



Overcoming Indigenous Disadvantage

Overcoming Indigenous Disadvantage

Key Indicators 2011

REPORT

Steering Committee
for the Review
of Government
Service Provision

2011

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CAUTION: Aboriginal and Torres Strait Islander people should be aware that this publication may contain images of deceased people.

The Steering Committee thanks Reconciliation Australia and the Department of Sustainability, Environment, Water, Population and Communities for providing the photographs reproduced in this report. No inference is intended that the people or communities shown are the subject of any issue raised in the report.

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Foreword

Overcoming Indigenous Disadvantage: Key Indicators 2011 is the fifth in a series of regular reports commissioned by heads of governments in 2002.

The reports serve as a public account of progress against the six targets set by the Council of Australian Governments (COAG), together with a number of other significant indicators. The Steering Committee has consulted extensively on the report's framework, which has been endorsed by Indigenous people, governments and a range of relevant organisations in the public and private sectors.

The reports help governments monitor and address the disadvantage that limits the opportunities and choices of many Indigenous people. While a number of dimensions of disadvantage increase with geographic remoteness, Indigenous people in urban settings can also face significant disadvantage compared with non-Indigenous people in those areas.

Nine years after this series was commissioned, there is still a considerable way to go if we are to fulfil COAG's commitment to close the gap in Indigenous disadvantage. Wide gaps in average outcomes remain across most indicators. Of the 45 quantitative indicators in the report, for example, available data show improvement in outcomes for only 13 indicators — including in employment, educational attainment and home ownership. For 10 there has been no real improvement, while for another seven, including social indicators such as criminal justice, outcomes have actually deteriorated.

The utility of this report depends on access to good data. Despite ongoing improvements in data collections, for one third of the indicators in this edition adequate data were not available to measure changes over time. All governments have committed to improving data availability and quality, and some impressive efforts at data improvement are underway. These efforts are strongly supported.

On behalf of the Steering Committee, I record our gratitude 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 also very grateful for the support of staff in

the Secretariat at the Productivity Commission and for their commitment to this enterprise. Finally, we thank all those who participated in consultations on previous editions of the report, which have contributed greatly to improvements in the scope and content of this latest edition.

Gary Banks AO
Chairman

August 2011

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Steering Committee

This report was produced under the direction of the Steering Committee for the Review of Government Service Provision (SCRGSP). The Steering Committee comprises the following current members:

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Mr Ron Perry	Aust. Govt.	Department of Prime Minister and Cabinet
Mr Peter Robinson	Aust. Govt.	Department of the Treasury
Mr David de Carvalho	Aust. Govt.	Department of Finance and Deregulation
Dr Liz Develin	NSW	Department of Premier and Cabinet
Mr Kevin Cosgriff	NSW	NSW Treasury
Mr Simon Kent	Vic	Department of Premier and Cabinet
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Mr David Christmas	WA	Department of Treasury and Finance
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People who also served on the Steering Committee during the production of this report include:

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Acronyms and abbreviations

ABS	Australian Bureau of Statistics
ABS Census	Census of Population and Housing
ACARA	Australian Curriculum, Assessment and Reporting Authority
ACER	Australian Council for Educational Research
ACIR	Australian Childhood Immunisation Register
ACF	Administration for Children and Families
ACT	Australian Capital Territory
AEDI	Australian Early Development Index
AHMAC	Australian Health Ministers' Advisory Council
AIC	Australian Institute of Criminology
AIEF	Australian Indigenous Education Foundation
AIEW	Aboriginal and Islander Education Workers
AIHW	Australian Institute of Health and Welfare
AIMSC	Australian Indigenous Minority Supplier Council
AMIC	Aboriginal Maternal and Infant Care
AMIHS	Aboriginal Maternal and Infant Health Service
ANAO	Australian National Audit Office
ANTA	Australian National Training Authority
ASCED	Australian Standard Classification of Education
ASGC	Australian Standard Geographical Classification
ATAR	Australian Tertiary Admission Rank
ATSIC	Aboriginal and Torres Strait Islander Commission
ATSIEB	Aboriginal and Torres Strait Islander Elected Body
ATSIHPF	Aboriginal and Torres Strait Islander Health Performance Framework

BMI	body mass index
CAEPR	Centre for Aboriginal Economic Policy Research
CDE IMQS	Census Data Enhancement Indigenous Mortality Quality Study
CDEP	Community Development Employment Projects
CDHS	Child Dental Health Survey
CEaCS	Childhood Education and Care Survey
CGRIS	Coordinator General for Remote Indigenous Services
CHINS	Community Housing and Infrastructure Needs Survey
COAG	Council of Australian Governments
CPiCLAS	Children's Participation in Cultural and Leisure Activities Survey
CRC	COAG Reform Council
CRCAH	Cooperative Research Centre for Aboriginal Health
CYI	Cape York Institute
CYPAL	Cape York Peninsula Aboriginal Land
CYWR	Cape York Welfare Reform
DALYs	Disability-adjusted life years
DEECD	Department of Education and Early Childhood Development
DEEWR	Department of Education, Employment and Workplace Relations
DERM	Department of Environment and Resource Management
DHAC	Commonwealth Department of Health and Aged Care
DMFT	Decayed, missing and filled teeth
DTP	Diphtheria, tetanus, pertussis
DVD	Digital Versatile Disc
ECEC	Early Childhood Education and Care Collection
ESO	Essential Service Operator
FaHCSIA	Department of Families, Housing, Community Services and Indigenous Affairs
FAS	Fetal alcohol syndrome

FASD	Fetal alcohol spectrum disorder
FIM	Family Income Management
FRC	Family Responsibilities Commission
GP	General practitioner
g	grams
GSS	General Social Survey
GWEH	Gross Weekly Equivalised Household Income
HEPS	Higher Expectations Program — Secondary
HEPT	Higher Expectations Program — Tertiary
h'hold	household
Hib	<i>Haemophilus influenzae</i> type b
IBA	Indigenous Business Australia
ICD-10	International Classification of Diseases, 10th Edition
ICD-10-AM	International Classification of Diseases, 10th Edition, Australian Modification
ICGP	Indigenous Community Governance Project
IESIP	Indigenous Education Strategic Initiatives Programme
ILC	Indigenous Land Corporation
ILUA	Indigenous Land Use Agreement
IPA	Indigenous Protected Area
KAWA	Kapululangu Aboriginal Women's Association
KBN	Koori Business Network
KIMSS	Kimberley Indigenous Management Support Service
KMS	Koori Maternity Services
LDC	Larrakia Development Corporation
LINs	Local Indigenous Networks
LMOs	Labour Market Outcomes
LORI	Levels of Relative Isolation
MBS	Medicare Benefits Schedule
MCATSIA	Ministerial Council for Aboriginal and Torres Strait Islander Affairs

MCEECDYA	Ministerial Council for Education, Early Childhood Development and Youth Affairs
MMR	Measles, mumps, rubella
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
NCACCH	North Coast Aboriginal Corporation for Community Health
NCIE	National Centre of Indigenous Excellence
NCVER	National Centre for Vocational Education Research
NDA	National Disability Agreement
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
NHS (I)	National Health Survey — Indigenous Supplement
NIEHS	National Indigenous Eye Health Survey
NIRA	National Indigenous Reform Agreement
NMDS	National Minimum Data Set
NNTT	National Native Title Tribunal
NP	National Partnership
NPA	National Partnership Agreement
NPC	National Preschool Census
NPDC	National Perinatal Data Collection
NPPG	Napranum Preschool PaL (Parents and Learning) Group
NPRSD	National Partnership on Remote Service Delivery
NSAOH	National Survey of Adult Oral Health
NSSC	National Schools Statistics Collection
NSW	New South Wales

NT	Northern Territory
NTER	Northern Territory Emergency Response
NYPR	National Youth Participation Requirement
OCSAR	Office for Crime Statistics and Research
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
PALS	Partnership, Acceptance, Learning and Sharing
PCP	Partnership Community Program
PISA	Program for International Student Assessment
POIs	Persons of Interest
PTA	Papunya Tula Artists
Qld	Queensland
QTAC	Queensland Tertiary Admissions Centre
RCIADIC	Royal Commission into Aboriginal Deaths in Custody
RSE	Relative standard error
SA	South Australia
SAAAC	South Australian Aboriginal Advisory Council
SAAP	Supported Accommodation Assistance Program
SATAC	South Australian Tertiary Admissions Centre
SCRGSP	Steering Committee for the Review of Government Service Provision
SDR	Standardised death rate
SIDS	Sudden Infant Death Syndrome
SIH	Survey of Income and Housing
STI	Sexually Transmitted Infection
TAFE	Technical and Further Education
Tas	Tasmania
TIMSS	Trends in International Mathematics and Science Study

TISC	Tertiary Institutions Service Centre
UAC	Universities Admissions Centre
UNDP	United Nations Development Programme
UNICEF	United Nations Children’s Fund
VET	Vocational Education and Training
Vic	Victoria
VTAC	Victoria Tertiary Admissions Centre
WA	Western Australia
WAACHS	Western Australian Aboriginal Child Health Survey
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.
- Canadian National Occupancy Standard** The Canadian National Occupancy Standard for housing appropriateness is a set of criteria adopted by the ABS to measure housing overcrowding. It compares the number of bedrooms with the number and characteristics of people in a dwelling.

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 in the survey data used in this report, the ABS classified 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 were essential roles in municipal services, health care, community services, education and other sectors that would be considered employment in mainstream communities and organisations. However, through the National Partnership Agreement on Indigenous Economic Participation agreed in early 2009, COAG committed to converting around two thousand CDEP positions to ongoing jobs in the government service provision (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.

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).

Confidence intervals

Survey data, for example data from the National Aboriginal and Torres Strait Islander Social 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	<p>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).</p> <p>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.</p>

	<p>For example, the gross monthly incomes for 9 households are: \$10 000, \$5000, \$2500, \$1500, \$1500, \$1500, \$1000, \$450, \$450.</p> <p>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.</p>
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 difference	The rate difference is the rate for the Indigenous population minus the rate for the non-Indigenous population. See ‘relative Indigenous disadvantage’.
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

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:

- major cities of Australia
- inner regional Australia
- outer regional Australia
- remote Australia
- very remote Australia
- migratory regions (comprising off-shore, shipping and migratory places).

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.

**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.

Very remote

See ‘remoteness areas’.

Terms of reference

Prime Minister
Canberra

Reference: B08/2004

11 Mar 2009

Mr Gary Banks AO
Chairman
Steering Committee for the Review of Government Service Provision

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 MCATSI, 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 collectively made a renewed commitment to overcoming the disadvantage experienced by many 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 fifth 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 can have the greatest impact. Over time, the report measures the broad effects of those policies and reveals where more effort is required. This was recognised in an updated terms of reference for this report, provided in 2009 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.

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

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 expand on the data used in the report.

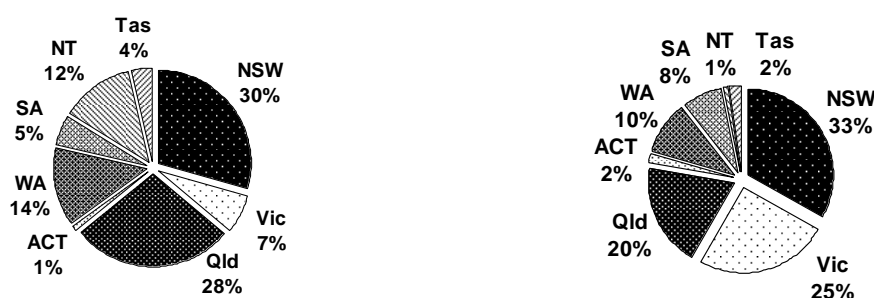
How many people?

In 2006, the estimated resident Indigenous population of Australia was 517 000 people, out of a total population of 21 million people (2.5 per cent of the Australian population). The projected Indigenous population in June 2011 was 575 600 people. The Indigenous population has a young age profile — in 2006, 38 per cent of Indigenous people were aged 14 years and under, compared with 19 per cent of the non-Indigenous population.

Throughout this report, the term 'Indigenous' is used to refer to Aboriginal people and Torres Strait Islander people. In the Indigenous population in 2006, 463 700 people (90 per cent) were of Aboriginal origin only, 33 300 people (6 per cent) were of Torres Strait Islander origin only and 20 100 people (4 per cent) were of both origins. Although the situations of different Indigenous peoples can vary, the small number of Torres Strait Islander people makes it difficult to report about them separately. Available data are summarised in the section 'Outcomes for Torres Strait Islander people'.

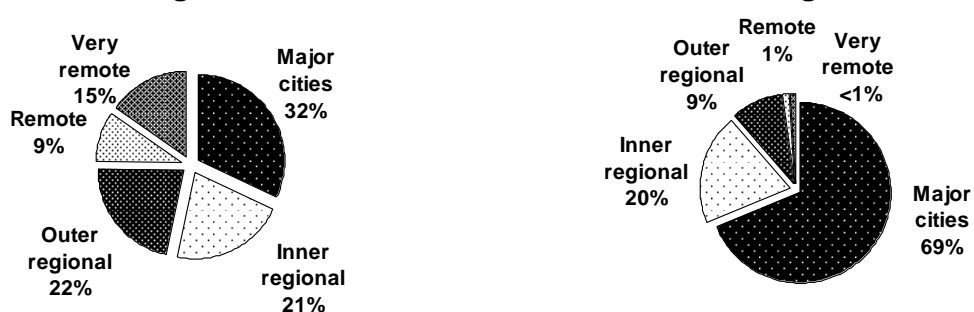
A higher proportion of both Indigenous and non-Indigenous populations live in NSW than other states and territories (30 per cent and 33 per cent respectively, in 2006). In contrast, 12 per cent of the Indigenous population live in the NT, but only 1 per cent of the non-Indigenous population.

Proportion of the Australian population, by State and Territory, 2006



Seventy-five per cent of Indigenous people lived in major cities or regional areas in 2006 (32 per cent in major cities, 21 per cent in inner regional areas and 22 per cent in outer regional areas). Nine per cent lived in remote areas and 15 per cent lived in very remote areas.

Proportion of the Australian population by remoteness area, 2006



Source: Figures A3.2 – A3.4 of the main report. See appendix 3 of the main report for more information.

What has changed?

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. The Steering Committee acknowledges that these high level averages do not reveal the different outcomes experienced by different groups of Indigenous people. Some Indigenous people experience little or no disadvantage compared to non-Indigenous people (although available data suggest that this is a relatively small group), while some Indigenous people are highly disadvantaged. Outcomes for Indigenous people can vary markedly by geography, age and sex, and by other socioeconomic factors.

Where possible, data are disaggregated by remoteness and other characteristics to help identify the underlying causes of disadvantage. In addition, the analysis of multiple disadvantage in chapter 13 explores the complex interactions of socioeconomic factors that contribute to disadvantage for both Indigenous and non-Indigenous people.

The Steering Committee has also prepared a series of brief fact sheets that summarise outcomes for particular groups of Indigenous people, including Indigenous men and women, Indigenous children, and Indigenous people living in urban, rural and remote areas.

Our ability to measure changes in outcomes over time varies. For some indicators, more than ten years of data are available. For other indicators, information from the National Aboriginal and Torres Strait Islander Social Survey 2008 can be compared to information from earlier surveys in 2002 and 1994. However, for some important indicators, such as life expectancy, there are no trend data (except for the NT).

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 and changes in economic conditions. Future editions of this report will include information on the effects of recent events.

Across virtually all the indicators in this report, there are wide gaps in outcomes between Indigenous and other Australians. 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.

Outcomes have improved in several areas. In those jurisdictions with long term data, the mortality rate for Indigenous people declined by 27 per cent between 1991

and 2009, leading to a narrowing (but not closing) of the gap with non-Indigenous people in those jurisdictions. In particular, Indigenous young child (0–4 years) and infant (0–12 months) mortality rates declined by over 45 per cent between 1991 and 2009 (in the three jurisdictions for which data are available: WA, SA and the NT). Nationally, Indigenous home ownership has increased, and Indigenous people are achieving better outcomes in post-secondary education, employment and income. However, outcomes in these areas have also improved for non-Indigenous people, leading to little or no closing of the gaps. In other areas, there has been less progress. There has been little change in literacy and numeracy, most health indicators and housing overcrowding for Indigenous people. Rates of child abuse and neglect substantiations and adult imprisonment have increased for Indigenous people, but there has been recent improvement in juvenile detention rates.

COAG targets

This section summarises outcomes related to the COAG targets. Detailed results for the formal COAG indicators are reported from page 14.

- *Life expectancy* — there are no trend data for life expectancy for Indigenous people, except for the NT. However, there has been improvement in a closely related measure, the mortality rate. For Indigenous people living in WA, SA and the NT, the mortality rate declined by 27 per cent between 1991 and 2009, leading to a narrowing (but not yet closing) of the gap with non-Indigenous people.
- *Young child mortality* — available data suggest that Indigenous infant (0–12 months) and child (0–4 years) mortality rates have improved significantly since the early 1990s (in those jurisdictions for which data are available).
- *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 was a statistically significant increase in Indigenous students' performance in years 3 and 7 reading and a statistically significant decrease in Indigenous students' performance in year 9 reading between 2008 and 2010. There was no significant change in writing and numeracy performance. A lower proportion of Indigenous than non-Indigenous students in all year levels achieved NAPLAN national minimum standards in reading, writing and numeracy in 2010.
- *Year 12 attainment* — the proportion of Indigenous 20–24 year olds who had completed year 12 or equivalent was around half that of non-Indigenous 20–24 year olds in 2008. There are no time series data for this measure, but

administrative data indicate that the proportion of Indigenous young people who received a year 12 certificate increased from 20 per cent in 2001 to 26 per cent in 2008, while the non-Indigenous rate remained constant around 56 per cent.

- *Employment* — between 2004–05 and 2008, for 15–64 year olds, an apparent increase in the employment to population ratio for Indigenous people (from 51 per cent to 54 per cent) was not statistically significant. The rate increased for non-Indigenous people (from 74 per cent to 76 per cent). There was no statistically significant change in the gap between Indigenous and non-Indigenous people over this period. However, the number of Indigenous people on CDEP halved between 2002 and 2008, while non-CDEP employment increased. **This paragraph has changed since the report was released in August 2001. See errata at <http://www.pc.gov.au/gsp/reports/indigenous/key-indicators-2011>**

Headline indicators

This section summarises outcomes related to the headline indicators. More detailed results are reported from page 24.

- *Post secondary education* — attainment of post secondary qualifications increased for both Indigenous and other people between 2002 and 2008, with no change in the gap between Indigenous and other people.
- *Disability and chronic disease* — rates of profound or severe core activity restriction were twice as high for Indigenous people as for non-Indigenous people, with no change for either population between 2002 and 2008. Hospitalisation rates for all chronic diseases except cancer were higher for Indigenous people than other people in 2008. The gaps between Indigenous and other people increased for circulatory diseases, diabetes and kidney disease, and remained the same for other conditions between 2004-05 and 2008-09.
- *Household and individual income* — after adjusting for inflation, median gross weekly equivalised household (GWEH) income increased for Indigenous people between 2002 and 2008, from \$347 per week to \$445 per week (in 2008 dollars) but a similar increase in the incomes of other people meant the gap did not change
- *Substantiated child abuse and neglect* — from 1999-2000 to 2009-10, the substantiation rate for Indigenous children increased from 15 to 37 per 1000 children, while the rate for non-Indigenous children increased from 4 to 5 per 1000 children, leading to a significant widening of the gap (partly reflecting increased reporting).
- *Family and community violence* — the proportion of Indigenous people who had been victims of physical or threatened violence in the previous 12 months did not change significantly between 2002 and 2008, and remained around twice the proportion of non-Indigenous people.

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- *Imprisonment and juvenile detention* — the imprisonment rate increased by 59 per cent for Indigenous women and by 35 per cent for Indigenous men between 2000 and 2010. In 2010, after adjusting for age differences, Indigenous adults were imprisoned at 14 times the rate for non-Indigenous adults, compared to 10 times in 2000. The Indigenous juvenile detention rate increased between 2001 and 2008; dropped significantly between 2008 and 2009; but was still 23 times the non-Indigenous rate in 2009.

Strategic change areas

Detailed results for all strategic change indicators are reported from page 33. This section highlights changes over time in the strategic change areas:

- Early child development:
 - The Indigenous teenage birth rate was unchanged between 2004 and 2009. The rate was over five times that for other Australian teenagers in 2009.
 - Low birthweight rates for Indigenous mothers were constant at around two and half times those for other mothers between 1998–2000 and 2006–2008.
 - Around half Indigenous mothers smoked during pregnancy in 2001 and 2008, around three times the non-Indigenous rate.
 - Already high hospitalisation rates for Indigenous 0–4 year olds increased between 2004-05 and 2008-09, and the gap with non-Indigenous rates increased. Most of the gap was for children in regional and remote areas.
 - Indigenous children had higher rates of hearing problems than other children in 2001, 2004-05 and 2008, and the gap remained unchanged.
- Education and training:
 - Apparent retention rates from years 7 or 8 to year 9 for Indigenous students increased from 95 per cent in 1998 to around 100 per cent in 2010, and rates to year 10 increased from 83 per cent to 96 per cent.
 - In both 2002 and 2008, around 40 per cent of Indigenous people aged 18 to 24 years were neither employed nor studying, compared to 10 per cent of non-Indigenous people.
- Healthy lives:
 - Hospitalisations of Indigenous people for potentially preventable acute and chronic conditions increased and the gap with other people increased (between 2004-05 and 2008-09 for acute conditions and between 2004-05 and 2007-08 for chronic conditions).

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- Mortality rates from avoidable causes declined for both Indigenous and non-Indigenous people, and the gap decreased from 483 per 100 000 in 1998 to 359 per 100 000 in 2009.
 - The current daily smoking rate for Indigenous adults was 2.4 times the rate for non-Indigenous adults in both 2001 and 2008.
 - The proportion of Indigenous people experiencing a high/very high level of psychological distress increased between 2004–05 and 2008, while the proportion for other Australians remained relatively stable, leading to an increase in the gap.
 - There was a slight increase in hospitalisations of Indigenous people for self-harm between 2004-05 and 2008-09, with the Indigenous hospitalisation rate was two-and-a-half times the rate for other people in 2008-09.
 - Economic participation:
 - The proportion of Indigenous people living in a home owned or being purchased by a member of their household increased from 22 per cent in 1994 to 29 per cent in 2008.
 - Home environment:
 - There was no change in the proportion of Indigenous people aged 15 years and over living in overcrowded households between 2002 and 2008.
 - There were improvements in access to clean water and functioning sewerage and electricity services in discrete Indigenous communities between 2001 and 2006. However, there was little change in hospitalisations for diseases associated with poor environmental health between 2004-05 and 2008-09.
 - Safe and supportive communities:
 - There were increases in the proportions of Indigenous people who participated in sporting and recreational events between 2002 and 2008 (from 49 to 57 per cent), but a decrease in the proportion who attended cultural events (from 68 to 63 per cent).
 - There was no change in the proportion of Indigenous people who recognised an area as their homelands between 1994 and 2008 (around 72 per cent). The proportion who lived on their homelands decreased from 29 per cent to 25 per cent, while there was no change in the proportion who were allowed to visit their homelands (around 45 per cent).
 - The proportion of Indigenous people aged 15 years and over who reported that they did not drink or had never drunk alcohol decreased from 31 to 27 per cent between 2002 and 2008. There was no change in the proportions

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- who reported drinking at chronic risky/high risk levels (17 per cent) or binge drinking in the two weeks prior to interview (37 per cent).
- There was no change in illicit drug use among Indigenous people aged 18 years or over between 2002 and 2008, with almost 23 per cent reporting using illicit drugs in the previous 12 months.
 - In recent years, Indigenous juvenile diversion rates have remained relatively constant at one-half to two-thirds of non-Indigenous rates.
- Governance and leadership:
 - No time series data are available for this strategic area.

The reporting framework

The report framework (see p. 13) 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 of how life should be for Indigenous people. These priority outcomes have been endorsed by both Indigenous people and governments.

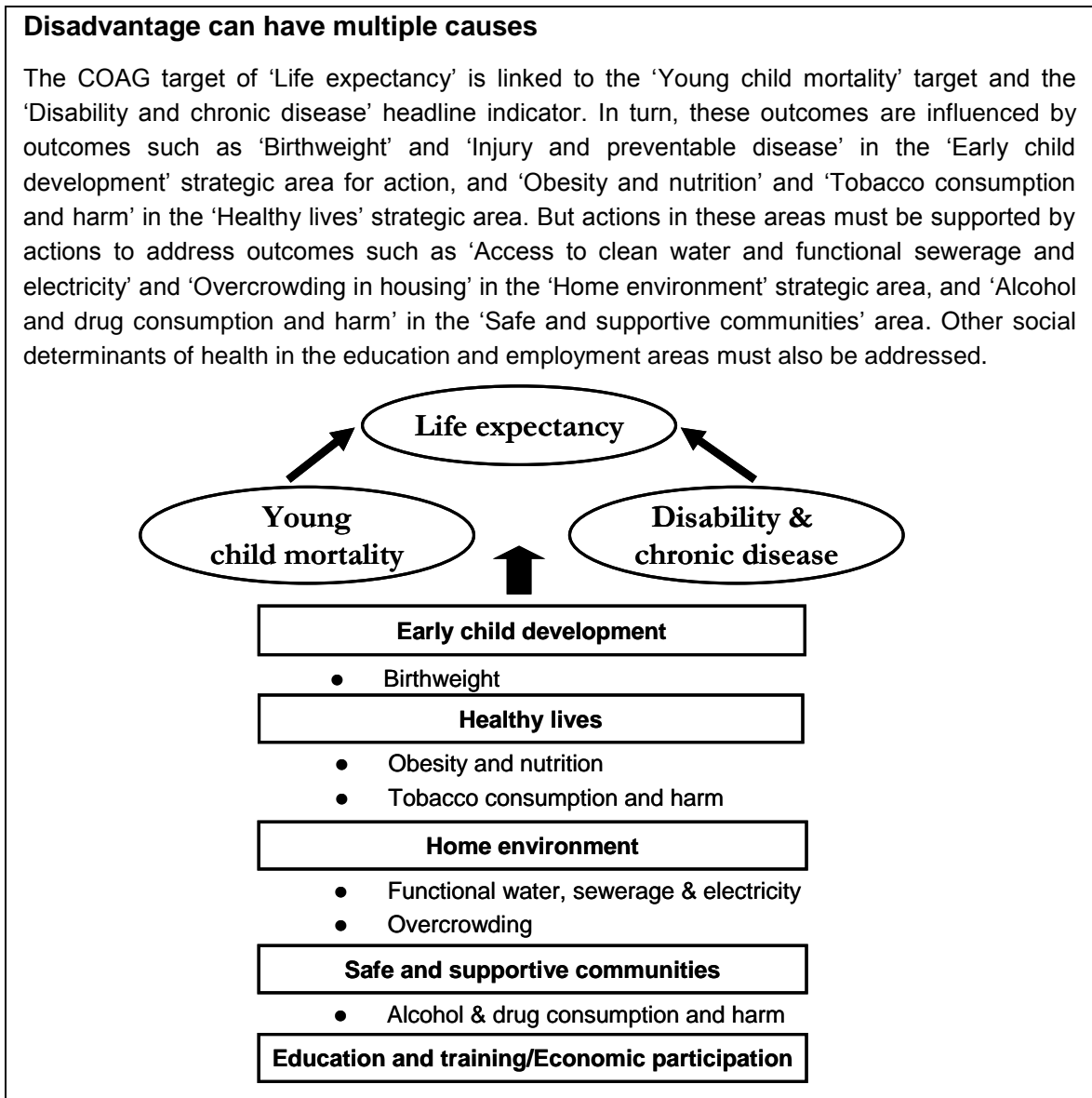
It is difficult to measure progress or to hold governments accountable for achieving these broadly stated priority outcomes. So the framework includes two layers of measurable indicators. The logic of the framework is that, over time, improvement in these indicators will demonstrate progress toward the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

The first layer of indicators is made up of the six Closing the Gap targets set by COAG, and six headline indicators 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.

In order to inform policy in the shorter term, seven ‘strategic areas for action’ underpin the COAG targets and headline indicators. The evidence shows that action is needed in these areas in order to achieve the COAG targets and headline indicators. For each strategic area, a small number of ‘strategic change indicators’ inform governments and the community about the current rate of progress and help to identify specific policy areas where more attention is needed.

The framework logic is that 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 deliberately do not mirror typical government service areas. In some cases (such as healthy lives, or education and training), a specific service area can be expected to play a major role but, in all strategic areas, more than one government agency is relevant to achieving better outcomes. Conversely, sometimes a single, well-targeted action by one agency can lead to improvements across many strategic areas.

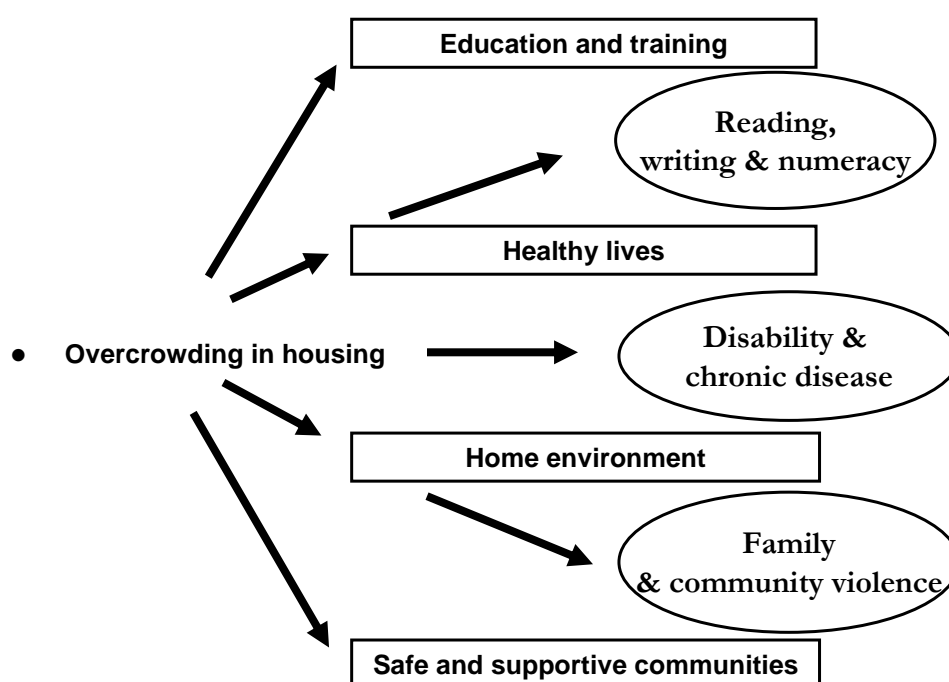


Things that work

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 aggregate data. The main report includes examples of ‘things that work’ — activities and programs that appear to be making a difference, often at the community level. This overview summarises the ‘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, and can contribute to the COAG target of ‘Reading, writing and numeracy’ and the headline indicators of ‘Disability and chronic disease’ and ‘Family and community violence’. Other influences are also important but 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 any of these factors can result in program failure.

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. Following the release of each edition, consultations have provided feedback on the report and ideas for future improvements. Common themes from consultations have included:

- broad support for the report from Indigenous people — who generally considered that the indicators reflected the issues affecting their communities
- endorsement of the ‘things that work’ case studies — but with an emphasis on improving the quality and rigour of the case studies and further analysis of the underlying ‘success factors’
- recognition of the importance of cultural issues to the wellbeing of Indigenous Australians — but acceptance of the difficulty of developing additional indicators
- a general view that improving governance remains critically important — including the governance of governments, as well as governance of Indigenous organisations and communities
- the importance of geographic disaggregation — in order to show differences in outcomes across major cities, regional areas and remote areas.

The Steering Committee has responded to this consultation feedback in this edition of the report by:

- reducing the number and increasing the rigour of case studies
- further developing its coverage of governance, particularly government governance in Indigenous affairs
- including disaggregation of data by remoteness wherever possible.

More information on the outcomes of the consultations is on the Review website (www.pc.gov.au/gsp).

COAG developments

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 identified seven ‘building blocks’ that underpinned a National Indigenous Reform Agreement (NIRA). In March 2009, the Prime Minister, on behalf of COAG, updated the terms of reference for this report (p. XXVI). In response, the report’s framework was aligned with the six COAG targets and the seven building blocks.

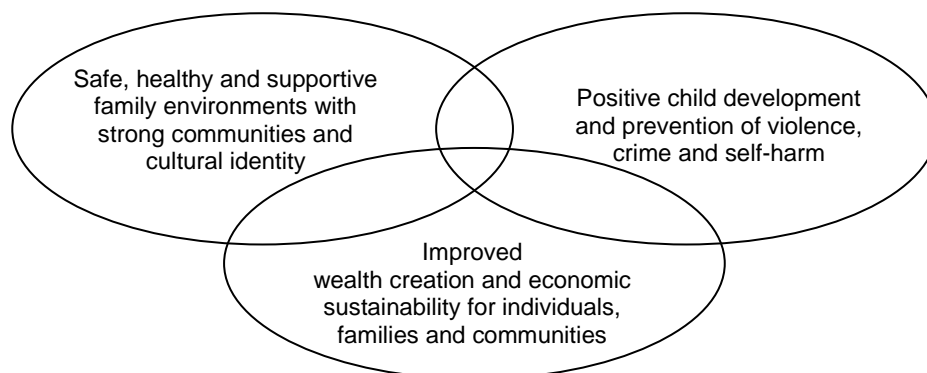
The COAG Reform Council has published two reports assessing progress against the NIRA (in 2010 and 2011), which complement the data in this report. For some indicators, this report uses different data sources to the COAG Reform Council reports, but results are mostly similar.

In December 2007, COAG also agreed to report transparently on expenditure on services to Indigenous Australians. The first *Indigenous Expenditure Report*, released on 28 February 2011, provides, for the first time, comprehensive and comparable information on expenditure by the Australian, State and Territory governments on both Indigenous specific services and the estimated Indigenous share of mainstream services.

The *Indigenous Expenditure Report* estimates are aligned with the seven building blocks of the NIRA and OID, and can be used alongside this report and the COAG Reform Council reports to examine policy outcomes and expenditure against the same broad framework. The *2010 Indigenous Expenditure Report* estimated expenditure on services related to Indigenous Australians to be just under \$22 billion in 2008-09, or about 5.3 per cent of all government expenditure. This is higher than the Indigenous representation in the population (2.5 per cent), reflecting the greater level of disadvantage and greater use of government services by Indigenous Australians.

The framework

Priority outcomes



COAG targets and headline indicators

COAG targets		Headline indicators	
4.1	Life expectancy	4.7	Post secondary education — participation and attainment
4.2	Young child mortality	4.8	Disability and chronic disease
4.3	Early childhood education	4.9	Household and individual income
4.4	Reading, writing and numeracy	4.10	Substantiated child abuse and neglect
4.5	Year 12 attainment	4.11	Family and community violence
4.6	Employment	4.12	Imprisonment and juvenile detention

Strategic areas for action

Early child development	Education and training	Healthy lives	Economic participation	Home environment	Safe and supportive communities	Governance and leadership
5.1 Maternal health 5.2 Teenage birth rate 5.3 Birthweight 5.4 Early childhood hospitalisations 5.5 Injury and preventable disease 5.6 Basic skills for life and learning 5.7 Hearing impairment	6.1 School enrolment and attendance 6.2 Teacher quality 6.3 Indigenous cultural studies 6.4 Year 9 attainment 6.5 Year 10 attainment 6.6 Transition from school to work	7.1 Access to primary health care 7.2 Potentially preventable hospitalisations 7.3 Avoidable mortality 7.4 Tobacco consumption and harm 7.5 Obesity and nutrition 7.6 Tooth decay 7.7 Mental health 7.8 Suicide and self-harm	8.1 Employment by full time/part time status, sector and occupation 8.2 Indigenous owned or controlled land and business 8.3 Home ownership 8.4 Income support	9.1 Overcrowding in housing 9.2 Rates of disease associated with poor environmental health 9.3 Access to clean water and functional sewerage and electricity services	10.1 Participation in organised sport, arts or community group activities 10.2 Access to traditional lands 10.3 Alcohol consumption and harm 10.4 Drug and other substance use and harm 10.5 Juvenile diversions 10.6 Repeat offending	11.1 Case studies in governance 11.2 Governance capacity and skills 11.3 Engagement with service delivery

Note: Numbers beside indicator names refer to section numbers in the report.

COAG targets and headline indicators

The six COAG targets and six headline indicators are high level measures of social and economic outcomes that must improve in order to achieve the priority outcomes.

COAG targets	Headline indicators
4.1. Life expectancy at birth	4.7. Post secondary education — participation and attainment
4.2. Young child mortality	4.8. Disability and chronic disease
4.3. Early childhood education	4.9. Household and individual income
4.4. Reading, writing and numeracy	4.10. Substantiated child abuse and neglect
4.5. Year 12 attainment	4.11. Family and community violence
4.6. Employment	4.12. Imprisonment and juvenile detention

Note: Numbers beside indicator names refer to section numbers in the main report.

4.1 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 high quality healthcare, and income and education levels. Lifestyle factors are also important, including nutrition, exercise and use of drugs, tobacco and alcohol.

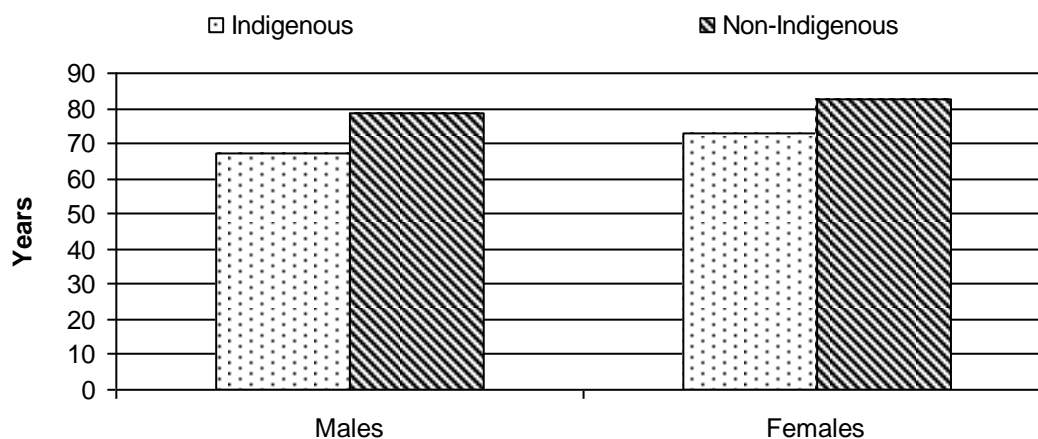
This indicator estimates the average number of years a person born between 2005 and 2007 could expect to live, if there were no change to population death rates throughout his or her lifetime. The estimate requires complex calculations and good data about death rates. Changes in methodology mean that trend data remain unavailable for Indigenous life expectancy — the estimates in this report cannot be compared to the estimates published in the 2007 or earlier reports. The key messages therefore include information on a closely related measure, mortality rates.

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, compared to 79 years for non-Indigenous males and 83 years for non-Indigenous females (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 10 years for females (figure 4.1.1).
- In NSW, Queensland, WA, SA and the NT combined, after adjusting for the age differences in the two populations:
 - the mortality rate for Indigenous people was twice the rate for non-Indigenous people, based on data for 2005–2009 (table 4.1.3)
- In WA, SA and the NT (jurisdictions with long term data), the mortality rate for Indigenous people declined by 27 per cent between 1991 and 2009, leading to a narrowing (but not closing) of the gap with non-Indigenous people in those jurisdictions.

Life expectancy at birth, 2005–2007



Source: Figure 4.1.1 in the main report.

4.2 Young child mortality

Young child mortality (particularly infant, or less than one year old, mortality) is a long established indicator of child health, and of the overall health of the population and its physical and social environment. Most childhood deaths occur during the first year of life. Far fewer deaths occur in the 1 to 4 year old age group.

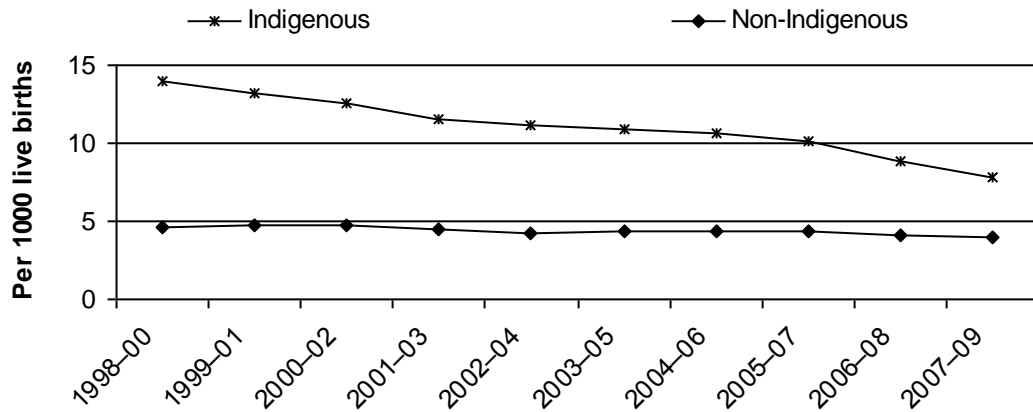
Infant mortality reflects the health status and health care of the population, the effectiveness of preventive care and the attention paid to child and maternal health, as well as socioeconomic deprivation, maternal education, smoking and other behavioural risk factors. The mortality rate for Indigenous infants is improving, but is still much higher on average than for infants in the rest of the population.

Box 2 KEY MESSAGES — Young child mortality

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

- Between 1997–99 and 2007–09, infant (first year of life) mortality rates among Indigenous infants remained constant or improved in states and territories for which data were available. However, Indigenous infant mortality rates were still 1.6 to 3 times as high as those for non-Indigenous infants in 2007–09 (figures 4.2.3 and 4.2.4).
- Longer-term data are available for WA, SA and the NT. In these jurisdictions, the Indigenous infant mortality rate declined by 48 per cent between 1991 and 2009, compared to a reduction of 44 per cent for non-Indigenous infants, leading to a narrowing of the gap (figure 4.2.5).
- Between 1997–99 and 2007–09, mortality rates for Indigenous children aged 1–4 years and 0–4 years remained relatively constant. However, Indigenous child mortality rates were still 1.8 to 3.8 times as high as those for non-Indigenous children in 2007–09 (figures 4.2.6 and 4.2.7).
- A longer time series of child mortality data is available for WA, SA and the NT. In these jurisdictions the mortality rate for children aged 0–4 years declined by 45 per cent between 1991 and 2009 (figure 4.2.8).

Infant mortality, 1998–2000 to 2007–09^a



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

Source: Figure 4.2.4 in the main report.

Box 3 Things that work — Young child mortality

The **Reducing the Risk of SIDS in Aboriginal Communities Project** (WA), established in 2005, addresses the significantly higher risk of Indigenous infants in dying from Sudden Infant Death Syndrome (SIDS) and fatal sleep accidents (box 4.2.2).

4.3 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

Ensuring all Indigenous four year olds in remote communities have access to quality early childhood education within five years is a COAG target.

- Currently, there is no comprehensive source of data on Indigenous preschool participation and it is difficult to draw conclusions about participation rates. Data from the new National Early Childhood Education Collection will be available for future reports.

Box 5 Things that work — Early childhood education

- **Learning Together** (SA) operates play groups in disadvantaged areas that value the needs of, and empower and educate children and their families (box 4.3.2).
- The **Aboriginal Early Years Program** (Tasmania) has successfully connected Indigenous families with preschool services since 2005, helping parents stimulate their children's learning (box 4.3.2).

4.4 Reading, writing and numeracy

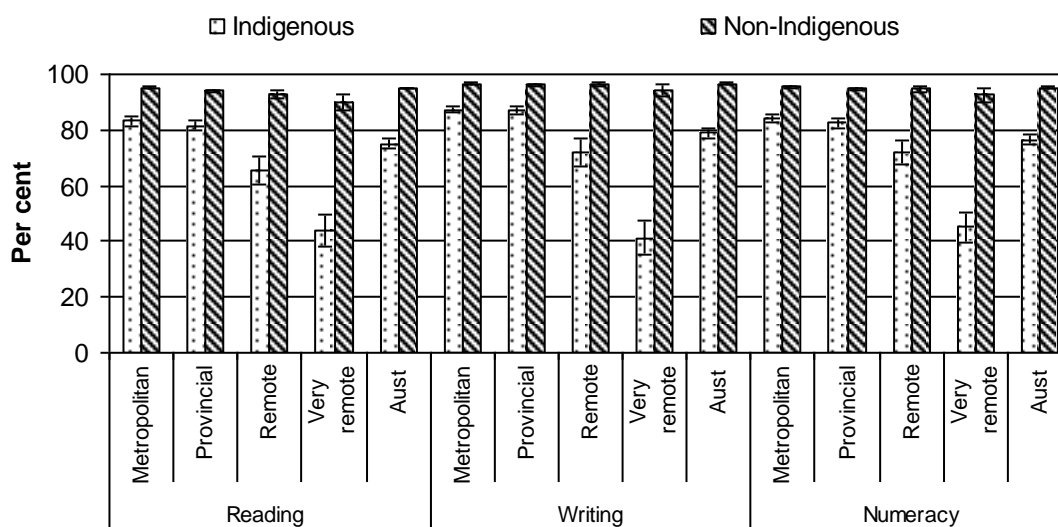
Improved educational outcomes are essential to overcoming many aspects of disadvantage. Participation in year 12 and entry into higher education rely on strong literacy and numeracy skills. School leavers who lack these skills face poor employment prospects and low income. There are also links between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

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.

- Participation rates in NAPLAN tests were lower for Indigenous students than for non-Indigenous students in 2010. For Indigenous students the rate was lower in remote areas, while for non-Indigenous students the rate was similar across remoteness areas (tables 4A.4.49–4A.4.52).
- There were some statistically significant changes in Indigenous students' performance against national minimum standards for reading, between 2008 and 2010 (tables 4A.4.13–4A.4.48). Nationally:
 - there was an increase in Indigenous students' performance in years 3 and 7 reading
 - there was a decrease in Indigenous students' performance in year 9 reading (a drop of 6.5 percentage points).
- There was no statistically significant change in Indigenous year 3, 5, 7 and 9 students' performance against the national minimum standards for writing and numeracy between 2008 and 2010 (tables 4A.4.13–4A.4.48).
- A substantially lower proportion of Indigenous than non-Indigenous students achieved the year 3, 5, 7 and 9 national minimum standards for reading, writing and numeracy in 2010 (figures 4.4.1, 4.4.2, 4.4.3, 4.4.4).
- The proportion of Indigenous students in urban (metropolitan and provincial) areas meeting the national minimum standards was higher than the proportion in remote and very remote areas in 2010. The gap in learning outcomes between Indigenous students and all students increased as remoteness increased in 2010 (figures 4.4.1, 4.4.2, 4.4.3, 4.4.4).

Students achieving year 3 standards, by location, 2010^a



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

Source: Figure 4.4.1 in the main report.

Box 7 Things that work — Reading, writing and numeracy

- **Walhallow Public School** (NSW) provides individualised literacy support to Indigenous students, which has improved their results in literacy and numeracy assessments (box 4.4.2).

4.5 Year 12 attainment

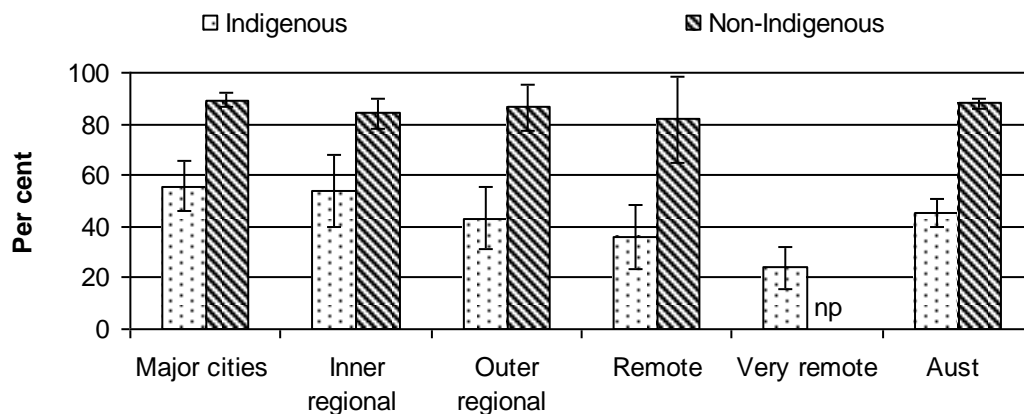
There are strong links between education, income and health. Students who stay on at school and complete year 12 or equivalent are more likely to go on to further education and training, and also have better employment options. In the long run, people who complete secondary education are likely to encourage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

Box 8 KEY MESSAGES — Year 12 attainment

Halving the gap for Indigenous 20–24 year olds in year 12 or equivalent attainment rates by 2020 is a COAG target.

- The proportion of Indigenous 20–24 year olds who reported completing year 12 or equivalent (45 per cent) was half that of non-Indigenous 20–24 year olds (88 per cent) in 2008 (figure 4.5.1).
- The proportion of Indigenous young people who received a year 12 certificate increased from 20 per cent in 2001 to 26 per cent in 2008, while the non-Indigenous rate remained constant around 56.1 per cent, leading to a narrowing of the gap (tables 4A.5.17 and 18).
- The proportion of the potential Indigenous year 12 population who achieved an ATAR of 50.00 or above increased from 3 per cent in 2006 to 7 per cent in 2010. However the gap between the Indigenous and non-Indigenous proportions widened from 20 to 33 percentage points (table 4A.5.11).
- Apparent retention rates for Indigenous students from the beginning of secondary school to year 12 increased from 32 per cent in 1998 to 47 per cent in 2010, while the non-Indigenous rate increased from 73 per cent to 79 per cent (figure 4.5.4). The gap between Indigenous and non-Indigenous apparent retention rates decreased from 41 percentage points in 1998 to 32 percentage points in 2010 (table 4A.5.19).

