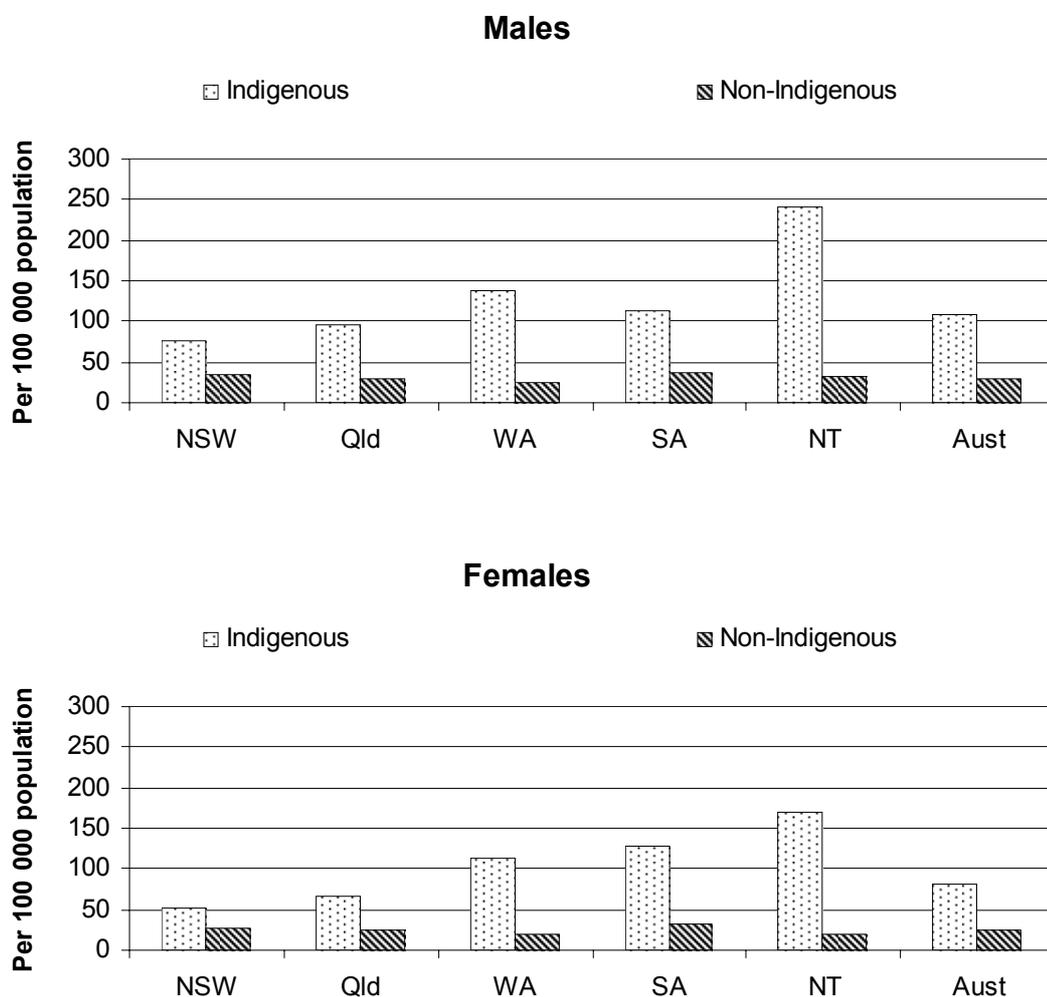
Figure 9.2.3 shows hospitalisation rates for the four most commonly occurring diseases associated with poor environmental health between 2004-05 and 2006-07, for two vulnerable Indigenous age groups:

- for 0–14 years, hospitalisation rates increased for intestinal infectious diseases and scabies and showed no change for acute upper respiratory infections and influenza and pneumonia (figure 9.2.3)
- for Indigenous people aged 65 years and over, hospitalisation rates for bacterial diseases increased and there was little change for intestinal infectious disease, scabies and influenza and pneumonia (figure 9.2.3).

Data for Queensland, WA, SA, and the NT for a longer period of time (from 2001-02 to 2006-07) are contained in tables 9A.2.10–16. For these jurisdictions from 2001-02 to 2006-07:

- for Indigenous people aged 0–14 years, there was a decrease in hospitalisations for intestinal infectious diseases, scabies and influenza and pneumonia, and no change in hospitalisations for bacterial diseases (table 9A.2.10)
- for Indigenous people aged 65 years and over, there was an increase in hospitalisations for bacterial diseases and influenza and pneumonia and no change in hospitalisations for intestinal infections diseases and scabies (table 9A.2.10).

Figure 9.2.4 **Death rates from diseases associated with poor environmental health, age standardised, 2003–07^{a, b, c, d}**



^a Data on deaths of Aboriginal and Torres Strait Islander Australians are affected by differing levels of coverage of deaths identified as Indigenous across states and territories. Care should be exercised in analysing these data, particularly in making comparisons across states and territories and between the Indigenous and non-Indigenous data. ^b Denominators used in the calculation of rates for the Indigenous population are *Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians* (ABS Cat. no. 3238.0, low series, 2001 base). There are no comparable population data for the non-Indigenous population. Denominators used in the calculation of rates for comparison with the Indigenous population have been derived by subtracting Indigenous population estimates/projections from total estimated resident population and should be used with care, as these data include population units for which Indigenous status as not stated. ^c Australia includes 'other territories'. ^d Non-Indigenous includes deaths with 'Not stated' Indigenous status.

Source: ABS *Causes of Death, Australia*, Cat. no. 3303.0 (unpublished); table 9A.2.17.

In NSW, Queensland, WA, SA and the NT, between 2003-07:

- death rates for diseases associated with poor environmental health were much higher people for Indigenous people than non-Indigenous people in all jurisdictions (figure 9.2.4)

- death rates for diseases associated with poor environmental health were higher for Indigenous males than females in all jurisdictions, while for non-Indigenous males and females death rates were similar, and did not vary much across jurisdictions (figure 9.2.4)
- death rates for Indigenous males for diseases associated with poor environmental health were highest in the NT (241.2 per 100 000) and lowest in NSW (75.7 per 100 000) (figure 9.2.4)
- death rates for Indigenous females for diseases associated with poor environmental health were also highest in the NT (170.5 per 100 000) and lowest in NSW (51.1 per 100 000) (figure 9.2.4).

9.3 Access to clean water, functional sewerage and electricity services

Box 9.3.1 Key messages

- The number of discrete Indigenous communities without an organised sewerage system decreased from 91 in 2001 to 25 in 2006 (table 9A.3.4).
- The number of discrete Indigenous communities without an organised electricity supply decreased from 80 in 2001 (ABS 2007), to 32 in 2006 (table 9A.3.7).
- In 2006, of the 322 discrete Indigenous communities with a reported usual population of 50 or more, 165 (51.2 per cent) had experienced water supply interruptions; 130 (40.4 per cent) had experienced sewerage overflows or leakages; and 246 (76.4 per cent) had experienced an electricity interruption; in the previous 12 months (tables 9A.3.2, 9A.3.5 and 9A.3.7).

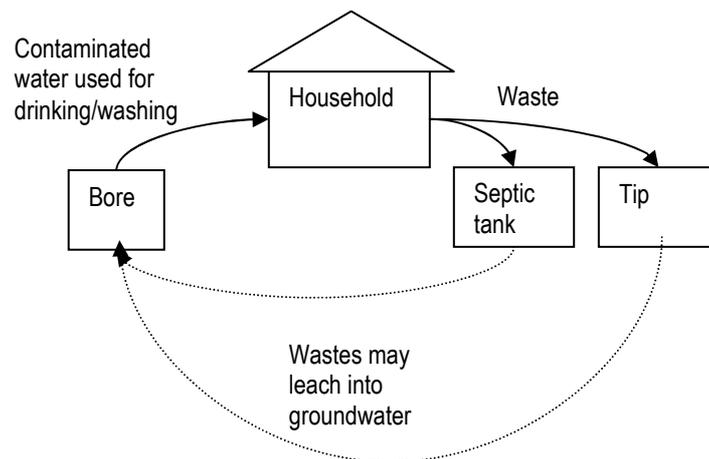
This indicator complements the indicator of rates of diseases associated with poor environmental health (section 9.2). To prevent disease, a community needs a clean (free of microbiological and toxic contamination), adequate and reliable supply of water for drinking, cooking and washing. A functional sewerage system prevents sewage from contaminating drinking water and food. Access to a reliable electricity supply is essential for cooking, refrigeration, washing machines and other appliances. Access to a reliable electricity supply is also critical for education, businesses and many government services.

Many Indigenous people live in urban areas where reliable drinking water, sewerage and electricity systems are used by everyone. While the performance of essential service providers varies across Australia, cities and large towns generally monitor the quality of drinking water and have reticulated sewerage systems where

waste is collected and treated at central treatment plants. Access to electricity services is also generally reliable in cities and large towns.

In rural and remote areas, there is a greater reliance on local or individual household systems, like generators, septic tanks and drinking water sourced from bores and rainwater tanks. If households are overcrowded and/or if these systems are not adequately maintained, wastes can leach into the groundwater and contaminate drinking water, as shown in figure 9.3.1 (setbacks between septic systems help prevent contamination, while floods can bring contamination into drinking water if sources are not adequately protected).

Figure 9.3.1 Environmental health risks from inadequate or poorly maintained environmental health hardware



Source: Adapted from ABS and AIHW (2005)

Torzillo et al. (2008) examined the state of housing in Indigenous communities in rural and remote Australia, and the living practices and ‘health hardware’ necessary to maintain family health. The surveys involved a limited cost repair following initial inspection and a repeat visit six months later to examine improvements in the performance of health hardware. The project both collected valuable data and directly improved outcomes for Indigenous people. Further details are provided in box 9.3.2.

Box 9.3.2 'Things that work' — assessing the health hardware in Indigenous communities

Adequate 'health hardware' (septic tanks, sewerage pipes, washing machines, etc.) is critical for healthy living practices. In a project funded by the Australian Government and the NSW Department of Health Torzillo et al (2008) undertook a detailed assessment of 4343 houses in 132 Indigenous communities between 1999 and 2006, involving the assessment of 250 items. After the first survey, limited cost repairs of non-functioning health hardware were undertaken. The authors then returned six months later for a repeat assessment of 3448 houses in 112 of those communities.

The initial surveys found very low proportions of houses met minimum safety standards (11 per cent for electrical, 54 per cent for gas, 31 per cent for structure and access and 12 per cent for fire). After low cost repairs, follow up surveys found these numbers rose to 62 per cent, 76 per cent, 54 per cent and 31 per cent, respectively.

The **Housing for Health** program in NSW improves living conditions in Aboriginal communities, particularly for children aged 0–5 years. Since 1999, over 53 000 hardware items have been repaired in 2210 homes in 70 communities, which has reached over 9400 Aboriginal people.

Across all Housing for Health projects in NSW, overall improvements in house function have shown: nearly nine fold improvements in electrical safety; over four fold improvements in fire safety; around two and a half fold improvement in ability to wash people and to wash clothes and bedding in homes; over two fold increase in removing waste safety in homes; and over three and a half fold improvement in the ability to prepare store and cook food in the home. Recent studies have indicated significant reductions in hospital admissions for infections for people living in houses that have been involved in this program (NSW Department of Health, unpublished).

Data from the ABS 2006 Community Housing and Infrastructure Needs Survey (CHINS) are reported for access to clean water, functional sewerage and electricity services in discrete Indigenous communities and are the most recent data currently available. ABS 2006 CHINS data were also reported for access to clean water and functional sewerage in the 2007 report. CHINS data are limited to discrete Indigenous communities and are not comparable with performance indicators commonly used by water, sewerage and electricity utilities to measure performance. Access to electricity services is reported for the first time in this report.

Source of drinking water supply

In 2004-05, there were 384 water providers in the water supply industry in Australia. Of these, 235 were minor urban (fewer than 10 000 connections), 61 were non-major urban (between 10 000 and 50 000 connections), 29 were major urban (greater than 50 000 connections) and 59 were irrigation/rural (businesses that

supply predominantly to agriculture) (ABS 2005). People who live outside areas serviced by utilities rely on other sources for their drinking water. While most Indigenous people live in cities and towns and have access to the same water and sewerage services as non-Indigenous people, some live in relatively small, discrete Indigenous communities.

In Australia in 2004-05, most (96 per cent) of the water supplied by the water supply industry originated from inland surface water. Groundwater accounted for 4 per cent of the total water supplied. Most (89 per cent) of the total water consumed by households was distributed by an organised water supply, and 11 per cent was water from a self-extracted source (such as rainwater tanks and direct extraction from surface or groundwater) (ABS 2005).

On 30 June 2006, the estimated resident Indigenous population of Australia was 517 043 (ABS 2008). At the time of the 2006 CHINS, 92 960 people (which includes some non-Indigenous people)¹ lived in 1187 discrete Indigenous communities.²

Table 9.3.1 Reported usual population in discrete Indigenous communities, by remoteness area 2006^a

Remoteness area	<i>Communities with population of:</i>					All communities	Reported usual population
	Less than 50	50–99	100–199	200–499	500–999		
Major cities	2	–	2	–	–	4	346
Inner regional	5	5	8	1	–	19	1870
Outer regional	20	9	16	4	–	52	10 254
Remote	71	14	8	7	2	104	11 237
Very remote	767	95	58	59	17	1008	69 253
Australia	865	123	92	71	19	1187	92 960

^a A community's usual population was generally estimated by the community representative without reference to community records. This methodology is considered to be less reliable than a population count as undertaken in the 2006 Census of Population and Housing. – Nil or rounded to zero.

Source: ABS 2006 CHINS, Cat. no. 4710.0.

In 694 discrete Indigenous communities (58.5 per cent), the most common source of drinking water in 2006 was bore water, a decrease from 784 communities (64.5 per cent) in 2001. Between 2001 and 2006, the number of Indigenous

¹ CHINS population data include both Indigenous and non-Indigenous people living in discrete Indigenous communities.

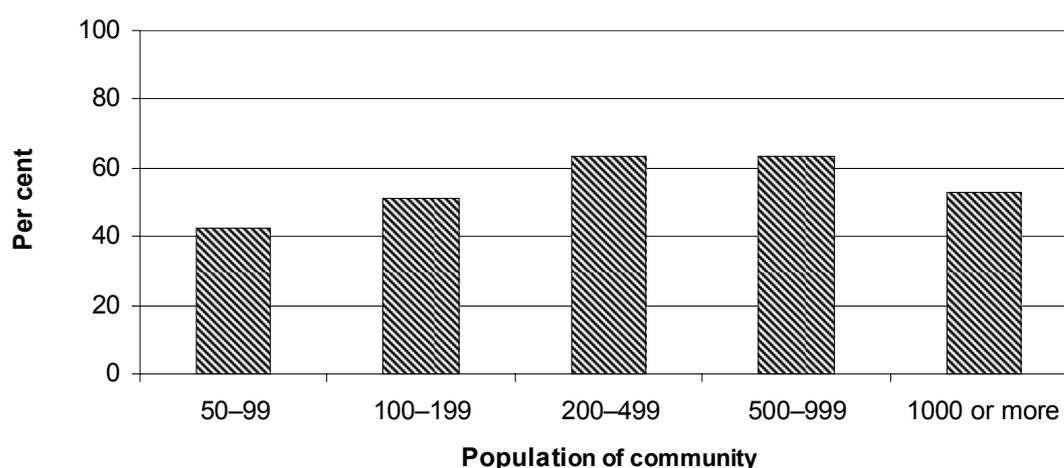
² Discrete Indigenous communities are defined by the ABS as geographic locations inhabited by or intended to be inhabited predominantly (greater than 50 per cent of usual residents) by Aboriginal or Torres Strait Islander peoples, with housing or infrastructure that is managed on a community basis.

communities that were connected to a town water supply increased from 186 to 209. Less common sources of drinking water (not part of a mainstream town supply) included rain water, rivers or reservoirs, wells or springs (ground water), carted water or some other organised supply. The number of communities with no organised water supply decreased from 21 (1.7 per cent) to 9 (0.8 per cent) between 2001 and 2006 (table 9A.3.1).

Reliability and adequacy of water supply

A reliable and adequate supply of water is essential for drinking, washing and hygienic food preparation and handling. In 2006, the CHINS collected data on interruptions to water supply in discrete Indigenous communities.

Figure 9.3.2 Proportion of discrete Indigenous communities that experienced water interruptions, by reported usual population 2006^{a, b, c}



^a In the 12 months prior to the survey. ^b Only a small proportion of communities with less than 50 people responded to this question, and the data are not included in the chart. ^c Causes of 'water interruptions' include 'equipment breakdown', 'ran out of water', 'lack of power', 'poor water quality', 'planned interruption' and 'other reasons'.

Source: ABS 2006 CHINS, Cat. no. 4710.0; table 9A.3.2.

- In 2006, between 42.3 and 63.4 per cent of discrete Indigenous communities (depending on the size of the community) reported having experienced drinking water interruptions in the previous 12 months (figure 9.3.2). The total reported usual population of discrete Indigenous communities reporting water supply interruptions was 44 563 (table 9A.3.2).

-
- 182 communities (with a total population of 21 291) reported having experienced water supply interruptions. Of these, 69 (37.9 per cent) had experienced five or more interruptions in the previous 12 months (table 9A.3.2).

Water quality

Data on testing of drinking water are included here as an indicator of the quality of drinking water.

Most drinking water in Australia is regularly tested to measure its compliance with guidelines and standards, which have been established to ensure that drinking water is safe for human consumption.

Data on drinking water testing and treatment in discrete Indigenous communities are only available from the ABS 2006 CHINS for those communities that were not connected to a nearby mainstream town supply, and data were not collected in 'administered' communities with a population of fewer than 50 residents.

The definition for the CHINS data item for water test failures does not specify whether one sample failed testing, all samples failed testing or whether water was outside the failure rates permitted by the various water quality guidelines. Therefore, results should be interpreted with caution.

- In 2006, there were 194 Indigenous communities with populations of 50 or more that were not connected to a town water supply. Three-quarters of these (149 communities) had drinking water sent away for testing (table 9A.3.3). Of these, 43 communities (28.9 per cent) failed the testing. These communities had a combined population of 12 059 people (table 9A.3.3).

Types of sewerage systems

In the 2006 CHINS, 25 discrete Indigenous communities reported having no organised sewerage system³, an improvement from 91 communities in 2001 (table 9A.3.4). The total usual population of communities without organised sewerage facilities was 1969 (ABS 2007).

Septic tanks, both with common effluent disposal and leach drains, and pit toilets continue to be the main sewerage systems in small communities. In discrete Indigenous communities, a total of 593, or half of the communities, reported the use

³ Organised sewerage systems include: town systems, community water borne systems, septic tanks and pit toilets.

of a septic system with a leach drain in 2006, and 202 communities reported using pit toilets (table 9A.3.4).

Between 2001 and 2006, the number of communities connected to a nearby mainstream town sewerage system increased from 89 to 121 (from 7.3 per cent to 10.2 per cent of all communities) (table 9A.3.4). By 2006, a total population of 32 256 people in discrete Indigenous communities were connected to a mainstream town sewerage system (ABS 2007).

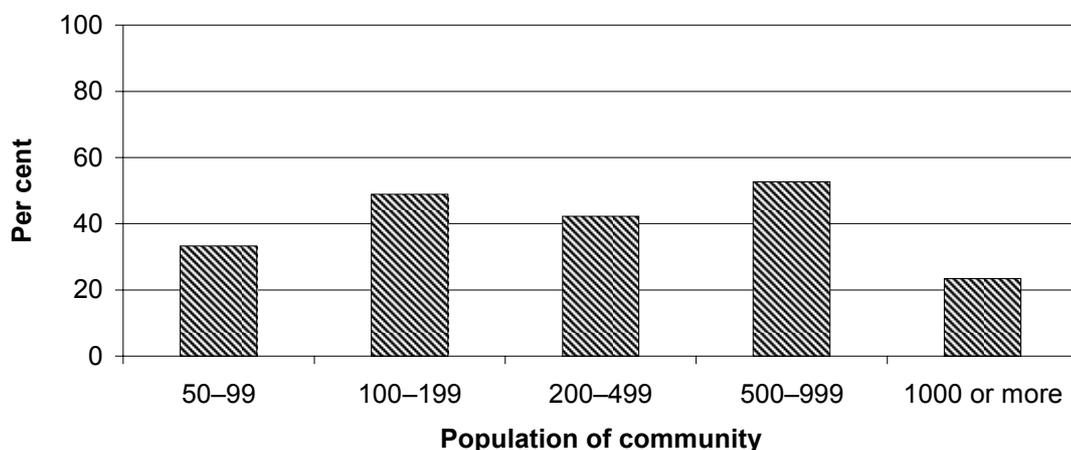
Numbers of community water-borne systems also increased slightly, with 108 communities reporting the use of such systems in 2006, compared to 96 in 2001 (table 9A.3.4). Community water-borne systems involve flush toilets and closed sewerage pipe systems using gravity and pumping stations to a common sewerage treatment plant (ABS 2007).

In communities with populations of 50 or more people, sewerage systems were reported to be connected to all permanent dwellings. A total of 192 small communities with a population of fewer than 50 people reported that a sewerage system was not connected to all permanent dwellings; 69 were located in WA, 61 in the NT, 51 in Queensland and 10 in SA (ABS 2007).

Sewerage system overflows and leakages

Sewerage system leaks and overflows create potential health risks to people living in their vicinity and can also contaminate drinking water sources.

Figure 9.3.3 Proportion of discrete Indigenous communities that experienced sewerage system overflows or leakages, by usual population, 2006^{a, b}



^a In the 12 months prior to the survey. ^b Data not collected in 'administered' communities with a population of less than 50.

Source: ABS 2006 CHINS, Cat no. 4710.0; table 9A.3.5.

- In 2006, between 23.5 and 52.6 per cent of discrete Indigenous communities (depending on the size of the community) experienced sewerage overflows or leakages in the previous 12 months (figure 9.3.3).
- In 2006, 142 communities reported sewerage overflows or leakages. Blocked drains (95 communities) and equipment failure (62 communities) accounted for the largest proportion of overflows and leakages. The total population in communities affected by sewerage overflows or leakages was 30 140 people (table 9A.3.5).
- Of the 142 communities that reported sewerage overflows or leakages, 31 (21.8 per cent) had experienced 10 or more overflows or leakages in the previous 12 months (table 9A.3.6).

Access to cooking, washing and toilet facilities

In 2006, 14 028 (89.6 per cent) of Indigenous Housing Organisation (IHO) managed permanent dwellings⁴ had access to their own cooking, washing and toilet facilities (ABS 2007).

⁴ ABS defines 'IHO managed permanent dwellings' as: 'Permanent dwellings located in discrete Indigenous communities, towns or other localities which are managed by an Indigenous organisation that provides housing to Aboriginal and Torres Strait Islander peoples. This includes permanent dwellings which are owned by State or Territory housing authorities, but managed by

The proportion of IHO managed permanent dwellings that had access to their own cooking, washing and toilet facilities varied across remoteness areas. Non-remote areas had the highest proportion (94.6 per cent) of houses with access to these facilities, compared with 87.5 per cent in remote and 89.0 per cent in very remote areas (ABS 2007).

A total of 161 communities reported access to public toilet facilities within the community. Of these, 125 communities (77.6 per cent) reported all toilets in working order (ABS 2007).

Electricity services

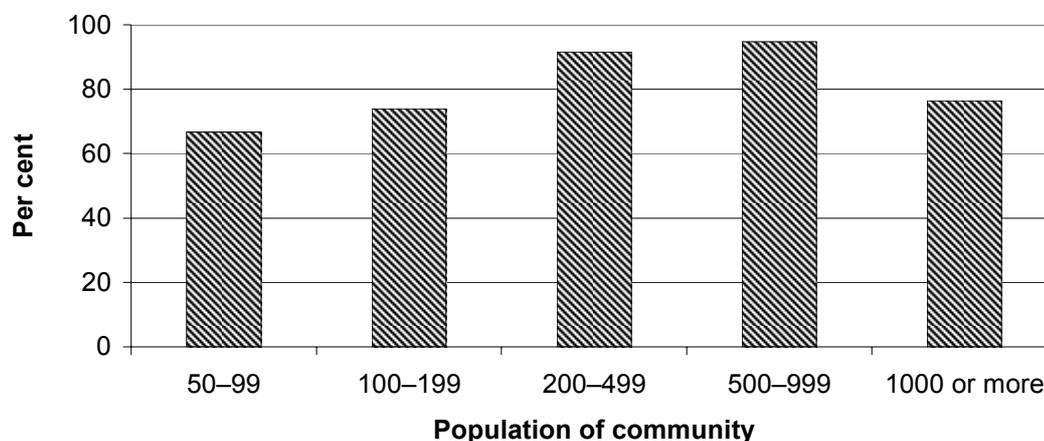
In 2006, 32 (2.7 per cent) of discrete Indigenous communities reported that they had no organised electricity supply (table 9A.3.7), an improvement on the 80 (7 per cent) of communities that reported no organised supply in 2001 (ABS 2007). The total usual population of communities without an organised electricity supply was 284 in 2006. Of the 32 discrete communities that reported no organised electricity supply, 31 were communities of less than 50 people (table 9A.3.7).

Community generators were the most common source of electricity supply reported in 2006, supplying 377 (35.9 per cent) of the 1049 discrete Indigenous communities with an organised electricity supply. State grid/transmitted supply was the second most common electricity source, supplying 274 (26.1 per cent) discrete Indigenous communities with an organised electricity supply. Of the remaining discrete Indigenous communities with an organised electricity supply, 178 (17.0 per cent) used domestic generators, 105 (10.0 per cent) used solar and 107 (10.2 per cent) used solar hybrid (table 9A.3.7).

Discrete Indigenous communities of fewer than 50 people tended to rely more heavily on domestic generators, solar and solar hybrid for electricity supplies than communities of 50 or more. Just over half of discrete Indigenous communities of fewer than 50 people with an organised electricity supply used these sources, compared with just under 5 per cent of discrete Indigenous communities with 50 or more people. In contrast, 94.7 per cent of discrete Indigenous communities with 50 people or more with an organised electricity supply were supplied by the state grid/transmitted supply or community generators, compared with just under half for discrete Indigenous communities of less than 50 people (table 9A.3.7).

an Indigenous Housing Organisation (IHO). Excluded are dwellings in discrete Indigenous communities which are not managed by an IHO' (ABS 2007).

Figure 9.3.4 Proportion of discrete Indigenous communities that experienced electricity interruptions, by usual population, 2006^{a, b}



^a In the 12 months prior to the survey. ^b Excludes communities connected to town supply. Data not collected in 'administered' communities with a population of fewer than 50. Totals include 'not stated'.

Source: ABS 2006 CHINS, Cat no. 4710.0; table 9A.3.7.

- In 2006, between 66.7 and 94.7 per cent of discrete Indigenous communities (depending on the size of the community) experienced electricity interruptions in the previous 12 months (figure 9.3.4).
- In 2006, 246 of the 322 discrete Indigenous communities with a population of 50 or more (76.4 per cent) had experienced an electricity interruption in the previous 12 months (table 9A.3.7).
- In 2006, 275 communities reported electricity supply interruptions. Storms (168 communities) and equipment breakdown (150 communities) accounted for the largest proportion of interruptions. The total population in communities affected by electricity supply interruptions was 67 849 people (table 9A.3.7).
- Of the 275 communities that reported electricity interruptions, 90 (32.7 per cent) had experienced 10 or more interruptions in the previous 12 months (table 9A.3.7).

9.4 Future directions in data

Rates of diseases associated with poor environmental health

The AIHW is working with states and territories to improve the identification of Indigenous people in hospitalisations data. See chapter 2 and appendix 4 for more information.

Access to clean water, functional sewerage and electricity supply

ABS CHINS data used in this chapter to report on drinking water, sewerage and electricity services are limited to discrete Indigenous communities and definitions are not comparable to those used for performance reporting by major water, sewerage and electricity utilities. It would be useful if data could be collected for discrete Indigenous communities using standard industry indicators, definitions and guidelines.

9.5 References

9.1 Overcrowding in housing

ABS (Australian Bureau of Statistics) 2004, 'The design and construction of Indigenous housing: the challenge ahead' *Year Book Australia 2004*, Canberra.

ABS (Australia Bureau of Statistics) and AIHW (Australian Institute of Health and Welfare) 2008, *The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples, 2008*, <http://www.abs.gov.au/AUSSTATS/abs@.nsf/39433889d406eeb9ca2570610019e9a5/8895D3C6DA088A7FCA2574390014A6CD?opendocument> (accessed 10 October 2008).

AIHW (Australian Institute of Health and Welfare) 2009, *Homeless Aboriginal and Torres Strait Islander Clients in SAAP 2006-07*, AIHW cat. no. HOU 190, Canberra, <http://www.aihw.gov.au/publications/ihw/aatsihpf08r-da/atsihpf08r-c02-02.pdf> (accessed 12 February 2009).

Biddle, N. 2007, *Does it Pay to Go to School? The Benefits of Participation in Education of Indigenous Australians*, PhD Thesis, Australian National University, Canberra.

Biddle, N. 2008 *The Scale and Composition of Indigenous Housing Need, 2001–2006*, Working Paper no. 47, Centre for Aboriginal Economic Policy Research, Australian National University, Canberra.

DHAC (Commonwealth Department of Health and Aged Care) 1999, *The National Environmental Health Strategy*, Canberra.

EOC (Equal Opportunity Commission) (WA) 2004, *Finding a Place: An Inquiry into the Existence of Discriminatory Practices in Relation to the Provision of Public Housing and Related Services to Aboriginal People in Western Australia*, <http://www.eocwa.wa.gov.au/pdf/findingaplace.pdf> (accessed 22 April 2009).

-
- Keys Young 1998, *Homelessness in the Aboriginal and Torres Strait Islander Context and its Possible Implications for the Supported Accommodation Assistance Program (SAAP)*, Sydney.
- Pholeros P., Rainow S. and Torzillo P. 1993, *Housing for Health: Toward a Healthy Living Environment for Aboriginal Australia*, Health Habitat, Sydney.
- Silburn S., Zubrick S., De Maio J., Shepherd C., Griffin J., Mitrou F., Dalby R., Hayward C. and Pearson G. 2006, *The Western Australian Aboriginal Child Health Survey: Strengthening the Capacity of Aboriginal Children, Families and Communities*, Curtin University of Technology and Telethon Institute for Child Health Research, Perth.
- Taylor, J. 2004, *Social Indicators for Aboriginal Governance: Insights from the Thamarrurr Region, Northern Territory*, Research monograph no. 24, Centre for Aboriginal Economic Policy Research, Australian National University, Canberra.
- Torzillo, P. Pholeros, P. Rainow, S. Barker, G. Sowerbutts, T. Short, T. Irvine, A. 2008, 'The state of health hardware in aboriginal communities in rural and remote Australia', *Australia and New Zealand Journal of Public Health*, vol. 32, no. 1, pp. 7–11.

9.2 Rates of diseases associated with poor environmental health

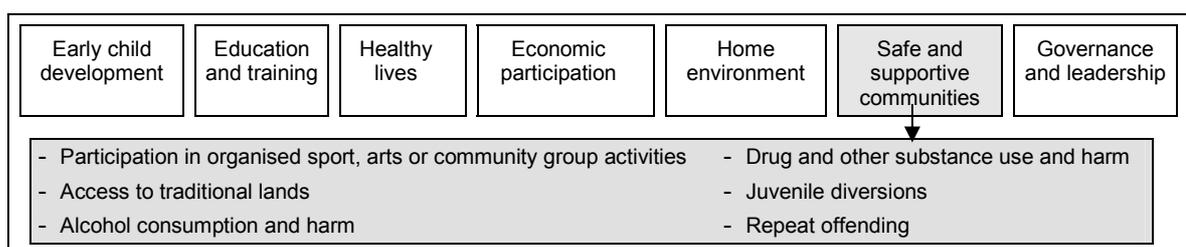
- AIHW (Australian Institute of Health and Welfare) 2008, *Australian Hospital Statistics 2006-07*, Cat. no. HSE 32, Health Services Series no. 22, Canberra.
- DHAC (Commonwealth Department of Health and Aged Care) 1999, *The National Environmental Health Strategy*, Canberra.
- enHealth Council 2007, *National Environmental Health Strategy 2007–12*, Department of Health and Ageing, Canberra. [http://www.health.gov.au/internet/main/publishing.nsf/Content/798726839F2B2FA6CA2572D40008D566/\\$File/enHealth%20NEHS%20final%20for%20web%20Nov%2007.pdf](http://www.health.gov.au/internet/main/publishing.nsf/Content/798726839F2B2FA6CA2572D40008D566/$File/enHealth%20NEHS%20final%20for%20web%20Nov%2007.pdf) (accessed 11 November 2008).

9.3 Access to clean water, functional sewerage and electricity supply

- ABS (Australian Bureau of Statistics) 2008 *Experimental Estimates of Aboriginal and Torres Strait Islander Australians, June 2006*, Cat. no. 3238.0.55.001, Canberra.
- 2007, *Housing and Infrastructure in Aboriginal and Torres Strait Islander Communities, Australia, 2006*, Cat. no. 4710.0, Canberra.
- 2005, *Water Account, Australia, 2004-05*, Cat. no. 4610.0, Canberra <http://www.abs.gov.au/ausstats/abs@.nsf/b06660592430724fca2568b5007b8619/9f319397d7a98db9ca256f4d007095d7!OpenDocument> (accessed on 16 April 2007).
- ABS (Australian Bureau of Statistics) and AIHW (Australian Institute of Health and Welfare) 2005, *The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples*, ABS Cat. no. 4704.0, AIHW Cat. no. IHW14, Canberra.
- Torzillo, P. Pholeros, P. Rainow, S. Barker, G. Sowerbutts, T. Short, T. Irvine, A. 2008, 'The state of health hardware in aboriginal communities in rural and remote Australia', *Australia and New Zealand Journal of Public Health*, vol. 32, no.1.

10 Safe and supportive communities

Strategic areas for action



Safe and supportive families and communities provide a resilient, caring and protective environment, promoting a range of positive outcomes (sometimes referred to as positive ‘social capital’). Some COAG targets and headline indicators can be positively influenced by outcomes in this area:

- life expectancy (section 4.1)
- young child mortality (section 4.2)
- early childhood education (section 4.3)
- reading, writing and numeracy (section 4.4)
- post secondary education (section 4.7)
- employment (section 4.6).

Problems in families and communities, among other influences, can contribute to disrupted social relationships and social alienation, and to alcohol and drug misuse and family violence. Three headline indicators are associated with breakdown in family and community relationships:

- substantiated child abuse and neglect (section 4.10)
- family and community violence (section 4.11)
- imprisonment and juvenile detention (section 4.12).

Outcomes in the safe and supportive communities strategic area can be affected by outcomes in several other strategic areas for action, or can influence outcomes in other areas:

-
- early child development (maternal health, teenage birth rate, early childhood hospitalisations, basic skills for life and earning) (chapter 5)
 - education and training (school attendance and attainment, Indigenous cultural studies) (chapter 6)
 - healthy lives (mental health, suicide and self-harm) (chapter 7)
 - economic participation (labour market participation, Indigenous owned and controlled land and business, home ownership, income support) (chapter 8)
 - home environment (overcrowding, access to water, sewerage and electricity) (chapter 10)
 - governance and leadership (governance capacity and skills, engagement with service delivery) (chapter 11).

The indicators in this strategic area for action focus on the key factors that contribute to safe and supportive communities, as well as some measures of the implications of a breakdown in family and community relationships:

- participation in organised sport, arts or community group activities — participation in sport can contribute to good physical and mental health, confidence and self-esteem, improved academic performance and reduced crime, smoking and illicit drug use. Indigenous people's participation in artistic and cultural activities helps to reinforce and preserve living culture, and can also provide a profitable source of employment (section 10.1)
- access to traditional lands — Indigenous people derive social, cultural and economic benefits from their connection to traditional country. Culturally, access to land and significant sites may allow Indigenous people to practise and maintain their knowledge of ceremonies, rituals and history. Socially, land can be used for recreational, health, welfare and educational purposes. The economic benefits of land are discussed in more detail in section 8.2 of this Report. This section reports data on whether Indigenous people live on, or have access to their homelands/traditional country, but does not show whether Indigenous people have control or ownership over their homelands, or access to particular sites that may be of special significance (section 10.2)
- alcohol consumption and harm — alcohol consumption has potential health and social consequences. Excessive alcohol consumption increases the risk of heart, stroke and vascular diseases, liver cirrhosis and several types of cancers. It also contributes indirectly to disability and death through accidents, violence, suicide and homicide. Alcohol misuse can also have effects at the family and community levels, contributing to workplace-related problems, child abuse and neglect, financial problems (poverty), family breakdown, family violence, and crime. This section examines patterns of alcohol consumption and alcohol

related harms, including alcohol influenced crime and alcohol related hospitalisations and deaths (section 10.3)

- drug and other substance use and harm — drug and other substance misuse contributes to illness and disease, accident and injury, violence and crime, family and social disruption, and workplace problems. Reducing drug related harm can improve health, social and economic outcomes at both individual and community levels. It is difficult to obtain accurate data on the use of illicit drugs, but this section reports available data on patterns of drug use, and drug related crime, hospitalisations and deaths (section 10.4)
- juvenile diversions — Indigenous young people have a high rate of contact with the juvenile justice system (see section 4.12). Juvenile diversion programs can contribute to a reduction in antisocial behaviour and offending. There are no national data on diversionary programs, but this section reports information on diversion programs provided by some jurisdictions (section 10.5)
- repeat offending — Indigenous people are over-represented in prisons, and are likely to come into contact with the criminal justice system at younger ages than non-Indigenous people. Once Indigenous offenders come into contact with the criminal justice system, they are more likely than non-Indigenous offenders to have repeat contact with it. Therefore, it is important that Indigenous people who have had contact with the criminal justice system have the opportunity to integrate back into the community and lead positive and productive lives. Reducing reoffending may also help break the intergenerational offending cycle (whereby incarceration of one generation affects later generations through the breakdown of family structures). This section reports both adult and (limited) juvenile repeat offending data (section 10.6).

Attachment tables

Attachment tables for this chapter are identified in references throughout this chapter by an ‘A’ suffix (for example, table 10A.1.1). These tables can be found on the Review web page (www.pc.gov.au/gsp), or users can contact the Secretariat directly.

10.1 Participation in organised sport, arts or community group activities

Box 10.1.1 Key messages

- For discrete Indigenous communities with a population of 50 or more, 66.8 per cent had some form of sporting facilities (such as outdoor courts for ballgames or sports grounds) in 2006 (ABS 2008).
- Indigenous people (21.0 per cent) were less likely than non-Indigenous people (30.7 per cent) to engage in moderate or high levels of exercise, in non-remote areas in 2004-05 (table 10A.1.1).
- Approximately one-third (35.7 per cent) of Indigenous people aged 15 years and over had attended an Aboriginal or Torres Strait Islander festival involving arts, craft, music or dance in the previous 12 months, and approximately one quarter (27.4 per cent) had participated in creative art activities in 2002. Indigenous people in remote areas were three times more likely than those in non-remote areas to have attended an Aboriginal or Torres Strait Islander ceremony (ABS 2004; 2006).

This indicator contains two main measures:

- participation rates in sport, recreation and fitness activities
- participation in arts, cultural or community group activities.

Participation in organised sport, arts or community group activities has the potential to lead to improvement in many areas of Indigenous disadvantage, including long term health, and physical and mental wellbeing, as well as improving social cohesion in Indigenous communities.

Participation in organised sport, arts or community group activities can foster (among other things) self-esteem, social interaction, and the development of skills and teamwork. A reduction of boredom and an increased sense of belonging are generally seen as having positive impacts on Indigenous youth.

Participation in sport and recreation activities from an early age has the potential to widely benefit individuals and communities (UNICEF 2004) by:

- strengthening the body and preventing disease — regular physical activity helps to build and maintain healthy bones, muscles and joints and control body weight. Physical activity can also help prevent chronic diseases
- preparing infants for future learning
- reducing the risk of clinically significant emotional or behavioural difficulties — the Western Australian Aboriginal Child Health Survey (WAACHS) found that

young Indigenous children who did not participate in organised sport were twice as likely to be at high risk of emotional or behavioural difficulties than Indigenous children who participated in sport (16 per cent and 8 per cent, respectively) (Zubrick et al. 2005)

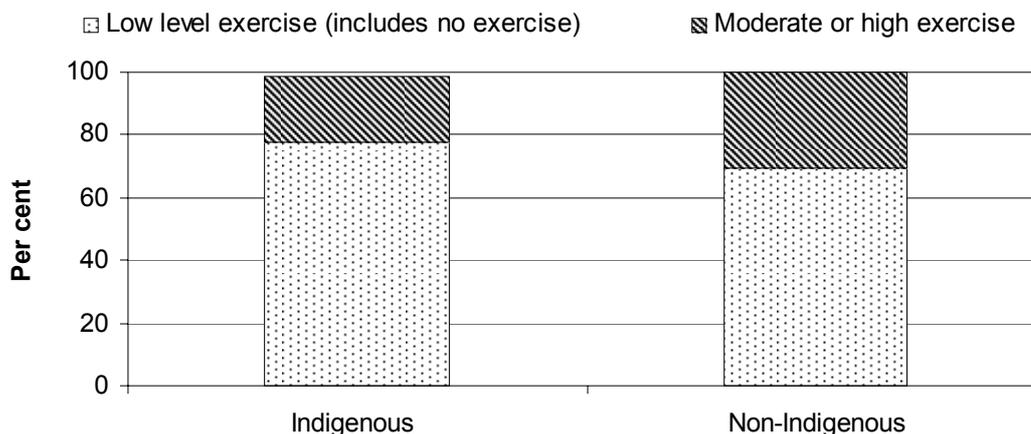
- reducing symptoms of stress and depression — a US study found that active children were depressed less often than inactive children (ACF 2002)
- improving confidence and self-esteem — a study of year seven students found that students involved in organised sports reported higher overall self-esteem and were judged by their teachers to be more socially skilled and less shy than students who did not participate in organised sports (Bush et al. 2001)
- improving learning and academic performance — studies have found that the quality and quantity of physical activity affects children's attention levels and academic performance at school. Similarly, Barber, Eccles and Stone (2001), reported that high school students who participated in organised sports in year 10 completed more years of schooling and experienced lower levels of social isolation than non-participants
- preventing smoking and the use of illicit drugs — Carinduff (2001) suggested that involvement in sport and recreation has the potential to reduce levels of substance abuse and self-harm
- reducing and preventing crime — the Australian Institute of Criminology found that participation in sport and physical activity programs reduces antisocial behaviour (such as engaging in drug and alcohol use and criminal offences) and improves the protective factors (such as leadership and self-esteem) that prevent young people becoming involved in antisocial and criminal behaviour (Morris, Sallybanks, and Willis 2003).

Participation in community arts and cultural programs benefits individuals and community health and wellbeing (Mills and Brown 2004). Dockery (2009) suggests that participation in traditional cultural community group activities can enhance the health, education, employment and behavioural outcomes for Indigenous people.

There are no recent data available on this subject and, as per the 2007 report, data in this section are sourced from the ABS 2004-05 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) and the 2002 National Aboriginal and Torres Strait Islander Social Survey (NATSISS). The NATSIHS provides information on the frequency, intensity and duration of exercise undertaken by Indigenous Australians aged 15 years and older living in non-remote areas. The latter part of this section provides some examples of sports and community programs in operation.

Participation in sport, recreation or fitness activities

Figure 10.1.1 Participation in exercise by persons aged 15 years and over in non-remote areas, age standardised, 2004-05^a



^a One per cent of Indigenous people did not state their level of exercise participation, and are not included in figure 10.1.1. Therefore, the Indigenous population does not add to 100 per cent.

Source: ABS (unpublished), derived from *National Health Survey, 2004-05*; ABS (unpublished), derived from *National Aboriginal and Torres Strait Islander Health Survey, 2004-05*; table 10A.1.1.

In 2004-05 in non-remote areas:

- Indigenous people participated in moderate or high levels of exercise (21.0 per cent) less than non-Indigenous people (30.7 per cent) (table 10A.1.1)
- Indigenous people were more likely to do little or no exercise (77.9 per cent) than non-Indigenous people (69.3 per cent) (figure 10.1.1, table 10A.1.1)
- for both Indigenous and non-Indigenous people in non-remote areas, participation in moderate or high levels of exercise decreased with age (table 10A.1.3)
- in both the Indigenous and non-Indigenous populations, a higher proportion of males than females engaged in moderate or high levels of exercise (table 10A.1.4)
- further information on exercise participation and health, employment, income and Indigenous language are shown in table 10A.1.5.

The availability of sporting facilities is likely to affect participation in sport and recreation. The ABS Community Housing and Infrastructure Needs Survey (CHINS) found that in 2006:

-
- 66.8 per cent of Indigenous communities with a population of 50 or more had some form of sporting facilities, and 33.2 per cent did not (ABS 2008)
 - almost 88 per cent of people living in Indigenous communities with a population of 50 or more had access to sporting facilities (ABS 2008)
 - the sporting facilities most commonly found in Indigenous communities with a population of 50 or more were outdoor courts for ballgames (such as basketball and netball) and sports grounds (ABS 2008).

Participation in arts and cultural activities

Involvement in art and cultural activities may improve social cohesion and contribute to community wellbeing. Participation in Indigenous arts and cultural activities may include:

- arts or cultural activities that are part of contemporary Indigenous people's lives — including evolving and new forms of cultural expression influenced by wider society
- more traditional forms of Indigenous arts or cultural involvement.

The production of Indigenous arts is also an important economic activity for many Indigenous people. There is further discussion of the economic benefits of self employment in section 8.2.

The 2002 NATSISS provides the most recent data available on Indigenous participation in cultural activities. The 2002 NATSISS found that:

- approximately one third (35.7 per cent) of Indigenous people aged 15 years and over had attended an Aboriginal or Torres Strait Islander festival involving arts, craft, music or dance in the previous 12 months (ABS 2004)
- approximately one quarter (27.4 per cent) of Indigenous people aged 15 years or over had participated in creative art activities (made Indigenous arts or crafts, performed Indigenous music, dance or theatre and/or wrote or told Indigenous stories) (ABS 2006)
- Indigenous people in remote areas were three times more likely to have attended an Aboriginal or Torres Strait Islander ceremony than those in non-remote areas (45.0 per cent compared with 15.5 per cent) (ABS 2006).

Case studies on sports, arts and community programs

The following case studies describe activities within organisations and Indigenous communities that demonstrate the benefits of participation in sport, arts and community group activities (box 10.1.2).

Box 10.1.2 Things that work — Indigenous participation in sports, arts and community programs

A **Residential Circus Camp for Indigenous students** with the Flying Fruit Fly circus is supported by the Arts NSW program ConnectEd Arts. In 2008, 36 Indigenous students from 16 schools across the Riverina had the opportunity to participate in workshops alongside professional circus makers and practitioners. The intensive five day program developed students' interest and knowledge in circus and physical theatre as well as providing an Indigenous cultural development experience. The program culminated in a performance to over 100 local community members and students. In 2009, the Flying Fruit Fly Circus will re-engage with the same students, teachers and Aboriginal Education Officers to build on skills developed in the first camp held in 2008 (New South Wales Government (unpublished)).

Established in June 2007, the **Hamilton Local Indigenous Network (Victoria)** works in partnership with local service providers and government agencies to strengthen their community and build the capacity of community members. The **Actively Maintaining Cultural Identity Project**, with funding from the Vic Health Community Participation Scheme, targets unemployed Indigenous males aged from 15 to 40 years, and supported by the Winda Mara Aboriginal Cooperative, aims to build cultural awareness and promote health and wellbeing through outdoor recreational activities. The project, which will continue until October 2009, is building self esteem and confidence among the participants, developing teamwork and communication skills, and is likely to lead to training and employment opportunities for a group whom agencies and service providers find difficult to engage (Victorian Government (unpublished)).

The Rumbalara Football and Netball Club in Shepparton was featured in the 2005 and 2007 reports. The Club's **Academy of Sport, Health and Education (ASHE) (Victoria)**, developed in partnership with the University of Melbourne and supported by the Victorian Government, uses participation in sport as an avenue for Indigenous people to undertake education and training within a trusted, culturally appropriate environment. The ASHE focuses on individuals and their personal needs by providing individualised education and career planning and provides accredited awards through the Goulburn Ovens Institute of TAFE as well as short community based courses. The Rumbalara Football and Netball Club continues to provide a positive example of social relationships within the Shepparton/Mooroopna community (Victorian Government (unpublished)).

(Continued next page)

Box 10.1.2 (continued)

In 1983, the **Garbutt Magpies Under 17 Touring Side (Queensland)** comprised 19 young men aged under 17 (including 15 Aboriginal and Torres Strait Islander men) to travel to Melbourne to watch the Australian Rules Grand Final and play football against young men their own age. In 2008, the current health and wellbeing of the players (now middle-aged men) was explored. It was found that the positive experiences of the young men during their involvement with the Garbutt Magpies may have impacted on their health and lifestyle later in life:

- most (79 per cent) attended school until Year 12 and more than half (58 per cent) went on to gain further trade or other qualifications
- all had been employed most of the time since leaving school, with most (68 per cent) currently working full time
- most (79 per cent) earned more than \$21 000 per year, with seven (37 per cent) earning more than \$81 000, and eight (42 per cent) owned or were purchasing their own home
- most considered their physical health (79 per cent), emotional wellbeing (89 per cent), and general wellbeing (84 per cent) as good or very good, and more than half (53 per cent) considered their physical fitness as good, however most (79 per cent) did not regularly play sport
- more than half (58 per cent) drank alcohol within the previous week, however nearly one third (32 per cent) had not drunk alcohol for more than six months
- more than half (58 per cent) had never smoked, almost half (42 per cent) had never used illicit drugs, and more than half (53 per cent) had not used illicit drugs for five years or more (McCoy, Ross and Elston 2008).

The **Yirra Yaakin Noongar Theatre (WA)** is an internationally acclaimed Indigenous theatre company and leader in community development. Since establishment in 1993, Yirra Yaakin has delivered 36 new works and employed over 500 Aboriginal theatre workers. Yirra Yaakin runs main stage theatrical productions that are written, directed and performed by Indigenous artists, and supports the community by running issues-based theatre performances and workshops to tackle specific social concerns. Yirra Yaakin also operates a development program to provide ongoing training and mentoring to ensure Indigenous people develop skills to work in the theatre industry. In 2007 and 2008, Yirra Yaakin won awards for its theatre, governance and partnerships. In 2009, Yirra Yaakin has partnered with the Wilin Centre for Indigenous Arts and Cultural Development in Victoria to create more training and employment opportunities for Indigenous artists (WA Government (unpublished), Yirra Yaakin 2009).

(Continued next page)

Box 10.1.2 (continued)

Indigenous Hip Hop Projects (IHHP) are a team of artists who use traditional Indigenous culture fused with hip-hop, rap, beat boxing and break dancing to foster positive thinking and leadership skills in remote Australian communities. IHHP promotes self expression through movement, music and art, boosting morale and confidence and promoting positive social behaviours in remote communities.

In December 2007, IHHP undertook a successful pilot program, *Deadly Styles*, in Kempsey, NSW using a series of dance workshops to celebrate youth and Indigenous culture while carrying important health messages for young people living in remote communities. In 2008, IHHP visited 56 communities across Australia, and reached over 70 000 youth in most states and territories through workshops, festivals, performances and conferences. For example, in August 2008, IHHP ran two free dance workshops in Townsville as part of Culture Fest 08 to raise awareness of wellbeing through mental and physical health by involving people in performance. The workshops were funded by *beyondblue* and supported by the Migrant Resource Centre Thuringowa and Townsville Council (*beyondblue* 2008, Indigenous Hip Hop Projects 2009).

The **Galiwin'ku Gumurr Marthakal Healthy Lifestyle Festival**, first held in 2001, is an annual event organised by the Galiwin'ku Community in northeast Arnhem Land on Elcho Island. The festival is supported by the Australian Government through the **Indigenous Culture Support Program**. The main theme of the festival is strengthening traditional understandings of health and healing through strong cultural frameworks and local ownership. The festival draws community-wide attendance, particularly children, and activities include traditional healing workshops, bush food gathering and cooking, a community market, traditional cultural workshops, modern and traditional dance workshops and community concerts.

In 2008, several high profile Indigenous bands performed at the festival and held workshops with local musicians, and this resulted in the development of songs advocating healthy lifestyles and the formation of a sustainable business model for musicians in isolated communities (Australian Government (unpublished)).

Yolngu Radio 1530 AM (NT) is a regional radio service broadcasting to approximately 8000 Yolngu people in 30 remote communities in North East Arnhem Land, as well as Darwin and Nhulunbuy. Funded by the Australian Government through the **Indigenous Broadcasting Program**, Yolngu Radio 1530 AM broadcasts educational programs on Indigenous health and other topics. Most programs are broadcast in the main language of Yolngu Matha and include traditional and contemporary local music. This has contributed to the revival and maintenance of Yolngu cultural identity and language, and is helping build a sense of community. Yolngu Radio 1530 AM also improves access to training and employment opportunities for the Indigenous community through training in broadcasting, radio interview skills and the technical aspects of operating a radio service, as well as supporting local musicians (Australian Government (unpublished)).

(Continued next page)

Box 10.1.2 (continued)

The **Dieri Families Reviving Language and Culture Project** is funded by the Australian Government's **Maintenance of Indigenous Languages and Records program** to revive and maintain the Dieri language. Dieri is an Eyre Basin language with traditional ties to country east of Lake Eyre in South Australia. Many Dieri people have moved outside of the traditional country and, as a result, Dieri language and cultural knowledge has diminished.

The project is currently underway and has already created a strong sense of culture and community, emphasised the positive aspects of common identity and provided a sense of purpose among the Dieri to rebuild their language. The involvement of Dieri youth in the project will generate a strong sense of achievement and opens possibilities of future employment (Australian Government (unpublished)).

Papunya Tula Artists (PTA), established in 1972, is entirely owned and directed by Indigenous artists of the Western Desert and has operated independently of government support for over ten years. PTA aims to promote individual artists, provide economic development for the communities to which they belong, and assist in the maintenance of a rich cultural heritage. PTA represents more than 120 artists across three communities (including Papunya, Kintore and Kiwirrkura) and has 49 shareholders from the Pintupi and Luritja language groups (Papunya Tula Artists 2009).

Papunya Tula Artists operates a gallery in Alice Springs and funded the construction of a new arts centre. PTA has funded community initiatives including a remote renal dialysis unit and the construction of a swimming pool at the Kintore community, and provides financial support for ceremonies, community funerals, sporting equipment and school excursions (Sweeney 2006).

10.2 Access to traditional lands

Box 10.2.1 Key messages

- The most recent data on access to traditional lands are for 2004-05, and relate only to adults in non-remote areas. The most recent data for remote areas are for 2002.
- In 2004-05, of Indigenous adults living in non-remote areas:
 - 38.0 per cent did not recognise an area as their homelands (up from 28.8 per cent in 1994) (table 10A.2.3)
 - 15.0 per cent lived on their homelands (down from 21.9 per cent in 1994) and 43.6 per cent were allowed to visit their homelands (similar to the 46.8 per cent reported in 1994) (table 10A.2.3).

Indigenous people derive social, cultural and economic benefits from their connection to traditional country. Culturally, access to land and significant sites allows Indigenous people to practise and maintain their knowledge of ceremonies, rituals and history. Socially, land can be used for recreational, health, welfare and educational purposes. The economic benefits of land are discussed in more detail in section 8.2 of this report. Section 7.1 includes a case study of the Kimberley Satellite Dialysis Centre, which enables Indigenous people in the Kimberley region of WA to remain closer their traditional lands and which has improved health outcomes for patients.