Proportion of 20–24 year olds who had completed year 12 or certificate II or above, 2008^a



^a Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information).

Source: Figure 4.5.1 in the main report.

Box 9 Things that work — Year 12 attainment

- The **Cape York Institute's Higher Expectations Program** (Queensland) provides Indigenous children living in the Cape York region with access to secondary education at Queensland's most academically successful boarding schools (box 4.5.2).
- The **AIEF Scholarship Program** offers boarding school scholarships to Indigenous children to improve school retention and year 12 attainment for promising students (box 4.5.2).
- The **Joodoogeb-be-gerring Werlemen program** (WA) was established to address the poor school attendance rates of Aboriginal girls in Kununurra. The program builds a positive sense of cultural identity, improves physical, social and emotional wellbeing, and has improved learning outcomes (box 4.5.2).

4.6 Employment

Having a job that pays adequately and provides opportunities for self development is an important component of adult life, and contributes to individual living standards, self-esteem and overall wellbeing. Employment is also important to the family and wider community. 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.

Box 10 has changed since the report was released in August 2001. See errata at <http://www.pc.gov.au/gsp/reports/indigenous/key-indicators-2011>.

Unemployment can contribute to poor health, domestic violence, homelessness and substance misuse.

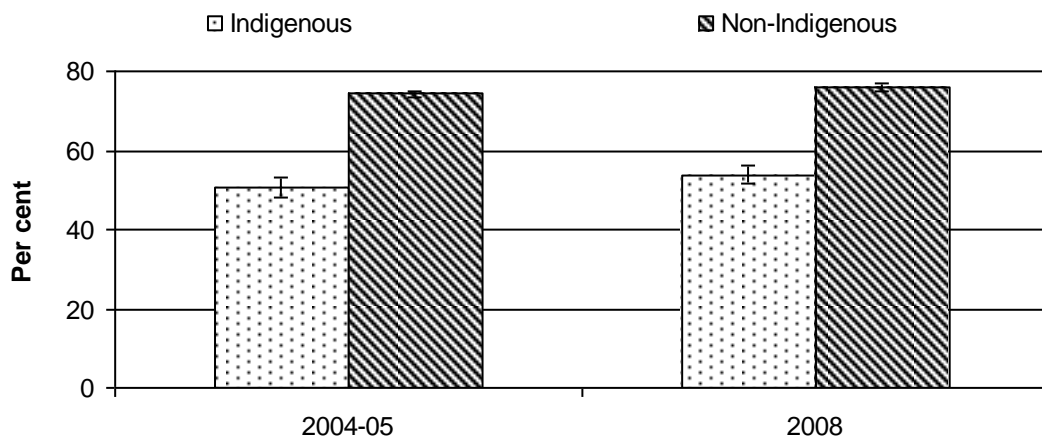
Indigenous people's participation in the labour force can be affected by the limited employment opportunities available to Indigenous people in some remote areas, access to income support payments and participation in Community Development Employment Projects (CDEP).

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 2004–05 and 2008, for those aged 15–64 years:
 - an apparent increase in the employment to population ratio for Indigenous people (from 51 per cent to 54 per cent) was not statistically significant. The rate increased for non-Indigenous people (from 74 per cent to 76 per cent) and there was no significant change in the gap over this period (figure 4.6.1).
- The number of Indigenous people on CDEP halved between 2002 and 2008, and there was a significant increase in 'mainstream' employment.
- Between 1994 and 2008, for Indigenous people aged 15–64 years:
 - the labour force participation rate increased from 55 per cent to 65 per cent (figure 4.6.3)
 - the unemployment rate decreased from 31 per cent to 17 per cent (figure 4.6.6).

Employment to population ratio, 2004-05 and 2008



Source: Figure 4.6.1 in the main report.

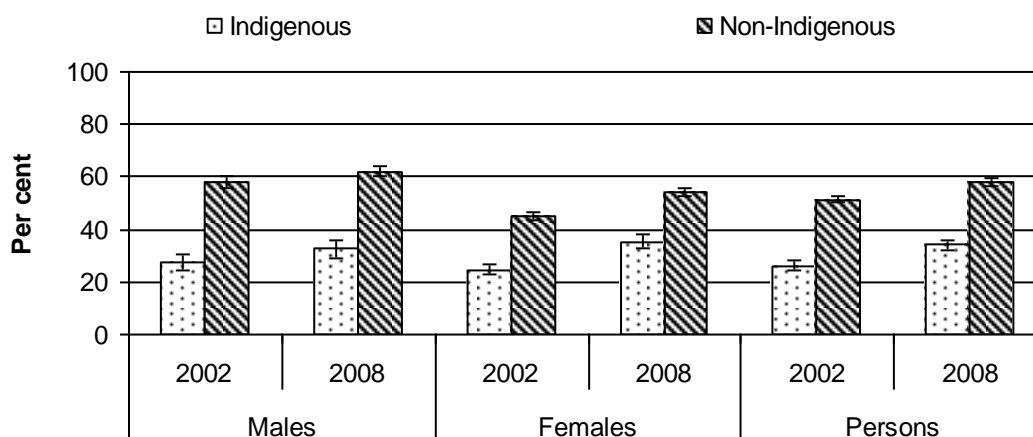
4.7 Post secondary education — participation and attainment

People who have participated in post secondary study have greatly improved employment prospects. They are also likely to earn higher incomes than those without post school qualifications. 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

- Lower proportions of Indigenous than non-Indigenous 20–64 year olds had or were working towards post school qualifications in 2008, in all states and territories and remoteness areas (tables 4A.7.3 and 4A.7.5).
- 34 per cent of Indigenous 20–64 year olds had or were working toward post school qualifications in 2008, compared with 58 per cent of non-Indigenous 20–64 year olds (figure 4.7.1).
- The proportion of 20–64 year olds with or working towards post school qualifications increased between 2002 and 2008 for both Indigenous people (from 26 per cent to 34 per cent) and non-Indigenous people (from 52 per cent to 58 per cent), with no change in the gap (figure 4.7.1).
- The VET national load pass rate for Indigenous students increased from 65 per cent in 2004 to 71 per cent in 2009 and the gap narrowed (table 4A.7.16).
- The higher education success rate for Indigenous students increased from 65 per cent in 2001 to 70 per cent in 2009, and the gap narrowed (figure 4.7.6).

Proportion of 20–64 year olds with a post school qualification of Certificate III or above or studying, 2002 and 2008^a



^a Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information).

Source: Figure 4.7.1 in the main report.

Box 12 Things that work — Post secondary education

- The **Cape York Institute's Higher Expectations Program — Tertiary (HEPT)** (Queensland) targets talented Cape York Indigenous people with high potential for achievement and leadership, and provides them with long-term support to undertake tertiary studies (box 4.7.2).
- **Swinburne University** and the **Bert Williams Aboriginal Youth Service** (Victoria) deliver a program to at-risk Indigenous young people aged 15–25 years who are not currently participating in mainstream education or employment, to help them continue into further study or employment (box 4.7.2).
- The **Monash University Indigenous Enabling Program** provides a pathway into Monash University undergraduate courses. Upon successful completion of the 12 week program, students are made a direct offer into their chosen undergraduate courses (box 4.7.2).

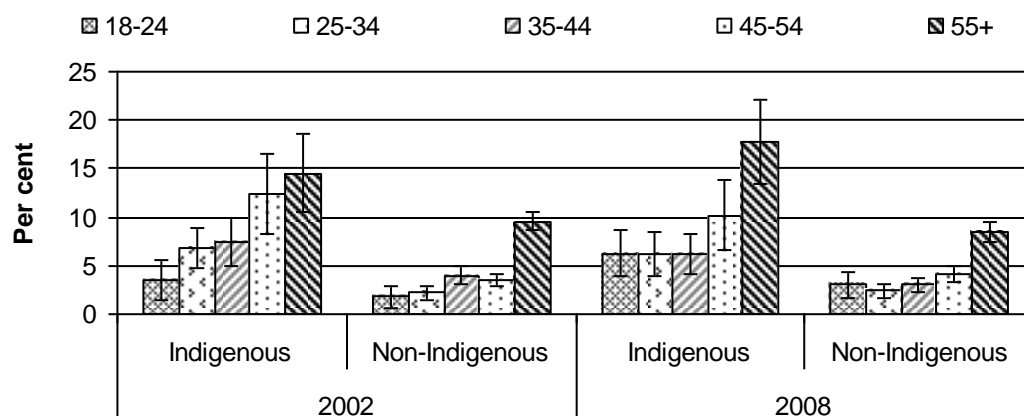
4.8 Disability and chronic disease

High rates of disability and chronic disease affect the quality of life of many Indigenous people. Disability and chronic disease can also create barriers to social interaction and reduce access to services, education and employment.

Box 13 KEY MESSAGES — Disability and chronic disease

- Indigenous people aged 18 years and over reported a profound or severe core activity restriction in both 2002 and 2008 around twice the rate for non-Indigenous people, with no significant change in the gap over that period (table 4A.8.1).
- Hospitalisation rates for all chronic diseases except cancer were higher for Indigenous males and females than other males and females in 2008-09 (table 4.8.1).
- Between 2004-05 and 2008-09, the gap in hospitalisation rates between Indigenous and other people for most chronic diseases did not change. However, rate differences for circulatory diseases (particularly ischaemic heart diseases), diabetes and end stage renal diseases increased over time (tables 4A.8.24–33).

People with profound or severe core activity restrictions by age groups and Indigenous status, non-remote areas of Australia, 2002 and 2008^a



^a Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information).

Source: Figure 4.8.1 in the main report.

4.9 Household and individual income

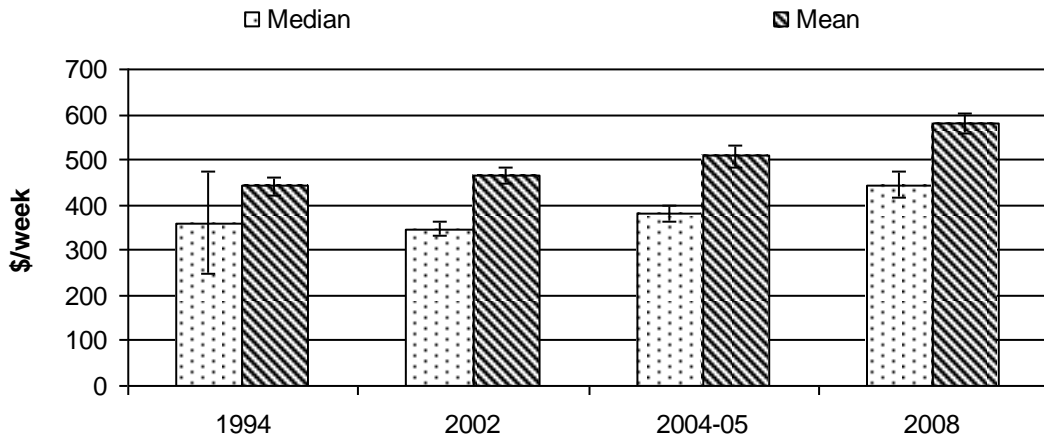
Household and individual incomes are linked to overall wellbeing. Higher incomes can enable the purchase of healthier food, including fruits and vegetables, better housing, recreation and health care. There may also be psychological benefits, such as a greater sense of personal control and self-esteem. 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

- For people aged 18 years and over, after adjusting for inflation:
 - median (middle) household weekly income (adjusted for household composition) increased for Indigenous people from \$347 in 2002 to \$445 in 2008 (in 2008 dollars) (figure 4.9.1). Similar increases in incomes for non-Indigenous households meant a gap of \$300 per week remained unchanged between 2002 and 2008 (figure 4.9.2)
 - there was no significant change in median (middle) personal weekly income for Indigenous or non-Indigenous people from 2004-05 to 2008 (in 2008 dollars). In 2008, Indigenous people received lower median personal gross weekly income (\$400 per week) than non-Indigenous people (\$608 per week) (figure 4.9.5)
 - Indigenous people had lower median household (adjusted for household composition) and personal incomes than non-Indigenous people across all remoteness areas in 2008 (figure 4.9.3).

Gross weekly equivalised household income, Indigenous people aged 18 years and over (2008 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 — Household and individual income

- 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).

4.10 Substantiated child abuse and neglect

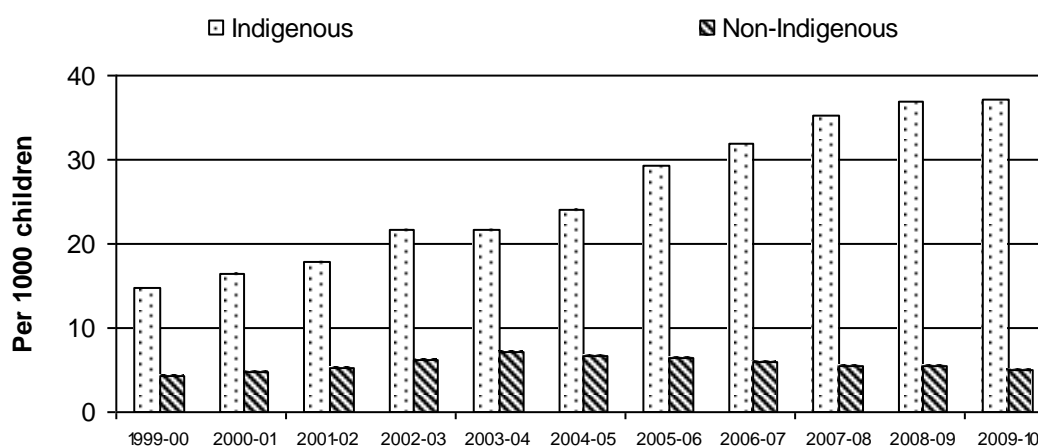
Many Indigenous families and communities live under severe social strain, caused by a range of social and economic factors. This social strain, combined with factors such as alcohol and substance misuse and overcrowded living conditions, can contribute to the incidence of child abuse and violence.

This indicator provides some information about the extent of abuse, neglect and harm to children in the family environment. However, no data exist on actual levels of abuse. The available data refer only to matters that have been notified to the authorities, and investigated and substantiated. Numbers and rates of substantiations are affected by the willingness of people to report incidents, government policies and practices (including variations in what constitutes substantiation), and the availability of services. It is possible that some of the increase is due to improved child protection action, but some is likely to reflect real increases in child abuse and neglect, given little improvement in the social and economic circumstances of Indigenous people.

Box 16 KEY MESSAGES — Substantiated child abuse and neglect

- The substantiation rate for Indigenous children aged 0–16 years (37 per 1000 children) was 7 times the rate for non-Indigenous children (5 per 1000 children) in 2009-10 (figures 4.10.1 and 4.10.2).
- The substantiation rate for Indigenous children increased from 15 to 37 per 1000 children between 1999-2000 and 2009-10, while the rate for non-Indigenous children increased from 4 to 5 per 1000 children, leading to a significant increase in the gap (figure 4.10.1).
- In 2010, 48 per 1000 Indigenous children aged 0–17 years were on care and protection orders, compared to 5 per 1000 non-Indigenous children (table 4.10.1).

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



Source: Figure 4.10.1 in the main report.

4.11 Family and community violence

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

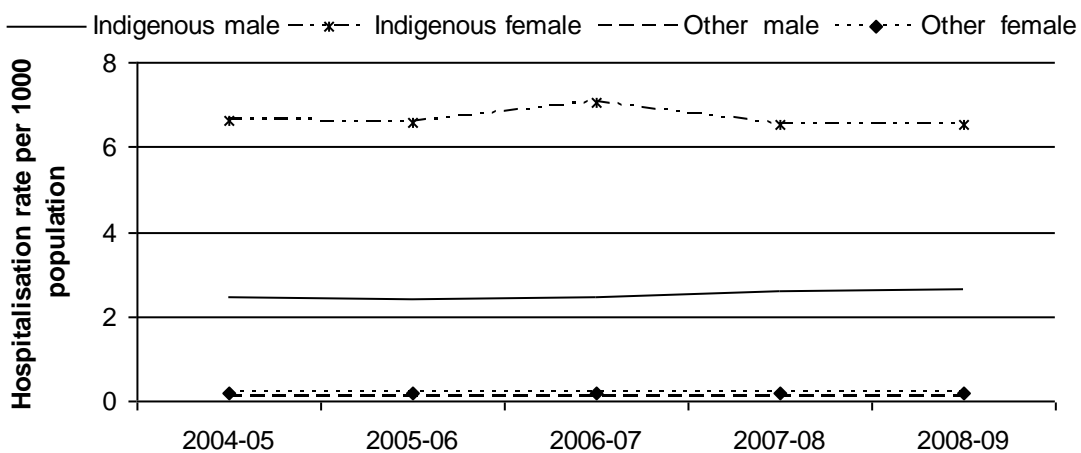
Box 17 KEY MESSAGES — Family and community violence

- A higher proportion of Indigenous people (20 per cent in 2008) than non-Indigenous people (11 per cent in 2006) aged 18 years and over had been a victim of physical or threatened violence in the previous 12 months (table 4A.11.1).
- The proportion of Indigenous people who had experienced physical or threatened violence in the previous 12 months did not change significantly between 2002 and 2008 (table 4A.11.4).
- After taking into account the different age structures of the populations:
 - in 2008-09, hospitalisation rates for injuries caused by assault were much higher for Indigenous men (seven times as high) and women (31 times as high) as for other Australian men and women (table 4A.11.8)
 - in remote areas, Indigenous people were hospitalised as a result of family violence at 36 times the rate of other people in 2008-09 (table 4A.11.7).

Box 18 Things that work — Family and community violence

- **The Cross Borders Remote Area Program** (SA, WA and the NT) reduces the incidence of physical and psychological harm in Aboriginal communities of Central Australia by running four week courses for men on anger management, substance misuse, motivation, controlling behaviours, personal change planning, and ways of speaking and listening and fathering (box 4.11.2).
- **Aboriginal Women Against Violence** (NSW) is a safe space in which Aboriginal and Torres Strait Islander women in the Liverpool and Campbelltown areas learn to become trainers, mentors and advocates against violence in their communities (box 4.11.2).
- **Through Black Eyes Workshop Kit** (national) raises awareness of the effects of family violence and abuse and neglect of children, and has been used to run workshops nationally (box 4.11.2).

Hospitalisation rate for family violence related assaults, per 1000 population, NSW, Victoria, Queensland, WA, SA, and public hospitals in the NT



Source: Figure 4.11.1 in the main report.

4.12 Imprisonment and juvenile detention

Poverty, unemployment, low levels of education, having a parent previously or currently in custody, 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.

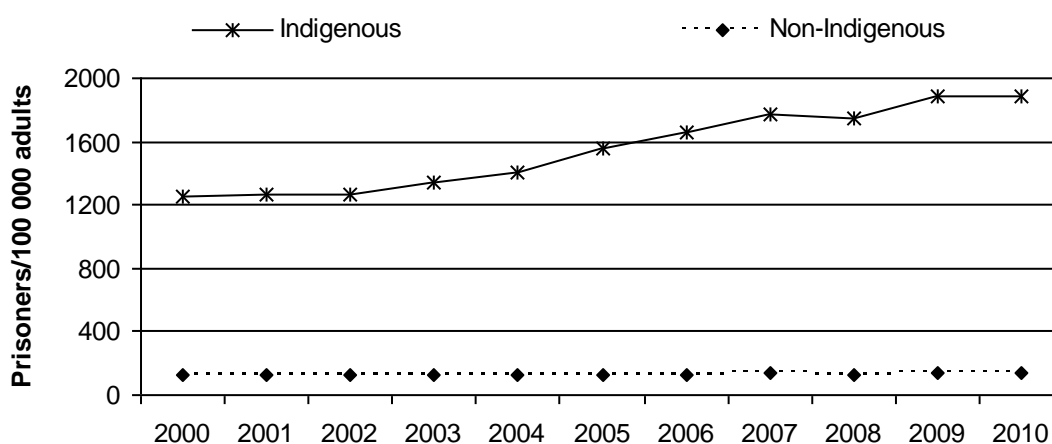
Box 19 KEY MESSAGES — Imprisonment and juvenile detention

- After adjusting for age differences, Indigenous people were imprisoned at 14 times the rate for non-Indigenous people in 2010 (table 4A.12.3).
- The imprisonment rate increased by 59 per cent for Indigenous women and by 35 per cent for Indigenous men between 2000 and 2010 (table 4A.12.7).
- Indigenous juveniles were detained at 23 times the rate for non-Indigenous juveniles at 30 June 2009 (figure 4.12.5).
- The Indigenous juvenile detention rate increased from 318 per 100 000 juveniles in 2001 to 420 per 100 000 juveniles in 2008, but fell sharply to 365 per 100 000 juveniles in 2009 (figure 4.12.5).

Box 20 Things that work — Imprisonment and juvenile detention

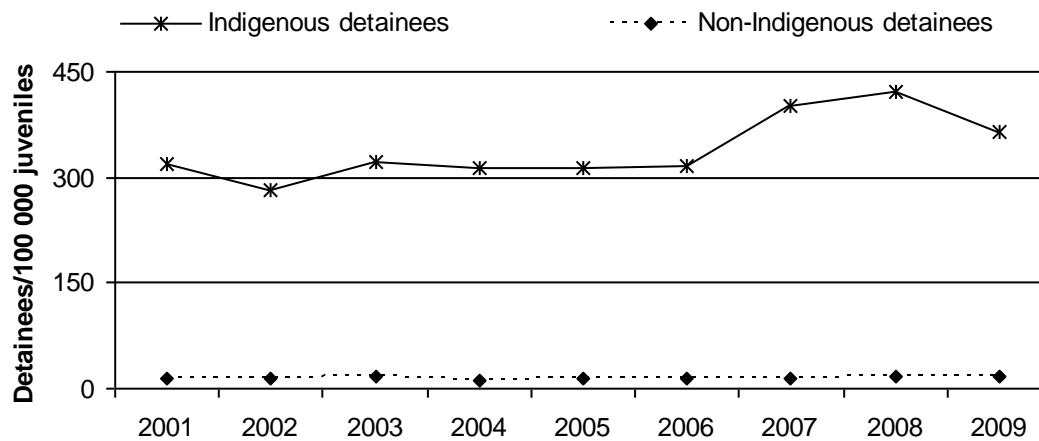
- Offenders appearing in a **Murri Court** (Queensland) had lower rates of absconding subject to warrant than the same Murri Court participants appearing in a mainstream Magistrates or Children’s Court. However, appearing for sentence in the Murri Court had no impact on reoffending or the seriousness of offending (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
5 Early child development	5.1 Maternal health 5.2 Teenage birth rate 5.3 Birthweight 5.4 Early childhood hospitalisations 5.5 Injury and preventable disease 5.6 Basic skills for life and learning 5.7 Hearing impairment
6 Education and training	6.1 School enrolment and attendance 6.2 Teacher quality 6.3 Indigenous cultural studies 6.4 Year 9 attainment 6.5 Year 10 attainment 6.6 Transition from school to work
7 Healthy lives	7.1 Access to primary health care 7.2 Potentially preventable hospitalisations 7.3 Avoidable mortality 7.4 Tobacco consumption and harm 7.5 Obesity and nutrition 7.6 Tooth decay 7.7 Mental health 7.8 Suicide and self-harm
8 Economic participation	8.1 Employment by full time/part time status, sector and occupation 8.2 Indigenous owned or controlled land and business 8.3 Home ownership 8.4 Income support

Strategic area for action	Strategic change indicators
9 Home environment	9.1 Overcrowding in housing 9.2 Rates of disease associated with poor environmental health 9.3 Access to clean water and functional sewerage and electricity services
10 Safe and supportive communities	10.1 Participation in organised sport, arts or community group activities 10.2 Access to traditional lands 10.3 Alcohol consumption and harm 10.4 Drug and other substance use and harm 10.5 Juvenile diversions 10.6 Repeat offending
11 Governance and leadership	11.1 Case studies in governance 11.2 Governance capacity and skills 11.3 Engagement with service delivery

5 Early child development

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

5.1 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, as well as behavioural factors such as women's nutrition and alcohol and tobacco consumption during pregnancy.

Box 21 **KEY MESSAGES — Maternal health**

- In 2008:
 - in NSW, SA, and the NT, 65 per cent of Indigenous mothers attended at least one antenatal visit in their first trimester, compared with 82 per cent of non-Indigenous mothers (figure 5.1.1)
 - in Queensland, SA and the NT, 77 per cent of Indigenous mothers attended five or more antenatal visits during pregnancy, compared with 93 per cent of non-Indigenous mothers (figure 5.1.2)
 - Indigenous mothers in remote areas in Queensland, SA and the NT attended similar numbers of antenatal sessions as those in non-remote areas. Those in remote areas in NSW, SA and the NT tended to start attending antenatal sessions later in their pregnancy than those in non-remote areas (table 5A.1.10).
- Around half of Indigenous mothers smoked during pregnancy in both 2001 and 2008, around three times the rate of non-Indigenous mothers (figure 5.1.3).

Box 22 **Things that work — Maternal health**

- The **Anangu Bibi Family Birthing Program** (SA) provides antenatal, birthing and early childhood care to Aboriginal women, and has encouraged more Aboriginal women to visit midwives for antenatal care (box 5.1.2).
- The **Koori Maternity Services Program**, (Victoria) provides culturally appropriate care to Aboriginal women during pregnancy, birth and in the immediate period after birth (box 5.1.2).
- The **Aboriginal Maternal and Infant Health Service (AMIHS)** (NSW) provides culturally appropriate care for Aboriginal women and babies. Positive outcomes for Aboriginal mothers and babies include decreased rates of premature birth, improved breast feeding rates and improved access to antenatal care in early pregnancy (box 5.1.2).
- The **Coomealla Community Midwifery Outreach Program** (NSW) has reduced risk taking behaviour in young Indigenous women before and after birth, and improved birth outcomes (box 5.1.2).

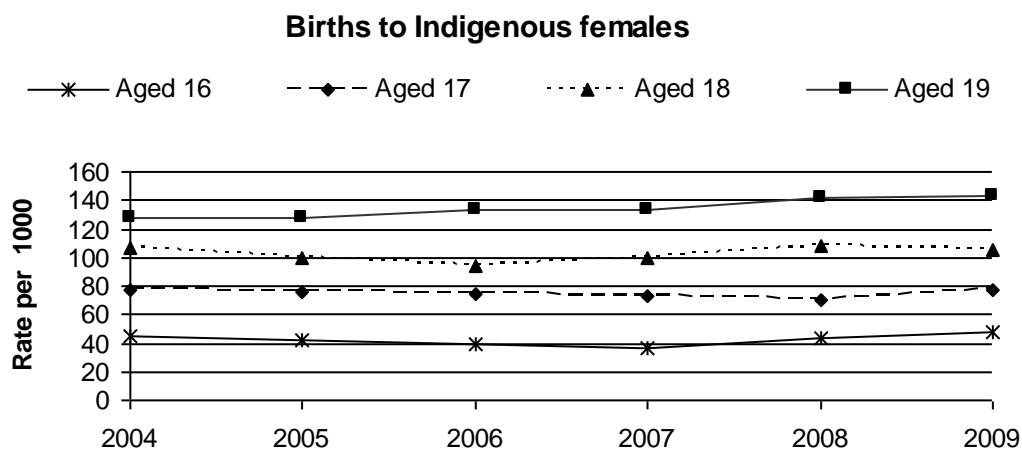
5.2 Teenage birth rate

Teenage births are associated with lower incomes and poorer educational attainment and employment prospects for the mother, which in turn influence outcomes for the child.

Box 23 KEY MESSAGES — Teenage birth rate

- There were 79 births per 1000 Indigenous teenage women compared with 14 births per 1000 non-Indigenous teenage women in 2009 (table 5A.2.31).
- Between 2005 and 2009:
 - in 10 per cent of births to Indigenous men, the father was a teenager (figure 5.2.2)
 - in 20 per cent of births to Indigenous women, the mother was a teenager (table 5A.2.28).

Teenage birth rate per 1000 females, 2004 to 2009



Source: Figure 5.2.1 in the main report.

Box 24 Things that work — Teenage birth rate

- The **Aboriginal Mothers and Daughters Gathering Program** (Bathurst, NSW) is a community based health education program covering: puberty, sex education, communication, self esteem and body image, protective behaviours, and advocacy for service utilisation and school attendance (box 5.2.2).
- The **Strong Young Mum's Program** (NSW) has a focus on re-engagement with education, as well as teaching about parenting skills and providing information about service supports. It has led to women improving their education and finding employment (box 5.2.2).

5.3 Birthweight

Low birthweight babies have a greater risk of dying in the first year of life, and can have more health problems early in life. Low birthweight may also influence the development of chronic diseases in adulthood, including diabetes and heart disease.

Box 25 KEY MESSAGES — Birthweight

- 11 per cent of Indigenous mothers had low birthweight babies in 2006–08, compared to 5 per cent of non-Indigenous mothers (figure 5.3.1).
- Proportions of low birthweight babies to Indigenous and non-Indigenous mothers were relatively constant between 1998–2000 and 2006–2008, with no change in the gap (table 5A.3.5–15).

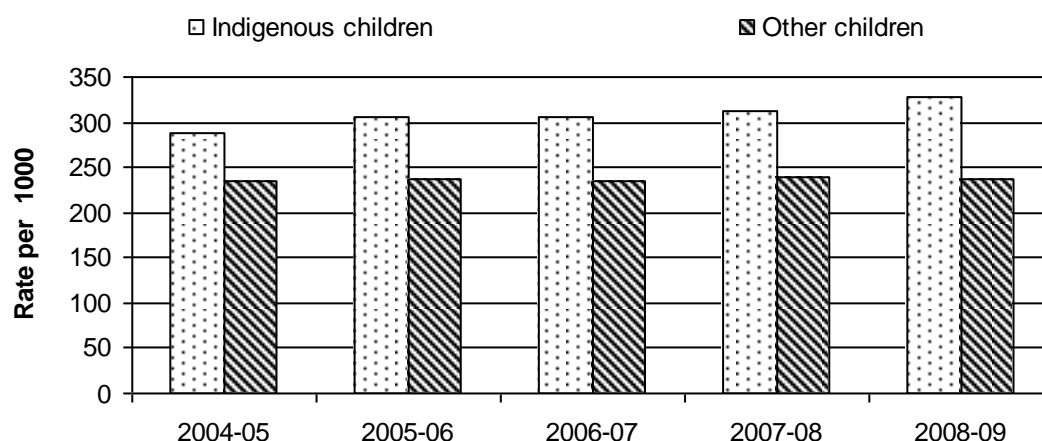
5.4 Early childhood hospitalisations

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

Box 26 KEY MESSAGES — Early childhood hospitalisations

- For children aged 0–4 years:
 - hospitalisation rates for Indigenous children increased from 288 per 1000 in 2004-05 to 327 per 1000 in 2008-09. Rates for other children remained relatively stable around 236 per 1000, leading to an increase in the gap (figure 5.4.1)
 - hospitalisation rates were similar for Indigenous and other children in major cities (227 per 1000 compared with 236 per 1000), but rates in regional areas were 1.3 times as high for Indigenous children as for other children (324 per 1000 compared with 243 per 1000) and in remote areas were twice as high (438 per 1000 compared with 223 per 1000) (table 5A.4.6).

Hospitalisations per 1000 children aged 0–4 years, NSW, Victoria, Queensland, WA, SA and public hospitals in the NT, 2004-2005 to 2008-2009



Source: Figure 5.4.1 in the main report.

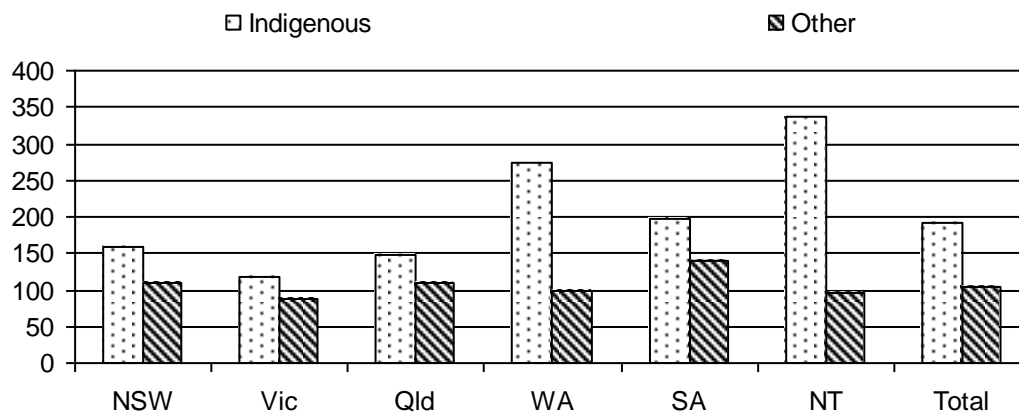
5.5 Injury and preventable disease

In many cases, hospital admissions can be prevented if more effective non-hospital care is available or used, either at an earlier stage in the disease progression or as an alternative to hospital care.

Box 27 KEY MESSAGES — Injury and preventable disease

- For children aged less than 5 years:
 - in NSW, Victoria, Queensland, WA, SA and public hospitals in the NT in 2008-09, 192 per 1000 Indigenous children were hospitalised for potentially preventable diseases and injuries, compared to 104 per 1000 other children (table 5.5.1)
 - in 2005–2009, for NSW, Queensland, WA, SA and the NT combined, the death rate for Indigenous children (14 deaths per 10 000 children) was more than twice the rate for non-Indigenous children (6 deaths per 10 000 children) (table 5A.5.7).

Potentially preventable hospitalisations, children aged less than five years, 2008-09



Source: Table 5A.5.5 in the attachment tables to the main report.

Box 28 Things that work — Injury and preventable disease

- The **Nganampa Health Council** (SA) provides primary healthcare services for the Anangu people and has a strong emphasis on child health, including immunisation, school aged screening, child growth monitoring for children aged less than 5 years, and child nutrition (box 5.5.2).

5.6 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 these basic skills that appear at age five or six are often difficult to close, even with targeted school interventions.

Box 29 KEY MESSAGES — Basic skills for life and learning

- 52 per cent of Indigenous five year old children were classified as 'at risk' or 'vulnerable' in the domain of language and cognitive skills in 2009, compared to 21 per cent of non-Indigenous five year olds (table 5A.6.1).
- The proportion of Indigenous five year old children classified as 'at risk' or 'vulnerable' in the domain of language and cognitive skills increased with remoteness in 2009, from 43 per cent in major cities to 73 per cent in very remote areas (table 5A.6.2).
- 31 per cent of Indigenous children received a fourth year developmental Aboriginal and Torres Strait Islander child health check in 2009-10 (table 5A.6.5).

5.7 Hearing impairment

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 effects, hearing impairment 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 30 KEY MESSAGES — Hearing impairment

- Indigenous children living in remote communities have the highest internationally published prevalence rates for otitis media. Of Indigenous children who had a Northern Territory Emergency Response audiology check, 74 per cent had at least one middle ear condition and 54 per cent had some hearing loss (AIHW and Department of Health and Ageing 2009; Department of Health and Ageing unpublished).
- Indigenous 0–14 year olds had higher rates of hearing problems than non-Indigenous 0–14 year olds in 2001, 2004-05 and 2008, and the gap remained unchanged (figure 5.7.1).
- The prevalence of hearing problems among Indigenous 0–14 year old in remote areas decreased from 18 per cent in 2001 to 10 per cent in 2008. The rate in non-remote areas remained relatively stable at around 8 per cent (table 5A.7.3).
- In major cities, Indigenous 0–14 year olds had lower rates of hospitalisation for all diseases of the middle ear and mastoid than other children (6 per 1000 compared with 7 per 1000) but in remote areas the rate for Indigenous children (15 per 1000) was 2.3 times as high as for other children (6 per 1000) (table 5A.7.9).

6 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.

6.1 School enrolment and attendance

There is a direct relationship between the number of days absent from school and academic performance. There is a 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.

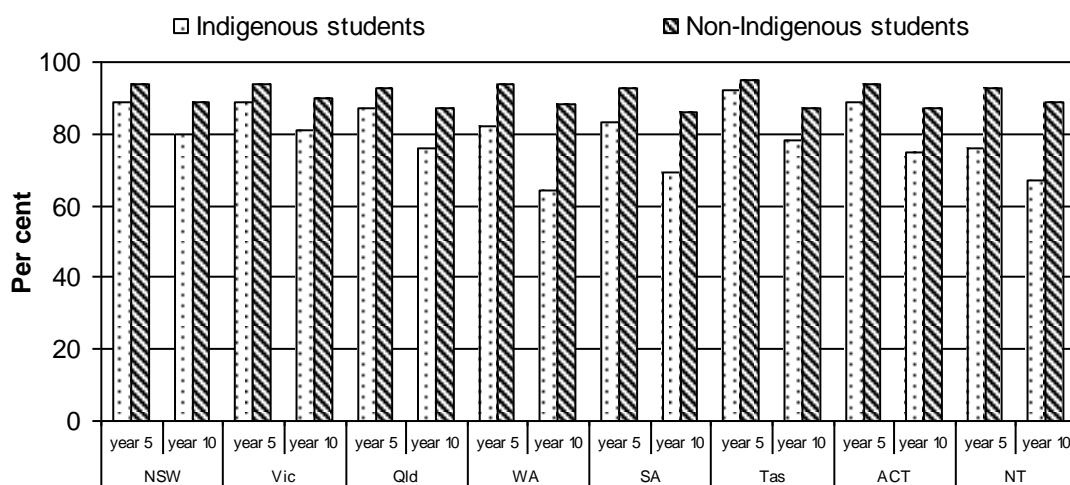
Box 31 KEY MESSAGES — School enrolment and attendance

- Attendance rates in government schools for years 5 and 10 were lower for Indigenous students than non-Indigenous students, in all states and territories in 2009 (figure 6.1.1).
- The gap between Indigenous and non-Indigenous students' attendance rates was greater in year 10 (between 9 and 24 percentage points) than in year 5 (between 3 and 17 percentage points) in 2009 (figure 6.1.1 and table 6A.1.1).

Box 32 Things that work — School enrolment and attendance

- 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 **Catherine Freeman Foundation** (Queensland) has a non-truancy project in the remote Indigenous community of Palm Island, which has resulted in a 20 per cent increase in attendance rates (box 6.1.2).
- **Wannik Dance Academies** (Victoria) have been established in three secondary schools. Participating students have attendance rates between 85 and 89 per cent (box 6.1.2).

Student attendance rates for years 5 and 10, government schools, 2009



Source: Figure 6.1.1 in the main report.

6.2 Teacher quality

It is generally recognised that the quality of teaching is a key determinant of student outcomes. However, it is difficult to measure teacher quality.

Box 33 KEY MESSAGES — Teacher quality

- Teacher quality is considered the most important in-school factor in improving learning outcomes for Indigenous students. COAG has agreed to a National Partnership on Improving Teacher Quality, but no data were available for this report.

6.3 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 34 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 6.3.2).
- In 2008, around two-thirds of Indigenous 5 to 24 year olds who had ever attended school or further studies reported being taught Indigenous culture as part of their studies. The proportions of people who had been taught Indigenous culture were lower in older age groups, with the lowest proportions for those in age groups 45 years and over (figure 6.3.1).

Box 35 Things that work — Indigenous cultural studies

- The **Partnership, Acceptance, Learning, Sharing (PALS) Program** (WA) encourages students to strengthen relationships between Indigenous and non-Indigenous people in their local community (box 6.3.2).
- The **Teacher Education Scholarship Program** (NSW) encourages and supports Aboriginal people to become school teachers and appoints successful graduates as permanent teachers (box 6.3.2).

6.4 Year 9 attainment

Anecdotal evidence suggests that many Indigenous children are leaving school in years 9 and 10 (generally the end of compulsory schooling) with poor literacy and numeracy skills, and with limited post school options. Leaving school early can lead 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 36 KEY MESSAGES — Year 9 attainment

- Apparent retention rates from years 7 or 8 to year 9 for Indigenous students increased from 95 per cent in 1998 to around 100 per cent in 2010 (table 4A.5.19).
- 34 per cent of Indigenous people aged 15 years and older reported year 9 or below as their highest level of schooling in 2008, compared to 16 per cent of non-Indigenous people aged 15 years and older (table 4A.5.6).
- Around one-third of Indigenous students achieved the minimum proficiency level in international tests for science, mathematics and reading literacy in 2009, compared to around two-thirds of non-Indigenous students (tables 6.4.1–3).

6.5 Year 10 attainment

There can be significant employment and income benefits of continuing education beyond the period of compulsory schooling.

Box 37 KEY MESSAGES — Year 10 attainment

- Apparent retention rates from years 7 or 8 to year 10 for Indigenous students increased from 83 per cent in 1998 to 96 per cent in 2010. The non-Indigenous rates increased from 98 per cent to around 100 per cent (table 4A.5.19).
- 65 per cent of Indigenous people aged 15 years and older reported leaving school before completing year 11 or 12 in 2008, compared to 40 per cent of non-Indigenous people aged 15 years and older (table 4A.5.6).

6.6 Transition from school to work

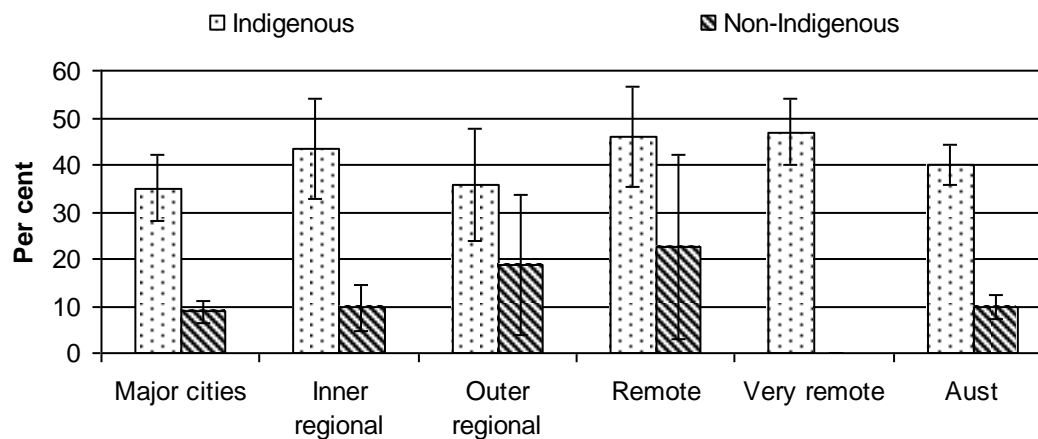
The teenage and adolescent years are critical development phases. At these stages, a good foundation in early childhood can be built upon, or actions can assist disadvantaged young people to make the transition to a positive adulthood.

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 38 KEY MESSAGES — Transition from school to work

- 40 per cent of Indigenous 18 to 24 year olds in 2008 were neither employed (unemployed or not in the labour force) nor studying, compared to 10 per cent of non-Indigenous people in the same age group (figure 6.6.1).
- There was no significant change in the proportions of Indigenous and non-Indigenous 18 to 24 year olds who were neither employed nor studying between 2002 and 2008 (figure 6.6.2).

People aged 18 to 24 years who were not employed and not studying, 2008



Source: Figure 6.6.1 in the main report.

7 Healthy lives

Health outcomes affect many aspects of people's lives, including their ability to socialise with family and friends, to participate in the community and to learn and work.

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.

7.1 Access to primary health care

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 39 KEY MESSAGES — Access to primary health care

- In 2008:
 - 28 per cent of Indigenous people aged 15 years and over reported their health as fair or poor, compared with 15 per cent of non-Indigenous people (figure 7.1.1, table 7A.1.1).
 - the proportions of both Indigenous and non-Indigenous people rating their health as fair or poor were higher in older age groups. The gap between Indigenous and non-Indigenous people with fair or poor health increased significantly with age (figure 7.1.2, table 7A.1.1).
- The proportion of Indigenous people rating their health as very good or excellent increased between 2004-05 and 2008 in all age groups except for those aged 15–24 years. The largest increase was in the 45–54 year age group (from 25 to 30 per cent) (table 7A.1.1).
- In 2006-07, average expenditure per person on primary health care was:
 - 30 per cent higher for Indigenous people than non-Indigenous people (table 7.1.2)
 - higher for Indigenous people than for non-Indigenous people for hospital services (\$326 compared with \$211) and community health services (\$1187 compared with \$182) (table 7.1.2)
 - lower for Indigenous people than for non-Indigenous people for medical services (\$342 compared with \$525), dental services (\$140 compared with \$279), pharmaceuticals (\$224 compared with \$509) and aids and appliances (\$37 compared with \$122) (table 7.1.2).

Box 40 Things that work — Access to primary health care

- The community-controlled **Urapuntja Health Service** (NT) conducts regular outreach to deliver primary, acute and chronic care, and preventive activities to the Utopia community, leading to significantly lower mortality than for the NT Indigenous population as a whole (box 7.1.2).
- The **Inala Indigenous Health Service** (Queensland) provides energetic Indigenous leadership, bulk billing and friendly service, which has resulted in a large increase in the number of Indigenous clients (box 7.1.2).
- The **Anyinginyi Health Aboriginal Corporation** (NT) and their Regional Eye Health Coordinator have partnered with an international non-government organisation to increase the delivery of culturally appropriate eye care services to Indigenous people (box 7.1.2).

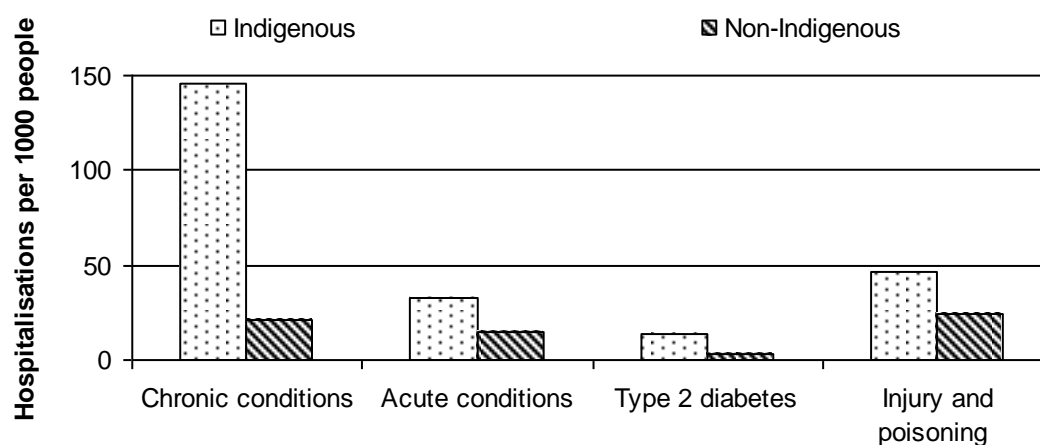
7.2 Potentially preventable hospitalisations

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

Box 41 KEY MESSAGES — Potentially preventable hospitalisations

- In NSW, Victoria, Queensland, WA, SA and public hospitals in the NT in 2008-09:
 - the Indigenous hospitalisation rate for potentially preventable chronic conditions was 7 times the rate for other people. Complications of all types of diabetes accounted for 84 per cent of Indigenous hospitalisations (table 7.2.1)
 - the Indigenous hospitalisation rate for potentially preventable acute conditions was 2.3 times the rate for other people
 - Indigenous hospitalisation rates for potentially preventable chronic conditions, complications of diabetes, potentially preventable acute conditions, vaccine preventable conditions, sexually transmitted conditions and injury and poisoning and other external causes were much higher in remote areas than in regional areas and major cities (tables 7A.2.2, 7A.2.4, 7A.2.6, 7A.2.8, 7A.2.10 and 7A.2.12)
 - the Indigenous hospitalisation rate for chronic disease in remote areas was 217 per 1000 people compared with 140 per 1000 people in major cities and regional areas (table 7A.2.2).
- In NSW, Victoria, Queensland, WA, SA and public hospitals in the NT between 2004-05 and 2008-09:
 - hospitalisations of Indigenous people for potentially preventable acute conditions increased from 30 to 33 per 1000 people, while rates for other people increased from 13 to 15 per 1000 people, leading to a small increase in the gap (table 7A.2.5)
- In NSW, Victoria, Queensland, WA, SA and public hospitals in the NT:
 - hospitalisations for potentially preventable chronic conditions increased from 153 per 1000 people in 2004-05 to 199 per 1000 people in 2007-08 and the gap increased (coding changes mean that data for 2008-09 are not directly comparable) (table 7A.2.1).

Potentially preventable hospitalisations



Source: Tables 7.2.1–5 in the main report.