Indigenous land rights are recognised in a variety of ways. Land may be owned outright by Indigenous people, including under land rights legislation, or Indigenous people may have native title rights or interests in land (discussed further in section 8.2). In other cases, Indigenous people may have negotiated access to visit their traditional country with the legal owners of the land. Further, traditional lands may be public land that is accessible to all people (although access to public lands for the purposes of hunting, fishing, gathering or cultural pursuits may be limited by regulations and by-laws).

Data for this indicator come from the ABS 1994 National Aboriginal and Torres Strait Islander Survey (NATSIS), 2002 National Aboriginal and Torres Strait Islander Social Survey (NATSISS) and 2004-05 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS). New data from the 2008 NATSISS will be available for the next edition of this report but were not available in time for this edition. The 2004-05 data reported here are for Indigenous people aged 18 years and over in non-remote areas and are not representative of all Indigenous people.

The data for this indicator show whether Indigenous people live on their homelands/traditional country or have access to their homelands/traditional country. The data do not show whether Indigenous people have control or ownership, rights to resources found on their homelands or access to particular sites that may be of special significance.

The data used for this indicator are based on Indigenous people's own understanding of what constitutes their homelands or traditional country, which may vary in different places. Some Indigenous people may live on or visit Indigenous owned or controlled land but they may not consider it to be their homelands or traditional country. Since European colonisation of Australia in 1788, many Indigenous people have moved both voluntarily and involuntarily from their traditional country. As a result, many Indigenous communities comprise a mix of traditional owners and Indigenous people whose traditional country is located elsewhere. Many people who were removed from their families (the Stolen

Generations) have not been able to find their families or return to their traditional country because they do not know their location.

Data for 2002 showed that Indigenous people in remote and very remote areas were more likely to recognise and live on their homelands than Indigenous people in non-remote areas. Indigenous people in very remote areas were the most likely (43.2 per cent) to live on their homelands/traditional country, and the least likely (9.6 per cent) to report that they do not recognise an area as their traditional country (SCRGSP 2005).

Some Indigenous people living in cities and towns with a majority of non-Indigenous people may say they live on their homelands, if the place where they live is part of their homelands/traditional country, even though much of it may be owned or occupied by non-Indigenous people.

In 2004-05, in non-remote areas:

- 15.0 per cent of Indigenous adults lived on their homelands and a further 43.6 per cent were allowed to visit their homelands (table 10A.2.1).
- 38.0 per cent of Indigenous adults did not recognise an area as their homelands or traditional country. Younger Indigenous adults were less likely to recognise an area as their homelands. Almost half those in the 18 to 24 year age group (47.3 per cent) did not recognise homelands (table 10A.2.2).
- 60.1 per cent of Indigenous adults recognised an area as their homelands or traditional country. Of these, only a very small proportion (0.6 per cent) were not allowed to visit their homelands (table 10A.2.1).

ABS surveys from 1994, 2002 and 2004-05 asked the same questions about access to land. However, comparable data are only available for Indigenous adults in non-remote areas. For Indigenous adults living in non-remote areas:

- the proportion who did not recognise an area as their homelands increased from 28.8 per cent in 1994, to 38.0 per cent in 2004-05 (table 10A.2.3)
- the proportion who lived on their homelands decreased (from 21.9 per cent in 1994, to 15.0 per cent in 2004-05). The proportion who were allowed to visit their homelands remained steady between 1994 and 2004-05 (table 10A.2.3).

10.3 Alcohol consumption and harm

Box 10.3.1 Key messages

- Indigenous adults were less likely than non-Indigenous adults to have consumed alcohol in the week prior to interview in a 2004-05 survey (53.4 per cent compared with 36.1 per cent). Among those who drank alcohol, rates of risky to high risk drinking were similar for Indigenous and non-Indigenous people (table 10A.3.9).
- 70.0 per cent of Indigenous homicides over the period 1999-2000 to 2006-07 involved both the offender and victim having consumed alcohol, compared to 22.5 per cent of non-Indigenous homicides (figure 10.3.2).
- Hospitalisation rates for all alcohol related conditions were higher for Indigenous people than non-Indigenous people in 2006-07 (table 10.3.1).

Alcohol consumption has health and social consequences through intoxication (drunkenness), alcohol dependence and other long term health effects. In addition, years of alcohol misuse can lead to chronic diseases. Excessive alcohol consumption increases the risk of heart, stroke and vascular diseases, liver cirrhosis, several types of cancers (AIHW 2005a) and alcohol-related brain injury. It also contributes to disability and death indirectly through associated accidents, violence, suicide and homicide.

Alcohol misuse also effects people other than the individual concerned. Excessive alcohol consumption contributes to workplace problems, child abuse and neglect, financial problems (poverty), family breakdown, interpersonal/domestic violence, and crime (WHO 2000, 2004). The *Little Children are Sacred* report (Anderson and Wild 2007) found a strong correlation between alcohol abuse, violence and the sexual abuse of children. Section 4.11, Family and community violence, examines in more detail Indigenous victimisation and deaths from homicide and hospitalisations for assault.

A study by Snowball and Weatherburn (2008) into predictors of Indigenous violence found a powerful association between alcohol consumption and violence. Their study found that high-risk alcohol consumption was a strong predictor of Indigenous violence.¹ The impact of high-risk alcohol consumption on violent behaviour far exceeded that of any other variable examined, including those measuring social disorganisation and social deprivation. Their study provides support to those who, like Pearson (2001, 2006) have rejected the notion that violence is a symptom of disadvantage. Other research has found that

¹ Even in the presence of controls for financial stress, unemployment, family breakdown and geographic mobility.

socioeconomic status is a significant determinant of health risk factors such as smoking, alcohol misuse, physical inactivity and excess weight (Glover et al. 2004).

Recently published data from the AIHW 2007 National Drug Strategy Household Survey (NDSHS) suggest that 27.4 per cent of Indigenous people reported ‘binge’ drinking (drinking alcohol at short-term risky/high risk levels — see discussion below) at least once in the 12 months prior to the interview (compared with 20.1 per cent of non-Indigenous people) (AIHW 2008; table 10A.3.1). The NDSHS provides comparable data from 2001–2007 about alcohol consumption by Indigenous and non-Indigenous people aged 14 years and over in non-remote areas (table 10A.3.1). Care should be taken in interpreting these data due to the small size of the Indigenous sample (fewer than 500 respondents) in the NDSHS.

Several governments and Indigenous communities have introduced alcohol reforms. Alcohol Management Plans were developed by the Queensland Government in partnership with discrete Indigenous communities between 2002 and 2006. The plans include alcohol carriage limits (type, strength and amount of alcohol) in communities, canteen takeaway restrictions and limited canteen opening hours. Alcohol restrictions in a community are complemented by strict trading conditions on licensed premises in surrounding areas to limit and monitor alcohol supply. In 2008, Queensland introduced additional reforms to improve the effectiveness of current restrictions, including banning councils from holding a general liquor licence; prohibiting drinking in public in communities and simplifying the process for declaring a private residence dry.

In Fitzroy Crossing in WA, liquor restrictions, in combination with support services, brought about immediate improvements (see box 10.3.2). The Northern Territory Emergency Response (NTER) introduced a ban on the possession, transportation, sale and consumption of alcohol in prescribed areas encompassing more than 500 Aboriginal communities.² A review of the NTER by the NTER Review Board (2008) reported a range of views on the impact of the alcohol restrictions, but recommended that the alcohol restrictions remain in place in remote communities. The NTER Review Board noted that greater support should be given to people through supply, demand and harm reduction strategies.

Box 10.3.2 provides examples of how alcohol related crime and violence is being addressed in some communities.

² Prescribed areas include land held under the *Aboriginal Land Rights Act (NT) 1976*, all Aboriginal community living areas and all Aboriginal town camps.

Box 10.3.2 'Things that work' — reducing alcohol consumption and harm

Alcohol limits in Fitzroy Crossing (WA) were introduced following lobbying by women from the Marninwarntikura Fitzroy Women's Centre. The WA director of liquor licensing limited the local hotel to selling only low strength beer for consumption off the premises. The alcohol restriction was implemented on 2 October 2007.

A study, following the first 12 months of the restriction, found that the alcohol ban led to a 36 per cent fall in the number of people seeking treatment at the Fitzroy Crossing Emergency Department for alcohol related injuries and a 28 per cent reduction in alcohol related violence (Drug and Alcohol Office 2009).

The Groote Eylandt Liquor Management System (NT) was initiated by leaders from the Aboriginal communities in June 2005. The system controls the takeaway of alcohol from two licensed premises on the island. In 2008, the system won two national drug and crime awards.

An evaluation of the system, conducted in July 2007, found 75 per cent fewer cases of public drunkenness; a decline in protective custodies over a year (from 90 to 11); 52 per cent less property crime; 60 per cent reduction in incidents of disturbance; 67 per cent decline in police callouts for aggravated assault; reduced mining company absenteeism (the Indigenous workforce sick leave declined from 7.8 per cent before the system to 2.4 per cent since); improved community function and wellbeing (Congrave, Proude and d'Abbs 2007).

Based on the Groote Eylandt model an electronic permit identification system for the sale of takeaway alcohol, was introduced in the East Arnhem (Gove) area in March 2008. The Gove system involves three permit committees and seven licensed premises. Preliminary evidence indicates that there has been a decrease in alcohol related hospital admissions, persons in protective custody and the level of anti social behaviour such as fighting and public drunkenness.

Alcohol Management Plans in Cape York, Queensland, developed by Cape York communities in partnership with the Queensland government in 2002 and 2003, include limits on alcohol carriage within communities, canteen takeaway restrictions, limited canteen opening hours and restrictions on the sale of full strength alcohol beverages. A study of four communities by Margolis, Ypinazar and Muller (2008) found an average 51.9 per cent reduction in retrieval rates for serious injury following the introduction of the Plans over the period January 1995 to November 2005. A recent report found that in 2008 there had been a decline in persons convicted of carrying alcohol in breach of the restrictions (Office for Aboriginal and Torres Strait Islander Partnerships 2009).

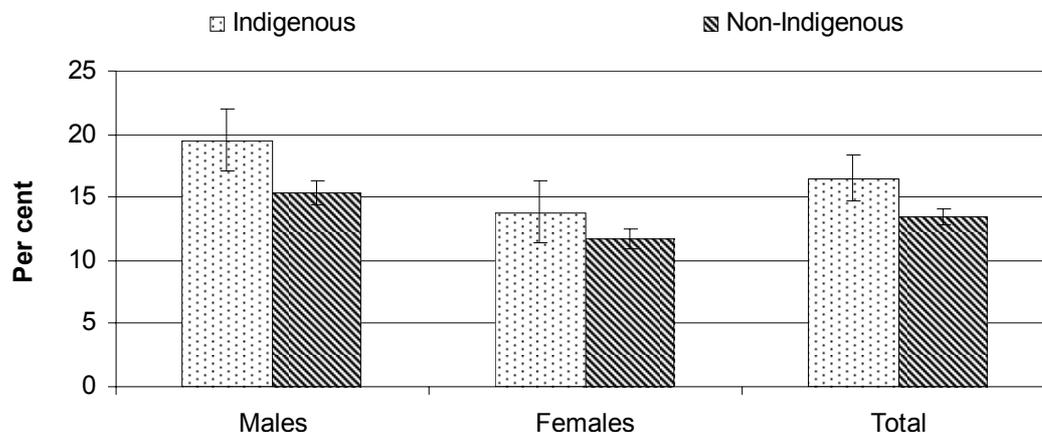
Patterns of alcohol consumption

This section examines patterns of alcohol consumption. In 2009, the National Health and Medical Research Council (NHMRC) released new *Australian Alcohol Guidelines to Reduce Health Risks from Drinking Alcohol* (NHMRC 2009). The NHMRC 2009 Guidelines advise both men and women to drink no more than two standard drinks per day to reduce their health risks over a lifetime. The previous *Australian Alcohol Guidelines* (NHMRC 2001), specified four drinks for men and two drinks for women per day, on average. Also in the NHMRC 2001 Guidelines there were two designated drinking levels where drinking above these levels was 'risky' and 'high risk'. These terms are not used in the NHMRC 2009 Guidelines because evidence suggests that risk increases progressively (NHMRC 2009).

The data presented in this section are grouped into relative risk levels as defined by the NHMRC 2001 Guideline levels. The low risk level defines a level of drinking at which there is only minimal risk of harm and, for some people, the likelihood of health benefits. Risky levels are those at which risk of harm is significantly increased beyond any possible benefits. High risk drinking levels are those at which there is substantial risk of serious harm, and above which risk continues to increase rapidly. Short term risk is the risk of harm in the short term associated with given levels of alcohol consumption on any one occasion. Long-term risk is associated with regular daily patterns of alcohol consumption and defined by the average daily intake of alcohol over the seven days of a reference week. Both short-term and long-term alcohol misuse can cause harm including illnesses, injuries and deaths (NHMRC 2001).

The ABS 2004-05 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) and the 2004-05 National Health Survey (NHS) collected data on a person's average daily alcohol consumption in the seven days prior to the interview and then grouped them into relative risk levels as defined by the NHMRC 2001 Guidelines (NHMRC 2001) (see table 10A.3.14). Average daily alcohol consumption and associated risk levels and rates of alcohol consumption at long term risky to high risk levels (by jurisdiction and nationally) is a performance measure in the National Indigenous Reform Agreement (COAG 2009).

Figure 10.3.1 Alcohol consumption at long term risky to high risk levels, people aged 18 years or over, 2004-05^{a, b}



^a Totals are not age standardised and are not directly comparable between Indigenous and non-Indigenous people. ^b Error bars represent 95 per cent confidence intervals around each estimate (see chapter 2 for more information).

Source: ABS *National Aboriginal and Torres Strait Islander Health Survey 2004-05*, Cat. no. 4715.0 (unpublished); ABS *National Health Survey 2004-05: Summary of Results*, Cat. no. 4362.0 (unpublished); table 10A.3.12.

- For both Indigenous and non-Indigenous people, in 2004-05, men were more likely than women to have consumed alcohol at risky to high risk levels (19.5 per cent compared with 13.8 per cent for Indigenous people and 15.4 per cent compared with 11.7 per cent for non-Indigenous people) (figure 10.3.1).

After adjusting for age differences, in 2004-05:

- Indigenous adults were less likely to have consumed alcohol in the week prior to interview than non-Indigenous adults (53.4 per cent compared with 36.1 per cent); and among those who drank alcohol, the reported rate of risky to high risk drinking for Indigenous people was not statistically different to that for non-Indigenous people (table 10A.3.9).
- Data on alcohol consumption by remoteness, sex and risk levels can be found in tables 10A.3.9 and 10A.3.12.

The 2008 National Aboriginal and Torres Strait Islander Social Survey (NATSISS) will provide information on alcohol consumption. The NATSISS results are expected to be available from late 2009.

Alcohol influenced crime

This section examines alcohol influenced crime. The relationship between excessive alcohol consumption, violence, crime and injury is well documented (Anderson and Wild 2007; AIC 1990; Ireland 1993; Prichard and Payne 2005; Smith 1983; Weatherburn, Snowball and Hunter 2006).

Two recent studies demonstrate the relationship between alcohol, crime and injury for Australian Indigenous people. An analysis of data from the Drug Use Monitoring in Australia (DUMA) program in 2004 showed that, among police detainees in seven urban police stations or watch houses in NSW, Queensland, WA and SA, there was a more pronounced association between alcohol and offending among Indigenous male offenders than their non-Indigenous counterparts (Putt, Payne and Milner 2005). Smith, O'Hagan and Gole (2006) found that alcohol related assault was a significant cause of the high rate of eye injuries in Indigenous people in far north Queensland. Examples of how alcohol related crime and violence is being addressed in some communities can be found in box 10.3.2.

There are no reliable data on the overall extent of alcohol related crime. This section examines alcohol related homicides, using data from the Australian Institute of Criminology (AIC) National Homicide Monitoring Program (NHMP). The NHMP data are discussed in appendix 4.

Figure 10.3.2 Alcohol involvement in Indigenous and non-Indigenous homicides, total recorded 1999-2000 to 2006-07^{a, b, c, d, e}



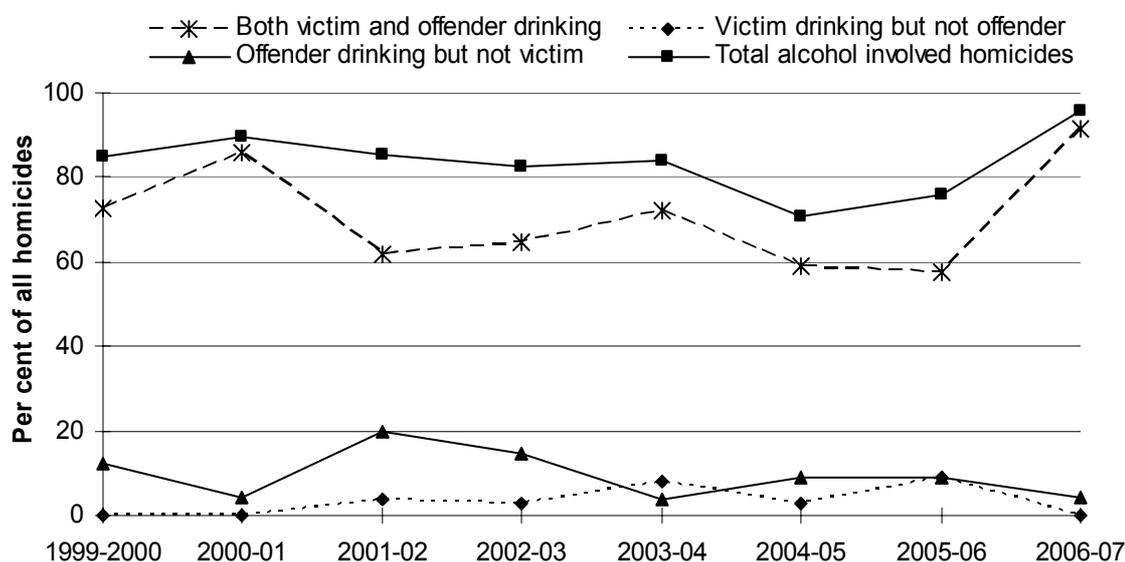
^a Homicide includes murder and manslaughter, but excludes driving causing death. ^b Excludes data where Indigenous status of victim or offender, or alcohol involvement is unknown. ^c Indigenous homicides are where both victims and offenders of homicide are Indigenous. ^d Non-Indigenous homicides are where both victims and offenders are not Indigenous, including victims and offenders who are Caucasian, Asian and Maori/Pacific Islanders. ^e Inter-racial homicides are where either the victim or the offender is Indigenous, including homicides involving: an Indigenous offender and non-Indigenous victim, and non-Indigenous offender and an Indigenous victim.

Source: AIC NHMP (unpublished); table 10A.3.2.

Among the total recorded homicides over the period from 1999-2000 to 2006-07:

- 70.0 per cent of Indigenous homicides involved both the victim and offender having consumed alcohol at the time of the offence, compared with 22.5 per cent of non-Indigenous homicides (figure 10.3.2)
- where only the offender was under the influence of alcohol in a homicide, the proportion was slightly higher for Indigenous homicides (10.6 per cent) than non-Indigenous homicides (9.4 per cent) (figure 10.3.2).

Figure 10.3.3 **Alcohol involvement in Indigenous homicides, 1999-2000 to 2006-07^{a, b}**



a Total alcohol involved homicides are the aggregate of three categories of homicides involving alcohol: both the 'victim and offender drinking', 'victim drinking but not offender', and 'offender drinking but not victim'.
b Excludes data where Indigenous status of victim or offender, or alcohol involvement is unknown.

Source: AIC NHMP (unpublished); table 10A.3.2.

Over the eight year period from 1999-2000 to 2006-07, the level of alcohol involvement in Indigenous homicides has fluctuated (figure 10.3.3). From 2004-05 to 2006-07 there was an increase in the level of alcohol involvement in Indigenous homicides (70.5 per cent in 2004-05, 75.8 per cent in 2005-06 and 95.6 per cent in 2006-07). The number of Indigenous homicides where both offender and victim were drinking (21) was similar in 2006-07 to numbers in the previous four years. However, the total number of Indigenous homicides (23) was well below average. With between 23 and 34 Indigenous homicides per year over the past four years, small changes in numbers can cause large changes in calculated proportions (table 10A.3.2).

Alcohol related hospitalisations and deaths

This section examines alcohol related harms, including alcohol related hospitalisations and deaths. Both short-term and long-term alcohol misuse can cause harm including illnesses, injuries and deaths. Short-term risk of harm is associated with levels of drinking on any one occasion. Drinking to the point of intoxication can cause injuries or deaths from associated violence, falls, road crashes and drowning. Long-term alcohol misuse can cause a number of chronic illnesses (for

example, various cancers, liver diseases, and chronic gastritis). Some suicides and strokes may also be attributable to either short or long-term alcohol misuse.

According to AIHW (2008), alcohol was the second largest cause of drug-related deaths and hospitalisations in Australia (after tobacco) in 2007. Chikritzhs et al. (2007) estimated alcohol attributable mortality for Indigenous residents in each of the 17 former ATSI zones and found that over a 5 year period (2000 to 2004), suicide (19 per cent) and alcoholic liver cirrhosis (18 per cent) were the two most common causes of alcohol attributable death among Indigenous men. The average age at death from the most common alcohol attributable conditions was 35 years for Indigenous men and 34 years for Indigenous women (Chikritzhs et al. 2007).

Heavy alcohol consumption during pregnancy is a risk factor for fetal alcohol syndrome (O'Leary et al. 2007; NHMRC 2001; World Bank 2000). See section 5.1 for more information on alcohol use in pregnancy, including fetal alcohol syndrome rates.

Data on hospitalisations related to alcohol use reported for this indicator are from the AIHW National Hospital Morbidity Database. These data only cover alcohol related illnesses resulting in admission to a hospital. In addition, data are only available for conditions directly attributable to alcohol consumption and do not include most of the conditions listed above, where alcohol may be a contributing factor but where the link is not direct and immediate.

The availability of hospitalisation data for Indigenous people has significantly improved in the 2009 report compared to the 2007 report. AIHW analysis of the quality of Indigenous identification in hospital statistics has shown that the quality of data from NSW and Victoria has improved and data are now available for NSW, Victoria, Queensland, WA, SA and the NT. Nevertheless, Indigenous identification in hospitalisation data remains incomplete in most jurisdictions. The AIHW (2005b) found that the quality of Indigenous hospitalisation data varied between jurisdictions and hospitals. Tasmania and the ACT are working with the AIHW to improve the quality of their Indigenous hospitalisation data.

Most hospitalisation data used in this section are for six jurisdictions: NSW, Victoria, Queensland, WA, SA, and the NT. These data have sufficient levels of Indigenous identification for 2004-05 to 2006-07. Longer time series data for Queensland, WA, SA and the NT from 2001-02 to 2006-07 are included in attachment table 10A.3.3. Hospitalisation data for these four jurisdictions should not be assumed to represent the hospitalisation experience in the other jurisdictions.

Non-Indigenous data from the AIHW include hospitalisations of people with a 'not stated' Indigenous status as well as those identified as non-Indigenous.

Table 10.3.1 Hospitalisations related to alcohol use, NSW, Victoria, Queensland, WA, SA, and public hospitals in NT, 2006-07 (per 1000 population)^{a, b, c, d, e}

	<i>Males</i>	<i>Females</i>	<i>All persons</i>
<i>Indigenous</i>			
Mental and behavioural disorders (F10)	10.9	5.0	7.8
Acute intoxication (F10.0)	4.8	2.8	3.7
Harmful use (F10.1)	0.4	0.2	0.3
Dependence syndrome (F10.2)	2.9	1.3	2.1
Other (F10.3–F10.9)	2.8	0.7	1.7
Alcoholic liver disease (K70)	1.4	1.1	1.2
Other inflammatory liver disease (K75)	–	0.1	0.1
Toxic effect of alcohol (T51)	0.1	0.1	0.1
Accidental poisoning by and exposure to alcohol (X45)	0.2	0.1	0.2
Intentional self-poisoning by and exposure to alcohol (X65)	0.3	0.5	0.4
Poisoning by and exposure to alcohol, undetermined intent (Y15)	0.1	0.1	0.1
<i>Non-Indigenous^f</i>			
Mental and behavioural disorders (F10)	2.1	1.5	1.8
Acute intoxication (F10.0)	0.6	0.4	0.5
Harmful use (F10.1)	0.1	–	0.1
Dependence syndrome (F10.2)	1.1	1.0	1.0
Other (F10.3–F10.9)	0.3	0.1	0.2
Alcoholic liver disease (K70)	0.4	0.1	0.2
Other inflammatory liver disease (K75)	–	0.1	–
Toxic effect of alcohol (T51)	–	–	–
Accidental poisoning by and exposure to alcohol (X45)	0.1	–	–
Intentional self-poisoning by and exposure to alcohol (X65)	0.2	0.3	0.2
Poisoning by and exposure to alcohol, undetermined intent (Y15)	–	–	–

^a The hospital separation rates (per 1000 population) were directly age standardised to the Australian population as at 30 June 2001. ^b Hospital separation is the discharge, transfer, death or change of episode of care of an admitted patient (see glossary for a detailed definition). ^c Principal diagnoses of hospitalisations are based on codes of the International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Australian Modification (ICD-10-AM). ^d Data are based on state of usual residence. ^e Overlapping may exist between separations by toxic effect of alcohol and separations based on external causes X45, X65, or Y15. ^f Non-Indigenous data include separations where Indigenous status was not reported.

– Nil or rounded to zero.

Source: AIHW National Hospital Morbidity Database (unpublished); table 10A.3.7.

In 2006-07, for NSW, Victoria, Queensland, WA, SA and public hospitals in the NT:

- hospitalisation rates for all conditions related to alcohol use were consistently higher for Indigenous people than for non-Indigenous people, and the rates for both Indigenous and non-Indigenous males were mostly higher than rates for females (table 10.3.1)
- for both Indigenous and non-Indigenous males and females, 'mental and behavioural disorders' was the most common condition for alcohol related hospitalisations
- hospitalisations for alcohol related mental and behavioural disorders were five times as high for Indigenous males (10.9 per 1000) as for non-Indigenous males (2.1 per 1000); the rate for Indigenous females (5.0 per 1000) was three times the rate for non-Indigenous females (1.5 per 1000)

Over the period 2004-05 to 2006-07, hospitalisation rates for all alcohol related conditions for both Indigenous and non-Indigenous people did not change significantly.

Using combined data for Queensland, WA, SA and public hospitals in the NT a longer time series can be created for 2001-02 to 2006-07. Over the period, hospitalisation rates for all alcohol related conditions for both Indigenous and non-Indigenous people did not change significantly (table 10A.3.3).

Table 10.3.2 Alcohol related deaths, death rates, age standardised, 2003–2007^{a, b, c, d}

	<i>Indigenous</i>					<i>Non-Indigenous^e</i>				
	NSW	Qld	WA	SA	NT	NSW	Qld	WA	SA	NT
Males	41.0	43.3	75.9	57.6	105.7	8.1	7.4	7.2	7.2	10.0
Females	19.2	19.4	36.0	np	53.0	2.0	2.1	1.9	1.8	4.2
Persons	29.7	30.5	54.7	33.9	77.7	4.9	4.7	4.5	4.4	7.4

^a Causes of death attributable to alcohol are based on codes of the International Classification of Diseases, 10th Revision (ICD-10) ^b Indirect standardised death rate per 100 000 population. ^c Denominators used in the calculation of rates for the Indigenous population are from ABS 2004, *Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians*, Cat. no. 3238.0 (low series). There are no comparable population data for the non-Indigenous population. Denominators used in the calculation of rates for comparison with the Indigenous population have been derived by subtracting Indigenous population estimates/projections from total estimated resident population and should be used with care, as these data include population units for which Indigenous status were not stated. ^d Data on deaths of Indigenous people are affected by differing levels of coverage of deaths identified as Indigenous across states and territories. Care should be exercised in analysing these data, particularly in making comparisons across states and territories and between the Indigenous and non-Indigenous data. ^e Non-Indigenous includes deaths with a 'Not stated' Indigenous status. **np** Not published

Source: ABS *Causes of Death, Australia*, Cat. no. 3303.0 (unpublished); table 10A.3.13.

In 2003–2007, for those jurisdictions for which data are available, alcohol related death rates were 5 to 19 times as high for Indigenous people than non-Indigenous (table 10.3.2).

10.4 Drug and other substance use and harm

Box 10.4.1 Key messages

- Illicit substance use in the previous 12 months was reported by 28.0 per cent of Indigenous adults living in non-remote areas in 2004-05 (table 10A.4.3).
- For all homicides recorded from 1999-2000 to 2006-07, a lower proportion of Indigenous homicides than non-Indigenous homicides occurred under the influence of drugs (24.1 per cent compared to 33.9 per cent) (table 10A.4.2).
- Indigenous people (2.1 per 1000) were three times as likely as non-Indigenous people (0.7 per 1000) to be hospitalised for mental and behavioural disorders caused by drug use (table 10A.4.6).

Drug and other substance misuse is a contributing factor to illness and disease, accidents and injury, violence and crime, family and social disruption, and workplace problems. Reducing drug related harm will improve health, social and economic outcomes at both individual and community levels.

This section reports available information on:

- patterns of illicit drug use
- drug related crime
- drug related hospitalisations and deaths.

Illicit substance use can be divided into two categories: use of substances which are illegal to possess (such as heroin) and misuse of substances which are legally available (such as petrol inhalation, misuse of prescription drugs or misuse in combination with alcohol).

In recent years, illicit drug consumption has played a significant role in Indigenous people's involvement in the criminal justice system. According to the Office of the Status of Women, there is a correlation between domestic violence and drug and alcohol use in Indigenous communities, with 70 to 90 per cent of assaults being committed while under the influence of alcohol and other drugs (DHA 2003).

The use of other substances such as inhalants (for example, petrol, glue, paint and butane gas) can lead to serious health consequences, including long term brain

damage, disability or even death. It can also cause social alienation of sniffers, violence and crime (Access Economics 2006; Community Affairs References Committee 2006).

Recently published data from the AIHW 2007 National Drug Strategy Household Survey (NDSHS) suggest that a higher proportion of Indigenous people than non-Indigenous people reported using illicit drugs (including marijuana/cannabis) in the 12 months prior to the survey (24.2 per cent compared with 13.0 per cent) (AIHW 2008; table 10A.4.1). The NDSHS provides comparable data from 1998–2007 about illicit drug use by Indigenous and non-Indigenous people aged 14 years and over in non-remote areas (table 10A.4.1). Care should be taken in interpreting these data due to the small size of the Indigenous sample (fewer than 500 respondents) in the NDSHS.

Patterns of illicit drug use

It is difficult to obtain accurate prevalence data on the use of illicit drugs. Their illegality and their low prevalence makes them difficult to address with population surveys. Data from use of health systems or interaction with the criminal justice system tend to identify mainly heavy users and those who succumb to the drug's effects; while the evidence suggests that the majority of illicit drug users use drugs infrequently without becoming addicted (Makkai and McAllister 1998).

The ABS 2004-05 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) collected data on illicit drug use by Indigenous people aged 18 years and over in non-remote areas. No data on drug use by non-Indigenous people are available for direct comparison with these data. In 2004-05:

- 28.0 per cent of Indigenous adults living in non-remote areas reported illicit substance use in the previous 12 months (table 10A.4.3)
- marijuana (22.5 per cent), amphetamines (7.3 per cent) and analgesics/sedatives (for non-medical purposes) (6.0 per cent) were the most commonly used substances (table 10A.4.3). Data on drug use by gender is reported in table 10A.4.3.

The 2008 National Aboriginal and Torres Strait Islander Social Survey (NATSISS) will provide information on illicit drug use. The NATSISS results are expected to be available from late 2009.

Inhalants

Petrol sniffing is a form of substance abuse that affects some Indigenous youth in remote areas, particularly in the Western corridor of Central Australia. Studies have found that petrol sniffing has been occurring in some remote and urban communities alongside other forms of substance use, notably cannabis, kava and alcohol, and that past inhalant use is a predictor of other substance use (AIHW 2002; Clough et al. 2002; Clough and Jones 2004). It is difficult to estimate the prevalence of petrol sniffing in Australia as there are no reliable national data on the number of people involved and the extent of resulting damage to individuals and communities.

Petrol sniffing amongst Indigenous people was first reported in northern Australia in 1950 (Brady 1992). More recently, between September 2005 and February 2007, in 74 remote communities (covering parts of the NT, SA, WA and Queensland) there were an estimated 1281 sniffers among the Indigenous population of 30 209 (D'Abbs and Shaw 2008a).

Consultations conducted by the NT Select Committee on Substance Abuse in the Community (2007) found that of the three main substances of abuse (alcohol, cannabis and petrol sniffing), petrol sniffing attracted the highest level of concern from community members in remote communities. Community members raised concerns about the vulnerability of young people to the practice, the severity of physical effects and the pervasive social disorder that comes when it is allowed to continue (NT Select Committee on Substance Abuse 2007).

Alternative fuels (such as Opal fuel) and community based interventions have been successful in reducing petrol sniffing in some communities (Burns et al. 1995; Campbell and Stojanovski 2001). In 2007, the NT Select Committee on Substance Abuse in the Community (2007) found that a black market for conventional fuel, specifically for petrol sniffing, had emerged in some communities. The Committee's view was that the introduction of Opal alone was not the answer to petrol sniffing; but it creates an opportunity to rehabilitate petrol sniffers before they find other drug substitutes (NT Select Committee on Substance Abuse 2007). Box 10.4.2 provides examples of how petrol sniffing is being addressed in some communities.

Box 10.4.2 ‘Things that work’ — reducing petrol sniffing

Between 2005 and 2006 baseline data on the prevalence of petrol sniffing was collected in 74 communities that were currently using, or shortly to begin using **Opal fuel**. In 2008, an evaluation study on the impact of Opal fuel was conducted and 20 of the initial 74 communities were revisited. The study found that the incidence of petrol sniffing had declined in 17 of the communities. Petrol sniffing had fallen by 70 per cent and in nine communities there was no sniffing (D’Abbs and Shaw 2008b).

Other drugs

The Northern Territory Emergency Response (NTER) introduced a ban on the possession, transportation, sale and consumption of alcohol in prescribed areas. A review of the NTER by the NTER Review Board (2008)³ noted that one of the major themes from the community consultations was that, although people thought that the NTER had reduced alcohol abuse, many people reported that cannabis use had increased. The NTER review did not provide data on alcohol or cannabis use in the NTER communities. A recent publication by Senior and Chenhall (2008) highlighted the emergence of cannabis as an apparent replacement for alcohol in one remote Northern Australian community. Heavy cannabis use has been associated with moderate to severe symptoms of depression (Lee et al. 2008).

Excessive consumption of kava is a concern in some Indigenous communities, as it can lead to health problems such as liver damage and malnutrition. Kava can also have a negative impact on families and communities. Some Indigenous communities have expressed concern that kava consumption is linked to neglecting family and community duties, and spending household income on kava instead of on necessities like food (DHA 2003; DHA 2004; Clough and Jones 2004).

Prescription drugs used in combination with other substances such as alcohol can compound the social, physiological and psychological problems faced by people with a mental illness. Through a consultation process with rural Indigenous communities, the Aboriginal Drug and Alcohol Council of SA found that some Indigenous communities were concerned about the misuse of prescription drugs. These communities stated that prescription drugs such as Serapax, codeine and Panadeine Forte were easily accessible by Indigenous people, and that some doctors freely prescribed these drugs (DHA 2003).

³ The NTER Review Board conducted an independent and transparent review of the first 12 months of the NTER.

Drug related crime

Broadly speaking, there are three types of drug related crime: violence associated with illegal drug markets; crimes committed by individuals under the influence of drugs; and crime committed by drug users to pay for their drug purchases.

Although the link between drug use and crime is complex, many studies have found that there is clear evidence that drug use and crime tend to be associated — that is, co-existing in the same populations (Prichard and Payne 2005; Makkai and Payne 2003; Johnson 2004; Stevens, Trace and Bewley-Taylor 2005). Many persistent offenders frequently used illicit drugs, and drug dependence may amplify offending. Both crime and problematic drug use are linked to other factors, including socio-economic deprivation.

Wilczynski and Pigott (2004) found that illicit drugs were associated with both violent and property crime, but strongest for property crime. An analysis of data from the Drug Use Monitoring in Australia (DUMA) program found that, among police detainees, between 1995 and 2005:

- 17 per cent of offences committed by Indigenous detainees were drug related
- 72 per cent of Indigenous detainees tested positive for cannabis (compared with 54 per cent of non-Indigenous detainees)
- 24 per cent of Indigenous detainees tested positive to benzodiazepines (22 per cent of non-Indigenous detainees)
- 29 per cent of Indigenous detainees tested positive to methylamphetamines (26 per cent of non-Indigenous detainees)
- overall, 79 per cent of Indigenous detainees tested positive to any drug at the time of being detained by police, compared with 67 per cent of non-Indigenous detainees (AIC 2008).

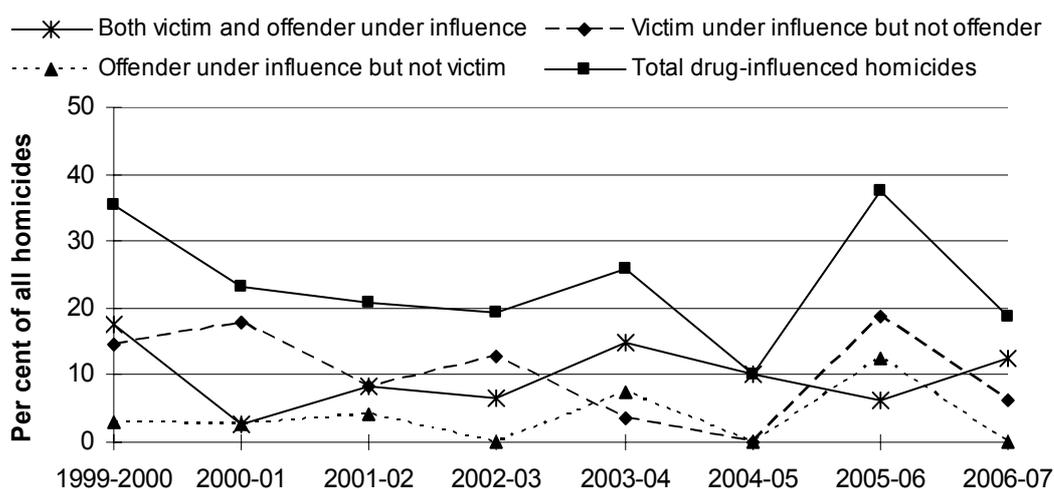
The use of inhalants has been linked with an increased likelihood of committing burglary, assault or wilful damage offences (Brady 1992). Unpublished data from DUMA indicated that Indigenous people detained by police in key city locations in 2004 and 2005, were more likely than non-Indigenous detainees to self-report use of inhalants (7 per cent for Indigenous detainees compared with 2 per cent for non-Indigenous detainees) (AIC 2008).

Prichard and Payne (2005) found that there was a connection between drug and alcohol use and criminal offending among 371 juveniles aged 10 to 17 years who were in detention centres in all Australian jurisdictions in 2003-04. They found that Indigenous and non-Indigenous youths used similar substances at similar frequencies, although non-Indigenous detainees were significantly more likely to

have used amphetamines and ecstasy. Indigenous youths were more likely to attribute their criminal offending to substance use (35 per cent) than non-Indigenous youths (29 per cent) (Prichard and Payne 2005).

Data from the Australian Institute of Criminology (AIC) National Homicide Monitoring Program (NHMP) on drug influenced crimes are included in this section. It should be noted that these data may not reflect the full extent of crimes under the influence of drugs as they do not include other forms of crime involving drugs, such as robberies, burglaries and assaults. Care should be taken in interpreting these data due to the small number of Indigenous homicides where drugs were involved at the time of the offence (between 3 and 12 per year over the past five years). Other limitations of the NHMP data are discussed in appendix 4.

Figure 10.4.1 Drug influenced Indigenous homicides, 1999-2000 to 2006-07^a



^a Totals are the aggregate of three categories of homicides under influence of drugs: both the 'victim and offender under the influence', 'victim under the influence but not offender', and 'offender under the influence but not victim'.

Source: AIC NHMP (unpublished); table 10A.4.2.

- Over the eight year period from 1999-2000 to 2006-07, the level of drug influenced Indigenous homicides has fluctuated. It is not possible to identify any clear trends (figure 10.4.1).
- Over the past five years there have been between 16 and 48 Indigenous homicides per year, and the number of drug influenced Indigenous homicides has fluctuated in even smaller numbers (between 3 and 12), small changes in numbers can cause large changes in proportions calculated (table 10A.4.2).
- Among all homicides recorded in the AIC NHMP database between 1999-2000 to 2006-07, a lower proportion of Indigenous homicides than non-Indigenous

homicides were associated with the use of drugs at the time of the offence (24.1 per cent compared to 33.9 per cent) (table 10A.4.2).

Drug related hospitalisations and deaths

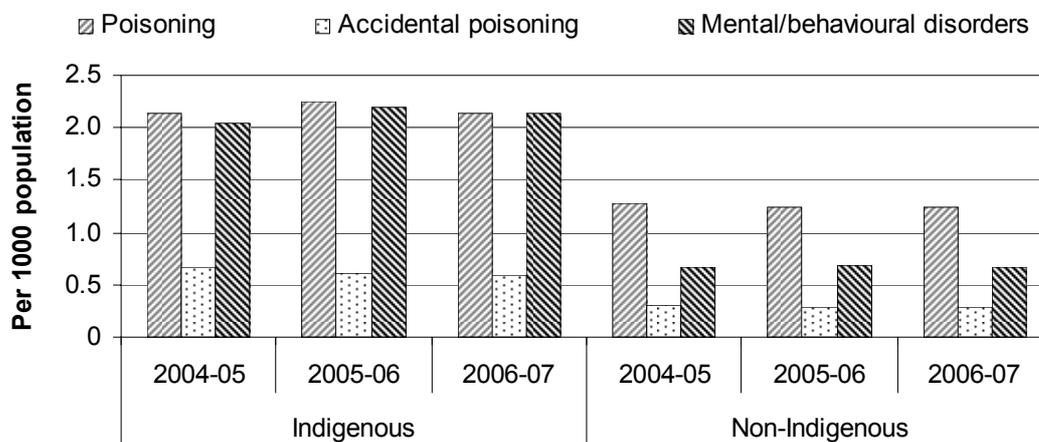
Data on hospitalisations related to drug use reported for this indicator are from the AIHW National Hospital Morbidity Database. These data only cover drug related illnesses resulting in admission to a hospital. Further, data are only available for conditions directly attributable to drug use and do not include conditions where drug use may be a contributing factor but where the link is not direct and immediate.

The availability of hospitalisation data for Indigenous people has significantly increased in the 2009 report compared to the 2007 report. AIHW analysis of the quality of Indigenous identification in hospital statistics has shown that the quality of data from NSW and Victoria has improved and data are now available for NSW, Victoria, Queensland, WA, SA and the NT. Nevertheless, Indigenous identification in hospitalisation data remains incomplete in most jurisdictions. The AIHW (2005) found that the quality of Indigenous hospitalisation data varied between jurisdictions and hospitals. Tasmania and the ACT are working with the AIHW to improve the quality of their Indigenous hospitalisation data.

Most hospitalisation data used in this section are for six jurisdictions: NSW, Victoria, Queensland, WA, SA, and the NT. These data have sufficient levels of Indigenous identification for 2006-07, 2005-06 and 2004-05. Longer time series data for Queensland, WA, SA and the NT from 2001-02 to 2006-07 are included in attachment tables 10A.4.4 and 10A.4.5. Hospitalisation data for these four jurisdictions should not be assumed to represent the hospitalisation experience in the other jurisdictions.

Non-Indigenous data from the AIHW include hospitalisations of people with a 'not stated' Indigenous status as well as those identified as non-Indigenous.

Figure 10.4.2 Age standardised hospitalisations related to drug use in NSW, Victoria, Queensland, WA, SA and public hospitals in the NT (per 1000 population)^{a, b, c, d}



^a The hospital separation rates (per 1000 population) were directly age standardised to the Australian population as at 30 June 2001. ^b Principal diagnoses of hospitalisations are based on codes of the International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Australian Modification (ICD-10-AM). ^c Data are based on state of usual residence. ^d Non-Indigenous data include separations where Indigenous status was not reported.

– Nil or rounded to zero.

Source: AIHW National Hospital Morbidity Database (unpublished); table 10A.4.6.

Figure 10.4.2 shows that from 2004-05 to 2006-07 in NSW, Victoria, Queensland, WA, SA and public hospitals in the NT:

- the most common drug-related conditions resulting in hospitalisations of both Indigenous and non-Indigenous people were poisoning, mental and behavioural disorders, and accidental poisoning
- the rates of hospitalisations for the three most common drug related conditions were all higher for Indigenous people than for non-Indigenous people.

In 2006-07:

- Indigenous people (2.1 per 1000) were three times as likely as non-Indigenous people (0.7 per 1000) to be hospitalised for mental and behavioural disorders caused by drug use (table 10A.4.6).

More data on hospitalisations due to drug use, by jurisdiction and sex, for the period 2004-05 to 2006-07 is reported in table 10A.4.7.

Illicit drugs are a direct cause of death as well as being risk factors for conditions such as HIV/AIDS, hepatitis, low birthweight, inflammatory heart disease, poisoning, and suicide and self-inflicted injuries.

Table 10.4.1 Drug related deaths, death rates, age standardised, 2003–2007^{a, b, c, d}

	Indigenous					Non-Indigenous ^e				
	NSW	Qld	WA	SA	NT	NSW	Qld	WA	SA	NT
Males	14.7	np	np	21.5	np	6.7	4.9	5.4	7.0	5.8
Females	7.8	3.8	np	np	np	3.9	2.8	0.3	4.9	3.6
Persons	11.1	3.3	5.4	13.9	4.5	5.3	3.8	4.3	5.9	4.7

^a Causes of death attributable to drug-induced mortality are based on codes of the International Classification of Diseases, 10th Revision (ICD-10) ^b Indirect standardised death rate per 100 000 population. ^c Denominators used in the calculation of rates for the Indigenous population are from ABS 2004, *Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians*, Cat. no. 3238.0 (low series). There are no comparable population data for the non-Indigenous population. Denominators used in the calculation of rates for comparison with the Indigenous population have been derived by subtracting Indigenous population estimates/projections from total estimated resident population and should be used with care, as these data include population units for which Indigenous status were not stated. ^d Data on deaths of Indigenous people are affected by differing levels of coverage of deaths identified as Indigenous across states and territories. Care should be exercised in analysing these data, particularly in making comparisons across states and territories and between the Indigenous and non-Indigenous data. ^e Non-Indigenous includes deaths with a 'Not stated' Indigenous status. **np** Not published

Source: ABS *Causes of Death, Australia*, Cat. no. 3303.0 (unpublished); table 10A.4.8.

In 2003–2007, for those jurisdictions for which data are available, drug related death rates were higher for Indigenous people than non-Indigenous in NSW, SA and WA and similar in Queensland and the NT.

10.5 Juvenile diversions as a proportion of all juvenile offenders

Box 10.5.1 Key message

- A smaller proportion of Indigenous than non-Indigenous juveniles were diverted from court by formal cautioning or referrals in each State and Territory for which data were available.

Juvenile diversion programs aim to divert offenders away from, or minimise their probability of, proceeding further into the criminal justice system. Australian diversion programs vary from informal arrangements between local communities, police, alcohol and drug workers, and the courts, through to legislated programs (Joudo 2008). Diversion programs have been implemented in various forms in

every State and Territory. These programs can be either police based or court based (Payne, Kwiatkowski and Wundersitz 2008). The most common diversionary mechanisms used by State and Territory juvenile justice systems include:

- cautions or warnings
- infringement notices
- referrals to youth, community or family conferences
- referrals to juvenile justice teams.

In some states and territories, the decision to divert an alleged offender will be left to the discretion of individual police officers. Alternatively, as in NSW, an Act of Parliament governs the process to be followed. In such cases, when the police apprehend a young person, they must consider whether the individual is entitled to be diverted under the appropriate Act.

Research has shown high levels of substance misuse among Indigenous offenders, and in recent years this has led to a number of diversionary programs addressing alcohol and drug use (Joudo 2008). A diversionary program available to juveniles in Queensland, for example, aims to address the underlying drug problems of offenders who have committed minor offences. The diversion is available in the court setting prior to sentencing, for suitable offenders who admit guilt, and involves a drug rehabilitation program. Court sentencing then takes into account the successful completion of the program (CCYPCG 2008).

Diversionary mechanisms may not reduce the interaction between Indigenous juveniles and the criminal justice system, but in combination with sports and leisure programs have been shown to contribute to reducing antisocial behaviour and offending (Morris, Sallybanks and Willis 2003). Research has also shown that programs that increase young peoples' involvement in sport, arts, or community group activities may reduce the likelihood of Indigenous juveniles having repeated contact with police (Cameron and MacDougall 2000; Mason and Wilson 1988; Morris, Sallybanks and Willis 2003; Randell 2002). This, in turn, may lead to an improvement in imprisonment and juvenile detention rates (section 4.12) and reduction in repeat offending rates (section 10.6) and less directly lead to improvements in year 10 and 12 retention (section 6.5), labour market participation (section 8.1), and suicide and self-harm (section 7.8).

A successful initiative for diverting Indigenous youth from the criminal justice system in the NT is described in box 10.5.2

Box 10.5.2 ‘Things that work’ — pre-court diversion in the NT

In 2000, a pre-court diversion program for juvenile offenders was introduced in the NT. This program is administered by police and uses warnings and conferences to divert selected individuals from the traditional court process. The program gives the police the power to divert offenders through a verbal or written warning, or by requiring the juvenile to attend a family or victim-offender conference.

An analysis of NT police records over a five year period showed a significant difference between juveniles diverted and those who attended court. Diverted juveniles reoffended less often than those who attended court, and those who went to court reoffended more quickly. The study acknowledges that although the program indicates positive results, further analysis is required to determine the effects of prior offending history (Cunningham 2007).

There are no national data on the extent of Indigenous juvenile diversions. The data in this section are from NSW, Victoria, Queensland, WA, SA and the NT, and the focus is on diversions at the police level. The data are not comparable, but have been provided to give some indication of the level of Indigenous juvenile diversions. Diversions can also be exercised at the court level. In this section, only WA provides some data on referrals to juvenile justice teams by the court. Diversionary mechanisms exercised by courts may be explored further in future reports.

For the 2007 report, data on juvenile diversions by Indigenous status were available for six jurisdictions: NSW, Victoria, Queensland, WA, SA and the NT. The 2009 report contains updated data for five of these jurisdictions, NSW, Victoria, Queensland, WA and SA. There are some updated data for WA on juvenile cautions by type of offence, but updated data on contacts with the juvenile justice system by type of contact were not available. More recent data for the NT were not available.

Data from Tasmania and the ACT have not been published in this section. In some instances, this is because there is no Indigenous identifier currently in place or data are not of sufficient size or quality to publish. It is anticipated that in future years a more extensive and comparable set of data will be available from jurisdictions.

The mechanism for juvenile diversions in NSW is youth justice conferencing, administered by the NSW Department of Juvenile Justice. The NSW data are from police records and represent persons of interest (POIs) or alleged offenders who have come to the attention of NSW Police for a recorded criminal incident (driving offences are excluded) and been referred to a youth justice conference.

In Victoria, data on apprehensions describe offences charged by police as either an ‘arrest’ or ‘summons’, and a diversion as a ‘caution’. Queensland Police data

present diversionary methods of processing as ‘caution’ and ‘community conference’, in contrast to an ‘arrest’, ‘notice to appear’, ‘summons’ or ‘warrant’. In WA, a juvenile diversion includes both ‘cautioning’ and ‘referrals to juvenile justice teams’ by the police. A ‘formal caution’ and ‘transfer to family conference’ issued by police in SA are classified as juvenile diversions. For the NT, the data refer to apprehension cases rather than individual persons; therefore, several cases can relate to one person.

Indigenous status in Victoria, WA and SA is completed on the basis of the attending officer’s subjective assessment of the person’s appearance and is recorded for operational purposes only. In NSW, Queensland and the NT, police officers ask juveniles whether they are Aboriginal or Torres Strait Islander.

Data in the following section have not been adjusted to control for factors that might affect the likelihood of a juvenile being diverted from court by police. These factors include the nature of the offence and the offending history of the young person.

New South Wales

Table 10.5.1 NSW, number and proportion of juveniles diverted, 2007 a, b, c, d

	<i>Unit</i>	<i>Indigenous</i>	<i>Non-Indigenous</i>	<i>Total^e</i>
Proceeded against other than to court				
Youth Justice conference	no.	523	1 551	2 217
Caution – Young Offenders Act	no.	1 571	9 388	11 487
Warning	no.	1 640	16 118	18 940
Infringement notice		428	7 083	8 055
Total	no.	4 162	34 140	40 699
Proceeded against to court	no.	5 131	10 417	16 058
Proportion of juveniles diverted	%	44.8	76.6	71.7

^a This table represents persons of interest (POIs) or alleged offenders who have come to the attention of NSW Police for a recorded criminal incident (driving offences are excluded). Not all crimes have an associated POI. The table only shows POIs whom the police have taken action against. ‘Proceeded against to court’ includes the issue of court attendance notices, charges and summonses. ‘Youth Justice Conference’ shows police conference referrals but excludes court referrals. ^b Under the *Young Offenders Act 1997* (NSW), when police apprehend a young person they must first consider whether the young person is entitled to be diverted under the Act by way of warning, caution or youth justice conference. ^c Excluded from this table were 1554 juvenile POIs whose status was recorded by police as ‘legal process not further classified’. ^d Indigenous status is based on self-identification by the juvenile. ^e ‘Total’ includes those juveniles whose status is unknown.

Source: NSW Bureau of Crime Statistics and Research (unpublished); table 10A.5.4.

Table 10.5.1 shows the various legal processes NSW Police can employ against alleged young offenders. The proportion of juveniles diverted includes those

referred to a ‘youth conference’ and those given a ‘caution’, ‘warning’ or ‘infringement notice’; none of which require the juvenile to attend court.

- Indigenous juveniles were diverted at a lesser rate than non-Indigenous juveniles in 2007 (44.8 per cent compared to 76.6 per cent) (table 10.5.1).
- The proportion of Indigenous juveniles diverted by police were similar from 2004 to 2007 (43.8 per cent in 2004 compared with 44.8 per cent in 2007) (tables 10A.5.3 and 10A.5.4). In 2004, 77.9 per cent of non-Indigenous juveniles were diverted (table 10A.5.3), similar to the 76.6 per cent diverted in 2007 (table 10A.5.4).

Tables 10A.5.1 and 10A.5.2 present data by offence type for 2006 and 2007 respectively.

Victoria

Table 10.5.2 Victoria, Indigenous and non-Indigenous juvenile alleged offenders and cautions^a

	<i>Unit</i>	<i>Indigenous</i>	<i>Non-Indigenous</i>
<i>2007-08</i>			
Total juvenile alleged offenders	no.	1 738	29 173
Juvenile cautions	no.	261	8 502
Proportion of juveniles cautioned	%	15.0	29.1
<i>2006-07</i>			
Total juvenile alleged offenders	no.	1 504	26 612
Juvenile cautions	no.	206	8 285
Proportion of juveniles cautioned	%	13.7	31.1
<i>2005-06</i>			
Total juvenile alleged offenders	no.	1 607	24 230
Juvenile cautions	no.	157	6 398
Proportion of juveniles cautioned	%	9.8	26.4
<i>2004-05</i>			
Total juvenile alleged offenders	no.	1 551	23 548
Juvenile cautions	no.	181	5 501
Proportion of juveniles cautioned	%	11.7	23.4

^a Indigenous status is derived from the racial appearance of the offender which is a subjective assessment of the police officer.

Source: Victoria Police (unpublished); tables 10A.5.5–8.

- In 2007-08, the proportion of Indigenous juvenile alleged offenders in Victoria who received a caution was around half the proportion of non-Indigenous

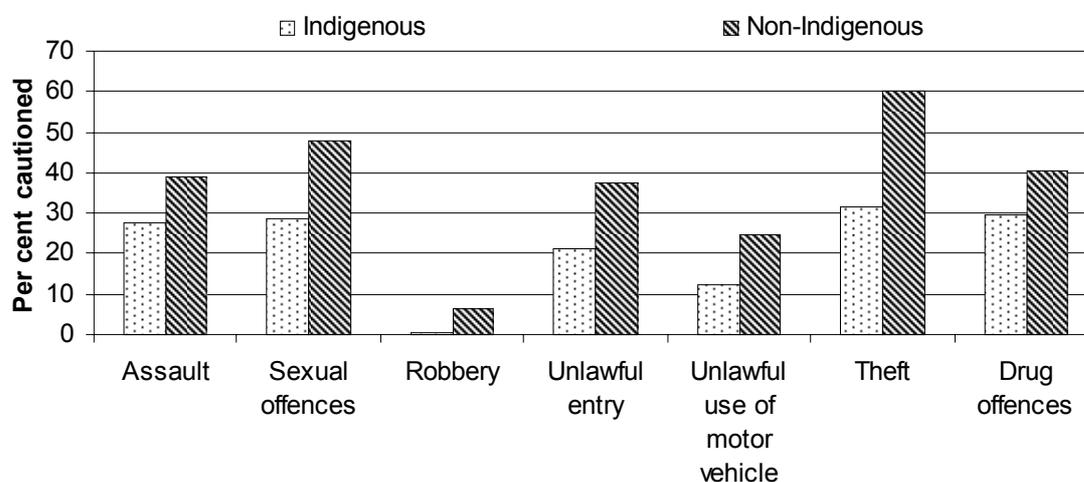
juvenile alleged offenders cautioned (15.0 per cent compared to 29.1 per cent) (table 10.5.2).

- The proportion of Indigenous juvenile alleged offenders cautioned by police in Victoria increased from 2004-05 to 2007-08 (11.7 per cent in 2004 05 compared to 15.0 per cent in 2007-08). The proportion of non-Indigenous juveniles cautioned by police also increased over this period.
- In 2006-07 and 2007-08, the proportion of Indigenous juvenile alleged offenders in Victoria who received a caution was highest in outer regional areas, 19.0 per cent in 2007-08 compared with 14.6 per cent in major cities and 11.0 per cent in inner regional areas (tables 10A.5.11 and 10A.5.12).

Tables 10A.5.9 and 10A.5.10 present data on method of processing juvenile alleged offenders by offence type for 2006-07 and 2007-08 respectively.

Queensland

Figure 10.5.1 **Queensland, proportion of Indigenous and non-Indigenous juvenile alleged offences receiving a caution, by type of offence, 2007-08^{a, b, c, d}**



^a Proportions are calculated using data in table 10A.5.13. The number of cautions is divided by the sum of the number of arrests, cautions, referrals to community conference, notices to appear, summons, warrants and other methods of processing juvenile alleged offenders used by Queensland Police, multiplied by 100.

^b Indigenous status is based on self-identification by the juvenile. ^c Only those offenders whose age and sex were identified are included. ^d 'Theft' excludes unlawful entry.

Source: Queensland Police Services (2008); table 10A.5.13.

Figure 10.5.1 presents police data on the number of offences, rather than the number of distinct young people. Therefore, these data should be interpreted with caution.

- In Queensland a greater proportion of non-Indigenous juveniles received cautions for assault, sexual offences, robbery, unlawful entry, unlawful use of a motor vehicle, theft, and drug offences than Indigenous juveniles in 2007-08 (figure 10.5.1).

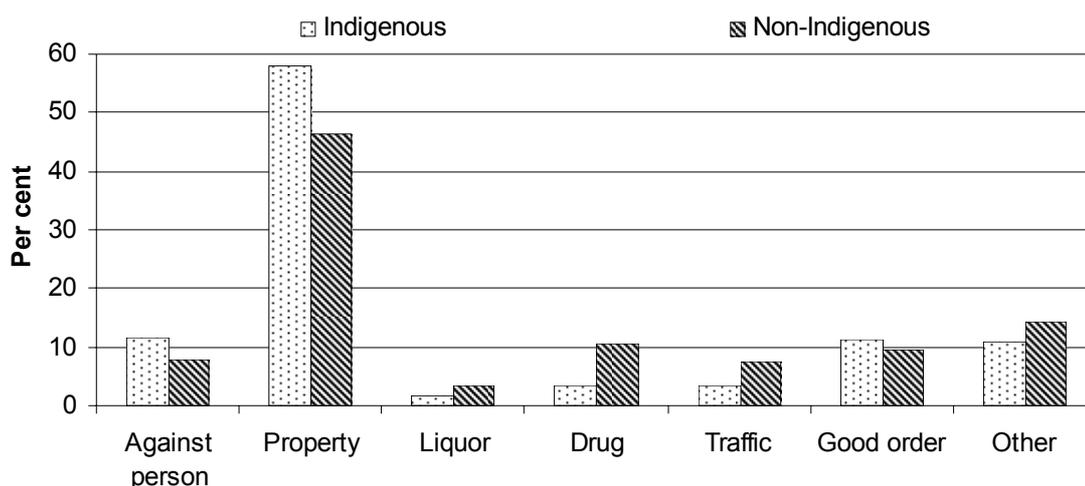
Tables 10A.5.13 and 10A.5.14 present a detailed breakdown of the number of arrests, cautions, referrals to community conferences, notices to appear, summonses and warrants issued by Queensland Police by offence type in 2007-08 and 2006-07.

Western Australia

Recent data on contacts with the juvenile justice system by type of contact for WA were not available for this report. Data reported below were also presented in the 2007 report. These data show that, between 1995 and 2002, about half (54.5 per cent) of the Indigenous juveniles formally dealt with by the WA Police were diverted, while 72.3 per cent of non-Indigenous juveniles were diverted (table 10A.5.15). To support these data, tables 10A.5.16 and 10A.5.17 present the number and proportion of juvenile diversions by sex and offence type.

Updated data on Indigenous and non-Indigenous juvenile cautions, by type of offence are presented in figure 10.5.2.

Figure 10.5.2 **WA Indigenous and non-Indigenous juvenile cautions, by type of offence, 2006^a**



^a Indigenous status is based on the attending officer's subjective assessment of the offenders' appearance and is recorded for operational purposes only.

Source: University of Western Australia 2006, *Crime and Justice Statistics for Western Australia*, Crime Research Centre, Perth; table 10A.5.19.

- In 2006, Indigenous juveniles received a greater proportion of cautions for three of the seven types of offences presented in figure 10.5.2 ('against person', 'property', and 'good order').
- The greatest disparity between the proportion of cautions by offence type issued to Indigenous and non-Indigenous juveniles was for property related offences (58.0 per cent for Indigenous and 46.3 per cent for non-Indigenous).

An annual breakdown of the number and proportion of juvenile cautions issued in WA from 1994 to 2006 is presented in table 10A.5.20. For Indigenous juveniles, there was an increase in the proportion of cautions issued from 1994 to 2006. For non-Indigenous juveniles, there was a decline in the proportion of cautions issued between 1994 and 2006.

Table 10A.5.21 shows the number and proportion of Indigenous and non-Indigenous juveniles cautioned in WA in 2006 by sex and single-year age groups (from 10 to 17 years).

South Australia

Table 10.5.3 SA, Indigenous and non-Indigenous juvenile apprehensions and diversions^{a, b}

	<i>Unit</i>	<i>Indigenous</i>	<i>Non-Indigenous</i>
<i>1 January to 31 December 2006</i>			
Juvenile apprehensions ^c	no.	1235	4681
Formal caution	no.	225	1341
Transfer to family conference	no.	204	846
Proportion diverted	%	34.7	46.7
<i>1 January to 31 December 2005</i>			
Juvenile apprehensions ^c	no.	1 248	4 439
Formal caution	no.	258	1 257
Transfer to family conference	no.	186	751
Proportion diverted	%	35.6	45.2
<i>1 January to 31 December 2004</i>			
Juvenile apprehensions ^c	no.	1 054	4 018
Formal caution	no.	200	247
Transfer to family conference	no.	181	837
Proportion diverted	%	36.1	51.9

^a Aboriginal appearance, derived from police apprehension reports, reflects the opinion of the apprehending officer. ^b Juvenile diversions include both formal cautions and transfers to a family conference. ^c Numbers of juvenile apprehensions exclude those offences with an unknown method of processing.

Source: Office of Crime, Statistics and Research (unpublished); table 10A.5.22.

-
- Table 10.5.3 shows that a smaller proportion of Indigenous juveniles were diverted via formal caution and transfer to family conference in 2005 and 2006 than non-Indigenous juveniles.
 - From 2004 to 2006, the proportion of Indigenous juveniles in SA diverted from court decreased slightly from 36.1 per cent to 34.7 per cent of Indigenous juvenile apprehensions (table 10.5.3).
 - In 2006, for each offence category listed in table 10A.5.24, the proportion of Indigenous juvenile alleged offenders diverted from court (via formal cautions or transfers to a family conference) was lower than the proportion of non-Indigenous juvenile alleged offenders (with the exception of ‘armed robbery and extortion’ and ‘driving offences’ (table 10A.5.24).

Northern Territory

Recent data on juvenile diversions by Indigenous status were not available for the NT, and data included in this report were also presented in the 2007 report.

In 2005, the proportion of juvenile cases diverted was lower for Indigenous than non-Indigenous juveniles (31.2 per cent compared with 58.2 per cent). For both Indigenous and non-Indigenous juvenile cases, a greater proportion of females than males were diverted. Of the total apprehensions for the period (1284), 39.2 per cent participated in diversion (table 10A.5.26).

From 2002 to 2005, there was a decrease in the proportion of Indigenous juveniles diverted. The proportions of non-Indigenous juvenile diversions fluctuated between 2002 and 2005, but were consistently greater than the proportion of Indigenous diversions during this period (table 10A.5.26).

10.6 Repeat offending

Box 10.6.1 Key messages

- A greater proportion of Indigenous prisoners (73.0 per cent) than non-Indigenous prisoners (49.6 per cent) had prior adult imprisonment in 2008 (figure 10.6.1). There was no significant change at the national level in the proportion of Indigenous prisoners with prior adult imprisonment from 2000 to 2008 (table 10A.6.3).
- Studies on juvenile offenders carried out in NSW, Queensland, WA and SA show that Indigenous juveniles experienced a higher number of court reappearances and higher rates of repeat offending than non-Indigenous juveniles (tables 10A.6.6, 10A.6.7, 10A.6.9 and 10A.6.10).

Repeat offending, sometimes called recidivism is a significant issue. Research has shown that once Indigenous offenders come into contact with the criminal justice system, they are more likely than non-Indigenous offenders to have further contact with it. Furthermore, Indigenous offenders are more likely to begin offending regularly at younger ages (Joudo 2008).

Indigenous children are more likely to have a parent imprisoned at some point in their lives than non-Indigenous children. Incarceration of one generation affects later generations through the breakdown of family structures, and has ramifications for the rehabilitation and employment prospects of individuals, and the socio-economic capacity of families to function (Standing Committee on Law and Justice 1999). Children of prisoners are more likely than children in the general community to commit offences that result in their own imprisonment (Standing Committee on Law and Justice 1999, 2000; Woodward 2003).

Several factors contribute to recidivism and, in many cases, these are the same as those that resulted in the initial incarceration (Standing Committee on Social Issues 2008; Willis and Moore 2008).

Given the extent of Indigenous imprisonment, it is important that people who have contact with the criminal justice system have the opportunity to integrate back into the community and lead positive and productive lives, which may also break the intergenerational offending cycle. Many social barriers faced by Indigenous offenders can be overcome to some extent through intervention programs aimed at addressing those barriers (Willis and Moore 2008). The Standing Committee on Social Issues (2008) found that a major factor leading to recidivism was the lack of suitable support to ex-offenders integrating back to society. Borzycki and Baldry (2003) found that there were only a small number of programs in Australia to help

Indigenous and non-Indigenous people make the transition from prison to society and to break the cycle of reoffending.

Services that aim to support Indigenous offenders with the experience of imprisonment can also help lower the rate of reoffending. These services can enhance rehabilitative outcomes and the reintegration process by helping Indigenous offenders remain in contact and involved with the community. These services can include: visits by elders, contact with community liaison officers, official Indigenous visitors and access to chaplains (including specified Indigenous chaplains) (Willis and Moore 2008).

Box 10.6.2 describes successful initiatives in SA and Tasmania aimed at reducing recidivism among Indigenous people.

Box 10.6.2 ‘Things that work’ — repeat offending

Operation Flinders, is a SA project aimed at reducing recidivism of young offenders. The program does not specifically target Indigenous participants, but in 2006-07, 13 per cent of all participants were Aboriginal.

Operation Flinders targets individuals aged 14–18 years who have a history of offending or are at risk of reoffending. The project is an eight day trek in the Flinders Ranges and aims to help youth develop self esteem, leadership, personal responsibility and motivation. The program is clinically based and has a strong focus on understanding, ongoing support and assistance to connect those who need further services.

An independent evaluation reported a significant improvement in attitudes and that post completion participants were less likely to commit crime. The project was a winner in the 2008 Australian Crime and Violence Prevention Awards (AIC 2008).

The **Aboriginal Outdoor Recreation Program** in Tasmania delivers cultural and outdoor recreation programs to provide personal growth opportunities for Aboriginal people. During 2008, the program conducted a *Men’s Cultural Connection Camp* in collaboration with Colony 47’s Justice Mentoring Program to assist with Aboriginal men to reintegrate into the community after release from prison. The involved participants take part in traditional cultural activities designed to re-connect them to their Aboriginal culture. Similar camps were run in 2006, and anecdotal evidence suggests that none of the past participants reoffended or returned to prison (Tasmanian Government, unpublished).

This section includes data on both adult and juvenile repeat offending. For the adult population, data on prior imprisonment under sentence are from the *ABS Prisoners in Australia* publication (ABS 2008) and are provided for each State and Territory. Data on juvenile repeat offending are limited to four jurisdictions: NSW,

Queensland, WA and SA, and are based on four cohort studies published by the Bureau of Crime Statistics and Research in NSW, Griffith University School of Criminology and Criminal Justice, the University of Western Australia Crime Research Centre, and the Office of Crime Statistics and Research in SA. Data presented for NSW have been updated since the 2007 report. Data for Queensland, WA and SA presented are as shown in the 2007 report. Sections 4.12 and 10.5 of the report present data on juvenile detention and juvenile diversions, and cover a greater number of jurisdictions than the data available on juvenile repeat offending.

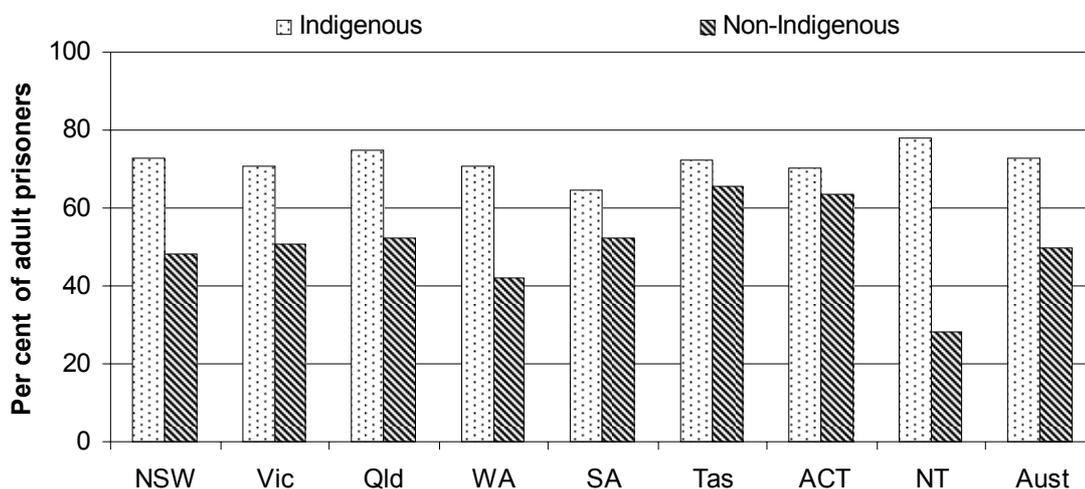
Data on the prior imprisonment of adults from the *ABS Prisoners in Australia* series need to be interpreted with caution, and are subject to caveats:

- some states and territories include episodes on remand as prior imprisonment
- a prior sentence of periodic detention is included as prior imprisonment
- prisoners who have had previous adult imprisonment in another State or Territory may not be counted as having prior imprisonment
- the data do not include arrests that do not proceed to court (for example, as a result of diversion or restitution)
- the data do not include convictions for re-offending that lead to outcomes that are not administered by prisons (for example, community service orders or fines)
- the data only deal with prior imprisonment in an adult prison (juvenile detention is not included).

As a consequence, the true level of repeat offending is under represented. Furthermore, not all offences come to the attention of police, or are recorded by police, or are dealt with within the criminal justice system.

Adult repeat offending

Figure 10.6.1 Proportion of prisoners with known prior adult imprisonment under sentence, 30 June 2008^a



^a People known to have had prior imprisonment under sentence in a gazetted adult prison. A prior sentence of periodic detention is included as prior imprisonment. Some states and territories may also include episodes on remand as prior imprisonment. Prisoners who have had previous adult imprisonment in another State or Territory may not be counted as having prior imprisonment.

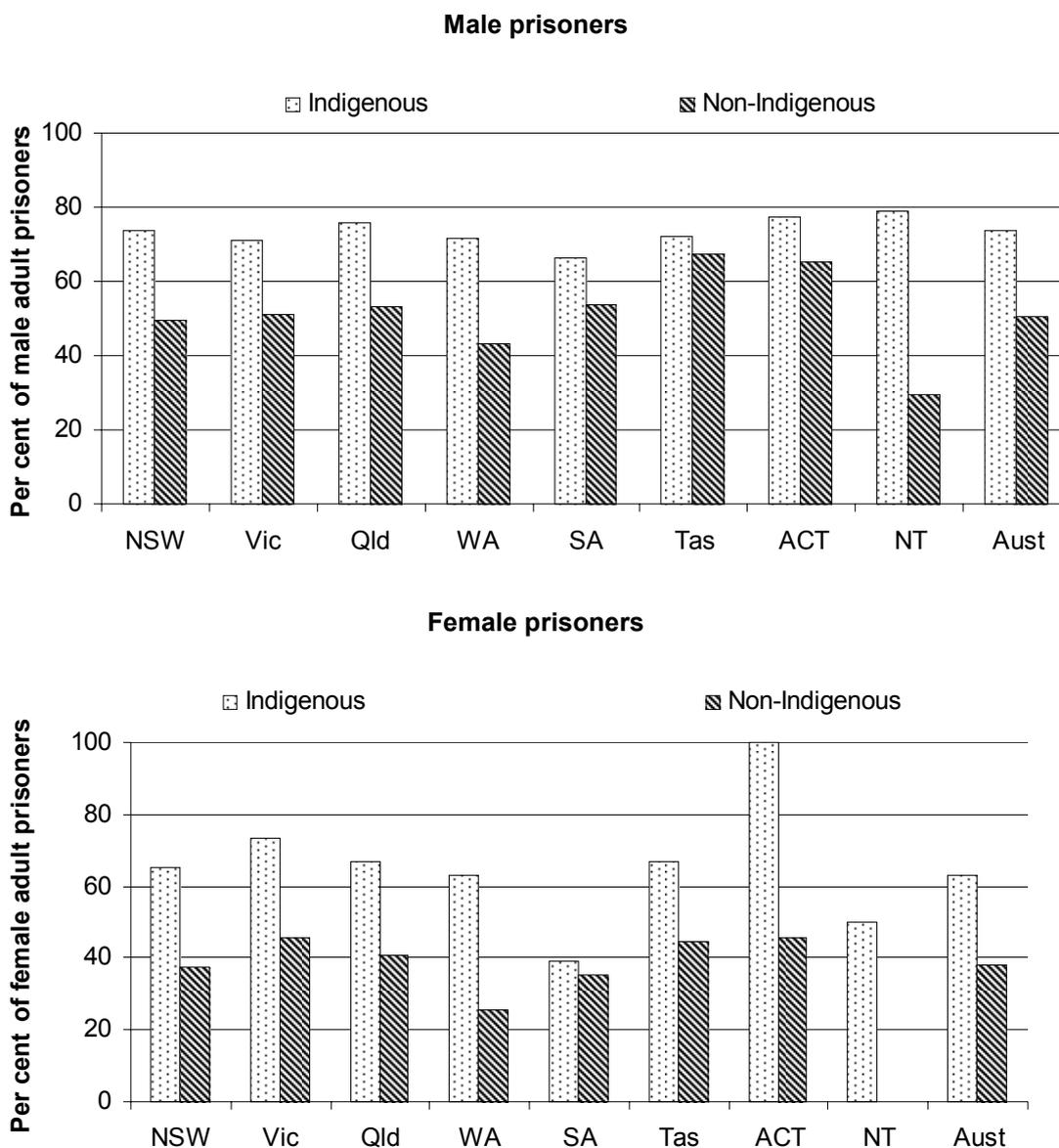
Source: ABS (2008); table 10A.6.1.

Nationally, at 30 June 2008:

- the proportion of prisoners who had prior adult imprisonment was 73.0 per cent for Indigenous prisoners and 49.6 per cent for non-Indigenous prisoners (figure 10.6.1).
- the proportion of prisoners who had prior adult imprisonment under sentence was higher for Indigenous prisoners than non-Indigenous prisoners in all states and territories (figure 10.6.1).

From 2000 to 2008, nationally, the percentages of Indigenous and non-Indigenous prisoners with prior imprisonment changed little. However there were different trends across states and territories, with the most significant improvements in SA, dropping from 89.3 per cent in 2000 to 64.6 per cent in 2008 (table 10A.6.3).

Figure 10.6.2 Proportion of prisoners with known prior adult imprisonment under sentence, by sex, 30 June 2008^a



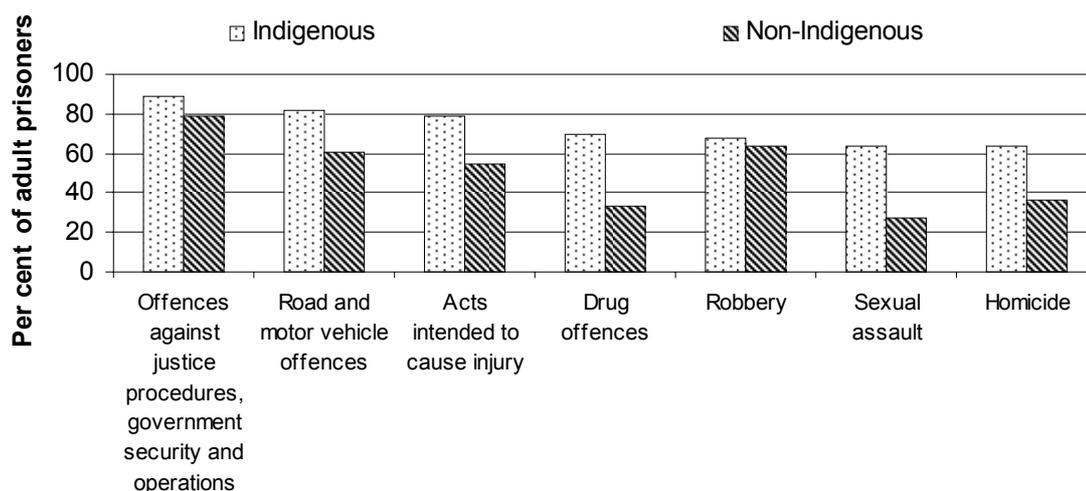
^a People known to have had prior imprisonment under sentence in a gazetted adult prison. A prior sentence of periodic detention is included as prior imprisonment. Some states and territories may also include episodes on remand as prior imprisonment. Prisoners who have had previous adult imprisonment in another State or Territory may not be counted as having prior imprisonment.

Source: ABS (2008); table 10A.6.1.

- At 30 June 2008, the proportion of prisoners who had prior adult imprisonment under sentence was higher for Indigenous male and female prisoners than non-Indigenous male and female prisoners in all states and territories (figure 10.6.2).

- Nationally in 2008, 73.9 per cent of Indigenous male prisoners had prior adult imprisonment, compared with 63.3 per cent of Indigenous female prisoners (figure 10.6.2).

Figure 10.6.3 Proportion of prisoners with known prior adult imprisonment under sentence, by most serious offence/charge, 30 June 2008^a



^a People known to have had prior imprisonment under sentence in a gazetted adult prison. A prior sentence of periodic detention is included as prior imprisonment. Some states and territories may also include episodes on remand as prior imprisonment. Prisoners who have had previous adult imprisonment in another State or Territory may not be counted as having prior imprisonment.

Source: ABS (2008); table 10A.6.4.

- Figure 10.6.3 shows the proportion of Indigenous and non-Indigenous prisoners with known prior adult imprisonment disaggregated by the current most serious offence/charge for which the person had been imprisoned. The most serious offence/charge for which the prisoner was serving their current sentence is not necessarily related to any offence/charge for which they may have previously been imprisoned.
- In each offence category shown in figure 10.6.3, the proportion of Indigenous prisoners who had been in prison previously was higher than the proportion of non-Indigenous prisoners at 30 June 2008.
- Indigenous prisoners serving a sentence for ‘offences against justice procedures, government security and operations’ at 30 June 2008 were more likely to have been in prison previously compared to the other offence categories (figure 10.6.3).

Data on the number and proportion of sentenced and unsentenced prisoners with prior imprisonment, disaggregated by a greater number of offence categories than

those presented in figure 10.6.3, are shown in tables 10A.6.4 (for 2008) and 10A.6.5 (for 2007). In 2008 and 2007, the proportion of sentenced Indigenous prisoners who had been in prison previously was higher than the proportion of sentenced non-Indigenous prisoners with prior imprisonment for each offence category excluding unlawful entry with intent, which had marginally higher proportions of non-Indigenous than Indigenous prisoners in both years, and for abduction and related offences in 2008 (tables 10A.6.4 and 10A.6.5).

Juvenile repeat offending

New South Wales

Table 10A.6.6 presents data from a cohort study of 3523 juveniles aged 10 to 18 years who appeared in the NSW Children's Court for the first time in 1999. Of the cohort population, 17.7 per cent were Indigenous. The study counted the number of court and custodial appearances for each juvenile from 1999 to 2007 to evaluate the re-offending behaviour of the cohort. The average number of court reappearances per person in the follow-up period was 2.4 times higher for Indigenous juveniles than non-Indigenous juveniles (7.0 court reappearances per person compared to 2.9). Further, 84.6 per cent of Indigenous juveniles in the cohort had at least one adult court appearance in the follow-up period, compared with 59.0 per cent of non-Indigenous juveniles.

Queensland

Data for Queensland are from a report published by Griffith University School of Criminology and Criminal Justice (2005) which examined the link between child maltreatment, police cautioning and juvenile repeat offending. The study followed all children born in a 1983 birth cohort through any contact they had with the former Department of Families (regarding a child protection matter) and juvenile justice system up until 2000-01 (that is, until the participants turned 17 years of age and were no longer classified as a juvenile in Queensland). In total, data pertaining to 24 305 children were collected and analysed in this study (Griffith University 2005).

In the population analysed, 14 572 juveniles received a police caution from 1983 to 2000-01. Of those who received a police caution, 993 had been maltreated as a child (Griffith University 2005). Child maltreatment, which can include physical abuse, neglect or sexual abuse, is considered a specific risk factor for delinquency and juvenile offending (Griffith University 2005).

Of the juveniles in the 1983 Queensland birth cohort who had been maltreated and received a police caution, a greater proportion of Indigenous males and females re-offended than non-Indigenous males and females. Eighty-two per cent and 74.1 per cent of maltreated Indigenous males and females re-offended, respectively, compared with 66.0 per cent of maltreated non-Indigenous males and 46.7 per cent of maltreated non-Indigenous females (table 10A.6.7).

The study also examined whether juveniles who may or may not have been maltreated as children who were cautioned for their first offence were more likely to re-offend than juveniles who appeared in court for their first offence.

The proportion of juvenile repeat offenders who had a finalised court appearance after receiving a caution was similar for Indigenous and non-Indigenous males (48.2 per cent and 49.9 per cent respectively) and females (42.1 per cent and 45 per cent, respectively).

The proportion of repeat offenders who had a finalised court appearance after their first contact with the juvenile justice system led to a court appearance was similar for males and females, although rates for Indigenous males and females were slightly greater than non-Indigenous males and females (table 10A.6.8).

For both Indigenous and non-Indigenous juveniles, greater proportions re-offended if their first contact with the juvenile justice system was court rather than a caution (46.6 per cent of Indigenous juveniles re-offended after receiving a caution compared to 53.4 per cent who re-offended after having had contact with court) (table 10A.6.8).

Western Australia

Data for WA are from a University of WA study. The report examined the proportions of Indigenous and non-Indigenous juveniles who re-offended after being dismissed, referred to a juvenile justice team, issued a formal caution, fine or community-based order, or sentenced to juvenile detention on their first contact with the WA juvenile justice system. Data are based on two cohorts of juveniles first entering the WA justice system in either 1995 or 2000, and measured re-offending over the period until mid 2002 (University of WA 2004).

For each type of contact with the juvenile justice system, a greater proportion of Indigenous juveniles re-offended than non-Indigenous juveniles. Among Indigenous juveniles, the greatest proportion re-offended after their first contact with the juvenile justice system was dismissed (77.4 per cent) or there was a referral to a juvenile justice team (74.7 per cent). For non-Indigenous juveniles, the greatest proportion re-offended after their first contact with the juvenile justice system was

dismissed (57.6 per cent) or there was a community-based order (53.5 per cent). The greatest difference between the proportion of Indigenous and non-Indigenous re-offenders was for juveniles receiving a fine as their first contact with the justice system (56.0 per cent of Indigenous juveniles re-offended after receiving a fine compared to 25.8 per cent of non-Indigenous juveniles) (table 10A.6.9).

South Australia

Data for SA are from an Office for Crime Statistics and Research study (OCSAR 2005). The study assessed the extent to which juveniles in SA had formal contact with the juvenile justice system. Each juvenile included in the study was born in 1984 and the follow-up period was 18 years (till 2002). In SA, a juvenile's formal contact with the justice system commences when they are officially apprehended by police, either by way of an arrest or report. The data must be interpreted with caution, as they do not measure the actual levels of offending as not all apprehended youths are subsequently found guilty or admit guilt (although the majority do).

In the study, Indigenous juveniles were more likely than non-Indigenous juveniles to be in contact with the SA juvenile justice system, overall, Indigenous juveniles were 2.8 times as likely to be apprehended at least once than non-Indigenous juveniles (44.1 per cent compared with 15.8 per cent).

The proportion of Indigenous juveniles who were apprehended on two to four occasions in the 1984 cohort was 3.6 times as high as the proportion of non-Indigenous juveniles (16.7 per cent compared with 4.6 per cent) (table 10A.6.10).

10.7 Future directions in data

Alcohol consumption and harm

There are limited data on patterns of substance use. This report and previous reports (2005 and 2007) sourced data on substance use from several ABS surveys. The AIHW National Drug Strategy Household Survey (NDSHS) has a small Indigenous sample (fewer than 500 respondents) and only supports comparisons between Indigenous and non-Indigenous people at a national level. Work is underway to improve Indigenous coverage. The NT is conducting an Indigenous drinking patterns study, the results from this study may be available for the next report.

The report, *Drug Use among Aboriginal and Torres Strait Islander Peoples: an Assessment of Data Sources* (AIHW 2006) suggested many ways to improve current collections of data on substance use:

- continue to improve identification of Indigenous people across all data sources
- improve estimates of substance use among Indigenous people, particularly in relation to illicit substance use in rural and remote locations
- improve information about the number of Indigenous people accessing alcohol and other treatment services, the types of treatment they receive and its outcomes
- develop an appropriate methodology for gathering information about issues relevant to Indigenous substance use, such as petrol sniffing.

The adoption of these suggested improvements would allow reporting of data with improved quality and comparability in the future.

Drug and other substance use and harm

There are limited data regarding patterns of substance use. This report and previous reports (2005 and 2007) sourced data on substance use from several ABS surveys. Data on substance use (including tobacco, alcohol and illicit drugs) are also available from the AIHW 2007 National Drug Strategy Household Survey (NDSHS). However, the NDSHS has a very small Indigenous sample (fewer than 500 respondents). The 2008 NATSISS has collected information about illicit substance use and these data will be available from late 2009.

There are limited data on the prevalence of drug and other substance use in the Indigenous population by type of drug, and by State/Territory or remoteness area. Future drug surveys need to be large enough in scope to ensure that robust data can be provided on the level of use and type of drugs used by Indigenous people.

The report, *Drug Use among Aboriginal and Torres Strait Islander Peoples: an Assessment of Data Sources* (AIHW 2006) suggested many ways to improve current collections of data on substance use.

10.8 References

10.1 Participation in organised, arts or community group activities

ABS (Australian Bureau of Statistics) 2004, *National Aboriginal and Torres Strait Islander Social Survey 2002*, Cat. no 4714.0, Canberra.

-
- 2006, *Aboriginal and Torres Strait Islander Australians: Involvement in Arts and Culture*, Cat. no 4721.0, Canberra.
- 2008, *Sports and Physical Recreation: A Statistical Overview, Australia, 2008 (Edition 2)*. Cat. no. 4156.0. Canberra.
- ACF (Administration for Children and Families) 2002, *Early Head Start Benefits Children and Families: Research Brief*, ACF, United States Department of Health and Human Services, Washington, D.C., June.
- Barber, B.L., Eccles, J.S. and Stone, M.R. 2001, 'Whatever happened to the jock, the brain, and the princess?: Young adult pathways linked to adolescent activity involvement and social identity', *Journal of Adolescent Research*, vol. 16, no. 5, September.
- Beyondblue 2008, 'Hip-hop feast promotes mental health message', http://www.beyondblue.org.au/index.aspx?link_id=59.1048&print=true (accessed 16 April 2009).
- Bush, L., McHale, J., Vinden, P., Richer, D., Shaw, D. and Smith, B. 2001, 'Functions of sport for urban middle school children', paper presented at the American Psychological Association's 109th Annual Conference, San Francisco, California, 25 August.
- Carinduff, S. 2001, *Sport and Recreation for Indigenous Youth in the Northern Territory*, Cooperative Research Centre for Aboriginal and Tropical Health and the Australian Sports Commission.
- Dockery, A.M. 2009, *Culture and Wellbeing: the Case of Indigenous Australians*, Centre for Labour Market Research, Curtin University of Technology, Perth, <http://cbs.curtin.edu.au/files/09.01.pdf>, (accessed 16 April 2009).
- Indigenous Hip Hop Projects 2009, 'Indigenous Hip Hop Projects', <http://www.indigenoushipop.com> (accessed 16 April 2009).
- McCoy, B.F., Ross, R. and Elston, J. 2008, *Boys to Men: Garbutt Magpies Twenty-Five Years On, 1983–2008*, James Cook University, Townsville.
- Mills, D. and Brown, P., 2004, *Art and Wellbeing a Guide to the Connections between Community Cultural Development and Health, Ecologically Sustainable Development, Public Housing and Place, Rural Revitalisation, Community Strengthening, Active Citizenship, Social Inclusion and Cultural Diversity*, The Arts Council of Australia, Sydney.
- Morris, L., Sallybanks, J., and Willis, K. 2003, *Sport, Physical Activity and Antisocial Behaviour in Youth*. Australian Institute of Criminology, Canberra.
- Papunya Tula Artists 2009, 'Papunya Tula Artists: History' <http://www.papunyatula.com.au/history/> (accessed 22 April 2009).
- Sweeney P., 2006, 'Papunya Tula Artists Pty Ltd: Submission to Inquiry into the Indigenous visual arts sector', http://www.aph.gov.au/Senate/committee/ecita_ctte/completed_inquiries/2004-07/indigenous_arts/submissions/sub14.pdf (accessed 22 April 2009).
- UNICEF (United Nations Children's Fund) 2004, *Sport, Recreation and Play* United Nations Children's Fund Division of Communication, New York, August.
- Yirra Yaakin 2009, 'About Us: History of Yirra Yaakin Aboriginal Corporation', <http://www.yirrayaakin.com.au/-ABOUT-US,87-.html> (accessed 16 April 2009).
- Zubrick, S.R., Silburn, S.R., Lawrence, D.M., Mitrou, F.G., Dalby, R.B., Blair, E.M., Griffin, J., Milroy, H., De Maio, J.A., Cox, A. and Li, J. 2005, *The Western Australian Aboriginal Child Health Survey: The Social and Emotional Wellbeing of Aboriginal Children and Young People*, Curtin University of Technology and Telethon Institute for Child Health Research, Perth.

10.3 Alcohol consumption and harm

- AIC (Australian Institute Criminology) 1990, *Directions for Australia*, National Committee on Violence, Australian Institute Criminology, Canberra.
- AIHW (Australian Institute of Health and Welfare) 2005a, *2004 National Drug Strategy Household Survey: Detailed findings*, Cat. no. PHE 66, Canberra.
- 2005b, *Improving the Quality of Indigenous Identification in Hospital Separations Data*, Cat. no. HSE 101, Canberra.
- 2008, *National Drug Strategy Household Survey: detailed findings 2007*, Cat. no. PHE 107, Canberra.
- Anderson, P. and Wild, R. 2007, *Ampe Akelyernemane Meke Mekarle Little Children are Sacred Report of the Northern Territory Board of Inquiry into the Protection of Aboriginal Children from Sexual Abuse*, Northern Territory Government, Darwin.
- Chikritzhs, T., Pascal, R., Gray, D., Stearne, A., Siggers, S. and Jones, P. 2007, 'Trends in alcohol-attributable deaths among Indigenous Australians, 1998-2004', *National Alcohol Indicators, Bulletin* no. 11, National Drug Research Institute, Curtin University of Technology, Perth.
- COAG (Council of Australian Governments) 2009, *National Indigenous Reform Agreement*, http://www.coag.gov.au/intergov_agreements/federal_financial_relations/docs/IGA_FFR_ScheduleF_National_Indigenous_Reform_Agreement.pdf (accessed 9 February 2009).
- Drug and Alcohol Office 2009, *Fitzroy Crossing Liquor Restriction: October 2007 to September 2008*, Fitzroy Crossing Alcohol and Other Drug Management Committee, WA.
- Conigrave, K., Proude, E. and d'Abbs, P. 2007, *Evaluation of the Groote Eylandt and Bickerton Island Alcohol Management System*, Department of Justice, Northern Territory Government.
- Glover, J.D., Hetzel, D.M.S. and Tennant, S.K. 2004, 'The socioeconomic gradient and chronic illness and associated risk factors in Australia', *Australia and New Zealand Health Policy*, <http://www.anzhealthpolicy.com/content/1/1/8> (accessed 22 January 2009).
- Henderson-Yates, L. Wagner, S., Parker, H., and Yates, D. 2008, *Fitzroy Valley Liquor Restriction Report: An Evaluation of the Effects of a Six Month Restriction on Take-away Alcohol Relating to Measurable Health and Social Benefits and Community Perceptions and Behaviours*, University of Notre Dame Australia, Western Australia.
- Ireland, S. (Inspector from NSW Police Service) 1993, Alcohol and its Contribution to Violence: New Directions for Policing Alcohol Related Violence, Crime and Anti-Social Behaviour in New South Wales, presented to the Second National Conference on Violence, conducted by the Australian Institute of Criminology (AIC), <http://www.aic.gov.au/conferences/ncv2/ireland.pdf> (accessed 7 October 2003).
- Margolis, S., Ypinazar, V.A. and Muller, R. 2008, 'The impact of supply reduction through alcohol management plans on serious injury in remote Indigenous communities in remote Australia: A ten-year analysis using data from the Royal Flying Doctor Service', *Alcohol and Alcoholism*, vol. 43, no. 1, pp. 104–110.
- NHMRC (National Health and Medical Research Council) 2001, *Australian Alcohol Guidelines: Health Risks and Benefits*, Canberra.
- 2009, *Australian Alcohol Guidelines to Reduce Health Risks from Drinking Alcohol*, Canberra.
- NTER (Northern Territory Emergency Response) Review Board 2008, *Northern Territory Emergency Response: Report of the NTER Review Board*, Department of Families, Housing,

Community Services and Indigenous Affairs, <http://www.nterreview.gov.au/> (accessed 13 October 2008).

Office for Aboriginal and Torres Strait Islander Partnerships 2009, *Quarterly Report on Key Indicators in Queensland's Discrete Indigenous Communities, October – December 2008*, Department of Communities, Brisbane.

O'Leary, C.M., Heuzenroeder, L., Elliott, E.J. and Bower, C. 2007, 'A review of policies on alcohol use during pregnancy in Australia and other English-speaking countries 2006', *The Medical Journal of Australia*, vol. 186, no. 9, pp. 466–471.

Pearson, N. 2001, On the human right to misery, mass incarceration and early death, The Charles Perkins Memorial Oration, MacLaurin Hall, University of Sydney, Sydney, 25 October.

Pearson, N. 2006, *The Right Side of the Law*, Cape York Institute for Policy and Leadership, <http://www.cyi.org.au/articles2006.aspx> (accessed 10 October 2008).

Prichard J. and Payne J. 2005, 'Alcohol, Drugs and Crime: A Study of Juveniles in Detention', *Research and Public Policy Series*, no. 67, Australian Institute of Criminology.

Putt J., Payne J. and Milner L. 2005, "Indigenous male offending and substance abuse", *Trends & Issues in Crime and Criminal Justice*, no. 293, Australian Institute of Criminology.

Smith, A.R., O'Hagan, S.B. and Gole, G.A. 2006, 'Epidemiology of open and closed-globe trauma presenting to Cairns base hospital, Queensland', *Clinical and Experimental Ophthalmology*, vol. 34, pp. 252–259.

Smith D.I. 1983, *Indices for the Use and Abuse of Alcohol: a Literature Review*, West Australia Alcohol and Drug Authority, Perth.

Snowball L. and Weatherburn D. 2008, 'Theories of Indigenous violence : a preliminary empirical assessment', *Australian and New Zealand Journal of Criminology*, vol. 41, no. 2, pp. 216–235.

Weatherburn, D., Snowball, L. and Hunter, B. 2006, *The Economic and Social Factors Underpinning Indigenous Contact with the Justice System: Results from the 2002 NATSISS Survey*, Contemporary Issues in Crime and Justice Bulletin no. 104, New South Wales Bureau of Crime Statistics and Research, Sydney.

WHO (World Health Organization) 2000, *International Guide for Monitoring Alcohol Consumption and Related Harm*, http://www.who.int/substance_abuse/PDFfiles/guide_montr_alcoholconsum.pdf (accessed 7 October 2003).

WHO (World Health Organization) 2004, *Global Status Report on Alcohol 2004*, Geneva.

World Bank 2000, *Health, Nutrition and Population, Sourcebook for the Poverty Reduction Strategy Paper, Part 2, Technical Notes*, 5 June 2000, <http://www.worldbank.org/poverty/health/library/hnptechnotes.pdf> (accessed 15 August 2003).

10.4 Drug and other substance use and harm

AIC (Australian Institute of Criminology) 2008, *Responding to Substance Abuse and Offending in Indigenous Communities: Review of Diversion Programs*, Research and Public Policy Series, no. 88, Canberra.

Access Economics 2006, *Opal Cost Benefit Analysis*, Report by Access Economics Pty Ltd for the Opal Alliance, Canberra.

AIHW (Australian Institute of Health and Welfare) 2002, *2001 National Drug Strategy Household Survey, Detailed Findings*, Cat. no. PHE 41, Canberra.

-
- 2005, *Improving the Quality of Indigenous Identification in Hospital Separations Data*, Cat. no. HSE 101, Canberra.
- 2008, *National Drug Strategy Household Survey: Detailed Findings 2007*, Cat. no. PHE 107, Canberra.
- Brady, M. 1992, *Heavy Metal: The Social Meaning of Petrol Sniffing in Australia*, Aboriginal Studies Press, Canberra.
- Burns, C., Currie, B., Clough, A. and Wuridjal, R. 1995, 'Evaluation of strategies used by a remote Aboriginal community to eliminate petrol sniffing', *Medical Journal of Australia*, vol. 163, no. 2, pp. 82–86.
- Campbell, L. and Stojanovski, A. 2001, 'Warlpiri elders working with petrol sniffers, Yuendumu', *Indigenous Law Bulletin*, vol. 5, no. 6, pp. 8–11.
- Clough, A.R., Burns, C.B., Guyula, T. and Yunupingu, M. 2002, 'Diversity of substance use in Eastern Arnhem Land (Australia): patterns and recent changes', *Drug and Alcohol Review*, vol. 21, pp. 349–356.
- Clough, A.R. and Jones, P. 2004, 'Policy approaches to support local community control over the supply and distribution of kava in the Northern Territory (Australia)', *Drug and Alcohol Review*, vol. 23, no. 1, pp. 117–126.
- Community Affairs References Committee 2006, *Beyond Petrol Sniffing: Renewing Hope for Indigenous Communities*, Senate, Canberra.
- D'Abbs, P and Shaw, G. 2008a, *Data Collection for the Petrol Sniffing Prevention Program Report Summary*, Commonwealth Department of Health and Ageing, Canberra <http://www.health.gov.au/internet/main/publishing.nsf/Content/health-oatsih-pspp-data>, (accessed 6 April 2009).
- 2008b, *Executive Summary of the Evaluation of the Impact of Opal Fuel*, Commonwealth Department of Health and Ageing, Canberra.
- DHA (Department of Health and Ageing) 2003, *Background Paper: National Drug Strategy, Aboriginal and Torres Strait Islander Peoples, Complementary Action Plan 2003–2006*, Canberra.
- DHA (Department of Health and Ageing) 2004, *An Evaluation of the Comgas Scheme*, Office for Aboriginal and Torres Strait Islander Health, Department of Health and Ageing, Canberra.
- Johnson, H. 2004, *Drugs and Crime: a Study of Incarcerated Female Offenders*, Research and Public Policy Series, no. 63, Australian Institute of Criminology, Canberra.
- Lee, K., Clough, A., Jaragba, M., Conigrave, K. and Patton, G. 2008, 'Heavy cannabis use and depressive symptoms in three Aboriginal communities in Arnhem Land, Northern Territory', *Medical Journal of Australia*, vol. 188, pp. 605–608.
- Makkai, T. and McAllister, I. 1998, *Patterns of drug use in Australia 1985–95*, Commonwealth Department of Health and Family Services, Canberra.
- Makkai, T. and Payne, J. 2003, *Drugs and Crime: a Study of Incarcerated Male Offenders*, Research and Public Policy Series, no. 52, Australian Institute of Criminology, Canberra.
- NTER (Northern Territory Emergency Response) Review Board 2008, *Northern Territory Emergency Response: Report of the NTER Review Board*, Department of Families, Housing, Community Services and Indigenous Affairs, <http://www.nterreview.gov.au/> (accessed 13 October 2008).

NT Select Committee on Substance Abuse in the Community 2007, *Substance Abuse in Remote Communities: Confronting the Confusion and Disconnection*, Legislative Assembly of the Northern Territory, Darwin.

Prichard, J. and Payne, J. 2005, *Alcohol, Drugs and Crime: A Study of Juveniles in Detention*, Research and Public Policy Series, no. 67, Australian Institute of Criminology, Canberra.

Senior, K. and Chenhall, R. 2008, 'Lukumbat marawana: a changing pattern of drug use by youth in a remote Aboriginal community', *Australian Journal of Rural Health*, vol. 16, no. 2, pp. 75–79.

Stevens, A., Trace, M. and Bewley-Taylor, D. 2005, *Reducing Drug Related Crime: an Overview of the Global Evidence*, Beckley Foundation Drug Policy Programme, Report 5, <http://www.internationaldrugpolicy.net/publications.htm> (accessed 24 August 2006).

Wilczynski, A. and Pigott, R. 2004, *The Relationship Between Drugs and Crime*, Australian Government Attorney-General's Department, Canberra.

10.5 Juvenile diversions as a proportion of all juvenile offenders

Cameron, M., and MacDougall, C. 2000, *Crime Prevention through Sport and Physical Activity*, Trends and Issues in Crime and Criminal Justice, no. 165, Australian Institute of Criminology, Canberra.

CCYPCG (Commission for Children and Young People and Child Guardian) 2008, *Snapshot 2008: Children and Young People in Queensland*, Brisbane.

Cunningham, T. 2007 *Pre-court Diversion in the Northern Territory: Impact on Juvenile Offending*, Trends and Issues in Crime and Criminal Justice, no. 339, Australian Institute of Criminology, Canberra.

Joudo, J., 2008, *Responding to Substance Abuse and Offending in Indigenous Communities: Review of Diversion Programs*, Research and Public Policy Series, no. 88, Australian Institute of Criminology, Canberra.

Mason, G. and Wilson, P 1988, *Sport, Recreation and Juvenile Crime: an Assessment of the Impact of Sport and Recreation upon Aboriginal and Non-Aboriginal Youth Offenders*, Australian Institute of Criminology, Canberra.

Morris, L., Sallybanks, J. and Willis, K. 2003, *Sport, Physical Activity and Antisocial Behaviour in Youth*, Research and Public Policy Series, no. 49, Australian Institute of Criminology, Canberra.

OCSAR (Office of Crime Statistics and Research) 2005, *Crime and Justice in South Australia — Juvenile Justice 2004*, Adelaide.

— 2006, *Crime and Justice in South Australia — Juvenile Justice 2005*, Adelaide.

— 2008, *Crime and Justice in South Australia — Juvenile Justice 2007*, Adelaide.

Payne, J., Kwiatkowski, M., Wundersitz, J., 2008, *Police Drug Diversion: a Study of Criminal Offending Outcomes*, Research and Public Policy Series, no. 97, Australian Institute of Criminology, Canberra.

Queensland Police Service 2008, *Annual Statistical Review 2007-08*, Brisbane.

— 2007, *Annual Statistical Review 2007-08*, Brisbane

Randell, N. (ed.) 2002, *Including the Arts: Preventing Youth Offending*, Report of the First National Conference on the Role of the Arts in Preventing Youth Offending, The Arts Council of England, the Paul Hamlyn Foundation and the Youth Justice Board.

Rowland, B. and Toumbourou, J. W. 2004, *Preventing Drug-Related Harm in Indigenous Australian Communities, Prevention Research Evaluation Report*, Druginfo Clearing House, Australian Drug Foundation and the Victorian Premier's Drug Prevention Council (<http://www.druginfo.adf.org.au>).

University of Western Australia 2004, *Pathways through Justice: A Statistical Analysis of Offender Contact with the WA Juvenile Justice System*, Crime Research Centre, Perth.

10.6 Repeat offending

ABS (Australian Bureau of Statistics) 2008, *Prisoners in Australia*, Cat. no. 4517.0, Canberra.

AIC (Australian Institute of Criminology) 2008, Australian Crime and Violence Prevention Awards, <http://www.aic.gov.au/acvpa/> (accessed 29 January 2009).

Borzycki, M and Baldry, E. 2003, *Promoting Integration: The Provision of Prisoner Post-Release Services*, Trends and Issues in Crime and Criminal Justice no. 262, Australian Institute of Criminology, Canberra.

Griffith University 2005, *Juvenile Offending Trajectories: Pathways from Child Maltreatment to Juvenile Offending and Police Cautioning in Queensland*, School of Criminology and Criminal Justice, Brisbane.

Joudo, J. 2008, *Responding to Substance Abuse and Offending in Indigenous Communities: Review of Diversion Programs*, Research and Public Policy Series, no. 88, Australian Institute of Criminology, Canberra.

OCSAR (Office for Crime Statistics and Research) 2005, *Young People Born in 1984: Offending Behaviour of Juveniles Apprehended at Least Once*. Government of South Australia, Adelaide.

Standing Committee on Law and Justice 1999, *Crime Prevention through Social Support, First Report*, Report no. 12, Legislative Council, Parliament of NSW, Sydney.

— 2000, *Crime Prevention through Social Support, Second Report*, Report no. 14, Legislative Council, Parliament of NSW, Sydney.

Standing Committee on Social Issues 2008, *Overcoming Indigenous Disadvantage in New South Wales*, Report no. 40, Legislative Council, Parliament of NSW, Sydney.

University of Western Australia 2004, *Pathways through Justice: A Statistical Analysis of Offender Contact with the WA Juvenile Justice System*, Crime Research Centre, Perth.

Willis, M., Moore, J. 2008, *Reintegration of Indigenous Prisoners*, Research and Public Policy Series, no. 90, Australian Institute of Criminology, Canberra.

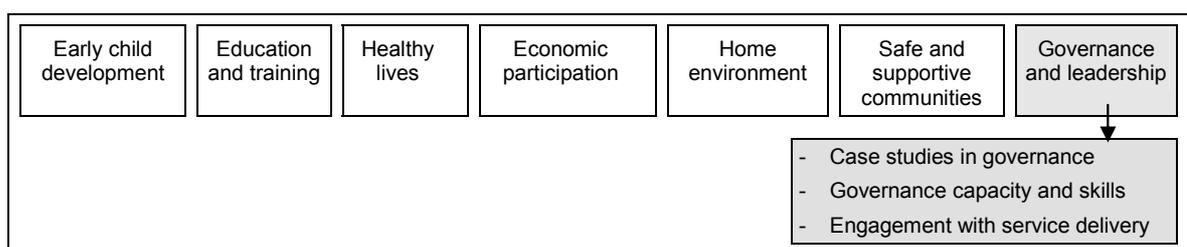
Woodward, R. 2003, *Families of Prisoners: Literature Review on Issues and Difficulties*, Occasional Paper no. 10, Australian Government Department of Family and Community Services, Canberra.

10.7 Future directions in data

AIHW (Australian Institute of Health and Welfare) 2006, *Drug Use Among Aboriginal and Torres Strait Islander Peoples: An Assessment of Data Sources*, Cat. no. PHE 76, Canberra.

11 Governance and leadership

Strategic areas for action



Governance generally refers to the way the members of a group or community organise themselves to make decisions that affect them as a group. Governance therefore includes the structures and institutions that guide individual and group behaviour, and describes who has the authority to make decisions in a community, how those decisions are to be carried out and how different members of the community are included in the making, implementation and communication of those decisions. Leadership is critical to the development of a strong governance culture, and there can be specific cultural aspects to Indigenous leadership.

This report emphasises both Indigenous governance (the ways Indigenous people come together to undertake social, economic and cultural activities) and government governance (the way governments engage with Indigenous organisations and communities). Effective governance and leadership play an essential part in the social life and economic development of Indigenous people, and influence virtually all the indicators in the report framework.