7.3 Avoidable mortality

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

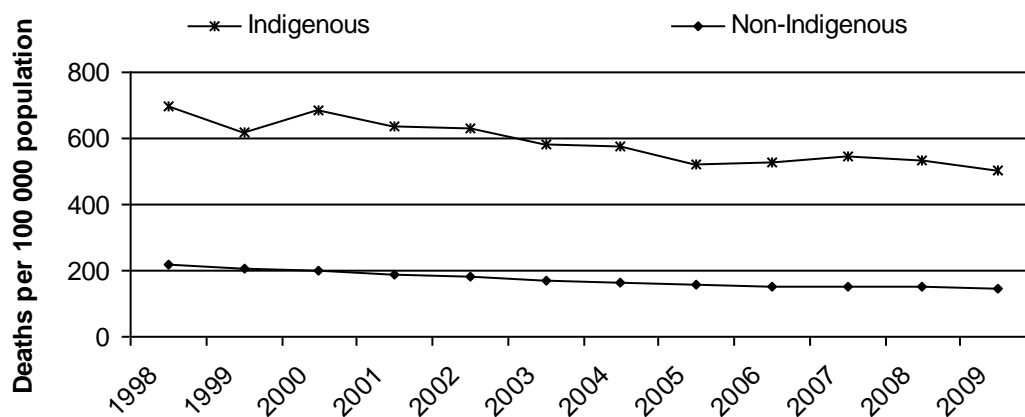
Box 42 KEY MESSAGES — Avoidable mortality

- For 0–74 year olds in NSW, Queensland, WA, SA and the NT between 2005 and 2009:
 - death rates from avoidable causes were 3.5 times as high for Indigenous females than for non-Indigenous females and 1.7 times as high for Indigenous males than for non-Indigenous males (table 7.3.2)
 - the most common causes of avoidable mortality for Indigenous people were ischaemic heart disease (heart attacks) (19 per cent), cancer (17 per cent) (particularly lung cancer (6 per cent)), diabetes (10 per cent) and suicide (8 per cent). Mortality rates for Indigenous people for all these conditions were significantly higher than for other Australians (table 7.3.3).
- For 0–74 year olds between 1998 and 2009, in NSW, Queensland, WA, SA and the NT combined:
 - mortality rates from avoidable causes declined by 29 per cent for Indigenous people and by 36 per cent for non-Indigenous people (figure 7.3.1)
 - the gap between death rates for Indigenous and non-Indigenous 0–74 year olds from avoidable causes decreased from 483 per 100 000 to 359 per 100 000 in 2009 (figure 7.3.1).

Box 43 Things that work — Avoidable mortality

- A combination of **pre-hospital care and treatment in public hospitals** (NT) has improved heart attack survival rates for Indigenous people (box 7.3.2).

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



^a Age standardised.

Source: Figure 7.3.1 in the main report.

7.4 Tobacco consumption and harm

Tobacco use is a significant contributor to premature death and ill health, 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 44 KEY MESSAGES — Tobacco consumption and harm

- Nearly half (48 per cent) of Indigenous adults reported that they were current daily smokers in 2008 (table 7A.4.1). The current daily smoking rate for Indigenous adults was 2.4 times the rate for non-Indigenous adults (figure 7.4.2).
- The proportions of Indigenous and non-Indigenous adults who were current daily smokers has not changed significantly since 2001 and, between 2001 and 2008 (table 7A.4.1), there was no significant change in the gap in current daily smoking rates between Indigenous and non-Indigenous adults (table 7A.4.4).
- Hospitalisation rates related to tobacco use for Indigenous people were between 3.3 (major cities) and 5.7 (remote) times as high as those for other people in 2008-09 (table 7A.4.9).

7.5 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. Good nutrition from a healthy diet contributes to better health outcomes.

Box 45 KEY MESSAGES — Obesity and nutrition

- 31 per cent of Indigenous adults were considered obese in 2004-05. After adjusting for differences in the age structure of the two populations, the Indigenous rate was twice the non-Indigenous rate (table 7A.5.1).
- Among 5–14 year olds in non-remote areas in 2008:
 - 42 per cent of Indigenous children met the guidelines for vegetable consumption, compared with 34 per cent of non-Indigenous children
 - 49 per cent of Indigenous children exceeded the guidelines for fruit consumption, compared with 56 per cent of non-Indigenous children (figure 7.5.1).

7.6 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 46 KEY MESSAGES — Tooth decay

- The proportion of Indigenous children with decay affected teeth was between 39 and 87 per cent, up to twice as high as non-Indigenous children in 2000–2002 in those jurisdictions for which data were available (NSW, SA and the NT) (tables 7A.6.1–2).
- Higher proportions of Indigenous adults than non-Indigenous adults had untreated tooth decay across all age groups in 2004–2006 (around 55 per cent and 25 per cent respectively) (figure 7.6.1).
- In 2008-09, Indigenous people were hospitalised for potentially preventable dental conditions at 1.3 times the rate of non-Indigenous people, in those jurisdictions for which data were available (NSW, Victoria, Queensland, WA, SA and public hospitals in the NT) (figure 7.6.2).

Box 47 Things that work — Tooth decay

- The Wuchopperen Health Service '**Filling the Gap**' Indigenous Dental Program (Queensland) has provided care to approximately 20 000 Aboriginal and Torres Strait Islander people in and around Cairns since 2005 (box 7.6.2).
- The **Aboriginal Liaison Program** (SA) has provided dental health care to increasing numbers of Indigenous people, from 185 people in 2007-08 to 1261 people in 2009-10 (box 7.6.2).

7.7 Mental health

Mental health is an important part of social and emotional wellbeing. Mental health can be affected by a broad range of influences, including domestic violence, substance misuse, physical health problems, imprisonment, family breakdown and social disadvantage.

For many Indigenous people, individual mental wellbeing is influenced by the social and emotional wellbeing of the community, and broad cultural and historic issues such as dispossession, removal from family and discrimination.

Box 48 KEY MESSAGES — Mental health

- In 2008:
 - 90 per cent of Indigenous people reported feeling ‘happy’, and 83 per cent reported feeling ‘calm and peaceful’ most/all/some of the time (table 7A.7.23).
 - However Indigenous people reported experiencing a high/very high level of psychological distress at two and a half times the rate for non-Indigenous people (32 per cent compared to 12 per cent) (figure 7.7.1).
- Between 2004–05 and 2008:
 - the proportion of people experiencing a high/very high level of psychological distress increased from 27 per cent to 32 per cent, while the proportion of non-Indigenous people remained relatively stable, leading to an increase in the gap (table 7A.7.2).
- From 2004–05 to 2008–09:
 - Indigenous people were hospitalised for mental and behavioural disorders at around 1.7 times the rate for non-Indigenous people. Rates were relatively stable over the period for both Indigenous people (from 24 to 27 per 1000) and non-Indigenous people (around 14 per 1000) (figure 7.7.2).

7.8 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 49 KEY MESSAGES — Suicide and self-harm

- In 2005–2009, after taking into account the different age structures of the two populations, for those jurisdictions for which suicide death data are available, the suicide death rate for Indigenous people was 2.5 times the rate for non-Indigenous people (figure 7.8.1).
- After adjusting for differences in the age structure of the two populations, Indigenous people were hospitalised for non-fatal intentional self-harm at two and a half times the rate for non-Indigenous people (3.5 per 1000 compared to 1.4 per 1000 in 2008-09) (table 7A.8.5). There was a slight increase in hospitalisations of Indigenous people for self-harm between 2004-05 and 2008-09 (figure 7.8.4).

Box 50 Things that work — Suicide and self-harm

- The **StandBy Response Service** (Queensland and WA) provides cultural support for people bereaved by suicide, reduces the potential for suicide, and helps build community capacity to respond to suicide losses (box 7.8.2).

8 Economic participation

Participation in the economy is a significant influence on living standards. Having a job or being involved in a business activity can lead to improved incomes for families and communities, and enhance self-esteem and reduce social alienation. Long term reliance on income support can entrench the disadvantages that accompany low socioeconomic status, and can contribute to long-term welfare dependency.

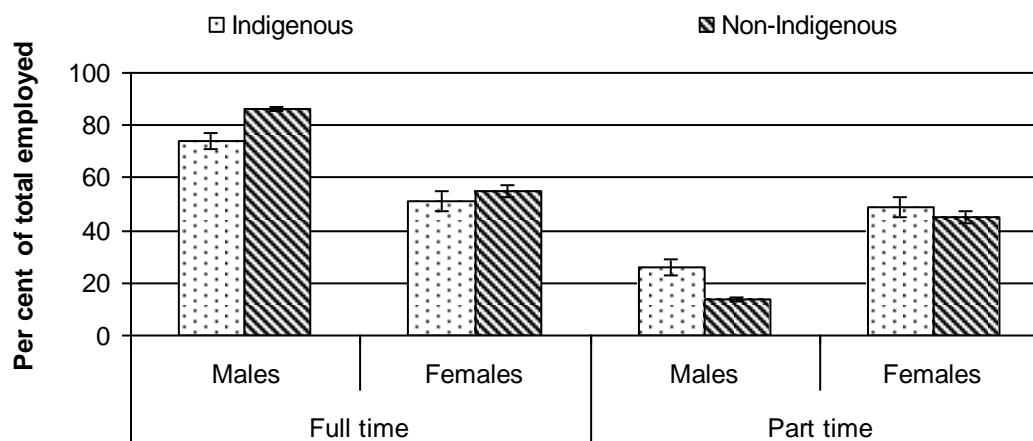
8.1 Employment by full time/part time status, sector and occupation

The types of employment undertaken by Indigenous people can affect rates of pay, job satisfaction and security, and opportunities for advancement.

Box 51 KEY MESSAGES — Employment by full time/part time status, sector and occupation

- In 2008, for employed 18–64 year olds:
 - a lower proportion of Indigenous than non-Indigenous males worked full time (74 per cent and 86 per cent respectively) (figure 8.1.1)
 - there was no significant difference between the proportions of Indigenous and non-Indigenous females working full time (figure 8.1.1).
- Between 1994 and 2008, for employed Indigenous 18–64 year olds:
 - full time employment levels for males and females combined initially fell from 1994 to 2002 (from 61 per cent to 55 per cent), before rising to 64 per cent in 2008 (figure 8.1.2).
- In 2006:
 - 26 per cent of employed Indigenous people worked in the public sector, compared to 15 per cent of employed non-Indigenous people (table 8A.1.12)
 - Indigenous people were employed as managers and administrators and professionals at a lower rate, and as labourers at a higher rate than non-Indigenous people (table 8A.1.7).

Full time and part time employment, employed people aged 18–64 years, by sex, 2008^a



^a Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information).

Source: Figure 8.1.1 in the main report.

Box 52 Things that work — Employment by full time/part time status, sector and occupation

- **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. The inclusion of education and training as part of employment has helped Indigenous employees overcome educational barriers. Rio Tinto is also involved in the Australian Government's National Indigenous Cadetship Project (box 8.1.2).
- The **Dean Rioli Aboriginal Employment** program (Victoria) places Indigenous employees in a range of occupations, including traineeships, apprenticeships and clerical positions, in partnership with the Indigenous community, industry, trade unions and governments (box 8.1.2).
- **Gunbalanya Station and Meats** (NT), a pastoral business and meatworks being developed by the Indigenous Land Corporation (ILC), is providing employment and training to Indigenous people (box 8.1.2).

8.2 Indigenous owned or controlled land and business

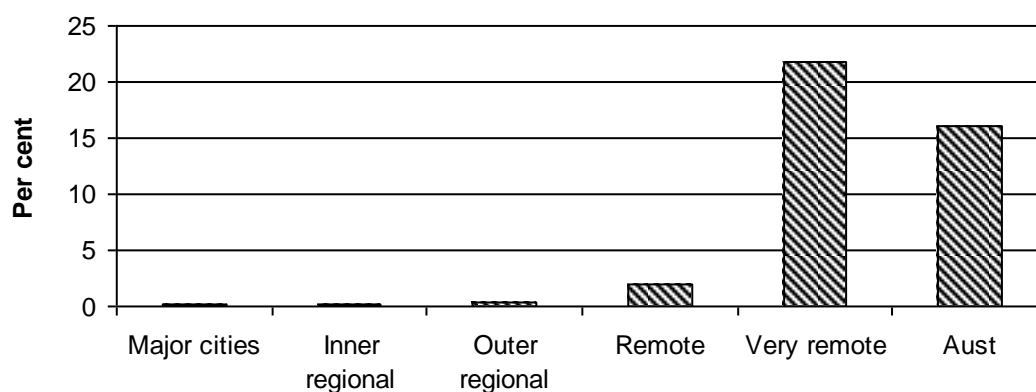
Land provides cultural, social and economic benefits for Indigenous people. Owning or controlling land can facilitate the practice of culture and customary activities such as fishing, hunting and gathering. Land can also provide people with a place to live, through either individual home ownership or community housing.

Economic benefits may arise from commercial activities, such as mining royalties and tourism, although these 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 53 KEY MESSAGES — Indigenous owned or controlled land and business

- Indigenous people obtain a variety of economic, social and cultural benefits from land. Different forms of tenure overlap and cannot be aggregated, but nationally in 2010:
 - Indigenous people owned or controlled 16 per cent of land in Australia. Most of this land (98 per cent) was in very remote areas (figure 8.2.2)
 - native title had been determined to exist in full or in part in 13 per cent of Australia, up from 5 per cent in 2004 (figure 8.2.2)
 - registered Indigenous Land Use Agreements (ILUAs) covered 15 per cent of Australia. The cumulative number of ILUAs has increased from 84 in June 2003 to 434 in June 2010 (figure 8.2.3).
- For 18 to 64 year olds in non-remote areas:
 - Indigenous people had lower rates of self employment than non-Indigenous people in 2008 (7 per cent compared with 11 per cent) (table 8A.2.13)
 - there was little change in Indigenous self employment between 1994 and 2008 (table 8A.2.13).

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



Source: Figure 8.2.1 in the main report.

Box 54 Things that work — Indigenous owned or controlled land and business

The main report discusses the following benefits from 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, to provide a range of social and cultural benefits. Its ‘Land Management Program’ assists with managing that land (box 8.2.2).
 - The **Wunan Foundation** (WA), a not-for-profit Indigenous organisation in the East Kimberley, provides services aimed at improving socio-economic outcomes for Indigenous people (box 8.2.3).
 - The **Larrakia Development Corporation** (NT) manages the development of land exchanged as part of a native title claim settlement with the NT Government, and has funded and coordinated community projects for the Larrakia people (box 8.2.3).
 - The **National Centre of Indigenous Excellence** (NSW) has four development pathways (sport, learning and innovation, culture and arts, and health and wellbeing) to promote the development and leadership of young Indigenous people (box 8.2.3).
 - **Booderee National Park** (Jervis Bay Territory), managed by the Wreck Bay Aboriginal Community and Parks Australia, provides employment to local Aboriginal people (box 8.2.3).
 - The **Kimberley Indigenous Management Support Service** (WA) develops the technical and management skills of Indigenous directors, managers and workers on Indigenous-owned Kimberley cattle stations (box 8.2.4).
 - The **Indigenous Landholder Service** (WA) has successfully expanded beyond the Kimberley region and delivers extension, training and support to over 70 Indigenous managed properties across WA (box 8.2.4).
 - The **Koori Business Network** (Victoria) assists the development and sustainability of Indigenous businesses (box 8.2.5).
 - **Indigenous Business Australia’s** Business Development Programme, known as IBA Enterprises, directly assists Indigenous people to succeed in business, through support, mentoring and business loans (box 8.2.5).
 - The **Australian Indigenous Minority Supplier Council** provides a direct business-to-business purchasing link between corporate Australia, government agencies and Indigenous-owned businesses (box 8.2.5).

8.3 Home ownership

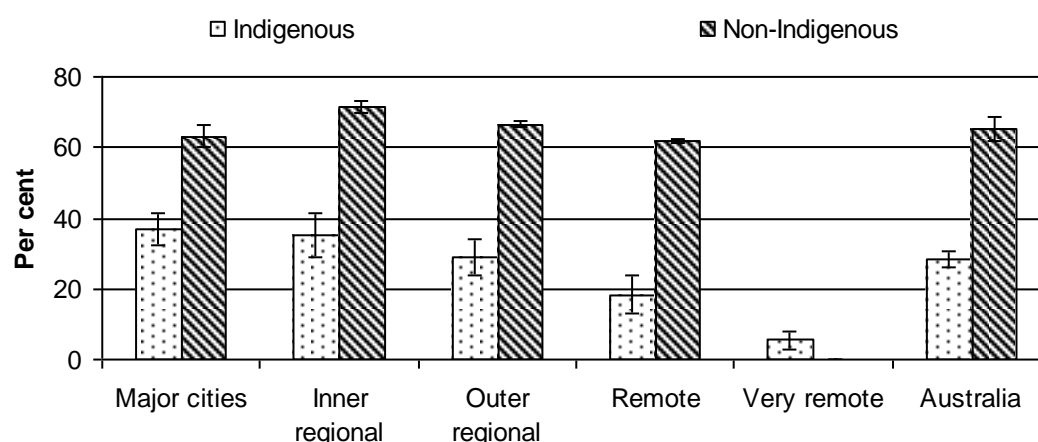
Home ownership, although not an aspiration of all Indigenous people, is an important indicator of wealth and saving. As well as providing accommodation, home ownership provides a secure asset base that can contribute to financial stability, and against which people can borrow.

Not all Indigenous people want to own their own homes. In particular, some 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 or controlled land’.

Box 55 KEY MESSAGES — Home ownership

- In 2008:
 - 29 per cent of Indigenous people lived in a home owned, with or without a mortgage, by a member of their household, compared to 65 per cent of non-Indigenous people (figure 8.3.1)
 - Indigenous home ownership rates declined with remoteness, from 37 per cent in major cities to 18 per cent in remote areas and 6 per cent in very remote areas (figure 8.3.1)
- From 1994 to 2008, the proportion of Indigenous people living in a home owned, either with or without a mortgage, by a member of their household, increased from 22 per cent to 29 per cent (figure 8.3.2).

Proportion of people living in home owner/purchaser households, by remoteness, 2008



Source: Figure 8.3.1 in the main report.

Box 56 Things that work — Home ownership

- An Indigenous home ownership program, now known as **IBA Homes**, has helped more than 14 000 Indigenous families buy their own homes since its establishment in 1975 (box 8.3.2).

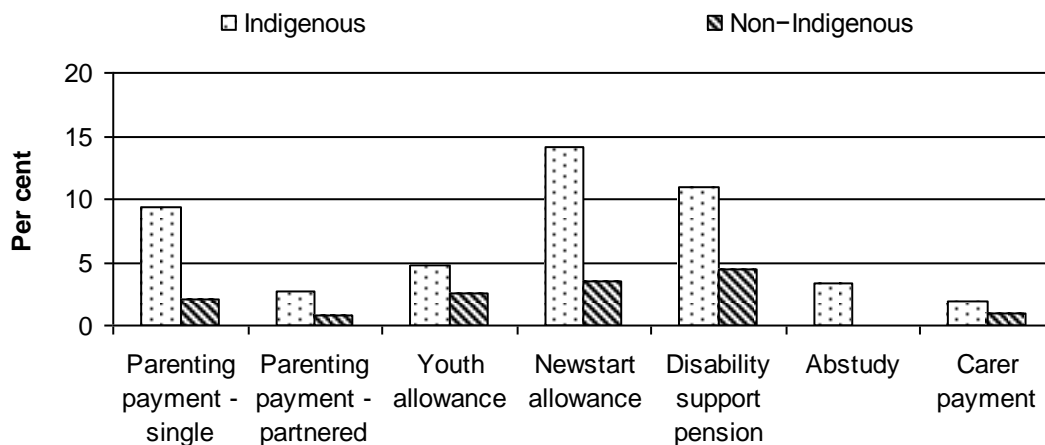
8.4 Income support

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 57 KEY MESSAGES — Income support

- For people aged 18–64 years in 2008:
 - 44 per cent of Indigenous people and 65 per cent of non-Indigenous people received employee income as their main source of personal income (figure 8.4.1)
 - 40 per cent of Indigenous people and 14 per cent of non-Indigenous people received government pensions and allowances as their main source of personal income (figure 8.4.1).
- For people aged 15–64 years in 2010:
 - a higher proportion of Indigenous people than non-Indigenous people received income support across all major payment types (figure 8.4.5).

People aged 15–64 years receiving income support payments, by selected payment types, 2010



Source: Figure 8.4.5 in the main report.

9 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.

9.1 Overcrowding in housing

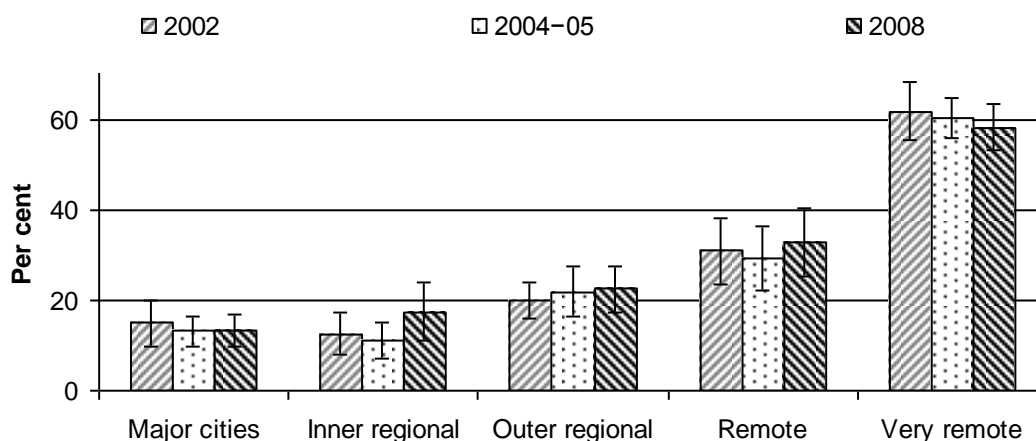
If a house is not appropriate for the number of residents, or has inadequate facilities, it may be more difficult to prevent the spread of infectious diseases. In addition, cramped living conditions can increase domestic tensions and contribute to family violence and child abuse and neglect. Overcrowding also affects the ability of children to do homework or study, and 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 58 KEY MESSAGES — Overcrowding in housing

- In 2008:
 - overcrowding rates for Indigenous people (28 per cent) were almost five times those for non-Indigenous people (6 per cent) (figure 9.1.1)
 - overcrowding rates for Indigenous people increased with remoteness, from 13 per cent in major cities to 58 per cent in very remote areas (figure 9.1.2).
- Between 2002 and 2008:
 - there was no statistically significant change in the proportion of Indigenous people aged 15 years and over living in overcrowded households, across all remoteness areas (figure 9.1.2).

Indigenous people aged 15 years and over, living in overcrowded households, by remoteness^a



^a Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information).

Source: Figure 9.1.2 in the main report.

9.2 Rates of disease associated with poor environmental health

Sanitation, drinking water quality, food safety, disease control and housing conditions all contribute to health and quality of life. However, many rural and remote Indigenous communities still struggle to achieve the 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.

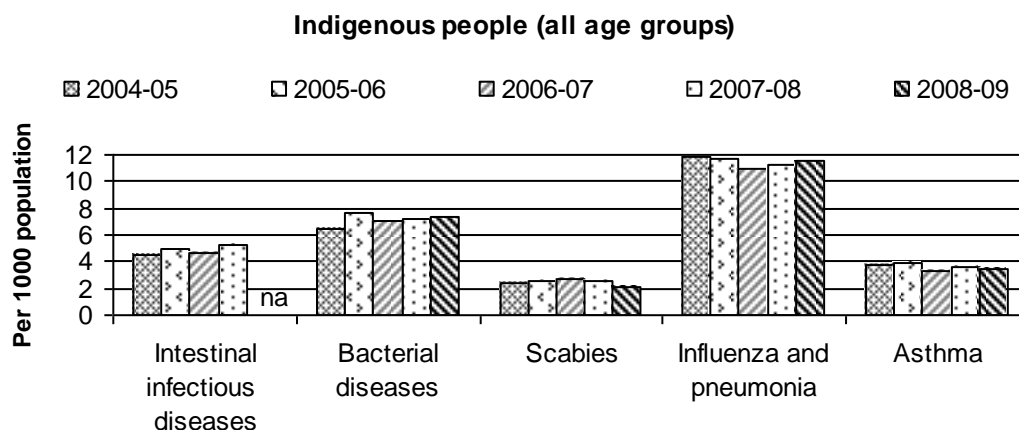
Box 59 KEY MESSAGES — Rates of disease associated with poor environmental health

- In 2008-09:
 - Indigenous people experienced higher rates of hospitalisation than other people for infectious diseases, bacterial diseases, acute hepatitis A and B, scabies, rheumatic and respiratory conditions, influenza and pneumonia (table 9.2.1)
 - hospitalisation rates for Indigenous people for most conditions associated with poor environmental health increased with remoteness. Remoteness had little effect on hospitalisation rates for other people (table 9A.2.16).
- Between 2004-05 and 2008-09, there was little change in hospitalisation rates for conditions associated with poor environmental health for Indigenous or other people (figure 9.2.2).

Box 60 Things that work — Rates of disease associated with poor environmental health

- The **Environmental Health Worker Program** and the **Feral and Domestic Animal Management and Welfare Program** (Queensland) often work together to improve environmental health conditions, the health and welfare of domestic animals, and the incidence of disease (9.2.2).
- The **No Germs on Me — Hand Washing Campaign** (NT) is a social marketing campaign to promote the benefits of hand washing with soap after going to the toilet, after changing babies' nappies and before touching food (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.

9.3 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 food 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 level of service that has been achieved for the rest of the population.

Box 61 KEY MESSAGES — Access to clean water and functional sewerage and electricity services

- There were improvements in access to clean water and functioning sewerage and electricity services in discrete Indigenous communities between 2001 and 2006. In 2006, 182 discrete Indigenous communities (44 563 people) had experienced water supply interruptions; 142 (30 140 people) had experienced sewerage overflows or leakages; and 275 (67 849 people) had experienced an electricity interruption; in the previous 12 months (tables 9A.3.2, 9A.3.5 and 9A.3.7).
- In both 2002 and 2008, high proportions of Indigenous households had working facilities for washing people, working facilities for washing clothes and bedding, working facilities for preparing food, and working sewerage facilities; although there were small decreases in proportions over time (tables 9A.3.8–9).

Box 62 Things that work — Access to clean water and functional sewerage and electricity services

- A **Health Hardware** program (Australian Government and NSW Department of Health) assessed health hardware in Indigenous communities. After low cost repairs, follow up surveys found significant increases in the proportions of houses meeting minimum safety standards (box 9.3.2).
- The **Housing for Health** program (NSW) improves living conditions in Aboriginal communities, improving the condition of houses (box 9.3.2).
- **Indigenous Essential Services** and **Power and Water Corporation** (NT) provides utility services in 72 growth towns and communities using local Essential Service Operators, 40 per cent of whom are Indigenous (box 9.3.2).

10 Safe and supportive communities

Safe and supportive families and communities provide the foundations for the physical and mental wellbeing of 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.

10.1 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 63 KEY MESSAGES — Participation in organised sport, arts or community group activities

- For Indigenous people aged 15 years and over, between 2002 and 2008:
 - there were increases in the proportions of people who participated in sporting events and recreational events (from 49 to 57 per cent) (table 10A.1.13)
 - there was a decrease in the proportion of people who attended cultural events (from 68 to 63 per cent) (table 10A.1.13).
- For Indigenous people aged 15 years and over in 2008:
 - there were no significant differences between proportions of people in different remoteness areas participating in sporting activities (table 10A.1.12)
 - attendance at cultural events increased with remoteness; from 56 per cent in major cities to 84 per cent in very remote areas (table 10A.1.12).
- Nearly two thirds of Indigenous 3 to 24 year olds participated in at least one cultural activity in 2008, including fishing, hunting, gathering wild plants/berries, Aboriginal or Torres Strait Islander arts or crafts, performing Aboriginal or Torres Strait Islander music, dance or theatre and writing or telling Aboriginal or Torres Strait Islander stories (table 10A.1.14).

Box 64 Things that work — Participation in organised sport, arts or community group activities

- **Sporting Chance** (national) delivers a range of sport and recreation based activities to engage Aboriginal and Torres Strait Islander students in their schooling and improve their education, training and employment outcomes (box 10.1.2).
- **Pintubi Anmatjere Warlpiri Media** (NT), in Yuendumu, coordinates community radio and television services across 14 communities (box 10.1.2).
- **Papunya Tula Artists** (NT), owned and directed by Indigenous artists of the Western Desert, promotes individual artists, provides economic development for communities, and assists in the maintenance of a rich cultural heritage (box 10.1.2).
- The **Culture, Art and Heritage Project** (Queensland) was developed by the Torres Strait Regional Authority to support the regional arts and crafts industry (box 10.1.2).
- The **Galiwin'ku Gumurr Marthakal Healthy Lifestyle Festival** (NT), 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).
- The **Swim and Survive Program** (NSW) is designed to increase Indigenous children's participation rates in swimming lessons and physical activities (box 10.1.2).

10.2 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. Access to land may allow Indigenous people to practise and maintain their knowledge of ceremonies, rituals and history.

Box 65 KEY MESSAGES — Access to traditional lands

- In 2008, among Indigenous people aged 15 years and over:
 - 25 per cent lived on their homelands and a further 45 per cent were allowed to visit their homelands (figure 10.2.1)
 - the proportion who lived on their homelands varied with remoteness, from 10 per cent in major cities to 51 per cent in very remote areas (figure 10.2.1)
 - 28 per cent did not recognise an area as their homelands or traditional country (figure 10.2.1).
- Between 1994 and 2008, for Indigenous people aged 15 years and over:
 - the proportion of people who lived on their homelands decreased from 29 per cent to 25 per cent
 - there was no statistically significant change in the proportions of people who were allowed to visit their homelands or who did not recognise an area as their homelands (figure 10.2.2).

Box 66 Things that work — Access to traditional lands

- The **Indigenous Heritage Program** (national) supports the identification, conservation and promotion (where appropriate) of Indigenous heritage across Australia (box 10.2.2).
- The **Working on Country** program (national) provides funding to enable Indigenous people to work and spend time on lands with a traditional or historical connection (box 10.2.2).
- The **Parks and Wildlife Service Tasmania**, with funding assistance from the Australian Government's Working on Country program, employed five Aboriginal trainee rangers on a four year traineeship (box 10.2.2).
- **The Department of Environment and Natural Resources** (SA) is working closely with Aboriginal people to identify opportunities for co-management of national and conservation parks (box 10.2.2).

10.3 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 issues in the workplace, child abuse and neglect, financial problems, family breakdown, violence and crime.

Box 67 KEY MESSAGES — Alcohol consumption and harm

- Between 2002 and 2008, for Indigenous people aged 15 years and over:
 - the proportion who reported that they did not drink or had never drunk alcohol decreased from 31 to 27 per cent (table 10A.3.3)
 - there was no change in the proportions who reported drinking at chronic risky/high risk levels (17 per cent) or binge drinking in the two weeks prior to interview (37 per cent) (figure 10.3.1 and table 10A.3.8).
- A 2004-05 survey found that a lower proportion of Indigenous than non-Indigenous adults had consumed alcohol in the week prior to interview (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 (SCRGSP 2009).
- Indigenous people were hospitalised for alcohol related conditions at rates between 1.5 and 8 times those of other people in 2008-09 (table 10.3.1).
- 71 per cent of Indigenous homicides over the period 1999-2000 to 2008-09 involved both the victim and offender having consumed alcohol at the time of the offence, compared with 25 per cent of non-Indigenous homicides (figure 10.3.2).

Box 68 Things that work — Alcohol consumption and harm

- Several governments and Indigenous communities have introduced alcohol reforms that have led to reductions in the number of people seeking treatment for alcohol related injuries, alcohol related violence and anti-social behaviour.
 - Alcohol Management Plans in Cape York, Queensland
 - alcohol restrictions in Fitzroy Crossing, WA
 - the Groote Eylandt Liquor Management System, NT
 - the Alice Springs alcohol management plan, NT
 - the Katherine alcohol management plan, NT
 - the Tennant Creek alcohol management plan. NT (box 10.3.2).

10.4 Drug and other substance use and harm

Drug and other substance use 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, including poor education, unemployment, socioeconomic status and mental health.

Box 69 KEY MESSAGES — Drug and other substance use and harm

- In 2007, Indigenous people were recent users of illicit substances at almost twice the rate of other Australians (AIHW 2008; table 10A.4.1).
- In 2008, 23 per cent of Indigenous people aged 18 years or over had used illicit drugs in the past 12 months, with cannabis the most commonly used drug (table 10.4.1).
- Apart from kava, illicit drug use was higher for Indigenous people in non-remote areas than remote areas in 2008 (table 10A.4.3).
- There was no change in illicit drug use among Indigenous people between 2002 and 2008 (figure 10.4.1).
- Indigenous people were hospitalised for mental and behavioural disorders caused by drug use at three times the rate for other people (table 10A.4.6) and hospitalised for accidental poisoning between 2004-05 and 2008-09 at nearly twice the rate for other people (table 10A.4.7).
- For all homicides recorded from 1999-2000 to 2008-09, a lower proportion of Indigenous homicides than non-Indigenous homicides occurred under the influence of drugs (24 per cent compared to 30 per cent) (table 10A.4.11).

Box 70 Things that work — Drug and other substance use and harm

- **Opal fuel** (WA, SA and the NT), an alternative fuel with low aromatics, has been successful in reducing the incidence of harm from petrol sniffing (box 10.4.2).
- The **Aboriginal Substance Misuse Connection Program** (SA) assists Aboriginal clients through assessment, detoxification, rehabilitation and integration with other services (box 10.4.2).

10.5 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 71 KEY MESSAGES — Juvenile diversions

- Rates of diversion from formal criminal justice processes for Indigenous juveniles were around one-half to two-thirds those for non-Indigenous juveniles in states and territories for which data were available (tables 10.5.1–2 and figures 10.5.1–4).
- In recent years, Indigenous juvenile diversion rates have remained relatively constant in most states and territories (tables 10A.5.5–7, 10.5.2 and figures 10.5.1 and 10.5.3).

Box 72 Things that work — Juvenile diversions

- The **Koori Youth Contact and Cautioning Program** (Victoria), developed by the Victorian Aboriginal Legal Service and Victoria Police, increased access to diversionary measures for Indigenous youth (box 10.5.2).
- The **Regional Youth Justice Service Program** (WA), developed by the Department of Corrective Services, focuses on the diversion of young people from formal justice processes through the provision of advice and support, youth bail options, in-court assistance and supervision of community based orders (box 10.5.2).

10.6 Repeat offending

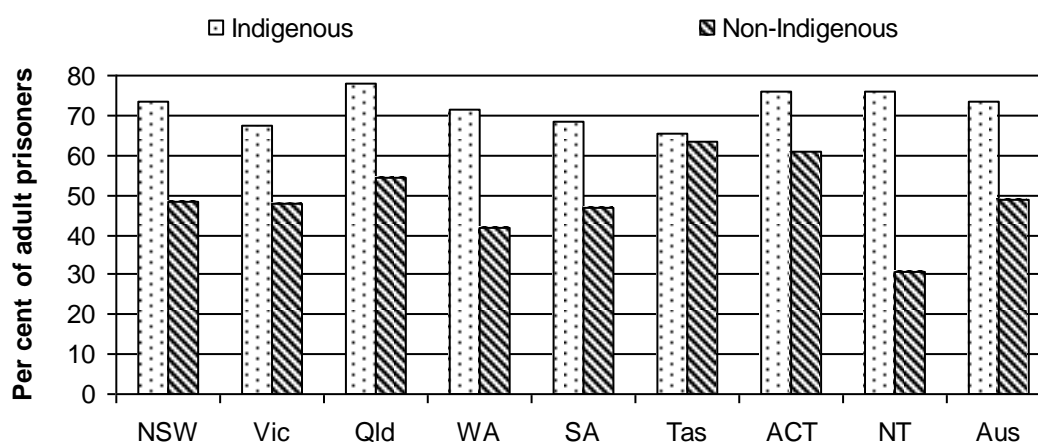
Indigenous people are over-represented in the criminal justice system, compared with non-Indigenous people, and once they have come into contact with the system, they are more likely to have further contact. High rates of imprisonment and reoffending affect families and communities, as well as individuals.

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 imprisonment of one generation affects later generations through the breakdown of family structures).

Box 73 KEY MESSAGES — Repeat offending

- A greater proportion of Indigenous prisoners (74 per cent) than non-Indigenous prisoners (49 per cent) had prior adult imprisonment as at 30 June 2010 (figure 10.6.1).
- Among prisoners released from prison between 1994 and 2007, 58 per cent of Indigenous people were reimprisoned within ten years, compared with 35 per cent of non-Indigenous people (ABS 2010a).
- Between 2000 and 2010, the proportion of Indigenous prisoners with prior imprisonment fell from 76 per cent to 74 per cent, and the proportion of non-Indigenous prisoners with prior imprisonment fell from 52 per cent to 49 per cent (table 10A.6.5).
- Studies on juvenile repeat offending carried out in NSW, Queensland, WA and SA indicate that Indigenous juvenile offenders had higher rates of reoffending than non-Indigenous juvenile offenders (tables 10A.6.10–17).

Prisoners with known prior adult imprisonment, 30 June 2010



Source: Figure 10.6.1 in the main report.

Box 74 Things that work — Repeat offending

The **Local Justice Worker** and **Koori Offender Support and Mentoring** programs (Victoria) assist Indigenous offenders to meet the requirements of their community correctional orders by providing support, mentoring, advice and cultural connection (box 10.6.2).

11 Governance and leadership

Governance refers to the way members of a group or community organise themselves to make decisions that affect them as a group. It can include governance of Indigenous communities and organisations, and 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.

11.1 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 unique cultural differences. The same key aspects also apply to ‘government governance’ — how governments engage with Indigenous organisations and communities.

Box 75 KEY MESSAGES — Case studies in governance

- Six determinants have general application to good Indigenous and government governance:
 - governing institutions
 - leadership
 - self-determination
 - capacity building
 - cultural match
 - resources.
- The existence of these determinants contributes to the success of the efforts to improve outcomes for Indigenous people. The lack of these determinants is often linked to failure.

Box 76 Things that work — Case studies in governance

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

Indigenous Governance Awards Finalists 2010

Organisations under 10 years old

Winner

- Carbon Media Events Pty Ltd (Brisbane, Queensland)

Highly commended

- Noongar Mia Mia Pty Ltd (Perth, WA)

Finalists

- Mirrimbeena Aboriginal Education Group Inc. (Echuca, Victoria)
- Napranum Preschool PaL Group (Weipa, Queensland)

Organisations over 10 years old

Winner

- Laynhapuy Homelands Association Incorporated (Yirrkala, NT)

Highly commended

- North Coast Aboriginal Corporation for Community Health (Maroochydore, Queensland)

Finalists

- Association of Northern, Kimberley and Arnhem Aboriginal Artists (Darwin, NT)
- Australian Indigenous Doctors Association Limited (Parkes, ACT)

Source: Section 11.1 in the main report.

11.2 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 Indigenous people's 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 77 KEY MESSAGES — Governance capacity and skills

- Indigenous students enrolled in university and VET courses relevant to governance in 2009 at lower rates than non-Indigenous students:
 - 15 per cent of Indigenous university students compared with 33 per cent of non-Indigenous university students
 - 14 per cent of Indigenous VET students compared with 20 per cent of non-Indigenous VET students (figure 11.2.1).

Box 78 Things that work — Governance capacity and skills

- The **Office of the Registrar of Indigenous Corporations (ORIC)** (national) has developed a range of corporate governance training programs for Indigenous corporations and their governing committees/boards (box 11.2.2). A related governance training program is administered by the Victorian Government through a partnership with ORIC (box 11.2.2).
- The **Fellowship for Indigenous Leadership** (Victoria) is an intensive, highly individualised leadership program. Fellows (supported for five years) and emerging leaders (supported for one year) have the opportunity to further their leadership skills, networks and community projects (box 11.2.2).

11.3 Engagement with service delivery

Engagement with service delivery considers 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 also include lack of services, long distances, or lack of interpreters.

Box 79 KEY MESSAGES — Engagement with service delivery

- Among Indigenous people aged 15 years and over, in 2008:
 - 30 per cent reported that they had problems accessing one or more services (figure 11.3.1). The largest numbers of people had problems accessing dentists (20 per cent) and doctors (10 per cent) (table 11A.3.7)
 - 27 per cent felt discriminated against in one or more situations or places. Most commonly, Indigenous people felt discriminated against by ‘members of the public’ (11 per cent), followed by ‘the police, security people, lawyers or in a court of law’ (11 per cent) (figure 11.3.2 and table 11A.3.7).
- Hospital discharges against medical advice for Indigenous people were six times as high as those for other people in 2008-09 (figure 11.3.4).

Box 80 Things that work — Engagement with service delivery

- The **Yarrenyty-Arltere Learning Centre** (Alice Springs, NT) is both a Family Resource Centre and an Inter-generational Centre, where adults and children work and learn side by side. The centre runs programs covering health, education, social support and culture, and enables mainstream programs to provide services to community members (box 11.3.2).
- The **Aboriginal Birth Certificate Registration project** (NSW) was initiated in 2006, because the absence of a birth certificate was preventing Aboriginal people from participating in organised sport and other community activities (box 11.3.2).
- The **Aboriginal Affairs Coordinating Committee** (WA) comprises Directors General from the Departments of Indigenous Affairs, Premier and Cabinet, Treasury and Finance, Health, Child Protection, Education and Training, Housing and WA Police, and provides a coordinated, strategic approach to delivering WA and Australian Government policy and strategy (box 11.3.2).
- The **Improving Care for Aboriginal and Torres Strait Islander Patients** program (Victoria) has: increased identification of Aboriginal patients; increased employment of Aboriginal staff in health services; and developed culturally responsive models of care (box 11.3.2).
- The **Let’s Start program** (NT) is for children aged 4 to 7 years, whose behaviour is of concern. The program aims to strengthen parenting and parent-child relationships to support resilience and reduce developmental risk factors within family relationships (box 11.3.2).

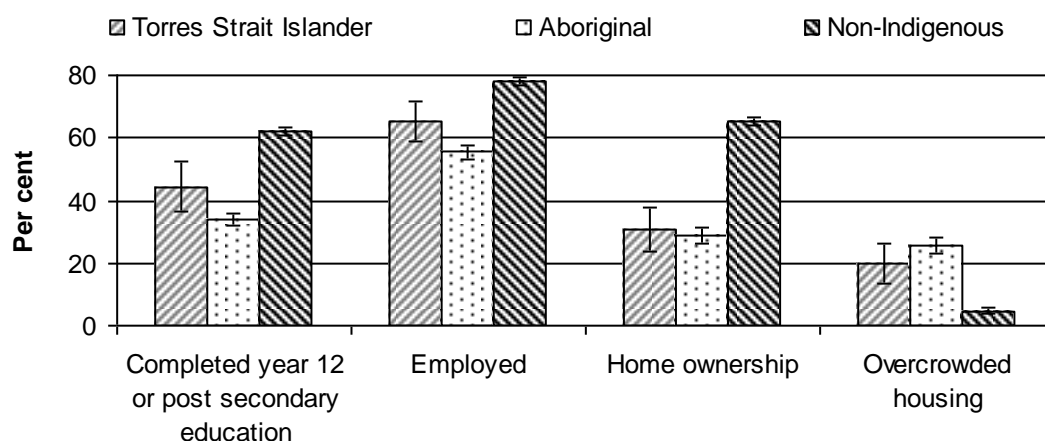
Outcomes for Torres Strait Islander people

Torres Strait Islander people are a culturally distinct group of Indigenous Australians. The relatively small number of Torres Strait Islander people limits the availability of data. However, survey data are available for some key indicators.

Box 81 KEY MESSAGES — Outcomes for Torres Strait Islander people

- In 2008:
 - the proportion of Torres Strait Islander people aged 18 years and over who had completed year 12 or post-secondary education (44 per cent) was higher than for Aboriginal people (34 per cent), but much lower than for non-Indigenous people (62 per cent) (table 12A.1.1, figure 12.1)
 - the proportion of Torres Strait Islander people who were employed (65 per cent) was higher than for Aboriginal people (56 per cent), but lower than for non-Indigenous people (78 per cent) (figure 12.3)
 - the proportions of Torres Strait Islander and Aboriginal people who lived in a home owned by a member of the household (29 per cent) were much lower than for non-Indigenous people (65 per cent) (figure 12.5)
 - there was no statistically significant difference between the individual median weekly income for Torres Strait Islander people (\$550) and non-Indigenous people (\$608), but incomes for Aboriginal people were lower (\$400) (figure 12.4).

Outcomes for Torres Strait Islander, Aboriginal and non-Indigenous people, 2008^a



Source: Chapter 12 in the main report.

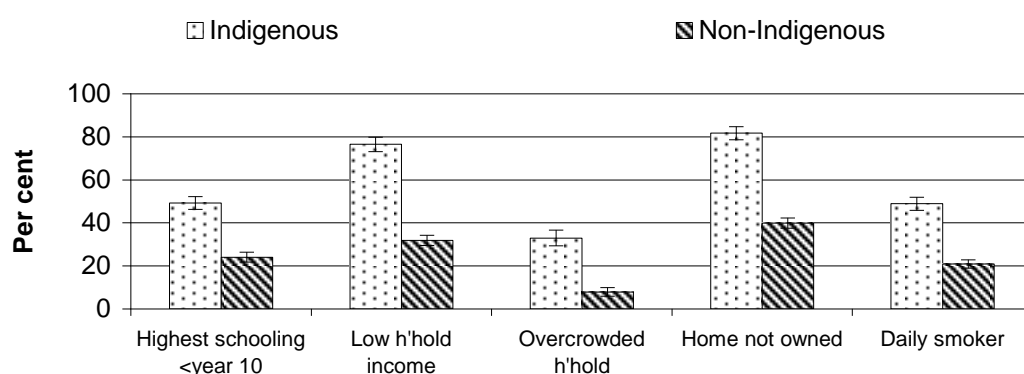
Multiple disadvantage and interactions across the framework

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 survey data, 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 82 KEY MESSAGES — Measuring multiple disadvantage

- The main report uses two approaches to examine the interactions between various indicators of disadvantage:
 - The first approach examines associations between different aspects of disadvantage. Where people who experience one type of disadvantage also tend to experience another kind of disadvantage, the two aspects of disadvantage may be linked or associated in some way. The analysis shows that rates of multiple disadvantage are higher for Indigenous people than non-Indigenous people in the areas of education, income, health, housing, crime and violence.
 - The second approach uses a statistical technique to isolate the possible contribution of one factor at a time (such as education), holding other modelled factors (such as health or age) constant. This information can be used to analyse the possible effect of factors that might be influenced by government policy, while controlling for other factors.

People aged 15 to 64 years not in the labour force — associations with selected characteristics, 2008



Source: Figure 13.1.2 in the main report.

Future directions in data

Although there have been significant improvements in many data sources since the first OID report in 2003, some key data sets still cannot provide good quality statistics for Indigenous people. All Australian governments have agreed that improvement of Indigenous data is a high priority.

Indicator	Data priority
Life expectancy and mortality	Continue work on improving quality and availability of Indigenous mortality (deaths) data, to inform trend data on life expectancy, (while recognising the limits on data from jurisdictions with small Indigenous populations).
Substantiated child abuse and neglect	Develop data collections on the underlying extent of child protection issues.
Tobacco, alcohol and drug and other substance use and harm	Collect regular data comparing Indigenous and non-Indigenous consumption and more robust data by jurisdictional and geographic levels.
Birthweight	Extend data collections to focus on the Indigenous status of babies (rather than mothers).
Hearing impairments	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	Improve quality of Indigenous identification in hospital administrative systems.
Social and emotional wellbeing	Improve data on comparable measures of social and emotional wellbeing.
Family and community violence	Improve data on relationship of victim to offender and comparability across states and territories.
Tooth decay	Expand the availability of comparable data on dental health.
Juvenile diversions	Develop and collect comparable national data.
Self employment and Indigenous business	Collect regular data on Indigenous business and self-employment.
Access to clean water and functional sewerage and electricity services	Collect regular data allowing comparison between services in Indigenous communities and those delivered by major utilities.
Data linkage	Explore opportunities for linking data from different collections.

1 Introduction

This is the fifth report in the Overcoming Indigenous Disadvantage series. It has been informed by ongoing consultations with Indigenous people, governments, academics and service providers.

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. Following the issue of an updated terms of reference, a fourth edition was published in July 2009. All four 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).

Many factors bear on change. A key message from consultations with Indigenous people is that the efforts of governments acting alone would not be enough to overcome Indigenous disadvantage. Fundamental, long term change will require concerted action on the part of governments, the private sector, the general community and, not least, Indigenous people themselves.

Based on the best available information, the report has provided depth to constructive debate about how to tackle Indigenous disadvantage, amongst Indigenous organisations, governments and public sector agencies, non-government organisations and many individuals.

In this report, the term 'Indigenous' is used to describe Aboriginal and/or Torres Strait Islander people of Australia. While the Steering Committee acknowledges the diversity of Australia's Indigenous peoples, most of the available data on Indigenous people are for Aboriginal and Torres Strait Islander people combined. A small amount of data showing outcomes for Aboriginal people and Torres Strait

Islander people separately is in chapter 12. Section 3.1 contains more specific definitions and more detailed information on the Indigenous population.

1.1 Not just another statistical report

COAG nominated two core objectives for the *Overcoming Indigenous Disadvantage: Key Indicators* report. The first is to inform Australian governments about whether policy programs and interventions are achieving improved outcomes for Aboriginal and Torres Strait Islander people. The second is to produce a report that is meaningful to Indigenous people.

This report therefore aims to be more than a collection of data. It does not seek 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 provides a practical tool for government agencies and Indigenous organisations. A whole-of-government, outcome focus encourages thinking beyond existing policy frameworks and government service agency boundaries.

The ultimate goal of this report, outlined in the ‘priority outcomes’ (see chapter 2), is that Indigenous people will one day enjoy the same opportunities as other Australians, while maintaining 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 factors that ultimately cause disadvantage; where evidence, logic and experience suggest that 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.