Although governance is an important element of the framework, it is difficult to establish numerical indicators of governance. The proxy indicators in this strategic area are complemented by a qualitative discussion of the characteristics of good governance:

- case studies in governance — drawing on international and Australian research, the case studies in governance focus on six key determinants of good governance. These determinants have general application to Indigenous governance structures, while allowing for the unique cultures of different organisations and communities: governing institutions; self-determination; leadership; capacity building; cultural match; and resources (section 11.1)

-
- governance capacity and skills — there is little quantitative data available on governance capacity and skills, but formal and informal governance training is one means for individuals, groups and organisations to build on their strengths and address their weaknesses in organisational management and community governance. This section reports data on participation in leadership, finance or management training, represented by the fields of management and commerce, business law, and economics and econometrics at the university and VET levels (section 11.2)
 - engagement with service delivery — service engagement is a broad concept that encompasses accessibility (including barriers to access) and appropriate delivery (including Indigenous cultural perspectives in designing and delivering programs). This section reports data on Indigenous people’s access to services and perceived barriers to access (section 11.3).

Attachment tables

Attachment tables for this chapter are identified in references throughout this chapter by an ‘A’ suffix (for example, table 11A.2.1). These tables can be found on the Review web page (www.pc.gov.au/gsp), or users can contact the Secretariat directly.

11.1 Case studies in governance

Box 11.1.1 Key messages

- Six determinants have general application to good Indigenous governance, while allowing for the unique cultures of different organisations and communities:
 - governing institutions
 - leadership
 - self-determination
 - capacity building
 - cultural match
 - resources.
- These determinants also play a role in good government governance — the way governments engage with Indigenous people.

Hunt et al. (2008) and the NTER Review Board (2008) argued that resolving the difference between western and Indigenous approaches to governance is a critical first step in improving social and economic outcomes for Indigenous people. Consultations with both Indigenous people and governments for this report emphasised that good governance arrangements have a positive impact on Indigenous outcomes (SCRGSP 2007).

What does ‘governance’ mean? A five year (2004–08) Indigenous Community Governance Project (ICGP) defined governance as:

...the evolving processes, relationships, institutions and structures by which a group of people, community or society organise themselves collectively to achieve the things that matter to them. To do this they need to make decisions about:

- their group membership and identity (who is the ‘self’ in their governance);
- who has authority within the group, and over what;
- their agreed rules to ensure authority is exercised properly and decision-makers are held accountable;
- how decisions are enforced;
- how they negotiate their rights and interests with others; and
- what arrangements will best enable them to achieve their goals.
(Hunt et al. 2008, p. 9)

Identifying common principles or determinants that underpin governance and encouraging the application of these determinants is the key to strengthening Indigenous governance.

Drawing on the Harvard Project On American Indian Economic Development in the USA (the Harvard Project 2003-04), the ICGP and broad consultations with Indigenous communities and organisations, this report addresses the following six determinants of good Indigenous governance:

- governing institutions
- self-determination
- leadership
- capacity building
- cultural match
- resources.

The determinants are inter-dependent. No one principle in isolation will lead to good governance — all determinants are necessary for sustained success. Each determinant is discussed and supported by examples that demonstrate the depth of good governance in Indigenous communities and organisations. Many of the example of good practice have come from the biennial Indigenous Governance Awards, are a partnership project between Reconciliation Australia and BHP Billiton to encourage, reward and promote best practice in Indigenous governance. (Gary Banks, Chairman of the Productivity Commission and of the Steering Committee for the Review of Government Service Provision, was a judge for the 2006 and 2008 Awards.) Other examples are drawn from an intensive Centre for Aboriginal Economic Policy Research (CAEPR) study into Indigenous governance (Hunt et al. 2008).

Any discussion on Indigenous governance also needs to look at *government governance*. That is, governments' engagement with Indigenous organisations and communities. The latter part of this section explores the relationship between government and Indigenous groups, organisations and communities.

Indigenous governance

This section discusses the six agreed determinants of good Indigenous governance. The discussion draws on the ICGP and the Reconciliation Australia/BHP Billiton Indigenous Governance Awards. The Awards are open to all Indigenous community organisations incorporated under legislation and applications are assessed against a set of criteria (see www.reconciliation.org.au/igawards for the assessment criteria). The 2008 Indigenous Governance Awards winners were:

Organisations established for less than 10 years	Organisations established for more than 10 years
<ul style="list-style-type: none">• <i>Winner</i> — Warakurna Artists Aboriginal Corporation (Warakurna Community, Ngaanyatjarra Lands, WA)• <i>Highly commended</i> — Yawoorroong Miriuwung Gajerrong Yirrgeb Noong Dawang Aboriginal Corporation (Kununurra, WA)• Murrijabree Aboriginal and Torres Strait Islander Association Inc (Deception Bay, Queensland)• Tirkandi Inaburra Cultural and Development Centre Inc (Coleambally, NSW)	<ul style="list-style-type: none">• <i>Winner</i> — Traditional Credit Union (Darwin, NT)• <i>Highly commended</i> — South West Aboriginal Medical Service (Bunbury, WA)• Yirra Yaakin Aboriginal Corporation (Perth, WA)• Waltja Tjutanku Palyapayi (Aboriginal Corporation) (Alice Springs, NT)

Governing institutions

Governing institutions establish the framework within which Indigenous bodies function. These 'institutions' are made up of both formal mechanisms (such as policies, rules, constitutions, legal and judicial systems) and informal ways of doing things (such as taboos, gender norms, religious beliefs, values, kinship and marriage systems) (Hunt and Smith 2006, p. 3).

The West Central Arnhem Regional Authority (Interim Council) call it governing ‘two-ways’ (Hunt et al. 2008). Good corporate governance is coupled with Indigenous cultural values, relationships and systems of authority to produce governing order and good outcomes (Hunt et al. 2008; Hunt and Smith 2007).

Lack of recognition and support from the formal statutory and regulatory arrangements can undermine Indigenous governance structures. At the same time, formal arrangements can be ineffective without community support (see ‘self determination’ below).

Good governance requires both:

capable institutions with clear ground rules (constitutions, rules for decision making etc.) which are informed by culturally-endorsed standards of what constitutes right and wrong behaviour, of who has legitimate knowledge, and who has the ‘right’ or authority to represent community residents and regional interests (IGA 2006, p. 4)

and:

effective financial management and administrative systems so that organisations are managed in a professional way with integrity and consistency. (IGA 2006, p. 4)

Many of these features are illustrated in the approaches to decision making of the 2008 Indigenous Governance Awards applicants (box 11.1.2).

Box 11.1.2 Decision making

The role of the **Gannambarra Limited** Board is clearly defined. The Board is responsible for four clearly defined areas — legal, policy and planning, financial function, and staffing, while the General Manager makes day to day decisions regarding operational issues. Decisions at the Board level are made by consensus or through a democratic process.

Election for the **Anangu Pitjantjatjara Yankunytjatjara (APY)** Executive Board are supervised by the SA Electoral Commission. All decisions relating to development, use and management of the lands are made by the APY General Meetings in conjunction with the APY Executive Board. APY is required to consult with traditional owners having a particular interest in that portion of the lands, or otherwise affected by any development proposal. Decisions are generally made in a consensus manner based on extensive discussions and negotiations. However, in some cases, the majority make the decisions.

Jarlmadanagah Burru Aboriginal Corporation has a 12 member governing body, supported by a committee of elders who act as special advisors. Decisions are generally made by consensus and with the support of the committee of elders, who ensure that decisions are culturally appropriate.

(Continued next page)

Box 11.1.2 (continued)

Traditional Credit Union won the Indigenous Governance Award for an organisation that had been established for more than 10 years. The governing body is the Board of Directors. The Board are responsible for managing consistent, cohesive policies and processes. The Executive Officer is chosen by the Board. The Traditional Credit Union has a comprehensive delegations policy which sets the authorisation limits for decisions that can be made by Traditional Credit Union staff.

The **South West Aboriginal Medical Service (SWAMS)** Governing Committee holds regular meetings. Committee meeting papers are prepared for each meeting and the papers include recommendations for Governing Committee approval. Decisions made by the Governing Committee are done as a body corporate and individual Governing Committee members cannot make decisions or bind SWAMS unless otherwise approved by the governing committee.

More information on these and other successful Indigenous organisations can be found on the Reconciliation Australia website at: www.reconciliation.org.au/igawards

Source: Reconciliation Australia 2008 (unpublished).

Good governing institutions do not just spontaneously arise. They are the result of often lengthy processes of developing capacity and leadership (each discussed below) and ongoing training and development. Good governing institutions support ‘board and staff training and development ... [and] compulsory governance training for board members’ (IGA 2006, p. 44). The institutions of governance can be actively built, and building these institutions creates a strong internal ‘governance culture’, providing a strong foundation for sustained good governance (Hunt and Smith 2006, p. 3). Examples of governance training by the 2008 Indigenous Governance Award applicants’ are summarised in box 11.1.3.

Box 11.1.3 Governance training

Yawoorroong Miriwung Gajerrong Yirrgeb Noong Dawang Aboriginal Corporation Governing Committees and Trustee Company Boards have undergone a Company Directors Training Course and two governance workshops since the organisation commenced operations in 2006.

Ungooroo Aboriginal Corporation insists that all Board members undertake governance training, and additional programs have been implemented to ensure the ongoing development of members of the governing body (for example, succession training). External consultants have assisted with the development of business plans and other capacity building strategies.

(Continued next page)

Box 11.1.3 (continued)

Winnunga Nimmityjah Aboriginal Health Service Inc has a business plan that includes governance issues (such as skills, education and training).

Kura Yerlo Incorporated provides governance workshops and training to all Board members.

Victorian Aboriginal Child Care Agency Co-Op Ltd has a governance training manual and requires board members to undertake governance training.

Gannambarra Limited has an induction/resource kit for new Directors. The kit includes the constitution, committee roles and responsibilities, information regarding funding agreements, organisational chart, staff positions and descriptions, purpose, philosophy and objectives, business plan and management reports.

Waltja Tjutangku Palyapayi (Aboriginal Corporation) Management Committee has undertaken Anangu Accounting, AAA Accounting training and governance training (such as the Introduction to Governance training for Aboriginal Board of Management members from the Office of the Registrar of Aboriginal Corporations). Executive members also receive professional development in governance and financial management.

More information on these and other successful Indigenous organisations can be found on the Reconciliation Australia website at: www.reconciliation.org.au/igawards

Source: Reconciliation Australia 2008 (unpublished).

Drawing on the Indigenous Governance Awards examples and research by the ICGP, some common characteristics of successful Indigenous governing institutions can be identified, many of which have close links with other determinants of good governance:

- clearly articulated vision, values, and goals, and the structures, processes and programs to achieve them
- legitimacy and authority of those with decision-making power (also see discussion of ‘leadership’ below)
- accountability of those in positions of responsibility
- stable institutional arrangements and effective administrative systems
- sound dispute resolution processes that provide fair and effective means of resolving disputes
- adequate capacity (including resources) to deliver core business (also see discussions of ‘capacity building’ and ‘resources’ below).

Leadership

Leadership has been described as ‘the process through which an individual influences group members to attain group or organisational goals’ (Smillie and Hailey 2001). Leadership is closely related to other determinants of good governance. Effective leadership depends on governing institutions that provide leaders with legitimacy and authority. In turn, effective leaders contribute to communities’ and organisations’ scope for self-determination. Sustained leadership also requires capacity building to build leadership skills, and is reliant on adequate resources for implementing decisions.

Indigenous leaders are critical to the development of a strong governance culture within organisations and communities. There is a specific cultural aspect to Indigenous leadership and, ‘visible’ Indigenous leaders of organisations are part of wider networks of community and regional leaders. These networks affect decision making processes and outcomes within organisations (Hunt et al. 2008). In his 1998 Williamson Community Leadership Program lecture, Patrick Dodson said:

For Aboriginal leaders, the social and moral obligation that comes with community leadership is life-long. Those who lead, who have authority, must care for and look after those who come behind. (Dodson 1998)

Different leadership models or styles are appropriate for different situations, and different attributes might be required for leadership in different governance contexts. Formal education is not necessarily a requirement for ‘people who contribute to the community, gain respect and act as role models’. It is most appropriate for Indigenous communities themselves to recognise, foster, promote and nurture this type of leadership (HOR 2004, p. 141).

Many Indigenous people who demonstrate this sort of leadership also take on formal roles leading Indigenous community organisations. At this level, more formal capacity building is required to build up leadership attributes such as:

- accountability and administration
- communication, consultation and representation
- negotiation, mediation and conflict resolution
- interacting with authorities at all levels of government
- integrity
- strategic policy and evaluation skills

-
- cross cultural awareness.¹

Leadership needs to be nurtured and leaders require training and support to help them fulfil their responsibilities. Box 11.1.4 provides examples of the 2008 Indigenous Governance Awards applicants' approaches to developing leaders' skills.

Box 11.1.4 Leadership development

Aboriginal Rainforest Council provides development and training for the governing body. Three members of the governing body have been supported in Indigenous leadership courses run by the Department Families, Housing, Community Services and Indigenous Affairs. Other development and training opportunities are provided through events such as the World Heritage Areas Indigenous Managers Network, conferences and workshops.

The **Aboriginal Employment Strategy** has a mentoring program. Staff are mentored by members of the executive leadership team.

Gannambarra Limited provides training and development programs for the governing body. Staff develop their skills through training, workshops or courses, to improve and build self esteem, confidence and their knowledge base.

The Ngaanyatjarra Arts Governance Training is a multi-year activity run by a collective of art centre organisations including **Papulankutja Artists Aboriginal Corporation**. Training is provided to each art centre's Executive Committee. The training program is conducted three and four times annually, drawing art centres together from across a huge area of the central and western desert. The 4-day program is a major element of each art centres' development program.

Central Queensland Indigenous Development Ltd provides all staff with opportunities for development and training. With the support of the organisation, all managers have recently completed certificate level training, with additional staff working towards graduate and post graduate qualifications.

Laynhapuy Homelands Association Incorporated has a membership and leadership structure that conforms on paper to the norms of good governance as laid out in the relevant legislative framework. Yet it actually operates in a way that is heavily imbued with Yolngu principles of governance (Hunt et al. 2008).

Yarnteen Aboriginal and Torres Strait Islanders Corporation Executive Director and Chair have an extremely sophisticated understanding of governance best practice and strategies. Governance is frequently discussed in board meetings. Governance training has been provided in-house; senior managers have participated in external leadership workshops; several board members and senior managers have presented

(Continued next page)

¹ These characteristics were derived from the content of the Certificate in Leadership program conducted by the Australian Indigenous Leadership Centre.

Box 11.1.4 (continued)

conference and workshop papers on the topic; and the Executive Director has undertaken the Australian Company Directors' Course (Hunt et al. 2008).

More information on these and other successful Indigenous organisations can be found on the Reconciliation Australia website at: www.reconciliation.org.au

Source: Reconciliation Australia 2008 (unpublished).

Sustained leadership requires succession planning, so new people can take over from current leaders over time. One of the key messages from the ICGP was that issues of leadership and succession are often neglected, to the detriment of communities and their organisations (Hunt et al. 2008, Hunt and Smith 2006). This is a particular issue for some Indigenous communities, where a small pool of current leaders face growing demands on their time and resources.

Box 11.1.5 provides examples of the 2008 Indigenous Governance Awards applicants' approaches to succession planning.

Box 11.1.5 Succession planning

Yirra Yaakin Aboriginal Corporation has three-year, two-year and one-year succession plans. No Board member can sit for more than two three-year terms, which ensures a healthy turn over and succession of the Board, whilst retaining valuable corporate memory.

Tirkandi Inaburra Cultural and Development Centre Inc has a designated position for a youth representative on the Management Committee. The young person is mentored and supported by other Management Committee members.

Traditional Credit Union identifies and prepares suitable employees through mentoring, training and job rotation, to replace key players — such as the general manager, senior management and other key positions. The organisation acknowledges that it often takes years of grooming to develop effective senior managers.

Waltja Tjutanku Palyapayi (Aboriginal Corporation) mentors Aboriginal trainees towards higher level positions within Waltja or in other organisations.

The Koorie Heritage Trust Board's Human Resources Governance Committee has a program for succession planning that involves developing people's skills to take on senior roles within the organisation.

More information on these and other successful Indigenous organisations can be found on the Reconciliation Australia website at: www.reconciliation.org.au/igawards

Source: IGA 2006; Reconciliation Australia 2008 (unpublished).

Developing the next generation of leaders is a specific aspect of succession planning. Several 2008 Indigenous Governance Awards applicants have specific programs to develop youth leaders (box 11.1.6). Drawing on the Indigenous Governance Awards examples and research by the ICGP, some lessons for developing leadership and succession planning can be identified:

- training, leadership and personal and professional development builds competent and highly skilled staff (IGA 2006, p. 7)
- staggering elections, mentoring new board members, developing potential board members and board succession planning assists in board continuity and skill retention (IGA 2006, p. 44)
- developing the communication skills and self-confidence of young people by providing role models, mentoring and experience nurtures future leaders.

Box 11.1.6 Developing youth leaders

Central Queensland Indigenous Development Ltd employs young Indigenous people and mentors them through work progression. The organisation encourages these people to take part in leadership programs and youth development programs.

Dharriwaa Elders Group regularly invites younger members of the community to attend meetings and events and conducts an elders school program. Many elders are mentors in the community. The organisation convenes the Youth Subcommittee of the Walgett Interagency to improve youth services, and has had some success in encouraging new youth programs in Walgett in the past 2 years.

Tirkandi Inaburra Cultural and Development Centre Inc Management Committee has a designated position for a youth representative.

Yirra Yaakin Aboriginal Corporation is proactive in identifying future leaders not only for Yirra Yaakin but for the Aboriginal Arts sector. The organisation acts as an arts agency to support and nurture new and established talent and is working with Austrade to look at formalising a role for product ready acts that are poised for international opportunities. An example of this is the mentoring of the Bardi Dancer troupe from North West of WA to self-manage international touring opportunities as they arise. Yirra Yaakin supported and facilitated a tour by the Bardi Dancers to Stonehenge as part of the Salisbury festival in the UK.

Waltja Tjutanku Palyapayi (Aboriginal Corporation) Senior management committee women mentor younger committee members. The organisation has nominated and supported staff for awards and leadership opportunities: New Apprenticeship Sponsorship Program, Alice Springs NAIDOC Apprentice of the Year, National Indigenous Youth Leadership Group, Charles Darwin University Indigenous Student of the Year and NT Training Awards.

(Continued next page)

Box 11.1.6 (continued)

Murdi Paaki Regional Assembly and Community Working Parties has established a Murdi Paaki Aboriginal Young Leaders Project. Through the program, young people have access to formal and informal training on leadership and governance, mentors and opportunities to meet with a variety of different leaders.

Brisbane Indigenous Media Association oversees the operations of 4 Triple A Training. This training empowers young people (many of whom are unemployed or at risk) by giving them communication skills, self-confidence and experience working in a professional team environment. The training includes face-to-face and on-line training for people in regional and remote areas. Senior staff are shadowed by junior staff members and skills transfer is strongly encouraged for all staff.

More information on these and other successful Indigenous organisations can be found on the Reconciliation Australia website at: www.reconciliation.org.au/

Source: Reconciliation Australia 2008 (unpublished).

Self-determination

Self-determination is a complex concept, with its roots in human rights. Wehmeyer (2002) states that ‘self-determined people are actors in their own lives instead of being acted upon by others’.

For many Indigenous people, self-determination has close links with issues of customary law, land rights and economic development. In this report, the focus is on Indigenous communities or organisations having the right and ability to determine their own priorities and design their own instruments of governance, within broad ‘external’ governing institutions. There is also a distinction between ‘self-determination’ and ‘selfishness’. The Indigenous Governance Awards have noted that the features of good governance include:

Limitation and separation of powers so that self-determination does not mean ‘selfish’ determination, by ensuring a separation between the powers and responsibilities of leaders and Boards, and the daily management of community businesses and services. (IGA 2006, p. 4)

Self-determination has significant practical, as well as philosophical and symbolic importance. The Harvard Project found that self-determination led to improved outcomes for North American Indigenous people:

When [Indigenous people] make their own decisions about what approaches to take and what resources to develop, they consistently out-perform [non-Indigenous] decision-makers. (Harvard Project 2003-04)

The Aboriginal and Torres Strait Islander Social Justice Commissioner, Tom Calma, considered that much of the failure of service delivery to Indigenous people and communities was a direct result of the failure to engage with Indigenous people and to support and build the capacity of Indigenous communities:

Put simply, governments risk failure if they develop and implement policies about Indigenous issues without engaging with the intended recipients of those services. Bureaucrats and governments can have the best intentions in the world, but if their ideas have not been subject to the ‘reality test’ of the life experience of the local Indigenous peoples who are intended to benefit from this, then government efforts will fail. (Calma 2006)

The Human Rights and Equal Opportunity Commission strongly endorses the principle of free, prior and informed consent, which supports the full and effective participation of Indigenous peoples in decisions that directly or indirectly affect them (Calma 2006).

The ICGP found that the extent of self-determination in Indigenous organisations was dependent upon the external governing institutions:

The system under which Indigenous organisations and communities operate largely determines the extent to which Indigenous people can exert control over decision-making. (ICGP 2006, p. 5)

The Indigenous governance environment is as complex as the government environment, with ‘complex systems of representation and leadership, overlapping constituencies, networks of families and groups associated with organisations, and complex systems of mandate, accountability and authority’ (Hunt et al. 2008, Hunt and Smith 2006). Despite (or perhaps because of) this complexity, the ICGP found that successful governance structures should be based on locally relevant Indigenous relationships and forms of representation:

Working through Indigenous relationships and systems of representation thus becomes the basis for working out organisational structures, institutions and procedures. (Hunt and Smith 2006, p. 1)

The Indigenous Governance Awards made similar findings:

The relationship between the formal governance body and the wider community, and traditional decision-making arrangements must be clear for that body to have the legitimacy it needs to function. (IGA 2006, p. 44)

Box 11.1.7 illustrates some of the 2008 Indigenous Governance Awards applicants’ approaches to ensuring cultural legitimacy. The examples illustrate the potential for the following governance characteristics to contribute to self-determination:

- culturally legitimate participation and control of decision-making

- community participation in community governance institutions
- specific programs to meet the needs of specific communities, for example, community courts, community policing and Indigenous schools
- flexible funding arrangements that facilitate (and not hinder) the development of appropriate programs at the community level.

Box 11.1.7 Cultural legitimacy

Jarlmadanagah Burru Aboriginal Corporation governing board are supported by a committee of elders who act as special advisors to the governing body. The committee of elders ensure that cultural values are married into the organisation's decision making.

Members of **Magabala Books Aboriginal Corporation** are all Indigenous. The Board is made up of local Indigenous people who represent the members and the community.

Brambuk National Park and Cultural Centre (Gariwerd Enterprises Pty Ltd) is vested with great responsibility to ensure that the local culture is protected and preserved. The board of directors are all active Elders and Traditional Owners. Through their cultural and community knowledge Brambuk maintains cultural respect and sensitivity. Brambuk is also ROC (Respecting our Culture) accredited.

The **Aboriginal Rainforest Council** Board represents the 18 tribal groups of the Wet Tropics World Heritage Areas. Rather than have a board of 18 members which could be unwieldy, an arrangement has been made with the Giringun Aboriginal Corporation to provide 3 members to represent 9 of the southern tribal groups, and the remaining 9 northern tribal groups each elect one member. This makes for a total of 12 delegates representing the Wet Tropics region.

Warakurna Artists Aboriginal Corporation won the Indigenous Governance Award for an organisation that had been established for fewer than 10 years. It is an Aboriginal corporation with a constitution that reflects the priorities and aspirations of its members. Warakurna Artists is constitutionally and operationally obliged to return maximum benefits to its members, financially and organisationally. To achieve this, Warakurna Artists has built its business model on the cultural and creative energies of Warakurna residents.

More information on these and other successful Indigenous organisations can be found on the Reconciliation Australia website at: www.reconciliation.org.au/igawards

Source: Reconciliation Australia 2008 (unpublished).

Capacity building

Governance capacity is having the capabilities that are needed to 'get things done'. Section 11.2 examines in greater detail some specific aspects of formal training in areas relevant to governance capacity.

There are two important aspects to capacity building. The ‘public management’ approach emphasises the need to develop a community’s ability to meet accountability requirements, and has strong links with the ‘governing institutions’ and ‘leadership’ determinants of good governance. The ‘community development’ approach emphasises empowering communities to take responsibility and control over their own futures, and is closely linked with the ‘self-determination’ aspect of good governance (Gerritson 2001, Hunt and Smith 2007).

‘Capacity building’ also has close links to the ‘resources’ determinant of good governance. In this report, ‘capacity building’ focuses on the social factors that contribute to the knowledge, ability and commitment essential to good governance, while ‘resources’ focuses on the economic factors necessary to underpin successful governance arrangements.

The OIPC (Office of Indigenous Policy Coordination) red tape evaluation (OIPC 2006, pp. 45-46) examined the capacity of Indigenous organisations included in the study. The results might present an overly positive picture, as the majority of the organisations included were considered ‘more capable than average’. The evaluation found that only half the organisations indicated they were satisfied with the skills and staff they had available. Others noted a lack of resources for local skills training, poor recruitment outcomes, and inadequate succession planning, particularly in the replacement of key personnel (OIPC 2006). Inadequate financial management skills or processes were cited as a major risk for organisations. Less than 30 per cent of organisations employed Indigenous managers or senior staff, so that Indigenous capacity was not being developed (OIPC 2006).

The OIPC evaluation confirmed anecdotal evidence that, for many Indigenous organisations, ‘human capital’ is much more of an issue than basic administrative equipment. Box 11.1.8 provides some examples of capacity building by Indigenous organisations from the 2008 Indigenous Governance Awards.

The Registrar of Indigenous Corporations is an independent statutory office holder who administers the *Corporations (Aboriginal and Torres Strait Islander) Act 2006*. The Office of the Registrar of Indigenous Corporations (ORIC) supports and regulates the corporations that are incorporated under the Act. It does this in a variety of ways, for example, by advising them on how to incorporate, by training directors and key staff in good corporate governance, and by making sure they comply with the law and intervening when needed. An example of ORIC’s contribution to capacity building is provided in section 11.2.

Box 11.1.8 Building capacity

Traditional Credit Union won the Indigenous Governance Award for an organisation that had been established for more than 10 years. Traditional Credit Union supports opportunities for Aboriginal and Torres Strait Islander peoples in the remote communities. It provides services and education so that Aboriginal and Torres Strait Islander peoples in remote communities can have control over their financial security.

Traditional Credit Union provides training initiatives and support to Indigenous young people in work readiness and financial awareness and offers financial literacy counselling to all community members. The organisation is a member of the Corporate Leaders for Indigenous Employment Project which is part of the Indigenous Economic Development Strategy, and encourages a partnership between individual companies and the Australian government aimed at generating more jobs for Indigenous Australians. In remote Indigenous locations Traditional Credit union is 100 per cent staffed by people from the community who speak the local language.

More information on these and other successful Indigenous organisations can be found on the Reconciliation Australia website at: www.reconciliation.org.au/igawards

Source: Reconciliation Australia 2008 (unpublished).

Cultural match

Cultural match, as noted by the ICGP, refers to the degree of ‘common ground’ that can be achieved between the types of governing structures and procedures a group want to develop, and the culturally-based standards and values of its members’ (CAEPR and RA 2004, p. 5). There are close links between the ‘cultural match’ and ‘governing institutions’ determinants of good governance.

While cultural match is essential for achieving legitimacy with Indigenous people, it is also essential that the organisation is functional, and it is able to achieve its objectives (see ‘governance institutions’). ‘What matters is not that things be done in the old ways. It is that things are done in ways — old or new — that win the support, participation, and trust of the people, *and get things done*. Some will be old. Some will be new’ (Cornell and Begay 2003). Approaches to cultural match by the applicants to the 2008 Indigenous Governance Awards are summarised in box 11.1.9.

Box 11.1.9 Cultural norms

Mingaletta Aboriginal and Torres Strait Islander Corporation follows protocols of acknowledging and welcome to country and give respect, support and distance to sorry

(Continued next page)

Box 11.1.9 (continued)

business. There are times when protocols and cultural norms differ. If there is a serious cultural breach the community have the right to exclude the person/s from the organisation.

Brisbane Indigenous Media Association will incorporate a traditional 'Talking Circle' into their new building.

Waltja Tjutangku Palyapayi (Aboriginal Corporation) was established and is governed by senior traditional Aboriginal women. All organisational policies, programs, projects and activities follow the values and priorities of senior traditional Aboriginal women from across the Central Australian region. Waltja Management Committee meetings and other Waltja activities such as workshops are delivered in a place separate from the community. This allows for an evening program, driven by members, to take place which includes cultural activities (such as dancing and painting).

Ungooroo Aboriginal Corporation board members are local Wonnarua people with close ties to the community and their culture. Local elders are consulted when making decisions for the future development of Ungooroo and in the development of appropriate programs that will benefit the whole community.

Indigenous Harvest Australia Cooperative Ltd. has an enforceable code of conduct for harvesting that requires that members maintain appropriate cultural and environmental protocols, including requiring harvesters to have the permission of traditional owners. The Board has a voluntary royalty payment to traditional owners on the basis of the origin of harvested fruit.

The **West Arnhem Shire Transitional Committee (WASTC)** developed a number of formal and informal governance rules. This 'rule innovation' allowed members to create workable solutions to some of the problems caused by the disjunctions between the two cultures of governance. For example, a new rule was created which addressed a widely recognised kin-based behaviour that required certain kinds of avoidance and deferential behaviour to be observed between two classes of relatives. Failure to observe the avoidance rule would incur family and public censure, and perhaps, retribution. The new rule enabled the WASTC members who stood in such a kin relationship to each other to effectively suspend the accepted customary rule of kin avoidance and so behave differently in the meeting (Hunt et al. 2008)².

More information on these and other successful Indigenous organisations can be found on the Reconciliation Australia website at: www.reconciliation.org.au/igawards

Source: Reconciliation Australia 2008 (unpublished).

² The West Arnhem Shire Transition Committee (WASTC) represented each new shire council area during the early stages of local government reform in the NT. The WASTC and advised the government on issues related to the reform process. The reforms to NT local government were implemented on 1 July 2008. The West Arnhem Shire Council is now established, and is responsible for local government service provision for the West Arnhem region.

Cultural match is more than symbolic — it can have a significant impact on a range of outcomes for Indigenous people. The Harvard Project on American Indian Economic Development found that ‘successful [Indigenous] economies stand on the shoulders of culturally appropriate institutions of self-government that enjoy legitimacy among tribal citizens’ (Harvard Project 2003-04).

The following successful approaches to address cultural match can be identified from the applicants to the Indigenous Governance Awards:

- ensuring specific sectors of their community (for example, language, skin or clan groups), especially elders, were represented on their board or were able to offer guidance/supervision
- using broad community consultation methods, and in particular consulting with elders about key issues
- consulting with the appropriate traditional owners where land, cultural heritage or cultural practices are concerned
- reflecting cultural norms in the design and operation of programs and projects, including the separation of men’s and women’s business where this is culturally required (IGA 2006).

Resources

Resources, which encompass financial, physical and human resources, are major factors in successful governance arrangements (SCRGSP 2007). The ‘resources’ determinant has close links to capacity building (discussed earlier) but each of the determinants has a different focus — ‘resources’ focuses on the economic factors necessary to underpin successful governance arrangements; while ‘capacity building’ focuses on the social factors that contribute to the ‘knowledge, ability and commitment’ essential to good governance.

Indigenous organisations may gather resources from a range of sources, including self-generated funds (from Indigenous-owned businesses or royalties), donations from private corporations, charities or individuals (including their own members), and different levels of government. Many of these sources, including government funding, can be unpredictable or uncertain, making future planning and long term investment difficult. The OIPC red tape evaluation found that 66 per cent of grants from government programs continue year after year, with little change in the circumstances or risk profile of the funded organisations. However, annual applications were still required (OIPC 2006, p. 6).

‘Resources’ also has close links to the ‘self-determination’ aspect of good governance. Access to alternative sources of resources can give Indigenous

organisations a degree of independence from government, and enable Indigenous organisations to run programs as Indigenous people want them to be run (IGA 2006, p. 41). The Indigenous Governance Awards noted that financial diversity and greater self-reliance were goals for many organisations. Box 11.1.10 provides examples of some 2008 Indigenous Governance Awards applicants pursuing financial independence.

Box 11.1.10 Resources

Yirra Yaakin Aboriginal Corporation is in the process of building an acceptable reserve ratio of between 1 and 5 per cent. The organisation has an earned income versus grants ratio of 60:40 per cent. It is one of the few arts organisations within Australia to have achieved a higher earned income than grants income.

Ungooroo Aboriginal Corporation aims to be financially self-sufficient and not reliant on funding bodies. The organisation is looking at creating different income streams such as hiring out a training and conference facility, hiring out vehicles, site work for the mines and facilitating training packages for different companies.

Indigenous Harvest Australia Cooperative Ltd. has a business loan from a commercial bank. In 2008-09 the organisation made a profit which was distributed to shareholders with a portion retained to expand the business, with a focus on further value adding and new product development.

Winnunga Nimmityjah Aboriginal Health Service Inc will increase its self funding from 10 per cent to 20 per cent over the next five years.

Yarnteen Aboriginal and Torres Strait Islanders Corporation has created a property investment vehicle (Yarnteen Pty Ltd) that enables the corporation to build an asset base for future investments. It currently owns land and warehouses at the Newcastle Port, 100 acres at Wollombi that it operates as a cultural and conference camp accessible to all Newcastle's Indigenous residents, and major residential property and buildings in town and interstate (Hunt et al. 2008).

More information on these and other successful Indigenous organisations can be found on the Reconciliation Australia website at: www.reconciliation.org.au/igawards

Source: Reconciliation Australia 2008 (unpublished).

The Larakia Development Corporation was included in the 2007 report as an example of an Indigenous organisation has been particularly successful at generating its own resources. Unable to rely on mining royalties, the Larakia people have established business ventures which provide the twin benefits of sustainable revenue streams into the future, and employment and skills transfer opportunities for the local Indigenous community (box 11.1.11).

Box 11.1.11 Larrakia Development Corporation

The Larrakia Development Corporation (LDC) was established in 2002. The LDC's first commercial operation (totalling over \$10 million and funded through commercial banks) was a residential housing development of 375 lots.

The LDC is debt free and LDC projects have paid financial dividends to the Larrakia people. Income is divided evenly between the Larrakia Development Trust (established to coordinate community projects for the Larrakia people) and the LDC. In addition, the LDC has generated employment and training opportunities for local Aboriginal people through its own development activities and its own employment placement agency.

In addition to Larrakia Homes and Larrakia Environmental Services, three new businesses have been established:

- Saltwater Constructions, a fully owned subsidiary that focuses on steel fabrication, construction and property maintenance
- Larrakia Turf Farm, which has around 10 hectares of turf farm and provides an opportunity for Larrakia people to undertake Certificates I and II in Horticulture
- Cox Peninsula Enterprises, which provides reliable and safe transportation to the people of Waigait and Belyuen.

The LDC has won numerous business and management awards and is recognised by many organisations, including Defence Housing, as being a well run and efficient partner.

The LDC demonstrates the power of establishing a commercial corporate body with profit motives to support the charitable objectives of an Indigenous Community Trust. It also highlights that good governance practices are attractive to commercial lending institutions.

Source: Larrakia Development Corporation (unpublished).

Government governance

The 'governance of governments' matters to the governance of Indigenous communities and organisations (Hunt and Smith 2006, Hunt et al. 2008). The effectiveness of both Indigenous governance and the 'governance of governments' are linked. Indigenous organisations and communities are affected by their relationships with Australian, State, Territory and local government institutions, policies, legislation and procedures. To a lesser extent, governments are influenced by the governance arrangements of Indigenous communities and organisations.

Australian governments have made a number of collective commitments to improve government governance, including commissioning this report (COAG 2002), agreeing to the 'National Framework of Principles for Government Service

Delivery to Indigenous Australians' (COAG 2004), establishing a national framework for reporting expenditure on Indigenous services (MCFFR 2008) and supporting the development of a national Indigenous representative body (Macklin 2008).

The outcomes of the COAG Indigenous community coordination trials (Morgan Disney et al 2007), the commencement of the *Corporations (Aboriginal and Torres Strait Islander) Act 2006*, and the Office of Indigenous Policy Coordination (2006) 'red tape' evaluation were all discussed in detail in the 2007 report. Such evaluations are crucial to inform the new arrangements in government governance in Indigenous affairs.

The Australian Government Office of Evaluation and Audit (Indigenous Programs) (OEA) conducts evaluation and performance audit reports of Indigenous programs. (The OEA only evaluates Indigenous specific programs and is not resourced to evaluate every Indigenous program delivered by the Australian Government. It does not evaluate mainstream programs serving both Indigenous and non-Indigenous people.) The OEA evaluations and audits are an important part of the Australian Government's accountability framework for Indigenous program delivery. The OEA has evaluated justice, family violence, small business, Community Development Employment Projects (CDEP), and homeownership programs (see <http://www.finance.gov.au/oea/publications-and-reports.html>). Many of these audited and evaluated programs have been included as 'things that work' case studies in this report (for example, see section 4.11).

At the Indigenous program level, across all governments, many 'pilots' and 'trials' are commissioned, implemented, run their course and then cease, with no formal, public evaluation. Opportunities to learn from experience are lost. Often, monitoring and evaluation are hampered by inadequate data collections and poor performance information systems. For example, there is limited information on the use of mainstream services by Indigenous peoples (see the Indigenous Compendium of the Report on Government Services for available data (SCRGSP 2009)) and very little information on the barriers to access and use of services that Indigenous people face (see section 11.3 on Indigenous engagement with service delivery).

The determinants of good Indigenous governance are relevant to the way government engages with Indigenous people, organisations and communities:

- *Governing institutions* are the rules and regulation within which government agencies and individual officers have to operate.
- *Shared leadership* at the Ministerial, senior executive and planning levels, and at the level of service delivery, assists in achieving both process and impact outcomes (Morgan Disney et al 2007).

-
- *Self-determination* refers both to Indigenous people as ‘...actors in their own lives instead of being acted upon by others’ (Wehmeyer 2002) and government officials having appropriate authority to act.
 - *Governance capacity* is having the capabilities that are needed to ‘get things done’ — staff engaged in whole of government initiatives need skills and knowledge about on how to do whole of government work (Morgan Disney et al 2007).
 - *Cultural match* refers to government staff who respect the protocols and processes in Indigenous communities (Morgan Disney et al 2007).
 - *Resources* are the economic factors necessary to underpin successful governance and program implementation.

The ICGP recommendations and key lessons from the COAG Indigenous community coordination trials both broadly reflect this report’s key determinants.

The Northern Territory Emergency Response³ (NTER) (box 11.1.12), the Cape York Welfare Reform (CYWR) trial (box 11.1.13), the representative arrangements for Indigenous people in the ACT (box 11.1.14) and the governing arrangements established in the Anangu Pitjantjatjara Yankunytjatjara (APY) Lands (box 11.1.15) are examples of government governance in Indigenous affairs.

³ The NTER Review Board conducted an independent review of the first 12 months of the NTER and made recommendations on the future of the NTER. The recommendations included that quarantining of welfare payments should only apply on the basis of certain ‘triggers’ (such as child abuse, and school attendance), CDEP should be reformed, alcohol restrictions should remain in place but greater support should be given to people through supply, demand and harm reduction strategies, and ongoing treatment be provided to children with health issues identified in the child health checks (NTER Review Board 2008).

Box 11.1.12 Northern Territory Emergency Response (NTER)

The NTER was announced by the former Australian Government on 21 June 2007 in response to the *Ampe Akelyernemane Meke Mekarle: 'Little Children are Sacred'* report (Anderson and Wild 2007). Key elements of the NTER include quarantining of 50 per cent of welfare payments, changes to the CDEP program, alcohol, drug and pornography restrictions, increased policing, enforced school attendance, implementing programs aimed at supporting child development, health checks for all children, improving housing arrangements, and appointing managers of all government business in communities.

A review by the NTER Review Board (2008) reported a range of views on the NTER and its impact on Indigenous people. The NTER Review Board recommendations echo many of the lessons learnt from the COAG Indigenous community coordination trials (Morgan Disney et al. 2007). Some of the findings of the NTER Review Board correspond closely to the key determinants:

- *Governing institutions* — one of the more challenging factors in implementing the NTER was contending with the 'silo' mentality of departments involved with the implementation of the NTER. (The 'silo' mentality refers to the arbitrary boundaries created between mainstream government departments.)
- *Leadership* — there was a lack of coordination and communication within and between agencies in delivering their services to the communities.
- *Self determination* — the positive potential of the NTER had been diminished because of the manner in which it was imposed (that is, top down rapid imposition of the NTER). Genuine community engagement in designing, developing and implementing policies going forward is necessary to provide the basis for long term and sustainable change in the communities. Local Indigenous community members have been employed to provide community input into Government decision-making.
- *Capacity building* — governments must be willing to support Indigenous governance with equitable negotiation in agreement making for determining the delivery of services, housing and essential infrastructure to remote communities
- *Cultural match* — government business managers who took time to properly engage with the Indigenous people in whose community they were living (for example, including local people, even in small ways, in the ongoing planning) were considered by community members to be adding value to the life of the community. Ongoing implementation of the NTER involves government business managers and locally employed community members working together to maximise cultural match.
- *Resources* — significant government resources have been devoted to the NTER. Sustainability of resourcing into the future has been raised as an issue.

The NTER Review Board also recommended that quantitative and qualitative data should be collected in order to assess the impact and progress of the NTER upon communities.

Source: NTER Review Board 2008; FaHCSIA unpublished.

Box 11.1.13 Cape York Welfare Reform (CYWR)

The CYWR trial is a partnership between four communities (Aurukun, Coen, Hope Vale and Mossman Gorge), the Australian Government, the Queensland Government and Cape York regional organisations. Fifteen programs covering housing, education, social responsibility and economic opportunity are being implemented as part of the CYWR trial.⁴ The development and implementation process for the CYWR trial exemplifies many of the key determinants.

- *Governing institutions* — during the development phase a Welfare Reform Steering Committee was established. The Steering Committee had representatives from each of the communities (Mayors), Cape York regional organisations, and Australian and Queensland governments. In the trial phase, in early 2008, a CYWR Board was established. The Board comprises one representative from each of the partners. The Board meets regularly to discuss implementation and progress of the trial and the Board members have equal and collective responsibility for the delivery of the trial.
- *Leadership* — the Cape York leaders and Elders in partnership with government ministers provide legitimacy and authority.
- *Self determination* — the CYWR project included a design and a community engagement process, which meant that communities were engaged in the designing and developing of the proposed reforms. In late 2007, the four communities involved in the design process (Aurukun, Coen, Hope Vale and Mossman Gorge) each gave their final agreement to participate in the CYWR trial.
- *Capacity building* — as part of the design phase, two engagement staff were based in each community (and one staff member had to be a local community person).
- *Cultural match* — restoring Indigenous authority is a key element of the CYWR trial. The Family Responsibilities Commission consists of a legally qualified Commissioner and six Local Commissioners for each of the four CYWR communities.
- *Resources* — the Australian and Queensland governments have committed substantial resources to the four year trial.

The CYWR trial commenced 1 July 2008 and will conclude on 31 December 2011.

Source: CYI 2007.

⁴ There are some similarities between the NTER and CYWR trial. The main difference is that the CYWR trial does not have automatic quarantining of 50 per cent welfare payments. Income management may apply if it is a recommendation by the Family Responsibilities Commission. (As an independent statutory body established to help rebuild social norms in the four CYWR communities.)

Box 11.1.14 **New representative arrangements for Indigenous people, ACT**

In 2004, the ACT Minister for Indigenous Affairs announced an opportunity for an Indigenous elected body to provide a broad representative voice for the ACT Indigenous community.

Between 2005 and 2007, the ACT Government worked with the local Indigenous communities to develop an appropriate model to reflect the expectations of the local Indigenous community and address outcomes expected by the ACT Government. Following comprehensive community consultations, the *Aboriginal and Torres Strait Islander Elected Body Act 2008* was passed by the ACT Legislative Assembly on 6 May 2008. The process undertaken to develop the representative arrangement reflect the key determinants outlined above:

- *Governing institutions* — seven members are elected to the Indigenous Elected Body every three years. The Elected Body is required to consult with and consider the views of the United Ngunnawal Elders Council. The United Ngunnawal Elders Council comprises representatives from the local traditional family groups.
- *Leadership* — the inaugural election for the Elected Body occurred in June 2008 with 13 local Indigenous people nominating. Seven successful candidates were officially declared on 2 July 2008. The Elected Body met on many occasions in the latter part of 2008 to set its agenda, plan a program of community consultations, develop protocols and a governance model.
- *Self determination* — the Indigenous Elected Body provides Indigenous people living in the ACT an opportunity to participate in the formulation, coordination and implementation of Indigenous government policies.
- *Cultural match* — the Elected Body is operating successfully both from the community perspective as well as from the point of view of ACT Government agencies.

Source: ACT Government (unpublished).

11.2 Governance capacity and skills

Box 11.2.1 Key message

- Indigenous students were less likely than non-Indigenous students to enrol in university and VET courses relevant to governance in 2007:
 - 9.7 per cent of Indigenous university students compared with 29.2 per cent of non-Indigenous university students
 - 15.5 per cent of Indigenous VET students compared with 21.2 per cent of non-Indigenous VET students (table 11.2.1).

Broadly, governance refers to the way that a society formally structures decision making, distributes authority and rights, and organises individual and collective behaviours (governance is further defined in section 11.1). Governance capacity is having the capabilities that are needed to ‘get things done’, and relates to both the social factors that contribute to the knowledge, ability and commitment essential to good governance and resourcing (see key determinants of good governance — see section 11.1).

Many studies have emphasised the importance of governance capacity to the social and economic development of Indigenous people (Hunt and Smith 2006, Hunt et al. 2008, Reconciliation Australia 2002, 2006). The Indigenous Community Governance Project (ICGP) found that governance capacity development is a major issue in Indigenous governance (Hunt and Smith 2007, p. 1). Hunt and Smith (2007) noted that governance capacity development requires a community development approach. In particular:

- ... investment in building governance capacity works most effectively when it is:
- part of the place-based work of building governance, so that governance practice and mentoring are ongoing
 - when it focuses on building effective and legitimate local institutions, and
 - when it is based on self-assessed governance priorities. (Hunt and Smith 2007, p. 6)

A House of Representatives (2004) inquiry into capacity building and service delivery in Indigenous communities and Gerritson (2001) have also supported the community development approach to building governance capacity.

Box 11.2.2 gives examples of accredited training programs in strengthening governance capacity and skills of Indigenous communities and organisations.

Box 11.2.2 ‘Things that work’ — Office of the Registrar of Indigenous Corporations (ORIC)

The Office of the Registrar of Indigenous Corporations (ORIC) provides a range of corporate governance training programs for Indigenous corporations and their governing committees/boards:

- **Combining dispute assistance and governance training** — the *Corporations (Aboriginal and Torres Strait Islander) Act 2006* includes a new function for the Registrar to assist with disputes. ORIC has found that poorly managed disputes can directly contribute to the failure of Indigenous corporations. ORIC is focusing on early regulatory intervention work. Members of ORIC’s newly formed Mediation and Dispute Resolution section work together with ORIC’s corporate governance

(Continued next page)

Box 11.2.2 (continued)

trainers to combine dispute assistance with governance training. Follow-up support is provided to ensure the sustainability of the outcomes and improve organisations' dispute management practices.

- The **'Managing in Two Worlds' program** was reported in the 2007 report. The program is managed and funded by Aboriginal Affairs Victoria in partnership with ORIC, Consumer Affairs Victoria and Swinburne University. The program aims to strengthen the management capacity of Victorian Aboriginal community organisations and improve service delivery in the community sector.

Until recently, the 'Managing in Two Worlds' program was limited to Introductory Workshops and a Certificate IV in Business (Governance). In 2007-08, The program was expanded to include a Diploma of Business (Governance). The Diploma is an accredited package of specifically tailored training for board members and staff of Indigenous community organisations.

Since March 2006, the program has delivered 16 three-day Introduction to Corporate Governance workshops with 388 participants from 116 organisations completing the workshop, including participants from other jurisdictions. Six Certificate IV in Business (Governance) courses have been delivered. Ninety students have undertaken certificate training and 86 have graduated (a 96 per cent completion rate). One national Diploma of Business (Governance) course has been delivered to 15 students, with 13 graduating (an 86 per cent completion rate). A second Diploma course has been delivered and 19 students were expected to graduate in April 2009.

The partnership model between ORIC and the Victorian Government has been used as a template for delivering the 'Managing in Two Worlds' program in other states. In 2007, ORIC partnered with the SA Government's Department of Premier and Cabinet and the Office of Consumer and Business Affairs to deliver the training (Victorian Government unpublished).

Building Strong Corporations (BSC) is a remote equivalent of the *Introduction to Corporate Governance* program produced by ORIC, in collaboration with the executive and staff of Ngaanyatjarra Pitjantjatjara Yankunytjatjara Women's Council. BSC is delivered in remote settlements or centres servicing remote settlements, targeting participants for whom English is a second language and where access to mainstream services may be limited. A BSC training workshop was held in Alice Springs in May 2007 with 27 participants.

Source: Registrar, ORIC, pers. comm., 22 December 2008.

This indicator complements the case studies in governance arrangements (section 11.1).

As there are few quantitative data available on governance capacity and skills, this section reports data on participation in particular types of training courses. Formal

and informal governance training is one useful means for individuals, groups and organisations to build on their strengths and address their weaknesses in organisational management and community governance. Information on participation in relevant training can also provide an indication of the available governance resources — people who have the motivation to seek knowledge in organisation and community governance.

While other forms of training are equally valuable, training in the areas of leadership, finance or management is potentially relevant to management, governance and the Australian business and government environment. Such training may also assist Indigenous people to function successfully in both Indigenous and non-Indigenous environments. For the purpose of this indicator, this type of training is represented by the fields of management and commerce, law, and economics and econometrics at the university and Vocational Education and Training (VET) levels.

Section 4.7 shows that Indigenous people are much less likely than non-Indigenous people to be studying at universities but more likely than non-Indigenous people to be studying at other types of colleges (including colleges of Technical and Further Education (TAFE)).

Table 11.2.1 Students of governance-related courses: management, commerce, business law, economics and econometrics, 2007^a

	<i>Indigenous students</i>			<i>Non-Indigenous students</i>		
	<i>Governance-related courses</i>	<i>All courses</i>		<i>Governance-related courses</i>	<i>All courses</i>	
	no.	no.	%	no.	no.	%
University	906	9 370	9.7	288 035	985 896	29.2
Technical or Further Educational Institution (including TAFE Colleges)	10 983	70 902	15.5	299 766	1 416 524	21.2
Total^b	11 889	80 272	14.8	587 801	2 402 420	24.5

^a Management, commerce, business, law, economics and econometrics defined as field of education codes, 08, 0909, and 0919, from the ABS Australian Standard Classification of Education (ASCED). ^b Totals do not include students whose genders are not known.

Source: DEST; NCVET (unpublished); table 11A.2.8.

- In 2007, 9.7 per cent of Indigenous university students studied courses relevant to governance compared with 29.2 per cent of non-Indigenous university students. At VET levels, 15.5 per cent of Indigenous students studied courses

relevant to governance compared with 21.2 per cent of non-Indigenous students (table 11.2.1).

- From 2004 to 2007, participation rates for governance training at university and VET levels, for both Indigenous and non-Indigenous students did not change significantly (table 11A.2.8).
- In 2007, for both Indigenous and non-Indigenous students at university and VET levels, those whose home addresses were in major cities were more likely than those in regional and remote areas to enrol in governance training. However, data for Indigenous students in remote areas need to be interpreted with caution as there are only small numbers of university students from remote areas.
 - At the university level, 11.6 per cent of Indigenous students from major cities and 4.1 per cent from very remote areas were enrolled in governance training, compared to 31.2 per cent and 16.9 per cent for Indigenous students, respectively (tables 11A.2.2 and 11A.2.5).
 - At the VET level, 19.2 per cent of non-Indigenous students from major cities and 12.4 per cent from very remote areas were enrolled in governance training, compared to 22.6 per cent and 17.7 per cent for non-Indigenous students, respectively (tables 11A.2.2 and 11A.2.5).

Data on governance training at university and VET levels by remoteness, sex and age groups can found in tables 11A.2.2 and 11A.2.3.

Table 11.2.2 Number of students in selected courses (governance), by Indigenous status, Australia, 2007

	<i>Indigenous</i>	<i>Non-Indigenous</i>	<i>Unknown</i>	<i>Total</i>
Training package				
Certificate III in Local Government (Governance and Administration)	–	4	1	5
Certificate IV in Business (Governance)	296	77	12	385
Certificate IV in Local Government (Governance and Administration)	–	2	3	5
Diploma of Business (Governance)	36	2	1	39
Courses				
Certificate II in Introduction to Community Governance	13	–	4	17
Governance				
Certificate III in Community Governance Support	–	–	–	–

– Nil or rounded to zero.

Source: NCVET (unpublished); table 11A.2.7.

Training in local government is particularly relevant for people from discrete Indigenous communities, where Indigenous people and organisations perform many

or all of the functions of local government (either as formal local government entities or more informally).

- In 2007, the participation of Indigenous students in Certificate IV in Business (Governance) was higher than that of non-Indigenous students (296 Indigenous participants compared to 77 non-Indigenous participants) (table 11.2.7).
- From 2003 to 2007, the number of Indigenous participants in Certificate IV in Business has fluctuated from 122 in 2003; 337 in 2004; 550 in 2005; 509 in 2006 and 296 in 2007 (table 11A.2.7).

Indigenous people may also undertake non-accredited training in leadership, finance or management, from which they may learn useful skills. A number of government programs, universities, colleges and other organisations run courses for Indigenous people on Indigenous leadership.

11.3 Engagement with service delivery

Box 11.3.1 Key messages

- A key lesson from the COAG Indigenous community coordination trials and the Northern Territory Emergency Response is that engagement with Indigenous communities is essential to achieve measurable improvements in economic, health, and social indicators. (Morgan Disney et al. 2007, NTER Review Board 2008).
- Rates of discharge from hospital against medical advice for Indigenous people were between 12.5 and 13.5 times as high as the rates for non-Indigenous people, in 2003–05, 2004–06 and 2005–07, in those jurisdictions for which data were available (figure 11.3.1).

Service engagement is a broad concept that encompasses accessibility (including barriers to access) and appropriate delivery (including Indigenous cultural perspectives in designing and delivering programs). In remote areas, there are additional barriers to access arising from the lack of services and long distances necessary to access those that do exist.

A review of the Northern Territory Emergency Response (NTER) echoed findings from the COAG Indigenous community coordination trials about community engagement. One of the lessons learnt from the COAG Indigenous community coordination trials was that it was essential to take time to engage the Indigenous community and that ‘...quick wins are not always possible when you are dealing with complex issues’ (Morgan Disney et al. 2007, p. 16). The NTER Review Board (2008) found that government initiatives were viewed more positively by

community members when government officers took time to engage with the Indigenous people in whose community they were living (for example, including local people, even in small ways, in the ongoing planning). See box 11.1.12 for more information on the NTER.

A 2001 Report (CGC 2001) found that barriers to accessing mainstream programs included the way programs were designed, how they were presented and the cost to users. In remote areas, these barriers were exacerbated by the lack of services and difficulties caused by the physical distance to services. Cultural barriers can lead to reduced access to resources such as education, housing, medical care and social support.