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. National and State/Territory averages do not reveal the different outcomes experienced by different groups of Indigenous people. Some Indigenous people experience no disadvantage compared to non-Indigenous people, while other Indigenous people are highly disadvantaged. The report recognises the diversity of Aboriginal and Torres Strait Islander cultures and experiences, and acknowledges that disadvantage may come in different forms for those who live in urban, regional and remote areas. Some data sources permit more

detailed disaggregation, which can help identify the underlying causes of disadvantage and demonstrate the complex interactions of socioeconomic factors that contribute to disadvantage for both Indigenous and non-Indigenous people. Analysis of multiple disadvantage in chapter 13 goes some way towards exploring these interactions.

Implementation of the framework

The report is influencing how governments address Indigenous disadvantage. 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 Overcoming Indigenous Disadvantage framework by each government 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.

In 2010, the Close the Gap Steering Committee published its Shadow Report assessing Australian Government progress in closing the gap (CGSCIHE 2010). The Shadow Report noted the role of the Overcoming Indigenous Disadvantage report in monitoring progress, however, the focus of the Shadow Report was on suggesting how the gap could be closed rather than providing data on outcomes.

Source: AHRC (2009, 2010)

1.2 Origins of the report

The origins of this report can be traced back to the final report of the Council for Aboriginal Reconciliation's report, *National Strategies to Advance Reconciliation* (CAR 2000), which called on all governments to report annually against measurable program performance 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 (SCRCSSP 2003b). Following the commissioning of the *Overcoming Indigenous Disadvantage* report in 2002, the MCATSIA work formed the basis of extensive consultations to develop the framework for the first report.

The Australian, State and Territory governments conducted consultations within their jurisdictions. Officials representing MCATSIA and the former Aboriginal and Torres Strait Islander Commission 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. In August 2003, COAG endorsed a revised framework, incorporating feedback from the consultations.

Consultation has continued following the release of each report. 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 and March 2008, COAG agreed to explicit targets for improving the lives of Indigenous people (COAG 2007, 2008a),¹ and in November 2008

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

established the National Indigenous Reform Agreement (NIRA), which was last revised in early 2011 (COAG 2011). The NIRA provides an integrated framework for the task of Closing the Gap, setting out the policy principles, objectives and performance indicators underpinning Closing the Gap and the specific steps governments are taking to meet the targets (see box 1.2).

Box 1.2 The Overcoming Indigenous Disadvantage report and the National Indigenous Reform Agreement (NIRA)

The COAG Reform Council reports annually to COAG on progress against the NIRA. The first of these reports was published in 2010 (COAG Reform Council 2010).

The Overcoming Indigenous Disadvantage framework is aligned to the NIRA and consequently the data in the two reports overlap. However, the NIRA is specifically focused on progress against the targets in the agreement, and comparisons of outcomes by State and Territory.

The Overcoming Indigenous Disadvantage report has a broader focus; and includes more indicators than the NIRA. The Overcoming Indigenous Disadvantage report also includes available time series data that predate the NIRA baseline of 2008, and, where State and territory data are not available, reports available information on outcomes at the national level.

The Steering Committee liaised with jurisdictions and COAG committees to align the Overcoming Indigenous Disadvantage framework with the COAG targets and the NIRA (COAG 2011). COAG agreed to the new framework at its meeting in November 2008 (COAG 2008a) and the then Prime Minister wrote to the Chair of the Steering Committee with new terms of reference for the report in 2009 (p. XXVI).

The Steering Committee conducted a broad round of consultations following the release of the 2009 report, to gather feedback on the alignment, and to inform the structure and content of the current and future reports. Most participants were very supportive of the OID report and the revised framework, with few suggestions for change.

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).

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 Australian Bureau of Statistics (ABS) and the Australian Institute of Health and Welfare (AIHW). It is chaired by the Chairman of the Productivity Commission, which also provides the Secretariat.

The Overcoming Indigenous Disadvantage Working Group

The Steering Committee is advised on production of this report by a working group comprising representatives from the Australian, State and Territory governments, as well as observers from 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.

Other Review reports

The Review undertakes three other major exercises for COAG:

- the annual *Report on Government Services*, now in its sixteenth 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 the Report on Government Services (SCRCSSP 2003a; SCRGSP 2004–2011)
- annual reporting of performance information relating to National Agreements between the Australian Government and the states and territories to the COAG Reform Council, including the National Indigenous Reform Agreement (SCRGSP 2009, 2010). National Agreements include a mix of outcome measures and indicators of the performance of services

- a biennial report on expenditure related to Indigenous Australians.² The Indigenous Expenditure Report estimates government expenditure on both Indigenous-specific and mainstream services related to Indigenous people. The first edition was released on 28 February 2011 (IERSC 2010). The report is aligned with the Overcoming Indigenous Disadvantage framework, potentially enabling expenditure to be linked to high level outcomes.

1.4 References

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

² The Indigenous Expenditure Report was originally overseen by a separate Steering Committee, with secretariat support from the Productivity Commission. In February 2011, COAG endorsed the inaugural report, and agreed to transfer responsibility for future reports to the Steering Committee for the Review of Government Service Provision.

— 2009 *National Agreement Performance Information 2008-09 National Indigenous Reform Agreement*, Productivity Commission, Canberra.

— 2010 *National Agreement Performance Information 2009-10 National Indigenous Reform Agreement*, 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 provides feedback from consultations conducted following the release of the 2009 report, and section 2.3 describes the report's approach to reporting on 'cultural' and wellbeing issues that influence the welfare of Indigenous people.

2.1 The framework

The terms of reference for this report require it to inform governments' responses to Indigenous disadvantage, by providing information about the impact of past program and policy interventions. However, it is recognised that government activity is not the only influence on the outcomes shown in this report. There are many other influences on outcomes for Indigenous people, and it can be difficult to link specific government activities to high level outcomes.

While there are many reports on the experiences of Indigenous people, including some prepared by State and Territory governments, reports about the performance of governments often focus on specific programs or policies, and 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), rather than on the outcomes achieved.

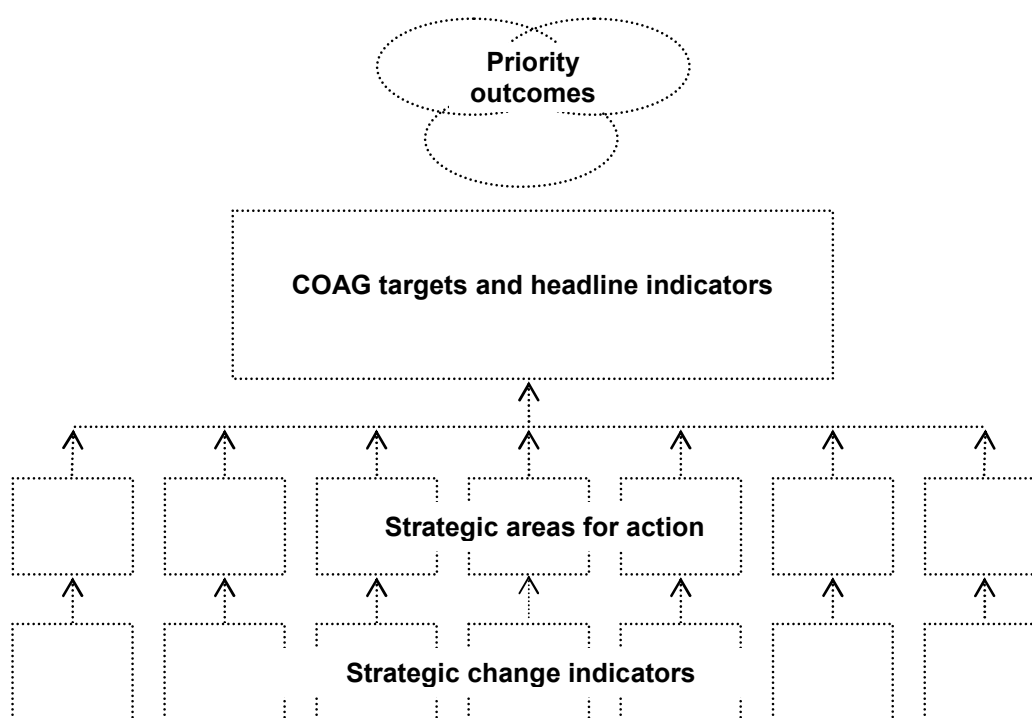
While information on inputs and outputs is valuable, this report focuses on outcomes — the impact of policies and programs on Indigenous people — and emphasises the need to assess the impact of programs and policies from a whole-of-government perspective.

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 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, and chapter 13 provides some analysis of the interactions that contribute to multiple 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 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.

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 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 Indigenous children under five within a decade (COAG 2007)
- *early childhood education* — ensure all Indigenous four year olds in remote communities have access to quality early childhood education within five years (COAG 2011)
- *reading, writing and numeracy* — halve the gap for Indigenous students in reading, writing and numeracy within a decade (COAG 2007)
- *year 12 attainment* — halve the gap for Indigenous 20-24 year olds in year 12 or equivalent attainment rates by 2020 (COAG 2011).
- *employment* — halve the gap in employment outcomes between Indigenous and non-Indigenous Australians within a decade (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).

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, and will require whole-of-government action over the long term before significant progress can be seen:

- 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.

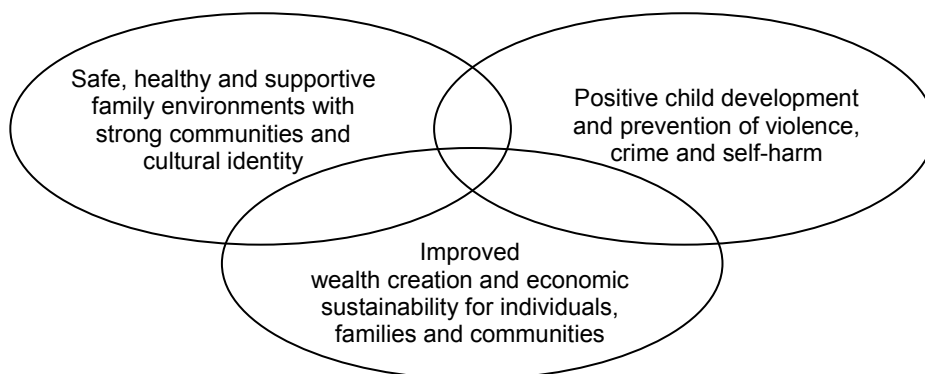
Strategic areas for action and strategic change indicators

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 in the short to medium term. 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 indicator outcomes 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 figure 2.1.2. The rationale for each strategic area for action and its associated indicators, the definitions of the specific measures used to report against each indicator, and the available data, including any information on recent trends, are presented in chapters 5 to 11.

Figure 2.1.2 **Multi-level indicator framework**

Priority outcomes



COAG targets and headline indicators

COAG targets		Headline indicators	
4.1	Life expectancy	4.7	Post secondary education — participation and attainment
4.2	Young child mortality	4.8	Disability and chronic disease
4.3	Early childhood education	4.9	Household and individual income
4.4	Reading, writing and numeracy	4.10	Substantiated child abuse and neglect
4.5	Year 12 attainment	4.11	Family and community violence
4.6	Employment	4.12	Imprisonment and juvenile detention

Strategic areas for action

Early child development	Education and training	Healthy lives	Economic participation	Home environment	Safe and supportive communities	Governance and leadership
5.1 Maternal health 5.2 Teenage birth rate 5.3 Birthweight 5.4 Early childhood hospitalisations 5.5 Injury and preventable disease 5.6 Basic skills for life and learning 5.7 Hearing impairment	6.1 School enrolment and attendance 6.2 Teacher quality 6.3 Indigenous cultural studies 6.4 Year 9 attainment 6.5 Year 10 attainment 6.6 Transition from school to work	7.1 Access to primary health care 7.2 Potentially preventable hospitalisations 7.3 Avoidable mortality 7.4 Tobacco consumption and harm 7.5 Obesity and nutrition 7.6 Tooth decay 7.7 Mental health 7.8 Suicide and self-harm	8.1 Employment by full time/part time status, sector and occupation 8.2 Indigenous owned or controlled land and business 8.3 Home ownership 8.4 Income support	9.1 Overcrowding in housing 9.2 Rates of disease associated with poor environmental health 9.3 Access to clean water and functional sewerage and electricity services	10.1 Participation in organised sport, arts or community group activities 10.2 Access to traditional lands 10.3 Alcohol consumption and harm 10.4 Drug and other substance use and harm 10.5 Juvenile diversions 10.6 Repeat offending	11.1 Case studies in governance 11.2 Governance capacity and skills 11.3 Engagement with service delivery

Note: Numbers beside indicator names refer to section numbers in the report.

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 are aligned with the seven ‘building blocks’ identified by COAG to support the reforms aimed at achieving the six COAG targets (COAG 2011). 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 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, housing 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 Steering Committee’s annual *Report on Government Services* (SCRGSP 2011). Estimates of government expenditure on services to Indigenous people are contained in the biennial Indigenous Expenditure Report (IERSC 2010).

The first *Indigenous Expenditure Report*, released on 28 February 2011, provides, for the first time, comprehensive and comparable information on expenditure on both Indigenous specific services and the estimated Indigenous share of mainstream services by the Australian, State and Territory governments. The *Indigenous Expenditure Report* is aligned with the seven building blocks of the NIRA and the

framework used in this report, and can be used alongside this report and the COAG Reform Council reports to examine policy outcomes and expenditure against the same broad framework.

The *2010 Indigenous Expenditure Report* estimated expenditure on services related to Indigenous Australians to be \$21.9 billion in 2008-09, or about 5.3 per cent of all government expenditure. This is higher than the Indigenous representation in the population (2.5 per cent), reflecting the greater level of disadvantage of (and greater use of government services by) Indigenous Australians. The Report found that estimated expenditure per person was \$40 228 for Indigenous people, compared with \$18 351 for non-Indigenous people (a ratio of 2.2 to 1). This difference reflects the combined effect of:

- *more intensive use of services* — reflecting the greater level of disadvantage of Indigenous Australians — accounting for 53.8 per cent (\$11 762) of the difference
- *provision of Indigenous specific services* — which complement, or substitute for, mainstream services — accounting for 42.6 per cent (\$9309) of the difference
- *differences in the cost of providing mainstream services* — accounting for 3.7 per cent (\$807) of the difference (IERSC 2010).

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 potentially could 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 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 meet the criteria — but a few indicators are regarded as so important that they are included in the framework even though they do 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, measured by improvement 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 compelling feedback from consultations meet these criteria.

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 accepted by most Indigenous people as meaningful during continuing consultations on this report (section 2.2).

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 few data available (Indigenous cultural studies and governance). These indicators are 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.

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 limitations mean that proxy measures must be used to report against some indicators, and sometimes multiple measures may be required to illustrate a single indicator. Information on the measures reported for each indicator is provided in each indicator section, and summarised in appendix 5 ‘Measures and data sources’.

Cross tabulating and linking data

Causal relationships are at the heart of the indicator framework in this report. Information about the relationships between different indicator outcomes can be a powerful tool for understanding how one factor influences another. Chapter 3 looks at interactions across the framework and chapter 13 examines interactions and multiple disadvantage in more detail.

However, data limitations constrain the analysis of such interactions. Cross tabulation and other sophisticated statistical analysis is only possible using unit record data, where a range of information has been collected for each individual or household. The analysis in chapter 13 is limited to data from the ABS National Aboriginal and Torres Strait Islander Social Survey (NATSISS) 2008 and National Health Survey 2007-08. Similar analysis in the 2009 report was limited to data from the Census.

During consultations, government agencies advised the Steering Committee that they are starting to examine opportunities for linking data across multiple administrative data sets. Knowing the relationships between factors such as health, education, income and housing could help governments to develop more effective policies and programs. However, the practical application of data linkage may take several years, because of the technical challenges in linking data and the need to address concerns about privacy that arise when databases are linked.

National Agreements

In November 2008, COAG agreed the National Indigenous Reform Agreement (NIRA), one of six new National Agreements within the Intergovernmental Agreement on Federal Financial Relations (COAG 2011). The performance of all governments in achieving the outcomes and benchmarks specified in each National Agreement is monitored and assessed by the COAG Reform Council (CRC) (COAG 2008b).

The NIRA contains 27 performance indicators, including COAG's six Closing the Gap targets. The indicator framework in this report is aligned with the NIRA and each of the 27 NIRA indicators is reflected in this report, either as an indicator in its own right or as a measure within a broader indicator. Wherever possible, definitions and data sources used for indicators in this report are consistent with those used for NIRA reporting to the CRC, although variations are necessary in some cases. The greatest variation in data sources between this report and NIRA reporting is this report's use of the ABS National Health Survey rather than the ABS Survey of Education and Work, to provide non-Indigenous comparators for education and labour force indicators. Use of the National Health Survey for this report allowed disaggregation of some indicators by remoteness areas and improved time series comparability with earlier data, which is not possible using the Survey of Education and Work.

As discussed in chapter 1, the NIRA indicators are focused primarily around the COAG targets. This report contains additional indicators and measures across the seven strategic areas for action (the NIRA's seven building blocks), reflecting its broader purpose (see figure 2.1.2). Reporting against National Agreements focuses strongly on State/Territory disaggregation, whereas this report also includes extensive disaggregation of national data by remoteness.

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 February 2011 (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

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- National Partnership Agreement on Closing the Gap in the Northern Territory
 - National Partnership Agreement on Remote Indigenous Public Internet Access
 - National Partnership Agreement on an Indigenous Clearinghouse (MCFFR 2011).

Other National Partnerships, which are not Indigenous-specific, may also contribute to achieving the COAG Closing the Gap targets. Indicators and measures in this report reflect definitions and data sources used for indicators in National Partnerships and other National Agreements where they are relevant to this report, which ensures that this report remains consistent with COAG's overall approach to performance reporting.

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 in this report.

For most indicators, 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 relatively scarce. In order to provide a range of examples to illustrate how things can change for the better, the Steering Committee included case studies of some promising programs that have not undergone rigorous evaluation.

Focused, rigorous evaluation is required to improve the effectiveness of government policies and programs. COAG has established the Closing the Gap Clearinghouse (AIHW and AIFS 2011) to compile, disseminate, and promote research and program evaluation in the field of Indigenous policy. The Clearinghouse is becoming a valuable resource for policy makers and Indigenous communities, and is the source of some of the ‘things that work’ case studies in 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 between Indigenous and non-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 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 contributed to the development of the report framework. Following the release of each report, further rounds of consultation have sought feedback on the report and ideas for improving future reports. Two reports on consultations have been produced (SCRCSSP 2003; SCRGSP 2007).

The 2009 report introduced a revised indicator framework incorporating the six COAG Closing the Gap targets and the seven building blocks of the NIRA. The revised framework was endorsed by COAG but did not have the benefit of consultation with Indigenous people and organisations or researchers. Therefore, the Steering Committee committed to consultations on the alignment following publication of the 2009 report. During 2010, the Steering Committee and its Secretariat consulted with Indigenous people and organisations, government agencies and researchers across Australia. The consultations sought feedback on the changes to the framework and suggestions for improving the report.

The consultations have provided valuable input for the 2011 report. Most participants were very supportive of the OID report and the revised framework, with very few suggestions for major changes.

A key topic of discussion at most consultation meetings was governance and leadership, which COAG identified as a separate strategic area for action in the revisions to the OID framework in 2009. The Steering Committee has worked to enhance this section of the report.

There has been continuing support for including ‘things that work’ case studies and the identification of things that work success factors, which are described in chapter 3. Consultation participants emphasised the desirability of rigorous evaluation of the case studies, and the Steering Committee has endeavoured to ensure the case studies in this report meet an appropriate standard of evaluation.

2.3 Measuring culture and wellbeing

Consultations with Indigenous people often raised two related issues:

- that the report should reflect wellbeing as well as disadvantage, and reflect the many positive aspects of Indigenous people’s lives
- that the report should reflect the central place of culture in the lives of Indigenous people. Culture is an essential component of wellbeing for Aboriginal and Torres Strait Islander peoples, and can also provide individuals and communities with a degree of resilience to entrenched disadvantage.

Culture

One clear message from consultations has been that no single indicator could adequately reflect the importance of culture in the lives of Indigenous people. Just as culture pervades every aspect of the lives of Indigenous people, the cultural indicators in this report 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.

Cultural strength is a fundamental aspect of Indigenous wellbeing. However, Australian Indigenous cultures are very diverse, which makes it difficult to identify cultural indicators for this report. While various groups of Indigenous people may identify with broad cultural themes, it is difficult to define aspects of culture in a way that can be measured for inclusion in a largely quantitative report such as this. Acknowledging these constraints, the following cultural indicators are included in this report:

- *Indigenous cultural studies* is included in the ‘Education and training’ strategic area for action (section 6.3). Indigenous cultural studies can benefit both Indigenous and non-Indigenous young people, and address the ignorance and misunderstanding that often underlie racism. In addition, culturally appropriate curriculum improves the motivation of Indigenous children to attend or remain at school. Data on Indigenous people’s experience of learning about Indigenous

culture in school or other study were available for this report for the first time from the ABS NATSISS 2008.

- *Participation in organised sport, arts or community group activities* is included in the ‘Safe and supportive communities’ strategic area for action (section 10.1). 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, and can contribute to outcomes such as a reduction in juvenile crime.
- *Access to traditional lands* is included in the ‘Safe and supportive communities’ strategic area for action (section 10.2). Access to land may allow Indigenous people to practise and maintain their knowledge of ceremonies, rituals and history. The ‘Economic participation’ strategic area for action includes the related indicator ‘Indigenous owned or controlled land and business’ (section 8.2).
- *Case studies in governance arrangements* are included in the ‘Governance and leadership’ strategic area for action (section 11.1). Culture is an essential determinant of good governance.
- *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).

Consultations have suggested several additional 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. Other meaningful indicators are not sensitive to government policies and programs. And very often, there are no supporting data which would allow reporting (although some interesting work is underway to develop relevant data collections). A discussion of some potential indicators follows.

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. Although language can be an important cultural signifier for many Indigenous people, according to the 2006

Census, a large proportion of Indigenous people (86 per cent) report only speaking English at home.

Loss of language and disadvantage can be linked in two main ways, through 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, contributing to individual loss of culture and decreased wellbeing of remaining speakers. The 2006 ABS Census of Population and Housing found:
 - twelve per cent of Indigenous people in Australia reported speaking an Indigenous language at home
 - of the 52 000 people who spoke an Indigenous language at home, three quarters lived in very remote Australia, while only 3.5 per cent lived in major cities. The majority of Indigenous language speakers (56 per cent) lived in the NT.
- 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 estimated 250 Indigenous languages before European colonisation, only around 145 languages were still spoken. The majority of these, around 110, 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, and appendix 3 presents information on speakers of Indigenous languages and where Indigenous people were taught Indigenous languages, drawing on data from the Census and NATSISS.

Other potential cultural indicators

Other potential cultural indicators have been identified, but to date it has not been possible to construct indicators that meet the criteria for inclusion in the report (box 2.1.1):

- 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.

Approaches to measuring Indigenous wellbeing, including cultural strength both in Australia and elsewhere are discussed in the next section on wellbeing.

Wellbeing

The original terms of reference for this report called for ‘...a regular report to COAG against key indicators of disadvantage ... that are of relevance to all governments and Indigenous stakeholders ...’. The Steering Committee has reported on disadvantage primarily by comparing outcomes for Indigenous and non-Indigenous people.

Some consultation participants have suggested that a focus on disadvantage leads to an essentially negative, or deficit, approach. They have argued that achieving the priority outcomes requires a positive, strengths-based approach that is focused on Indigenous wellbeing. Important aspects of wellbeing include safety, relationships, sense of self, purpose, belonging to community, and participating in the economic life of the nation (UNPFII 2008; OECD 1976; Eckersley 2010; ABS 2001).

The broad term ‘wellbeing’ encompasses a number of related concepts such as social inclusion, social cohesion, natural helpers, and capabilities:

- *Social inclusion* emphasises the importance of full participation in the social and economic life of the nation — by having a job, receiving a secure and adequate income, and being closely connected to family, friends and the local community. It expands individuals’ life opportunities through education, training and employment (Australian Social Inclusion Board 2010).

-
- *Social cohesion* is about building social networks, developing community leaders and providing better education, health, housing and other vital social services in disadvantaged communities (Vinson 2007).
 - *Natural helping* refers to the range of local professional and non-professional supports (friends, family, neighbours) to which people can turn. Natural helpers are people in a community who, often without prompting, provide support to others — they help friends, family, and neighbours, but also people with whom they have no prior link. Natural helpers are often able to achieve positive outcomes in the face of adversity — they are resilient, despite facing stressful, high risk situations (Tomison and Wise 1999).
 - *Capabilities* emphasises the importance of people having a meaningful range of life choices that enable them to choose a life that they have reason to value (Sen 2001). This range of choices is enriched not only by income, but also by capabilities such as education, health and community strength (CYI 2007).

Table 2.3.1 sets out the broad elements of three wellbeing frameworks:

- social inclusion indicators developed by the Australian Social Inclusion Board
- the ABS Indigenous wellbeing framework
- the Maori wellbeing framework.

Other countries have developed frameworks and approaches to measure the wellbeing of their indigenous peoples. Canada has developed the Registered Indian Human Development Indices (Cooke 2007) and the Community Well-being Index (O’Sullivan and McHardy 2007), which are based around life expectancy, education, employment, income and housing indicators. New Zealand has developed quality of life indicators based around income, education, life expectancy, housing, language use and participation in cultural activities (Kooyela 2007) and the Māori Wellbeing Framework (table 2.3.1)

Table 2.3.1 Wellbeing framework elements

<i>Social inclusion indicators</i>	<i>ABS Indigenous wellbeing framework</i>	<i>Māori wellbeing framework</i>
Poverty and low income (income, housing tenure)	Culture, heritage and leisure (connection to land, participation in cultural activities and sports, land ownership, access to traditional lands)	Māori language (use of language)
Lack of access to the job market (participation in the labour market, employment rates, long-term unemployment)	Health (child and maternal health, disability, risk factors, social and emotional wellbeing and mental health)	Wahi Taonga ^a (identification and recognition of sites, control and access of Wahi Taonga)
Effect of the local neighborhood (fear, and actual experience of violence, neighboring, community involvement)	Education (literacy and numeracy, school to work, non-school qualifications)	Social connections (participation in community activities)
Exclusion from services (low educational attainment, year 3 and year 7 academic progress, access to services, teenage mothers)	Customary, voluntary and paid work (customary work, self employment, unemployment, paid work)	Skills (formal and non-formal education and training)
Health (life expectancy, risk of mental illness, self defined health status)	Income and economic resources (income support, home ownership)	Health (life expectancy, hospitalisations, primary health care)
	Citizenship and governance (leadership and responsibility, participation in community organisations)	Housing (homeownership, housing type preference)
		Work (labour force participation, unemployment)
		Social problems (juvenile and adult offending, use of women's refuges)

^a Wahi Taonga means sites of importance.

Source: Australian Social Inclusion Board 2009; ABS 2010; Statistics New Zealand 2002.

A comparison of the indicators in the Overcoming Indigenous Disadvantage with those in the frameworks in table 2.3.1 shows a very broad area of overlap. Many indicators of wellbeing are the inverse of those of disadvantage (for example, all the frameworks include measures of community safety, health, education and employment outcomes). Although some aspects of wellbeing cannot be measured simply by comparing outcomes for Indigenous and non-Indigenous people, over time the Steering Committee has included a number of indicators in the Overcoming Indigenous Disadvantage report that address aspects of broader Indigenous wellbeing, with limited or no comparison to non-Indigenous people:

- Indigenous cultural studies (section 6.3)
- participation in organised sport, arts or community group activities (section 10.1)
- access to traditional lands (section 10.2)
- case studies in governance (section 11.1)

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- engagement with service delivery (section 11.3).

Other sections of the report also examine aspects of wellbeing:

- section 7.7 (mental health), while comparing Indigenous and non-Indigenous outcomes, explores Indigenous mental health as part of the broader concept of social and emotional wellbeing
- chapter 13 (multiple disadvantage) explores the relationships between different aspects of disadvantage and includes cross tabulations against some broader aspects of Indigenous wellbeing, such as removal from family, core activity restriction and absence of non-school qualifications.

However, there are limits to the extent that this report can or should become an explicit ‘wellbeing’ report. A pure ‘wellbeing’ report might include additional cultural and spiritual indicators that are not appropriate for government intervention — but as a government policy report, one of the criteria for selecting the indicators in this report is sensitivity to changes in government policy settings (box 2.1.1).

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3 Key themes and interpretation

This chapter draws together some of the overarching issues and themes of the report and provides a broad context for understanding Indigenous disadvantage.

Interpreting data on Indigenous disadvantage requires an understanding of some of the characteristics of the Indigenous population, including its geographic distribution and age structure. This chapter provides some information about these characteristics (section 3.1), which are explored further in appendix 3.

Indigenous people often experience multiple disadvantage (section 3.2) and different aspects of disadvantage are often interrelated. There are strong links across many of the COAG targets and headline indicators, and across the strategic areas for action (sections 3.3 and 3.4). Action may be needed on several fronts at once in order to make progress and, conversely, sometimes a single action can have multiple effects. Therefore, the report's framework emphasises the need for a whole-of-government approach to closing the gaps in outcomes between Indigenous and non-Indigenous people.

This report includes numerous case studies of projects and programs that are successfully addressing Indigenous disadvantage. These 'things that work' have a range of common characteristics that are explored in section 3.5.

While this report focuses on Indigenous disadvantage in Australia, it contains a small number of comparisons with outcomes for Indigenous peoples in other countries. However, there are many challenges in making international comparisons (section 3.6).

Finally, this chapter concludes with a brief summary of issues to keep in mind while using and interpreting data in the report (section 3.7).

3.1 Indigenous demographics

Indigenous identification

Virtually all the information in this report is based on self-identification by Indigenous people, and therefore relies on an individual's view of their Indigenous status. A small number of administrative data collections require people who identify as Indigenous to provide proof of Indigenous descent or acceptance by the Indigenous community, but this is not necessary for most data collections. Therefore, the accuracy of most of the data in this report depends on the opportunities provided to identify as Indigenous, and people's 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 Indigenous service users.

Throughout this report, the term 'Indigenous people' is used to refer to Aboriginal people and Torres Strait Islander people. Outcomes for different groups of Aboriginal people can vary greatly, however, data can usually only be disaggregated by standard categories such as remoteness, State/Territory, age and sex and not by different Aboriginal cultural or language groups. 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 chapter 12 'Outcomes for Torres Strait Islander people'.

Indigenous and non-Indigenous population data

Indigenous and non-Indigenous population data are used extensively throughout this report as denominators for calculating rates and percentages. Most of the indicators in this report are expressed as rates (for example, hospitalisations per 1000 people), or as proportions of a particular population (for example, percentage of people aged 18 years and over). 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.

The five-yearly Census provides the basis for estimates of the Indigenous population. It is known that the Census itself significantly ‘undercounts’ the number of Indigenous people. Therefore, the ABS adjusts the Census count to derive the estimated resident Indigenous population (ABS 2007). The ABS continues to work towards reducing the undercount of Indigenous people in future Censuses.

For non-Census years, the ABS calculates experimental estimates and projections of the Indigenous population (ABS 2009). These projections are based on the adjusted 2006 Census data and a set of assumptions about likely trends in Indigenous population growth (box 3.1.1).

The ABS only publishes official non-Indigenous population data for Census years. For other years, non-Indigenous population data must be derived by subtracting Indigenous population data from total population data.

Box 3.1.1 Indigenous population estimates and projections

In September 2009, the ABS published experimental estimates of the Indigenous population for 1991 to 2006, and projections for 2007 to 2021 for Australia and each State and Territory (ABS 2009). These estimates are adjusted to account for the undercount of Indigenous people in the Census.

The 2009 ABS publication provided two alternative sets of projections:

- ‘series A’ projections, which assume Indigenous life expectancy at birth will remain constant at 67.3 years for males and 73.0 years for females for the duration of the projection period
- ‘series B’ projections, which assume that Indigenous life expectancy at birth will increase by 0.3 years per year for both males and females, reaching 72.1 years for males and 77.8 years for females by 2021. This equates to an increase in life expectancy at birth of 5 years over the 15 year projection period for both males and females.

The projections also make other assumptions, the same for both series, which are set out in ABS (2009).

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

Source: ABS (2009).

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

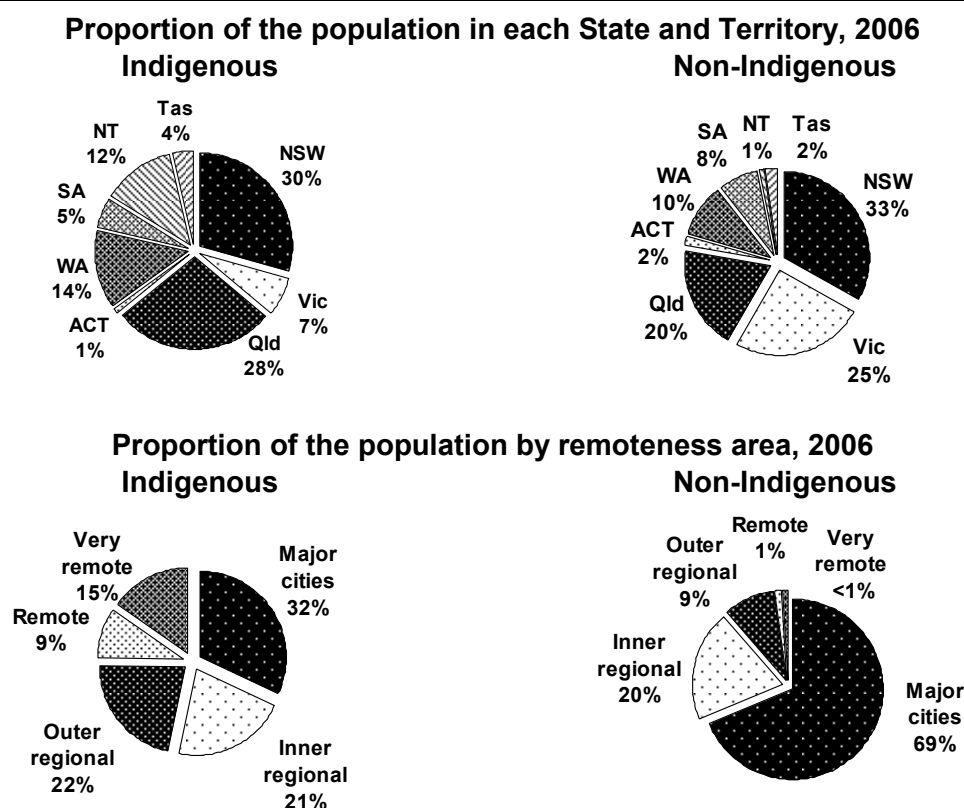
origin only, 33 300 (6 per cent) were of Torres Strait Islander origin only and 20 100 (4 per cent) were of both origins (ABS 2008a). The projected Indigenous population in June 2011 was 575 600, which was 2.6 per cent of the projected total population of 22 319 000 (ABS 2008b; ABS 2009).

Population distribution and mobility

Service providers need to consider the geographic and age distribution of the Indigenous population, and the requirements of different groups if they are to meet people's needs and address disadvantage. Services must also accommodate Indigenous people's relatively high rates of temporary mobility and anticipate medium to long term demographic trends.

Higher proportions of both the Indigenous (30 per cent) and non-Indigenous (33 per cent) populations lived in NSW than in other states and territories in 2006. Other states and territories with significant shares of the Indigenous population included Queensland (28 per cent), WA (14 per cent) and the NT (12 per cent). (ABS 2008a; figure 3.1.1).

Figure 3.1.1 Indigenous population distribution



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

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. In comparison, almost 90 per cent of non-Indigenous people lived in major cities or inner regional areas (ABS 2008a; figure 3.1.1).

This report presents data disaggregated by remoteness area wherever possible. For many indicators, remoteness data are not available, or are only available only at the national level. However, disaggregation by remoteness at the national level often shows patterns of disadvantage more clearly than disaggregation by State and Territory (but not remoteness), as the proportions of Indigenous people living in different remoteness areas vary across states and territories. However, it should be noted that outcomes can vary across places with similar degrees of remoteness in different states and territories.

Taylor and Biddle (2008) proposed an alternative geographic classification for the Indigenous population based on structural settings (city areas, large regional towns,

small regional towns and localities, regional rural areas, remote towns, Indigenous towns, town camps and remote dispersed settlements). Disaggregating data into finer geographic classifications (such as structural settings and the ABS Indigenous Areas) is essential for planning and coordinating the delivery of services. However, the structural settings and Indigenous Areas classifications currently can only be readily applied to Census data. As the current edition of this report uses mainly survey and administrative data, these data are disaggregated geographically by remoteness and State/Territory.

For many of the indicators in this report, Indigenous people in remote areas generally have poorer outcomes than Indigenous people in major cities and regional areas, for example, educational outcomes (sections 4.4, 4.5 and 4.7), income (section 4.9), hospitalisation for potentially preventable diseases (section 7.2) and housing (sections 8.3 and 9.1). Biddle (2009a) found similar results using 2006 Census data. The relationship between remoteness and disadvantage is at least partly due to ‘the tyranny of distance’ creating barriers to accessing services and engaging with the labour market. However, remoteness can also be a proxy for other factors affecting Indigenous disadvantage, such as English language proficiency. Rates of English language proficiency tend to be lower in more remote areas but vary across remote areas in different states and territories.

Although many aspects of disadvantage increase with remoteness, Indigenous people in cities and large regional towns also face significant disadvantage — they are relatively disadvantaged compared to non-Indigenous people, are concentrated in neighbourhoods with low socioeconomic outcomes, and tend to be poorer than non-Indigenous people in those same neighbourhoods (Biddle 2009b; Taylor 2006).

Census data show that Indigenous people are gradually becoming more urbanised, with a noticeable decrease in the number living in remote towns and settlements, and a rising Indigenous population in larger regional towns. At the same time, the non-Indigenous population of some of these regional towns is declining, and so, Indigenous people are becoming a larger proportion of the populations of those towns (Taylor and Biddle 2008).

Mobility can make it difficult for governments to plan for the delivery of services such as health, housing, employment and education, as shifting populations cause variation in the level of demand for services at different times in different places. Nationally, Indigenous people appear only slightly more mobile than non-Indigenous people in the medium to long term (measured as the proportion of people who moved residence between 2001 and 2006), and Indigenous and non-Indigenous migration patterns were similar across age groups, with the greatest movement among young adults in both populations (Biddle 2009c).

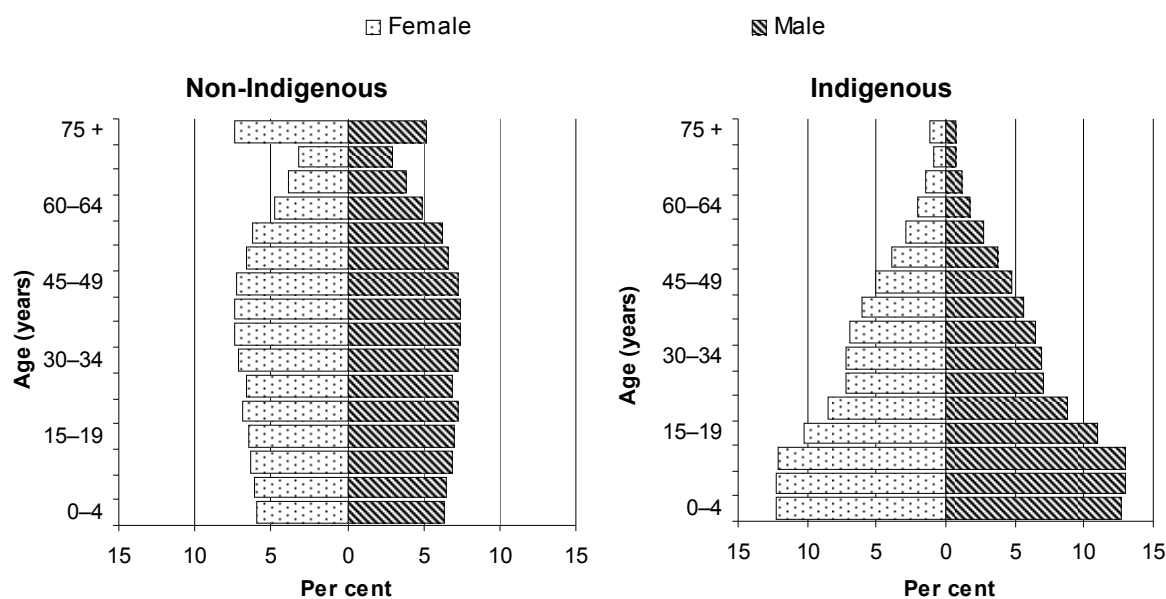
However, in addition to medium and long term mobility, Indigenous people in remote areas have much higher temporary mobility than non-Indigenous people, and Indigenous people in non-remote areas (Biddle and Prout 2009). Mobility plays an important role in many Indigenous people's maintenance of connections to family and country (DEST et al 2002). However, the reason for some mobility is to access services and employment, which are often only available at long distances from smaller remote towns and communities (Prout 2008).

Age profile of the Indigenous population

Figure 3.1.2 shows the age structures of the Indigenous and non-Indigenous populations. The Indigenous population has a younger age structure than the non-Indigenous population. In 2006, 37.6 per cent of the Indigenous population was aged 14 years or less, compared to 19.1 per cent of the non-Indigenous population (ABS 2008a). The disparity between the Indigenous and non-Indigenous age profiles reflects the gap in life expectancy. While there is a difference in fertility between Indigenous and non-Indigenous people, the fundamental reason for the different profiles is the higher premature death rate experienced by the Indigenous population.

Age standardisation, which accounts for differences in the age structures of populations, enables more realistic comparisons across populations. In this report, relevant data on disability, health and justice outcomes have been age standardised, as these outcomes vary markedly by age. Most age standardised data in the report have been age standardised using the direct method, which is more suited to comparisons over time. However, most mortality data in the report have been age standardised using the indirect method, because small numbers of Indigenous deaths for particular causes make it impractical to apply the direct method.

Figure 3.1.2 Population distribution, Australia, by age and sex, 30 June 2006^{a, b}



a Includes 'other territories'. **b** Final experimental estimates of the Indigenous, non-Indigenous and total populations of Australia as at 30 June 2006, based on results of the 2006 Census of Population and Housing, and adjusted for net undercount.

Source: ABS (2008a) *Experimental Estimates of Aboriginal and Torres Strait Islander Australians, June 2006*, Cat. no. 3238.0.55.001, Canberra; table A.1 of appendix 3.

The younger age structure of the Indigenous population presents a potential opportunity for increased Indigenous employment, by filling gaps in the workforce created by the ageing of the non-Indigenous population. This opportunity will grow as increasing numbers of young Indigenous people reach prime working ages (Biddle and Taylor 2009). However, poorer educational outcomes (sections 4.4, 4.5, 4.7 and chapter 6) are an impediment to young Indigenous people taking advantage of this opportunity. While this report shows some limited improvements in higher levels of Indigenous educational attainment (VET and university), much more improvement is needed in school learning outcomes. Research by Taylor (2010), at a remote community in the NT, suggests that unless Indigenous engagement in education in remote communities is dramatically increased, young Indigenous people will continue to struggle to enter the workforce. The potential for younger people to take advantage of the increased demand for labour created by an ageing population has been noted internationally, as has the potential for weak educational systems and labour market rigidities to constrain that advantage (National Institute on Aging 2007)

Appendix 3 contains more extensive demographic data on the Indigenous and non-Indigenous populations, including the age structure, geographic distribution and language use.

3.2 Multiple disadvantage

Different aspects of disadvantage often 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:

- education and income levels are estimated to account for between one-third and one-half of the gap between Indigenous and non-Indigenous people's self-assessed health status (Booth and Carroll 2005, AIHW 2004)
- socioeconomic differences account for between one-third and two-thirds of the gap in early childhood outcomes (Leigh and Gong 2008)
- eleven modifiable risk factors account for almost half of the gap in disease burden (including tobacco, obesity, physical inactivity, high blood cholesterol and high blood pressure (Vos et al. 2007, see section 4.8).

In many other areas, research on the underlying *causal* factors behind Indigenous disadvantage is still thin. However, data sources such as the ABS National Aboriginal and Torres Strait Islander Social Survey 2008 (NATSISS 2008) and National Health Survey 2007-08 (NHS 2007-08) allow analysis of the *association* between different aspects of disadvantage. Chapter 13 of the report uses data from the NATSISS and NHS to identify some aspects of disadvantage that tend to occur together (box 3.2.1) and to model the effects of some particular influences in isolation (box 3.2.2). However, these analyses do not demonstrate whether disadvantage in one area is the *cause* of another poor outcome.

Box 3.2.1 Measuring multiple disadvantage

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

Section 13.1 uses data from the ABS National Aboriginal and Torres Strait Islander Social Survey 2008 (NATSISS 2008) and the ABS National Health Survey 2007-08 (NHS 2007–08) to present information on the interactions between various indicators of disadvantage. The data do not indicate cause and effect relationships between different aspects of disadvantage — that is, the data do not say that disadvantage in one area is the cause of another poor outcome — rather they show where there are correlations between different aspects of disadvantage.

In 2008, both Indigenous and non-Indigenous people with lower educational attainment, low incomes, who were unemployed or not in the labour force and/or whose principal source of income was a government pension, allowance or benefit were more likely to experience other socioeconomic disadvantages. However, significantly higher proportions of Indigenous experienced multiple disadvantage.

Source: chapter 13, section 13.1.

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 various factors one by one, while 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 3.2.2 Influences on labour market outcomes (multivariate analysis)

Using data from the ABS NATSISS 2008, the Productivity Commission used a technique called multinomial 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.

The analysis found that lower proportions of Indigenous people in poor health or with disabilities were employed than those with good health or without a disability. Those with higher levels of education were more likely to be employed than those with lower levels of education. English language skills increased the likelihood of employment while arrest in the previous five years decreased employment rates.

Source: chapter 13, section 13.2.

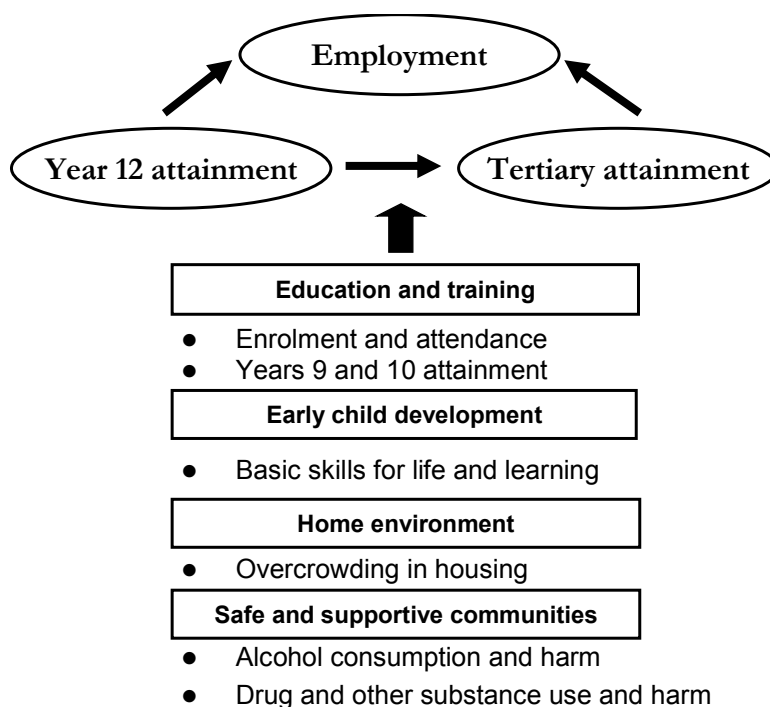
3.3 Multiple causes

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. However, this report on its own does not provide sufficient information for governments to allocate resources. Resource allocation requires governments to combine information on outcomes from this report with information on service delivery and expenditure. Some relevant sources of additional information include:

- the *Indigenous Compendium* to the annual *Report on Government Services*, which 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 (SCRGSP 2004–2011)
- the *Closing the Gap Clearinghouse*, which provides evidence-based research on what works to overcome Indigenous disadvantage (AIHW and AIFS 2011)
- the two-yearly *Indigenous Expenditure Report*, which provides information on expenditure on services to Indigenous Australians (IERSC 2011)
- the two yearly *Aboriginal and Torres Strait Islander Health Performance Framework Report*, which brings together evidence and data in relation to 71 performance measures across three domains: health status and outcomes; health determinants; and health system.

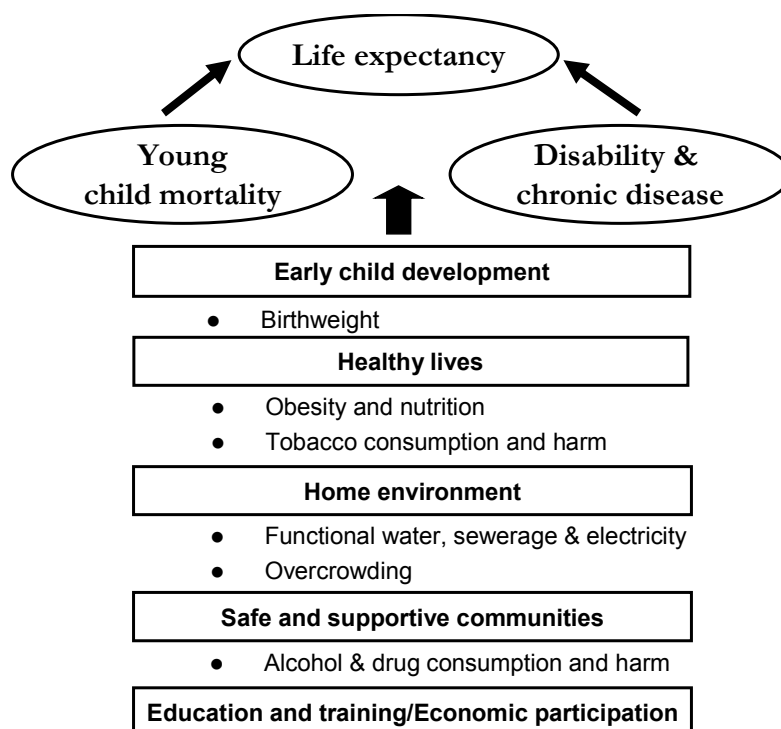
The diagrams in figures 3.3.1 and 3.3.2 illustrate just some of the many linked factors that can affect outcomes. In figure 3.3.1, the COAG target of employment, the closely related COAG target of year 12 attainment and the headline indicator of tertiary attainment, are influenced by outcomes across 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 — 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 3.3.1 Multiple causes — employment



In figure 3.3.2, 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 3.3.2 **Multiple causes — health**



3.4 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 3.4.1, 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 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.

Figure 3.4.1 Multiple effects — overcrowding

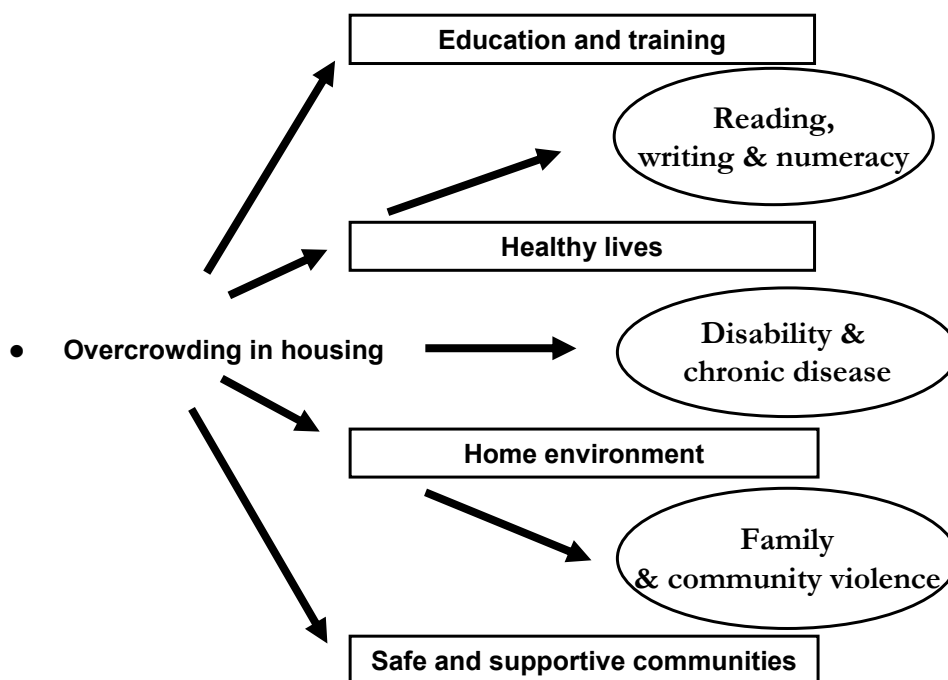
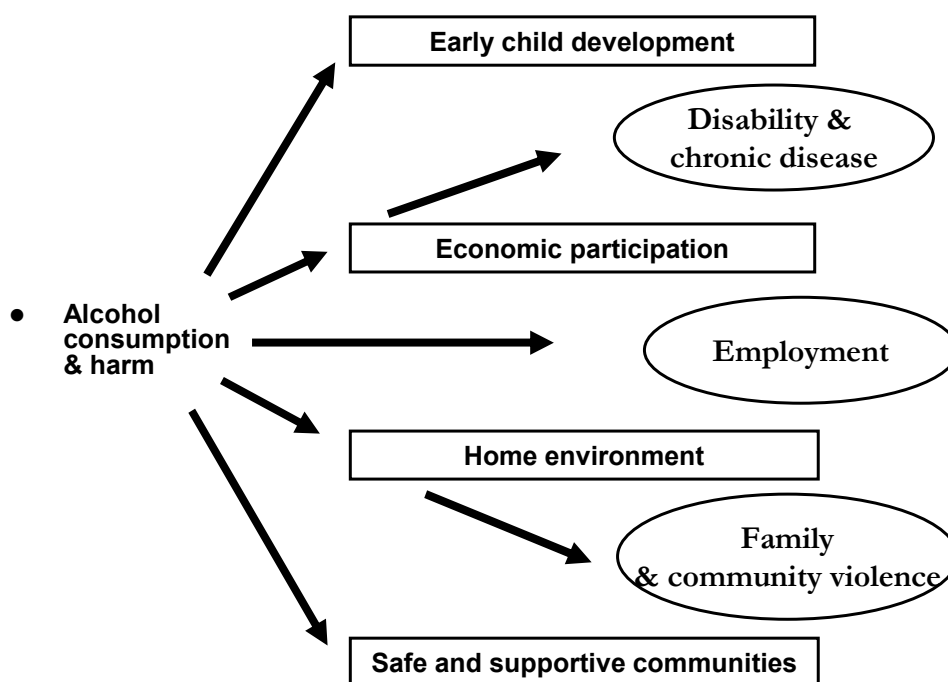


Figure 3.4.2 illustrates similar links for actions designed to address excessive alcohol consumption and associated harm. Misuse of alcohol can affect outcomes in the ‘Early child development’, ‘Healthy lives’, ‘Economic participation’, and ‘Safe and supportive communities’ strategic areas for action, and can contribute to the COAG target of ‘Employment’ and the headline indicators of ‘Disability and chronic disease’ 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 3.4.2 **Multiple effects — alcohol**



3.5 Things that work — success factors

Brief case studies of ‘thing that work’ in improving outcomes for Indigenous people have been a part of this report since 2005. 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 and Territory or national data.

As noted in chapter 2, ‘Things that work’ in this report were assessed against a broad set of criteria before they were included. However, formal evaluations of Indigenous programs are relatively scarce. In order to provide a range of examples to illustrate how things can change for the better, the Steering Committee included case studies of some promising programs that have not undergone rigorous evaluation.

There is an urgent need for more research and evaluation to identify successful Indigenous programs and the reasons for their success. The Closing the Gap Clearinghouse (AIHW and AIFS 2011) is becoming a valuable resource for policy makers and Indigenous communities, and is the source of some of the ‘things that work’ case studies in this report. However, the Clearing House will only achieve its

full potential if governments commit to funding and publishing more evaluations and research.

Analysis of the ‘things that work’ and extensive consultation with Indigenous people, governments and researchers have 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.

These success factors are closely related to the six determinants of good governance explained in chapter 11 (Governance and leadership): governing institutions; leadership; self-determination; capacity building; cultural match; and resources. While these success factors appear to emphasise the roles of government and Indigenous people, without direct involvement of the private sector there are limits to improvements in outcomes, particularly in areas such as employment and economic development.

Cooperative approaches

Cooperation between Indigenous people and governments seems an obvious ingredient for successful programs. Nevertheless it does not always occur. Cooperative approaches require Indigenous communities and organisations, governments, non-profit organisations and private businesses to work as partners. If each party acknowledges the value, and supports the contributions of the other partners, success is much more likely. Hunt (2010) has explored some aspects of cooperative partnerships between non-government organisations, Aboriginal organisations and communities. Cooperative approaches are closely related to the second success factor — community involvement in program design and decision-making — a ‘bottom-up’ rather than ‘top-down’ approach.

Most case studies in the report rely on cooperative approaches between governments, Indigenous people and other organisations. Examples include:

- the Cape York Institute’s Higher Expectations Program — Secondary, and the Australian Indigenous Education Foundation, which are collaborations between the Australian Government and philanthropic and corporate supporters in the private sector (box 4.5.2)

-
- the Wuchopperen Indigenous Health Service Filling the Gap Indigenous Dental Program, which operates as a partnership between Wuchopperen, the community, its steering committee and volunteer dentists (box 7.6.2)
 - the Aboriginal Liaison Program in SA, which operates through a partnership between the SA Dental Service and Aboriginal Community Health Services (box 7.6.2).

Community involvement

Community involvement in program design and decision-making — a ‘bottom-up’ rather than ‘top-down’ approach — is closely related to self-determination, one of the determinants of good Indigenous governance. The Harvard Project on American Indian Economic Development 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 on American Indian Economic Development 2003-04)

The former Aboriginal and Torres Strait Islander Social Justice Commissioner, Tom Calma, considered that much of the failure of service delivery to Indigenous people was a direct result of the failure to engage and to support and build the capacity of 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)

Community involvement is a key factor in the success of most case studies in this report. Some specific examples of successful community involvement include:

- the Cape York Family Income Management project, which was designed by Indigenous people to build financial literacy, and is overseen by a working group including representatives from each Indigenous community, the Australian Government, Westpac Bank and Cape York Partnerships (box 4.9.2)
- the community controlled Urupuntja Health Service, which provides preventative activities and health care to the Utopia community and its 16 outstations (box 7.1.2)
- the Indigenous elements of the Standby Response Service, which were developed in partnership with Indigenous communities in northern Australia and

involve training local community members to provide assistance to people bereaved by suicide (box 7.8.2)

Good governance

Good governance — at organisation, community and government levels — is closely related to several of the key determinants of good Indigenous governance:

- governing institutions
- leadership
- capacity building
- cultural match.

Unless organisations, communities and governments demonstrate principles of good governance, programs are likely to fail.

Good governance is essential to all successful case studies in the report. Particular examples include:

- Nganampa Health Council, a successful community controlled organisation that has provided health services, including child health services, to the Anangu people of SA for many years (box 5.5.2)
- Papunya Tula Artists, which was established in 1972, and is entirely owned and directed by Indigenous artists of the Western Desert. It has operated independently of government support for more than ten years (box 10.1.2)
- finalists and winners of the BHP Billiton Reconciliation Australia Indigenous Governance awards that have demonstrated excellence across key determinants of good governance (section 11.1).

Ongoing government support

Ongoing government support — including human, financial and physical resources — is closely related to resources, one of the key determinants of good Indigenous governance. Many Indigenous programs are funded as short-term pilot programs with no continuity. Many Indigenous organisations, including successful long term organisations, are funded through multiple, short term government contracts that increase uncertainty and place pressure on capacity and sustainability.

Some of the ‘things that work’ case study programs included in previous editions of this report no longer exist because government funding and support have been withdrawn.

Some examples of programs and organisations that have been able to provide long term benefits to Indigenous people because of ongoing government support include:

- the Teacher Education Scholarship Program in NSW, which has provided scholarships to Indigenous students studying to become primary or secondary school teachers since 2002 (box 6.3.2)
- the home ownership program now marketed as IBA Homes, which was established in 1975 and has helped more than 14 100 individuals and families since its inception (box 8.3.2)
- the Housing for Health program in NSW, which over more than 10 years has fixed 72 000 items for 11 500 Aboriginal people living in 2714 houses in 72 Aboriginal communities (box 9.3.2).

3.6 International comparisons

Comparisons of Indigenous disadvantage in Australia with the disadvantage experienced by minority indigenous peoples in other countries provides scope to identify where improvements are being made overseas that may help Australia to more effectively address Indigenous disadvantage.

Caution must be used in comparing data with other countries, due to variations in data quality and scope, estimation methods, coverage of the Indigenous populations and definitions of who is an Indigenous person. The economic, social and political environments may also be quite different.

The most meaningful comparisons of outcomes for Aboriginal and Torres Strait Islander people in Australia is with developed countries with a history of relatively recent European colonisation, and a non-Indigenous majority — countries such as the United States, Canada, and New Zealand.

Many Latin American countries also have relatively recent European colonisation and indigenous minorities. However, most Latin American countries are less developed than Australia, have different economic, legal and social systems and typically have less developed statistical collections.

In some countries, particularly in Africa and Asia, groups of people may be identified as indigenous but various ethnic groups have lived together for significant periods. In such cases, the distinction between indigenous and non-indigenous people can be less clear cut, and no comparisons with such countries are attempted in this report.

Comparability of international data

Comparable data on Indigenous disadvantage are available for only a limited number of indicators. Different definitions, counting rules and collection methods limit the comparability of data from different countries. However, many countries have agreed to adopt international definitions for particular statistics such as life expectancy, disease codes for mortality and hospital statistics, labour force participation and international trade.

While some total population data are comparable between countries, comparable data on indigenous people are not commonly available. Different countries use different definitions to determine who is counted as indigenous, and, even where definitions are similar, the extent to which indigenous people are identified in data collections varies both within and across countries.

The United Nations (2009) has prepared a comprehensive assessment of the state of the world's indigenous peoples. The report is largely qualitative, and focuses on the human rights of indigenous people. The limited quantitative data on outcomes for indigenous people in different countries are older than those available for this report and do not include the most recent Indigenous life expectancy estimates for Australia published by the ABS in 2009.

Cooke et al. (2007) compared outcomes for indigenous peoples in Australia, Canada, New Zealand and the United States for life expectancy, income, educational attainment and the Human Development Index used by the United Nations Development Programme (UNDP). However, the most recent data assembled by Cooke et al. (2007) are from 2001. The compilation of data on Indigenous Australians has progressed substantially since then, including the introduction by the ABS of a substantially revised method for estimating Indigenous life expectancy.

Indicators with international comparisons

Life expectancy

The gap in life expectancy between Indigenous and non-Indigenous people in Australia for 2005–2007 (11.5 years for males and 9.7 years for females) appears to be larger than in other countries where Indigenous peoples share a similar history of relatively recent European colonisation. In Canada in 2001 there were gaps of between 5 and 14 years between different Aboriginal groups and all Canadians (Statistics Canada 2005). In New Zealand in 2005–2007 there was a Māori/non-

Māori gap of 8.6 years for males and 7.9 years for females (Statistics New Zealand 2008).

Other comparisons

Cooke et al. (2007) compared outcomes for indigenous and non-indigenous peoples in Australia, Canada, New Zealand and the United States, including people aged 18 to 24 years who had attained year 12 or were still studying, and median annual incomes. Data for 2001 showed larger gaps between indigenous and non-indigenous people's outcomes in Australia, than in Canada¹, New Zealand and the United States. However, the data are not included in this report because they are not recent.

3.7 Interpreting data in the report

Readers of this report should bear the following 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 main 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 five years. The Census is rich in information and has the potential for extensive disaggregation, and the 2006 Census was a major data source for the 2009 report.

¹ Canadian data are for Canadians who identified as Aboriginal in the national census, not the Registered Indian population. Cooke et al. (2007) also report data for the Registered Indian Population.

The 2006 Census included responses from just over 450 000 people who identified as being of Aboriginal and/or Torres Strait Islander origin. The undercount of Indigenous people was highest 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.

The ABS has undertaken significant work to improve the Indigenous response rate in the 2011 Census.

Survey data

Surveys can provide a rich source of data at higher levels of aggregation, for example, national and State and Territory data, and sometimes remoteness area disaggregation. However, 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 were published in late 2009, and form an important component of this report. The next survey in the program will be the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS), which is scheduled for collection in 2012-13 as part of the Australian Health Survey.

Data from other ABS surveys are included in this report, often to provide non-Indigenous comparators for NATSISS data. Most general population surveys do not contain a large enough Indigenous sample to allow for disaggregation by Indigenous status.

Administrative data

Administrative data are usually collected as part of the management of a service (for example, hospital patient records). These data are constantly updated and new data may be available annually or more frequently. However, Australia's federal system means that there are often differences across 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.

There can be issues with the accuracy of Indigenous identification in administrative collections, across jurisdictions and over time. Indigenous Australians are not always asked the standard Indigenous status question, there are situations where they may choose not to identify, and there are also some inconsistencies in the recording of Indigenous status across jurisdictions. Further work is required to assess and improve the quality of Indigenous identification in administrative data collections. Governments have committed to improve Indigenous identification in data collections as part of the National Indigenous Reform Agreement.

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).

Interpreting survey data (standard errors, error bars and confidence intervals)

The report draws extensively on ABS survey data, including the:

- National Aboriginal and Torres Strait Islander Social Survey 2008 (NATSISS 2008)
- National Health Survey 2007-08 (NHS 2007-08)
- Survey of Income and Housing 2007-08 (SIH 2007-08)
- National Aboriginal and Torres Strait Islander Health Survey 2004-05 (NATSIHS 2004-05)
- National Health Survey 2004-05 (NHS 2004-05)
- National Aboriginal and Torres Strait Islander Social Survey 2002 (NATSISS 2002)
- General Social Survey 2002 (GSS 2002)
- National Health Survey 2001 (NHS 2001)
- National Health Survey – Indigenous Supplement 2001 (NHS(I) 2001)
- National Aboriginal and Torres Strait Islander Survey 1994 (NATSIS 1994).

Survey results are subject to sampling error, because they are based on samples of the total population, rather than the whole population. Where survey data are shown in charts in this report, error bars are included, showing 95 per cent confidence intervals. Data collections that seek to include the entire population (for example the

Census of Population and Housing) are not subject to sampling error. (Although not survey data, data on years 3, 5, 7 and 9 literacy and numeracy also include 95 per cent confidence intervals, as explained in section 4.4.)

There is a 95 per cent chance that the true value of the measure lies within the interval shown by the error bars. If there is an overlap between confidence intervals for different results, it cannot be stated for certain that there is a statistically significant difference between the results. This report only highlights statistically significant differences (although it should be noted that ‘statistically significant’ differences are not necessarily material or important).

Relative standard errors (RSEs) are a statistical measure of the precision of a survey statistic. RSEs for all survey data included in the report are shown in the attachment tables referred to in the report, which are available on the Review website (www.pc.gov.au/gsp). The 95 per cent confidence intervals shown in the error bars in the charts are equivalent to 1.96 times the RSEs above and below the estimate. See ABS (2010a) for more information about RSEs, confidence intervals and tests of statistical significance. Information on the calculation of error bars is included in the glossary.

Disaggregation

Where possible, relevant indicators are disaggregated into various categories — for example, by sex, State and Territory, remoteness and age groups. For most indicators in this report, remoteness areas are according to 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. The distribution of the Indigenous population according to remoteness areas is presented in section 3.1. For more information on how remoteness is defined, see ABS (2001a, 2001b, 2010b).

Rate ratios and rate differences

For some indicators, rate differences and rate ratios are calculated to compare rates between different groups, consistent with approach in NIRA reporting:

- a rate difference highlights the difference between rates, for example if the Indigenous rate for an indicator is 70 per cent and the non-Indigenous rate is 90 per cent, the rate difference is 20 percentage points. The six COAG Closing the Gap targets and many other indicators are expressed primarily using rate differences, to measure the change in the Indigenous/non-Indigenous gap over time. This is consistent with COAG's emphasis on closing gaps in outcomes between Indigenous and non-Indigenous people
- a rate ratio compares rates to allow statements such as 'the Indigenous rate is three times the non-Indigenous rate'. For example if the Indigenous rate is 30 per cent and the non-Indigenous rate is 10 per cent, the rate ratio would be three to one (or 3:1).

3.8 References

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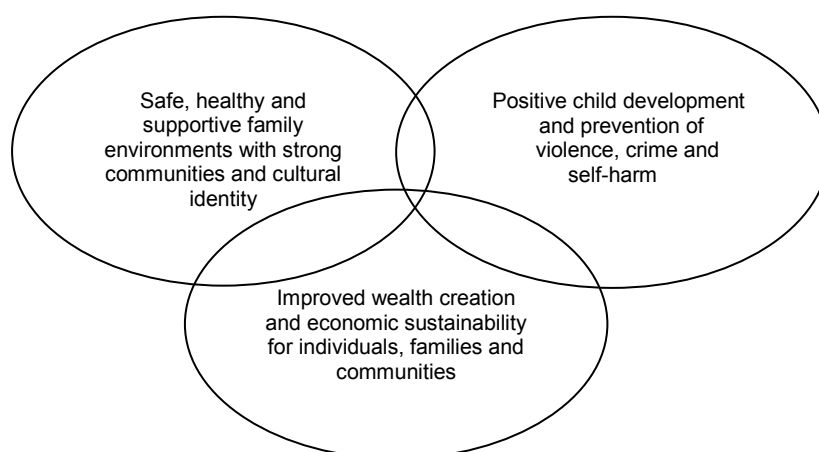
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4 COAG targets and headline indicators



COAG targets and headline indicators

COAG targets	Headline indicators
4.1 Life expectancy	4.7 Post secondary education — participation and attainment
4.2 Young child mortality	4.8 Disability and chronic disease
4.3 Early childhood education	4.9 Household and individual income
4.4 Reading, writing and numeracy	4.10 Substantiated child abuse and neglect
4.5 Year 12 attainment	4.11 Family and community violence
4.6 Employment	4.12 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, and most of these high level indicators are likely to take some time to improve, even if effective policies are implemented in the strategic areas for action.

The COAG targets and headline indicators are high level indicators:

- 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. The primary measure for section 4.1 is life expectancy at birth
- 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. The primary measures for section 4.2 are child under five mortality rates and mortality rates by leading causes (perinatal, infant, 1–4 years and 0–4 years)
- 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. Ensuring all Indigenous four year olds in remote communities have access to early childhood education within five years is a COAG target. The primary measures for section 4.3 are preschool enrolment rates and attendance at preschool (measured by absentee rates)
- reading, writing and numeracy — improved educational outcomes are 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. The primary measures for section 4.4 are National Assessment Program — Literacy and Numeracy (NAPLAN) performance for years 3, 5, 7 and 9 (reading, writing and numeracy) and NAPLAN student participation rates
- year 12 attainment — growing evidence emphasises the importance of continuing education after the period of compulsory schooling ends. Halving the gap for Indigenous 20 to 24 year olds in year 12 or equivalent attainment by 2020 is a COAG target. The primary measure for section 4.5 is the proportion of 20–24 year olds who have completed year 12 or certificate level II or above
- 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. The primary measure for

section 4.6 is the ‘employment to population ratio’, which measures the number of people employed as a proportion of the workforce-age population

- post secondary education, participation and attainment — an individual’s education can affect employment prospects and incomes, and also their health, and the health of their children, as well as their ability to make informed life decisions. The primary measure for section 4.7 is the proportion of 20–64 year olds with a post school qualification of Certificate III or above or currently studying
- 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. The primary measures for section 4.8 are rates of disability; the prevalence of different types of disability; and hospitalisation rates for chronic disease
- 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. The primary measures for section 4.9 are mean and median gross weekly equivalised household income and personal gross weekly income
- 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. The primary measure for section 4.10 is the proportion of children who were the subject of substantiated child protection notifications and/or care and protection orders
- 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. There is no primary measure for section 4.11, but this section provides data on measures that, in combination, inform our understanding of Indigenous and non-Indigenous people’s experience of family and community violence
- 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 all associated with high crime rates and high levels of imprisonment. The primary measures for section 4.12 are age standardised adult imprisonment rates and juvenile detention rates for people aged 10–17 years.

Attachment tables

Attachment tables for this chapter are identified in references throughout this chapter by an ‘A’ suffix (for example, table 4A.2.3). These 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, compared to 78.7 years for non-Indigenous males and 82.6 years for non-Indigenous females (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 (figure 4.1.1).
- In NSW, Queensland, WA, SA and the NT combined, after adjusting for the age differences in the two populations:
 - the all causes mortality rate for Indigenous people was twice the rate for non-Indigenous people, based on data for 2005–2009 (table 4.1.3)
- In WA, SA and the NT (jurisdictions with long term data), the mortality rate for Indigenous people declined by 27 per cent between 1991 and 2009, leading to a narrowing (but not closing) of the gap with non-Indigenous people in those jurisdictions (table 4A.1.5).

The Council of Australian Governments (COAG) has committed to ‘closing the life expectancy gap [between Indigenous and non-Indigenous Australians] within a generation’. 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).

The primary measure for this indicator is ‘life expectancy at birth’ — how long someone born in a particular year might expect to live if mortality patterns for that year remained unchanged over their lifetime.

This section also includes data on related measures:

- age specific death rates and median age at death

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

Life expectancy

Life expectancy is an indicator of long-term health and wellbeing. The life expectancy of Indigenous people is potentially affected by outcomes across all of the strategic areas for action. Disparities in life expectancy can be influenced by differences in income and education levels, access to high quality healthcare, social and support services, social factors, and environmental factors, such as overcrowded housing, lack of clean drinking water and inadequate sanitation. Information about these factors is provided in other sections of the report.

Indigenous life expectancy can be increased by improving access to high quality health services, greater levels of preventative care, early diagnosis of diseases (such as diabetes) and more effective treatment of chronic diseases (see sections 4.8, 7.1 and 7.2) and 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. People from lower socioeconomic groups suffer from higher rates of ill health and death at younger ages. They are also more likely to experience a larger health gap due to risk factors such as smoking, excessive alcohol consumption, illicit drug use, insufficient physical activity, and poor nutrition (see sections 7.4, 7.5, 10.1, 10.3 and 10.4) which, in turn, contribute to higher rates of chronic disease. Chronic diseases (for example, circulatory diseases, diabetes, kidney diseases, respiratory diseases and cancer) contribute to two thirds of the health gap (ill health and mortality) between Indigenous and non-Indigenous people (Vos et al. 2007; AHMAC 2011). Section 7.3 contains data on avoidable mortality.

There are no new Indigenous life expectancy estimates since the 2009 report. However, proxy measures — such as mortality rates by leading causes — are available. The ABS publishes new Indigenous life expectancy estimates every five years. The Census Data Enhancement Indigenous Mortality Quality Study (CDE IMQS) was an important source of information for the most recent estimates, and will be repeated following the 2011 Census. New Indigenous life expectancy estimates will not be available from the ABS until at least 2013.

The ABS 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. 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, the ABS advised that it was not possible to recalculate Indigenous identification rates in deaths data from earlier periods.

After consulting with experts and data users, the ABS developed a new method for adjusting registered Indigenous deaths. This method used the 2006 CDE IMQS data to derive factors for adjusting registered Indigenous deaths. The adjusted deaths were then used to compile Indigenous life tables and life expectancy estimates (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, except for the NT. Differences between the 1996–2001 and 2005–2007 life expectancy estimates should not be interpreted as measuring changes in Indigenous life expectancy over time.

Differences between the estimated life expectancies for Indigenous males and females, and for Indigenous people in different states and territories should be interpreted with care. These estimates are sensitive to the demographic assumptions and differing quality of death registration data across states and territories.

Life expectancy estimates for Victoria, SA, Tasmania and the ACT are excluded because the small Indigenous population in those states and territories precludes estimation.

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 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 to derive population estimates.

Identification of Indigenous people in death registrations data is incomplete and varies across states and territories. While it is expected that most deaths of Indigenous people are registered, not all Indigenous people are identified as such in death records. The ABS linked Census records from 2006 and death records from August 2006 to June 2007 to estimate the identification rate of Indigenous deaths (ABS 2008b). Nationally, the ABS estimates the identification rate of Indigenous people in deaths data 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 life expectancies at birth, 2005–2007

	<i>Indigenous</i>				<i>Non-Indigenous</i>	
	<i>Life expectancy at birth</i>		<i>95% confidence intervals^a</i>		<i>Life expectancy at birth</i>	
	<i>Males</i>	<i>Females</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	78.7	82.5
Queensland	68.3	73.6	67.3–69.3	72.8–74.4	78.6	82.5
WA	65.0	70.4	63.8–66.2	69.4–71.4	79.0	82.9
NT	61.5	69.2	60.5–62.5	68.4–70.0	75.7	81.2
Australia ^b	67.2	72.9	66.3–68.1	72.1–73.7	78.7	82.6

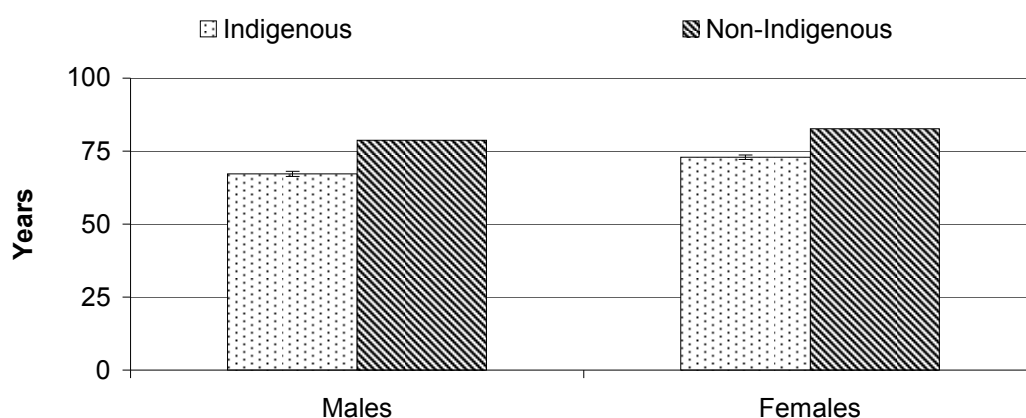
^a These confidence intervals are for sensitivity error, which includes sample error. ^b Includes all states and territories.

Source: ABS (2009) *Experimental Life Tables for Aboriginal and Torres Strait Islander Australians, Australia, 2005–2007*, Cat. no. 3302.0.55.003, Canberra; 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 (78.7 years) (table 4.1.1, figure 4.1.1)
- for Indigenous females was 72.9 years; 9.7 years less than for non-Indigenous females (82.6 years) (table 4.1.1, figure 4.1.1)

Figure 4.1.1 Life expectancy at birth, 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. ^b Error bars represent confidence intervals for sensitivity error (which includes sample error) calculated by the ABS 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) *Experimental Life Tables for Aboriginal and Torres Strait Islander Australians, Australia, 2005–2007*, Cat. no. 3302.0.55.003, Canberra; 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 5.7 years higher than for Indigenous males. Life expectancy for non-Indigenous females was 3.9 years higher than for non-Indigenous males (figure 4.1.1).

Available data suggest that 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. In Canada, in 2001, there were gaps of between 5 and 14 years for different Aboriginal groups and all Canadians (Statistics Canada 2005). In New Zealand, in 2005–07, there was a Māori/non-Māori gap of 8.6 years for males and 7.9 years for females (Statistics New Zealand 2008). The life expectancy gap between Māori and non-Māori in New Zealand has closed slightly from 9.1 years in 1995–97 to 8.2 years in 2005–07 (Statistics New Zealand 2008). More detail is shown in table 4A.1.2. Caution must be used in comparing data across countries, due to a range of conceptual, methodological and data issues (AIHW 2011).

Data from one jurisdiction does not provide an indication of life expectancy for people from other Australian states and territories. The NT is the only jurisdiction in which Indigenous identification in death data has been of sufficient and sustained

quality to allow time series analysis. A study by Wilson, Condon and Barnes (2007) found that between 1967 and 2004:

- life expectancy for Indigenous men in the NT increased by eight years (from 52 to 60 years). However, life expectancy for non-Indigenous men in Australia as a whole rose by ten years (from 68 to 78 years) meaning the gap increased from 16 to 18 years
- life expectancy for Indigenous women in the NT increased by 14 years (from 54 to 68 years) and life expectancy for non-Indigenous women in Australia rose by nine years (from 74 to 83 years) meaning the gap narrowed from 20 to 15 years.

Over a 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).

Age specific death rates and median age at death

Table 4.1.2 Total age specific death rates, NSW, Queensland, WA, SA and the NT, 2005–2009^{a, b}

Age (years)	Males			Females		
	Indigenous	Non-Indigenous	Rate ratio ^c	Indigenous	Non-Indigenous	Rate ratio ^c
0 ^d	10.4	4.6	2.2	7.6	3.8	2.0
1–4	60.6	22.9	2.6	51.5	17.5	2.9
5–14	24.2	10.5	2.3	17.3	8.1	2.1
15–24	153.8	58.0	2.7	74.0	23.0	3.2
25–34	312.5	87.0	3.6	159.5	34.0	4.7
35–44	648.3	130.6	5.0	369.2	68.2	5.4
45–54	1 076.2	279.5	3.9	682.5	167.3	4.1
55–64	1 935.0	661.3	2.9	1 411.1	390.1	3.6
65 and over	5 642.3	4 181.2	1.3	4 864.4	3 675.7	1.3

^a Deaths per 100 000 population, except age zero. ^b Deaths where Indigenous status was not stated are excluded. As a result, age specific death rates may be underestimated. ^c Indigenous rate divided by the non-Indigenous rate. ^d Infant deaths per 1000 live births.

Source: ABS (2010) *Deaths, Australia 2009*, Cat. no. 3302.0; table 4A.1.3.

In NSW, Queensland, WA, SA and the NT, for 2005–2009 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)
- Age-specific death rates for Indigenous people were at least twice the rate for non-Indigenous people, for all age groups below 65 years (table 4.1.2).

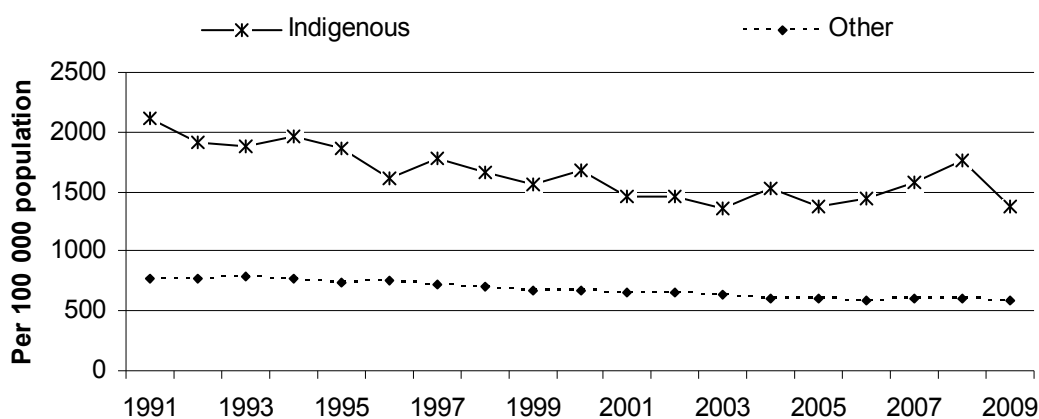
- The greatest differences in age specific death rates were for people aged 35 to 44 years, among whom Indigenous death rates were five times the rates for non-Indigenous people (table 4.1.2).

Median age at death — the age at which half the population is older and half is younger — is another way of examining Indigenous mortality but estimates should be treated with caution. Differences in coverage rates by age can lead to bias in the 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 2010). Furthermore, median age at death is not a sensitive measure of changing mortality over time (Coory and Baade 2003). Median ages at death for Indigenous people fluctuated between 2000 and 2009 but no clear trend was apparent (table 4A.1.4).

Age standardised mortality

Although time-series data for life expectancy are not available, time series data are available for age standardised mortality from all causes for WA, SA and the NT for 1991–2009 (figure 4.1.2). Data for these three jurisdictions are not representative of rates in other jurisdictions.

Figure 4.1.2 Mortality rates, WA, SA and the NT, 1991–2009^{a, b}



^a Rates have been directly age-standardised using the 2001 Australian standard population. ^b 'Not stated' Indigenous deaths included in 'Other'.

Source: ABS (unpublished) *Deaths, Australia*, Cat. no. 3302.0; table 4A.1.5.

Mortality rates for Indigenous people living in WA, SA and the NT declined by 26.5 per cent between 1991 and 2009, and the gap in mortality rates with

non-Indigenous people narrowed, despite a small decline in non-Indigenous death rates (Australian Government 2011).

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

- in 2009, the mortality rate for Indigenous people was 2.3 times the mortality rate for other people (table 4A.1.5)
- between 1991 and 2009, the mortality rate for Indigenous people has varied from 2.1 times (in 1996 and 2003) to 2.9 times (in 2008) the mortality rate for other people (table 4A.1.5).

A slightly shorter time series is available for five jurisdictions. Age standardised mortality data for NSW, Queensland, WA, SA and the NT are available for the period 2005–2009.

Table 4.1.3 All causes mortality, age standardised, NSW, Queensland, WA, SA and the NT, 2005–2009^{a, b, c, d}

	<i>Indigenous^e</i>	<i>Non-Indigenous^e</i>	<i>Ratio^g</i>
	<i>No. per 100 000^f</i>	<i>No. per 100 000^f</i>	
NSW	954	602	1.6
Queensland	1064	598	1.8
WA	1680	575	2.9
SA	1024	613	1.7
NT	1542	667	2.3
NSW, Queensland, WA, SA and the NT	1181	599	2.0

^a Data are reported for NSW, Queensland, WA, SA and the NT only. These five states and territories are considered to have adequate levels of Indigenous identification in mortality data. They do not represent a quasi-Australian figure. ^b Data are presented in five-year groupings due to 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 of death. ^e These data exclude 5344 registered deaths where the Indigenous status was not stated. ^f Directly age-standardised using the 2001 Australian standard population.

^g Mortality rate for Indigenous people divided by the mortality rate for non-Indigenous people.

Source: ABS (unpublished) *Deaths, Australia*, Cat. no. 3302.0; table 4A.1.6.

In NSW, Queensland, WA, SA and the NT combined, after adjusting for age differences in the two populations, between 2005 and 2009:

- the all causes mortality rate for Indigenous people was twice the rate for non-Indigenous people, based on data from 2005–2009 (table 4.1.3)
- the Indigenous all causes mortality rate increased by 6.9 per cent. Over the same period the non-Indigenous rate decreased by 1.1 per cent (table 4A.1.7).

Table 4A.1.7 contains further data on mortality rates, rate ratios and rate differences over the period 2005 to 2009.

Mortality rate by leading causes

Table 4.1.4 shows leading causes of mortality for NSW, Queensland, WA, SA and the NT. These data are indirectly age-standardised, because of the small numbers of deaths for particular causes. Other mortality data earlier in this section are directly age-standardised (see chapter 3 for more information).

In NSW, Queensland, WA, SA and the NT combined, after adjusting for the age differences in the two populations, between 2005 and 2009:

- 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 both Indigenous and non-Indigenous people were diseases of the circulatory system, followed by cancers (table 4.1.4)
- Indigenous death rates were 8.4 times as high as non-Indigenous rates for diabetes, 5.2 times as high for kidney diseases and 4.7 times as high for digestive diseases, 2.6 times as high for circulatory diseases and 1.5 times as high for cancers (table 4.1.4).

Age standardised mortality rates, rate ratios and rate differences, by selected causes of death, are available in single years, from 2007 to 2009, and are provided in tables 4A.1.9–11.

Table 4.1.4 Causes of death, age standardised, by Indigenous status, NSW, Qld, WA, SA and the NT, 2005–2009^{a, b, c, d, e}

	<i>Indigenous</i>	<i>Non-Indigenous</i>	<i>Rate ratio^e</i>
	<i>Rate per 100 000</i>	<i>Rate per 100 000</i>	
Circulatory diseases	527.9	205.8	2.6
External causes	96.5	36.7	2.6
Endocrine, nutritional and metabolic diseases	137.6	21.7	6.3
Diabetes	128.3	15.2	8.4
Respiratory diseases	149.5	49.0	3.1
Cancers	271.8	179.0	1.5
Cancer of digestive organs	80.4	47.8	1.7
Lung cancer	65.4	33.6	1.9
Cervical cancer	5.6	1.0	5.6
Digestive diseases	94.6	20.2	4.7
Kidney diseases	58.6	11.2	5.2
Conditions originating in the perinatal period	5.9	2.8	2.1
Infectious and parasitic diseases	30.5	8.5	3.6
Nervous system diseases	38.6	23.2	1.7
Other causes ^f	91.6	42.5	2.2
Total	1490.3	600.5	2.5

^a Age standardised death rates enable the comparison of death rates between populations with different age structures by relating them to a standard population. The current ABS standard population is all persons in the Australian population at 30 June 2001. Standardised death rates (SDRs) are expressed per 100 000 persons. SDRs in this table have been calculated using the indirect method, age standardised by 5 year age group to 75 years and over. Rates calculated using the indirect method are not comparable to rates calculated using the direct method. ^b 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. ^c Data are reported individually by jurisdiction of residence for NSW, Queensland, WA, SA and the NT only. These five jurisdictions sufficient levels of identification and sufficient numbers of deaths to support mortality analysis. ^d Data are presented in five-year groupings due to the volatility of small numbers each year. ^e Rate ratio is the age standardised Indigenous rate divided by the non-Indigenous rate. ^f 'Other causes' consist of all conditions excluding the selected causes displayed in the table.

Source: ABS (unpublished) *Causes of Death, Australia*, Cat. no. 3303.0; table 4A.1.8.

4.2 Young child mortality

Box 4.2.1 Key messages

- Between 1997–99 and 2007–09, infant (first year of life) mortality rates among Indigenous infants remained constant or improved in states and territories for which data were available. However, Indigenous infant mortality rates were still 1.6 to 3.1 times as high as those for non-Indigenous infants in 2007–09 (figures 4.2.3 and 4.2.4).
- Longer-term data are available for WA, SA and the NT. In these jurisdictions, the Indigenous infant mortality rate declined by 48 per cent between 1991 and 2009, compared to a reduction of 44 per cent for non-Indigenous infants, leading to a narrowing of the gap (figure 4.2.5).
- Between 1997–99 and 2007–09, mortality rates for Indigenous children aged 1–4 years and 0–4 years remained relatively constant. However, Indigenous child mortality rates were still 1.8 to 3.8 times as high as those for non-Indigenous children in 2007–09 (figures 4.2.6 and 4.2.7).
- A longer time series of child mortality data is available for WA, SA and the NT. In these jurisdictions the mortality rate for children aged 0–4 years declined by 45 per cent between 1991 and 2009 (figure 4.2.8).

The mortality rate for children under five years is a key indicator of the general health and wellbeing of a population. Halving the gap in mortality rates for Indigenous children under five within a decade is a COAG target (COAG 2008a).

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 that between Aboriginal and Torres Strait Islander infants in the general population in Australia (AHMAC 2011).

The primary measures for this indicator are drawn from the National Indigenous Reform Agreement (COAG 2008b) and comprise:

- child under five mortality rates
- mortality rates by leading causes:
 - perinatal, infant¹, 1–4 years and 0–4 years.

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

¹ Infant mortality is defined as the number of deaths of children between birth and exactly one year of age.

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 2006, infant deaths comprised 1 per cent of all deaths, but almost three-quarters of deaths among children aged less than 14 years (AIHW 2009a).

The main risk factors for perinatal mortality (the period five months before and one month after birth) are low birth weight (section 5.3) and pre-term birth. Other factors which may be associated with perinatal mortality are maternal smoking during pregnancy, infection, inadequate maternal nutrition and underutilisation of antenatal services (AIHW 2009b). Antenatal visits provide opportunities to inform mothers about risk factors, identify ‘at risk’ fetuses and allow for implementation of primary prevention strategies (see sections 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 4.3 deaths per 1000 live births in 2009 (ABS 2002; ABS 2010). 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 (such as neonatal intensive care), education campaigns about the importance of immunisation and infant sleeping position (in the case of Sudden Infant Death Syndrome — SIDS) have led to further modest declines in infant deaths (ABS 1996; ABS 2010; d’Espaignet et. al. 2008). The infant mortality rate has been consistently higher for males than females over the past 10 years — between 1989 and 2009, the male infant mortality rate decreased from 8.8 to 4.8 deaths per 1000 live births, while the female infant mortality rate declined from 7.1 to 3.7 deaths per 1000 live births (ABS 2010).

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. 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 drowning deaths that may be the result of legislation requiring fencing around swimming pools in most states and territories (ABS 2005).

This section contains comparisons of Indigenous and non-Indigenous deaths and estimates of excess deaths.² Only NSW, Queensland, WA, SA, and the NT have

² 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

sufficient identification of Indigenous people in deaths registrations to be reported. Mortality rate data and all causes infant and child mortality data are sourced from the ABS Deaths Australia collection. Data on causes of death are sourced from the ABS Causes of Death collection. All causes perinatal mortality data are sourced from the ABS Perinatal Deaths collection.

Estimates of child mortality rates among Australia's Indigenous population are imprecise:

The exact scale of difference between the mortality of Aboriginal and Torres Strait Islander Australians and the total population is difficult to establish conclusively, due to quality issues with Aboriginal and Torres Strait Islander Australian deaths data and the uncertainties inherent with estimating and projecting the size and structure of the Aboriginal and Torres Strait Islander Australian population over time. Caution should be exercised when undertaking analysis of Aboriginal and Torres Strait Islander Australian deaths and mortality and, in particular, trends in Aboriginal and Torres Strait Islander Australian mortality. (ABS 2010)

The ABS (2010) considers that it is likely that most deaths of Indigenous Australians are registered. However, some of those deaths may not be registered as deaths of Indigenous people. Although the total proportion of deaths for which Indigenous status is not stated is quite small (1.1 per cent in 2009), the Indigenous Mortality Quality Study identified substantial mis-classification of Indigenous status in death registrations (ABS 2010).

There is limited information on the under-coverage of Indigenous mortality and differences may exist in the identification of Indigenous adults and children in deaths registrations. The AIHW is undertaking research on linking Indigenous death registration records to perinatal deaths, deaths recorded in hospital and deaths recorded in aged care facilities.

Indigenous mortality data is also affected by differences in the method of Indigenous identification between the denominator and the numerator. Indigenous identification in deaths data is usually provided by the parent or relative of the deceased infant, while in birth registrations Indigenous status is ascribed to the infant, based on the parents' Indigenous status.

An example of a program designed to reduce Indigenous young child mortality is reported in box 4.2.2.

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 the age, sex and cause specific rates of non-Indigenous Australians) from the number of actual cause-specific deaths in the Indigenous population (AIHW 2009b).

Box 4.2.2 ‘Things that work’— young child mortality

The **Reducing the Risk of SIDS in Aboriginal Communities Project** (WA), established in 2005, addresses the significantly higher risk of Indigenous infants dying from Sudden Infant Death Syndrome (SIDS) and fatal sleep accidents. SIDS and Kids Western Australia employ Indigenous staff to raise awareness in Indigenous communities of the risk factors associated with sudden infant death. The project has consulted with over 870 individuals from 115 organisations, including visits and collaboration with Indigenous and non-Indigenous health workers and researchers, and 87 individuals have completed related training. A 2010 external review found the project was an effective means of distributing SIDS safe sleeping messages and culturally appropriate education resources to Aboriginal communities (Wichmann, Vicary and Piek 2010).

Perinatal mortality

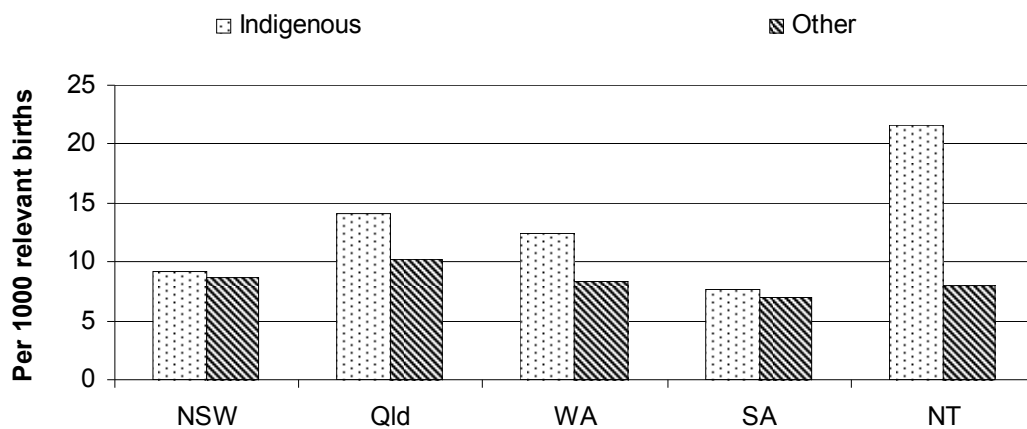
Perinatal deaths include all fetuses delivered with a gestational age of 20 weeks or more, or weighing at least 400 grams, and all neonatal deaths — infant deaths within 28 days of birth.

In 2009, the ABS removed perinatal data from the Causes of Death publication and, from June 2009, published a separate Perinatal Deaths publication. Due to the small number of Indigenous perinatal deaths registered each year, Perinatal Deaths includes aggregated national perinatal death statistics for five year periods. Single year data are available for five jurisdictions from 2007.

For the period 2005–2009, in NSW, Queensland, WA, SA and the NT combined:

- perinatal mortality rates among Indigenous babies were higher than for non-Indigenous babies rate. Indigenous to non-Indigenous perinatal mortality rate ratios ranged from close to 1.0 for NSW to 2.7 for the NT (figure 4.2.1)
- the rate of Indigenous fetal deaths was 1.2 times the rate of other fetal deaths (table 4A.2.1)
- the rate of Indigenous neonatal deaths was 1.6 times the rate of other neonatal deaths (table 4A.2.1).