Ineffective service delivery and low levels of access to mainstream programs (because of barriers to access) compound the levels of disadvantage experienced by Indigenous people (CGC 2001). For example:

- patients with chronic and life-threatening conditions are unable to make informed choices because they do not understand health professionals' explanations of what is making them ill, or how it can be treated (Coulehan et al. 2005; Lowell et al. 2005; Trudgen 2000).
- not understanding legal proceedings affects access to justice (Byrne 2003; Cooke 2002; Eades 1997; Koch 1985; Siegel 2002)
- miscommunication in the classroom hinders education (Lowell and Devlin 1998; Malcolm 1982).
- in 2005, there were 9867 births to Indigenous mothers but only 8555 registered births (ABS 2006, Laws et al. 2007). If births are not registered it can be difficult to obtain other forms of identification such as a driver's licence or passport later in life, which creates further barriers to accessing services.

The next part of this section presents survey data on perceived treatment when seeking health care, difficulty communicating with service providers, services located in discrete Indigenous communities and the use of mental health services by Aboriginal children. A more detailed presentation of these data was included in the 2007 report (see tables 11A.3.1 to 11A.3.7).

- The ABS 2004-05 National Aboriginal and Torres Strait Islander Health Survey found that the majority of Indigenous adults (76.8 per cent) believed that the quality of health care treatment they had received in the last 12 months was the same as that received by non-Indigenous people (table 11A.3.2).
- The ABS 2002 National Aboriginal and Torres Strait Islander Social Survey (NATSISS) found that Indigenous people living in remote areas were more

likely to report difficulty communicating with service providers (18.1 per cent) than Indigenous people living in non-remote areas (7.4 per cent) (table 11A.3.5).

- The 2002 NATSISS also found that Indigenous people living in remote areas were approximately five times more likely than Indigenous people in non-remote areas to have difficulty both understanding and being understood by service providers (table 11A.3.5).
- The 2000-01 Western Australian Aboriginal Child Health Survey (WAACHS) found that, even though there was a high proportion of Aboriginal children at high risk of clinically significant emotional and behavioural difficulties, very few children had had contact with mental health services (Zubrick et al. 2005).

The ABS 2006 Community Housing and Infrastructure Needs Survey (CHINS) collected data from 1187 discrete Indigenous communities. Data show that:

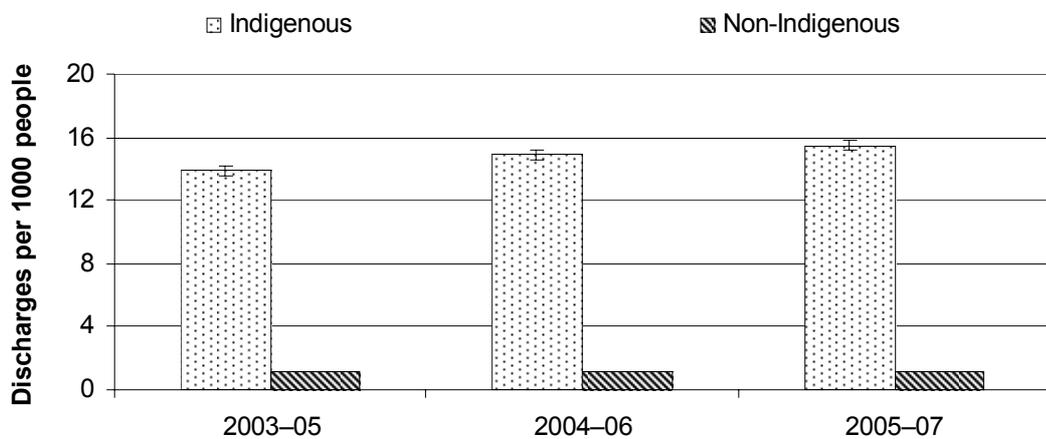
- 245 out of 1187 communities reported that a primary school was located within the community. Of the 245 communities with primary schools, 212 were located in very remote Australia (ABS 2007)
- 755 discrete Indigenous communities were located 100 kilometres or more from the nearest hospital. Ten of the 1187 discrete Indigenous communities reported that a hospital was located within the community (ABS 2007).
- 894 communities reported roads as the main mode of transport to get into towns that provided major services (ABS 2007). The ABS 2006 Census found that 30.7 per cent of Indigenous households living in remote areas had no motor vehicle compared with 5.9 per cent of non-Indigenous households living in remote areas. In very remote areas, 52.7 per cent of Indigenous households had no motor vehicle compared with 8.1 per cent of non-Indigenous households (table 11A.3.11).

Data on access to clean water and functional sewerage and electricity services in discrete Indigenous communities can be found in section 9.2. Information about Aboriginal primary health care centres and state-funded community health centres located in discrete Indigenous communities and whether any Indigenous health workers had visited or worked within these communities is reported in section 7.1. Information on Indigenous people working in education can be found in section 6.3.

The National Hospital Morbidity Database provides information on the rate at which Indigenous people discharge themselves from hospital against medical advice. These data do not provide the reasons why some Indigenous and non-Indigenous people choose to discharge themselves against medical advice and if there were differences between Indigenous and non-Indigenous people's reasons. These data do not provide information on the nature of the person's medical

condition. In the absence of research to the contrary, it may be possible that the Indigenous and non-Indigenous differences in discharge against medical advice may be a reflection of socioeconomic differences such as Indigenous people's lower average incomes, employment status, education levels, and greater remoteness. Cost and access to private health insurance and private hospitals may also be a factor.

Figure 11.3.1 Rates of discharge from hospital against medical advice, per 1000 people, NSW, Victoria, Queensland, WA, SA and public hospitals in the NT^{a, b, c, d, e}



^a Data are based on State/Territory of usual residence. ^b Data are presented in two-year groupings due to small numbers each year. ^c Rates are directly age standardised using the Australian 2001 Standard population. ^d Rates are presented with error bars showing 95 per cent confidence limits. ^e Non-Indigenous includes Indigenous status not stated.

Source: AIHW National Hospital Morbidity Database (unpublished); table 11A.3.8.

Figure 11.3.1 compares the rates of discharge from hospital for Indigenous and non-Indigenous people for NSW, Victoria, Queensland, WA, SA and public hospitals in the NT. For Indigenous people, rates of discharge from hospital against medical advice were 12.6, 13.5 and 12.9 times as high as the rates for non-Indigenous people, in 2003–05, 2004–06 and 2005–07.

Case studies on service engagement

The following case studies (boxes 11.3.2 to 11.3.3) provide examples of initiatives to improve service engagement. These include acknowledging Indigenous cultural perspectives in designing and delivering programs, and improving communication between Indigenous people and health services. Information on culturally appropriate justice practices for Indigenous people can be found in chapter 4, section 4.12.

Box 11.3.2 'Things that work' — improving service delivery

The **Aboriginal Birth Certificate Registration project** was initiated because the absence of a birth certificate was preventing young Aboriginal people from participating in organised sporting activities. The Western Region of NSW Sport and Recreation worked with the Registry of Births, Deaths and Marriages, and members of the Indigenous community in Dubbo to identify practical solutions to the problem. The success of this program was recognised in the awarding of a Gold Medal in the 2008 NSW Premier's Public Sector Awards (NSW Government unpublished).

Local Indigenous Community Partnership Projects (Victoria) are place based projects led by a Departmental Secretary in partnership with local Indigenous communities. The aim of the partnership is to find locally based solutions to community concerns or issues:

- In Mildura, the local partnership project arranged for the bus service to pick students up from the public housing estate rather than the main highway (addressing safety concerns) and changed the bus timetable so students could arrive before school and participate in the Book and Breakfast Program.
- In Whittlesea, community members identified the need for early childhood services that were culturally appropriate for the growing Aboriginal community. The local partnership project worked to establish an interim kindergarten (launched in December 2008) (Victorian Government unpublished).

The **Improving Care for Aboriginal and Torres Strait Islander Patients** program (ICAP) (Victoria) aims to improve identification of, and quality care for, Indigenous patients in Victoria. A number of results have flowed from ICAP including improved relationships between health services and Indigenous organisations, and increasing numbers of formal and informal partnerships between health services and Indigenous organisations.

- The Royal Children's Hospital has developed a new model of care to improve accessibility and cultural appropriateness of services for Aboriginal children and their families. Formal partnerships between the Royal Children's Hospital and the relevant Aboriginal organisations is a component of the strategy. The strategy enables seamless movement from hospital to community and ongoing linkage to services for families with difficulties accessing hospital services.
- Ballarat Health Services (BHS) and the Ballarat and District Aboriginal Co-operative have a strong working relationship. BHS ICAP plan is integrated into hospital strategic planning structures. The plan is also underpinned by an Aboriginal Health Taskforce Committee comprising representation from the hospital and the co-operative (Victorian Government unpublished).

The **'Keeping Our Mob Safe'** national emergency management strategy for remote Indigenous communities was implemented by the Queensland Department of Community Safety. The strategy has improved emergency response service delivery for Indigenous communities in Queensland.

(Continued next page)

Box 11.3.2 (continued)

Ambulance stations are located in six Queensland Indigenous communities, which service their own and surrounding communities. Field Offices staffed by permanent Queensland Ambulance Service (QAS) paramedics operate in a further four communities. The Field Officers serve the local community, surrounding communities and related homelands/outstations, enhancing the capacity to respond to healthcare emergencies. Field Officers also provide training in pre-hospital care to health centre and clinic staff, security officers, Indigenous health workers, and other nominated members of the community, and injury prevention and first aid training to community members in homelands/outstations. Over 500 residents and community workers across Indigenous communities participated in QAS sponsored First Aid Training in 2007-08.

State Emergency Service (SES) units and Rural Fire Brigades are community-driven volunteer organisations operating in Torres Strait Islander and Aboriginal communities to provide emergency response capacity for their community and surrounding areas in case of flood, cyclone or fire. In 2007-08, SES and Rural Fire Brigade training was provided to over 150 volunteers in Indigenous communities. Improving emergency response services has also provided employment opportunities for local Indigenous people. In Yarrabah, Mornington Island and Palm Island, local Indigenous people are employed to provide ambulance services. Two Indigenous trainers work with communities in Cape York and the Torres Strait on emergency management issues and the Queensland Fire and Rescue Service employs two local permanent Indigenous Liaison Officers who are also Auxiliary Fire-fighters, to work with Woorabinda and Cherbourg Aboriginal Shire Councils (Queensland Government unpublished).

Box 11.3.3 'Things that work' — acknowledging Indigenous cultural perspectives in programs

The **Northern Territory Aboriginal Interpreter Service** has been operating for approximately seven years and currently employs 180 interpreters. The NTER Review Board (2008) recommended that a local employment strategy be developed to increase the number of Indigenous people employed as interpreters. One hospital eye theatre clinic, has regularly used the interpreter service, enabling patients to understand the procedure and give informed consent before surgery. This practice has assisted 80 Indigenous patients who have had surgery and approximately 1200 patients who have attended outpatient eye clinics since 2003 (NTER Review Board 2008; NT Government unpublished).

(Continued next page)

Box 11.3.3 (continued)

The **Let's Start** project (NT) promotes resilience. Part of the project is targeted at Indigenous preschool and early primary school-aged children and their parents. The project promotes positive parent–child interaction, improves children's social and emotional skills and helps build their capacity to negotiate the transition to school. About 40 schools in the Darwin, Darwin rural regions, at Jabiru and on the Tiwi Islands participate in the project.

Parents have reported satisfaction with the project, and improvements in children's behaviour. The project has also led to the training of Indigenous personnel and the provision of effective news and information for communities and practitioners, Indigenous parents, teachers and health providers.

The project was successful because it used a differentiated strategy of engagement in the diverse social settings of remote communities, fringe communities and suburbs in large towns and major centres. The project highlighted the need to train Indigenous people in strategies for early intervention (CRCAH 2008).

11.4 Future directions in data

Case studies in governance arrangements

There has been significant progress in examining good Indigenous governance since the first report in 2003. The introduction of the Indigenous Governance Awards has helped identify and highlight the many examples of good practice. The ICGP by CAEPR and Reconciliation Australia has provided academic rigour to the examination of current governance practices. Among governments, the OEA and the OIPC Indigenous Red Tape evaluation help identify aspects of government governance that can assist or impede Indigenous governance. The report by the NTER Review Board and the COAG community coordination trial evaluations have identified some significant lessons for government governance. That said, there is still more to be done before future reports can include an objective measure of 'governance'.

Engagement with service delivery

There are few data on barriers to accessing services, particularly for Indigenous children and youth. The key challenges are to improve existing collections, such as Indigenous specific surveys and longitudinal studies of Indigenous children to collect information on service engagement for young people. The Australian Survey

of Social Attitudes (AuSSA) is a biennial survey which began in 2003. AuSSA is managed by the Australian Demographic and Social Research Institute at the Australian National University. The AuSSA could be expanded to include questions on difficulties experienced by Indigenous people in communicating with police and legal services.

11.5 References

11.1 Case studies in governance arrangements

- Aboriginal and Torres Strait Islander Commissioner 2006, *Social Justice Report 2005*, HREOC, http://www.humanrights.gov.au/social_justice/sjreport05/index
- Anderson, P. and Wild, R. 2007, *Ampe Akelyernemane Meke Mekarle Little Children are Sacred Report of the Northern Territory Board of Inquiry into the Protection of Aboriginal Children from Sexual Abuse*, Northern Territory Government, Darwin.
- CAEPR (Centre for Aboriginal Economic Policy Research) and RA (Reconciliation Australia) 2004, *Annual Report 2004*, Australian National University, Canberra.
- Calma, T. 2006, Evaluating the external forces which exert an influence on government policy direction, Collaborative Indigenous Policy Development Conference, 27 & 28 June 2006, http://www.humanrights.gov.au/speeches/social_justice/collaborative20060628.html
- COAG (Council of Australian Governments) 2004, *Communiqué, 24 June 2004*, http://www.coag.gov.au/coag_meeting_outcomes/2004-06-25/index.cfm#indigenous
- COAG (Council of Australian Governments) 2002, *Communiqué, 5 April 2002*, http://www.coag.gov.au/coag_meeting_outcomes/2002-04-05/index.cfm
- Cornell, S. 2008, A North American Perspective Lecture, Closing the gaps, Reconciliation Australia, Canberra, 11 September.
- Cornell, S. and Begay, M. 2003, quoted by CAEPR and RA, *2004 Annual Report*, Australian National University, Canberra, p. 5.
- CYI (Cape York Institute for Policy and Leadership) 2007, *From Hand Out to Hand Up: Cape York Welfare Reform Project Design Recommendations*, <http://www.cyi.org.au> (accessed 3 October 2008).
- Dodson, P. 1998, On Leadership, Williamson Community Leadership Program Lecture, 11 May 1998, Victoria, http://www.leadershipvictoria.org/speeches/speech_dodson.html.
- Gerritson, R. 2001, *Community Capacity Building: An ATSIC Discussion Paper*, cited in House of Representatives Standing Committee on Aboriginal and Torres Strait Islander Affairs, June 2004, *Many Ways Forward*, Canberra, pp.12–13.
- Harvard Project on American Indian Economic Development 2003-04, *Overview of the Harvard Project*, John F. Kennedy School of Government, Harvard university, USA, <http://www.ksg.harvard.edu/hpaied/overview.htm>
- HOR (House of Representatives Standing Committee on Aboriginal and Torres Strait Islander Affairs) 2004, *Many Ways Forward*, June 2004, Canberra, pp.14–15.

-
- Hunt, J. and Smith, D.E. 2007, *Further Key Insights from the Indigenous Community Governance Project 2006*, Centre for Aboriginal Economic Policy Research, http://www.anu.edu.au/caepr/Projects/Key_Insights_ICGP_2006.pdf
- Hunt, J. and Smith, D.E. 2006, *Ten Key Messages from the Preliminary Findings of the Indigenous Community Governance Project 2005*, Centre for Aboriginal Economic Policy Research, http://www.anu.edu.au/caepr/Projects/10_keymessages.pdf
- Hunt, J., Smith, D., Garling, S. and Sanders, W. (eds) 2008, *Contested Governance: Culture, Power and Institutions in Indigenous Australia*, Centre for Aboriginal Economic Policy Research, Canberra.
- ICGP (Indigenous Community Governance Project) 2006, Community governance Research Update no. 1, March 2006, ANU, Canberra.
- IGA (Indigenous Governance Awards) 2006, *Celebrating Indigenous Governance: Success stories of the Indigenous Governance Awards*, Reconciliation Australia and BHP Billiton, Canberra.
- Macklin, M. (Minister for Families, Housing, Community Services and Indigenous Affairs) 2008, *Next steps for Indigenous body*, Media release, 16 December.
- MCFRR (Ministerial Council for Federal Financial Relations) 2008, *Communiqué of the 14 January Meeting*, MCFRR.
- Morgan Disney & Associates Pty. Ltd, Tracey Whetnall Consulting and Wis-Wei Consulting Pty Ltd 2007, *Synopsis Review of the COAG Trial Evaluations, Report to the Office of Indigenous Policy Coordination (OIPC) November 2006*, Canberra, <http://oipc.gov.au/publications/default.asp>.
- NTER (Northern Territory Emergency Response) Review Board 2008, *Northern Territory Emergency Response: Report of the NTER Review Board*, Department of Families, Housing, Community Services and Indigenous Affairs, <http://www.nterreview.gov.au/> (accessed 13 October 2008).
- OIPC (Office of Indigenous Policy Coordination) 2006, *A Red Tape Evaluation in Selected Indigenous Communities* (a report by Morgan Disney and Associates), OIPC, Canberra.
- Pearson, N. 2000, *Our Right to Take Responsibility*, Noel Pearson and Associates, Cairns.
- SCRGSP (Steering Committee for the Review of Government Service Provision) 2007, *Report on Consultations*, Productivity Commission, Canberra.
- 2009, *Report on Government Services 2009, Indigenous Compendium*, Productivity Commission, Canberra.
- Smillie, I. and Hailey, J. 2001, *Managing for Change: Leadership, Strategy and Management in Asian NGOs*, Earthscan, London.
- Wehmeyer, M. L. 2002, *Self-determination and the Education of Students with Disabilities*, Digest No. E632, ERIC Clearinghouse on Disabilities and Gifted Education, ERIC Document Reproduction Service No. ED470036, Virginia.

11.2 Governance capacity and skills

- Gerritson, R. 2001, *Community Capacity Building: An ATSIC Discussion Paper*, cited in House of Representatives Standing Committee on Aboriginal and Torres Strait Islander Affairs, June 2004, *Many Ways Forward*, Canberra, pp.12–13.

-
- HOR (House of Representatives Standing Committee on Aboriginal and Torres Strait Islander Affairs) 2004, *Many Ways Forward*, June 2004, Canberra, p.14–15.
- Hunt, J. and Smith, D. E. 2006, *Building Indigenous Community Governance in Australia: Preliminary Research Findings*, Working Paper, no. 31/2006, Governance Project at the CAEPR, ANU, Canberra.
- 2007, *Further key insights from the Indigenous Community Governance Project 2006*, Centre for Aboriginal Economic Policy Research, http://www.anu.edu.au/caepr/Projects/Key_Insights_ICGP_2006.pdf
- Hunt, J., Smith, D., Garling, S. and Sanders, W. (eds) 2008, *Contested Governance: Culture, Power and Institutions in Indigenous Australia*, Centre for Aboriginal Economic Policy Research, Canberra.
- Reconciliation Australia 2002, *The Importance of Indigenous Governance to Social and Economic Development*, Background Paper, Indigenous Governance Conference, Canberra, 2–5 April 2002.
- Reconciliation Australia 2006, *Summary of Preliminary Research Findings, Indigenous Community Governance Research Project*, Reconciliation Australia, June 2006.

11.3 Engagement with service delivery

- ABS (Australian Bureau of Statistics) 2006, *Births Australia*, Cat. no. 3301.0, Canberra.
- 2007, *Housing and Infrastructure in Aboriginal and Torres Strait Islander Communities, Australia 2001*, Cat. no. 4710.0, Canberra.
- AIFS (Australian Institute of Family Studies) 2003, *Building Strong and Healthy Families in Derby*, Stronger Families Fund Learning Exchange Bulletin, no. 3, Winter, pp. 24–28.
- Byrne, J. 2003, *Indigenous Witnesses and the Native Title Act 1993 (Cth)*, National Native Title Tribunal Occasional Papers Series no. 2/2003, National Native Title Tribunal, Perth.
- Cass, A., Lowell, A., Christie, M., Snelling, P.L., Flack, M., Marrnganyin, B. and Brown, I. 2002, ‘Sharing the True Stories: Improving communication between Aboriginal patients and healthcare workers’, *Medical Journal of Australia*, vol. 176, pp. 466–470.
- CGC (Commonwealth Grants Commission) 2001, *Report on Indigenous Funding 2001*, Canberra.
- Cooke, M. 2002, *Indigenous Interpreting Issues for Courts*, Australian Institute of Judicial Administration Incorporated, Melbourne.
- Cooperative Research Centre for Aboriginal Health (CRCAH) 2008, *Parenting Support for Indigenous Families: Project no. 213*, Casuarina, NT.
- Coulehan, K., Brown, I., Christie, M., Gorham, G., Lowell, A., Marrnganyin, and Patel, B., 2005, *Sharing the True Stories: Improving Communication between Health Staff and Aboriginal Patients*, Final Project Report, Cooperative Research Centre for Aboriginal Health, Darwin.
- Craze, L. and Lucas, S. 1998, *The Establishment of a Pre-Hospital Care Model for Isolated Aboriginal and Torres Strait Islander Communities — Project Report*, Queensland Ambulance Service, Brisbane.
- Eades, D. 1997, ‘Language in court: the acceptance of linguistic evidence about Indigenous Australians in the criminal justice system’, *Australian Aboriginal Studies*, vol. 1, pp. 15–27.
- Koch, H. 1985, ‘Non-standard English in an Aboriginal land claim’, in Pride, J.B. (ed), *Cross Cultural Encounters: Communication and Mis-Communication*, River Seine Publications, Melbourne.

-
- Laws, P.J., Abeywardana, S., Walker, J. and Sullivan, E.A. 2007, *Australia's Mothers and Babies 2005*, Cat. no. PER 40, Australian Institute of Health and Welfare, Canberra.
- Lowell, A. and Devlin, B. 1998, 'Miscommunication between Aboriginal students and their non-Aboriginal teachers in a bilingual school', *Language, Culture and Curriculum*, vol. 11, no. 3, pp. 67–89.
- Lowell, A., Brown, I., Marrnganyin, B., Flack, M., Christie, M., Snelling, P. and Cass, A., 2005, *Sharing the True Stories: Improving Communication between Health Staff and Aboriginal Patients*, Stage 1, Interim Project Report, Cooperative Research Centre for Aboriginal Health, Darwin.
- Malcolm, I. 1982, 'Speech events of the Aboriginal classroom', *International Journal of the Sociology of Language*, vol. 36, pp. 115–34.
- Morgan Disney & Associates Pty. Ltd, Tracey Whetnall Consulting and Wis-Wei Consulting Pty Ltd 2007, *Synopsis Review of the COAG Trial Evaluations, Report to the Office of Indigenous Policy Coordination (OIPC) November 2006*, Canberra, <http://oipc.gov.au/publications/default.asp>.
- NTER (Northern Territory Emergency Response) Review Board 2008, *Northern Territory Emergency Response: Report of the NTER Review Board*, Department of Families, Housing, Community Services and Indigenous Affairs, <http://www.nterreview.gov.au/> (accessed 13 October 2008).
- Paradies, Y., Harris, R. and Anderson, I. 2008, *The Impact of Racism on Indigenous Health in Australia and Aotearoa: Towards a Research Agenda*, Cooperative Research Centre for Aboriginal Health, Darwin.
- Siegel, N. 2002, Bush Court: administering criminal court process and corrective services in remote Aboriginal communities, paper presented at the Crime Prevention Conference convened by the Australian Institute of Criminology and the Crime Prevention Branch, Commonwealth Attorney-General's Department, Sydney, 12–13 September.
- Trudgen, J. 2000, *Why Warriors Lie Down and Die: Towards an Understanding of Why the Aboriginal People of Arnhem Land Face the Greatest Crisis in Health and Education since European Contact: Djambatj Mala*, Aboriginal Resource and Development Services, Darwin.
- Urbis Keys Young 2006, *Aboriginal and Torres Strait Islander Access to Major Health Programs*, Medicare Australia and the Department of Health and Ageing, Canberra.
- Zubrick, S.R., Silburn, S.R., Lawrence, D.M., Mitrou, F.G., Dalby, R.B., Blair, E.M., Griffin, J., Milroy, H., De Maio, J.A., Cox, A. and Li, J. 2005, *The Western Australian Aboriginal Child Health Survey: The Social and Emotional Wellbeing of Aboriginal Children and Young People*, Curtin University of Technology and Telethon Institute for Child Health Research, Perth.

12 Outcomes for Torres Strait Islander people

Box 12.1 Key messages

- Between 2001 and 2006:
 - the proportion of Torres Strait Islander people aged 15 years or over who had completed year 12 or an equivalent increased from 27.4 per cent to 32.2 per cent (figure 12.1) and the proportion aged 25–64 years with a non-school qualification increased from 21.8 per cent to 28.5 per cent (figure 12.2)
 - the proportion of Torres Strait Islander people aged 15–64 years who were employed increased from 49.5 per cent to 55.1 per cent (figure 12.3)
 - after adjusting for the effects of inflation, median individual incomes for Torres Strait Islander people aged 15 years and over increased by 3.9 per cent (figure 12.4)
 - there was little change in the proportion of Torres Strait Islander people living in a home owned or being purchased by a member of the household (around 28 per cent) (figure 12.7) or in the proportion living in overcrowded housing (around 25 per cent) (figure 12.9).

12.1 Selected outcomes for Torres Strait Islander people

The estimated Indigenous population of Australia at 30 June 2006 was 517 043, of whom 53 337 (10.3 per cent of the Indigenous population) were Torres Strait Islander people. People who identified as being of Torres Strait Islander origin only comprised 6.4 per cent of the Indigenous population, while the remaining 3.9 per cent identified as being of both Aboriginal and Torres Strait Islander origin. The majority (61.5 per cent) of Torres Strait Islander people lived in Queensland (ABS 2008). For more information on the distribution of the Indigenous population, including Torres Strait Islander people, see ABS (2007).

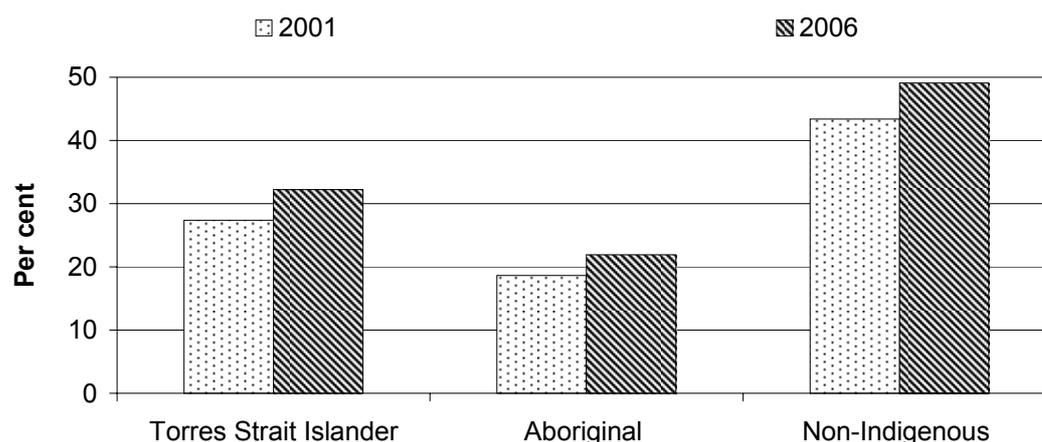
Torres Strait Islander people comprise a small proportion of the Australian population (and of the Indigenous population), making it difficult to extract reliable data on Torres Strait Islander people from surveys and administrative data collections. The five-yearly ABS Census provides the most reliable data on Torres Strait Islander people.

This chapter presents a selection of results from the ABS 2001 Census and ABS 2006 Census showing outcomes for Torres Strait Islander, Aboriginal and non-Indigenous people. These outcomes are selected proxy measures of the COAG targets and other headline indicators and the strategic areas for action. In these data, ‘Torres Strait Islander’ comprises people who identified as ‘Torres Strait Islander only’ and people who identified as ‘Both Aboriginal and Torres Strait Islander’. ‘Aboriginal’ in this section is limited to people who identified as ‘Aboriginal only’.

Data for this chapter are disaggregated into three geographical areas; the Torres Strait Indigenous Region (which was known as the Torres Strait Area in 2001, and is directly comparable), the Balance of Queensland, which comprises the remainder of Queensland, and the Balance of Australia, which comprises the remainder of Australia. This contrasts to other chapters of this report which are geographically disaggregated by remoteness areas and by State and Territory. The three geographical areas used in this section of the report better reflect the distribution of Torres Strait Islander people across Australia. Data for each of these areas includes a small number of people whose usual residence was not stated or inadequately described.

Highest year of school completed

Figure 12.1 Proportion of people aged 15 years and over who had completed year 12 or equivalent^{a, b, c}



^a Excludes people still attending secondary school and those who did not state their highest year of school completed. ^b Torres Strait Islander includes people who identified as Torres Strait Islander only or both Aboriginal and Torres Strait Islander origin. Aboriginal includes people who identified as being of Aboriginal origin. ^c Calculations exclude those who did not state their highest year of schooling completed.

Source: ABS (unpublished) derived from the 2006 Census of Population and Housing; 2001 Census of Population and Housing; table 12A.2; table 12A.4.

Between 2001 and 2006, for those aged 15 years and over:

- the proportion of Torres Strait Islander people who had completed year 12 or an equivalent increased from 27.4 per cent to 32.2 per cent (figure 12.1)
- the proportion of Aboriginal people who had completed year 12 or an equivalent increased from 18.6 per cent to 21.9 per cent (figure 12.1)
- the proportion of non-Indigenous people who had completed year 12 or an equivalent increased from 43.4 per cent to 49.1 per cent (figure 12.1)
- the proportion of Torres Strait Islander people who had completed year 12 or an equivalent increased from 32.4 per cent to 38.5 per cent in the Torres Strait Indigenous Region (tables 12A.2 and 12A.4) increased from 32.1 per cent to 36.5 per cent in the Balance of Queensland (tables 12A.2 and 12A.4) and increased from 21.5 per cent to 25.5 per cent in the Balance of Australia (tables 12A.2 and 12A.4).

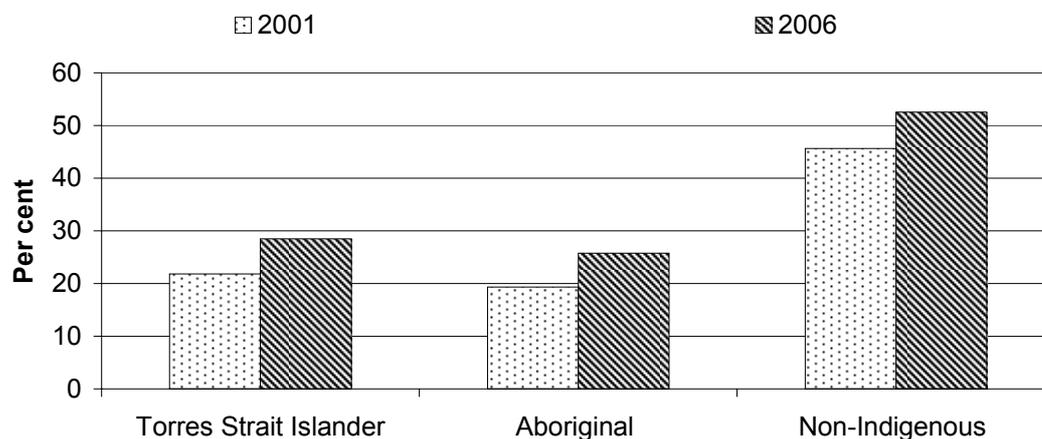
The proportion of Torres Strait Islander people who had completed year 12 or an equivalent increased for those aged 25–34, 35–44, 45–54, 55–64 and 65 years and over (tables 12A.2 and 12A.4).

In both 2001 and 2006 the proportion of Torres Strait Islander people who had completed year 12 or an equivalent was highest amongst those aged 25–34 years, and lower among older age groups (tables 12A.2 and 12A.4).

In both 2001 and 2006 the proportion of Torres Strait Islander people aged 15 years and over who had completed year 12 or an equivalent was slightly higher amongst those who lived in the Torres Strait Indigenous Region than in the Balance of Queensland and much higher than those who lived in the Balance of Australia.

Post secondary education

Figure 12.2 Proportion of people aged 25–64 with a non-school qualification^{a, b, c, d}



^a Includes 'Certificate Level', 'Advanced Diploma & Diploma Level', 'Bachelor Degree Level', 'Graduate Diploma & Graduate Certificate Level', 'Postgraduate Degree Level' and 'Level of education inadequately described'. ^b The denominator for this calculation includes 'Persons who have a qualification that is out of scope of this variable', 'Persons with no qualifications' and 'Level of education not stated.' ^c Denominator for calculation includes 'Level of education not stated'. ^d Torres Strait Islander includes people who identified as Torres Strait Islander only or both Aboriginal and Torres Strait Islander origin. Aboriginal includes people who identified as being of Aboriginal origin only.

Source: ABS (unpublished) derived from the 2006 Census of Population and Housing; 2001 Census of Population and Housing; table 12A.6; table 12A.8.

In both 2001 and 2006, for people aged 25–64 years, the proportion of Torres Strait Islander people with a non-school qualification was slightly higher than for Aboriginal people, but much lower than for non-Indigenous people.

Between 2001 and 2006, for people aged 25–64 years:

- the proportion of Torres Strait Islander people with a non-school qualification increased from 21.8 per cent to 28.5 per cent (figure 12.2)
- the proportion of Aboriginal people with a non-school qualification increased from 19.3 per cent to 25.8 per cent (figure 12.2)
- the proportion of non-Indigenous people with a non-school qualification increased from 45.7 per cent to 52.5 per cent (figure 12.2).

In both 2001 and 2006, for people aged 25–64 years, the proportion of Torres Strait Islander people with a bachelor degree or higher was slightly lower than for Aboriginal people, and much lower than for non-Indigenous people (tables 12A.6 and 12A.8).

Between 2001 and 2006, for people aged 25–64 years:

- the proportion of Torres Strait Islander people with a bachelor degree or higher increased from 3.6 per cent to 4.7 per cent (tables 12A.6 and 12A.8)
- the proportion of Aboriginal people with a bachelor degree or higher increased from 4.0 per cent to 5.2 per cent (tables 12A.6 and 12A.8)
- the proportion of non-Indigenous people with a bachelor degree or higher increased from 17.4 per cent to 21.5 per cent (tables 12A.6 and 12A.8).
- the proportion of Torres Strait Islander people with Certificate III or IV as their highest non-school qualification increased from 10.0 per cent to 13.4 per cent (tables 12A.6 and 12A.8)
- the proportion of Aboriginal people aged 25–64 with Certificate III or IV as their highest non-school qualification increased from 8.5 per cent to 11.7 per cent (tables 12A.6 and 12A.8)
- the proportion of non-Indigenous people with Certificate III or IV as their highest non-school qualification higher increased from 16.0 per cent to 17.0 per cent (tables 12A.6 and 12A.8).

In both 2001 and 2006, for people aged 25–64 years, the proportion of Torres Strait Islander people with a Certificate III or IV as their highest non-school qualification was slightly higher than for Aboriginal people but slightly lower than for non-Indigenous people.

In both 2001 and 2006, the proportion of Torres Strait Islander people with a non-school qualification was highest in the 25–34 and 35–44 years age groups. A similar pattern occurred for Aboriginal and non-Indigenous people. More information on the age breakdown of non-school qualifications can be found in tables 12A.5 to 12A.8.

In both 2001 and 2006, the proportion of Torres Strait Islander people aged 25–64 years with a non-school qualification varied substantially across Australia.

Between 2001 and 2006, for Torres Strait Islander people aged 25–64 years:

- the proportion with a non-school qualification increased significantly in the Torres Strait Indigenous Region (from 15.7 per cent to 35.1 per cent) (tables 12A.6 and 12A.8) – mainly due to an increase in the proportion of males and females with a certificate level 3 or 4
- the proportion with a non-school qualification increased slightly in the Balance of Queensland (from 22.1 per cent to 27.4 per cent) and in the Balance of Australia (from 23.3 per cent to 27.3 per cent) (tables 12A.6 and 12A.8).

In both 2001 and 2006, Torres Strait Islander, Aboriginal and non-Indigenous males aged 25–64 years were more likely than females to have a non-school qualification – primarily a certificate 3 or 4 (tables 12A.6 and 12A.8). However, between 2001 and 2006 the proportion of Torres Strait Islander, Aboriginals and non-Indigenous females aged 25–64 years with a non-school qualification increased, and at a faster rate than for males, closing the relative and absolute gap (tables 12A.6 and 12A.8).

Labour force status

This section presents data for employment, unemployment and persons not in the labour force as proportions of the population of working age (aged 15–64 years). This is a different approach to measures of employment and unemployment as a proportion of the labour force.

Figure 12.3 **Labour force status, people aged 15–64 years, 2001 and 2006^{a, b}**



^a Torres Strait Islander includes people who identified as Torres Strait Islander only or both Aboriginal and Torres Strait Islander origin. Aboriginal includes people who identified as being Aboriginal only. ^b Calculations exclude those who did not state their labour force status.

Source: ABS (unpublished) derived from the 2006 Census of Population and Housing; 2001 Census of Population and Housing; table 12A.21; table 12A.22.

In both 2001 and 2006, for 15–64 year olds, a higher proportion of Torres Strait Islander people were employed than Aboriginal people. However, a much lower proportion of Torres Strait Islander than non-Indigenous people were employed.

Between 2001 and 2006, for 15–64 year olds:

- the proportion of Torres Strait Islander people who were employed increased from 49.5 per cent to 55.1 per cent (figure 12.3)

-
- the proportion of Aboriginal people who were employed increased from 42.5 per cent to 47.2 per cent (figure 12.3)
 - the proportion of non-Indigenous people who were employed increased from 68.0 per cent to 71.7 per cent (figure 12.3).

In both 2001 and 2006, for those aged 15–64 years, similar proportions of Torres Strait Islander and Aboriginal people were unemployed. A much lower proportion of non-Indigenous people were unemployed (figure 12.4).

Between 2001 and 2006, for 15–64 year olds:

- the proportion of Torres Strait Islander people who were unemployed decreased from 11.0 per cent to 7.7 per cent (figure 12.3) — this equates to a fall in the unemployment rate of 6 percentage points (from 18.2 per cent to 12.3 per cent)
- the proportion of Aboriginal people who were unemployed decreased from 10.8 per cent to 9.0 per cent (figure 12.3) — this equates to a fall in the unemployment rate of 4 percentage points (from 20.3 per cent to 16.1 per cent)
- the proportion of non-Indigenous people who were unemployed decreased from 5.3 per cent to 3.9 per cent (figure 12.3) — this equates to a fall in the unemployment rate of 2 percentage points (from 7.3 per cent to 5.1 per cent).

In both 2001 and 2006, for 15–64 year olds:

- lower proportions of Torres Strait Islander people were not in the labour force than Aboriginal people. However, much lower proportions of non-Indigenous people were not in the labour force (figure 12.3).

Between 2001 and 2006, for 15–64 year olds:

- the proportion of Torres Strait Islander people who were not in the labour force decreased from 39.5 per cent to 37.2 per cent (figure 12.3)
- the proportion of Aboriginal people who were not in the labour force decreased from 46.7 per cent to 43.8 per cent (figure 12.3)
- the proportion of non-Indigenous people who were not in the labour force decreased from 26.7 per cent to 24.5 per cent (figure 12.3).

Table 12.1 Employed people as a proportion of the population, Torres Strait Islander people aged 15–64 years, 2001 and 2006^{a, b}

	2001	2006
	%	%
Torres Strait Indigenous Region	63.6	68.9
Balance of Queensland	45.2	51.2
Balance of Australia	49.2	54.3
Australia	49.5	55.1

^a Torres Strait Islander includes people who identified as Torres Strait Islander only or both Aboriginal and Torres Strait Islander origin. Aboriginal includes people who identified as being of Aboriginal origin and not Torres Strait Islander origin. ^b Calculations exclude those who did not state their labour force status.

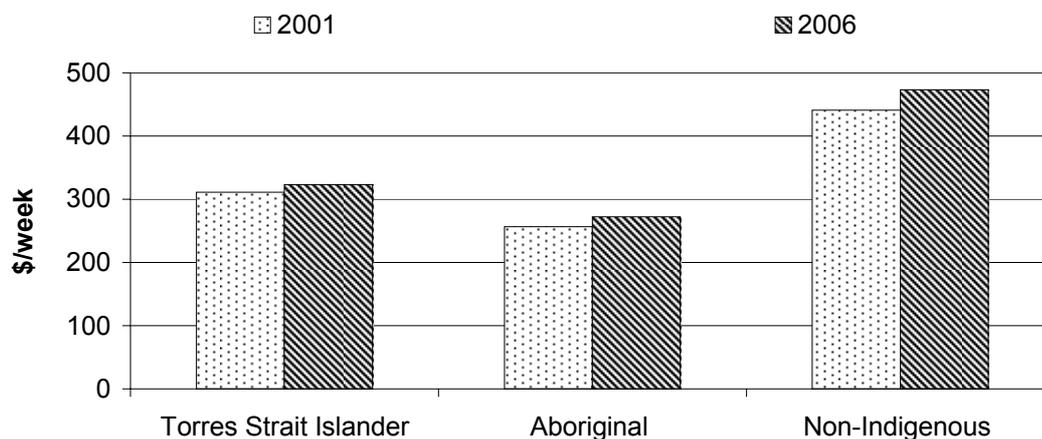
Source: ABS (unpublished) derived from the *2006 Census of Population and Housing*; *2001 Census of Population and Housing*; table 12A.21 and 12A.22.

For people aged 15–64 years:

- in both 2001 and 2006, a much higher proportion of Torres Strait Islander people living in the Torres Strait Indigenous Region were employed than for Torres Strait Islander people living elsewhere in Australia (table 12.1). However, CDEP participation accounts for a much larger proportion of employment for Indigenous people in the Torres Strait Indigenous Region than in other parts of Australia (table 12A.23)
- between 2001 and 2006, the proportion of Torres Strait Islander people who were employed increased in the Torres Strait Indigenous Region, the Balance of Queensland and the Balance of Australia (table 12.1)
- in 2006, in the Torres Strait Indigenous Region, 52.4 per cent of employed Torres Strait Islander people participated in CDEP (32.5 per cent part time, 15.8 per cent full time and 4.1 per cent were employed but away from work) (table 12A.23). Section 4.6 of this report contains more information on CDEP participation for Indigenous people.

Income

Figure 12.4 **Median real gross weekly individual income, people aged 15 years and over, (2006 dollars)^{a, b, c}**



^a Torres Strait Islander includes people who identified as Torres Strait Islander only or both Aboriginal and Torres Strait Islander origin. Aboriginal includes people who identified as being Aboriginal only. ^b Real income is adjusted for the effects of inflation, and allows comparisons to be made between incomes in different years, by holding purchasing power constant. The 2001 data are adjusted for inflation using the Consumer Price Index for the September quarter 2001 and the September quarter 2006. ^c Calculations exclude those who did not state their income.

Source: ABS (unpublished) derived from the *2006 Census of Population and Housing; 2001 Census of Population and Housing*; ABS (2008), *Consumer price index* Cat. no. 6401.0, Canberra, <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/6401.0Dec%202008?OpenDocument> (accessed 19 January 2009): tables 12A.15 and 12A.19.

For people aged 15 years and over:

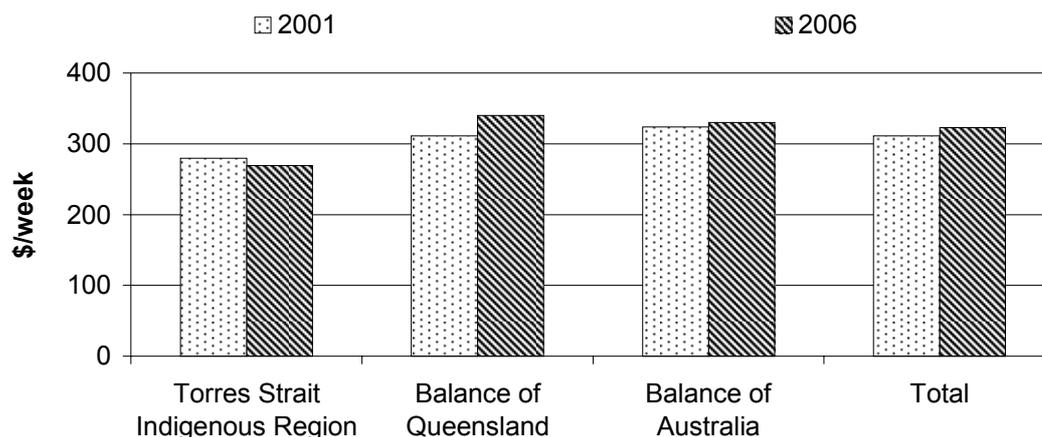
- in 2006, the individual median income for Torres Strait Islander people was \$323, which was higher than for Aboriginal people (\$272 per week) but much lower than for non-Indigenous people (\$473 per week) (figure 12.4).

After adjusting for the effects of inflation:

- between 2001 and 2006, there were increases in real individual median incomes for Torres Strait Islander, Aboriginal and non-Indigenous people (3.9 per cent, 6.1 per cent and 7.3 per cent, respectively) (figure 12.4)
- in 2006, individual weekly median incomes for Torres Strait Islander people were equivalent to 68.3 per cent of those for non-Indigenous people, and in 2001, were equivalent to 70.5 per cent (figure 12.4)
- in 2006, individual weekly median incomes for Aboriginal people were equivalent to 57.5 per cent of those for non-Indigenous people, and in 2001, were equivalent to 58.2 per cent (figure 12.4)

- data on mean average individual incomes are shown in tables 12A.15 and 12A.19.

Figure 12.5 Median real gross weekly individual income for Torres Strait Islander people aged 15 years and over (2006 dollars)^{a, b, c}



^a Torres Strait Islander includes people who identified as Torres Strait Islander only or both Aboriginal and Torres Strait Islander origin. Aboriginal includes people who identified as being Aboriginal only. ^b Real income is adjusted for the effects of inflation, and allows comparisons to be made between incomes in different years, by holding purchasing power constant. The 2001 data are adjusted for inflation using the Consumer Price Index for the September quarter 2001 and the September quarter 2006. ^c Calculations exclude those who did not state their income.

Source: ABS (unpublished) derived from the *2006 Census of Population and Housing; 2001 Census of Population and Housing*; ABS (2008), *Consumer price index* Cat. no. 6401.0, Canberra, <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/6401.0Dec%202008?OpenDocument> (accessed 19 January 2009); tables 12A.15 and 12A.19.

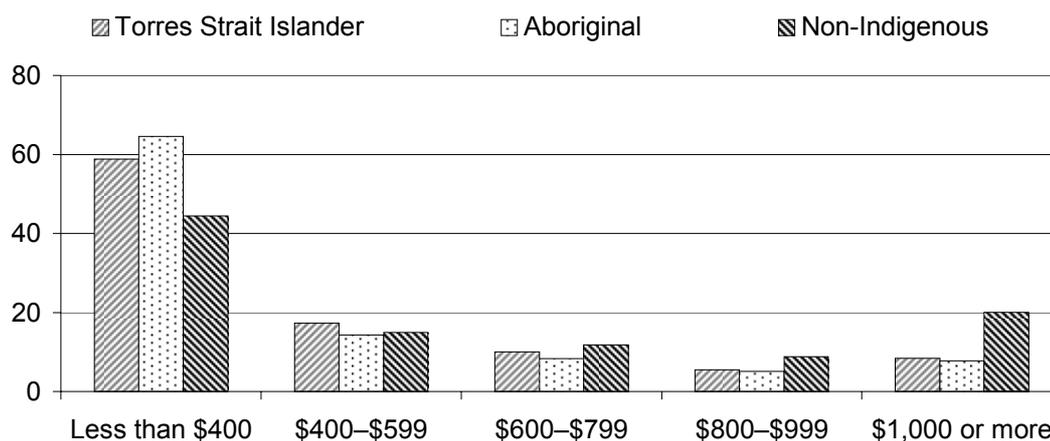
In both 2001 and 2006, for people aged 15 years and over, median gross weekly individual income for Torres Strait Islander people was much lower for those living in the Torres Strait Indigenous Region than in other parts of Australia (figure 12.5).

After adjusting for the effects of inflation, between 2001 and 2006, for people aged 15 years and over:

- median real gross weekly individual income for Torres Strait Islander people living in the Torres Strait Indigenous Region decreased by 3.8 per cent (from \$280 to \$269) (figure 12.5)
- median real gross weekly individual income for Torres Strait Islander people living in the Balance of Queensland increased by 9.3 per cent (from \$311 to \$340) (figure 12.5)

- median real gross weekly individual income for Torres Strait Islander people living in the Balance of Australia increased by 1.9 per cent (from \$324 to \$330) (figure 12.5).

Figure 12.6 Distribution of gross weekly individual income, Torres Strait Islander people aged 15 years and over, 2006^{a, b}



^a Torres Strait Islander includes people who identified as Torres Strait Islander only or both Aboriginal and Torres Strait Islander origin. Aboriginal includes people who identified as being Aboriginal only. ^b Calculations exclude those who did not state their income.

Source: ABS (unpublished) derived from the 2006 Census of Population and Housing; 2001 Census of Population and Housing; table 12A.18.

Figure 12.6 above shows the distribution of gross weekly individual incomes amongst Torres Strait Islander, Aboriginal and non-Indigenous people for Australia.

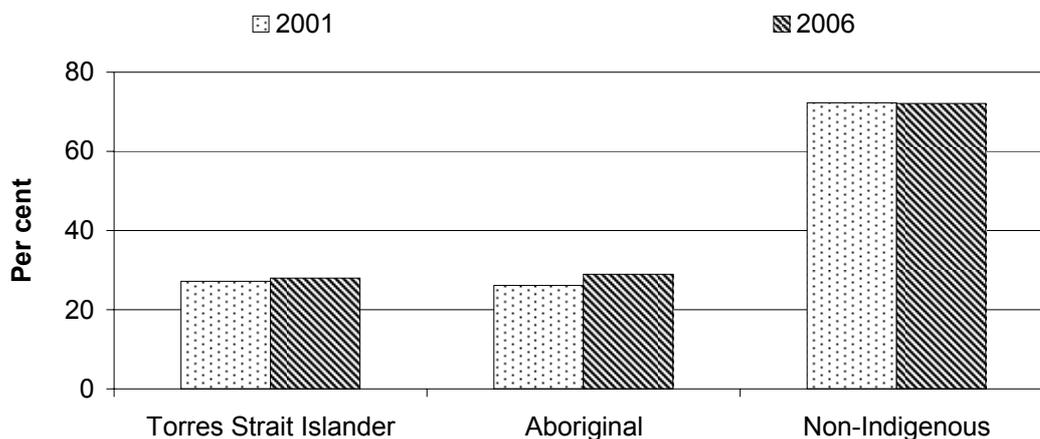
In 2006:

- the majority of both Torres Strait Islander and Aboriginal people had incomes of below \$400 a week (58.9 per cent and 64.6 per cent, respectively) (figure 12.6)
- a similar proportion of Torres Strait Islander and Aboriginal people earned \$1000 or more per week (8.4 per cent and 7.7 per cent, respectively). A much higher proportion of non-Indigenous people earned \$1000 or more per week (20.0 per cent) (figure 12.6).

More detailed data on the distribution of income for Torres Strait Islander people, and comparisons for Aboriginal and non-Indigenous people in 2001 and 2006 are presented in tables 12A.13–20. Additional data on the distribution of household and individual income for Indigenous people and comparisons with non-Indigenous people are contained in section 4.9 and the attachment tables for chapter 4.

Housing Tenure

Figure 12.7 Proportion of people living in a home owned or being purchased by a member of the household, 2001 and 2006^{a, b}



^a Torres Strait Islander includes people who identified as Torres Strait Islander only or both Aboriginal and Torres Strait Islander origin. Aboriginal includes people who identified as being Aboriginal only. ^b Includes dwellings 'Fully owned', 'Being purchased', and 'Being purchased under a rent/buy scheme'.

Source: ABS (unpublished) derived from the 2006 Census of Population and Housing; 2001 Census of Population and Housing; tables 12A.10 and 12A.12.

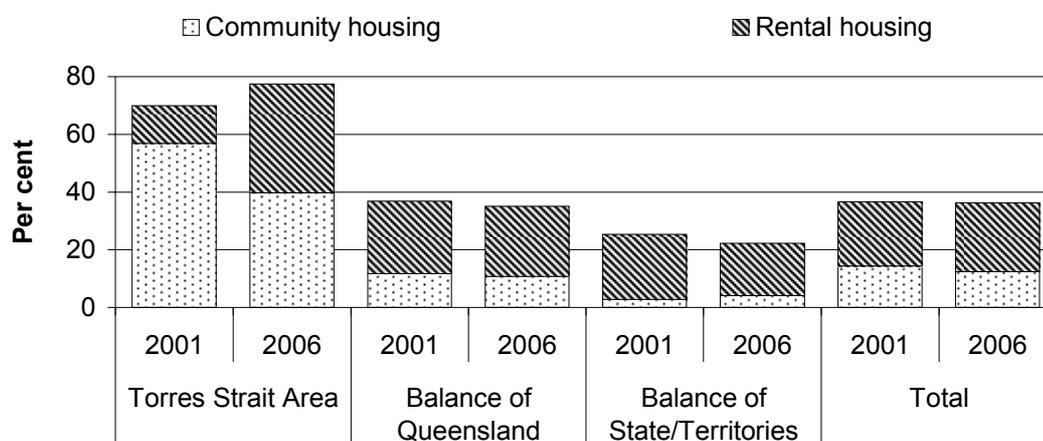
In both 2001 and 2006, the proportion of Torres Strait Islander people and Aboriginal people living in a home owned or being purchased by a member of the household was much lower than for non-Indigenous people (figure 12.7).

Between 2001 and 2006, the proportion of people living in a home owned or being purchased by a member of the household:

- increased slightly for Torres Strait Islander people (from 27.2 per cent to 28.0 per cent) (figure 12.7)
- increased slightly for Aboriginal people (26.1 per cent to 29.0 per cent) (figure 12.7)
- changed little for non-Indigenous people (72.3 per cent in 2001 and 72.1 per cent in 2006) (figure 12.7).

Much higher proportions of Torres Strait Islander and Aboriginal people lived in rented homes in both 2001 and 2006 than non-Indigenous people (around 65 per cent compared to around 25 per cent) (tables 12A.10 and 12A.12).

Figure 12.8 **Proportion of Torres Strait Islander people living in community or public rentals, 2001 and 2006^{a, b}**



^a Torres Strait Islander includes people who identified as Torres Strait Islander only or both Aboriginal and Torres Strait Islander origin. Aboriginal includes people who identified as being Aboriginal only. ^b Community rental comprises rental from 'Housing co-operative/community/church group'; 'Community or co-operative housing group'.

Source: ABS (unpublished) derived from the 2006 Census of Population and Housing; 2001 Census of Population and Housing; tables 12A.10 and 12A.12.

A large proportion of Torres Strait Islander people lived in public or community rentals.