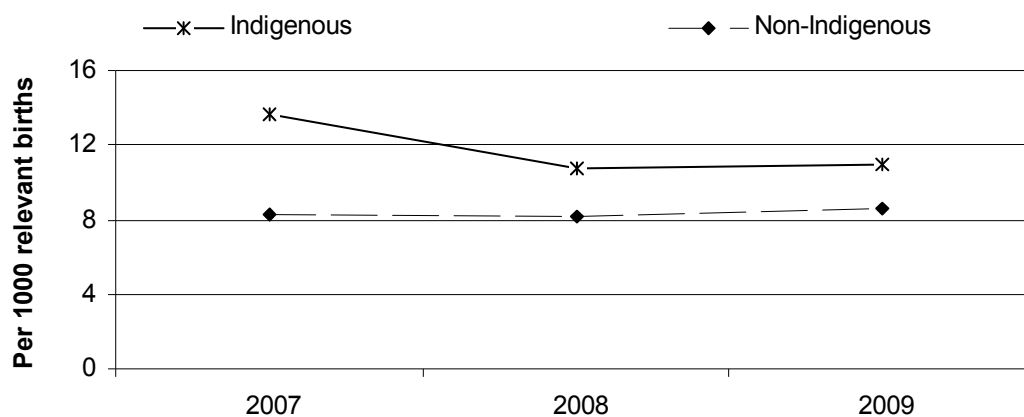
Figure 4.2.1 Perinatal mortality rates, 2005–09^{a, b, c, d, e}



^a Perinatal deaths include all fetuses delivered with a gestational age of 20 weeks or more or, weighing at least 400 grams; and all neonatal deaths (infant deaths within 28 days of birth). ^b Data are reported by jurisdiction of residence for NSW, Queensland, SA, WA and the NT only. These five states and territories are considered to have adequate levels of Indigenous identification in mortality data. ^c Data are presented in a five-year grouping due to volatility of the small numbers involved. ^d 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. ^e 'Other' includes mortality of non-Indigenous people and those for whom Indigenous status was not stated.

Source: ABS (2011) *Perinatal Deaths, Australia, 2009*, Cat. no. 3304.0; table 4A.2.1.

Figure 4.2.2 **Perinatal mortality rates, NSW, Queensland, WA, SA, NT combined** ^{a, b, c, d}



^a Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous all-causes mortality rate. ^b Data are reported by jurisdiction of residence for NSW, Queensland, SA, WA and the NT only. These five states and territories are considered to have adequate levels of Indigenous identification in mortality data. ^c Non-Indigenous does not include deaths with a 'not stated' Indigenous status. ^d Total relevant births comprise live births and fetal deaths (with at least 20 weeks gestation or at least 400 grams birth weight).

Source: ABS (unpublished) *Perinatal deaths, Australia*; ABS (unpublished) *Deaths, Australia*; table 4A.2.2.

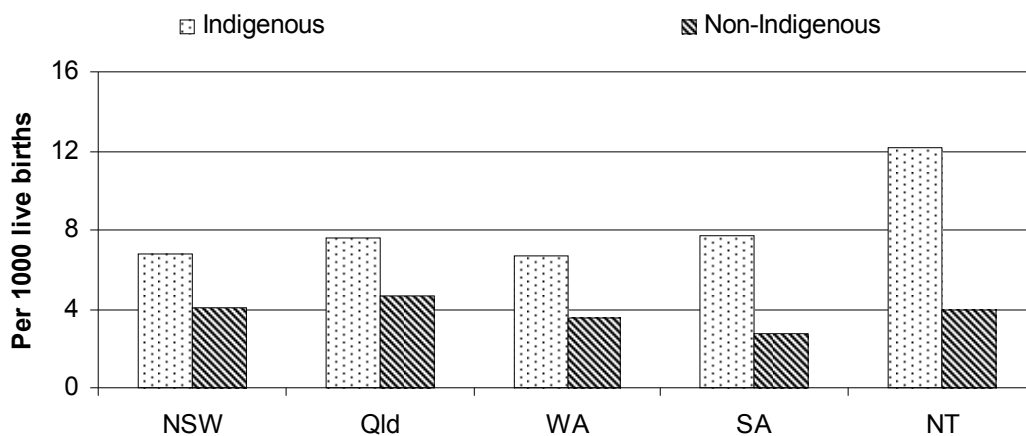
Nationally, between 2007 and 2009, for NSW, Queensland, WA, SA and the NT combined:

- the rate of perinatal Indigenous deaths declined and the rate of non-Indigenous deaths increased, leading to a narrowing of the gap (figure 4.2.2)
- the total number of Indigenous perinatal deaths declined (from 175 to 156) and the total number of non-Indigenous deaths increased (from 1584 to 1714 deaths) (table 4A.2.2).

Infant mortality

Due to the small number of infant deaths, infant mortality rates are aggregated over a three year period.

Figure 4.2.3 Infant mortality rates, 2007–09^{a, b, c, d}



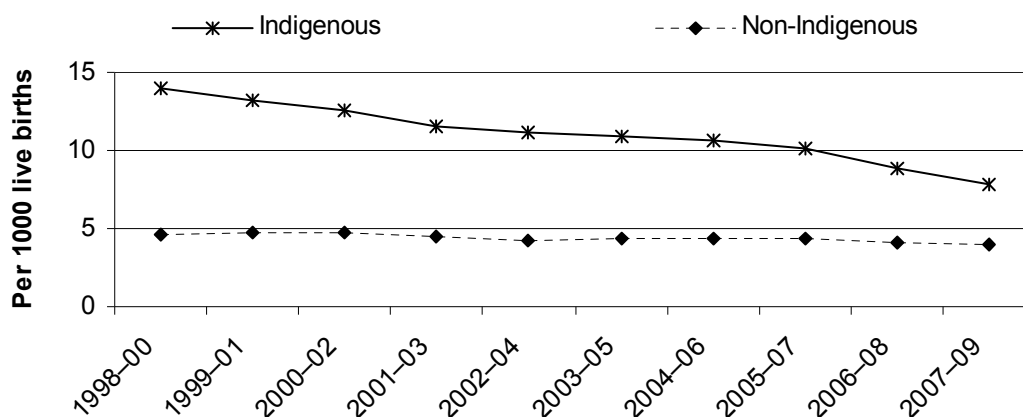
^a The infant mortality rate is defined as the number of deaths of children between birth and exactly one year of age per 1000 live births. ^b Victoria, Tasmania and the ACT are excluded due to small numbers. ^c Deaths for which Indigenous origin was not stated have not been prorated between Indigenous and non-Indigenous deaths. As a result, Indigenous and non-Indigenous infant mortality rates may be underestimated. ^d Contribution of Indigenous deaths to total deaths is much larger in the NT than in other states or territories.

Source: ABS (unpublished) *Deaths, Australia*; table 4A.2.1.

For the period 2007–09:

- In states and territories for which data were available, mortality rates among Indigenous infants were 1.6 to 3.1 times as high as those for non-Indigenous infants (figures 4.2.3).

Figure 4.2.4 **Infant mortality, NSW, Queensland, WA, SA, NT combined, 1998–2000 to 2007–09^{a, b, c, d}**



^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. ^b Victoria, Tasmania and the ACT are excluded due to small numbers. ^c Deaths for which Indigenous origin was not stated have not been prorated between Indigenous and non-Indigenous deaths. As a result, Indigenous and non-Indigenous infant mortality rates may be underestimated. ^d Contribution of Indigenous deaths to total deaths is much larger in the NT than in other states or territories.

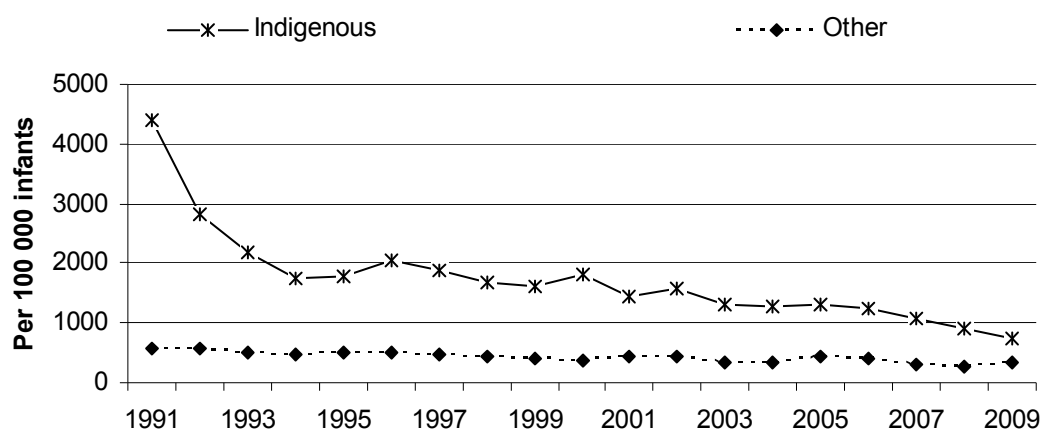
Source: ABS (unpublished) *Deaths, Australia*; table 4A.2.5.

- Between 1997–99 and 2007–09, Indigenous infant mortality fell in NSW, Queensland, WA and the NT. Mortality rates for non-Indigenous infants in these jurisdictions also fell, but the improvement was not as large as for Indigenous infants, leading to a narrowing of the gap (table 4A.2.5). The SA infant mortality rate fluctuated for both Indigenous and non-Indigenous infants over this period.

A longer time series of infant mortality data is available for WA, SA and the NT between 1991 and 2009, and shows:

- the decline in mortality rate for Indigenous infants (48 per cent) was slightly higher than the decline for other infants (44 per cent) (figure 4.2.5)
- the gap between mortality rates for Indigenous and other infants has significantly narrowed from 3852 to 394 per 100 000 children (figure 4.2.5).

Figure 4.2.5 Infant mortality rates, WA, SA and the NT, 1991–2009^{a, b}



^a Average annual change in rates determined using linear regression analysis. ^b 'Other' Includes deaths of those for whom Indigenous status was not stated.

Source: ABS (unpublished) *Deaths, Australia*; table 4A.2.6.

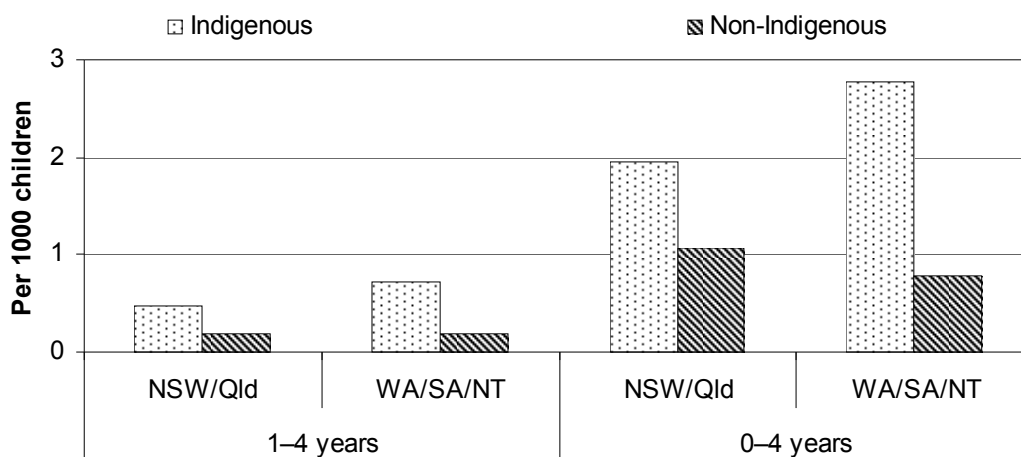
Mortality, children aged 0–4 and 1–4 years

Due to the small numbers of deaths of Indigenous people in the 0–4 and 1–4 year age groups 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 these variations may, in part, be due to the lower levels of coverage of Indigenous deaths in NSW and Queensland than in WA, SA and the NT. Data for Victoria, Tasmania and the ACT are excluded due to small numbers of deaths of Indigenous people in these jurisdictions.

During 2007–09:

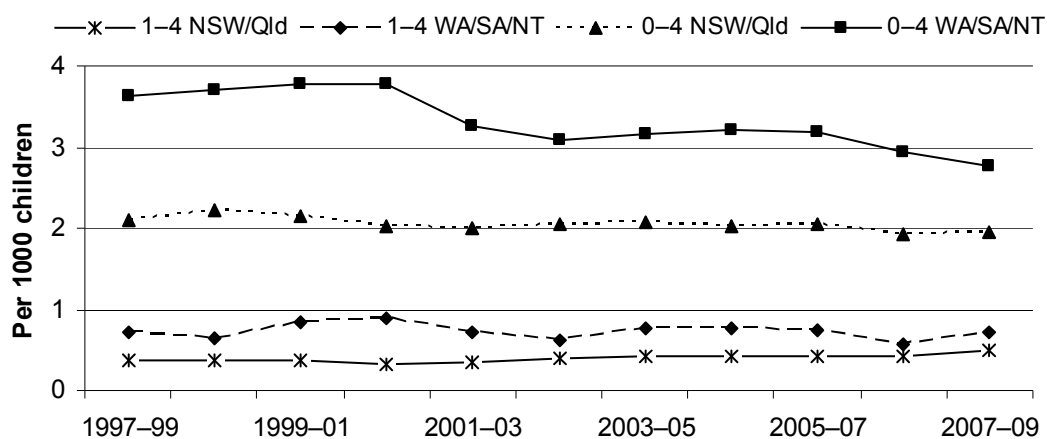
- mortality rates for Indigenous children aged 1–4 years were 2.5 and 3.8 times as high as those for non-Indigenous children in NSW/Queensland and WA/SA/NT, respectively (figure 4.2.6)
- mortality rates for Indigenous children aged 0–4 years were 1.8 and 3.6 times as high as those for non-Indigenous children in NSW/Queensland and WA/SA/NT, respectively (figure 4.2.6).

Figure 4.2.6 **Mortality rates, children aged 0–4 and 1–4 years, by Indigenous status, 2007–09**



Source: ABS *Deaths, Australia* (unpublished); table 4A.2.10 and 4A.2.14.

Figure 4.2.7 **Indigenous mortality rates, children aged 0–4 and 1–4 years, 1997–99 to 2007–09**



Source: ABS *Deaths, Australia* (unpublished); table 4A.2.10 and 4A.2.14.

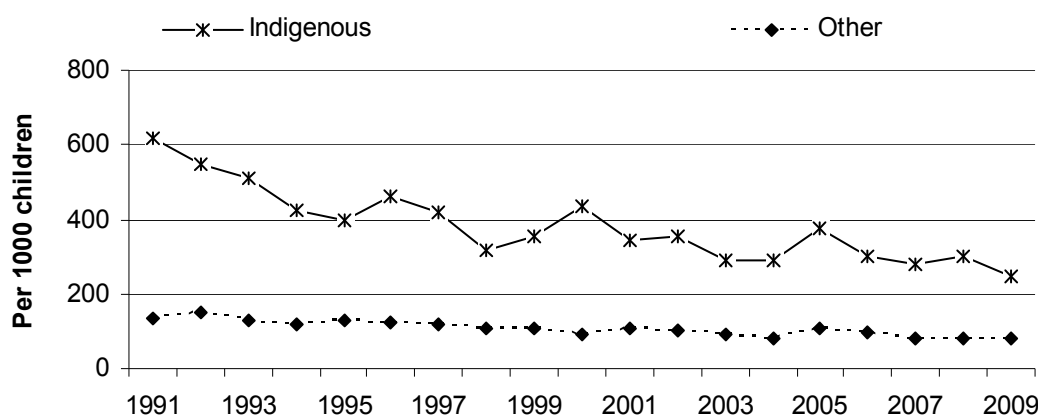
Between 1997–99 and 2007–09:

- Indigenous mortality rates were consistently higher than those for non-Indigenous children for both the 1–4 and the 0–4 years age groups in both NSW/Queensland and WA/SA/NT (figure 4.2.7)
- Indigenous mortality rates for the 1–4 years age group remained relatively constant in both NSW/Queensland and WA/SA/NT. The 0–4 years age group

also remained relatively constant in NSW/Queensland, but declined slightly in WA/SA/NT (figure 4.2.7)

- the mortality rates of both age groups of non-Indigenous children in NSW/Queensland and WA/SA/NT remained fairly constant (figure 4.2.7)
- Indigenous mortality rates for NSW/Queensland were lower than the rates for WA/SA/NT in both age groups, 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 4.2.7).

Figure 4.2.8 Child (aged 0–4 years) mortality rates, WA, SA and the NT^{a, b}



^a Average annual change in rates determined using linear regression analysis. ^b 'Other' Includes deaths of those for whom Indigenous status was not stated.

Source: ABS *Deaths, Australia* (unpublished); table 4A.2.15.

A longer time series of child mortality data is available for WA, SA and the NT between 1991 and 2009, and shows:

- the decline in mortality rate for Indigenous children (45 per cent) was similar to the decline for other children (44 per cent), but from a much higher base (figure 4.2.8)
- the gap between mortality rates for Indigenous and other children has narrowed from 485 to 166 per 100 000 children (table 4A.2.15).

Mortality rates by leading causes

For the period 2005–2009, in NSW, Queensland, WA, SA and the NT combined:

- the major cause of perinatal death³ was ‘disorders related to length of gestation and fetal growth’ (36.6 per cent of Indigenous perinatal deaths and 32.4 per cent of non-Indigenous perinatal deaths). This was followed by ‘other disorders originating in the perinatal period’ (31.4 per cent of Indigenous perinatal deaths and 32.2 per cent of non-Indigenous perinatal deaths) (table 4A.2.21)
- the major cause of perinatal deaths originating in the mother was the ‘fetus or newborn affected by complications of placenta, cord and membranes’ (15.5 per cent of Indigenous perinatal deaths and 14.9 per cent of non-Indigenous perinatal deaths) (table 4A.2.22).

In NSW, Queensland, WA, SA and the NT combined, in 2009:

- the leading cause of both Indigenous and non-Indigenous infant (0–12 months) and child (0–4 years) mortality was ‘certain 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 (table 4A.2.20 and 4A.2.21)
- Indigenous infants died of these causes at 1.6 times the rate of non-Indigenous infants (3.4 and 2.2 per 1000 live births respectively) (table 4A.2.20)
- Indigenous children (0–4 years) died of these causes at 1.8 times the rate of non-Indigenous children (79.7 and 61.3 per 1000 live births respectively) (table 4A.2.21).

For the period 2005–09, in NSW, Queensland, WA, SA and the NT combined:

- infant (0–12 months) mortality rates for certain infectious and parasitic diseases were much higher for Indigenous babies (0.2 per 1000 live births) than for non-Indigenous babies (0.1 per 1000 live births) (table 4A.2.24)
- child (0–4 years) mortality rates for diseases of the circulatory system were much higher for Indigenous children (4.4 per 100 000 children) than for non-Indigenous children (0.8 per 100 000 children) (table 4A.2.25)
- child (1–4 years) mortality rates for diseases of the respiratory system were much higher for Indigenous children (11.7 per 100 000 children) than for non-Indigenous children (2.9 per 100 000 children) (table 4A.2.26).

³ Perinatal deaths include all fetuses delivered with a gestational age of 20 weeks or more or weighing at least 400 grams; and all neonatal deaths.

4.3 Early childhood education

Box 4.3.1 Key messages

Currently, there is no comprehensive source of data on Indigenous preschool participation and it is difficult to draw conclusions about participation rates. Data from the new National Early Childhood Education and Care Collection will be available for future reports.

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 closing the gap targets. COAG's target, set in 2008, was 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 primary measures for this indicator are:

- preschool enrolment rates:
 - for children in the year before commencing full time schooling
 - for children aged 3, 4 and 5 years, calculated as a proportion of children aged 3, 4 and 5 years in the population
- attendance at preschool, measured by absentee rates, with a low absentee rate indicating a higher rate of attendance.

There is no single, definitive source of data on Indigenous childrens' participation in preschool programs in Australia, or information on the qualifications of staff delivering these programs and whether children were enrolled in the year before commencing full-time schooling. These data will be available in future iterations of the National Early Childhood Education and Care (ECEC) Data Collection (ABS 2011) (see section 4.13, 'Future directions in data').

This section also includes data on:

- 'Preschool participation' — parent's or guardian's responses about their children's participation in preschool programs, by:
 - State and Territory
 - remoteness
 - the child's age

-
- ‘Early childhood education and care’ — 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.

This chapter draws on the National Preschool Census (NPC) to present participation rates based on preschool enrolments as a proportion of preschool aged children in the population. Information based on parental responses to questions about their children’s preschool participation for children aged 3 to 5 years are from the Australian Bureau of Statistics (ABS) National Aboriginal and Torres Strait Islander Social Survey 2008 (NATSISS 2008) and ABS Childhood Education and Care Survey 2008 (CEaCS 2008). These surveys collect no information on whether a child actually attends preschool on a regular basis. Therefore, this report also includes data from the NPC on preschool attendance, based on absences from non-government preschools.

In Australia, preschool participation is not compulsory. Preschool programs are offered to children for one or two years before they commence primary school, and are available to children aged 3–5 years. Predominantly, participation occurs for one year before full time schooling, although children who are disadvantaged or have special needs may receive special programs for longer than one year. However, fees and program availability can create barriers to accessing preschool, particularly for Indigenous children, in both remote and non-remote regions (ANAO 2002; HREOC 2000; NTDE 1999).

In 2008, COAG endorsed a National Partnership Agreement (NPA) for Indigenous Early Childhood Development, which emphasised the importance of reducing the gap in developmental outcomes between Indigenous and non-Indigenous children. COAG also endorsed the NPA on Early Childhood Education which set a national priority of increasing early childhood education participation rates, particularly for Indigenous and disadvantaged children. Both NPAs 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 2009a). Further to these NPAs, in 2009 COAG endorsed the National Quality Framework for early childhood education and care and outside school hours care, to be implemented progressively from July 2010. This will replace existing separate licensing and quality assurance processes for early childhood education and care (COAG 2009b).

These policy developments have been informed by research on the benefits of early childhood education, particularly for disadvantaged groups. Although the focus of this indicator is on preschool, research has shown that positive childhood development is also influenced by a wide variety of other factors (AIFS 2005; Bortoli and Thompson 2010; Harrison 2008; McCain, Mustard and Shanker 2007;

Mustard 2007; Ou and Reynolds 2004; Reynolds et al. 2001; Schweinhart 2007). More information about some of the factors that influence on early childhood development are found throughout this report, including: basic skills for life and learning (section 5.6); maternal and fetal health (section 5.1, Maternal health; section 5.2, Teenage birth rate; section 5.3, Birthweight) and early childhood health (section 5.4, Early childhood hospitalisations; section 5.5, Injury and preventable disease; section 5.7, Hearing impairment), Home environment (chapter 9) and Safe and supportive communities (chapter 10).

Children's experiences in their early years affect their development and influence lifelong learning, behaviour and health (McCain, Mustard and Shanker 2007; Mustard 2007). Early childhood education and care services provide development opportunities for children, as well as supporting the needs of families, and can be considered to be a significant influence in a child's early education (McCain, Mustard and Shanker 2007). Early childhood education programs are associated with increased levels of school completion and enhanced literacy, numeracy and social skills (Bortoli and Thomson 2010; Harrison 2008; Mustard 2007; Ou and Reynolds 2004; Reynolds et al. 2001; Schweinhart 2007). The provision of services to children during their early years may also 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 influence on children's attendance and children's readiness for school (Fordham and Schwab 2007; High 2008; Hutchins, Saggars and Frances 2009, Sims et al. 2008). For families of 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).

Analysis of the Program of International Student Assessment (PISA) results from 2000 to 2006 showed that, for Indigenous students, there was a strong relationship between attending preschool and educational outcomes (although it is difficult to establish direct causation). Indigenous students who had attended preschool for more than one year, scored, on average, 69 points higher than Indigenous students who had not attended preschool at all. For Indigenous students there was also a moderate relationship between attending preschool and mathematical literacy

performance. For non-Indigenous students these relationships were not as strong — with a 33 point score difference between those who attended preschool and those who did not, and little association between preschool attendance and mathematical literacy performance (Bortoli and Thomson 2010).

The case studies in box 4.3.2 describe activities that are improving outcomes in early childhood development.

Box 4.3.2 ‘Things that work’ – improving Indigenous early childhood education outcomes

Learning Together (SA) is an early childhood development program focused on literacy and learning experiences at home, which has operated since 2003 in seven disadvantaged areas of SA. Learning Together provides playgroups specifically for Aboriginal families, with workers who are often local Aboriginal women employed as early childhood workers. Program managers support families on a one-to-one basis, encourage parent/child interactions, and help parents to observe their children’s learning.

An evaluation in 2007 found the program to be flexible and highly responsive to the needs of local communities. Parents and family members developed an increased awareness about their roles in providing learning resources and opportunities for their children. Children had increased access to learning resources and opportunities, and spent less time watching TV (Whiteman et al. 2007).

Between 2007 and 2010, the number of Aboriginal children attending Learning Together programs increased by 104 per cent, and the number of Aboriginal families attending increased by 61 per cent. In December 2010, 103 Aboriginal families with 143 children were enrolled and attending Learning Together programs (SA Government unpublished; SA Government 2011).

The Aboriginal Early Years Program (Tasmania) emphasises early literacy, language development and school readiness. The program has been running since 2005. In 2010, 95 children and 72 adults from 61 families were assisted. Aboriginal Early Years Liaison Officers support families to engage in the Launching into Learning (LiL) program, which connects Indigenous families with local early childhood education services and provides parents with culturally appropriate activities to nurture and stimulate children’s learning.

Annual LiL progress reports show improved performance, particularly for the most disadvantaged students. The 2009 Kinder Development Check assessment showed that LiL students were less likely to be ‘at risk’ than non-LiL students (20.5 per cent and 28.8 per cent respectively). Similarly, the 2010 Performance Indicators for Primary Schools assessment showed that LiL students performed better than non-LiL students in reading (10.1 per cent ‘below range’ compared to 17.4 per cent) and numeracy (10.9 per cent ‘below range’ compared to 17.6 per cent) (Tasmanian Government 2010; Tasmanian Government unpublished).

Preschool enrolment rates

Data on the number of children enrolled in preschool are available from the 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. There are also issues with the reliability of Indigenous population projections by single year of age and data on remote populations to estimate the number of Indigenous children who are enrolled in preschool in certain areas.

These data should be interpreted with care as there are different preschool arrangements across states and territories (including different starting ages for preschool and primary school), and issues in estimating the number of Indigenous children enrolled in preschools relative to the projected number of Indigenous children used for the population for this age group. Definitions of preschool also vary across states and territories (tables 4A.3.1–3).

Reporting against the COAG target ‘to ensure all Indigenous four year olds in remote communities have access to quality early childhood education within five years’ in the National Indigenous Reform Agreement (NIRA) uses as its primary measure the number of 4 and 5 year old Indigenous children as at 1 July, who are enrolled in a preschool program at the Census date, by single year of age, as a proportion of the estimated number of Indigenous children aged 4 years (CRC 2010). COAG has agreed that the data source for this measure will be the forthcoming National ECEC Data Collection 2010, which was not available for this report. Using this method with the preschool enrolment data from the NPC in 2009⁴:

- 63.5 per cent of Indigenous and 68.4 per cent of non-Indigenous 4 and 5 year olds were enrolled in preschool (calculated as a proportion of the 4 year old population) (table 4A.3.4).

Preschool enrolment rates, calculated as preschool enrolments divided by the number of preschool aged children in the population, are presented in table 4A.3.4. Nationally, in 2009:

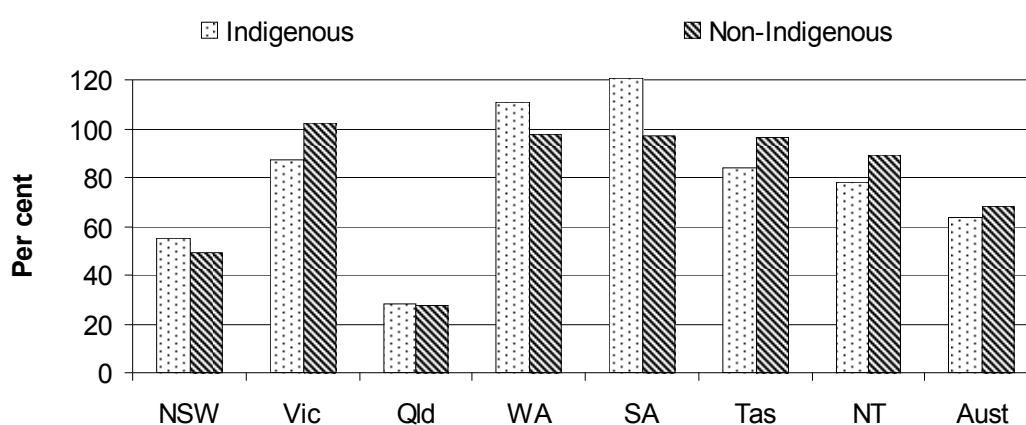
- 19.0 per cent of Indigenous 3 year olds and 11.8 per cent of non-Indigenous 3 year olds were enrolled in preschool

⁴ Dates of birth are not collected in the NPC, therefore, age referencing back to 1 July does not occur. The NPC does not use a consistent census date for the collection of this information, therefore, data are not limited to children in the year before full-time schooling (DEEWR unpublished).

- 53.3 per cent of Indigenous 4 year olds and 50.4 per cent of non-Indigenous 4 year olds were enrolled in preschool
- 10.5 per cent of Indigenous 5 year olds and 18.1 per cent of non-Indigenous 5 year olds were enrolled in preschool (table 4A.3.4).

Variable school starting ages in each jurisdiction affect these results by State and Territory (tables 4A.5.1–3).

Figure 4.3.1 Indigenous and non-Indigenous enrolments rates, children aged 4 to 5 years, by State and Territory, 2009^{a, b, c, d}



^a The definition of preschool in the NPC varies across states and territories. The NPC includes children enrolled in government and non-government preschools, but excludes children enrolled in preschool programs delivered in child care settings (for example, long day care). A student is classed as enrolled if, during Census Week, they were on the roll and had attended a preschool education program in the last month. Preschool enrolments may include activities not funded by State and Territory Governments. ^b There are problems with identifying and enumerating Indigenous children enrolled in preschools in State and Territory Government data collections, and this affects government preschool estimates in the NPC. ^c As noted elsewhere in this report (chapter 2 and appendix 4), there are difficulties in collecting data on the Indigenous population. Calculations of rates for the Indigenous population are based on ABS Experimental Projections, Aboriginal and Torres Strait Islander Australians (low series, 2006 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 Data for ACT were unavailable.

Source: DEEWR (unpublished) National Preschool Census 2009; ABS (2010) *Population by Age and Sex, Australian States and Territories*, Cat. no. 3201.0; ABS (unpublished) *Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians*, Cat. no. 3238.0; table 4A.3.4.

Rates for some states and territories exceed 100 per cent, due to enrolments by one child in multiple programs and possible population undercounts in the ABS population estimates. In 2009:

- enrolment rates for children aged 4 to 5 years varied by State and Territory (figure 4.3.1)

-
- enrolment rates by remoteness differed by age of child. Enrolment rates for Indigenous four year olds were highest in remote areas, whereas, regional areas had the highest proportion of enrolled Indigenous five year olds (table 4A.3.5).

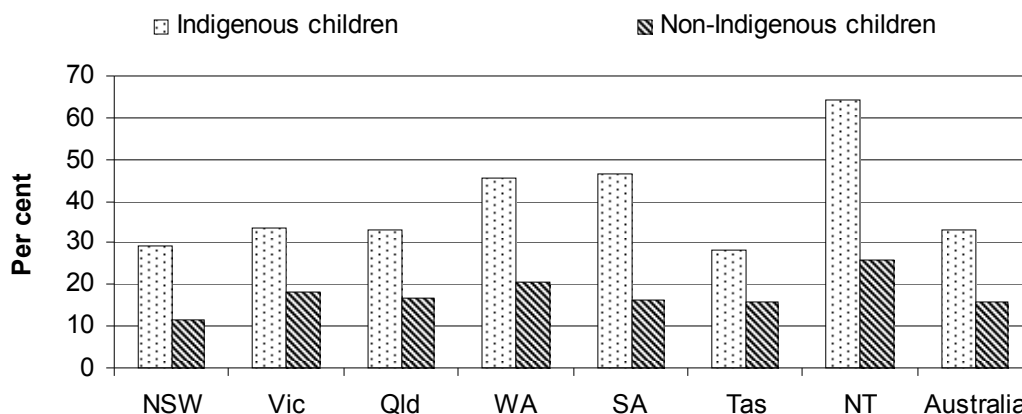
Data for enrolments by service type for 2007 to 2009 are presented in table 4A.3.6, enrolments by remoteness in table 4A.3.5, and enrolments for 2002 to 2005 in table 4A.3.7. Enrolment data for 2002 to 2005 in table 4A.3.7 are not comparable with data for 2007 to 2009 in tables 4A.3.4–6.

Preschool attendance

NPC data on preschool attendance relate only to children enrolled in non-government preschools. Non-government preschools account for 76 per cent of all preschool enrolments, but only 47 per cent of Indigenous preschool enrolments. These proportions vary across states and territories (table 4A.3.6).

In this section, attendance is measured using 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 enrolled in non-government preschools in 2009.

Figure 4.3.2 **Enrolled children aged 3 to 5 years, absent from non-government preschools, 2009^{a, b, c, d, e}**



^a Data on attendance are limited to non-government preschools, and exclude government preschools. At the national level, for 2007, 2008 and 2009 around 70 per cent of children are in preschools considered to be 'non-government', though this percentage varies across states and territories. ^b Attendance measured during the NPC week of 28 July–1 August 20 in 2009. 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. ^c Australian totals are calculated as the sum of states and territories where data were available. Australian totals do not include 'other territories'. ^d ACT Indigenous data for 2009 are not provided for privacy reasons and are not included in population totals. ^e Non-Indigenous data are derived from data on Indigenous and all children.

Source: DEEWR (unpublished) NPC 2009; table 4A.3.8.

In 2009, for children aged 3 to 5 years:

- a higher proportion of Indigenous children were absent from preschool (33.2 per cent) than non-Indigenous children (15.8 per cent) (figure 4.3.2)
- a higher proportion of Indigenous than non-Indigenous children were absent from preschool in all states and territories for which data were available (figure 4.3.2)
- absentee rates for both Indigenous and non-Indigenous children remained similar between 2007 and 2009, with only minor fluctuations (table 4A.3.8).

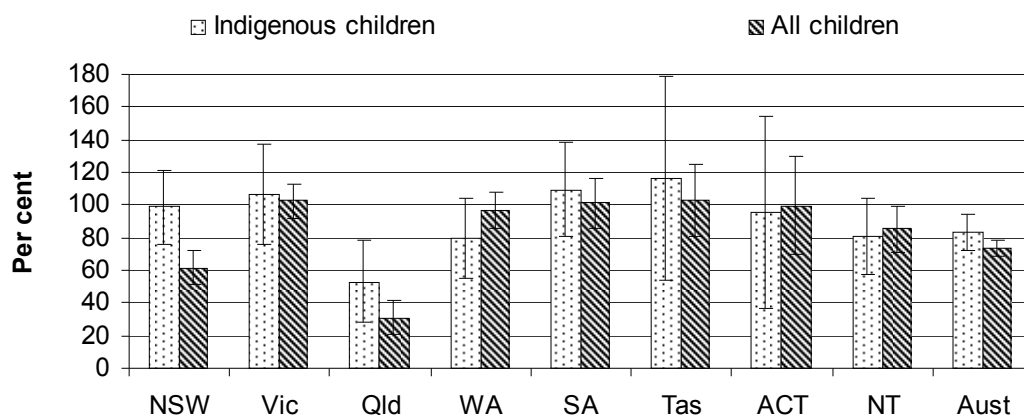
Preschool participation survey data

Supplementary data from the ABS NATSISS 2008 on preschool participation for children 4–5 years by State and Territory, and aged 3–5 years by remoteness areas are presented in tables 4A.3.9 and 4A.3.10.

Data from the ABS NATSISS differ from NPC data. Readers should consider these differences when interpreting NPC and ABS survey data.

- ABS NATSISS data are based on responses from parents/guardians to a question on the type of educational institution that the child attended (with one response option being preschool). Differences may arise due to parents/guardians interpretation of the term ‘preschool’, as preschool program names vary across states and territories. Some people may have interpreted the term ‘preschool’ as synonymous with any early childhood education and care service.
- NPC data are enrolment numbers and are sourced from preschools. The NPC excludes children enrolled in preschool programs delivered in child care settings (for example, long day care services) and, therefore, does not represent participation in all early childhood education programs. There are also difficulties comparing the number of Indigenous children enrolled in preschools with the projected number of Indigenous children in the population.

Figure 4.3.3 Preschool participation rates for children aged 4–5 years, by State and Territory, 2008^{a, b, c}



^a Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information). ^b Preschool participation data sourced from the ABS NATSISS 2008 and the ABS CEaCS 2008 are based on responses from parents/guardians to a question on the type of educational institution that the child attended, with one response option being preschool. Preschool is not defined to survey participants in the ABS NATSISS or CEaCS unless specifically requested. Variability may occur due to parents' or guardians' interpretation of the term 'preschool' (as preschool program names vary across states and territories). These data differ from other preschool data presented in this report which are based on enrolment and/or attendance data reported by preschool providers.

Source: ABS (unpublished) NATSISS 2008 and ABS (unpublished) CEaCS 2008; table 4A.3.9.

When using the NIRA method, data from the ABS NATSISS 2008 and ABS CEaCS 2008 show a higher proportion of children aged 4 to 5 years who were participating in a preschool program, than were recorded in the NPC. In 2008, ABS survey data found that, among children aged 4 to 5 years:

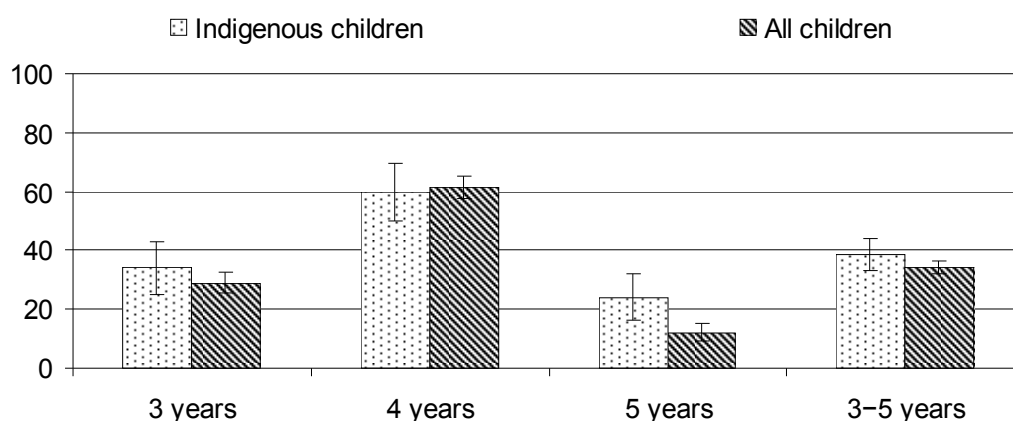
- 83.5 per cent of Indigenous children (10 190) participated in preschool programs nationally (figure 4.3.3)

- 73.5 per cent of all children (191 945) participated in preschool programs nationally (figure 4.3.3)

While the NIRA emphasises participation in preschool programs in the year before entering primary school, many 3 year olds also participate in preschool programs. Among children aged 3 to 5 years:

- rates of participation were similar across remoteness areas, with a significant difference only found between Indigenous children living in very remote areas (28.5 per cent) and those living in major cities (42.2 per cent) (table 4A.3.10)
- data for ‘all children’ were only available for non-remote areas. In major cities, a significantly higher proportion of Indigenous children participated in a preschool program, compared to all children (42.2 per cent compared with 32.3 per cent) (table 4A.3.10).

Figure 4.3.4 Preschool participation rates for Indigenous and all Australian children by age, non-remote areas, 2008^{a, b}



^a Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information). ^b Preschool participation data sourced from the ABS NATSISS 2008 and the ABS CEaCS 2008 are based on responses from parents/guardians to a question on the type of educational institution that the child attended, with one response option being preschool. Preschool is not defined in the ABS NATSISS or CEaCS and variability 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.

Source: ABS (unpublished) NATSISS 2008 and ABS (unpublished) CEaCS 2008; table 4A.3.10.

In 2008:

- for both the 3 year old and 4 year old groups, Indigenous and all children had similar preschool participation rates (figure 4.3.4)
- for 5 year olds, a significantly higher proportion of Indigenous than all children participated in preschool (table 4A.3.10).

Early childhood education and care

Attachment table 4A.3.11 shows the representation of Indigenous and non-Indigenous children aged from birth to 12 years in State and Territory funded and/or provided early childhood education and care services. Early childhood education and care services include both 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.

Representation is measured by the number of children attending child care and preschool services as a proportion of children in the community.

- Indigenous childrens' representation in early childhood education and care services in 2009-10 (9.3 per cent) was similar to that of all children (9.1 per cent) but this varied across jurisdictions (table 4A.3.11).

More data on representation of Indigenous children aged from birth to 12 years in early childhood education settings, by service funding type for 2008-09 and 2009-10 are presented in table 4A.3.12.

4.4 Reading, writing and numeracy

Box 4.4.1 Key messages

- Participation rates in NAPLAN tests were lower for Indigenous students than for non-Indigenous students in 2010. For Indigenous students the rate was lower in remote areas, while for non-Indigenous students the rate was similar across remoteness areas (tables 4A.4.49–4A.4.52).
- There were some statistically significant changes in Indigenous students' performance against national minimum standards for reading, between 2008 and 2010 (tables 4A.4.13–4A.4.48). Nationally:
 - there was an increase in Indigenous students' performance in years 3 and 7 reading
 - there was a decrease in Indigenous students' performance in year 9 reading (a drop of 6.5 percentage points).
- There was no statistically significant change in Indigenous year 3, 5, 7 and 9 students' performance against the national minimum standards for writing and numeracy between 2008 and 2010 (tables 4A.4.13–4A.4.48).
- A substantially lower proportion of Indigenous than non-Indigenous students achieved the year 3, 5, 7 and 9 national minimum standards for reading, writing and numeracy in 2010 (figures 4.4.1, 4.4.2, 4.4.3, 4.4.4).
- The proportion of Indigenous students in urban (metropolitan and provincial) areas meeting the national minimum standards was higher than the proportion in remote and very remote areas in 2010. The gap in learning outcomes between Indigenous students and non-Indigenous increased as remoteness increased in 2010 (figures 4.4.1, 4.4.2, 4.4.3, 4.4.4).

Halving the gap for Indigenous students in reading, writing and numeracy achievements within a decade is one of the six closing the gap targets announced by COAG (COAG 2009). Improving literacy and numeracy levels and increasing year 12 completion rates (see section 4.5) could significantly improve Indigenous education and employment outcomes (ACER 2004; Nguyen 2010).

The primary measures for this indicator are

- National Assessment Program — Literacy and Numeracy (NAPLAN) performance for years 3, 5, 7 and 9 (reading, writing and numeracy)
- NAPLAN student participation rates.

NAPLAN results are available by jurisdiction, remoteness (4A.4.13–4A.4.48) and by parental education and occupation (a proxy for socio-economic status) (tables 4A.4.1–4A.4.12). The COAG Reform Council (2011) provides detailed

analysis of the 2010 NAPLAN results for Indigenous students by State and Territory.

Studies have shown that many Indigenous children start school at a disadvantage. Indigenous children have lower levels of attendance at preschool (see section 4.3 for more information on preschool and early learning), less access to home educational resources, and their parents are more likely to have lower levels of education (Bortoli and Thompson 2010). Unless quality preschool and early primary school assistance are provided, disadvantaged students are rarely able to keep pace with their peers (Biddle 2010; Bortoli and Thompson 2010; Ou and Reynolds 2004; Reynolds et al. 2001; Schweinhart 2005).

Regular school attendance is important to developing core skills, such as literacy and numeracy (UNICEF Innocenti Research Centre 2004; Purdie and Buckley 2010). Indigenous students are more likely than other students to be late to school on a regular basis, to miss consecutive months of schooling and to change school several times (Bortoli and Thompson 2010; Hughes and Hughes 2010; Taylor 2010; Zubrick et al. 2006). Taylor (2010) found that non-attendance at school has become the social norm for compulsory school-age Indigenous children in at least one remote community. Section 6.1 has more information on student attendance.

Academic performance can also be affected by emotional distress. Aboriginal students at high risk of clinically significant emotional or behavioural difficulties were almost three times as likely to have low academic performance as 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 Aboriginal children.

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' — literacy and numeracy engagement

Walhallow Public School (NSW) provides individualised literacy support to Indigenous students. A specialist teacher provides mentoring and professional learning for staff in the use of the Accelerated Literacy program in the classroom. Outcomes to date include:

- all students have improved their reading by a minimum of three 'reading recovery' levels since the beginning of 2010
- teacher and parent interviews indicate that students are more engaged in reading and writing activities
- the proportion of students achieving stage appropriate outcomes in school based assessments of English and mathematics has increased from 70 per cent to 80 per cent (Australian Government unpublished).

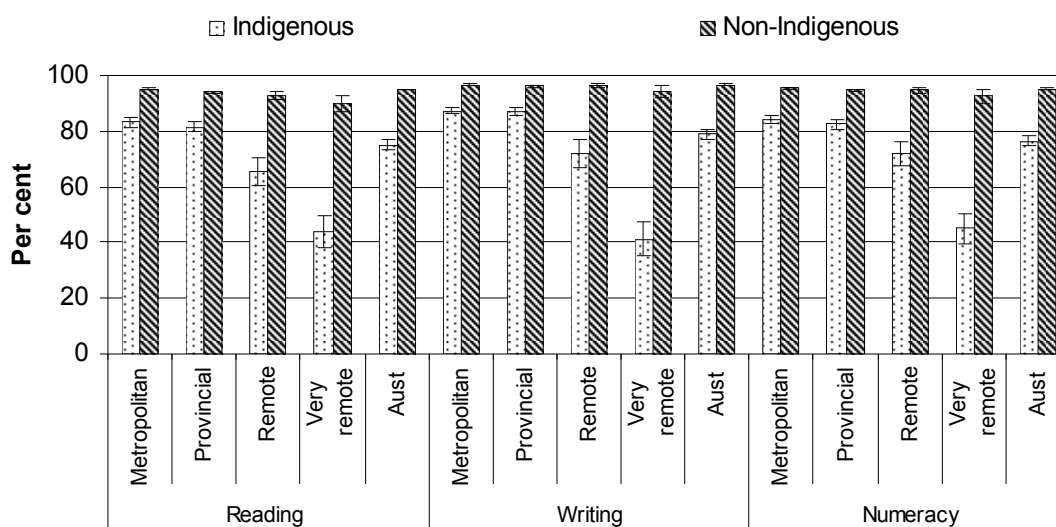
Years 3, 5, 7 and 9 NAPLAN results

In 2008, national common tests (the NAPLAN) were introduced to assess student achievement against 'national minimum standards'. NAPLAN data are not directly comparable with previous learning outcomes data. Data for 1999 to 2007 (which are available for Indigenous and all students) can be found in previous editions of this report.

Measuring literacy and numeracy achievement against national minimum standards provides an indicator of progress against COAG's agreed closing the gap target. However, the national minimum standard is set at a very low — indicating a student has demonstrated only the basic elements of literacy and numeracy for the year level.

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 national minimum standard.)

Figure 4.4.1 Proportion of year 3 students who achieved the national minimum standard by learning domain, by geolocation, 2010^{a, b, c}



^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. ^c The method used to identify Indigenous students varies between jurisdictions.

Source: ACARA (unpublished) *National Assessment Program — Literacy and Numeracy: Achievement in Reading, Writing, Language Conventions and Numeracy, 2010*; tables 4A.4.13–15.

In 2010, lower proportions of Indigenous students than non-Indigenous students achieved the year 3 national minimum standard in:

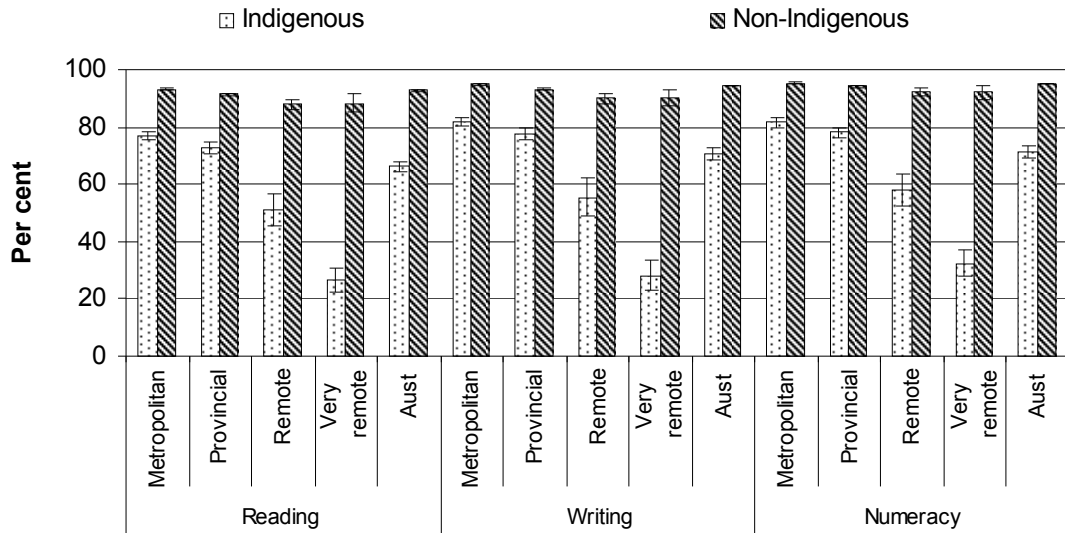
- reading — 75.1 per cent for Indigenous students compared with 95.0 per cent for non-Indigenous students
- writing — 79.0 per cent for Indigenous students compared with 96.6 per cent for non-Indigenous students
- numeracy — 76.6 per cent for Indigenous students compared with 95.3 per cent for non-Indigenous students (figure 4.4.1).

The proportion of year 3 Indigenous students in urban (metropolitan and provincial) areas meeting the national minimum standards was higher than the proportions in remote and very remote areas. The proportion of non-Indigenous varied slightly by remoteness, and the gap in learning outcomes between Indigenous students and non-Indigenous students increased as remoteness increased (figure 4.4.1).

Between 2008 and 2010, the proportion of year 3 Indigenous students who achieved the national minimum standard for reading increased. There was no statistically significant change in the proportion of Indigenous students who achieved the

national minimum standard for writing or numeracy. For reading, writing and numeracy the gaps between Indigenous and non-Indigenous outcomes did not change over time (tables 4A.4.13–15, 4A.4.25–27 and 4A.4.37–39).

Figure 4.4.2 Proportion of year 5 students who achieved the national minimum standard by learning domain, by geolocation, 2010^{a, b, c}



^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. ^c The method used to identify Indigenous students varies between jurisdictions.

Source: ACARA (unpublished) *National Assessment Program — Literacy and Numeracy: Achievement in Reading, Writing, Language Conventions and Numeracy, 2010*; tables 4A.4.16–18.

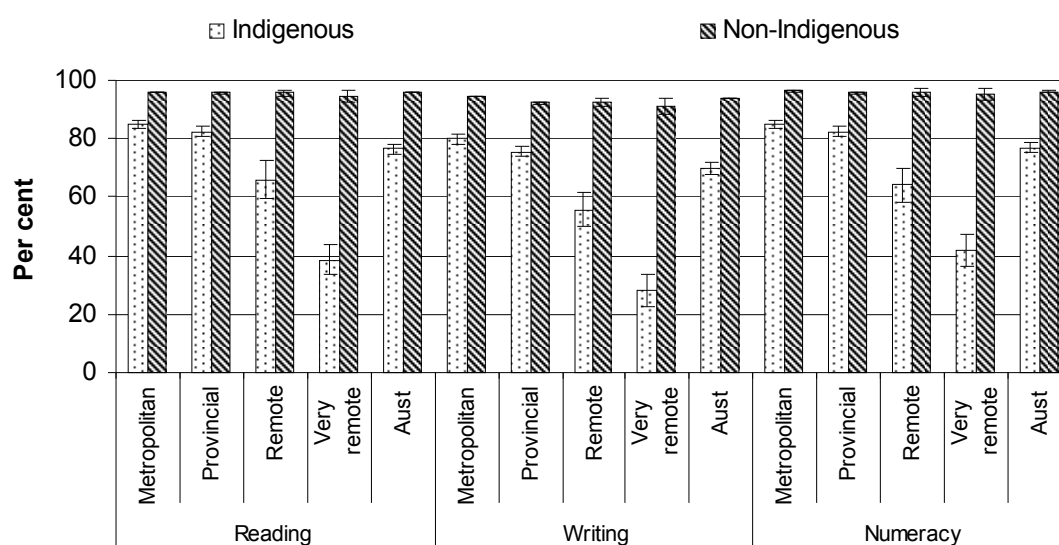
In 2010, lower proportions of Indigenous students than non-Indigenous students achieved the year 5 national minimum standard in:

- reading — 66.2 per cent for Indigenous students compared with 92.7 per cent for non-Indigenous students
- writing — 70.5 per cent for Indigenous students compared with 94.4 per cent for non-Indigenous students for writing
- numeracy — 71.4 per cent for Indigenous students compared with 95.0 per cent for non-Indigenous students (figure 4.4.2).

The proportion of year 5 Indigenous students in urban (metropolitan and provincial) areas meeting the national minimum standards was higher than the proportion in remote and very remote areas. The proportions of non-Indigenous students varied only slightly by remoteness, and the gap in learning outcomes between Indigenous and non-Indigenous students increased as remoteness increased (figure 4.4.2).

There was no significant change in the proportion of year 5 Indigenous students who achieved the national minimum standard for reading, writing or numeracy between 2008 and 2010, and there was no significant change in the gaps between Indigenous and non-Indigenous students (tables 4A.4.16–18, 4A.4.28–30 and 4A.4.40–42).

Figure 4.4.3 Proportion of year 7 students who achieved the national minimum standard by learning domain, by geolocation, 2010^{a, b, c}



^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. ^c The method used to identify Indigenous students varies between jurisdictions.

Source: ACARA (unpublished) *National Assessment Program — Literacy and Numeracy: Achievement in Reading, Writing, Language Conventions and Numeracy, 2010*; tables 4A.4.19–21.

In 2010, lower proportions of Indigenous students than non-Indigenous students achieved the year 7 national minimum standard in:

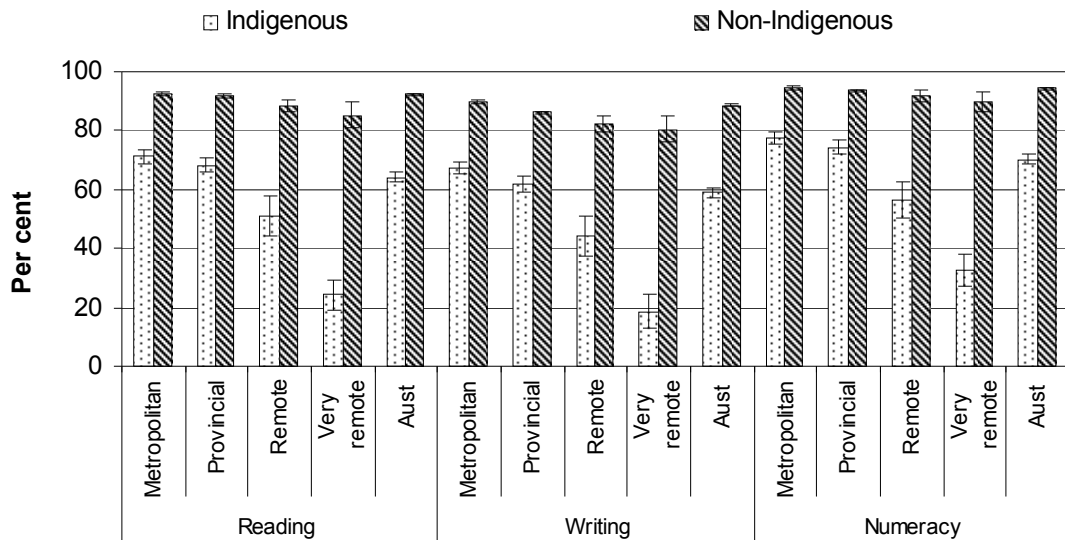
- reading — 76.6 per cent for Indigenous students compared with 95.9 per cent for non-Indigenous students
- writing — was 69.8 per cent for Indigenous students compared with 93.9 per cent for non-Indigenous students
- numeracy — was 77.0 per cent for Indigenous students compared with 96.1 per cent for non-Indigenous students (figure 4.4.3).

The proportion of year 7 Indigenous students in urban (metropolitan and provincial) areas meeting the national minimum standards was higher than the proportion in remote and very remote areas. The proportions of non-Indigenous students varied

only slightly by remoteness, and the gap in learning outcomes between Indigenous and non-Indigenous students increased as remoteness increased (figure 4.4.3).

Between 2008 and 2010, the proportion of year 7 Indigenous students who achieved the national minimum standard for reading increased but there was no significant change in the proportion of students who achieved the national minimum standard for writing or numeracy. For reading, the gap between outcomes for Indigenous and non-Indigenous students decreased by 4.2 percentage points but for writing and numeracy the gaps between Indigenous and non-Indigenous outcomes did not change over time (tables 4A.4.19–21, 4A.4.31–33 and 4A.4.43–45).

Figure 4.4.4 Proportion of year 9 students who achieved the national minimum standard by learning domain, by geolocation, 2010^{a, b, c}



^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. ^c The method used to identify Indigenous students varies between jurisdictions.

Source: ACARA (unpublished) *National Assessment Program — Literacy and Numeracy: Achievement in Reading, Writing, Language Conventions and Numeracy, 2010*; tables 4A.4.22–24.

In 2010, lower proportions of Indigenous students than non-Indigenous students achieved the year 9 national minimum standard in:

- reading — 64.2 per cent of Indigenous students compared with 92.2 per cent of non-Indigenous students
- writing — 59.0 per cent of Indigenous students compared with 88.7 per cent of non-Indigenous students

-
- numeracy — 70.4 per cent of Indigenous students compared with 94.3 per cent of non-Indigenous students (figure 4.4.4).

The proportion of year 9 Indigenous students in urban (metropolitan and provincial) areas meeting the national minimum standards was higher than the proportion in remote and very remote areas. The proportions of non-Indigenous students varied only slightly by remoteness, and the gap in learning outcomes between Indigenous and non-Indigenous students increased as remoteness increased (figure 4.4.4).

Between 2008 and 2010, the proportion of year 9 Indigenous students who achieved the national minimum standard for reading decreased but there was no significant change in the proportion of students who achieved the national minimum standard for writing or numeracy. For reading, the gap between outcomes for Indigenous and non-Indigenous students outcomes increased by 4.5 percentage points, but for writing and numeracy the gaps between Indigenous and non-Indigenous outcomes did not change over time (tables 4A.4.22–24, 4A.4.34–36 and 4A.4.46–48).

NAPLAN results by socio-economic status

Tables 4A.4.1–12 illustrate the relationships between Indigenous student achievement and parental education and occupation. Data on parental education and occupation are from student enrolment forms. These results are indicative, as parental education and occupation were not always stated on school enrolment forms.

In 2008, 2009 and 2010, higher proportions of students whose parents had higher levels of education achieved the national minimum standard for reading, writing and numeracy (tables 4A.4.1–12). However, parental education had a more significant effect on the proportions of Indigenous students who achieved the national minimum standards for reading, writing and numeracy than non-Indigenous students. For example, in 2010, for year 3 reading:

- for parents who had year 11 or below, 73.7 per cent of Indigenous students achieved the minimum standard compared to 88.9 per cent of non-Indigenous students
- for parents who had year 12 or equivalent, 85.0 per cent of Indigenous students achieved the minimum standard compared to 94.2 per cent of non-Indigenous students
- for parents who had certificate I to IV, 84.8 per cent of Indigenous students achieved the minimum standard compared to 94.6 per cent of non-Indigenous students

-
- for parents who had advanced diploma/diploma, 87.0 per cent of Indigenous students achieved the minimum standard compared to 96.4 per cent of non-Indigenous students
 - for parents who had bachelor degree or above, 92.8 per cent of Indigenous students achieved the minimum standard compared to 97.9 per cent of non-Indigenous students. Outcomes were similar across learning domains and year levels (tables 4A.4.1–4).

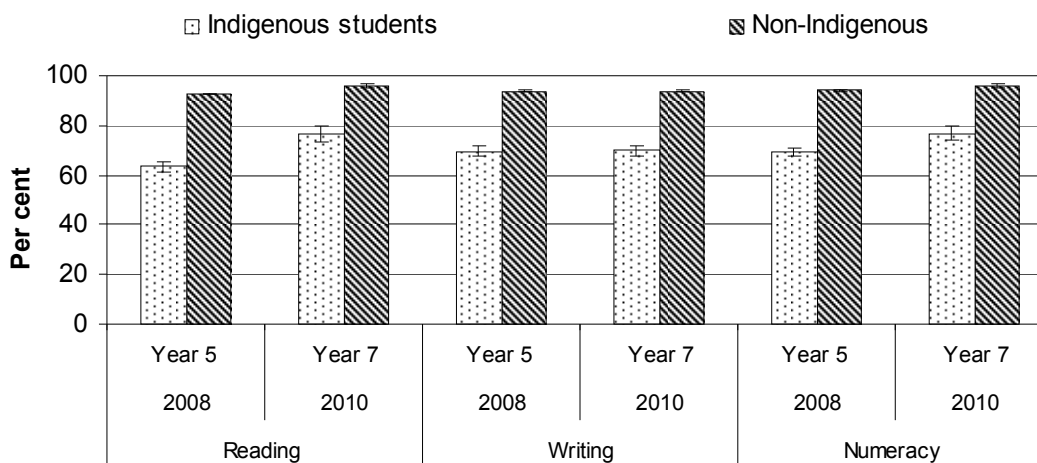
Similar findings can be found for the relationships between NAPLAN results and parental occupation. Lower proportions of children for whom neither parent was in paid employment in the previous 12 months achieved the national minimum standards than children who had a parent who was employed. Lower proportions of Indigenous than non-Indigenous children who did not have an employed parent achieved the national minimum standards (tables 4A.4.1–4).

NAPLAN results by progression through school

NAPLAN data are not longitudinal in design or measurement but 2010 NAPLAN data allow some investigation of students' performance as they progress through school. For example, students tested in year 5 in 2008 could be expected to be retested in year 7 in 2010. The Australian Curriculum, Assessment and Reporting Authority (ACARA) have begun work on reporting matched students over time which may be available by Indigenous status for future reports.

Data in tables 4A.4.16–18 and 4A.4.37–39 show that, as Indigenous students progressed through school from year 3 (2008) to year 5 (2010), the proportion who achieved the national minimum standard remained the same for reading, and, decreased for writing and numeracy.

Figure 4.4.5 Proportion of year 5 students in 2008 and year 7 students in 2010 who achieved the national minimum standard by learning domain^{a, b, c, d}



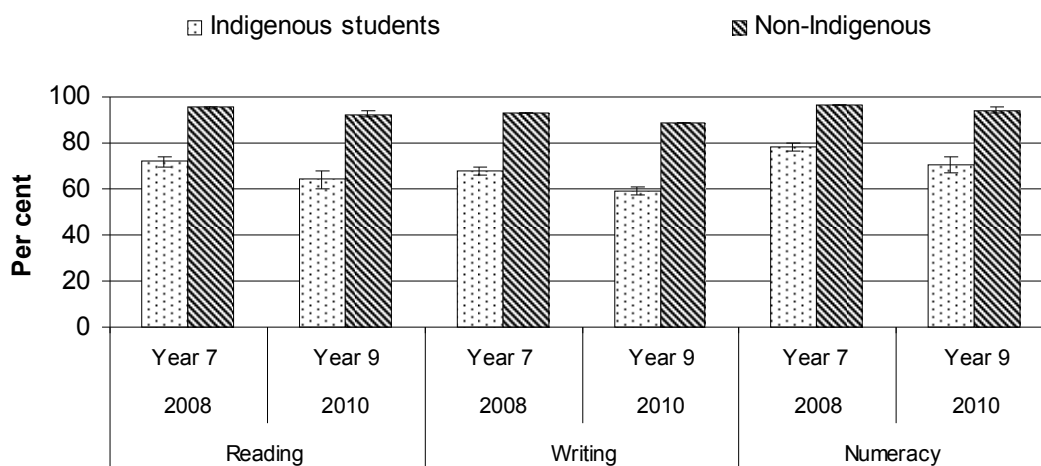
^a The achievement percentages reported in this figure include 95 per cent confidence intervals, for example, 80 per cent \pm 2.7 per cent. ^b Exempt students were not assessed and were deemed not to have met the national minimum standard. ^c The method used to identify Indigenous students varies between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

Source: ACARA (unpublished) *National Assessment Program — Literacy and Numeracy: Achievement in Reading, Writing, Language Conventions and Numeracy*; tables 4A.4.19–21, 4A.4.40–42.

As students progressed through school from year 5 (2008) to year 7 (2010) the proportion who achieved the national minimum standard in:

- reading — increased for Indigenous students (from 63.4 per cent in year 5 to 76.6 per cent in year 7) and non-Indigenous students (from 92.6 per cent in year 5 to 95.9 per cent in year 7), with the gap narrowing from 29.2 to 19.3 percentage points
- writing — did not change for Indigenous or non-Indigenous students, with the gap constant at 24 percentage points
- numeracy — increased for Indigenous students (from 69.2 per cent in year 5 to 77.0 per cent in year 7) and non-Indigenous students (from 94.0 per cent in year 5 to 96.1 per cent in year 7) with the gap narrowing from 24.8 to 19.1 percentage points (figure 4.4.5).

Figure 4.4.6 Proportion of year 7 students in 2008 and year 9 students in 2010 who achieved the national minimum standard 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 Exempt students were not assessed and were deemed not to have met the national minimum standard. ^c The method used to identify Indigenous students varies between jurisdictions. ^d 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.

Source: ACARA (unpublished) *National Assessment Program — Literacy and Numeracy: Achievement in Reading, Writing, Language Conventions and Numeracy*; tables 4A.4.22–24, 4A.4.43–45.

As Indigenous and non-Indigenous students progressed through school from year 7 (2008) to year 9 (2010), the proportions who achieved the national minimum standard for reading, writing and numeracy decreased. Proportions of non-Indigenous students did not change significantly and the gaps increased (figure 4.4.6).

Indigenous student participation rates in the NAPLAN

NAPLAN participation rates record the proportion of students in a given year level who participated in NAPLAN testing. Higher participation rates are desirable, as they increase the level of confidence that the results reflect the performance of the population of interest (because the level of performance of students who do not participate is not known). Students who are exempt from testing because of their lack of proficiency in the English language (important for some Indigenous students) or because of significant intellectual and/or functional disability are included in the participation rate. Students who do not undertake the tests because they are absent or withdrawn are not included in the participation rate.

Participation rates for Indigenous students in the 2008, 2009 and 2010 NAPLAN are available by:

- State/Territory
- geolocation
- years 3, 5, 7 and 9
- reading, writing, and numeracy (tables 4A.4.49–4A.4.60).

Nationally, in 2010, the participation rate:

- for Indigenous students was around 90 per cent for reading, writing and numeracy for year 3, 5 and 7, and fell to around 80 per cent in year 9. The rate for non-Indigenous students was around 96 per cent for reading, writing and numeracy for years 3, 5 and 7, and fell to around 94 per cent in year 9 (tables 4A.4.49–52)
- decreased for Indigenous students as remoteness increased — by around 15 percentage points in years 3 and 5; by around 13 percentage points in year 7 and by around 23 percentage points in year 9. For non-Indigenous students participation rates were similar across remoteness areas (tables 4A.4.49–52).

National Indigenous participation rates in the NAPLAN were similar in 2008, 2009 and 2010 (tables 4A.4.49–60).

4.5 Year 12 attainment

Box 4.5.1 Key messages

- The proportion of Indigenous 20–24 year olds who reported completing year 12 or equivalent (45.4 per cent) was half that of non-Indigenous 20–24 year olds (88.1 per cent) in 2008 (figure 4.5.1).
- The proportion of Indigenous young people who received a year 12 certificate increased from 20.2 per cent in 2001 to 25.8 per cent in 2008, while the non-Indigenous rate remained constant around 56.1 per cent, leading to a narrowing of the gap (tables 4A.5.17 and 18).
- The proportion of the potential Indigenous year 12 population who achieved an ATAR of 50.00 or above increased from 3.2 per cent in 2006 to 7.1 per cent in 2010. However the gap between the Indigenous and non-Indigenous proportions widened from 19.5 to 33.4 percentage points (table 4A.5.11).
- Apparent retention rates for Indigenous students from the beginning of secondary school to year 12 increased from 32.1 per cent in 1998 to 47.2 per cent in 2010, while the non-Indigenous rate increased from 72.7 per cent to 79.4 per cent (figure 4.5.4). The gap between Indigenous and non-Indigenous apparent retention rates decreased from 40.6 percentage points in 1998 to 32.2 percentage points in 2010 (table 4A.5.19).

‘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). The evidence is unambiguous — successful completion of year 12 is important 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 2010).

The primary measure for this indicator is the proportion of 20–24 year olds who have completed year 12 or certificate level II or above. This section also includes data on the related measures: year 12 certificates issued to students who have completed year 12; students who attained an Australian Tertiary Admission Rank (ATAR); and apparent retention rates from year 7/8 to year 12.

The research is clear about the importance of completing year 12 (Dusseldorp Skills Forum 2006; Long 2006) and the pivotal role of education in reducing long term disadvantage and reducing the need for remedial education and social welfare services (ACER 2003, 2004; Barnett 1993; Biddle 2010; Buckskin 2000; OECD 2004; Reynolds et al. 2002; WHO 1986). Education is linked to economic and social wellbeing (and other positive health behaviours) and is considered one of

the crucial contributors to the formation of human capital (Biddle 2010; Laplagne, Glover and Shomos 2007).

What happens after year 12 is also important and there is limited Australian evidence of what works in transitioning school leavers into further education and training and looking for work (Hunter 2010). There is a need for more longitudinal data on the pathways for Indigenous school leavers into training or employment (Hunter 2010). See section 6.6 for more information on transitioning school leavers to work.

Examples of initiatives that have been successful in increasing Indigenous secondary school participation and attainment can be found in box 4.5.2.

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

The **Cape York Institute's Higher Expectations Program — Secondary (HEPS)** (Queensland) and the **Australian Indigenous Education Foundation (AIEF)** (national) are collaborations between the Australian Government and philanthropic and corporate supporters from the private sector.

The HEPS provides Indigenous children living in the Cape York region with access to secondary education at Queensland's most academically successful boarding schools. The HEPS 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 HEPS has grown each year, from six students in 2005 (HEPS inaugural year) to 36 students in 2010. The program's success is due to the individual case management of students and extra activities to increase motivation and develop life skills and leadership. Though only a small number of Cape York students will participate in the HEPS, 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.
- In 2008, two students graduated from year 12 and enrolled in university.
- In 2009, two students finished year 12 and enrolled in university (Westerhout, J., Cape York Institute for Policy and Leadership, Cairns, pers. comm., 26 August 2010).

See box 4.7.2 for information on the Higher Expectations Program — Tertiary outcomes.

(Continued next page)

Box 4.5.2 (continued)

The AIEF Scholarship Program offers boarding school scholarships to Indigenous children to attend some of the leading schools in the country. In 2009, AIEF funded 43 scholarships across 10 partner schools and offered 165 scholarships per annum from 2010 onwards. The 98 Indigenous secondary students enrolled at AIEF partner schools in 2009 were spread throughout years 7 to 12. Forty-six students have successfully completed Year 12 since 1998. A study of the students who completed year 12 over the past 10 years found that:

- 63 per cent had gone to university
- 20 per cent had undertaken apprenticeships and traineeships
- 17 per cent had gone into the workforce (AIEF 2010).

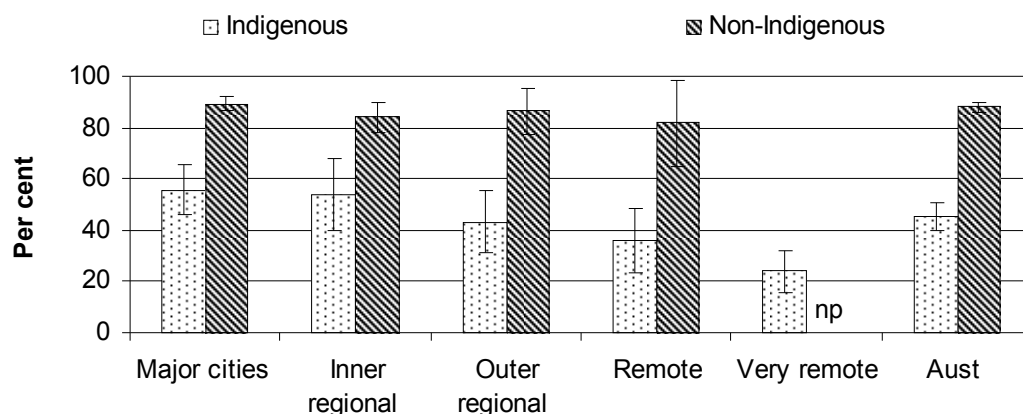
The Joodoogeb-be-gerring Werlemen program (WA) was established to address poor school attendance rates of Aboriginal girls in Kununurra, WA. As well as improving learning outcomes, the program seeks to build a positive sense of cultural identity and to improve physical health and social and emotional wellbeing,. Each student has an individual learning plan, with an emphasis on involving the family in the program. The program has improved school attendance to mainstream levels and in 2011, four program students will return to mainstream education at Coolgardie Christian Aboriginal Parent Directed School (WA Government unpublished).

Proportion of 20–24 year olds who have completed year 12 or certificate level II or equivalent (survey data)

Data on the proportion of 20–24 year olds who have completed year 12 or certificate level II or above are derived from the ABS National Aboriginal and Torres Strait Islander Social Survey 2008 (NATSISS 2008) and the ABS National Health Survey 2007-08 (NHS 2007-08), for Indigenous and non-Indigenous people, respectively.

The NHS 2007-08 allows for comparisons over time (between this and previous editions of the report) and by remoteness areas. For reporting against the National Indigenous Reform Agreement (NIRA), the Steering Committee uses data derived from the ABS Survey of Education and Work for non-Indigenous people, which maintains consistency between reporting for the NIRA and other COAG National Agreements. Data from the Survey of Education and Work are not used here as they are not available by remoteness and are not suitable for time series comparison with non-Indigenous data for earlier years, which is an essential component of the analysis in this report.

Figure 4.5.1 Proportion of 20–24 year olds who had completed year 12 or certificate II or above, by remoteness, 2008^{a, b}



^a Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information). ^b Persons aged 20–24 years who have completed year 12 or Certificate II or above (includes 'Certificate I or II not further defined' but excludes persons with a 'Certificate not further defined' and persons whose level of non-school qualification could not be determined).

Source: ABS (unpublished) NATSISS 2008; ABS (unpublished) NHS 2007-08; table 4A.5.1.

The proportion of 20–24 year olds who had completed year 12 or equivalent in 2008 was:

- lower for Indigenous people (45.4 per cent) than non-Indigenous people (88.1 per cent) nationally
- declined with remoteness for Indigenous people, from 55.8 per cent in major cities to 27.6 per cent in remote areas (figure 4.5.1 and table 4A.5.1). Data by jurisdiction are available in table 4A.5.2.

Although not directly comparable with the NATSISS 2008 and the NHS 2007-08, the 2006 *Census of Population and Housing* showed that the proportion of 20–24 year old Indigenous people who had completed year 12 or equivalent was 47.4 per cent compared with 83.8 per cent for non-Indigenous people (table 4A.5.3).

Indigenous specific survey data on highest level of schooling completed show that the proportion of Indigenous people aged 15 years and over who had completed year 12 increased from 9.3 per cent in 1994 to 22.1 per cent in 2008 (table 4A.5.10).

The proportion of Indigenous people aged 15 years and over who had completed year 12 decreased with remoteness (table 4A.5.5) and age (table 4A.5.6) in both 2004-05 and 2008. More data on the highest level of schooling completed by jurisdiction and remoteness area are available in tables 4A.5.4–6.

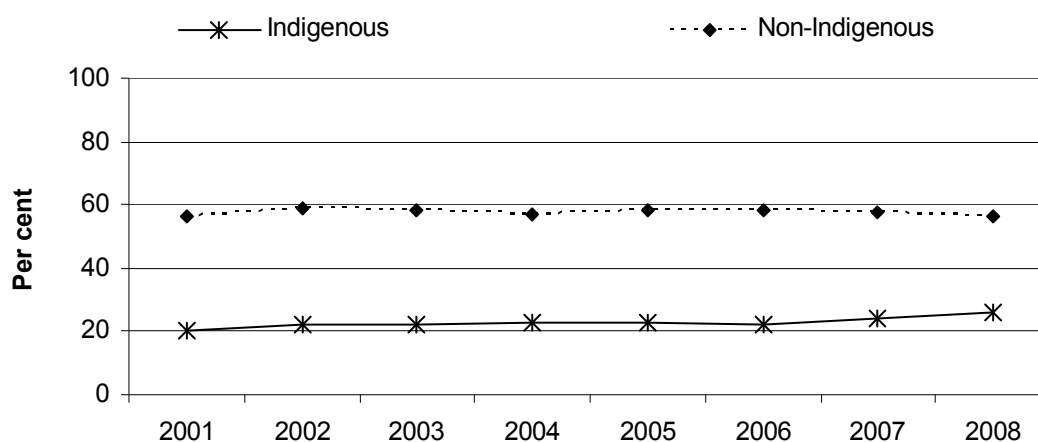
Year 12 completion rate (administrative data)

State and Territory education authorities issue year 12 certificates to students who have completed year 12. The 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 from administrative data are not comparable to survey data derived from the NATSISS 2008 and the NHS 2007-08. The administrative data on year 12 certificates may not include equivalent qualifications such as the certificate level II. The survey data are based on respondents' understandings of what is meant by completing year 12 or equivalent, which may be different to meeting the requirements to obtain a year 12 certificate.

The number of year 12 certificates issued were provided by the Department of Education, Employment and Workplace Relations (DEEWR). These data were reported to DEEWR in Indigenous Education Performance Reports. Changes to education funding under the Intergovernmental Agreement on Federal Financial Relations has meant that these data have not been reported since December 2008.

Figure 4.5.2 Year 12 completion rates, Australia, 2001–2008^{a, b, c}



^a Completion is defined as the number of students who meet the requirements of a year 12 certificate or equivalent (see tables 4A.5.12 and 13) 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 divided by five.

^b Calculations of rates for the Indigenous population are based on ABS *Experimental Projections, Aboriginal and Torres Strait Islander Australians* (low series, 2006 base). See table 4A.5.14. ^c Non-Indigenous estimates are available for census years only. In the intervening years, Indigenous population figures are derived from assumptions about past and future levels of fertility, mortality and migration. In the absence of non-Indigenous population figures for these years, it is possible to derive denominators for calculating non-Indigenous rates by subtracting the Indigenous population from the total population. Such figures have a degree of uncertainty and should be used with caution, particularly as the time from the base year of the projection series increases. See tables 4A.5.15 and 16.

Source: ABS (unpublished), *Experimental Projections, Aboriginal and Torres Strait Islander Australians*, Cat. no. 3238.0; ABS (2009), *Population by Age and Sex, Australian States and Territories*, Cat. no. 3201.0; Department of Education, Employment and Workplace Relations (unpublished); table 4A.5.17 and 18.

- In 2008, nationally, the year 12 completion rate for Indigenous students was 25.8 per cent compared with 56.1 per cent for non-Indigenous students (figure 4.5.2).
- Year 12 completion rates increased for Indigenous students from 20.2 per cent in 2001 to 25.8 per cent in 2008. Completion rates for non-Indigenous students remained stable (figure 4.5.2). The gap between Indigenous and non-Indigenous year 12 certificate completion decreased from 36.4 percentage points in 2001 to 30.3 percentage points in 2008 (tables 4A.5.17 and 18).

More data on completion rates by jurisdiction are available in tables 4A.5.17 and 18.

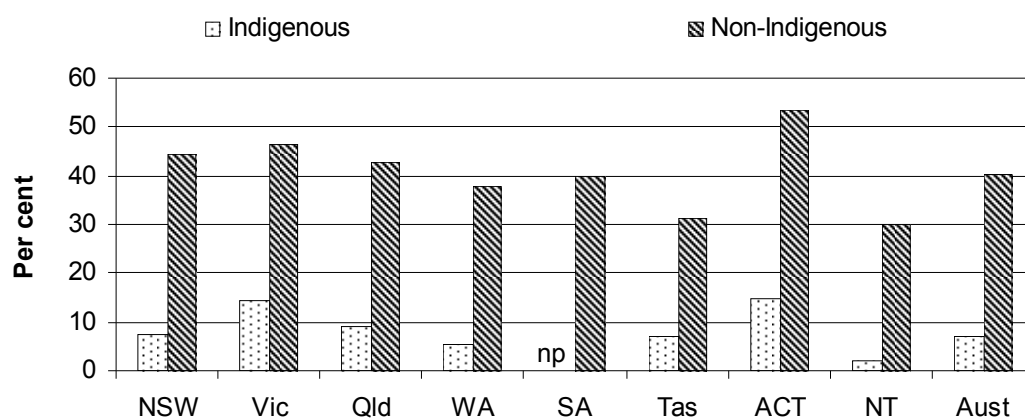
Students who attained an Australian Tertiary Admission Rank (ATAR)

The ATAR is calculated for the use of tertiary institutions to compare the overall achievement of students who have completed different combinations of year 12 certificate studies. University admission organisations use year 12 certificate results issued by State and Territory assessment bodies to calculate a rank which shows a student's achievement in relation to other students. Not all students who have qualified for a year 12 certificate are eligible for an ATAR. Year 12 students who do not intend to apply for university admission may have studied subjects that qualify for a certificate but do not allow the calculation of an ATAR.

ATAR scores range from 0.05 (lowest) to 99.95 (highest). An ATAR above 50.00 would usually be required for entry into more popular courses and universities, although most universities, TAFE colleges and other institutions take a holistic approach when assessing applications from Indigenous students. This means that Indigenous applicants often are not assessed solely on the basis of their academic results (QTAC 2011; SATAC 2011; TISC 2011; University of Tasmania 2011; VTAC 2011; UAC 2011).

The ATAR rate shown in figure 4.5.3 is the number of students who achieved an ATAR of 50.00 or above 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.

Figure 4.5.3 Year 12 ATAR rates, 2010^{a, b, c}



^a The Australian Tertiary Admission Rank (ATAR) is calculated for the use of tertiary institutions to compare the overall achievement of students who have completed different combinations of year 12 certificate studies. ATAR was previously known as ENTER (Equivalent National Tertiary Entrance Rank) in Victoria and TER (Tertiary Entrance Rank) in Western Australia, South Australia, Tasmania and the NT. The change to ATAR, the nationally agreed name used by all Australian states and territories (except Queensland), is a change in name only. There is no change to the calculation. Universities admission organisations use year 12 certificate results issued by State/Territory assessment bodies to calculate the ATAR. The ATAR is not a score — it is a rank (which shows a student's achievement in relation to other students). Queensland uses a ranking system (OP) which is not equivalent to the ATAR. A conversion table for the Queensland OP to the ATAR is available on the QTAC website (www.qtac.edu.au) and is the basis for Queensland ATAR data presented here. ^b Most universities, TAFE colleges and other institutions take a holistic approach when assessing applications from Indigenous students. Institutions typically have parallel assessment processes. This means that Indigenous applicants are often not assessed solely on the basis of their academic results. ^c The ATAR rate shown in this report is the number of students who achieved an ATAR of 50.00 or above 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. Calculations of rates for the Indigenous population are based on ABS *Experimental Projections, Aboriginal and Torres Strait Islander Australians* (low series, 2006 base). See table 4A.5.14. Non-Indigenous estimates are available for Census years only. In the intervening years, Indigenous population figures are derived from assumptions about past and future levels of fertility, mortality and migration. In the absence of non-Indigenous population figures for these years, it is possible to derive denominators for calculating non-Indigenous rates by subtracting the Indigenous population from the total population. Such figures have a degree of uncertainty and should be used with caution, particularly as the time from the base year of the projection series increases. See tables 4A.5.15 and 16. np Not published.

Source: ABS (unpublished), *Experimental Projections, Aboriginal and Torres Strait Islander Australians*, Cat. no. 3238.0; ABS (2010), *Population by Age and Sex, Australian States and Territories*, Cat. no. 3201.0; Victoria Tertiary Admissions Centre (unpublished); Queensland Tertiary Admissions Centre (unpublished); South Australian Tertiary Admissions Centre (unpublished); Tertiary Institutions Service Centre (unpublished); Universities Admissions Centre (unpublished); Tasmanian Qualifications Authority (unpublished); ACT Board of Senior Secondary Studies (unpublished); table 4A.5.11.

- Nationally, 7.1 per cent of the Indigenous potential year 12 population achieved an ATAR of 50.00 or above, compared to 40.4 per cent of non-Indigenous students in 2010 (figure 4.5.3).
- The proportion of the Indigenous potential year 12 population who achieved an ATAR of 50.00 or above increased from 3.2 per cent in 2006 to 7.1 per cent in

2010. However the gap between the Indigenous and non-Indigenous proportions widened from 19.5 to 33.4 percentage points (table 4A.5.11).

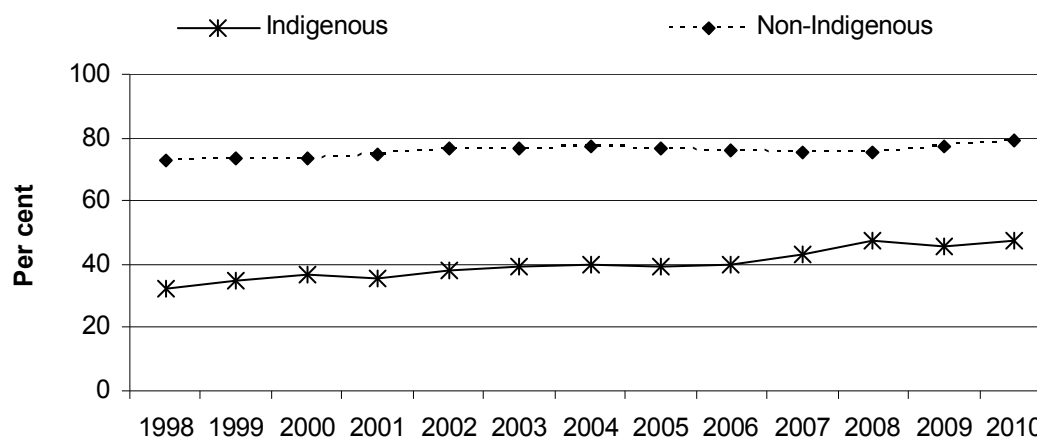
Apparent retention rate

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 senior secondary studies or an equivalent vocational education and training qualification at TAFE
- the calculation of apparent retention rates does not take into account the effect of migration and overseas students, and students repeating a year level or moving interstate (ABS 2011)
- apparent retention rates do not reflect students who do not make the transition from primary to secondary school.

Recent changes to the school leaving age may influence apparent retention rates in the future. COAG agreed in 2009 that from 1 January 2010 young people will be required to participate in schooling (or an approved equivalent) until they complete year 10, and then participate full-time (at least 25 hours per week) in education, training or employment, or a combination of these activities, until age 17 (COAG 2009a).

Figure 4.5.4 Apparent retention rates of full time secondary students to year 12, all schools^{a, b, c}



^a The apparent retention rate is the percentage of full time students who continued to year 12 from respective cohort groups at the commencement of their secondary schooling (year 7/8). See notes to tables 4A.5.23–31 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 are high proportions 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 (2011); table 4A.5.19.

- Nationally, in 2010, the retention rate to year 12 for Indigenous students was significantly lower than the rate for non-Indigenous students (47.2 per cent compared with 79.4 per cent, respectively) (figure 4.5.4).
- Over the period 1998 to 2010, the gap between Indigenous and non-Indigenous apparent retention rates fell from 40.6 percentage points to 32.2 percentage points (table 4A.5.19).

More data on apparent retention rates from 2002 to 2010, by school sector, jurisdiction and gender are included in tables 4A.5.20–32.

Section 6.4 and 6.5 include retention rates to year 9 and year 10, respectively. High rates of retention to year 9 and year 10 are to be expected because normal level progression means students in these years are generally of an age at which school education is compulsory.

4.6 Employment Errata — Overcoming Indigenous Disadvantage: Key Indicators 2011.

The material in box 4.6.1 from p.4.59 was amended after the report went to print.

Box 4.6.1 Key messages

- Between 2004–05 and 2008, for those aged 15–64 years:
 - an apparent increase in the employment to population ratio for Indigenous people (from 50.7 per cent to 53.8 per cent) was not statistically significant. The rate increased for non-Indigenous people (from 74.2 per cent to 76.0 per cent) and there was no significant change in the gap over this period (figure 4.6.1).
- The number of Indigenous people on CDEP halved between 2002 and 2008, and there was a significant increase in ‘mainstream’ employment.
- Between 1994 and 2008, for Indigenous people aged 15–64 years:
 - the labour force participation rate increased from 54.5 per cent to 64.5 per cent (figure 4.6.3)
 - the unemployment rate decreased from 31.0 per cent to 16.6 per cent (figure 4.6.6).

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 2009a). Employment 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. Employment also enhances self-esteem, increases opportunities for self development, influences interaction at the family and community levels and reduces social alienation.

The primary measure for this indicator is the ‘employment to population ratio’, which measures the number of people employed as a proportion of the working age population.

This section also includes data on related measures:

- labour force participation rates
- Community Development Employment Projects (CDEP) participation
- unemployment
- outcomes from employment assistance programs.

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. It measures 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 are outside the labour force: they may not wish or be able to work because they are studying in education, retired, caring for family members, have a disability or poor health or have some other means of financial support. ABS National Aboriginal and Torres Strait Islander Social Survey 2008 (NATSISS 2008) data show that out of the top reasons Indigenous people aged 18 to 64 years were outside of the labour force in 2008, the majority (57.1 per cent) of respondents cited they were unable, or did not want, to work (table 4A.6.25). Other common reasons included child care (14.2 per cent), family reasons (7.8 per cent), study (7.5 per cent), and long term health condition or disability (5.5 per cent).

Alternatively, people may become discouraged jobseekers who would like work but are not actively looking for work. Discouraged jobseekers might believe that there are no suitable jobs in their area, the costs of searching are too great, or that they do not have the appropriate skills or qualifications (Hunter and Gray, 2001). It is likely that the true extent of unemployment — particularly long term unemployment — is underestimated due to discouraged jobseekers.

Even if a person is employed, they may be not necessarily work the number of hours they wish to. This is known as underemployment — an issue which has become increasingly prominent in recent decades, as part time employment levels have risen (see section 8.1 for data on full time/part time employment status) (Hunter, 2010). Data from the NATSISS 2008 indicate that a higher proportion of Indigenous males work part time than non-Indigenous males (although there is no statistical difference between Indigenous and non-Indigenous females), which implies there could be a greater occurrence of underemployment amongst the Indigenous male population (figure 8.1.1).

While many Indigenous people in more remote areas are considered ‘outside’ of the labour force, many are still actively engaged in productive activities such as the production of Indigenous art or participation in traditional customs, which often generate income but are not always recorded as employment (Altman, Buchanan and Biddle, 2006).

Data for employment to population ratios, labour force participation and unemployment in this section are from the ABS NATSISS 2008. Data are reported for the population aged 15 to 64 years, which aligns with National Indigenous Reform Agreement performance reporting (SCRGSP 2009). 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.

For non-Indigenous people, this section uses data from the ABS National Health Survey 2007–08 (NHS 2007–08). The NHS allows for comparisons over time (between this and previous editions of the report) and by remoteness area. For reporting against the National Indigenous Reform Agreement (NIRA), the Steering Committee uses data derived from the ABS Survey of Education and Work for non-Indigenous people, which maintains consistency between reporting for the NIRA and other COAG National Agreements. Data from the Survey of Education and Work are not used here as they are not available by remoteness and are not suitable for time series comparison with non-Indigenous data for earlier years, which is an essential component of the analysis in this report.

The Indigenous labour force participation and unemployment data reported in this section are influenced by the CDEP program, which is funded by the Australian Government and supports Indigenous people in remote areas through community development and participation opportunities that develop skills, improve work readiness and employability, and link with local priorities. More information on the CDEP program is included in box 4.6.2.

Employment outcomes are also discussed in chapter 13 of this report, which contains regression analysis of labour market outcomes in the areas of: ‘mainstream (non-CDEP) employment’, ‘unemployment’, ‘CDEP participation’, and ‘labour force participation’.

Box 4.6.2 Community Development Employment Projects (CDEP)

The original aim of the CDEP program — introduced in 1977 — was to create local employment opportunities in remote Indigenous communities where the labour market might not otherwise offer employment. The program was later extended to all areas. However, a recent restructuring of the CDEP program has seen its focus shift back to supporting employment opportunities in remote Indigenous communities.

For statistical purposes, in the 2008 NATSISS, 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 historical labour force and unemployment data because, at the time data were collected:

- CDEP participant payments comprised a mix of both wages and income support payments such as NewStart Allowance
- CDEP had elements of both unemployment and employment, especially in remote and very remote areas. Some CDEP activities were similar to those undertaken by participants in Work for the Dole, while other activities were essential roles in municipal services, health care, community services, education and other sectors that would be considered employment in mainstream communities and organisations. However, through the National Partnership Agreement on Indigenous Economic Participation agreed in early 2009, COAG committed to converting around two thousand CDEP positions to ongoing jobs in the government service provision (COAG 2009b).

Following the collection of the NATSISS data contained in this Report, in late 2008 significant changes to CDEP were announced. Since then, CDEP has ceased operating in non-remote locations where the economy was already reasonably established, with services to Indigenous job seekers in those areas now provided through Job Services Australia and the Indigenous Employment Program (IEP). Commencing on 1 July 2009, new CDEP participants received corresponding income support payments rather than wages, with existing CDEP participants continuing to access CDEP wages until 30 June 2011 before transferring to the new payment arrangements.

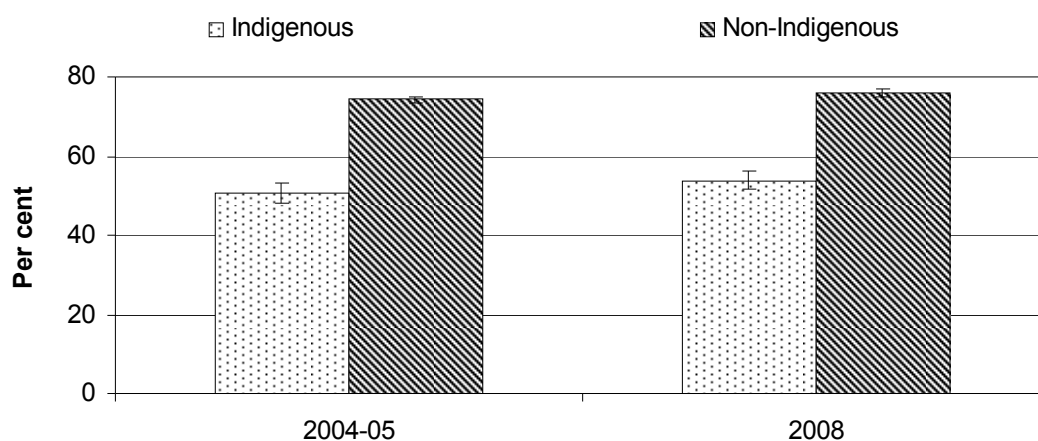
Errata — Overcoming Indigenous Disadvantage: Key Indicators 2011.

The following material from p.4.63 was amended after the report went to print.

Employment to population ratio

The employment to population ratio measures the employed as a proportion of the working age population.

Figure 4.6.1 **Proportion of population aged 15–64 years old employed, 2004–05 and 2008**



Source: ABS (unpublished) NATSIHS 2004–05; ABS (unpublished) NHS 2004–05; ABS (unpublished) NATSISS 2008; ABS (unpublished) NHS 2007–08; table 4A.6.1.

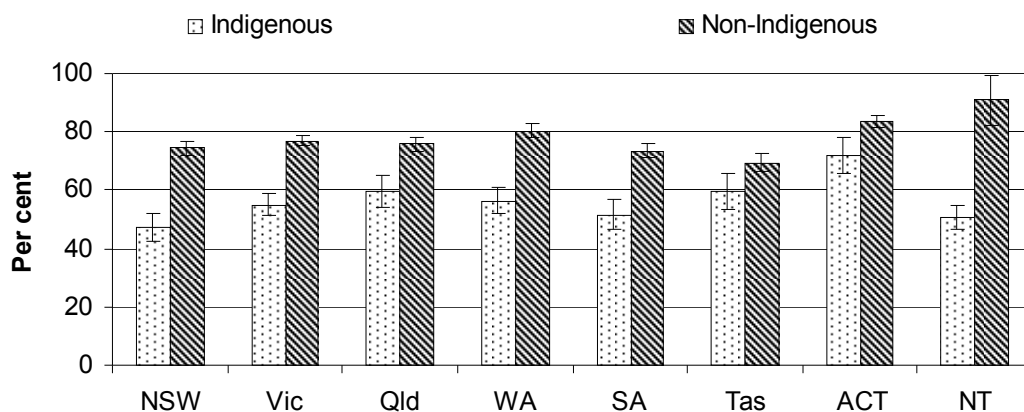
Between 2004–05 and 2008, for those aged 15–64 years:

- an apparent increase in the employment to population ratio for Indigenous people (from 50.7 per cent to 53.8 per cent) was not statistically significant. The rate increased for non-Indigenous people (from 74.2 per cent to 76.0 per cent). Overall, there was no significant change in the gap between Indigenous and non-Indigenous people over this period (from 23.5 percentage points in 2004–05 to 22.2 percentage points in 2008) (figure 4.6.1).

Errata — Overcoming Indigenous Disadvantage: Key Indicators 2011.

The following material from p.4.64 was amended after the report went to print.

Figure 4.6.2 Proportion of population aged 15–64 years old employed, by State and Territory, 2008



Source: ABS (unpublished) NATSISS 2008; ABS (unpublished) NHS 2007-08; table 4A.6.1.

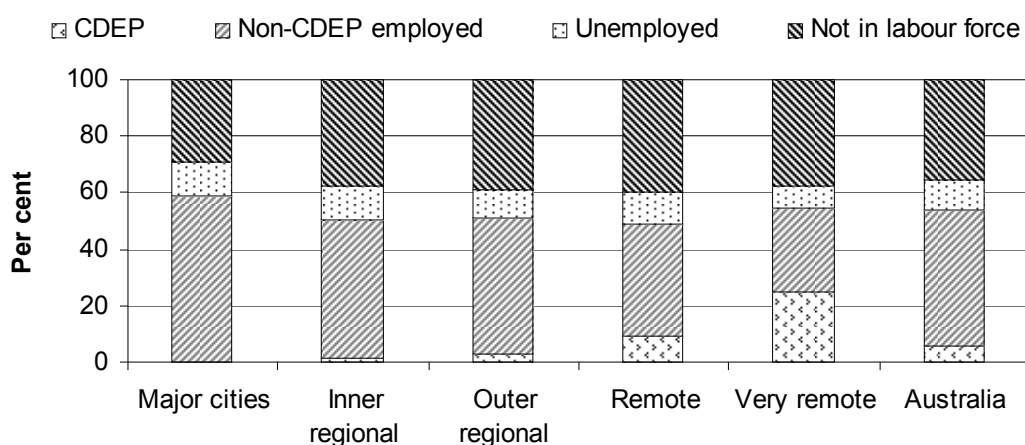
In 2008, for those aged 15–64 years:

- employment to population ratios for Indigenous people were lower than for non-Indigenous people in all states and territories. This gap was highest in the NT (50.8 per cent of Indigenous people employed compared to 90.8 per cent of non-Indigenous people) (figure 4.6.2)
- employment to population ratios varied across states and territories for both Indigenous and non-Indigenous people (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 unemployed (the labour force), divided by the population in that age group.