Between 2001 and 2006:

- in Australia, the proportion of Torres Strait Islander people who were living in community rental housing decreased from 14.4 per cent to 12.4 per cent (figure 12.8)
- the proportion of Torres Strait Islander people in the Torres Strait Indigenous Region who were living in community rental housing decreased from 56.9 per cent to 39.7 per cent (figure 12.8)
- the proportion of Torres Strait Islander people in the Balance of Queensland who were living in community rental housing decreased from 11.8 per cent to 10.7 per cent (figure 12.8)
- the proportion of Torres Strait Islander people in the Balance of Australia who were living in community rental housing increased from 2.8 per cent to 4.1 per cent (figure 12.8).

Between 2001 and 2006:

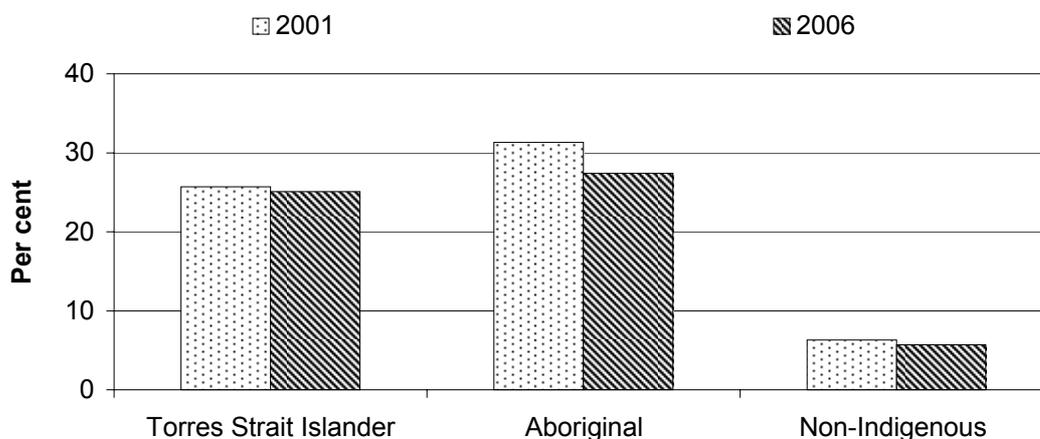
- in Australia, the proportion of Torres Strait Islander people who were living in public rental housing increased from 22.3 per cent to 23.9 per cent (figure 12.8)

- the proportion of Torres Strait Islander people in the Torres Strait Indigenous Region who were living in public rental housing increased from 13.0 per cent to 37.7 per cent (figure 12.8)
- the proportion of Torres Strait Islander people in the Balance of Queensland who were living in public rental housing decreased from 25.1 per cent to 24.4 per cent (figure 12.8)
- the proportion of Torres Strait Islander people in the Balance of Australia who were living in public rental housing decreased from 22.5 per cent to 18.1 per cent (figure 12.8).

More detailed information on tenure type for Torres Strait Islander people can be found in tables 12A.9–12.

Overcrowding in housing

Figure 12.9 Overcrowding in housing, 2001 and 2006^{a, b}



^a Torres Strait Islander includes people who identified as Torres Strait Islander only or both Aboriginal and Torres Strait Islander origin. Aboriginal includes people who identified as being Aboriginal only. ^b Based on the Canadian National Occupancy Standard for housing appropriateness. Rates are based on households for which utilisation could be determined.

Source: ABS (unpublished) derived from the *2006 Census of Population and Housing*; *2001 Census of Population and Housing*; tables 12A.27 and 12A.31.

In both 2001 and 2006 a slightly lower proportion of Torres Strait Islander than Aboriginal people lived in overcrowded housing. However, a much higher proportion of Torres Strait Islander than non-Indigenous people lived in overcrowded housing.

Between 2001 and 2006:

- the proportion of Torres Strait Islander people living in overcrowded housing changed little (25.7 per cent in 2001 and 25.1 per cent in 2006) (figure 12.9)
- the proportion of Aboriginal people living in overcrowded housing decreased from 31.3 per cent to 27.4 per cent (figure 12.9)
- the proportion of non-Indigenous people living in overcrowded housing changed little (6.3 per cent in 2001 and 5.7 per cent in 2006) (figure 12.9).

Table 12.2 Proportion of Torres Strait Islander people living in overcrowded housing, 2001 and 2006^{a, b}

	2001	2006
	%	%
Torres Strait Indigenous Region	46.8	41.1
Balance of Queensland	27.7	27.9
Balance of Australia	16.6	15.4
Australia	25.7	25.1

^a Torres Strait Islander includes people who identified as Torres Strait Islander only or both Aboriginal and Torres Strait Islander origin. Aboriginal includes people who identified as being Aboriginal only. ^b Based on the Canadian National Occupancy Standard for housing appropriateness. Rates are based on households for which utilisation could be determined.

Source: ABS (unpublished) derived from the 2006 Census of Population and Housing; 2001 Census of Population and Housing; table 12A.27; table 12A.31.

Between 2001 and 2006, the proportion of Torres Strait Islander people living in overcrowded housing fell slightly in the Torres Strait Indigenous Region, the Balance of Australia and Australia, but was unchanged in the Balance of Queensland (table 12.2).

In both 2001 and 2006:

- the proportion of Torres Strait Islander people living in overcrowded housing was highest in the Torres Strait Indigenous Region (table 12.2)
- around 30 per cent of Torres Strait Islander young people (under 25 years of age) were living in overcrowded housing. Rates tapered off for older age groups (to around 10 per cent for those aged 65 years and over) (tables 12A.27 and 12A.31)
- a similar proportion of male and female Torres Strait Islander people lived in overcrowded housing. This pattern was similar for the Aboriginal and non-Indigenous populations (tables 12A.27 and 12A.31).

For more information on overcrowding in housing for Indigenous and non-Indigenous people see section 9.1 of this report.

Disability

The 2001 and 2006 Census did not collect data on long term health conditions. In the 2007 report, data were presented on long term health conditions from the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS). Similar proportions of Aboriginal and Torres Strait Islander people aged 18 years and over reported having a long term health condition in 2004-05 (tables 12A.1.5 and 12A.1.6 from the 2007 report). This section contains information on the proportion of Torres Strait Islander people and other Australians who needed assistance with one or more core activities (self-care, mobility and communication) and those who provided unpaid assistance to people with a disability, long term illness or problems relating to old age. For more information on these topics, and comparisons with non-Indigenous people, see section 4.8 of this report.

Core activity need for assistance is a disability measure that was included in the 2006 Census. Core activity need for assistance data are often age standardised because the age structure of the Indigenous population is significantly different to the non-Indigenous population. The Indigenous population is much younger than the non-Indigenous population and disabilities are generally much more common among older age groups. Therefore, non age standardised data can understate the prevalence of disability among Indigenous people. This section includes some information by age groups (table 12.3), as well as age standardised data for sub-populations. Section 4.8 (disability and chronic disease) includes age standardised core activity need for assistance data for both the Indigenous and non-Indigenous population.

In 2006, for Australia, for people aged 15 years and over, 5.4 per cent of Torres Strait Islander people had a core activity need for assistance. Similar proportions of Aboriginal and non-Indigenous people had a core activity need for assistance (6.1 per cent and 5.0 per cent, respectively) (table 12.10).

Table 12.3 Core activity need for assistance, by age group, 2006^{a, b}

	<i>Torres Strait Islander</i>	<i>Aboriginal</i>	<i>Non-Indigenous</i>
15–24	1.9	2.4	1.4
25–34	2.2	2.7	1.3
35–44	4.2	4.8	1.9
45–54	7.0	8.3	2.9
55–64	10.7	14.7	5.1
65+	21.2	29.5	18.2
15 years and over (not age standardised)	5.4	6.1	5.0
15 years and over (age standardised)	7.4	9.7	4.8

^a Torres Strait Islander includes people who identified as Torres Strait Islander only or both Aboriginal and Torres Strait Islander origin. Aboriginal includes people who identified as being Aboriginal only. ^b Calculations exclude those people who did not state whether they had a core activity need for assistance.

Source: ABS (unpublished) derived from the *2006 Census of Population and Housing*; table 12A.33–4.

In 2006:

- in each age group, Torres Strait Islander people had lower rates of core activity need for assistance than Aboriginal people and higher rates than non-Indigenous people. Rates of core activity need for assistance for Torres Strait Islander people were particularly high relative to non-Indigenous people in the 35–44, 45–54 and 55–64 years age groups (table 12.3)
- the proportion of Torres Strait Islander people who had a core activity need for assistance was lowest in the Torres Strait Indigenous Region (3.7 per cent) and higher in the Balance of Queensland and the Balance of Australia (4.7 and 6.8 per cent, respectively) (table 12A.33).

Rates of core activity need for assistance alone do not fully account for the impact of disabilities on peoples' lives. Many people provide unpaid assistance to people with a disability, long term illness or problems related to old age. Table 12A.36 presents rates of unpaid assistance (care) to a person with a disability amongst Torres Strait Islander, Aboriginal and non-Indigenous people. Rates have been calculated for the 15 years and over population, excluding those who did not state their carer status.

In 2006, for people aged 15 years and over, 12.7 per cent of Torres Strait Islander people provided unpaid assistance to a person with a disability. A similar proportion of Aboriginal and non-Indigenous people provided unpaid assistance to a person with a disability (13.3 per cent and 11.2 per cent, respectively) (table 12A.36).

After adjusting for differences in the age structure of the two populations, Torres Strait Islander people aged 15 years and over were 1.2 times as likely as all Australian people to have provided unpaid assistance in 2006 (table 12A.37).

The proportion of Torres Strait Islander people who provided unpaid assistance varied across age groups. Torres Strait Islander people in the 45 to 54 and 55 to 64 years age groups were most likely to have provided unpaid assistance (15.7 and 15.2 per cent, respectively) (table 12A.36). Torres Strait Islander people in younger and older age groups were less likely to have provided unpaid assistance.

The proportion of Torres Strait Islander aged 15 years and over who provided unpaid assistance did not vary much between the Torres Strait Indigenous Region, the Balance of Queensland and the Balance of Australia (table 12A.36).

12.2 Attachment tables

Attachment tables are identified in references throughout this chapter by an ‘A’ suffix (for example, table 12A.2 is table 2 in the attachment tables for chapter 12). The files containing the attachment tables can also be found on the Review web page (www.pc.gov.au/gsp) or can be obtained by contacting the Secretariat directly.

12.3 References

- ABS (Australian Bureau of Statistics) 2008, *Experimental Estimates of Aboriginal and Torres Strait Islander Australians, June 2006*, Cat. no. 3238.0.55.001, ABS, Canberra.
- ABS (Australian Bureau of Statistics) 2007, *Population Distribution, Aboriginal and Torres Strait Islander Australians, 2006*, Cat. no. 4705.0, ABS, Canberra.

13 Measuring multiple disadvantage

Box 13.1 Key messages

In 2006:

- Indigenous people were markedly disadvantaged when compared with non-Indigenous people against measures of education, labour force and income (figures 13.1.1–3)
- patterns of disadvantage by age and sex were generally similar for Indigenous and non-Indigenous people. However, for Indigenous people, disadvantage increased with remoteness, while rates of disadvantage for non-Indigenous people were lower in remote areas (figures 13.1.1–3).

Using a statistical technique that holds other modelled factors constant, in 2006:

- Males and females who had attained higher than year 8 were more likely to be in the labour force and less likely to be unemployed than those whose highest level of educational attainment was year 8 or below. This effect was stronger for Indigenous males and females than for non-Indigenous males and females (figure 13.3.1 and table 13.3.2).

Different aspects of disadvantage often seem to occur together — for example, poor education may be linked with poor employment outcomes, and both may be linked with poor income. This chapter uses data from the ABS 2001 and 2006 Censuses to present some indicators of Indigenous disadvantage that tend to occur together. However, this information does not reveal cause and effect (that is, it does not say that disadvantage in one area is the *cause* of another poor outcome).

Section 13.1 examines patterns of disadvantage against proxy measures of the COAG targets and headline indicators according to age, sex and remoteness area, and compares patterns of outcomes for Indigenous and non-Indigenous people. Section 13.2 examines links between proxy measures of the COAG targets and headline indicators and some strategic change indicators, and compares Indigenous and non-Indigenous results. Section 13.3 uses data from the ABS 2006 Census to identify factors related to Indigenous labour market participation and unemployment. In this section, statistical techniques have been used to isolate the contribution of one factor holding other modelled factors constant. The analytical technique used in this section means that the results of this analysis are not comparable to other sections of this chapter or other chapters of the report.

Other approaches to measuring multiple disadvantage exist. Silburn et al. (2006) examined three measures of socioeconomic disadvantage for Aboriginal children:

- low education — defined as primary carers who had not been to school or whose highest level of education was Years 1–9
- no employment history — primary carers who have never had a paid job
- financial strain — defined as primary carers who reported that their family's money situation was 'spending more money than we get' and that they have 'just enough money to get to the next pay day'.

A child whose primary carer met two of these criteria was considered by Silburn et al. (2006) to experience multiple socioeconomic disadvantage. The study found that one in five Aboriginal children had primary carers who met two of these criteria.

13.1 Patterns of relative Indigenous disadvantage

The analysis in this chapter is built on the Overcoming Indigenous Disadvantage indicator framework. The report covers a wide range of socioeconomic dimensions, but the analysis in this chapter is limited to indicators where comparable data items were available from the ABS 2001 and 2006 Censuses.

This section analyses five measures from the ABS 2001 and 2006 Censuses. These measures are closely aligned with the COAG targets and headline indicators. Box 13.1.1 lists the measures used and the corresponding headline indicators.

Box 13.1.1 Measuring relative Indigenous disadvantage

The following measures for the Indigenous and non-Indigenous population are from the ABS 2001, 2006 Census.

<i>Census measure</i>	<i>Headline indicator</i>
<ul style="list-style-type: none">• without a non-school qualification (without a vocational or higher education qualification)	<ul style="list-style-type: none">• Post-secondary education, participation and attainment
<ul style="list-style-type: none">• not in the labour force	<ul style="list-style-type: none">• Employment
<ul style="list-style-type: none">• unemployed	<ul style="list-style-type: none">• Employment
<ul style="list-style-type: none">• individual income in the lowest 20 per cent of income for the total Australian population aged 15 to 64 years	<ul style="list-style-type: none">• Household and individual income
<ul style="list-style-type: none">• equivalised household income^a in the lowest 20 per cent of income for the total Australian population	<ul style="list-style-type: none">• Household and individual income

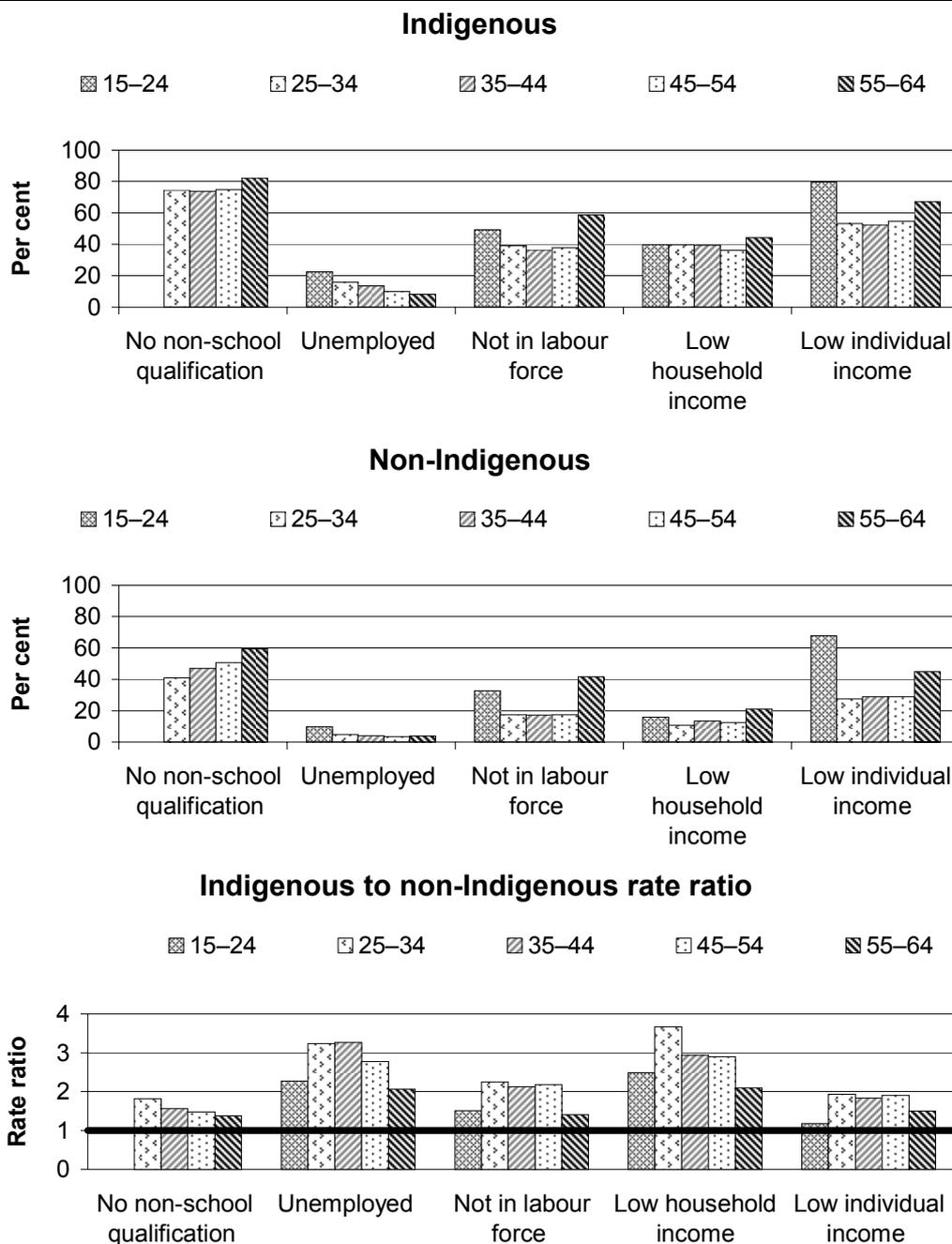
^a Equivalised household income adjusts the actual incomes of households to make households of different sizes and composition comparable. It results in a measure of the economic resources available to members of a standardised household.

In both 2001 and 2006, Indigenous people were markedly disadvantaged when compared with non-Indigenous people against all the selected proxy measures of the COAG targets and headline indicators (see box 13.1.2 for an explanation of the method used to measure relative Indigenous disadvantage).

Box 13.1.2 Measuring 'relative' Indigenous disadvantage

'Relative' Indigenous disadvantage is measured by comparing the rate of Indigenous disadvantage (for example, the proportion of Indigenous people reporting they do not have a non-school qualification) with the rate for the non-Indigenous population. The 'rate ratio' is calculated by dividing the rate for the Indigenous population by the rate for the non-Indigenous population. When using indicators of disadvantage, a rate ratio value greater than one (above the solid horizontal black line) implies that Indigenous people are disadvantaged when compared to non-Indigenous people with the same characteristics.

Figure 13.1.1 Relative disadvantage by Indigenous status and age, 2006^{a, b, c, d}



^a Data for no non-school qualification for people aged 15–24 years are not included because many people aged 15–24 years are still attending school or obtaining a non-school qualification. Non-school qualifications include: 'Certificate', 'Advanced diploma/diploma', 'Bachelor degree', 'Graduate diploma/graduate certificate' and 'Postgraduate degree'. ^b No non-school qualification includes: 'Level of education inadequately described', 'Level of education not stated', and 'Not applicable' (people with no qualifications, still studying for a first qualification, and qualifications out of scope of this classification). ^c Low equivalised household income includes people who are in households in the lowest quintile (<\$315). ^d Low individual income includes people who have negative or nil income and people who have an income of less than \$400 per week.

Source: ABS (unpublished) derived from the 2006 Census of Population and Housing; tables 13A.1.16; 13A.1.18; 13A.1.20; 13A.1.22; and 13A.1.24.

Non-school qualifications

In 2006:

- Indigenous people in all age groups were less likely to have a non-school qualification (figure 13.1.1)
- the relative Indigenous disadvantage (as measured by the Indigenous to non-Indigenous rate ratio) was largest for the 25–34 years age group (Indigenous people in this age group were 1.8 times as likely as non-Indigenous people to have no non-school qualification, compared to 1.6 times as likely in 2001) (figure 13.1.1 and table 13A.1.2)
- for both Indigenous and non-Indigenous people those in older age groups were less likely to have a non-school qualification (figure 13.1.1).

Labour force participation and unemployment rates

In 2006 :

- Indigenous people in all age groups were much more likely to be unemployed than non-Indigenous people (figure 13.1.1)
- the relative Indigenous disadvantage was greatest for those in the 25–34 and 35–44 year age groups (Indigenous people in these age groups were 3.2 and 3.3 times as likely as non-Indigenous people to be unemployed in 2006, compared to 2.9 and 2.8 times as likely in 2001) (figure 13.1.1 and table 13A.1.4)
- Indigenous and non-Indigenous people in older age groups were less likely to be unemployed (figure 13.1.1)
- Indigenous people in all age groups were much less likely to be in the labour force (figure 13.1.1)
- for both Indigenous and non-Indigenous people, those aged 15–24 years and 55–64 years were most likely be out of the labour force (figure 13.1.1).

Low income

In both 2006 and 2001, age related patterns in individual income were similar for Indigenous and non-Indigenous people. In both populations people in the 15–24 years age group and the 55–64 years age group were more likely to have low individual incomes (less than \$400 per week).

In 2006:

- for all age groups Indigenous people had lower individual incomes than non-Indigenous people (figure 13.1.1)
- relative disadvantage was greatest for Indigenous people aged 25–54 years (figure 13.1.1).

13.1.2 Differences between males and females

Figure 13.1.2 shows outcomes for Indigenous and non-Indigenous people by sex.

Non-school qualifications

In 2006, for those aged 25–64 years:

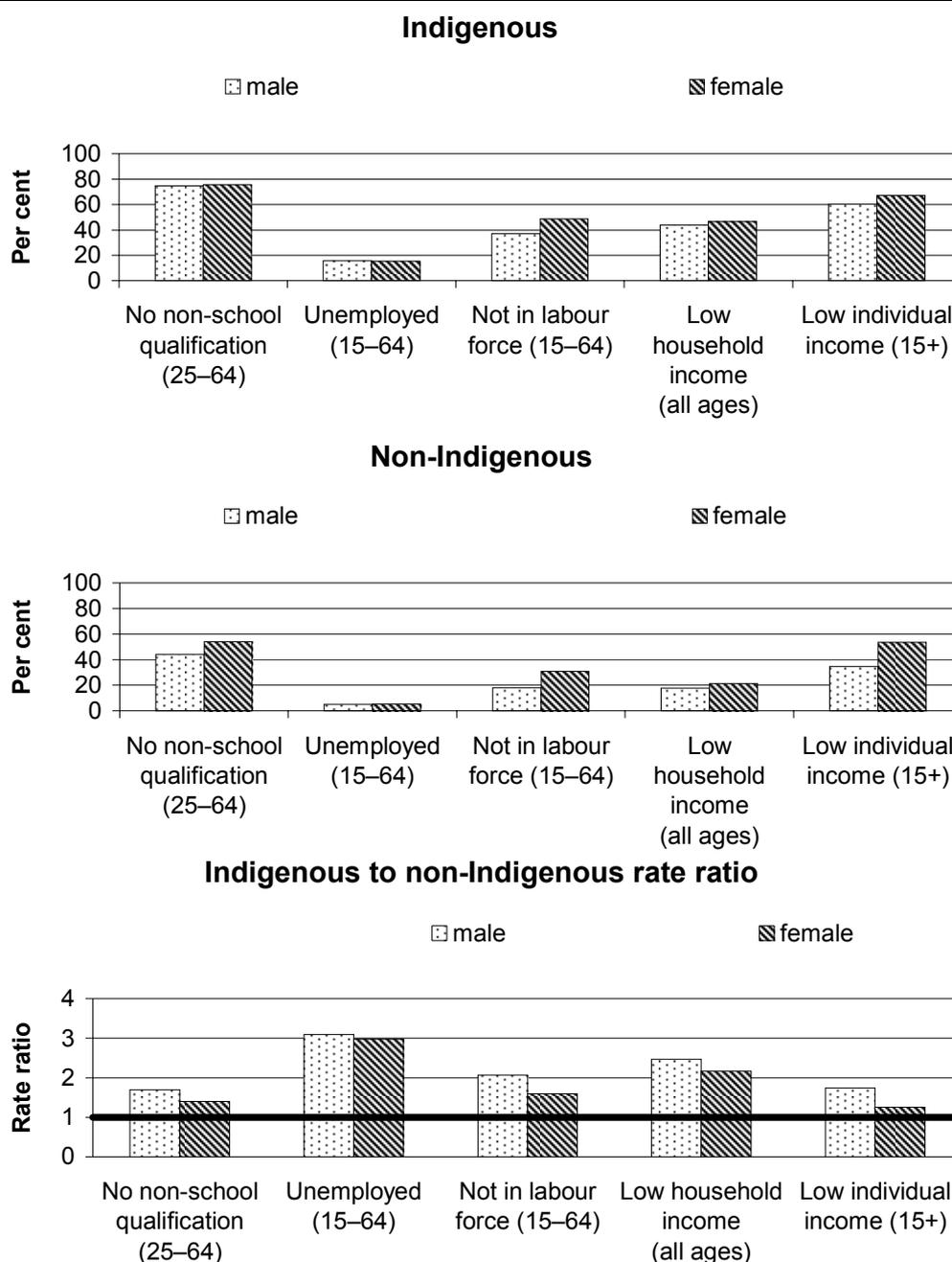
- Indigenous males and females were less likely than non-Indigenous males and females to have non-school qualifications (figure 13.1.2)
- relative Indigenous disadvantage was greater for males than for females (Indigenous males were 1.7 times as likely as non-Indigenous males to have no non-school qualification in 2006, compared to 1.6 times as likely in 2001) (figure 13.1.2 and table 13A.1.2)
- for both Indigenous and non-Indigenous people, females were less likely to have non-school qualifications than males. However, the gap between males and females was much greater for non-Indigenous people (figure 13.1.2).

Labour force participation and unemployment rates

In 2006, for those aged 15–64 years:

- Indigenous people of both sexes were much less likely to be in the labour force (figure 13.1.2)
- relative Indigenous disadvantage was greater for males than for females (rate ratios of 2.1 and 1.6, respectively) (figure 13.1.2).
- Indigenous people of both sexes were much more likely to be unemployed than non-Indigenous people (figure 13.1.2)
- the relative gap between Indigenous and non-Indigenous people was similar for males and females (in 2006, Indigenous males were 3.1 times as likely to be unemployed and Indigenous females were 3.0 times as likely to be unemployed, the corresponding 2001 ratios were 2.8 and 2.7) (figure 13.1.2 and table 13A.1.4).

Figure 13.1.2 **Relative disadvantage, by Indigenous status and sex, 2006^{a, b, c, d}**



^a Data for no non-school qualification for people aged 15–24 years are not included because many people aged 15–24 years are still attending school or obtaining a non-school qualification. Non-school qualifications include: 'Certificate', 'Advanced diploma/diploma', 'Bachelor degree', 'Graduate diploma/graduate certificate' and 'Postgraduate degree'. ^b No non-school qualification includes: 'Level of education inadequately described', 'Level of education not stated', and 'Not applicable' (people with no qualifications, still studying for a first qualification, and qualifications out of scope of this classification). ^c Low equivalised household income includes people who are in households in the lowest quintile (<\$315). ^d Low individual income includes people who have negative or nil income and people who have an income of less than \$400 per week.

Source: ABS (unpublished) derived from the 2006 Census of Population and Housing; tables 13A.1.16; 13A.1.18; 13A.1.20; 13A.1.22; and 13A.1.24.

Low income

In 2006:

- Indigenous males and females had lower equivalised household incomes and lower individual incomes than non-Indigenous males and females, respectively (figure 13.1.2)
- for both the Indigenous and non-Indigenous populations females were more likely to have low equivalised household income (figure 13.1.2)
- for both Indigenous and non-Indigenous people aged 15 years and above females were more likely to have low individual incomes (figure 13.1.2).

13.1.3 Differences by remoteness area

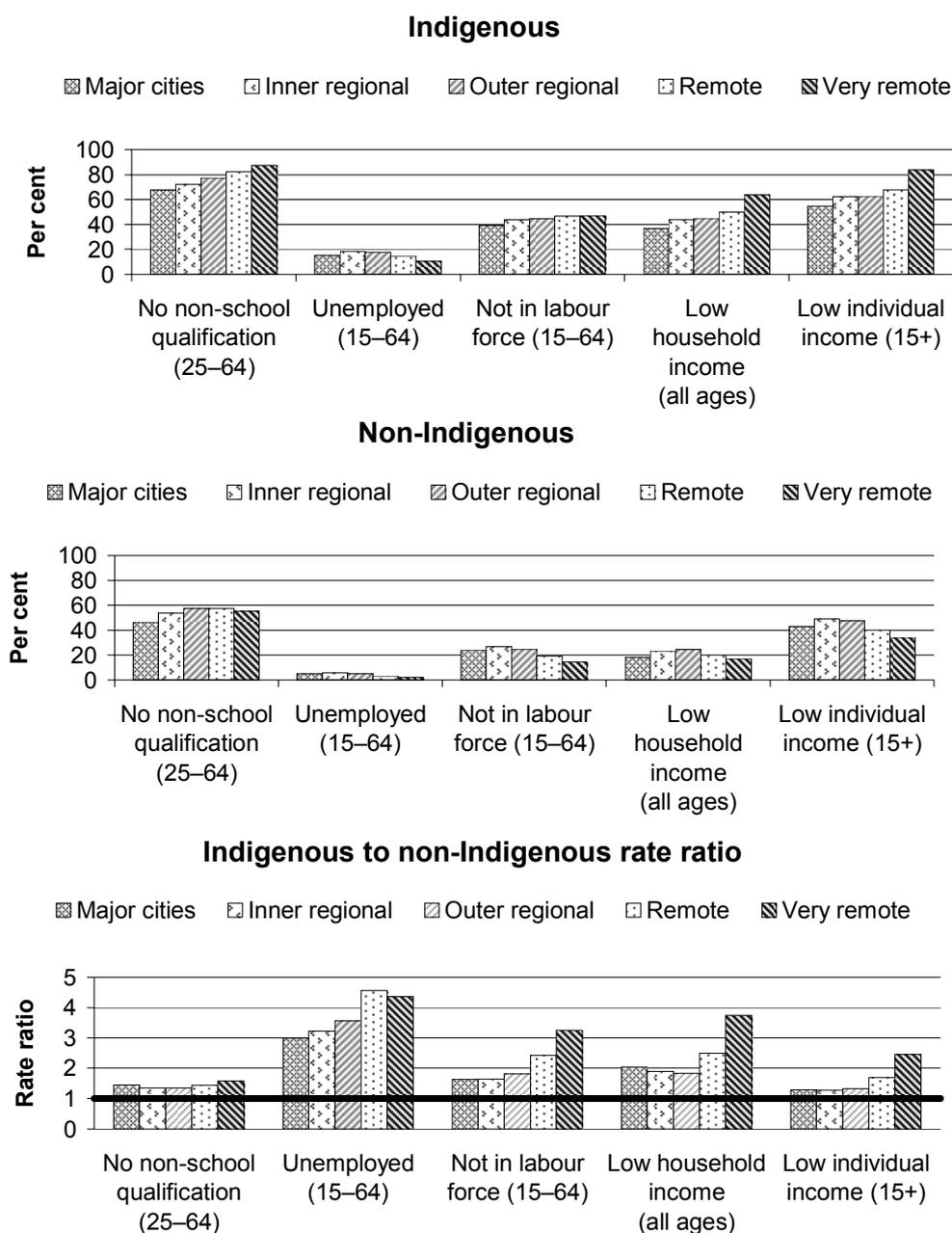
Figure 13.1.3 shows outcomes for Indigenous and non-Indigenous people by remoteness areas: major cities, inner regional, outer regional, remote, and very remote. Where the characteristics of people in major cities, inner regional and outer regional areas are similar, they may be collectively described as the characteristics of people in ‘non-remote’ areas. Similarly, where the characteristics of people in remote and very remote areas are similar, they may be collectively described as the characteristics of people in ‘remote’ areas.

Non-school qualifications

In 2006, for those aged 25–64 years:

- Indigenous people were less likely than non-Indigenous people to have a non-school qualification in all remoteness areas (figure 13.1.3)
- Indigenous people in more remote areas were less likely to have a non-school qualification (figure 13.1.3)
- relative Indigenous disadvantage was greatest in very remote areas (in 2006, Indigenous people were 1.6 times as likely as non-Indigenous people in very remote areas to have no non-school qualification, the corresponding 2001 figure was 1.5) (figure 13.1.3 and table 13A.1.2)
- for both Indigenous and non-Indigenous people those in major cities were most likely to have non-school qualifications (figure 13.1.3).

Figure 13.1.3 **Relative disadvantage, by Indigenous status and remoteness, 2006^{a, b, c, d}**



a Data for no non-school qualification for people aged 15–24 years are not included because many people aged 15–24 years are still attending school or obtaining a non-school qualification. Non-school qualifications include: 'Certificate', 'Advanced diploma/diploma', 'Bachelor degree', 'Graduate diploma/graduate certificate' and 'Postgraduate degree'. **b** No non-school qualification includes: 'Level of education inadequately described', 'Level of education not stated', and 'Not applicable' (people with no qualifications, still studying for a first qualification, and qualifications out of scope of this classification). **c** Low equivalised household income includes people who are in households in the lowest quintile (<\$315). **d** Low individual income includes people who have negative or nil income and people who have an income of less than \$400 per week.

Source: ABS (unpublished) derived from the 2006 Census of Population and Housing; tables 13A.1.16; 13A.1.18; 13A.1.20; 13A.1.22; and 13A.1.24.

Labour force participation and unemployment rates

In 2006, for those aged 15–64 years:

- for all remoteness areas, Indigenous people were much less likely than non-Indigenous people to be in the labour force (figure 13.1.3)
- relative Indigenous disadvantage was greatest in very remote areas (Indigenous people were 3.2 times less likely to be in the labour force) and lowest in major cities (Indigenous people were 1.6 times less likely to be in the labour force) (figure 13.1.3 and table 13A.1.4)
- Indigenous people in all remoteness areas were much more likely to be unemployed than non-Indigenous people (figure 13.1.3)
- for both Indigenous and non-Indigenous people those in remote and very remote areas were least likely to be unemployed (figure 13.1.3)
- relative Indigenous disadvantage in unemployment was lowest in major cities and highest in remote areas (figure 13.1.3).

Low income

- In 2006, patterns of household and individual income across remoteness areas were very different for the Indigenous and non-Indigenous populations. Indigenous people in remote areas were more likely than those in non-remote areas to have low equivalised household incomes and low individual incomes. In contrast, non-Indigenous people in very remote areas were least likely to have low equivalised household incomes and low individual incomes. These patterns were similar in 2001 and 2006.

13.2 Patterns of multiple disadvantage

This section examines the associations between disadvantage in one dimension and disadvantage in another. For example, to what extent is a low level of educational attainment associated with a high level of unemployment, and do the Indigenous and the non-Indigenous populations follow the same or different patterns?

The approach to measuring associations between proxy measures of the COAG targets and headline indicators and other COAG targets and headline indicators or strategic change indicators is described in box 13.2.1.

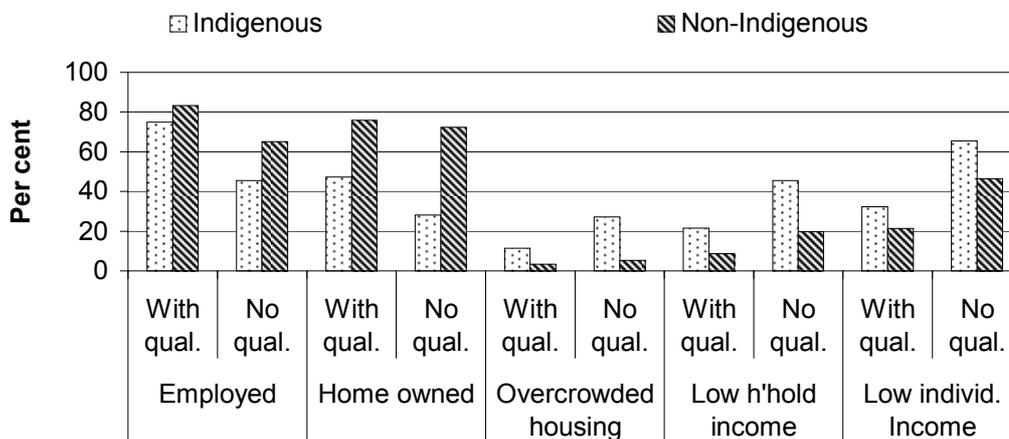
Box 13.2.1 Measuring associations between the proxy measures of the COAG targets and other headline indicators and other COAG targets and headline indicators or strategic areas for action

This analysis is based on proxy measures of the COAG targets and headline indicators defined in box 13.1.1, using data from the ABS 2001 and 2006 Censuses. The analysis:

- classifies the population into various subgroups based on their educational attainment (has a non-school qualification or has no non-school qualification) or labour force status (employed, unemployed or not in the labour force)
- compares the proportions of people in each population subgroup which have other outcomes (for example, are people who are employed more likely than the unemployed to own a home or live in overcrowded housing).

Although Indigenous people experience higher rates of disadvantage for all the proxy measures, the patterns of association between the measures are similar for Indigenous and non-Indigenous people. For both Indigenous and non-Indigenous people, poor educational outcomes, low levels of labour force participation and employment and low household incomes are interrelated (figures 13.2.1–2).

Figure 13.2.1 Proportion of people aged 25–64 years with (and without) non-school qualifications and other selected characteristics, 2006^{a, b, c, d, e, f}



^a Non-school qualifications include: 'Certificate', 'Advanced diploma/diploma', 'Bachelor degree', 'Graduate diploma/graduate certificate' and 'Postgraduate degree'. ^b No non-school qualification includes: 'Level of education inadequately described', 'Level of education not stated', and 'Not applicable' (people with no qualifications, still studying for a first qualification, and qualifications out of scope of this classification). ^c 'Home owned' comprises people who live in a house that is: 'Fully owned', 'Being purchased', or 'Being purchased under a rent/buy scheme' by a member of the household. ^d Housing overcrowding is based on the Canadian National Occupancy Standard. For more information on housing overcrowding see section 9.1. ^e 'Low h'hold income' includes people who live in a household that has an equivalised household income in the lowest quintile (<\$315 per week). ^f Low individual income includes people who have negative or nil income and people who have an income of less than \$400 per week.

Source: ABS (unpublished) derived from the 2006 Census of Population and Housing; tables 13A.2.20; 13A.2.22; 13A.2.24; 13A.2.26; and 13A.2.28.

In 2006, for those aged 25–64 years:

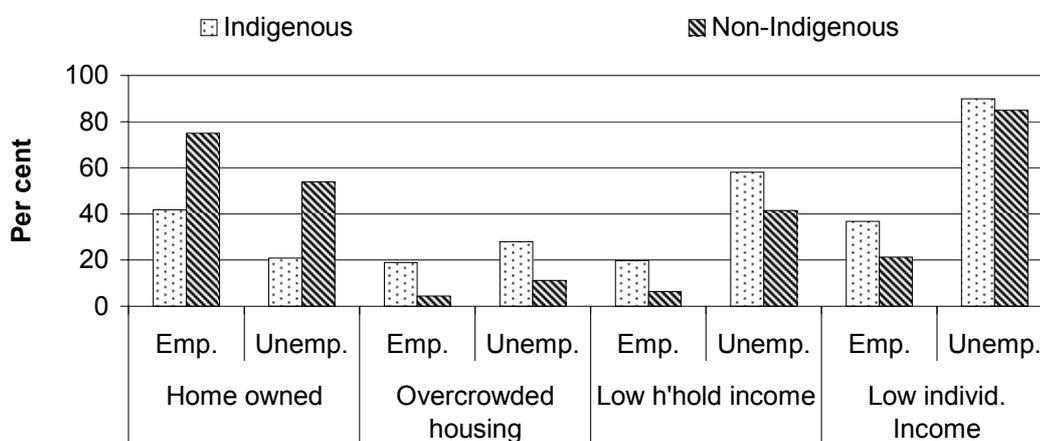
- both Indigenous and non-Indigenous people with a non-school qualification were more likely to be employed. However, a lower proportion of Indigenous than non-Indigenous people with a non-school qualification were employed (74.9 per cent and 83.3 per cent, respectively) (figure 13.2.1)
- 47.3 per cent of Indigenous people with a non-school qualification lived in a home that was owned or being purchased by a member of the household (compared to 28.1 per cent for Indigenous people without a non-school qualification). There was no association between having a non-school qualification and living in a home that was owned or being purchased by a member of the household for non-Indigenous people (figure 13.2.1)
- Indigenous people were much more likely than non-Indigenous people to live in overcrowded housing. Indigenous people with a non-school qualification were much less likely than Indigenous people without a non-school qualification to

live in overcrowded housing (11.4 per cent and 27.2 per cent, respectively) (figure 13.2.1)

- both Indigenous and non-Indigenous people with a non-school qualification were much less likely to live in a household with low equivalised household income. However, a much higher proportion of Indigenous than non-Indigenous people with a non-school qualification lived in a household with a low equivalised household income (21.6 per cent and 8.6 per cent, respectively) (figure 13.2.1)
- both Indigenous and non-Indigenous people with a non-school qualification were much less likely to have a low individual income (less than \$400 a week). However, a much higher proportion of Indigenous than non-Indigenous people with a non-school qualification had low individual incomes (32.2 per cent and 21.4 per cent, respectively) (figure 13.2.1).

These patterns of disadvantage were similar in 2001. Comparable data are available for 2001 in tables 13A.2.2, 13A.2.4, 13A.2.6, 13A.2.8 and 13A.2.10.

Figure 13.2.2 Proportion of people aged 15–64 years who were employed (and unemployed), selected characteristics, 2006 a, b, c, d



a 'Home owned' comprises people who live in a house that is: 'Fully owned', 'Being purchased', or 'Being purchased under a rent/buy scheme' by a member of the household. **b** Housing overcrowding is based on the Canadian National Occupancy Standard. For more information on housing overcrowding see section 9.1. **c** 'Low household income' includes people who live in a household that has an equivalised household income in the lowest quintile (<\$315). **d** Low individual income includes people who have negative or nil income and people who have an income of less than \$400 per week.

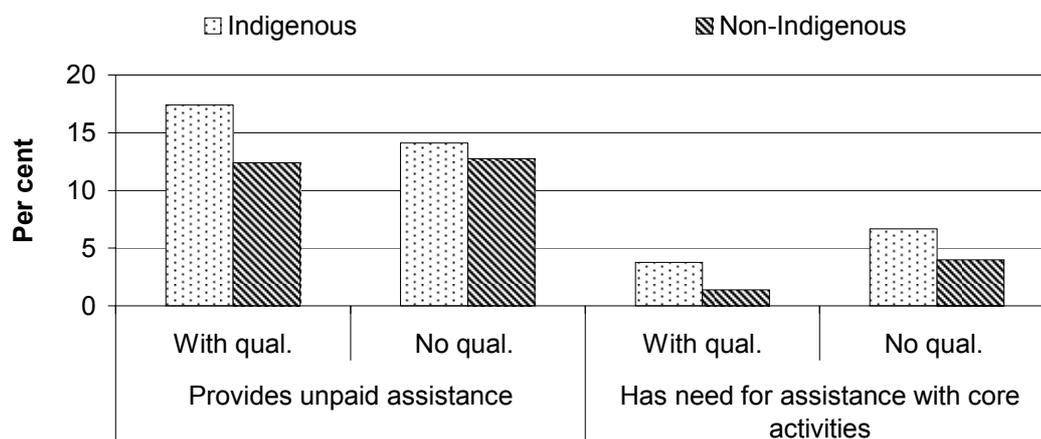
Source: ABS (unpublished) derived from the 2006 Census of Population and Housing; tables 13A.2.34; 13A.2.36; 13A.2.38; and 13A.2.40.

In 2006, for those aged 15–64 years:

- Indigenous and non-Indigenous people who were employed were much more likely to live in a home that was owned or being purchased by a member of the household. However, a lower proportion of Indigenous than non-Indigenous people who were employed lived in a home that was owned or being purchased by a member of the household (41.7 per cent and 75.0 per cent, respectively) (figure 13.2.2)
- Indigenous people who were employed or unemployed were both much more likely than non-Indigenous people with these characteristics to live in overcrowded housing. However, Indigenous people who were employed were less likely than Indigenous people who were unemployed to live in overcrowded housing (18.9 per cent and 28.0 per cent, respectively) (figure 13.2.2)
- Indigenous and non-Indigenous people who were unemployed were much more likely to live in a household with low equivalised household income. However, a higher proportion of Indigenous than non-Indigenous people who were unemployed lived in a household with a low equivalised household income (58.0 per cent and 41.5 per cent, respectively) (figure 13.2.2)
- Indigenous and non-Indigenous people who were unemployed were much more likely than those who were employed to have a low individual income (less than \$400 a week) (89.9 per cent and 84.9 per cent, respectively) (figure 13.2.2).

These patterns of disadvantage were similar in 2001. Comparable data are available for 2001 in tables 13A.2.12, 13A.2.14, 13A.2.16 and 13A.2.18.

Figure 13.2.3 Proportion of people aged 25–64 years with (and without) non-school qualifications who provide unpaid assistance to a person with a disability or have a core activity need for assistance, 2006^a



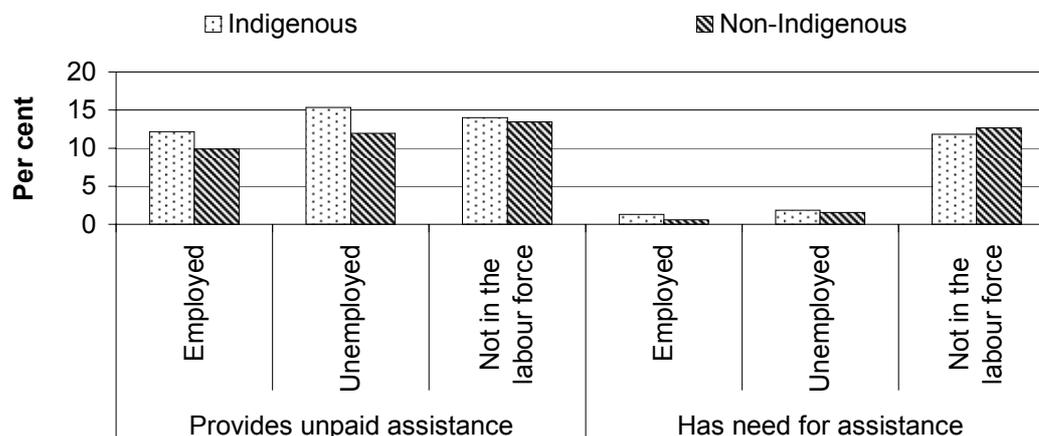
^a People who provided unpaid assistance to another person with disability, long term illness or problems related to old age.

Source: ABS (unpublished) derived from the 2006 Census of Population and Housing; tables 4A.2.30 and 13A.2.32.

In 2006, for those aged 25–64 years:

- Indigenous people with non-school qualifications were more likely than Indigenous people without non-school qualifications to provide unpaid assistance to a person with a disability (17.4 per cent and 14.1 per cent, respectively). Similar proportions of non-Indigenous people with and without non-school qualifications provided assistance to a person with a disability (12.4 per cent and 12.7 per cent, respectively) (figure 13.1.3)
- for both Indigenous and non-Indigenous people those with non-school qualifications were much less likely to have a core activity need for assistance. However Indigenous people with non-school qualifications were much more likely to have a core activity need for assistance than non-Indigenous people with non-school qualifications (3.8 per cent and 1.4 per cent, respectively) (figure 13.1.3).

Figure 13.2.4 Proportion of people aged 15–64 years who were employed (and unemployed) who provide unpaid assistance to a person with a disability or have a core activity need for assistance, 2006^a



^a People who provided unpaid assistance to another person with disability, long term illness or problems related to old age.

Source: ABS (unpublished) derived from the 2006 Census of Population and Housing; tables 13A.2.42; and 13A.2.44:

In 2006, for those aged 15–64 years:

- Indigenous people who were employed, unemployed and not in the labour force were more likely than non-Indigenous people to provide unpaid assistance to a person with a disability (figure 13.1.4)
- for both Indigenous and non-Indigenous people those who were not in the labour force were much more likely to have a core activity need for assistance (11.8 per cent and 12.6 per cent, respectively) (figure 13.1.4).

13.3 Influences on Indigenous labour force participation and unemployment

Using data from the ABS 2006 Census, this section uses a technique called multiple regression analysis to identify which factors have the strongest effects on Indigenous labour force participation and unemployment. The Census provides data on ‘human capital’ factors, such as educational attainment, and other factors that can contribute to people’s labour market outcomes (such as family status, the need for assistance with core activities and geographical location).

The analytical technique used in this section allows modelled factors to be held constant, in order to isolate the effect that just one factor has on labour force participation and unemployment. For details on the methodology see box 13.3.1. For further details, including a full description of the modelled variables, marginal effects, mean values, coefficients and diagnostic tests, see tables 13A.3.1–8.

Box 13.3.1 Methodology

The estimates in this section were produced using a statistical technique that estimates how a selected factor affects either labour force participation or unemployment, holding all other modelled factors constant.

To produce the estimates two steps are required (while this box uses labour force participation as an example, the same steps were used for unemployment).

First, the relationships of all the factors to labour force participation are estimated using a standard statistical technique called regression analysis. In this case, the technique is used to study the relationship between labour force participation and a number of factors that are related to labour force participation.

Second, the parameter estimates from this technique are used to investigate the effect of each factor on labour force participation. The effect of a factor on participation is estimated differently for two different types of factors:

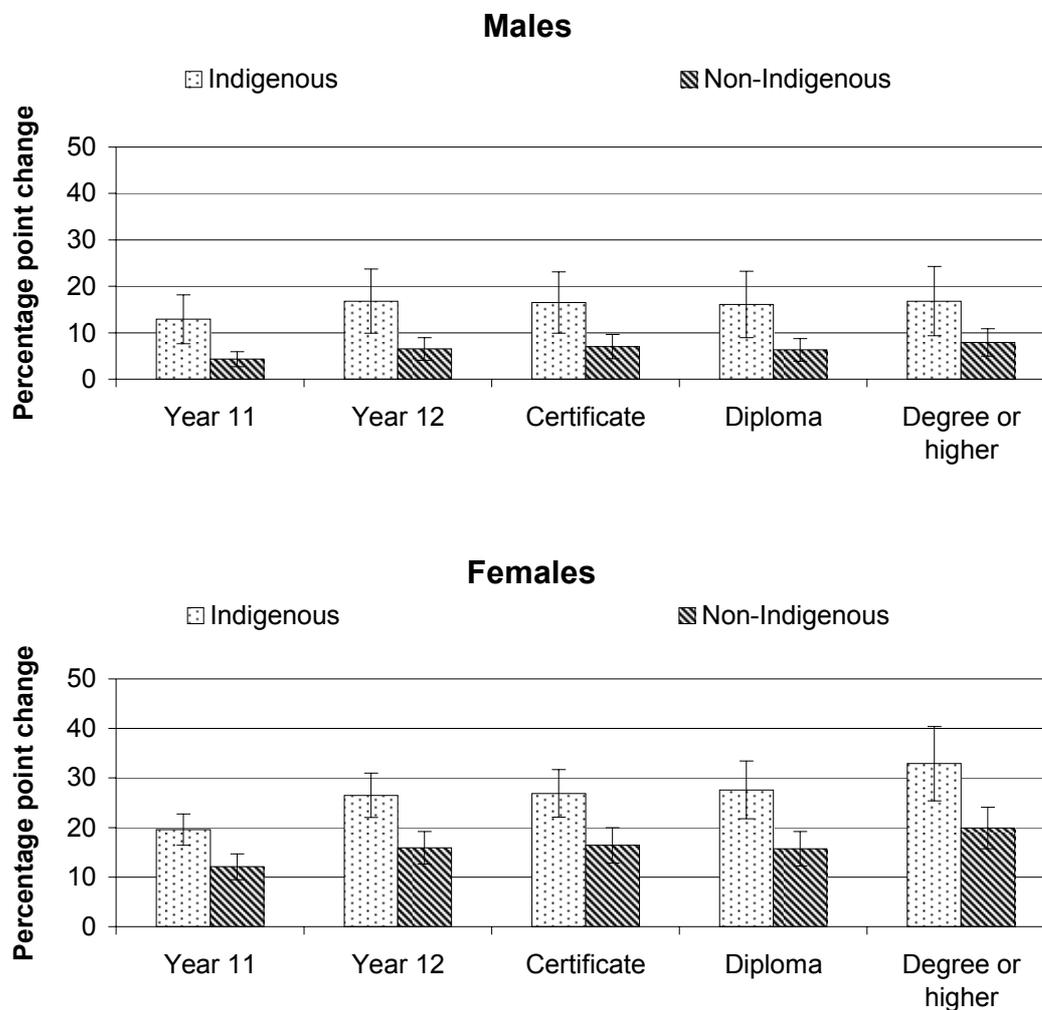
- factors that have only two outcomes, for example, being married or not married (called ‘binary outcomes’). The effect of being married on labour force participation is the change in participation rate expected if a person changes from being unmarried to married, holding other factors constant
- factors that have a range of outcomes, for example, age. The effect of factors like age is the change in the participation rate that would be expected if a person was one year older or younger than the average age.

One issue that often arises in studies of Indigenous labour market outcomes is the small sample size that can cause estimates to be unreliable. To overcome this limitation, all 210 000 Indigenous people of working age (those aged 15–64 years), who completed the 2006 Census were included in the study. One in ten (1.2 million) non-Indigenous people of working age were randomly selected for comparative analysis (Productivity Commission, unpublished).

Labour force participation

Labour force participation rates are calculated as the number of people aged 15 to 64 years who are either employed or actively looking for work (the labour force), divided by the population in that age group. Figure 13.3.1 and table 13.3.1 present data on the associations between a number of factors and labour force participation.

Figure 13.3.1 Marginal effect of educational attainment (relative to year 8 or lower) on labour force participation, people aged 15–64 years, 2006 (percentage point change)^{a, b, c}



^a Percentage point change in participation if a person's highest level of educational attainment were to increase from year 8 or lower. ^b All variables are binary variables. ^c The bars attached to each estimate indicate the 95 per cent confidence interval of the estimate. The standard errors of the estimates are provided in table 13.3.1.

Source: Productivity Commission estimates; table 13A.3.1.

It is generally agreed that completing year 12 and/or having a non-school qualification improves labour market outcomes. Therefore, it would be expected that people with higher educational attainment would be more likely to be in the labour force. This analysis examines the effect of people's highest level of education attainment on labour force participation, relative to people whose highest level of educational attainment was year 8 or below.

As expected, higher education was associated with increased labour force participation. The effect was greater for Indigenous people than for non-Indigenous people, and peaked at year 12 for Indigenous males (although there were still benefits from even higher levels of education) and at degree or higher level for Indigenous females. In 2006, holding other modelled factors constant (a full list of modelled factors are included in table 13A.3.1), relative to people whose highest level of educational attainment was year 8 or below:

- Indigenous males whose highest level of educational attainment was year 12 were 16.8 percentage points more likely to be in the labour force, compared to 6.5 percentage points for non-Indigenous males (figure 13.3.1)
- Indigenous females whose highest level of educational attainment was year 12 were 26.5 percentage points more likely to be in a labour force, compared to 15.9 percentage points for non-Indigenous females (figure 13.3.1).

The subject area studied at post-school level can also influence labour market outcomes. For this analysis, one subject area must be chosen as the ‘base case’ in order to compare the effect of subject areas on labour market incomes. The food, hospitality and personal services subject area was chosen as the base case. In 2006, holding other factors constant, relative to people who studied food hospitality and personal services subject areas:

- Indigenous males who studied education subject areas had the greatest increase in labour force participation (8.0 percentage points), and there were also improvements for those who studied health (7.0 percentage points), management and commerce (7.6 percentage points) and society and culture (4.7 percentage points) (table 13A.3.1)
- Indigenous females who studied education subject areas had the greatest increase in labour force participation (14.4 percentage points), and there were also improvements for those who studied health (11.0 percentage points), management and commerce (9.8 percentage points) and society and culture (6.5 percentage points) (table 13A.3.1).

For non-Indigenous people, estimates of the effects of subject area on labour force participation, holding other factors constant, were much smaller than for Indigenous people (table 13A.3.1).

Table 13.3.1 Marginal effects of selected other factors on labour market participation, people aged 15–64 years, 2006 (percentage point change)^{a, b}

	Unit	Indigenous		Non-Indigenous	
		Male	Female	Male	Female
Personal and family characteristics					
Children under 5 in family	Binary	-3.0***	-20.4***	-1.1**	-18.5***
Income of other family members	\$'000	6.5***	9.3***	1.4***	1.2***
Core assistance needed	Binary	-55.1***	-43.3***	-58.3***	-58.8***
Voluntary work	Binary	7.2***	8.8***	0.9***	-0.7***
Relationship status					
Married	Binary	12.0***	0.7	9.6***	-6.7***
Defacto	Binary	9.4***	-1.4**	4.8***	-5.0***
Single parent	Binary	-5.1***	-4.2***	-2.5**	0.3
Geographical location					
Remote and very remote	Binary	6.2***	9.7***	1.9***	4.2***

^a The asterisks indicate the degree of certainty of each estimate. *** = significant at 1 per cent level (a 1 in 100 possibility that the result is due to chance); ** = significant at 5 per cent level (a 5 in 100 possibility that the result is due to chance); * = significant at 10 per cent level (a 10 in 100 possibility that the result is due to chance). ^b Standard errors for these estimates are contained in table 13A.3.1.

Source: Productivity Commission estimates; table 13A.3.1.

Table 13.3.1 examines the effect of non-education factors on labour force participation, such as personal and family characteristics, relationship status and geographical location. In 2006, holding other modelled factors constant:

- the likelihood of Indigenous males and females being in the labour force would be 6.5 and 9.3 percentage points higher if the income of other family members were \$1000 higher. The effect was much smaller for non-Indigenous people (table 13.3.1)
- both Indigenous and non-Indigenous females who had children under five were much less likely to be in the labour force. There was a much smaller effect for Indigenous and non-Indigenous males (table 13.3.1)
- both Indigenous and non-Indigenous males who were married, relative to those who were unmarried, were much more likely to be in the labour force. Indigenous females who were married, relative to those who were unmarried, were as likely to be in the labour force. In contrast, non-Indigenous females who were married were less likely to be in the labour force (table 13.3.1)
- Indigenous and non-Indigenous males and females who needed assistance with a core activity were much less likely to be in the labour force (table 13.3.1)
- Indigenous males and females who were single parents were less likely to be in the labour force. The effect was much smaller for non-Indigenous people (table 13.3.1)

- Indigenous males and females who lived in remote or very remote areas were more likely to be in the labour force. However, Indigenous people in remote or very remote areas are much more likely to participate in CDEP. CDEP is discussed in more detail in section 4.6. Non-Indigenous males and females who lived in remote areas were also more likely to be in the labour force, but the effect was much smaller (table 13.3.1).

Unemployment

Unemployment rates are calculated as the number of people aged 15 to 64 years who are actively looking for work, divided by the number of people in the labour force (the employed plus those actively looking for work). Tables 13.3.2 and 13.3.3 present data on the associations between a number of factors and unemployment.

Table 13.3.2 Marginal effect of educational attainment on unemployment, people aged 15–64 years, 2006 (percentage point change)^{a, b, c, d}

	<i>Indigenous</i>		<i>Non-Indigenous</i>	
	<i>Male</i>	<i>Female</i>	<i>Male</i>	<i>Female</i>
Education, highest level completed (relative to year 8 or lower)				
Degree or higher	-8.8***	-9.4**	-2.4***	-2.9***
Diploma	-7.3***	-7.5**	-2.0***	-2.2***
Certificate	-8.2***	-6.8**	-2.0***	-1.9***
Year 12	-7.1***	-7.5**	-1.8***	-2.3***
Year 11	-3.7***	-5.3**	-1.3***	-1.7***
Subject area of post-school study (relative to food, hospitality and personal services)				
Health	ns	-3.0**	-1.3***	-1.9***
Education	ns	-4.2**	-1.4***	-1.3***
Management and commerce	ns	-2.9**	0.1	-0.3**
Society and culture	ns	-0.9	0.4	-0.4**

ns = Not significant in regression. ^a The asterisks indicate the degree of certainty of each estimate. *** = significant at 1 per cent level (a 1 in 100 possibility that the result is due to chance); ** = significant at 5 per cent level (a 5 in 100 possibility that the result is due to chance); * = significant at 10 per cent level (a 10 in 100 possibility that the result is due to chance). ^b All variables are binary variables. ^c The standard errors of the estimates are provided in table 13A.3.2. ^d A minus sign indicates that the unemployment rate has decreased.

Source: Productivity Commission estimates; table 13A.3.2.

It would be expected that people with higher educational attainment would be less likely to be unemployed. This analysis examines the effect of people's highest level of education attainment on unemployment relative to people whose highest level of educational attainment was year 8 or below.

As expected, higher educational attainment was associated with decreases in unemployment. The effect was greater for Indigenous people than for non-Indigenous people, and peaked at degree or higher level. In 2006, holding other modelled factors constant (a full list of modelled factors are contained in table 13A.3.2), relative to people whose highest level of educational attainment was year 8 or below:

- Indigenous males whose highest level of educational attainment was year 12 were 7.1 percentage points less likely to be unemployed. Non-Indigenous males whose highest level of educational attainment was year 12 were 1.8 percentage points less likely to be unemployed (table 13.3.2)
- Indigenous females whose highest level of educational attainment was year 12 were 7.5 percentage points less likely to be unemployed. Non-Indigenous females whose highest level of educational attainment was year 12 were 2.3 percentage points less likely to be unemployed (table 13.3.2).

The subject area studied at post-school level can also influence the likelihood of a person being unemployed. In 2006, holding other factors constant, relative to people who studied food, hospitality and personal services subject areas:

- Indigenous females who studied education subject areas had the greatest decrease in unemployment (4.2 percentage points), and there were also decreases in unemployment for those who studied health (3.0 percentage points), management and commerce (2.9 percentage points) and society and culture (0.9 percentage points) (table 13.3.2).

Estimates of the impact of subject choice on unemployment for Indigenous males were not significant. Estimates of the effects of subject area on unemployment for non-Indigenous people in 2006, were small (table 13.3.2).

Table 13.3.3 Selected other unemployment marginal effects, people aged 15–64 years, 2006 (percentage point change)^{a, b, c}

	Unit	Indigenous		Non-Indigenous	
		Male	Female	Male	Female
Personal and family characteristics					
Income of other family members	\$'000	-3.4***	-4.9**	-0.6***	-0.9***
Relationship status					
Married	Binary	-10.2***	-5.9**	-5.0***	-2.5***
Divorced	Binary	-3.6***	-1.3**	-0.9***	-0.3**
Separated	Binary	-3.3**	-0.9	-1.2***	-0.2
Single parent	Binary	3.3	0.9	1.6	1.0
Defacto relationship	Binary	-4.1***	-2.6**	-2.0***	-1.3***
Geographical location					
Remote and very remote	Binary	-10.0***	-9.0**	-1.0***	-1.4***

^a The asterisks indicate the degree of certainty of each estimate. *** = significant at 1 per cent level (a 1 in 100 possibility that the result is due to chance); ** = significant at 5 per cent level (a 5 in 100 possibility that the result is due to chance); * = significant at 10 per cent level (a 10 in 100 possibility that the result is due to chance). ^b The standard errors of the estimates are provided in table 13A.3.2. ^c A minus sign indicates that the unemployment rate has decreased.

Source: Productivity Commission estimates; table 13.3.2.

Table 13.3.3 examines the effect on unemployment of non-education factors such as personal and family characteristics, relationship status and geographical location. In 2006, holding other modelled factors constant:

- the likelihood of Indigenous males and females being unemployed would be 3.4 and 4.9 percentage points lower if the income of other family members were \$1000 higher. The effect was much smaller for non-Indigenous people (table 13.3.3)
- for Indigenous and non-Indigenous males and females, those who were married were less likely to be unemployed (table 13.3.3)
- Indigenous males who were single parents were more likely to be unemployed. The effect was much smaller for Indigenous females and non-Indigenous males and females (table 13.3.3)
- Indigenous males and females who lived in remote or very remote areas were much less likely to be unemployed, relative to those who lived in non-remote areas. Non-Indigenous males and females who lived in remote or very remote areas were slightly less likely to be unemployed (table 13.3.3). However, Indigenous people in remote or very remote areas are much more likely to participate in CDEP (see section 4.6).

13.4 References

Silburn S., Zubrick S., De Maio J., Shepherd C., Griffin J., Mitrou F., Dalby R., Hayward C. and Pearson G. 2006, *The Western Australian Aboriginal Child Health Survey: Strengthening the Capacity of Aboriginal Children, Families and Communities*, Curtin University of Technology and Telethon Institute for Child Health Research, Perth.

Appendix 1 COAG Communiqués

Extract from COAG Communiqué 3 November 2000

ABORIGINAL RECONCILIATION

The Council thanked the Council for Aboriginal Reconciliation for its extensive work and contribution to the nation over the past nine years.

Reconciliation is an ongoing issue in the life of Australians and a priority issue for all governments that will require a concerted and sustained effort over many years. The Council acknowledged the unique status of Indigenous Australians and the need for recognition, respect and understanding in the wider community.

The Council agreed that many actions are necessary to advance reconciliation, from governments, the private sector, community organisations, Indigenous communities, and the wider community. Governments can make a real difference in the lives of Indigenous people by addressing social and economic disadvantage, including life expectancy, and improving governance and service delivery arrangements with Indigenous people.

Drawing on the lessons of the mixed success of substantial past efforts to address Indigenous disadvantage, the Council committed itself to an approach based on partnerships and shared responsibilities with Indigenous communities, programme flexibility and coordination between government agencies, with a focus on local communities and outcomes. It agreed priority actions in three areas:

- investing in community leadership initiatives;
- reviewing and re-engineering programmes and services to ensure they deliver practical measures that support families, children and young people. In particular, governments agreed to look at measures for tackling family violence, drug and alcohol dependency and other symptoms of community dysfunction; and

-
- forging greater links between the business sector and Indigenous communities to help promote economic independence.

The Ministerial Council on Aboriginal and Torres Strait Islander Affairs will continue its overarching coordination and performance monitoring roles, including its contribution to the work of the Review of Commonwealth/State Service Provision.

Extract from COAG Communiqué 5 April 2002

RECONCILIATION

The Council reaffirmed its continuing commitment to advance reconciliation and address the social and economic disadvantages experienced by many Indigenous Australians.

The Council considered a report on progress in implementing the reconciliation framework agreed by the Council in November 2000 (will be available at www.dpmmc.gov.au/docs/comm_state_index.cfm). The report shows that all governments have made progress in addressing the COAG priorities of leadership, reviewing and re-engineering programmes to assist Indigenous families and promoting Indigenous economic independence. Ministerial councils have also made progress in developing action plans and performance reporting strategies, although this has been slower than expected.

To underpin the commitment to reconciliation and to drive future work, the Council agreed to a trial of a whole-of-governments cooperative approach in up to 10 communities or regions. The aim of these trials will be to improve the way governments interact with each other and with communities to deliver more effective responses to the needs of Indigenous Australians. The lessons learnt from these cooperative approaches will be able to be applied more broadly. This approach will be flexible in order to reflect the needs of specific communities, build on existing work and improve the compatibility of different State, Territory and Commonwealth approaches to achieve better outcomes. The selection of communities and regions will be discussed between the Commonwealth, States and Territories, the communities and the Aboriginal and Torres Strait Islander Commission and be announced by mid 2002.

The Council also agreed to commission the Steering Committee for the Review of Commonwealth/State Service Provision to produce a regular report against key indicators of Indigenous disadvantage. This report will help to measure the impact

of changes to policy settings and service delivery and provide a concrete way to measure the effect of the Council's commitment to reconciliation through a jointly agreed set of indicators.

The Council noted that it would continue to review progress under the reconciliation framework, and that the next detailed report on progress achieved by governments and ministerial councils would be provided to the Council no later than the end of 2003.

Extract from COAG Communiqué 14 July 2006

INDIGENOUS ISSUES

Generational Commitment

COAG agreed that a long-term, generational commitment is needed to overcome Indigenous disadvantage. COAG agreed the importance of significantly closing the gap in outcomes between Indigenous people and other Australians in key areas for action as identified in the *Overcoming Indigenous Disadvantage: Key Indicators Report* (OID) released by COAG in 2003.

COAG's future work will focus on those areas identified for joint action which have the greatest capacity to achieve real benefits for Indigenous Australians in the short and long term.

COAG has agreed to establish a working group to develop a detailed proposal for generational change including specific, practical proposals for reform which reflect the diversity of circumstances in Australia.

The working group will consider how to build clearer links between the OID framework, the National Framework of Principles for Delivering Services to Indigenous Australians, the COAG Reconciliation Framework and the bilateral agreements between the Commonwealth and State and Territory Governments. The working group will report back to COAG by December 2006.

Extract from COAG Communiqué 13 April 2007

INDIGENOUS ISSUES

Indigenous Generational Reform

COAG reaffirmed its commitment to closing the outcomes gap between Indigenous people and other Australians over a generation and resolved that the initial priority for joint action should be on ensuring that young Indigenous children get a good start in life.

COAG requested that the Indigenous Generational Reform Working Group prepare a detailed set of specific, practical proposals for the first stage of cumulative generational reform for consideration by COAG as soon as practicable in December 2007. National initiatives will be supported by additional bi-lateral and jurisdiction specific initiatives as required to improve the life outcomes of young Indigenous Australians and their families.

COAG also agreed that urgent action was required to address data gaps to enable reliable evaluation of progress and transparent national and jurisdictional reporting on outcomes. COAG also agreed to establish a jointly-funded clearing house for reliable evidence and information about best practice and success factors.

Extract from COAG Communiqué 20 December 2007

Indigenous Australia

COAG agreed the 17 year gap in life expectancy between Indigenous and non-Indigenous Australians must be closed.

COAG today agreed to a partnership between all levels of government to work with Indigenous communities to achieve the target of closing the gap on Indigenous disadvantage. COAG committed to:

- closing the life expectancy gap within a generation;
- halving the mortality gap for children under five within a decade; and
- halving the gap in reading, writing and numeracy within a decade.

COAG recognised the pathway to closing the gap is inextricably linked to economic development and improved education outcomes.

COAG also specifically addressed the importance of tackling the debilitating effect of substance and alcohol abuse on Indigenous Australians.

COAG has also agreed that States and Territories will report transparently on the use of their Commonwealth Grants Commission funding which is on the basis of Indigenous need funding for services to Indigenous people.

Working Group on Indigenous Reform

Indicative Forward Work Program From March:

- Identification of duplication and overlap between Commonwealth and States with new framing recommendations on roles and responsibilities.
- Ensuring that new Commonwealth/State agreements in health, schools and housing contain specific targets for Indigenous Australians.
- Reducing alcohol and substance abuse and its impact on families, safety and community wellbeing.
- Addressing passive welfare.
- Identifying further joint reforms and implementation timetables by the end of 2008, including in the following areas:
 - basic protective security from violence for Indigenous parents and children;
 - early childhood development interventions;
 - a safe home environment;
 - access to suitable primary health services;
 - supporting school attendance;
 - employment and business development opportunities; and
 - involving local Indigenous people in the formulation of programs that support them.
- Optimal service delivery for small remote communities.

Extract from COAG Communiqué 26 March 2008

Indigenous Reform

COAG reaffirmed its commitment to close the gap on Indigenous disadvantage and agreed to a new national target for its reform agenda -halving the gap in Indigenous employment outcomes within a decade. COAG agreed on a series of specific actions across health, education, affordable housing and water supply, that will begin to improve the lives of Indigenous Australians, including to provide at least 48,000 dental services to Indigenous people over four years under the new Commonwealth Dental Health Program, targeting the needs of Indigenous Australians through the Transition Care initiative, the elective surgery waiting list reduction plan and the Place to Call Home program for homeless people.

Extract from COAG Communiqué 3 July 2008

Indigenous Reform — Closing the Gap

Leaders agreed to sustained engagement and effort by all governments over the next decade and beyond to achieve the Closing the Gap targets for Indigenous people.

As a first step, COAG agreed in principle to a National Partnership with joint funding of around \$547.2 million over six years to address the needs of Indigenous children in their early years.

The National Partnership is based on evidence that improvements in Indigenous child mortality require better access to antenatal care, teenage reproductive and sexual health services, child and maternal health services and integrated child and family services. Bilateral plans for implementing the reforms will be agreed between each jurisdiction and the Commonwealth for COAG's consideration in October 2008. COAG further agreed to consider in mid 2009 a progress report and advice about the contribution of COAG's broader reform agenda to overcoming Indigenous children's disadvantage. The Commonwealth will continue to explore with the States the role that conditions on benefit payments could play in increasing the take up by vulnerable families, including vulnerable Indigenous families, of early childhood, family support and child and maternal health services.

COAG agreed that the Working Group on Indigenous Reform (WGIR) should continue to develop reform proposals for improving community safety, remote service delivery and Indigenous economic development and active welfare for

consideration in October 2008. In addition, COAG requested the WGIR, in conjunction with other Working Groups, to report to COAG in December 2008 on how COAG's broader reform agenda will deliver an integrated strategy on closing the gap for all Indigenous people.

Extract from COAG Communiqué 2 October 2008

Indigenous Early Childhood Development

In a further demonstration of all governments' commitment to sustained engagement and effort in achieving COAG's Closing the Gap targets for Indigenous people, leaders signed COAG's first National Partnership (NP) covering Indigenous Early Childhood Development.

Through the agreement, the Commonwealth and the States and Territories will work together to improve the early childhood outcomes of Indigenous children by addressing the high levels of disadvantage they currently experience to give them the best start in life. The NP comprises \$564 million of joint funding over six years to address the needs of Indigenous children in their early years. As part of the initiative, 35 Children and Family Centres are to be established across Australia to deliver integrated services that offer early learning, child care and family support programs. The funding will also increase access to ante-natal care, teenage reproductive and sexual health services, and child and maternal health services.

Extract from COAG Communiqué 29 November 2008

Indigenous Reform

COAG has previously agreed to six ambitious targets for closing the gap between Indigenous and non-Indigenous Australians across urban, rural and remote areas:

- to close the gap in life expectancy within a generation;
- to halve the gap in mortality rates for Indigenous children under five within a decade;
- to ensure all Indigenous four years olds in remote communities have access to early childhood education within five years;
- to halve the gap in reading, writing and numeracy achievements for Indigenous children within a decade;

-
- to halve the gap for Indigenous students in year 12 attainment or equivalent attainment rates by 2020; and
 - to halve the gap in employment outcomes between Indigenous and non-Indigenous Australians within a decade.

Since the targets were agreed in December 2007 and March 2008, all governments have been working together to develop fundamental reforms to address these targets. Governments have also acknowledged that this is an extremely significant undertaking that will require substantial investment. COAG has agreed this year to initiatives for Indigenous Australians of \$4.6 billion across early childhood development, health, housing, economic development and remote service delivery.

The NP on Indigenous Early Childhood Development is now joined by a new National Agreement on Indigenous Reform and two new NPs which cover the areas of Economic Development (\$228.8 million — \$172.7 million Commonwealth funding and \$56.2 million State funding over five years) and Remote Service Delivery (\$291.2 million over six years).

Taken together with the Indigenous Health NP and the Remote Indigenous Housing NP, these new agreements represent a fundamental response to COAG's commitment to closing the gap. Sustained improvement in outcomes for Indigenous people can only be achieved by systemic change. Through these agreements, all governments will be held publicly accountable for their performance in improving outcomes in these key areas.

National Indigenous Reform Agreement

COAG agreed to the National Indigenous Reform Agreement (NIRA) which captures the objectives, outcomes, outputs, performance measures and benchmarks that all governments have committed to achieving through their various National Agreements and NPs in order to close the gap in Indigenous disadvantage. The NIRA provides an overarching summary of action being taken against the closing the gap targets as well as the operation of the mainstream national agreements in health, schools, vocational education and training (VET), disability services and housing and several NPs. The NIRA will be a living document, refined over time based on the effectiveness of reforms in closing the gap on Indigenous disadvantage.

Closing the Gap COAG Meeting in 2009

In October 2008, COAG agreed to convene a dedicated meeting in 2009 on closing the gap on Indigenous disadvantage.

COAG has asked for advice on how the NPs and National Agreements will collectively lead to a closing of the gap and what further reforms are needed. In addition to this, COAG has asked for a Regional and Urban Strategy to coordinate the delivery of services to Indigenous Australians and examine the role that private and community sector initiatives in education, employment, health and housing can make to the success of the overall strategy.

COAG noted that it will work to develop a further reform proposal, including benchmarks and indicators for improvements in services and related outputs relevant to family and community safety, for consideration at the Closing the Gap COAG meeting to be held in 2009.

Revised framework of the Overcoming Indigenous Disadvantage Report

In April 2002, COAG commissioned the Productivity Commission's Steering Committee for the Review of Government Service Provision to produce a regular report against key indicators of Indigenous disadvantage, with a focus on areas where governments can make a difference. The resulting Overcoming Indigenous Disadvantage (OID) Report has been published every two years since 2003.

COAG agreed to a new framework for the OID Report that is aligned with the closing the gap targets.

Appendix 2 Implementation of the framework

Jurisdictions' comments

This appendix provides comments by the Australian, State and Territory Governments, summarising the implementation of the framework in each jurisdiction:

- Australian Government
- New South Wales
- Victoria
- Queensland
- Western Australia
- South Australia
- Tasmania
- Australian Capital Territory
- Northern Territory.

Australian Government comments

The Australian Government views closing the gap in Indigenous disadvantage between Indigenous and non-Indigenous Australians as an issue of national importance. All governments have reaffirmed their commitment to Indigenous reform through the Council of Australian Governments (COAG). COAG has agreed to six ambitious targets to improve health and life expectancy and provide better access to educational attainment and employment opportunities:

- to close the gap in life expectancy within a generation
- to halve the gap in mortality rates for Indigenous children under five within a decade
- to ensure all Indigenous four year olds in remote communities have access to early childhood education within five years
- to halve the gap in reading, writing and numeracy achievements for Indigenous children within a decade
- to halve the gap for Indigenous students in year 12 attainment or equivalent attainment rates by 2020
- to halve the gap in employment outcomes between Indigenous and non-Indigenous Australians within a decade.

In agreeing to these targets COAG also recognised that Closing the Gap will require a long-term, generational commitment that sees major effort directed across a range of strategic platforms or ‘building blocks’. The Building Blocks endorsed by COAG are: Early Childhood; Schooling; Health; Economic Participation; Healthy Homes; Safe Communities; and Governance and Leadership. The OID’s areas for strategic action are closely aligned with the COAG targets and building blocks.

The targets and building blocks are brought together in the National Indigenous Reform Agreement (NIRA) which sits under the Intergovernmental Agreement (IGA) on Federal Financial Relations. It sets out the objectives, outcomes, outputs, performance indicators, and performance benchmarks which will be used by the COAG Reform Council (CRC) to assess progress in closing the gap in Indigenous disadvantage.

COAG has committed to a number of Indigenous specific National Partnerships (NPs) covering Indigenous Early Childhood Development, Remote Indigenous Housing, Closing the Gap on Indigenous Health Outcomes, Indigenous Economic

Participation and Indigenous Remote Service Delivery. Other NPs (such as Early Childhood Education, and Low Socio-Economic Status School Communities and Smarter Schools), will also play a major role in contributing to meeting the Closing the Gap targets.

The NIRA will ensure that all relevant information on implementation of these reforms is publicly available, so governments can be held accountable for their decisions in relation to meeting Indigenous needs.

As part of the Remote Service Delivery NP a Coordinator-General will be appointed, responsible for the implementation of major reforms in remote housing, infrastructure and employment in remote communities. The Coordinator-General will have authority to coordinate across agencies, to cut through bureaucratic blockages and red tape, and to make sure services for Indigenous Australians are delivered effectively.

The Prime Minister will report annually to Parliament on progress in reducing the disadvantage faced by Indigenous Australians. The first report was delivered on 26 February 2009. The report will allow public scrutiny of efforts made by all governments to close the gap in Indigenous disadvantage.

The Australian Government's Secretaries Group on Indigenous Affairs is responsible for high level coordination and policy development on Indigenous affairs; coordination of a strategically focussed single Indigenous budget submission; forward looking strategies to improve service delivery and implementation of programs to achieve the closing the gap targets and oversight of overarching bilateral plans with State and Territory governments.

Australian Government services and programs to Indigenous Australians are coordinated through a network of Indigenous Coordination Centres (ICCs) in urban, regional and remote locations. The ICCs work in partnership with Indigenous communities, families and State and Territory governments to shape service delivery and respond to community priorities.

New South Wales Government comments

The NSW Government continues to build on its efforts to reduce the gap in outcomes between Aboriginal and non-Aboriginal Australians, across the seven strategic areas in the Overcoming Indigenous Disadvantage framework.

Two Ways Together

Two Ways Together, the Aboriginal Affairs Plan 2003–2012, is the NSW Government's 10 year plan to improve outcomes for Aboriginal people and communities. Through Two Ways Together, the NSW Government has established a framework for coordinating whole of government action across the key national strategic change areas. The framework incorporates the Overcoming Indigenous Disadvantage indicators as well as NSW-specific measures.

The NSW State Plan (2006–2016)

The Government's 10 year strategic plan for improved service delivery contains priorities and targets for action that will result in improved outcomes for residents of NSW. Building on commitments made under existing plans such as Two Ways Together, the State Plan's priorities include F1: Improved health, education and social outcomes for Aboriginal people. Targets for this priority are:

- Safe families – support Aboriginal families to live without violence and harm.
- Education – increase the readiness of Aboriginal children at school entry.
- Environmental health – ensure that all Aboriginal communities have equitable access to environmental health systems.
- Economic development – increase Aboriginal employment.
- Community resilience – build community resilience.

Two Ways Together Partnership Communities Program

This program has been established to develop Aboriginal community resilience, which is a key underpinning strategy under State Plan Priority F1. It is designed to give Aboriginal people a strong voice in planning and deciding how their needs and aspirations are met. The program has two main elements: a Framework to underpin Governance arrangements in 40 Partnership Communities across NSW (comprising around 45% of the NSW Aboriginal population), and Guidelines for planning to provide evidence-based, practical service delivery responses and

outcomes that meet local needs and build community strength and wellbeing.

NSW Interagency Plan to Tackle Child Sexual Assault in Aboriginal Communities 2006–2011

This plan is being implemented through State-wide initiatives involving child protection, the legal system and health services. Under the plan's location-based actions, specific communities are being engaged in community-based prevention activities to raise awareness and reduce the incidence of child sexual assault.

Water and sewerage infrastructure

The NSW Government and the NSW Aboriginal Land Council have jointly funded a 25 year initiative to tackle water and sewerage issues in over 60 discrete Aboriginal communities throughout NSW. The initiative includes water disinfection, improvements to water quality, repairs to centralised sewerage systems and sub-surface irrigation, and ongoing inspections and maintenance of pump stations and water treatments plants, maintenance and cleaning of sewer pumps and sewer mains, and collection and testing of water.

Aboriginal Languages Program

Over the past five years, the NSW Government has significantly invested in community-based Aboriginal language projects. These have included the establishment of the NSW Aboriginal Language Research and Resource Centre, language revitalisation within Aboriginal communities, language education in schools and access to language materials in jails and detention centres.

Schools in Partnership Program and Targeted Aboriginal Students Strategy

The Schools in Partnership and associated programs are targeted at schools with significant Aboriginal student populations. These programs focus on improving literacy, numeracy and participation outcomes through school communities forming partnerships with the local Aboriginal Education Consultative Group and the Aboriginal community, establishing targets to improve student performance, and developing Personalised Learning Plans for students with their parents. The NSW Government also funds 312 Aboriginal Education Officer positions in schools to provide extra support for Aboriginal students and their families.

Victorian Government comments

The Victorian Government is committed to improving the quality of life and life expectancy of Indigenous Victorians.

Partnership with Indigenous Victorians is central to the government's strategic directions, in civic representation and engagement and in specific partnerships in key program areas, including human services, justice and education.

The Victorian Government is acutely aware of the gaps in outcomes for Indigenous Victorians. In Indigenous Australia, the Victorian Indigenous communities are experiencing the fastest population growth. This presents significant challenges and opportunities for the community and government.

The primary government articulation of Victorian government policy is through the Victorian Indigenous Affairs Framework (VIAF). The VIAF was adopted in 2006 and provide for concerted attention in closing the gaps in strategic areas such as perinatal outcomes, early childhood development, education and justice.

The VIAF recognises the needs for concerted whole of government attention across priority outcome areas and for reform to be driven from the highest levels. Accordingly the Government uses a Ministerial Taskforce on Aboriginal Affairs chaired by the Deputy Premier to ensure delivery of vital reforms.

The VIAF was developed in advance of the national Indigenous reform directions now adopted by the Council of Australian Governments (COAG). The Victorian Government is committed to implementing the national reforms and meeting the targets adopted through COAG which are consistent with Victoria's existing approach.

The strategic policy framework

The VIAF established the goal, priority outcomes and Victorian strategic areas for action. Outcomes include:

- Safe, healthy and supportive family environments with strong communities and cultural identity.
- Safe, healthy and supportive family environments with strong communities and cultural identity, positive child development and education.

-
- Improved employment and economic sustainability for Indigenous Victorians and their communities.
 - Prevention of violence, crime and self harm.

In the course of 2009 the VIAF is expected to be refined to accommodate additional specific targets adopted through COAG.

Performance framework

Each year the Victorian Government reports to Parliament on progress in implementing the VIAF. This is one of the strategic measures adopted in this State to strengthen public accountability for closing the gaps and meeting the goal of improving quality of life and life expectancy for Indigenous Victorians. Consistent progress is being achieved.

Management Framework

Implementation of the VIAF requires cross departmental action and a concerted whole of government management framework. The Government uses the Ministerial Taskforce on Aboriginal Affairs to provide the required policy leadership. The Taskforce is supported by the Secretaries Group for Aboriginal Affairs that drives cross departmental coordination.

Partnership with Indigenous Victorians is the cornerstone of progress

Sustained improvements in reducing Indigenous disadvantage are contingent on solid partnerships between governments and Indigenous Victorians.

Partnership commences at the local community level. Across Victoria, 38 Local Indigenous Networks (LINs) are being established involving hundreds of Indigenous Victorians in local priority setting and planning. The LINs link through to the Premier's Aboriginal Affairs Advisory Council. The Council is a key source of advice to government on Indigenous affairs issues and priorities.

There are also significant program and departmental partnership arrangements involving Indigenous community representatives, including Indigenous managed services and their peak organisations. These partnerships are proving vital in improving family safety, justice, community and educational outcomes.

Queensland Government comments

The Queensland Government continues to address Indigenous disadvantage, including the six national Closing the Gap targets.

Queensland has already advanced key Indigenous service delivery reforms across the State including the ongoing implementation of the Alcohol and Cape York Welfare Reforms, including the new Family Responsibilities Commission, along with the investment of over \$200 million in State and Commonwealth funds into new or enhanced services for Indigenous Queenslanders.

The Alcohol Reforms have seen local Indigenous Councils divesting control of canteens and thus breaking the nexus between Council income and the sale of alcohol. Councils are being compensated and additional support services are available in these communities.

The Cape York Welfare Reforms (CYWR) is a collaboration between four communities, the Commonwealth and Queensland Governments, and the Cape York Institute for Policy and Leadership. The reforms will run for four years and aim to restore positive social norms, re-establish local Indigenous authority, and support community and individual engagement in the real economy through the removal of the disincentives that cause dependency cycles.

The Family Responsibilities Commission, a key part of the CYWR, is an independent statutory body based in Cairns, with a legally qualified Commissioner and Local Commissioners — who are respected members from each of the four communities. The Commission aims to restore social norms and rebuild Indigenous authority. by attaching obligations to welfare payments and encouraging individuals to engage in socially responsible standards of behaviour.

Framework for Action

Improving social, health and economic outcomes for Aboriginal and Torres Strait Islander Queenslanders is a key priority and the seven national COAG building blocks have been adopted as the state-wide strategic framework for addressing Indigenous disadvantage, with an additional building block for ‘Land and Culture’ — given the significance of this in Queensland.

Some key strategies and innovative projects include:

- A new Aboriginal and Torres Strait Islander Health Strategy which will also prioritise Indigenous child and maternal health services.
- In partnership with the Australian Government, a network of Indigenous Enterprise Development Officers provide support to Indigenous clients pursuing opportunities in business development.
- In 2008-09, \$90.2 million (including \$25 million under the Rural and Remote Indigenous Housing initiative) will be invested to construct, replace, purchase or upgrade dwellings for Indigenous clients.
- \$2.3 million in 2008-09 to remote communities through the Indigenous Environmental Health Worker Program to deliver community environmental health programs.
- The Former Origin Greats (FOG) Program fosters the participation of community members in sporting activities by using well-known sporting role models.
- The *Aboriginal Land Act 1991* was amended, enabling 99 year private residential lease provisions on *Deed of Grant in Trust* communities.

Performance monitoring and reporting

Queensland continues its strong monitoring and reporting framework, based originally on the OID performance management framework. Since the release of the Partnerships Queensland Baseline Report 2006, Queensland has redeveloped its reporting to align with the new COAG framework. In November 2008, the first annual Queensland Closing the Gap Report: 2007-08 was released, outlining progress against 17 key outcome indicators. Quarterly reporting on 21 discrete Indigenous communities continues to monitor progress in these locations.

Engagement and partnership

The Queensland Government acknowledges that it cannot close the gap by itself. The government works with Aboriginal and Torres Strait Islander individuals and groups (such as the new *Queensland Aboriginal and Torres Strait Islander Advisory Council*), other levels of government, community groups, non-government organisations, the business sector and the wider Queensland community in an effort to close the gap.

Western Australian Government comments

Building on initial investments in its Action Plan in response to the Gordon inquiry into family violence and child abuse (the Gordon Action Plan), Western Australia continued its focus on whole of government initiatives aimed at improving child, family and community safety.

In line with the findings of the evaluation of the Gordon Action Plan undertaken in 2007, additional resources have been allocated for key initiatives found to have made a difference. These include the establishment of Multifunction Police Facilities, Child Protection Workers, the STRONGfamilies program, Aboriginal Support Workers, Community Supervision Agreements, programs for the management of released offenders, Safe Places – Safe People, Victim Support and Child Witness Services, expansion of Aboriginal Sexual Abuse Services and Family Violence Courts.

The evaluation also highlighted the importance of an integrated results-based focus for programs and services aimed at reducing family violence and child abuse. Recognising that achieving results is a long term commitment that requires monitoring of intermediate outcomes, an outcomes pathway linked to the OID framework has been developed.

As an extension of the Gordon Action Plan, the WA Government has implemented the Safer Communities, Safer Children model representing its ongoing commitment to continue its effort in partnerships with Aboriginal people. The model has been implemented in five Indigenous communities in the Kimberley region of Western Australia to coordinate whole of government action to address community issues arising from disclosures of child sexual abuse.

The Safer Communities Safer Children model involves three main phases. The first phase comprises immediate and short-term responses through which evidence is obtained by specialist interviewers, perpetrators are charged and case-managed within the criminal justice system, victims are provided with safety, support and intervention strategies, and community education is provided to raise awareness of legal processes and their implications.

In the second phase the broader community is supported to manage issues that result from the allegations and arrests. This phase involves community healing and involves the establishment of arrangements for effective engagement. It includes provision of child victim support and responses to drug and alcohol and mental health issues; cultural and healing activities; protective behaviours

programs; and alternative dispute resolution.

Phase three is the longer term community building process through which agencies work with communities to accomplish cultural and societal changes needed to ensure the long-term safety and security of children. This phase involves ongoing partnerships to strengthen governance and service functions and includes community development, governance training, establishing structures for community participation, addressing housing and accommodation and public health needs.

The model has been very successful in achieving a rapid and effective response to disclosures by integrating the efforts of key agencies to meet the needs of child victims, their families and communities.

The need to engage Indigenous communities in the development and implementation of solutions to family violence and child abuse has been widely acknowledged and further reinforced in the findings of the evaluation of the Government's Gordon Action Plan. Western Australia's Aboriginal Justice Agreement has established roles for Local Justice Forums, Regional Justice Forums and the Western Australian Aboriginal Justice Congress to facilitate collaboration and negotiations between the Indigenous community and Government on matters relating to the justice system and its impact on Indigenous Western Australians.

The WA Aboriginal Justice Agreement provides a state-wide framework for improving justice-related outcomes for Aboriginal people, guided by a set of agreed principles. The intended long-term outcomes of the WA Aboriginal Justice Agreement are:

- providing safe and sustainable communities
- reducing the number of victims of crime
- reducing the rate of over-representation of Aboriginal people in the criminal justice system.

These outcomes are supported by performance measures closely aligned with the OID framework.

Western Australia's current work towards making Indigenous children, families and communities safer complements the COAG Indigenous reforms in general, and the *Safe Communities* building block in particular.

South Australian Government comments

South Australia's Strategic Plan (SASP) remains the State's peak policy and strategy document. Its 2007 revisions included an increase from two Aboriginal-specific targets to nine. The current targets closely align with the Overcoming Indigenous Disadvantage (OID) framework. They are:

- reduce the gap between Aboriginal and non-Aboriginal unemployment rates each year
- lower the morbidity and mortality rates of Aboriginal South Australians
- resolve 75 per cent of all native title claims by 2014
- Aboriginal cultural studies included in school curriculum by 2014 with involvement of Aboriginal people in design and delivery
- increase the number of Aboriginal South Australians participating in community leadership development programs
- improve the overall wellbeing of Aboriginal South Australians
- reduce overcrowding in Aboriginal households by 10 per cent by 2014
- increase yearly the proportion of Aboriginal children reading at age appropriate levels at the end of Year 1
- increase the participation of Aboriginal people in the South Australian public sector, spread across all classifications and agencies, to 2 per cent by 2010 and maintain or better those levels through to 2014.

Given the major national reform agenda that has been progressed since December 2007, the South Australian Government is now seeking to realign its activities to ensure consistency with the new COAG Aboriginal-specific targets and the initiatives being implemented through National Partnership Agreements.

This alignment process will result in a revised Aboriginal Strategic Plan which will act as a consolidated strategy document bringing together the actions and policy directions of the full range of national and state frameworks, including the SASP, the COAG Indigenous Reform agenda and the OID.

Structural arrangements in place to ensure across-government coordination in this area are being re-examined in light of the national reform agenda and the impact this is having on operations within the South Australian public sector.

Arrangements will also be reviewed with the Australian Government, within the context of negotiations for a new *Overarching Agreement on Indigenous Affairs*, to ensure appropriate lines of communication exist between the two Governments.

Tasmanian Government comments

The Tasmanian Government's commitment to improving the well being of Tasmanian Aborigines is delivered through a mix of programs aimed at addressing both the fundamental causes and symptoms of Indigenous disadvantage with a focus on breaking intergenerational cycles. These programs address key elements of the Overcoming Indigenous Disadvantage framework and include:

Social Inclusion

In March 2008 the Tasmanian Government announced its social inclusion agenda comprising: the appointment of a Social Inclusion Commissioner for Tasmania to lead the Government's social inclusion agenda and be a champion for excluded Tasmanians; and the establishment of a dedicated Social Inclusion Unit to co-ordinate evidence based policy making, whole of government and whole of community responses to complex social issues. The Unit has recently completed statewide consultations for the development of a social inclusion strategy for Tasmania. The strategy will contain indicators and approaches to address Aboriginal disadvantage in Tasmania.

Stolen Generations

The *Stolen Generations of Aboriginal Children Act 2006* became operational on 15 January 2007. The Act enabled the Tasmanian Government to provide ex gratia payments to Aborigines who were forcibly removed from their families as children, due to the direct intervention of previous Government policies and practices. From a total of 151 applications received, 106 met the criteria under the Act and were eligible for payment. Twenty-two of these applicants were children of deceased members of the Stolen Generations. The process of financial reparation was completed in February 2008.

Through this legislation, the Tasmanian Government has taken an important step towards reconciliation with the Aboriginal community. For many applicants the process provided a chance to tell their stories for the first time. For some it was an opportunity to finally understand what happened to them as children. The actions taken by the State Government were echoed by the apology given by the Australian Government on 13 February 2008.

'pakana tunapri' — Cape Barren Island District High School

Cape Barren Island Secondary and Senior Secondary students are achieving educational success without having to leave their families, community or their links with their cultural heritage. This program links the students to teachers in various Senior Secondary Colleges around the state. They also have the benefit of the high school facilities and a support teacher on Cape Barren Island. The attendance rate at the high school is excellent and the students are starting to think about their life pathways and are setting goals towards achieving their ambitions for their futures.

'ningenneh tunapry' Aboriginal Education Programs

The Tasmanian Museum and Art Gallery (TMAG) and the Department of Education entered into a partnership to present a series of cultural awareness workshops by Aboriginal people utilising the *ningenneh tunapry* gallery at the TMAG. A series of school programs and teacher workshops are delivered by TMAG staff and local Indigenous Sharers of Knowledge. The program has been highly successful with programs being fully booked and attended by teachers and students from government, independent and catholic school sector.

Aboriginal Cross Cultural Awareness Courses

Aboriginal Cross Cultural Awareness Courses provide teachers with a historical and contemporary understanding of Tasmanian Aboriginal people and their culture. A number of two day workshops are run over the academic year that gives support to facilitate effective Aboriginal cultural understandings through the curriculum.

Critical Intervention Program

The Critical Intervention program provides for an Aboriginal Senior Social Worker to maintain case management and cross-agency co-ordination of services and support to Aboriginal students whose engagement with education is threatened by social circumstances. These include students held at the Ashley Youth Detention Facility. They are provided with professional referral and cultural support.

Australian Capital Territory Government comments

The ACT Government is committed to ensuring that Aboriginal and Torres Strait Islander people in the ACT have the highest level of support available to close the gap and ease the disadvantage they face compared to non Indigenous residents. Significant investment has been made to address the strategic areas for action.

Childhood Development and Education and Training

The Integrated Aboriginal and Torres Strait Islander People project provides targeted, intensive early intervention support for at-risk Indigenous families through an integrated service delivery model. This cross-government initiative addresses the Strategic Areas of Early Childhood Development and Education and Training by providing coordinated services around families, providing links to early childhood services and facilitating engagement with education. Improvements such as increased school attendances by children are evident.

The Department of Education and Training Aboriginal and Torres Strait Islander Strategic Plan 2006–09 aims to encourage Indigenous students to participate in education to achieve equitable and appropriate educational outcomes. Indigenous programs also aim to increase student understanding and respect for, Aboriginal and Torres Strait Islander cultural perspectives. Specific programs include:

- Koori Preschool program for Indigenous children aged 3 to 5
- personalised learning plans for each Indigenous children to year 6
- the Indigenous Literacy and Numeracy initiative
- mentoring programs for Indigenous students in years 11 and 12
- a school leadership initiative providing professional learning and action research activities for public school principals and deputy principals.

Healthy Lives and Safe and Supportive Communities

Outcomes for Healthy Lives and Safe and Supportive Communities Strategic Areas for Action are being achieved through the implementation of:

- A New Way: The ACT Aboriginal and Torres Strait Islander Health and Wellbeing Plan 2006–2011
- The Cultural Respect Implementation Plan 2006–2009
- The ‘Integrated Indigenous Service Delivery Project’

-
- Development of the Aboriginal and Torres Strait Islander Residential Rehabilitation Service
 - Improving Aboriginal and Torres Strait Islander health data quality.

Economic Participation

The ACT Indigenous Traineeship Program provides an opportunity for young Indigenous people to commence traineeships each year with a guarantee of full time employment with ACT Government. The Program responds to skills shortages by up-skilling a portion of the population under/unemployed and features a mentoring component and cultural awareness training for staff. Eleven trainees completed the pilot program in 2007-08 and are now employed in ACT Departments. The second program commenced in May 2009.

Home Environment

As part of its action plan to improve housing outcomes for Aboriginal and Torres Strait Islanders, Housing and Community Services ACT is achieving positive results against key deliverables by: establishing an Indigenous specific homelessness service, increasing public housing allocations to Indigenous people; sustaining Indigenous public housing tenancies; reducing overcrowding for Indigenous public housing tenants; and increasing the number of Indigenous staff in Housing ACT.

Governance and Leadership

The ACT Government provides funding for the United Ngunnawal Elders Council, which reports to the Minister for Indigenous Affairs on issues relating to ‘connection to land’ and heritage in the ACT. The ACT Government set up the Taskforce on Indigenous Affairs to progress service delivery issues of importance to Indigenous people in the ACT.

In July 2008, seven members of the inaugural ACT Indigenous Elected Body were announced – the first such representative body in Australia. The Indigenous Elected Body provides direct advice to the ACT Minister for Indigenous Affairs on priorities for the expenditure of funds for policies and services aimed at improving the lives of Indigenous people living in the ACT.

Northern Territory Government comments

The Department of the Chief Minister provides whole-of-government strategic policy advice on Indigenous affairs. It works with agencies across government to develop and implement strategic and targeted activities in key areas such as governance, housing and infrastructure, health, education, safer communities and economic development.

Overarching Agreement on Indigenous Affairs

The Overarching Agreement on Indigenous Affairs between the Commonwealth of Australia and the Northern Territory of Australia 2005–2010 represents a commitment by the Northern Territory and Australian governments to work collaboratively to improve government service delivery and achieve better outcomes for Indigenous people in the Northern Territory.

Closing the Gap

On 20 August 2007, the Northern Territory Government launched Closing the Gap of Indigenous Disadvantage — a Generational Plan of Action aimed at addressing the gap in outcomes between Indigenous and non-Indigenous Territorians within a generation. Closing the Gap contains a vision and objectives and sets ambitious but achievable targets at the five, ten and twenty year marks to overcome Indigenous disadvantage. It also identifies priority actions in the next 5 years.

An Operational Group comprised of senior public servants at the Deputy Secretary level are managing the implementation and monitoring of Closing the Gap and report on progress and outcomes to the Chief Executives' Taskforce on Indigenous Affairs. Highlights from the first 12 months of the operation of Closing the Gap report can be found at the following web address: <http://www.action.nt.gov.au/>

Northern Territory Emergency Response

On 21 June 2007 the former Australian Government announced the Northern Territory Emergency Response (NTER) to build the basis for a better future for Aboriginal children. The current Australian Government has continued most NTER measures and on 6 June 2008 announced a comprehensive and independent review. The review's report was released on 13 October 2008.

The Northern Territory Government's submission to the review called for a new governance framework to be developed based on principles of integrated service delivery and cooperation between governments.

The Northern Territory Government will be working with the Australian Government to ensure that NTER investment and activity in the Territory is sustained and enhanced. This will mean working to ensure that investments are aligned with the Closing the Gap agenda of both Governments and other major reform areas such as COAG, CDEP and local government reform.

COAG Working Group on Indigenous Reform (WGIR)

In December 2007, the Council of Australian Governments (COAG) agreed to a new model of cooperation underpinned by more effective working arrangements. Six targets have been agreed to Close the Gap in Indigenous disadvantage – specifically to:

- close the life expectancy gap within a generation
- halve the gap in mortality rates for Indigenous children under five within a decade
- ensure all four year olds in remote communities have access to early childhood education within five years
- halve the gap in reading, writing and numeracy achievements within a decade
- at least halve the gap for Indigenous students in Year 12 attainment or equivalent attainment rates by 2020
- halve the gap in employment outcomes within a decade.

COAG has now agreed to five National Partnerships to specifically address Indigenous disadvantage:

- Indigenous Early Childhood
- Closing the Gap on Indigenous Health Outcomes
- Remote Indigenous Housing
- Indigenous Economic Participation
- Remote Service Delivery.

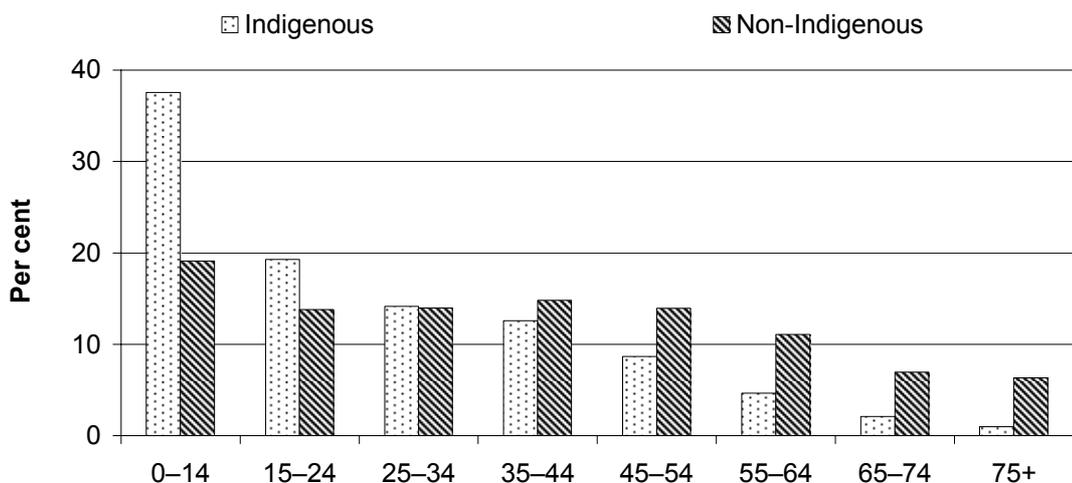
Together, these National Partnerships represent a strong response to COAG's commitment to Close the Gap and will deliver significant outcomes to Indigenous Territorians.

Appendix 3 Indigenous population and language use

This appendix provides contextual data on the Indigenous and non-Indigenous populations to aid interpretation of data elsewhere in the report. It also includes data on language use by Indigenous people.

Indigenous population

Figure A3.1 Proportion of the population in each age category, 2006



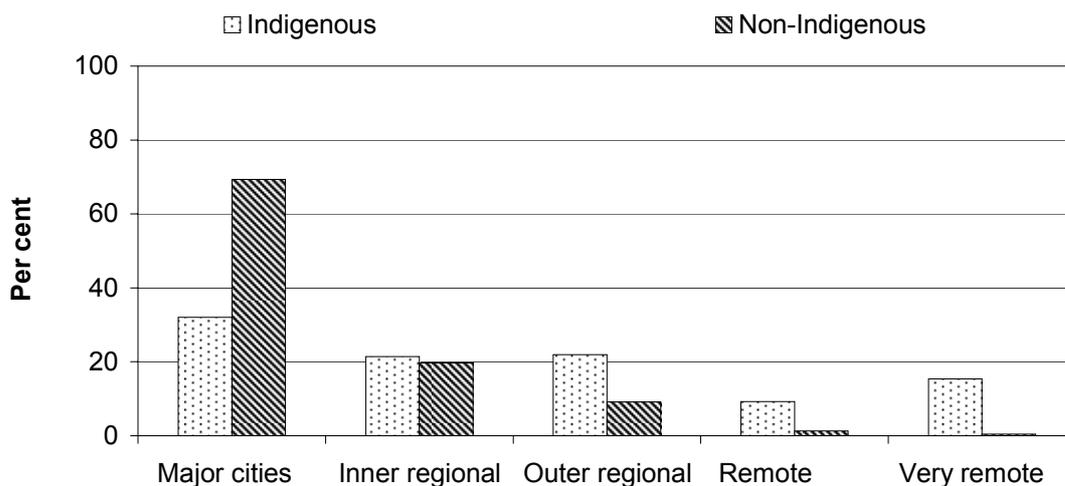
Source: ABS 2008, *Experimental Estimates of Aboriginal and Torres Strait Islander Australians, June 2006*, Cat. no. 3238.0.55.001; table A.1.

According to experimental estimates of the Australian population in 2006:

- the Indigenous population had a significantly different age structure to the non-Indigenous population. The Indigenous population tended to be younger, with 37.6 per cent of the Indigenous population being aged 14 years or under, compared to 19.1 per cent for the non-Indigenous population (figure A3.1)
- the proportion of the Indigenous population over the age of 75 years was 1.0 per cent, compared to 6.3 per cent for the non-Indigenous population (figure A3.1)

- the difference in age structure of these populations was also reflected in their median ages. The median age of the Indigenous population was 21.0 years, compared with a median age of 37.0 years for the non-Indigenous population (table A.1).

Figure A3.2 Proportion of the population in each remoteness area, 2006

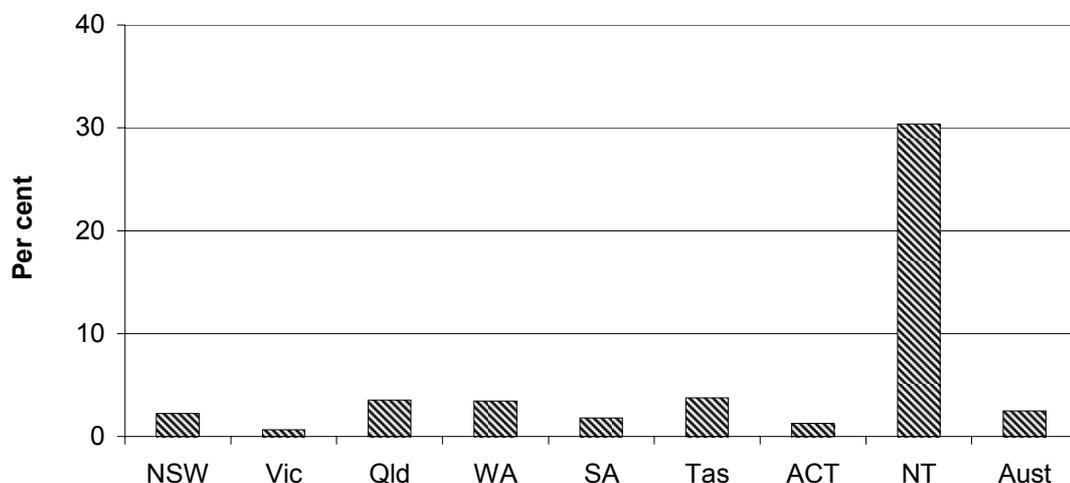


Source: ABS 2008, *Experimental Estimates of Aboriginal and Torres Strait Islander Australians, June 2006*, Cat. no. 3238.0.55.001; table A.2.

In 2006:

- the two populations also differed in their geographic distribution. Both Indigenous and non-Indigenous people lived predominantly in major cities and regional areas (figure A3.2)
- however, a much higher proportion of the Indigenous population lived in remote and very remote areas: 24.6 per cent, compared to 1.8 per cent for non-Indigenous people (figure A3.2).

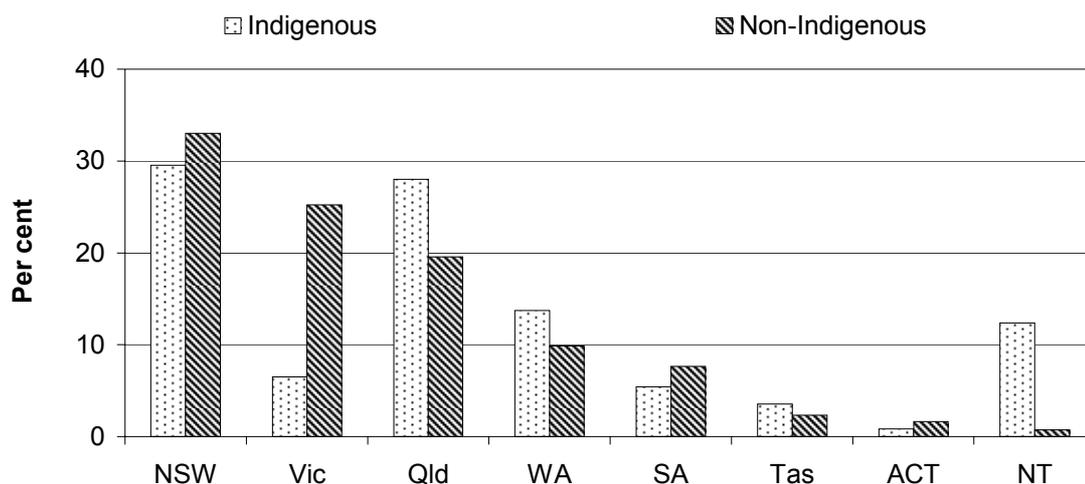
Figure A3.3 Proportion of each State and Territory population who were Indigenous, 2006



Source: ABS 2008, *Experimental Estimates of Aboriginal and Torres Strait Islander Australians, June 2006*, Cat. no. 3238.0.55.001; table A.2.

- In 2006, the proportion of the population who were Indigenous differed across jurisdictions. The NT had the highest proportion of the population who were Indigenous (30.4 per cent) and Victoria had the lowest (0.7 per cent) (figure A3.3).

Figure A3.4 Proportion of the total Indigenous/non-Indigenous population in each State and Territory, 2006



Source: ABS 2008, *Experimental Estimates of Aboriginal and Torres Strait Islander Australians, June 2006*, Cat. no. 3238.0.55.001; table A.2.

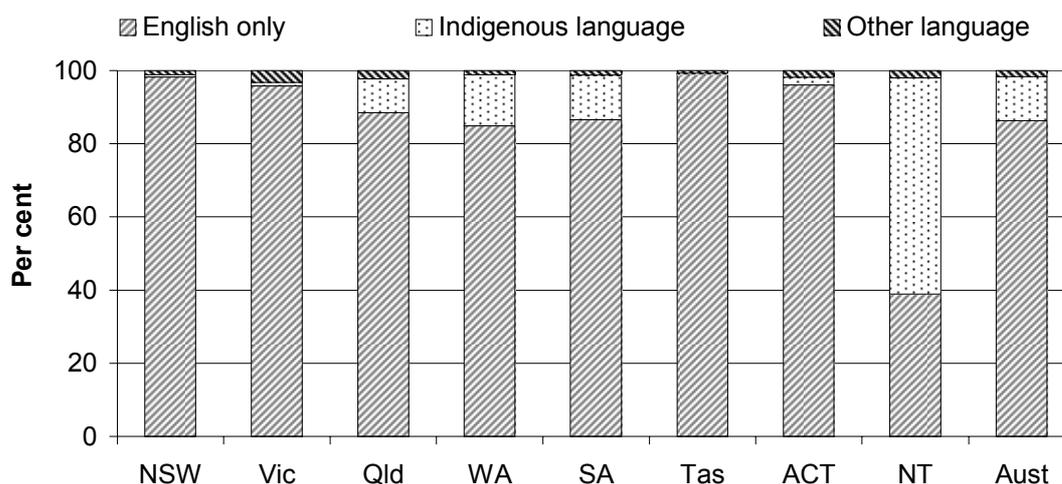
- In 2006, a higher proportion of the Indigenous population lived in NSW than other states (29.5 per cent and 33.0 per cent respectively). Other jurisdictions

with relatively large Indigenous populations were Queensland, WA and the NT (figure A3.4).

Use of Indigenous languages

Information about the use of Indigenous languages is relevant to many areas of the report. Language plays an important role in the continuation of culture and promotion of resilient communities. Therefore, there is a clear relationship between the loss of Indigenous languages and speakers and ‘disadvantage’ — the focus of this report (chapter 2). That said, a lack of proficiency in English can also create barriers for Indigenous people in education, employment and in access to services (section 11.3).

Figure A3.5 Language spoken at home by Indigenous people, 2006^a

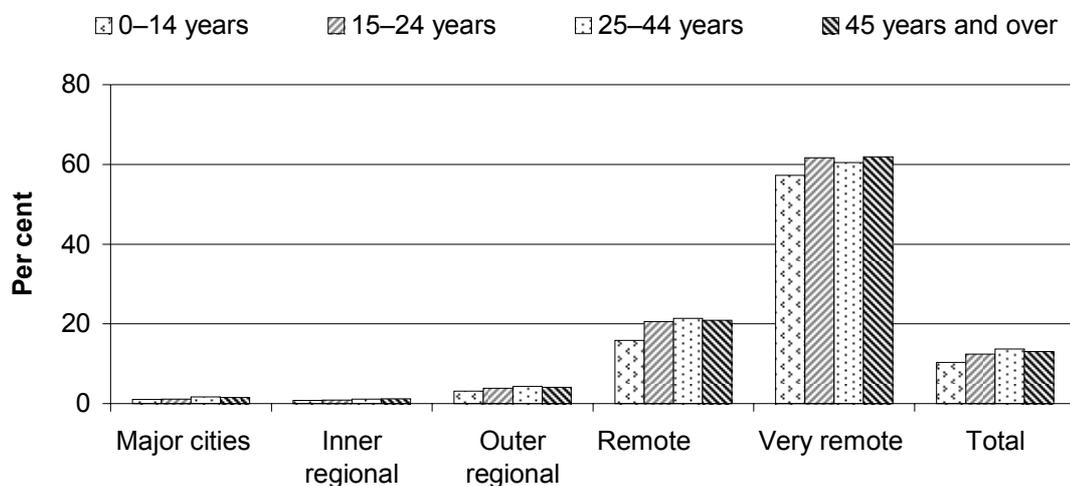


^a Indigenous people who did not state what language they spoke at home are excluded from the analysis.

Source: ABS 2008, *Population Characteristics, Aboriginal and Torres Strait Islander Australians, Australia, 2006*, Cat. no. 4713.0.55.001; table A.4.

- Nationally in 2006, 12.1 per cent of the Indigenous population spoke an Indigenous language at home. This proportion varied significantly across states and territories. The NT had the highest proportion (59.1 per cent) and Tasmania had the lowest (0.2 per cent) (figure A3.5).

Figure A3.6 Indigenous people who spoke an Indigenous language at home, by remoteness area and age, 2006^a

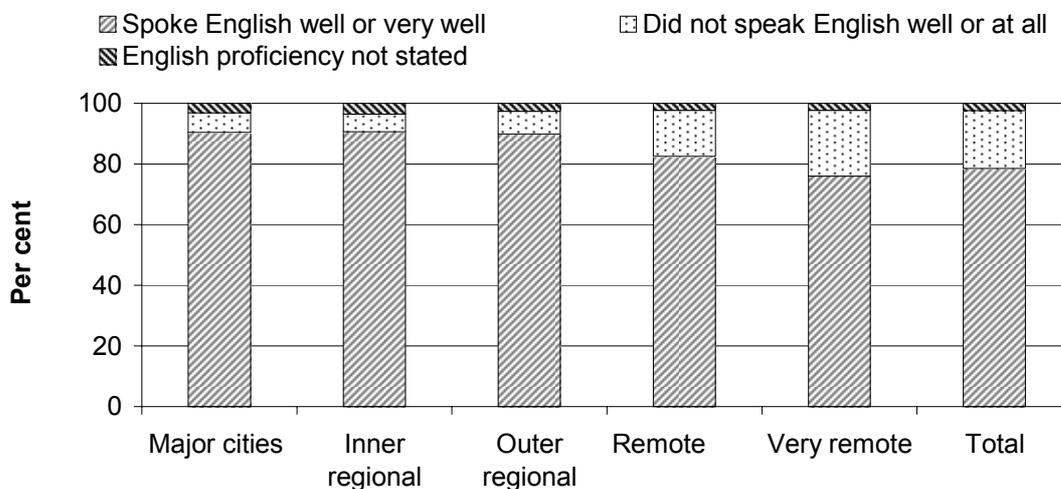


^a Indigenous people who did not state what language they spoke at home are excluded from the analysis.

Source: ABS 2008, *Population Characteristics, Aboriginal and Torres Strait Islander Australians, Australia, 2006*, Cat. no. 4713.0.55.001; table A.5.

- The proportion of Indigenous people who spoke an Indigenous language at home also differed across remoteness areas and age groups. Very remote areas had the highest proportions and inner regional areas had the lowest (figure A3.6). Across all remoteness areas, the age group with the lowest proportion of Indigenous language speakers was children aged 0–14 years.
- Overall, 2.3 per cent of Indigenous people who spoke an Indigenous language at home, also said they did not speak English well, or at all. In very remote areas, the proportion was 13.0 per cent (table A.6).

Figure A3.7 Indigenous people who spoke an Indigenous language at home, by remoteness area and proficiency in English, 2006



Source: ABS 2008, *Population Characteristics, Aboriginal and Torres Strait Islander Australians, Australia, 2006*, Cat. no. 4713.0.55.001; table A.6.

- The majority of the Indigenous population who spoke an Indigenous language at home also spoke English well or very well (78.6 per cent) (figure A3.7).
- People aged 0–24 years represented a significant proportion (69.5 per cent) of all people who spoke an Indigenous language at home, but who did not speak English well or at all (table A.6).

Attachment tables

Attachment tables are identified in references throughout this appendix by an ‘A’ prefix (for example, table A.2 is table 2 in the attachment tables for this appendix). The files containing the attachment tables can be found on the Review web page (www.pc.gov.au/gsp). Users without access to the Internet can contact the Secretariat directly.

Appendix 4 Data limitations

ABS mortality data

Excessively precise analysis based on Indigenous death registrations, Indigenous deaths coverage or projected Indigenous deaths should be avoided.

The registration of deaths is the responsibility of registrars in individual states and territories. It is based on information supplied by a relative, another person acquainted with the deceased, a funeral director, or an official of the institution where the death occurred, and on information about the cause of death supplied by a medical practitioner. State and territory registrars supply this information to the ABS for compilation into aggregate mortality statistics for its publications.

Although it is considered that most Indigenous deaths are registered, not all Indigenous people are identified as such in deaths data (ABS 2008). There are several data collection forms on which people are asked to state whether they are of Indigenous origin, and the results are not always consistent. The likelihood that a person will be identified in administrative collections is influenced by factors including: whether the person or their next of kin is asked the question; who completes the form (for example, a relative, an official or a funeral director); the perception of how the information will be used; education programs about the importance of identifying Indigenous; and emotional reaction to identifying as Indigenous.

Understanding of the extent to which Indigenous deaths are recorded as Indigenous in death registrations data is improving. The ABS carried out research linking 2006 Census records and death registration data (ABS 2008), from which the ABS concluded that was better than had previously been estimated. Research by the Australian Institute of Health and Welfare (AIHW) linking death registrations data to data on deaths in hospitals and aged care facilities will provide additional information on Indigenous mortality.

Changing rates of Indigenous identification in deaths data over time and between states and territories means that time series and geographic comparisons should be interpreted with caution.

Improved information on coverage of Indigenous deaths has enabled the ABS to use a different method to estimate Indigenous life expectancy. More information is included in section 4.1.

Census data

The ABS Census of Population and Housing takes place every 5 years. The Census is rich in information and has the potential for extensive disaggregation, and the 2006 Census is a major data source for this report. The next Census will be conducted in 2011. Because Census data are available less frequently than administrative data and some survey data, other sources need to be used for more frequent reporting.

The 2006 Census includes responses from just over 450 000 people who identified as being of Aboriginal and/or Torres Strait Islander origin, out of an estimated Indigenous population of just over 500 000. Following the Census, the ABS conducted a Post Enumeration Survey to identify people who may have been missed in the Census count. The Post Enumeration Survey also identified people whose Indigenous status was recorded differently in the Census and the Survey. The undercount of Indigenous people was particularly significant in WA (estimated at 25 per cent) and the NT (estimated at 20 per cent). Census data for these jurisdictions still provide a high quality picture of the circumstances of those who were counted, but readers should not assume that the characteristics of those who were counted in the Census are necessarily the same as those who were missed.

Survey data

This report uses data from the ABS 2004-05 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS), the ABS 2004-05 National Health Survey (NHS), the ABS 2002 National Aboriginal and Torres Strait Islander Social Survey (NATSISS), the ABS 1994 National Aboriginal and Torres Strait Islander Survey (NATSIS) and the ABS 2002 General Social Survey (GSS). Data from surveys conducted by other organisations are also included where relevant.

ABS surveys are designed to provide estimates for all indicators at the national level, and for most of the indicators at the state and territory level. Sample size also limits the extent to which data can be disaggregated by different factors such as geography, age and sex, particularly for characteristics that are not widespread across the population. More information on using and interpreting survey data is in ABS (2006). As a guide to readers, survey data in this report are presented in charts with error bars to show 95 per cent confidence intervals and relative standards

errors (RSE) are included in the attachment tables accompanying the report on the Review website.

Hospitalisations data

Hospitalisations data are from the National Hospital Morbidity Database (NHMD), a national collection of hospitalisation records maintained by the Australian Institute of Health and Welfare (AIHW). Health departments in all states and territories provide the AIHW, with information on the characteristics, diagnosis and care of admitted patients in public and private hospitals. Hospitalisations include admissions that result in discharges, transfers, deaths or changes in type or episode of care (defined in the database as hospital separations). A record is included for each hospitalisation, not for each patient, so patients who are admitted more than once in a year have more than one record in the database.

The coverage of hospitalisation data for Indigenous people is significantly improved in the 2009 report compared to the 2007 report. AIHW analyses of the quality of Indigenous identification of hospital admitted patient statistics showed that while the quality is good in some jurisdictions, other jurisdictions it is not sufficiently comprehensive or robust (AIHW 2005). In the 2007 report, data on the hospitalisation of Indigenous people were only available for Queensland, WA, SA and the NT. Data from NSW and Victoria are now of sufficient quality and are included in this report. Data for Tasmania and the ACT are still considered to be of insufficient robustness and are therefore not available for this report. Although Indigenous hospitalisation are now available from most states and territories, there is still scope for improvement in most of them. Therefore, the AIHW is working with all states and territories to continue to improve the quality of Indigenous identification in their hospitalisations data. Changing rates of Indigenous identification in hospitalisation means that time series and geographic comparisons should be interpreted with caution.

Data relating to admitted patients are included from almost all hospitals, including public acute and psychiatric hospitals, private acute and psychiatric hospitals, and private free-standing day hospital facilities.

The AIHW and the data providers jointly validate the morbidity database to ensure data quality. When data are supplied using non-standard definitions or classifications, the AIHW maps them to the National Health Data Dictionary definitions, where possible, in collaboration with the data providers.

Limitations of the data

The following should be used to guide interpretation of the hospitalisations data.

- Although the National Health Data Dictionary definitions form the basis of the database, the actual definitions used may vary among the data providers and from one year to another. In addition, admission practices and the detail of the scope of the data collections may vary among the states and territories and from year to year.
- Each state and territory has a unique demographic structure, and factors such as age and Indigenous status can have an effect on the nature of health care delivery. The frequency of particular procedures, for example, can be affected by the demographic composition of the population.
- Although data on hospitalisations from the NHMD can reflect an aspect of the burden of disease in the community, they do not usually provide measures of the incidence or prevalence of conditions. This is because not all people with a particular condition or degree of illness are treated in hospital and there are multiple admissions for some chronic conditions. Also, the number and pattern of hospitalisations can be affected by differing admission practices, and differing levels and patterns of service provision.
- Analysis of hospital morbidity collections for Indigenous people is complicated by difficulties in estimating both the numbers of Indigenous patients admitted to hospital and the numbers in the overall population. Information about the numbers of Indigenous patients in hospital is limited by the accuracy with which they are identified in hospital records. Problems associated with identification will result in an understatement of morbidity patterns among Indigenous people. Assessments of the level of completeness of Indigenous identification in hospital is dependent on the accuracy with which morbidity collections are provided annually by each jurisdiction to the AIHW and have been explored in detail in AIHW (2005).

Australian Institute of Criminology (AIC) homicide data and other police data

Limitations of the National Homicide Monitoring Program (NHMP) data, collected by the AIC, are discussed below.

- The data are derived from police records, which depend on the police accurately recording the Indigenous status of the victim and offender. In some jurisdictions this involves the police making a subjective assessment based solely on the victim's or offender's appearance, which might lead to errors and

inconsistencies. In others, Indigenous status is determined by police administering a standard question. In a proportion of cases where determination of Indigenous status is based on external appearance, this might not readily identify them as Indigenous. Similarly, not all Indigenous people may choose to identify when asked by police. Hence, results reported from this data source might under represent the true extent of Indigenous homicide in Australia.

- Nevertheless, a 1998-99 study conducted by the ABS on assessing the quality of Indigenous status and racial appearance data collected by NSW police indicated that:

When racial appearance data were compared with the Indigenous status data asked by the police, the data quality of Indigenous status based on racial appearance was fairly good for Aboriginal people, but the data quality for Torres Strait Islanders was poor. (SCRCSSP 2001, p. 382)

In addition to data from the AIC National Homicide Monitoring Program, police data from individual states and territories are included in sections 4.11 (Family and community violence) and 10.5 (Juvenile diversions as a proportion of all juvenile offenders).

References

- ABS (Australian Bureau of Statistics) 2008, *Information Paper: Census Data Enhancement — Indigenous Mortality Quality Study, Australia*, Cat. no. 4723.0, Canberra.
- 2006, *National Aboriginal and Torres Strait Islander Health Survey: Users' Guide*, Cat. no. 4715.0, Canberra.
- AIHW (Australian Institute of Health and Welfare) 2005, *Improving the Quality of Indigenous Identification in Hospital Separations Data*, Cat. no. HSE 101, Canberra.
- SCRCSSP (Steering Committee for the Review of Commonwealth/State Service Provision) 2001, *Report on Government Services 2001*, Productivity Commission, Canberra.

Appendix 5 Measures and data sources

Introduction

The following table summarises the major measures and data sources used to report against the indicators in this report. Unless otherwise noted, all measures are:

- disaggregated by Indigenous status (Indigenous/non-Indigenous or Indigenous/total population)
- reported at a national (Australian total) level.

Many rates were calculated by combining data from various sources. Depending on the time period required, Indigenous population figures have been sourced from:

- data from the ABS Census of Population and Housing are compared to the number of Indigenous people identified in the Census (this provides internal consistency as both the numerator and the denominator are from the same source)
- data as at June 2006 are compared to the ABS estimate of the Indigenous population as at June 2006 (ABS 2007). This estimate is based on adjusted 2006 Census data
- data for other years generally are compared to the ABS 'low series' experimental projections of the Indigenous population for those years (ABS 2004). These projections are based on adjusted 2001 Census data and a set of assumptions about likely trends in Indigenous population growth (box 2.6.1). Indigenous population estimates and projections based on the 2006 Census are expected to be released later in 2009.

References to data sources are summarised in the table. Many data sources are referenced as 'unpublished'. This means that the particular data items cited in the Overcoming Indigenous Disadvantage report are not included in a standard publication but have been made available on request by the data providers.

A list of acronyms and full references for data sources are provided at the end of the appendix.

Indicator	Measure	Data source
COAG targets		
4.1 Life expectancy	Estimated life expectancies at birth, 2005–2007, by sex, (Australia, NSW, Qld, WA, NT)	ABS (2009), <i>Experimental Life Tables for Aboriginal and Torres Strait Islander Australians, Australia, 2005–2007</i>
	Age specific death rates, 2005–2007, by sex, (NSW/Qld, WA/SA/NT)	ABS (2008) <i>Deaths Australia</i>
	Median age at death, 2000 to 2007, by sex, (NSW, Qld, WA, SA, NT)	ABS (2008) <i>Deaths Australia</i>
	All causes mortality, age standardised, 2002–2006, (Qld, WA, SA, NT)	AIHW (2009), <i>Aboriginal and Torres Strait Islander Health Performance Framework 2008 Report: Detailed Analyses</i>
	Causes of death, age standardised, 2002–2006, (Qld, WA, SA, NT)	AIHW (2009), <i>Aboriginal and Torres Strait Islander Health Performance Framework 2008 Report: Detailed Analyses</i>
4.2 Young child mortality	Perinatal mortality, 1997–99 to 2003–05, (NSW, Qld, WA, SA, NT)	ABS (unpublished), <i>Deaths Australia</i>
	Infant mortality, 1997–99 to 2005–07, (NSW, Qld, WA, SA, NT)	ABS (2008), <i>Deaths Australia</i>
	Child mortality, children aged 1–4 years, 1997–99 to 2005–07, (NSW/Qld, WA/SA/NT)	ABS, <i>Deaths Australia</i> (unpublished)
	Child mortality, children aged 0–4 years, 1997–99 to 2005–07, (NSW/Qld, WA/SA/NT)	ABS, <i>Deaths Australia</i> (unpublished)

Indicator	Measure	Data source
4.2 Young child mortality (cont.)	Perinatal mortality leading causes of death, 2001–2005, (Qld/WA/SA/NT)	AIHW (2009), <i>Aboriginal and Torres Strait Islander Health Performance Framework 2008 Report: Detailed Analyses</i>
	Infant mortality leading causes of death 2002–2006, (Qld/WA/SA/NT)	AIHW (2009), <i>Aboriginal and Torres Strait Islander Health Performance Framework 2008 Report: Detailed Analyses</i>
	Child mortality, children aged 0–4 years, leading causes of death, 2002–2006, (Qld/WA/SA/NT)	AIHW (2009), <i>Aboriginal and Torres Strait Islander Health Performance Framework 2008 Report: Detailed Analyses</i>
4.3 Early childhood education	Preschool enrolment and participation rates, 2007, children aged 3, 4 and 5 and combined	DEEWR (2008) <i>National Preschool Census 2007</i>
	Preschool participation rates, 2006, children aged 3–5 years, by remoteness area	ABS (unpublished), <i>Census of Population and Housing 2006</i>
	Enrolled children absent from non-government preschools, 2007, by jurisdiction	DEEWR (unpublished), <i>National Preschool Census 2007</i>
	Representation of children aged 0–12 years in State and Territory funded and/or provided early childhood education and care services, 2007–08, by jurisdiction	SCRGSP (2009), <i>Report on Government Services 2009</i>
4.4 Reading, writing and numeracy	Proportion of years 3, 5, 7 and 9 students who achieved the national minimum standard by learning domain, 2008, by jurisdiction	MCEETYA (2008), <i>2008 National Assessment Program – Literacy and Numeracy: Full Report</i>

Indicator	Measure	Data source
4.4 Reading, writing and numeracy (cont.)	Proportion of years 3, 5, 7 and 9 students who achieved the national benchmarks by learning domain, 1999–2007	MCEETYA (various years), <i>National Report on Schooling in Australia</i>
	Proportion of year 3 students in 2003, year 5 students in 2005 and year 7 students in 2007 who achieved the national benchmarks by learning domain	MCEETYA (various years), <i>National Report on Schooling in Australia</i>
	Proportion of years 3, 5, 7 and 9 students achieving the national minimum standard for reading, by Indigenous status and geolocation, 2008	MCEETYA (2008), <i>2008 National Assessment Program – Literacy and Numeracy: Full Report</i>
	Years 3, 5, 7 and 9 Indigenous student participation rates in national assessments, 2008, by learning domain, by jurisdiction	MCEETYA (2008), <i>2008 National Assessment Program – Literacy and Numeracy: Full Report</i>
4.5 Year 12 attainment	Proportion of 19 year olds who have completed year 12 and/or certificate level II, 2001 and 2006, by jurisdiction and remoteness area	ABS (unpublished), <i>Census of Population and Housing 2001 and 2006</i>
	Indigenous year 12 completion rates, 2001–2007, by jurisdiction	DEEWR (unpublished)
	Apparent retention rates of full time secondary students, all schools, from year 7/8 to years 9–12, 2004–2008, by jurisdiction and gender	ABS (2009), <i>Schools Australia 2008</i>
	Apparent retention rates from year 10 to year 12, 2004 to 2008 by jurisdiction	ABS (2009), <i>Schools Australia 2008</i>

Indicator	Measure	Data source
4.6 Employment	Employment to population ratio, 2001 and 2006, by sex, remoteness and jurisdiction	ABS (unpublished) <i>Census of Population and Housing, 2001 and 2006</i>
	Labour force participation, 2001 and 2006, by sex, remoteness, age group and jurisdiction	ABS (unpublished) <i>Census of Population and Housing, 2001 and 2006</i>
	Unemployment, 2001 and 2006, by sex, remoteness, age group, jurisdiction	ABS (unpublished) <i>Census of Population and Housing, 2001 and 2006</i>
	Long term unemployment, 2004-05, by sex, age groups and jurisdiction	ABS (unpublished), <i>National Aboriginal and Torres Strait Islander Health Survey 2004-05</i>
	Long term unemployment, 1994, 2002 and 2004-05, by sex and remoteness	ABS (unpublished), <i>National Aboriginal and Torres Strait Islander Health Survey 1994 and 2004-05</i> ; ABS (unpublished), <i>National Aboriginal and Torres Strait Islander Social Survey 2002</i>
	CDEP participation, 1993-94, 2002-03, 2005-2007	Various sources, ABS (unpublished) <i>Census of Population and Housing 2006</i>
	CDEP participation, 2001 and 2006, by sex, age group and jurisdiction	FaHCSIA (unpublished)
	Remote area CDEP participation, 2006, by sex, age, age group, full time/part time and sector	ABS (unpublished) <i>Census of Population and Housing 2006</i>

Indicator	Measure	Data source
<i>Headline indicators</i>		
4.7 Post secondary education — participation and attainment	TAFE and university participation, 2001 and 2006, by sex, age group, remoteness and jurisdiction	ABS (unpublished) <i>Census of Population and Housing</i> , 2001 and 2006
	Post secondary participation at higher education institutions, by course level, 2002–07, by jurisdiction	DEEWR (unpublished), Higher Education Statistics Collection
	Post secondary attainment by course level, people 20–64 years old, 2001 and 2006, by sex, age group, remoteness and jurisdiction	ABS (unpublished) <i>Census of Population and Housing</i> , 2001 and 2006
	VET national load pass rate, 2004–07, by course level, remoteness and jurisdiction	National 2004–2007 VET provider collections (unpublished)
	Higher education success rate, 2001–07, by sex and jurisdiction	DEEWR (unpublished), Higher Education Statistics Collection
4.8 Disability and chronic disease	People with a need for assistance with core activities, by age group, 2006	ABS (unpublished) <i>Census of Population and Housing 2006</i>
	Labour force participation, employment, unemployment, volunteering and educational attainment of people aged 15–64 who had a need for assistance with core activities, 2006, age standardised, by age group, remoteness and jurisdiction	ABS (unpublished) <i>Census of Population and Housing 2006</i>

Indicator	Measure	Data source
4.8 Disability and chronic disease (cont.)	People aged 15 years and older who provided unpaid care to a person with a disability, long term illness or problems related to old age, 2006, by sex, age group, remoteness, jurisdiction and labour force participation	ABS (unpublished) <i>Census of Population and Housing 2006</i>
	Rates of use of Commonwealth, State and Territory Disability Agreement (CSTDA) funded services by nominal and potential population, by jurisdiction	AIHW (unpublished), CSTDA NMDS
	Hospitalisation rates by principal diagnosis, 2006-07, (NSW, Vic, Qld, WA, SA and public hospitals in NT)	AIHW (unpublished), National Hospital Morbidity Database
	Hospitalisations, by principal diagnosis, July 1998 to June 2000 and July 2004 to June 2006 (NSW, WA, SA and the NT)	AIHW (unpublished), National Hospital Morbidity Database
	Hospitalisation rate ratios of Indigenous to non-Indigenous people, by type of chronic disease, 2004-05 to 2006-07, age standardised, by sex, (NSW, Vic, Qld, WA, SA and public hospitals in the NT), and 2001-02 to 2006-07 (Qld, WA, SA and public hospitals in the NT)	AIHW (unpublished), National Hospital Morbidity Database
	Burden of disease, 2003, age standardised	Vos et al. (2007)

Indicator	Measure	Data source
4.8 Disability and chronic disease (cont.)	Rates of Indigenous people aged 18 years and over with selected long term conditions, by type of personal stressor experienced by self, family or friends, Australia, 2004-05	ABS (unpublished), <i>National Aboriginal and Torres Strait Islander Health Survey 2004-05</i>
4.9 Household and individual income	Median and mean real gross weekly equivalised household income, 2001 and 2006, by remoteness, jurisdiction and quintile	ABS (unpublished) <i>Census of Population and Housing, 2001 and 2006</i>
	Median gross weekly individual income, 2006, by sex, age, income range, remoteness and jurisdiction	ABS (unpublished) <i>Census of Population and Housing, 2006</i>
4.10 Substantiated child abuse and neglect	Child protection substantiations, 1999-2000 to 2007-08, by jurisdiction	AIHW (unpublished), <i>Child Protection Australia</i>
	Child protection substantiations, 2001-02 to 2007-08, by type of abuse or neglect	AIHW (unpublished), <i>Child Protection Australia</i>
	Children on care and protection orders, 1999-2000 to 2007-08	AIHW (unpublished), <i>Child Protection Australia</i>
	Placement in accordance with the Aboriginal Child Placement Principle, 2008	AIHW (unpublished), <i>Child Protection Australia</i>
	Number of diagnoses of chlamydia, gonorrhoea and syphilis in children 2003-07, by age group, (various jurisdictions)	NCHECR (2008), <i>Australian National Notifiable Diseases Surveillance System</i>
	Child sexual assault victims, various years, (NSW, Vic, Qld, WA, NT)	State and Territory Governments (unpublished)

Indicator	Measure	Data source
4.11 Family and community violence	Non-fatal hospitalisations for assault, by relationship of victim to perpetrator, 2004-05 to 2006-07, age standardised, by sex and age group (NSW, Vic, Qld, WA, SA and public hospitals in the NT), and 2001-02 to 2006-07 (Qld, WA, SA and public hospitals in the NT)	AIHW (unpublished), National Hospital Morbidity Database
	Homicide rate, 1999-2000 to 2006-07, by jurisdiction, remoteness, victim and offender relationship of and other key characteristics	AIC (unpublished), National Homicide Monitoring Program
	Reasons for seeking Supported Accommodation Assistance Program services, 2005-06 and 2006-07, by jurisdiction	AIHW SAAP NDCA
	Crime victimisation for selected offences, various years, (NSW, Vic, Qld)	State and Territory Governments (unpublished)
4.12 Imprisonment and juvenile detention	Imprisonment rates, 2000—2008, age standardised, by jurisdiction	ABS (2008), <i>Prisoners in Australia</i>
	Crude imprisonment rates, 2000–2008, by sex and jurisdiction	ABS (unpublished), <i>Prisoners in Australia</i>
	Sentenced prisoners by most serious offence and expected time to serve, 2007 and 2008	ABS (2008), <i>Prisoners in Australia</i>
	Imprisonment rates, 2007 and 2008, by age group	ABS (unpublished), <i>Prisoners in Australia</i>
	Prisoners by legal status, 2007 and 2008	ABS (unpublished), <i>Prisoners in Australia</i>

Indicator	Measure	Data source
4.12 Imprisonment and juvenile detention (cont.)	Juvenile detention rates, people aged 10–17 years, 2001–2007, by sex and jurisdiction	Taylor (2009)
	Juvenile detention rates, 2006 and 2007, by age group and legal status	AIC (unpublished); Taylor (2009)
5 Early child development		
5.1 Maternal health	Use of antenatal services, 2006, (NSW, Qld, SA, NT)	AIHW analysis of State/Territory perinatal collections (unpublished)
	Mothers reporting smoking during pregnancy, 2001–2006, (various jurisdictions)	AIHW (various editions), National Perinatal Statistics Unit reports
	Maternal mortality rates, 1991–1993 to 2003–2005	AIHW (2009) <i>Aboriginal and Torres Strait Islander Health Performance Framework 2008: Detailed Analyses</i>
5.2 Teenage birth rate	Teenage birth rate (females aged 15–19 years), by Indigenous status of mother, age of mother and jurisdiction, 2004–2007	ABS (unpublished), <i>Births, Australia</i>
	Births, by Indigenous status of baby and mother, age of mother and jurisdiction, 1998–2007	ABS (unpublished), <i>Births, Australia</i>
	Births, by Indigenous status of baby and mother, age of mother and remoteness, 1998–2007	ABS (unpublished), <i>Births, Australia</i>
5.3 Birthweight	Birthweight, by live births and fetal deaths, 2004–2006	AIHW (unpublished), National Perinatal Data Collection

Indicator	Measure	Data source
5.4 Early childhood hospitalisations	Hospitalisations per 1000 children aged 0–4 years, 2004-05 to 2006-07, by principal diagnosis, (NSW, Vic, Qld, WA, SA and public hospitals in the NT)	AIHW (unpublished), National Hospital Morbidity Database
5.5 Injury and preventable disease	Potentially preventable hospitalisations for children aged less than 5 years, 2004-05 to 2006-07, (NSW, Vic, Qld, WA, SA, and public hospitals in the NT)	AIHW (unpublished), National Hospital Morbidity Database
	Deaths rates from external causes and preventable diseases for children aged less than five years, 2003–2007	ABS (unpublished), <i>Causes of Death</i>
5.6 Basic skills for life and learning	Indigenous children aged 0–14 years who received a voluntary health check or assessment, 2007-08	Medicare Australia (unpublished)
5.7 Hearing impediments	Hospitalisations where the principal diagnosis was diseases of the ear and mastoid process, 2004-05 to 2006-07, children aged 0–3 years and 4–14 years, (NSW, Vic, Qld, WA, SA and public hospitals in the NT combined)	AIHW (unpublished), National Hospital Morbidity Database
	Hospitalisations where the principal diagnosis was diseases of the ear and mastoid, 2001-02 to 2006-07, children aged 0–3 years and 4–14 years, (Qld, WA, SA and public hospitals in NT combined)	AIHW (unpublished), National Hospital Morbidity Database

Indicator	Measure	Data source
6 Education and training		
6.1 School enrolment and attendance	Student attendance in schools, 2007, by school sector	MCEETYA (2009) <i>National Report on Schooling in Australia</i>
	School participation rate, 2006, by age, sex and jurisdiction	ABS (unpublished), <i>Schools Australia 2006</i>
	School enrolment, 2006–2008, by age, sex and jurisdiction	ABS (unpublished), <i>Schools Australia (various years)</i>
6.2 Teacher quality	No data were available for this report.	
6.3 Indigenous cultural studies	Indigenous employment in schools, 2003–2007, by school sector	DEST (unpublished), IESIP performance reports 2003–2007
6.4 Year 9 attainment	Apparent retention rates of full time secondary students to year 9, 1998–2008, all schools, by sex and jurisdiction	ABS (2009), <i>Schools Australia</i>
	Year 9 or below as highest level of schooling by persons aged 15 years and over (excluding persons still attending secondary school), 2006, by age group, sex, remoteness and jurisdiction	ABS (unpublished), <i>Census of Population and Housing 2006</i>
	OECD Program for International Student Assessment (PISA) 15 year old learning outcomes, 2000, 2003 and 2006	ACER (unpublished)
	Trends in International Mathematics and Science Study (TIMSS) year 8 learning outcomes, 2002–03 and 2006–07	ACER (unpublished)

Indicator	Measure	Data source
6.5 Year 10 attainment	Apparent retention rates of full time secondary students to year 10, 1998–2008, all schools, by sex and jurisdiction	ABS (2009), <i>Schools Australia</i>
	Year 10 or below as highest level of schooling by persons aged 15 years and over (excluding persons still attending secondary school), 2006, by age group, sex, remoteness and jurisdiction	ABS (unpublished), <i>Census of Population and Housing 2006</i>
6.6 Transition from school to work	People aged 15 to 24 years who were not employed and not studying, 2006, by sex, age group, remoteness and jurisdiction	ABS (unpublished), <i>Census of Population and Housing 2006</i>
	People aged 15 to 24 years who were not employed and not studying, 2001, by sex, age group and jurisdiction	ABS (unpublished), <i>Census of Population and Housing 2001</i>
	Provision of unpaid childcare by people age 15 to 24 years who were not studying, 2006, by labour force status and sex	ABS (unpublished), <i>Census of Population and Housing 2006</i>
	Labour force status by educational qualification, people aged 25–64 years, 2001 and 2006, by sex, age group, jurisdiction and remoteness	ABS (unpublished), <i>Census of Population and Housing 2001 and 2006</i>

Indicator	Measure	Data source
7	<i>Healthy lives</i>	
7.1 Access to primary health	Self-assessed health status and use of primary health practitioners, people aged 15 years and over, 2004-05, age standardised, by age group, remoteness, schooling and jurisdiction	ABS (unpublished), National Aboriginal and Torres Strait Islander Health Survey 2004-05 and National Health Survey 2004-05
	Total expenditure on health services, by type of health good or service, 2004-05	AIHW (2008), <i>Expenditures on Health for Aboriginal and Torres Strait Islander Peoples 2004-05</i>
	Expenditure on primary and secondary/tertiary health services, by type of health good or service, 2004 05	AIHW (2008), <i>Expenditures on Health for Aboriginal and Torres Strait Islander Peoples 2004-05</i>
	Vaccination coverage estimates for children, 2007, (NSW, Vic, WA, SA and NT combined)	AIHW (2009) <i>Aboriginal and Torres Strait Islander Health Performance Framework 2008: Detailed Analyses</i>
	Access to health services in discrete Indigenous communities, 2006	ABS (2007), <i>Community Housing and Infrastructure Needs Survey</i>
7.2 Potentially preventable hospitalisations	Hospitalisations for potentially preventable chronic, acute and vaccine preventable conditions, and infections with a predominantly sexual mode of transmission, age standardised, (2004-04 to 2006-07: NSW, Vic, Qld, WA, SA and public hospitals in the NT); (2001-02 to 2006-07: Qld, WA, SA and public hospitals in the NT)	AIHW (unpublished), National Hospital Morbidity Database

Indicator	Measure	Data source
7.2 Potentially preventable hospitalisations (cont.)	Hospitalisations for injury and poisoning and other consequences of external causes, July 2005 to June 2007, age standardised, by sex, (NSW, Vic, Qld, WA, SA, and NT)	AIHW (unpublished), National Hospital Morbidity Database
7.3 Avoidable mortality	Avoidable mortality, people aged 0–74 years, 2002–2006, age standardised, and by age and sex, (Qld, WA, SA, NT)	AIHW (2009), <i>Aboriginal and Torres Strait Islander Health Performance Framework 2008: Detailed Analyses</i>
	Avoidable mortality, by cause of death, people aged 0–74 years, , 2002–2006, (Qld, WA, SA, NT)	AIHW (2009), <i>Aboriginal and Torres Strait Islander Health Performance Framework 2008: Detailed Analyses</i>
	Avoidable mortality rates, people aged 0–74 years, 1998–2006, age-standardised, (Qld, WA, SA, NT)	AIHW (2009), <i>Aboriginal and Torres Strait Islander Health Performance Framework 2008: Detailed Analyses</i>
7.4 Tobacco consumption and harm	Current daily smokers aged 18 years or over, 2004-05, age standardised, by jurisdiction	ABS (unpublished), National Aboriginal and Torres Strait Islander Health Survey 2004-05 and National Health Survey 2004-05
	Hospitalisations related to tobacco use, 2004-05 to 2006-07, age standardised, (NSW, Vic, Qld, WA, SA and public hospitals in the NT)	AIHW (unpublished), National Hospital Morbidity Database
7.5 Obesity and nutrition	Body mass index groups for people aged 18 years and over in non-remote areas, 2004-05, by age group and age standardised	ABS 2004-05 NATSIHS cited in AIHW (2009) <i>Aboriginal and Torres Strait Islander Health Performance Framework 2008: Detailed Analyses</i>

Indicator	Measure	Data source
7.5 Obesity and nutrition (cont.)	Dietary behaviours for people aged 12 years and over in non-remote areas, 2004-05, age standardised	ABS 2004-05 NATSIHS cited in AIHW (2009) <i>Aboriginal and Torres Strait Islander Health Performance Framework 2008: Detailed Analyses</i>
7.6 Tooth decay	Indigenous children's dental health, selected years between 2000 and 2003, by age, (NSW, SA and NT combined)	Jamieson, Armfield and Roberts-Thomson (2006), <i>Child Dental Health Survey</i>
	Untreated tooth decay, 2004–2006, by age group	Roberts-Thomson, K.F. and Do, L. (2007), <i>National Adult Oral Health Survey</i>
	Potentially preventable hospitalisations for dental conditions, 2004-05 to 2006-07	AIHW (unpublished), National Hospital Morbidity Database
7.7 Mental health	Psychological distress prevalence, 2004-05	ABS (unpublished), National Aboriginal and Torres Strait Islander Health Survey 2004-05
	Treatment rates in mental health related services, 2005-06 and 2006-07, (various jurisdictions)	AIHW (2008), <i>Mental Health Services in Australia 2005–06</i> ; AIHW (2009), <i>Measuring the Social and Emotional Wellbeing of Aboriginal and Torres Strait Islander Peoples</i>
	Average annual deaths from mental and behavioural disorders, 2003–2007, (NSW, Qld, WA, SA, NT)	ABS (unpublished), <i>Causes of Death</i>

Indicator	Measure	Data source
7.8 Suicide and self-harm	Average annual intentional self-harm (suicide) deaths, 2003–07, by age group and age standardised, by sex (NSW, Qld, WA, SA, and public hospitals in the NT)	ABS (unpublished), <i>Causes of Death</i>
	Non-fatal hospitalisations for intentional self harm, 2004-05 to 2006-07, age standardised, by sex, (NSW, Vic, Qld, WA, SA, and public hospitals in the NT combined)	AIHW (unpublished), National Hospital Morbidity Database
	Non-fatal hospitalisations for intentional self harm, 2001-02 to 2006-07, by sex, (Qld, WA, SA, and public hospitals in the NT combined)	AIHW (unpublished), National Hospital Morbidity Database
	Average annual intentional self-harm (suicide) deaths, 2001–05, by age group and age standardised, by sex (Qld, WA, SA, and public hospitals in the NT)	ABS (unpublished), <i>Causes of Death</i>
8 <i>Economic participation</i>		
8.1 Labour market participation	Employment rates, people aged 15 to 64 years, 2001 and 2006, by sex, age group, remoteness area; jurisdiction, by public/private sector, industry and occupation	ABS (unpublished), <i>Census of Population and Housing</i>
	CDEP and total employment as a proportion of the Indigenous population aged 15 years and over, 2006, by jurisdiction	FACHSIA (unpublished)

Indicator	Measure	Data source
8.1 Labour market participation (cont.)	Labour force status (including full time part time), people aged 15–64, by age group and remoteness	ABS (2008) <i>Population Characteristics, Aboriginal and Torres Strait Islander Australians</i> , 2006. ABS cat.no 4713.0.
8.2 Indigenous owned or controlled land and business	Indigenous owned or controlled land as a proportion of each remoteness area, 2008	Indigenous Land Corporation (unpublished)
	Determinations of native title, 2004–2008, by jurisdiction	National Native Title Tribunal (unpublished)
	Cumulative growth of Indigenous Land Use Agreements, 2005–2008, by jurisdiction	National Native Title Tribunal (unpublished)
	Self employment as a proportion of total employed, people aged 15 to 64 years, 2001 and 2006, by sex	ABS (unpublished), <i>Census of Population and Housing</i> 2001 and 2006
	Self employment as a proportion of total employed, people aged 15 to 64 years, 2006, by remoteness; by age group; by jurisdiction	ABS (unpublished), <i>Census of Population and Housing</i> 2006
8.3 Home ownership	Proportion of people living in home occupied under various forms of housing tenure, 2001 and 2006, by remoteness and by jurisdiction	ABS (unpublished), <i>Census of Population and Housing</i> 2001 and 2006
8.4 Income support	Source(s) of household cash income for Indigenous people, 2004–05	ABS (unpublished), National Aboriginal and Torres Strait Islander Health Survey 2004–05
	Main source of personal cash income, people aged 15–64 years, 2004–05	ABS (unpublished), National Aboriginal and Torres Strait Islander Health Survey 2004–05 and National Health Survey 2004–05

Indicator	Measure	Data source
8.4 Income support (cont.)	People receiving income support payments, main or secondary income source, 2004-05, by age	ABS (unpublished), National Aboriginal and Torres Strait Islander Health Survey 2004-05 and National Health Survey 2004-05
	People aged 15–64 years receiving income support payments, by selected payment types, 2006, by jurisdiction	Centrelink (unpublished)
9 Home environment		
9.1 Overcrowding in housing	Housing and household size, 2001, and 2006	ABS (unpublished), <i>Census of Population and Housing 2001 and 2006</i>
	Proportion of people living in overcrowded housing, 2006, by remoteness; jurisdiction; age group; and tenure type	ABS (unpublished), <i>Census of Population and Housing 2006</i>
9.2 Rates of disease associated with poor environmental health	Hospitalisations for selected diseases associated with poor environmental health, age standardised and by age group (2004-05 to 2006-07: NSW, Vic, Qld, WA, SA, and public hospitals in the NT; 2001-02 to 2006-07: Qld, WA, SA, and public hospitals in the NT)	AIHW (unpublished), National Hospital Morbidity Database
	Death rates from diseases associated with poor environmental health, 2003–07, age standardised, by sex (NSW, Qld, WA, SA, NT)	ABS (unpublished), <i>Causes of Death</i>

Indicator	Measure	Data source
9.3 Access to clean water and functional sewerage and electricity services	Source of drinking water supply, water quality, type of sewerage system, access to cooking, washing and toilet facilities, electricity services	ABS (2007), <i>Community Housing and Infrastructure Needs Survey</i>
	Proportion of discrete Indigenous communities that experienced water interruptions, by reported usual population 2006	ABS (2007), <i>Community Housing and Infrastructure Needs Survey</i>
	Proportion of discrete Indigenous communities that experienced sewerage system overflows or leakages, by usual population, 2006	ABS (2007), <i>Community Housing and Infrastructure Needs Survey</i>
	Proportion of discrete Indigenous communities that experienced electricity interruptions, by usual population, 2006	ABS (2007), <i>Community Housing and Infrastructure Needs Survey</i>
10 Safe and supportive communities		
10.1 Participation in organised sport, arts or community group activities	Participation in exercise, persons aged 15 years and over in non-remote areas, 2004-05, age standardised	ABS (unpublished), National Aboriginal and Torres Strait Islander Health Survey 2004-05 and National Health Survey 2004-05
	Indigenous communities with a population of 50 or more, access to sporting facilities, 2006	ABS (2007), <i>Community Housing and Infrastructure Needs Survey</i>
	Participation in cultural and art activities, 2002	ABS (unpublished), National Aboriginal and Torres Strait Islander Social Survey 2002

Indicator	Measure	Data source
10.2 Access to traditional lands	Indigenous people in non-remote areas who lived on their homelands/traditional country or had access to their homelands/traditional country, 2004-05	ABS (unpublished), National Aboriginal and Torres Strait Islander Health Survey 2004-05
10.3 Alcohol consumption and harm	Alcohol consumption, people aged 18 years or over, 2004-05, by remoteness; sex; and risk levels	ABS (unpublished), National Aboriginal and Torres Strait Islander Health Survey 2004-05 and National Health Survey 2004-05
	Alcohol involvement in homicides, 1999-2000 to 2006-07, by key characteristics	AIC (unpublished), National Homicide Monitoring Program
	Hospitalisations related to alcohol use, (2004-05 to 2006-07: NSW, Vic, Qld, WA, SA, and public hospitals in NT; 2001-02 to 2006-07: Qld, WA, SA and the NT)	AIHW (unpublished), National Hospital Morbidity Database
	Alcohol related deaths, death rates, age standardised, 2003-2007, by sex, (NSW, Qld, WA, SA, NT)	ABS (unpublished), <i>Causes of Death</i>
10.4 Drug and other substance use and harm	Illicit drug use, Indigenous people aged 18 years or over in non-remote areas, 2004-05	ABS (unpublished), National Aboriginal and Torres Strait Islander Health Survey 2004-05
	Drug influenced Indigenous homicides, 1999-2000 to 2006-07, by key characteristics	AIC (unpublished), National Homicide Monitoring Program

Indicator	Measure	Data source
10.4 Drug and other substance use and harm (cont.)	Hospitalisations related to drug use, 2004-05 to 2006-07, by sex, (NSW, Vic, Qld, WA, SA, and public hospitals in NT)	AIHW (unpublished), National Hospital Morbidity Database
	Drug related deaths, death rates, age standardised, 2003-2007, by sex, (NSW, Qld, WA, SA, NT)	ABS (unpublished), <i>Causes of Death</i>
10.5 Juvenile diversions	Juvenile diversions by Indigenous status, various years, (NSW, Vic, Qld, WA and SA)	State and Territory Governments (unpublished)
10.6 Repeat offending	Proportion of prisoners with known prior adult imprisonment under sentence, 30 June 2008, by jurisdiction; by sex	ABS (2008), <i>Prisoners in Australia</i>
	Proportion of prisoners with known prior adult imprisonment under sentence, 30 June 2008, by most serious offence/charge,	ABS (2008), <i>Prisoners in Australia</i>
	Juvenile repeat offending, various years, (NSW, Qld, WA, SA)	Various studies
11 Governance and leadership		
11.1 Case studies in governance	Case study approach	
11.2 Governance capacity and skills	Students of governance-related courses: management, commerce, business law, economics and econometrics, 2002 to 2007, by jurisdiction, gender and remoteness	DEEWR (unpublished); NCVER (unpublished)
	Number of students in selected governance courses, 2007	NCVER (unpublished);

Indicator	Measure	Data source
11.3 Engagement with service delivery	Perceived treatment when seeking health care, difficulty communicating with service providers	ABS (unpublished), National Aboriginal and Torres Strait Islander Health Survey 2004-05 and National Aboriginal and Torres Strait Islander Social Survey 2002
	Services located in discrete Indigenous communities, 2006	ABS (2007), <i>Community Housing and Infrastructure Needs Survey</i>
	Use of mental health services by Aboriginal children	Zubrick et al. (2005), <i>Western Australian Aboriginal Child Health Survey</i>
	Rates of discharge from hospital against medical advice, 2003–05, 2004–06, 2005–07, (NSW, Vic, Qld, WA, SA and public hospitals in the NT)	AIHW (unpublished), National Hospital Morbidity Database

Acronyms and abbreviations

ABS	Australian Bureau of Statistics
ACER	Australian Council for Educational Research
AIC	Australian Institute of Criminology
AIHW	Australian Institute of Health and Welfare
DEEWR	Department of Education, Employment and Workplace Relations
FAHCSIA	Department of Families, Housing, Community Services and Indigenous Affairs
MCEETYA	Ministerial Council on Education, Employment, Training and Youth Affairs
NCVER	National Centre for Vocational Education Research
NATSIHS	National Aboriginal and Torres Strait Islander Health Survey
NATSIS	National Aboriginal and Torres Strait Islander Survey
NATSISS	National Aboriginal and Torres Strait Islander Social Survey
NHS	National Health Survey
SAAP NDCA	Supported Accommodation Assistance Program National Data Collection Agency
VET	vocational education and training

References

- ABS (Australian Bureau of STATISTICS) 2009, *Experimental Life Tables for Aboriginal and Torres Strait Islander Australians, Australia, 2005–2007*, Cat. no. 3302.0.55.003, Canberra.
- 2009, *Schools Australia 2008*, Cat. no. 4221.0, Canberra.
- 2009, *Causes of Death, Australia 2007*, Cat. no. 3303.0, Canberra.
- 2008, *Deaths Australia 2007*, Cat. no. 3302.0, Canberra.
- 2008, *Experimental Estimates of Aboriginal and Torres Strait Islander Australians, June 2006*, Cat. no. 3238.0.55.001, Canberra.
- 2008, *Prisoners in Australia*, Cat. no. 4517.0, Canberra.
- 2008, *Births, Australia, 2007*, Cat. no 3301.0, Canberra..
- 2007, *Housing and Infrastructure in Aboriginal and Torres Strait Islander Communities, Australia, 2006*, Cat. no. 4710.0, Canberra.

-
- 2004, *Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians 30 June 1991 to 30 June 2009*, Cat. no. 3238.0, Canberra.
- ABS and AIHW (Australian Bureau of Statistics and Australian Institute of Health and Welfare) 2008, *The health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples*, Cat. no. 4704.0, Cat. no. IHW 21, Canberra.
- AIHW (Australian Institute of Health and Welfare) 2009, *Aboriginal and Torres Strait Islander Health Performance Framework 2008 Report: Detailed Analyses*, Cat. no. IHW 22, Canberra.
- 2009, *Measuring the Social and Emotional Wellbeing of Aboriginal and Torres Strait Islander Peoples*, Cat. no. IHW 24, Canberra.
- 2008, *Expenditures on Health for Aboriginal and Torres Strait Islander Peoples 2004-05*, Cat. no. HWE 40, Health and welfare expenditure series no. 33, Canberra.
- 2008, *Mental Health Services in Australia 2005–06*, Cat. no. HSE 56, Canberra.
- DEEWR (Department of Education, Employment and Workplace Relations) 2008, *National Preschool Census 2007, Aboriginal and Torres Strait Islanders and All Students: Technical Report, May 2008*, Data Analysis Australia.
- Jamieson, L., Armfield, J.M., Roberts-Thomson, K.F., 2006, 'The role of location in Indigenous and non-Indigenous child oral health', *Journal of Public Health Dentistry*, vol. 66, pp. 123–30.
- MCEETYA (Ministerial Council on Education, Employment, Training and Youth Affairs) 2008, *National Assessment Program – Literacy and Numeracy: Achievement in Reading, Writing Language Conventions and Numeracy*, Melbourne.
- (various years), *National Report on Schooling in Australia*, Melbourne.
- SCRGSP (Steering Committee for the Review on Government Service Provision), 2009, *Report on Government Services 2009*, Productivity Commission, Canberra.
- Taylor, N. 2009, *Juveniles in Detention in Australia, 1981–2007*, Technical and Background Paper, Australian Institute of Criminology, Canberra.
- Vos T., Barker B., Stanley L., Lopez A.D. 2007, *The Burden of Disease and Injury in Aboriginal and Torres Strait Islander Peoples 2003*, School of Population Health, the University of Queensland, Brisbane.
- Zubrick, S.R., Silburn, S.R., Lawrence, D.M., Mitrou, F.G., Dalby, R.B., Blair, E.M., Griffin, J., Milroy, H., De Maio, J.A., Cox, A. and Li, J. 2005, *The Western Australian Aboriginal Child Health Survey: The Social and Emotional Wellbeing of Aboriginal Children and Young People*, Curtin University of Technology and Telethon Institute for Child Health Research, Perth.