Figure 4.6.3 Indigenous CDEP participation, unemployment, and population not in the labour force, people aged 15–64 years, 2008



Source: ABS (unpublished) NATSISS 2008; table 4A.6.15.

In 2008:

- the majority of the Indigenous working age population were either non-CDEP employed (48.2 per cent), or not in the labour force (35.5 per cent) (table 4A.6.15)
- very remote areas had the highest rate of CDEP participation (25.1 per cent) (table 4A.6.15)
- the proportion Indigenous people who were non-CDEP employed declined with remoteness area, from 58.6 per cent in major cities, to 29.2 per cent in very remote areas (table 4A.6.15).

For survey data drawn upon in this section, known CDEP participants were counted as employed, as opposed to unemployed or not in the labour force. This accounts for both the lower proportion of non-CDEP employment in more remote areas, and the corresponding higher level of CDEP participation.

Historical numbers of CDEP participants (from administrative data) are as follows:

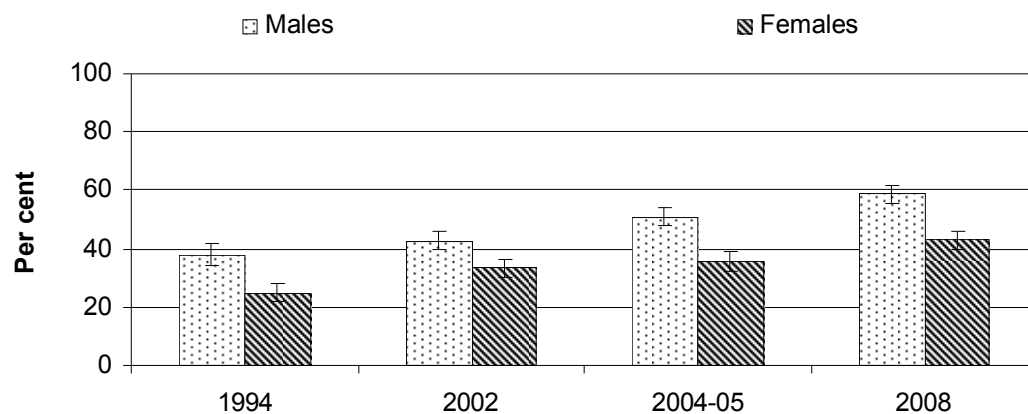
- 24 098 participants in 1993-94 (ATSIC 1994)
- 35 182 participants in 2002-03 (ATSIC 2003)
- 34 775 participants as at 30 June 2005 (DEWR 2005)
- 32 782 participants as at 8 August 2006 (table 4A.6.17)
- 26 421 participants as at 30 June 2007 (FaHCSIA unpublished)

- 18 800 participants as at 30 June 2008 (FaHCSIA unpublished)
- 16 013 participants as at 30 June 2009 (table 4A.6.19)
- 10 258 participants as at 30 June 2010 (table 4A.6.20).

Despite the number of CDEP participants falling by nearly half between 2002 and 2008, the Indigenous labour force participation rate has not fallen and the Indigenous unemployment rate did not rise, even in regional and remote areas where CDEP participation was concentrated (figure 4.6.4; figure 4.6.5; table 4A.6.2). Therefore, it appears that a greater number of Indigenous people have gained employment during the restructure of CDEP, than have moved to income support.

The National Indigenous Reform Agreement (NIRA) provides data on CDEP participants moving to off-CDEP job placements (table 4A.6.21), as part of its measures of progress on Closing the Gap targets. Data on this indicator can also be found in the 2010 NIRA report (SCRGSP 2010).

Figure 4.6.4 Non-CDEP employment, as a proportion of the labour force, Indigenous people aged 18–64 years, 1994–2008^a



^a Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information).

Source: ABS (unpublished) NATSISS 1994; ABS (unpublished) NATSISS 2002; ABS (unpublished) NATSIHS 2004-05; ABS (unpublished) NATSISS 2008; table 4A.6.14.

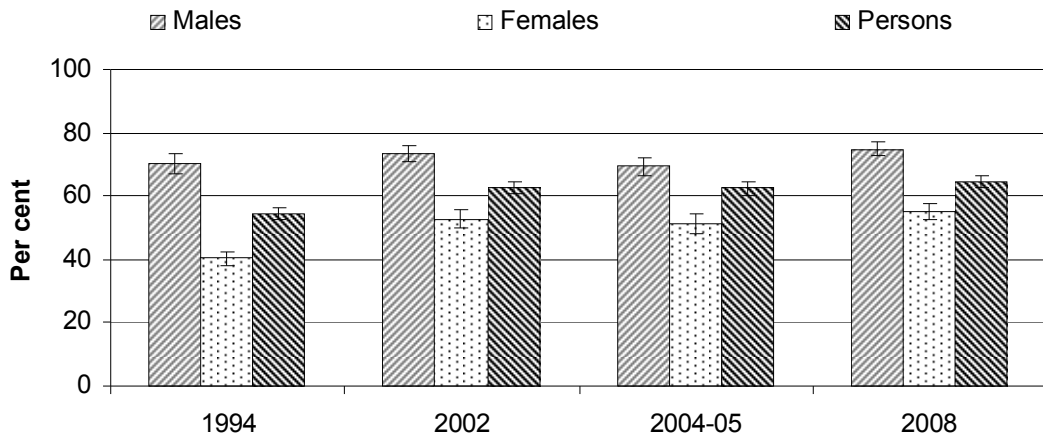
Between 1994 and 2008, for Indigenous people aged 18–64 years:

- the level of non-CDEP male employment rose (from 47.5 per cent in 1994 to 74.8 per cent in 2008) (figure 4.6.4)
- the level of female non-CDEP employment rose (from 50.9 per cent in 1994 to 76.9 per cent in 2008) (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 full-time education and training into jobs, remaining relatively high during prime working ages, and then declining towards retirement.

In 2008, labour force participation for Indigenous people across all age groups was lower than for non-Indigenous people in all age groups (table 4A.6.7). A breakdown of Indigenous labour force participation by sex is available in figure 4.6.5.

Figure 4.6.5 Indigenous labour force participation, people aged 15–64 years, 1994 to 2008^{a, b}



^a Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information). ^b 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.

Source: ABS (unpublished) NATSIS 1994; ABS (unpublished) NATSISS 2002; ABS (unpublished) NATSIHS 2004-05; ABS NATSISS 2008; ABS NHS 2007-08; table 4A.6.6.

Between 1994 and 2008, for people aged 15 to 64 years:

- labour force participation increased for Indigenous people from 54.5 per cent to 64.5 per cent (table 4A.6.6)
- labour force participation increased for Indigenous women from 40.2 per cent to 55.0 per cent (table 4A.6.6)
- labour force participation increased for Indigenous men from 70.0 per cent to 74.9 per cent (table 4A.6.6).

Comparable non-Indigenous data is not available as early as 1994. However, the gap between Indigenous and non-Indigenous labour force participation decreased (from 17.6 percentage points to 14.4 percentage points) from 2004-05 to 2008 (table 4A.6.6).

Across remoteness areas, in 2008:

- labour force participation for Indigenous people was lower than for non-Indigenous people in all remoteness areas (table 4A.6.8)
- labour force participation for Indigenous people was highest in major cities (70.6 per cent) and lowest in remote areas (60.3 per cent). In contrast, labour force participation for non-Indigenous people was very similar in major cities, inner and outer regional areas (79.3 per cent, 77.8 per cent, and 78.3 per cent respectively), and remote areas (78.7 per cent) (table 4A.6.8).

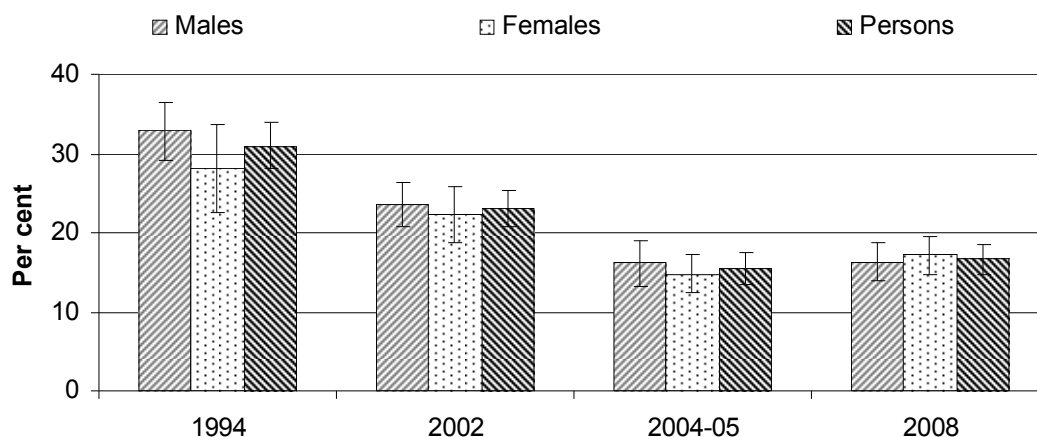
Across jurisdictions, in 2008:

- labour force participation for Indigenous people was lower than for non-Indigenous people in all states and territories (table 4A.6.7)
- Indigenous labour force participation was highest in the ACT (79.9 per cent) and lowest in NSW (59.9 per cent). However, the NT exhibited the largest increase in Indigenous labour force participation, increasing from only 49.6 per cent in 2004-05 and climbing to 61.1 per cent in 2008. In contrast non-Indigenous labour force participation was also highest in the ACT (85.4 per cent) and lowest in Tasmania (73.1 per cent) in 2008 (NT estimates were not available for comparative purposes in this period) (table 4A.6.7).

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.

Figure 4.6.6 Indigenous unemployment, by gender, people aged 15–64 years, 1994 to 2008, Australia^a



^a Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information).

Source: ABS NATSIS 1994; ABS NATSISS 2002; ABS NATSISS 2008; table 4A.6.6.

Between 1994 to 2008:

- unemployment decreased for all Indigenous people from 31.0 per cent to 16.6 per cent (table 4A.6.)
- for Indigenous females, the unemployment rate decreased from 28.1 per cent to 17.1 per cent (table 4A.6.6)
- unemployment decreased for Indigenous males from 32.8 per cent to 16.3 per cent (tables 4A.6.6).

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 (table 4A.6.6). 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.

Across jurisdictions, in 2008:

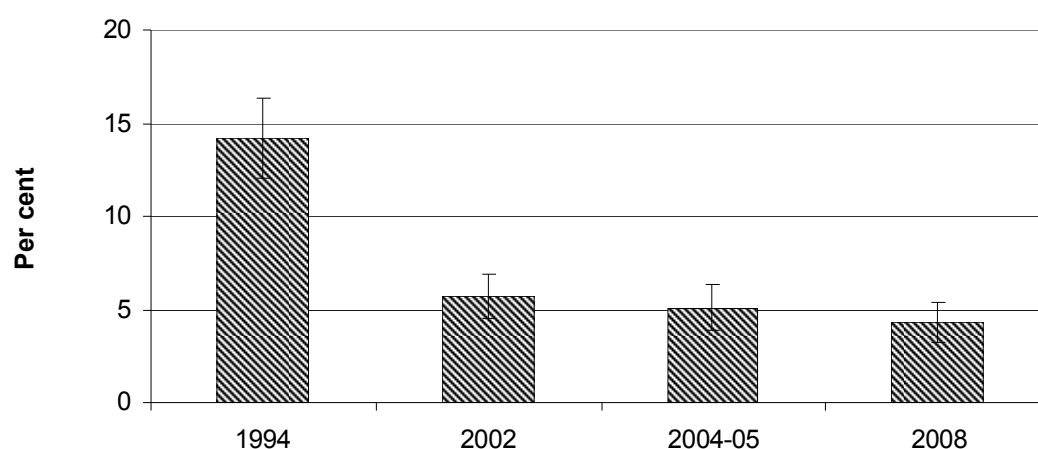
- unemployment rates for Indigenous people were much higher than for non-Indigenous people in all states and territories (table 4A.6.7)

The long term unemployed are defined as unemployed people who have been unemployed 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.

Figure 4.6.7 below presents data for Indigenous people aged 18 to 64 years. Non-Indigenous data and data for the 15 to 64 age range are not available for the full time series.

Figure 4.6.7 Long term Indigenous unemployment, people aged 18–64 years, 1994 to 2008^a



^a Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information).

Source: ABS (unpublished) NATSIS 1994; ABS (unpublished) NATSISS 2002; ABS (unpublished) NATSIHS 2004-05; ABS (unpublished) NATSISS 2008; table 4A.6.10.

- Between 1994 and 2008, long term unemployment decreased from 14.2 per cent to 4.3 per cent of the Indigenous labour force (figure 4.6.7). Data comparing Indigenous and non-Indigenous long term unemployment are for those aged 15 to 64 years, and are only available for 2004-05 and 2008.

In 2008, for those aged 15 to 64 years:

- Indigenous people were more than six times as likely as non-Indigenous people to have been unemployed long term (4.3 per cent of the labour force compared to 0.7 per cent) (table 4A.6.11)
- long term unemployment as a proportion of total unemployment was higher for Indigenous people than for non-Indigenous people (26.0 per cent compared to 18.6 per cent) (table 4A.6.11).

Between 2004-05 and 2008, for people aged 15 to 64 years:

- the gap in long term unemployment outcomes between Indigenous and non-Indigenous Australians narrowed from 11.6 per cent to 7.4 per cent of those who were unemployed (table 4A.6.11).

Outcomes from employment assistance programs

The National Indigenous Reform Agreement (NIRA) provides data on three month employment outcomes for job seekers who have participated in a Department of Education, Employment and Workplace Relations (DEEWR) funded employment assistance program (table 4A.6.23), as part of its measures of progress on Closing the Gap targets.

The COAG Reform Council (CRC) NIRA Performance report for 2009–10 (CRC 2011) showed that nationally, between 2008 and 2009:

- the proportion of Indigenous people employed three months after participating in an employment assistance program fell by 2.7 percentage points
- the proportion of non-Indigenous people employed three months after participating in an employment assistance program fell by 4.3 percentage points (CRC 2011).

Although the gap between Indigenous and non-Indigenous outcomes narrowed over this period, this is believed to be a result of the downturn in economic conditions and associated employment outcomes in 2009, rather than an improvement in closing the gap (CRC 2011).

4.7 Post secondary education — participation and attainment

Box 4.7.1 Key messages

- Lower proportions of Indigenous than non-Indigenous 20–64 year olds had or were working towards post school qualifications in 2008, in all states and territories and remoteness areas (tables 4A.7.3 and 4A.7.5).
- 34.0 per cent of Indigenous 20–64 year olds had or were working toward post school qualifications in 2008, compared with 58.1 per cent of non-Indigenous 20–64 year olds (figure 4.7.1).
- The proportion of 20–64 year olds with or working towards post school qualifications increased between 2002 and 2008 for both Indigenous people (from 26.0 per cent to 34.0 per cent) and non-Indigenous people (from 51.5 per cent to 58.1 per cent), with no change in the gap (figure 4.7.1).
- The VET national load pass rate for Indigenous students increased from 64.5 per cent in 2004 to 70.9 per cent in 2009 and the gap narrowed (table 4A.7.16).
- The higher education success rate for Indigenous students increased from 65.1 per cent in 2001 to 70.0 per cent in 2009, and the gap narrowed (figure 4.7.6).

COAG has identified post secondary education participation and attainment as a progress measure for its Closing the Gap target of ‘halving the gap in employment outcomes between Indigenous and non-Indigenous Australians by 2020’ (COAG 2008). Post secondary education includes both vocational education and training (VET) at institutions such as technical and further education (TAFE) colleges, and higher education at universities.

The primary measure for this indicator is the proportion of 20–64 year olds with a post school qualification of Certificate III or above or studying. Certificate III is considered the minimum level qualification needed to improve a person’s employability. This section also includes data on related measures: participation by course level at higher education institutions; VET national load pass rate; and higher education success rate.

People with a skilled vocational qualification or higher qualifications are more likely to be employed than those without such qualifications (see section 6.6). Other potential benefits that flow from higher education include a positive influence on health outcomes, and on children’s health outcomes and educational performance (OECD 2004; Wolfe and Haveman 2001; Zubrick et al. 2006).

TAFE is a particularly important destination for early school leavers (Dusseldorp Skills Forum 2006). Young Indigenous people are more likely to participate in VET than higher education. Nationally in 2009, the participation rate for Indigenous people aged 15–64 years in VET (19.2 per cent) was higher than the participation rate in higher education (3.1 per cent) — this may be 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).⁵ In the general population, 5.5 per cent participated in higher education and 8.2 per cent participated in VET (DEEWR unpublished and NCVET unpublished).

Locality can influence the extent to which Indigenous people participate in post secondary education (ACER 2002; Dockery 2009). 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.

On average, Indigenous VET students achieve lower outcomes than 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), as a proportion of all Indigenous VET students 6.4 per cent of Indigenous students completed a diploma or higher course compared with 14.0 per cent for other full-time students in 2008 (NCVER 2010). Employment outcomes from VET are lower for Indigenous students than other students (ANTA 2005; Buckskin 2001; NCVER 2006, 2010; O’Callaghan 2005; Saunders et al. 2003).

Research by Dockery (2009, 2010) into the role of Indigenous culture in education and employment outcomes found that a strong attachment to traditional culture may be associated with better outcomes in education and employment. Examples of initiatives that have been successful in increasing Indigenous post secondary participation and attainment can be found in box 4.7.2.

⁵ 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 Australian Tertiary Admission Rank (ATAR).

Box 4.7.2 'Things that work' — increasing post secondary participation and attainment

The **Cape York Institute's Higher Expectations Program — Tertiary (HEPT)** (Queensland) targets talented Cape York Indigenous people with high potential for achievement and leadership, and provides them with long-term support to undertake tertiary studies. HEPT is sponsored by the Rio Tinto Aboriginal Fund and the Indigenous Youth Leadership Program through the Department of Education, Employment and Workplace Relations.

HEPT offers material assistance through scholarships, and strengthens students' academic, social and emotional capacity through a combination of case management, leadership training and professional mentoring. Strong family support and community identity are at the core of the program.

As of June 2010, 22 HEPT students were enrolled in either university or TAFE, studying a range of disciplines in Cairns, Townsville, Brisbane, Sydney, Canberra and Melbourne. Many students were also actively engaged in community projects and a range of career development and volunteer activities, including environmental conservation, art and cultural activities, well-being programs, and sport and recreation. One HEPT student recently completed a Bachelor of Social Work and has begun postgraduate research studies for an honours dissertation, and seven students are expected to complete their degrees and university bridging courses in December 2010 (Westerhout, J., Cape York Institute for Policy and Leadership, Cairns, pers. comm., 26 August 2010).

Swinburne University and the Bert Williams Aboriginal Youth Service (Victoria) deliver a program to at-risk Indigenous young people aged 15–25 years who are not currently participating in mainstream education or employment. The program commenced as a pilot in 2009 with 13 participants, of whom 12 continued into further study or employment. In 2010, 22 at-risk Indigenous young people participated in the program. The program received the 2009 Wurreker Award for excellence in the delivery of vocational outcomes for Indigenous students, and the Swinburne University's Vice-Chancellor's Teaching Award (Victorian Government unpublished).

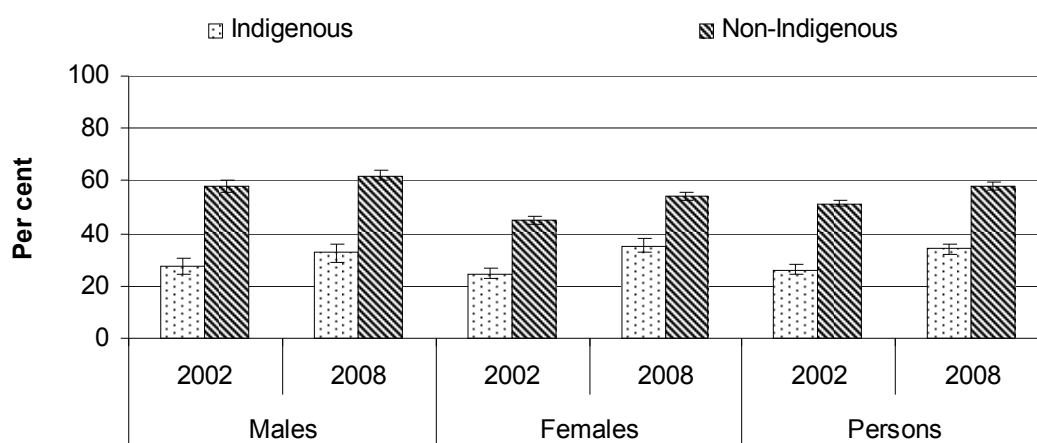
The **Monash University Indigenous Enabling Program** (Victoria) provides a pathway into Monash University undergraduate courses. Upon successful completion of the 12 week program, students are made direct offers into their chosen undergraduate courses. The university supports Indigenous students and their families through assistance with applications, scholarships, tutorials, accommodation and other resources. There are 148 Indigenous undergraduate and postgraduate students enrolled at Monash University. The retention rate for Indigenous student at Monash University is 90 per cent (Victorian Government unpublished).

People with or working towards a post secondary qualification

Education and training are important means of promoting attachment to the labour force (Hunter and Daly 2008). Certificate III is considered the minimum qualification necessary to provide pathways to further education and training, and improve employment outcomes. Certificate III or above includes certificate levels III and IV, diplomas, advanced diplomas, bachelor degrees, graduate diplomas and postgraduate degrees.

For non-Indigenous people, this section uses 2007-08 data from the ABS National Health Survey. The NHS 2007-08 allows for comparisons over time (between this and previous editions of the report) and remoteness areas. For reporting against the National Indigenous Reform Agreement (NIRA), the Steering Committee uses data derived from the ABS Survey of Education and Work for non-Indigenous people, which maintains consistency between reporting for the NIRA and other COAG National Agreements. Data from the Survey of Education and Work are not used here as they are not available by remoteness and are not suitable for time series comparison with non-Indigenous data for earlier years, which is an essential component of the analysis in this report.

Figure 4.7.1 **Proportion of 20–64 year olds with a post school qualification of Certificate III or above or studying, 2002 and 2008^a**



^a Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information).

Source: ABS (unpublished) GSS and NATSISS 2002; ABS (unpublished) NATSISS 2008; ABS (unpublished) NHS 2007-08; table 4A.7.1.

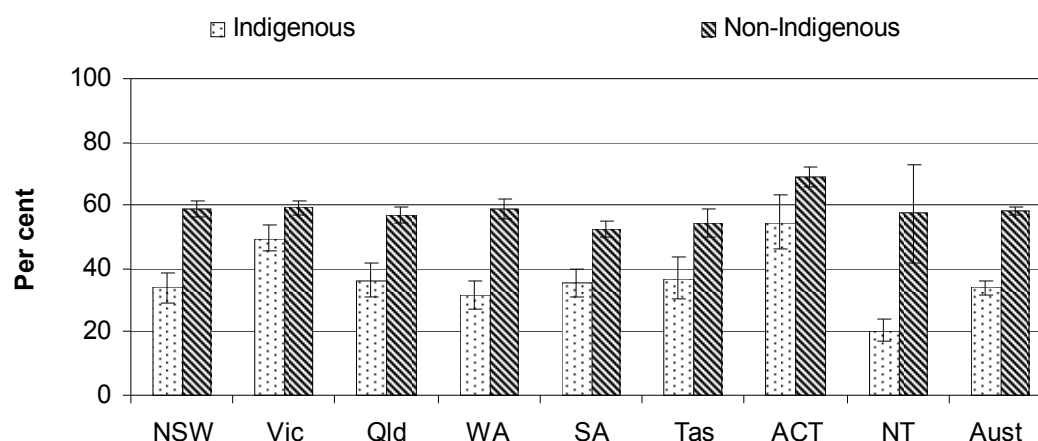
- The proportion of 20–64 year olds with a Certificate III or above or who were studying increased between 2002 and 2008 for both Indigenous people (from

26.0 per cent to 34.0 per cent) and non-Indigenous people (from 51.5 per cent to 58.1 per cent). Between 2002 and 2008 there was no change in the gap (figure 4.7.1).

In 2002 and 2008:

- there were no significant differences between the proportions of Indigenous males and females aged 20–64 years who had attained a Certificate III or above or who were studying.
- there were significantly higher proportions of non-Indigenous males than females aged 20–64 years who had attained a Certificate III or above or who were studying (table 4A.7.1).

Figure 4.7.2 Proportion of 20–64 year olds with a post school qualification of Certificate III or above or studying, by State and Territory, 2008^a



^a Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information).

Source: ABS (unpublished) NATSISS 2008; ABS (unpublished) NHS 2007-08; table 4A.7.3.

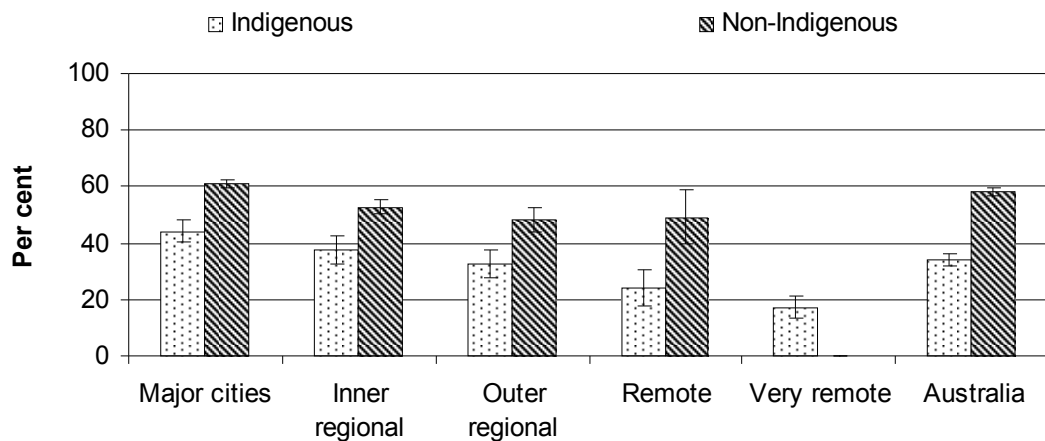
In 2008:

- In all states and territories, lower proportions of Indigenous than non-Indigenous people aged 20 to 64 years had or were working towards post school qualifications. The gap was the widest in the NT (20.5 per cent for Indigenous people compared with 57.4 per cent for non-Indigenous people) and smallest in Victoria (49.6 per cent for Indigenous people compared with 59.2 per cent for non-Indigenous people) (figure 4.7.2 and table 4A.7.3).

Between 2002 and 2008:

- The proportion of 20–64 year olds with or working towards post school qualifications increased significantly for Indigenous people nationally and in Victoria, Queensland, WA and the NT (tables 4A.7.2 and 4A.7.3).

Figure 4.7.3 Proportion of 20–64 year olds with a post school qualification of Certificate III or above or studying, by remoteness, 2008^a



^a Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information).

Source: ABS (unpublished) NATSISS 2008; ABS (unpublished) NHS 2007-08; table 4A.7.5.

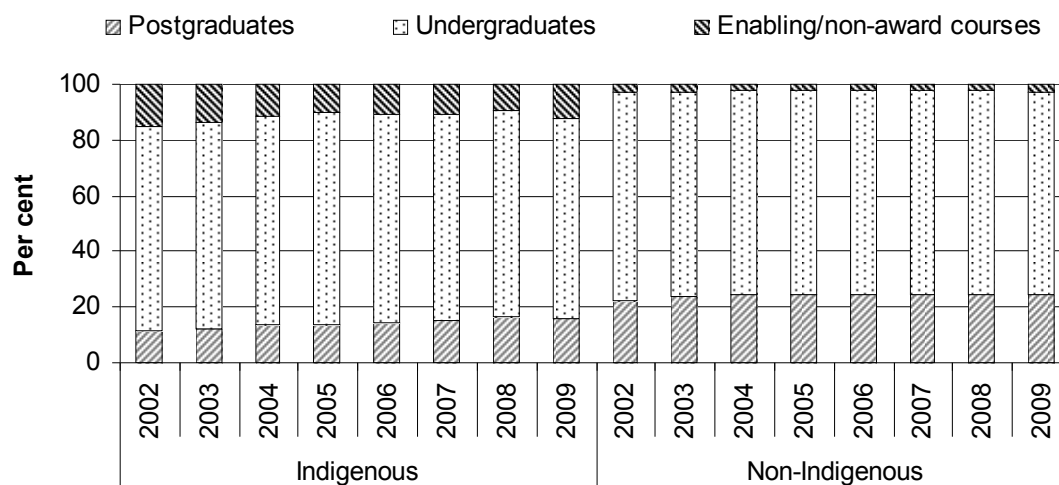
- Across all remoteness areas, in 2008, the proportion of 20–64 year olds with or working towards post school qualifications was lower for Indigenous people than for non-Indigenous people (figure 4.7.3).

Between 2002 and 2008:

- the gap between Indigenous and non-Indigenous people, aged 20–64 years with a Certificate III or above or who were studying, was wider in remote areas than in non-remote areas (tables 4A.7.4 and 4A.7.5).

More data on post school qualifications in 2002 and 2008, by age, by State and Territory and remoteness can be found in tables 4A.7.1–7.

Figure 4.7.4 Post secondary participation at higher education institutions, by course level, 2002–2009



Source: DEEWR higher education statistics collection (unpublished); tables 4A.7.8–15.

- In all years between 2002 and 2009 Indigenous students were more likely than non-Indigenous students to be enrolled in enabling and non-award courses, and less likely to be enrolled in postgraduate courses.
- However, over this period, the proportion of Indigenous students enrolled in enabling or non-award and undergraduate courses decreased (from 15.2 per cent to 12.0 per cent), and the proportion enrolled in postgraduate courses increased (from 11.6 per cent to 15.5 per cent) (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.7.8–15.

VET load pass rate and higher education success rate

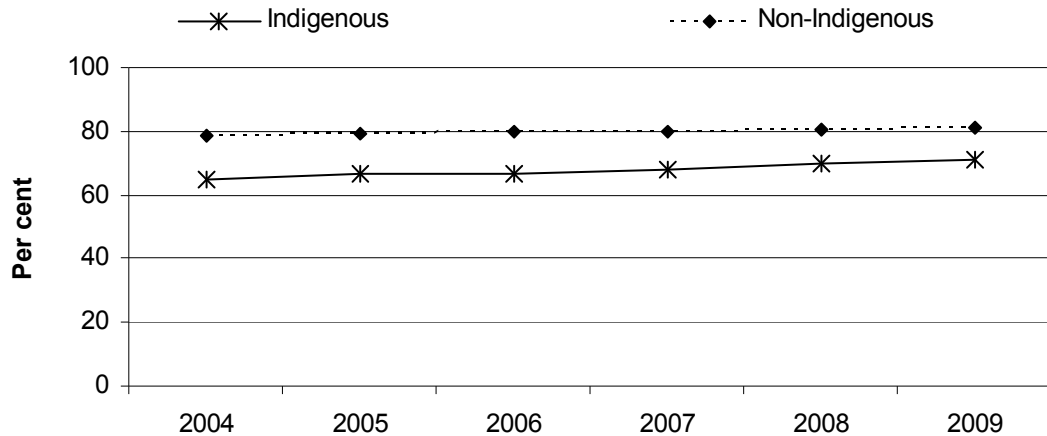
One measure of post secondary attainment is the extent to which people complete or pass the course they are undertaking. This is known in the VET system as the load pass rate and in the higher education system as the success rate.

VET load pass rate

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 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 jurisdictions because average module durations and standards of competencies achieved by students vary across states and territories.

Figure 4.7.5 VET national load pass rate, 2004–2009^a



^a Excludes students participating in VET programs in schools. Not adjusted for recognition of prior learning, credit transfer and students enrolled but not participating.

Source: National VET Provider Collection, 2005–2009 (unpublished); table 4A.7.16.

From 2004 to 2009:

- the national load pass rate for Indigenous students was lower than for non-Indigenous students in all years (figure 4.7.5)
- the national load pass rate for Indigenous students increased from 64.5 per cent in 2004 to 70.9 per cent in 2009. Over the same period, the load pass rate for non-Indigenous students also increased, from 78.8 per cent to 80.9 per cent. The gap between fell from 14.3 percentage points to 10.0 percentage points (figure 4.7.5 and table 4A.7.16).

Table 4.7.1 VET load pass rates, by course level, 2004–2009

	<i>Indigenous</i>						<i>Non-Indigenous</i>					
	2004	2005	2006	2007	2008	2009	2004	2005	2006	2007	2008	2009
Diploma or higher	68.9	73.4	71.6	73.8	77.7	77.8	79.2	79.3	79.4	79.6	80.9	81.4
Certificate IV	69.3	69.8	67.5	69.1	68.8	72.3	76.5	77.0	76.9	77.4	78.7	79.2
Certificate III	70.2	72.5	71.4	73.5	74.9	74.4	83.1	84.2	84.4	84.3	84.7	84.6
Certificate II	61.8	65.2	64.7	63.7	67.4	67.6	75.8	76.4	77.4	77.6	77.0	77.4
Certificate I	52.2	52.2	55.8	57.8	58.7	64.2	65.2	66.4	67.6	67.5	64.9	65.5
Other ^a	57.0	60.6	60.6	60.8	61.7	61.6	74.5	74.2	74.7	75.4	77.8	74.8

^a Includes senior secondary education and other education (bridging and enabling courses).

Source: National VET Provider Collection, 2005–2009 (unpublished); table 4A.7.17.

In 2009, the highest national load pass rates were achieved by Indigenous students studying at diploma level or higher (77.8 per cent) (table 4.7.1).

Between 2004 and 2009:

- there was an increase in load pass rates for all course levels for both Indigenous and non-Indigenous students (table 4.7.1)
- the gap in load pass rates for all course levels for Indigenous and non-Indigenous students decreased and load pass rates achieved by Indigenous and non-Indigenous students at Certificate I level are almost the same (64.2 per cent and 65.5 per cent, respectively) (table 4.7.1).

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 load pass rates for Indigenous and non-Indigenous students by State and Territory, remoteness areas and course level can be found in table 4A.7.16.

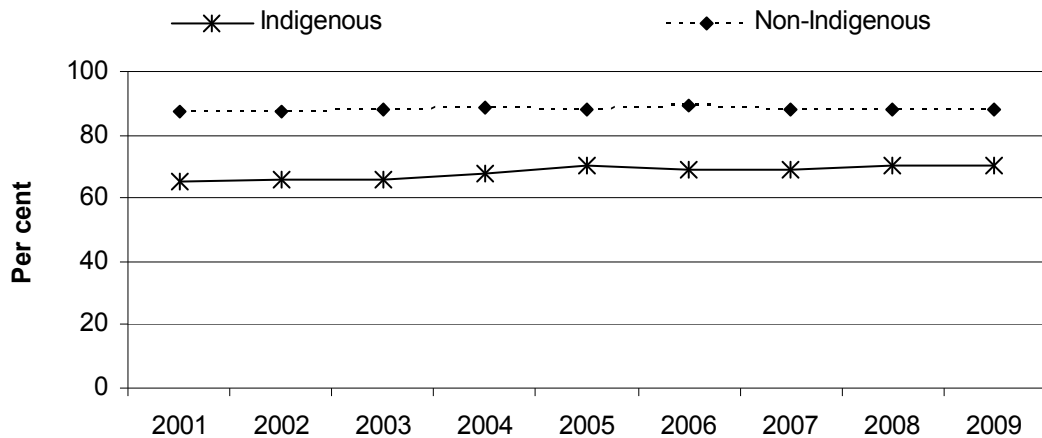
The *Report on Government Services* (SCRGSP 2011) contains further data on Indigenous outcomes in the VET system. Chapter five of SCRGSP 2011 reports on the number of government funded participants in the VET system who self-identified as Indigenous, the number and proportion of qualifications completed, and units of competency and modules (outside training packages) achieved/passed in a given year by Indigenous students.

Higher education success rate

The success rate is the proportion of units passed within a year compared with the total units enrolled. Although this measure is based on a different calculation to the

VET load pass rate, a similar trend in outcomes for Indigenous students can be observed.

Figure 4.7.6 Higher education success rate, 2001–2009^{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: DEEWR Higher Education Statistics Collection (unpublished).; tables 4A.7.19–27.

From 2001 to 2009:

- the higher education success rate was lower for Indigenous students than non-Indigenous students in all years (figure 4.7.6)
- the success rate for Indigenous students increased from 65.1 per cent to 70.0 per cent, while the success rate for non-Indigenous students remained stable and the gap fell from 22.2 percentage points to 18.0 percentage points (figure 4.7.6 and tables 4A.7.19–27).

4.8 Disability and chronic disease

Box 4.8.1 Key messages

- Indigenous people aged 18 years and over reported a profound or severe core activity restriction in both 2002 and 2008 around twice the rate for non-Indigenous people, with no significant change in the gap over that period (table 4A.8.1).
- Hospitalisation rates for all chronic diseases except cancer were higher for Indigenous males and females than other males and females in 2008-09 (table 4.8.1).
- Between 2004-05 and 2008-09, the gap in hospitalisation rates between Indigenous and other people for most chronic diseases did not change. However, rate differences for circulatory diseases (particularly ischaemic heart diseases), diabetes and end stage renal diseases increased over time (tables 4A.8.24–33).

Indigenous Australians experience significantly higher rates of disability and chronic disease than other Australians. The restrictions that people with disability may face include long-term physical, mental, intellectual or sensory impairments, which may hinder their participation in society on an equal basis with others (UN General Assembly 2006). Disability is complex, reflecting an interaction between features of a person's body and features of the society in which he or she lives (WHO 2009). The extent to which people with disability or chronic disease are able to be fully involved in society varies; for example, a significant physical, mental, intellectual or sensory impairment may not be as severely limiting if there is a sufficiently supportive and enabling environment from both informal carers and formal support services (Aboriginal Disability Network of NSW 2007; Priestly 2001).

The primary measures for this indicator are:

- rates of disability measured as the prevalence of severe or profound core activity restrictions
- the prevalence of different types of disability: intellectual, psychological, sight, hearing and speech, and physical
- hospitalisation rates for chronic disease.

This section also includes data on related measures:

- participation in society by people with severe or profound core activity restrictions:
- education, employment and household income for Indigenous people with a disability

-
- carers of people with disability, long term illness or problems related to old age
 - hospitalisations rates by principal diagnoses.

The ABS and AIHW (2008, 2011) found that Indigenous Australians experienced a higher risk of chronic disease and disability due to health risk factors such as smoking, high alcohol consumption, use of illicit substances, low levels of exercise, being overweight or obese and low consumption of fruit and vegetables. Using data from the National Aboriginal and Torres Strait Islander Health Survey 2004-05, the ABS and AIHW found that these risk factors were correlated with poorer outcomes in education, employment and income (ABS and AIHW 2008, 2011). Other risk factors include high levels of stress or a family history of poor health and chronic disease (ABS and AIHW 2005, AIHW 2006).

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 Indigenous population had an overall age standardised rate of disease burden (measured in DALYs/1000 people) two and a half times as great as the general Australian population

Eleven risk factors were identified in the study, each accounting for part of the gap in disease burden between the Indigenous population and the total Australian population. For Indigenous people, tobacco was the leading risk factor (12.1 per cent of the total disease burden), followed by obesity (11.4 per cent of the total disease burden), physical inactivity (8.4 per cent of the total disease burden), high blood cholesterol (5.5 per cent of the total disease burden) and alcohol (5.4 per cent of the total disease burden) (Vos et al. 2007).

Indigenous Australians with disability may face compounding issues of disadvantage due to the poorer outcomes that Indigenous people experience across a range of socio-economic and environmental factors, including issues with poverty, social class, social capital, education, employment, welfare and housing (Carson et al. 2007). Chronic disease limits the extent to which people can effectively participate in the social and economic life of their communities. AIHW (2009) found that people with chronic disease were less likely to participate in the labour force, less likely to be employed full-time, and 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. As well as a reduction in chronic disease, the report pointed to the need for more work-enabling environments for people with chronic disease, efforts to enable

mature workers to remain in the workforce and workplaces that engaged in health promotion (AIHW 2009).

The Aboriginal Disability Network of NSW (2007) consulted 400 Aboriginal people with disability across NSW in 2004 and 2005, and found that access to services and support was a major problem. For many people, family and other kin were their only form of support. Barriers to obtaining services and disability aids and appliances were higher in rural and remote areas. Being housebound was a common problem. Systemic barriers were also a major problem: those with intellectual disability, mental illnesses and acquired brain injury had a range of negative experiences with the justice system, including police, courts and corrective services. The study also noted a number of reasons for under identification of disability in Indigenous communities, including the potential for further discrimination, and a focus on more visible types of physical disability at the expense of less visible types such as mental illness.

The Australian and State and Territory governments are jointly committed to providing more opportunities for people with disability to participate and enjoy Australia's economic and social life. The National Disability Agreement (NDA), effective from 1 January 2009, seeks to improve and increase services for people with disability, their families and carers, by creating a disability services system that is focussed on early intervention, timely person-centred approaches and lifelong planning. The agreement aims to increase access for Indigenous Australians through a National Indigenous Access Framework (COAG 2009).

Disability

Data on the prevalence of Indigenous people with disability are from the ABS National Aboriginal and Torres Strait Islander Social Survey 2002 and 2008 (NATSISS 2002 and 2008). Comparable data for non-Indigenous people with disability are from the ABS General Social Survey 2002 (GSS 2002) and the ABS National Health Survey 2007-08 (NHS 2007-08). There are differences in the ages of people who were in scope for these four surveys and there are also issues with comparability between surveys.

- Data on proportions of people with 'severe or profound core activity restrictions' and various 'disability types' were available for Indigenous people aged 15 years and over for 2002 and 2008 and for non-Indigenous people aged 15 years and over for 2008. Data for non-Indigenous people in 2002 are only available for those aged 18 years and over.
- Comparability issues between the surveys restrict the availability of data for analysis by remoteness. Data for Indigenous people are available for both remote

and non-remote areas, while data for non-Indigenous people are available for non-remote areas only.

Hence, there is some variation between measures in this section in the age ranges and geographic scope of data.

Definitions of disability used by health professionals might not be the same as definitions used by Indigenous and non-Indigenous people responding to surveys. During extensive consultations, the Productivity Commission's Inquiry into Disability Care and Support in 2011 heard that some Indigenous people, particularly those who live a more traditional way of life, may conceptualise disability differently to Euro-Western understandings. The First Peoples Disability Network suggested that 'in traditional language there was no comparable word to disability, which suggests that disability may have been accepted as part of the human experience' (sub. 542, p. 8 cited in PC 2011). This can result in under-reporting and, potentially, under utilisation of the available disability support services in some areas (PC 2011). Other research has shown people's perception of their own disability/long term condition depends on their knowledge of available aids and services. This also may have a substantial impact on reporting rates for disability/long term health conditions, particularly when the methodology depends on self reporting (AIHW and DHFS 1998).

Severe or profound core activity restrictions

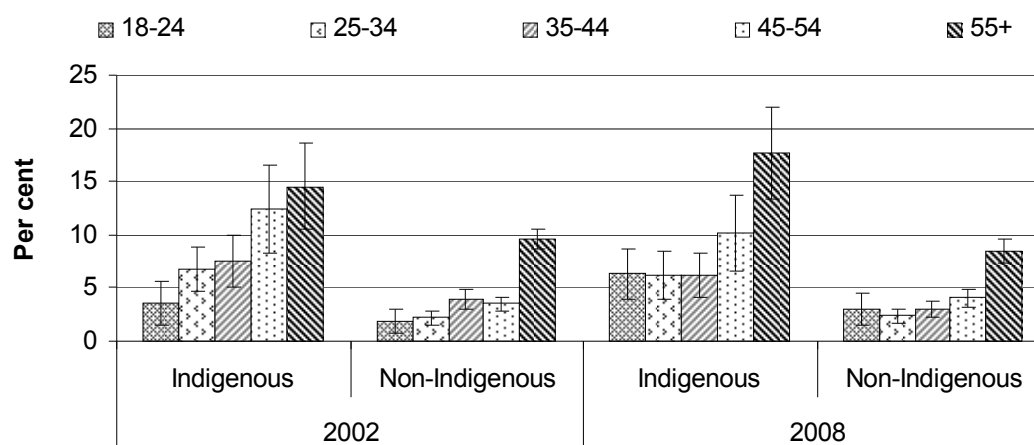
Data on the prevalence of severe or profound core activity restrictions are available from the ABS NATSISS 2008. Severe or profound core activity restrictions exist if a limitation, restriction, impairment, disease or disorder, has lasted, or is expected to last for six months or more, and restricts everyday activities. People who needed assistance to perform one or more core activities, such as self-care, mobility and communication, some or all of the time, were categorised as having a profound or severe core activity restriction. The severity of restrictions for others with a disability or long term health condition was not determined and is therefore presented as an 'unspecified limitation or restriction' (ABS 2009).

For people aged 18 years and over, living in non-remote areas of Australia, after taking into account the different age structures of the Indigenous and non-Indigenous populations:

- Indigenous people reported a profound or severe core activity restriction at around twice the rate for non-Indigenous people in both 2002 (9.8 per cent compared with 4.9 per cent) and in 2008 (10.3 per cent compared with 4.7 per cent) (table 4A.8.1)

- there was no significant change in the gap between Indigenous and non-Indigenous proportions of people with profound or severe core activity restriction between 2002 and 2008 (table 4A.8.1)
- across all states and territories there were significantly higher proportions of Indigenous than non-Indigenous people with profound or severe core activity restrictions (table 4A.8.2).

Figure 4.8.1 People with profound or severe core activity restrictions by age groups and Indigenous status, non-remote areas of Australia, 2002 and 2008^{a, b, c, d}



^a Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information). ^b The difference between Indigenous and non-Indigenous rates for people aged 18 to 24 years is not statistically significant for 2002. ^c The differences between 2002 and 2008 Indigenous rates are not statistically significant. ^d The differences between 2002 and 2008 non-Indigenous rates are not statistically significant.

Source: ABS (unpublished) NATSISS 2008; table 4A.8.3.

Proportions of people with profound or severe core activity restrictions were consistently higher for Indigenous than non-Indigenous people for all age groups. In 2002 and 2008, for people aged 18 years and over in non-remote areas:

- for both Indigenous and non-Indigenous people, the oldest age group (people aged 55 years and over) had the highest proportion of people with a profound or severe core activity restrictions, although the ratio of Indigenous to non-Indigenous proportions (1.5 times in 2002 and 2.1 times in 2008) were lower for this age group than for younger people. This levelling out of the relative burden of disability is possibly due to the heightened risk of age related ailments which affect all people irrespective of socio-economic status (figure 4.8.1)

- the greatest disparities between the proportions of Indigenous and non-Indigenous people with profound or severe core activity restrictions were in the 25–34 years and 45–54 years age groups. Indigenous people in these age groups reported having a profound or severe core activity restriction around 2.5 times the rate for non-Indigenous people (table 4A.8.3).

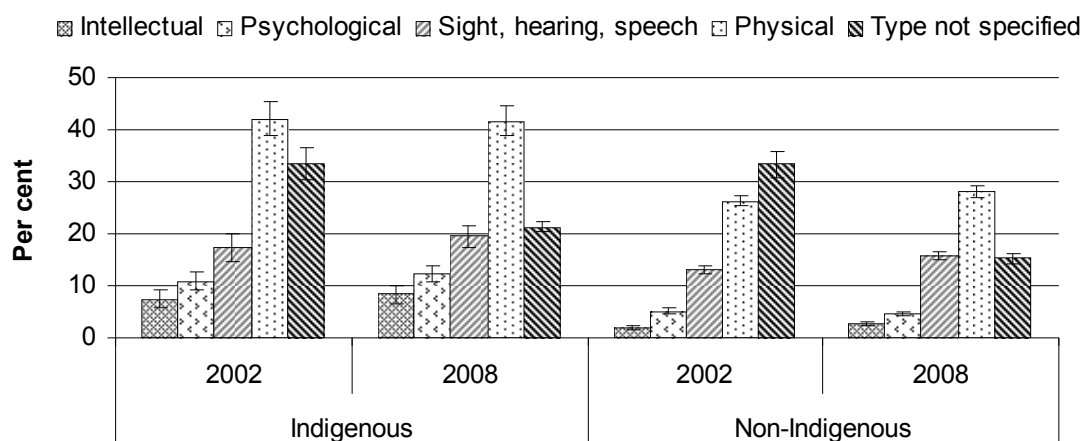
Data for Indigenous people aged 15 years and over are available for both remote and non-remote areas for 2002 and 2008.

- In both 2002 and 2008, the proportions of Indigenous people with profound or severe core activity restrictions were not significantly different between remote and non-remote areas (table 4A.8.4).

For more information about profound or severe core activity restrictions and other degrees of disability by remoteness, age groups and jurisdiction see attachment tables 4A.8.1–5.

Disability type

Figure 4.8.2 People aged 18 years and over by disability type and Indigenous status, non-remote areas of Australia, age standardised, 2002 and 2008^{a, b, c}



^a Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information). ^b The difference between Indigenous and non-Indigenous age standardised rates is statistically significant for all categories. ^c Disability type includes all degrees of disability including 'profound', 'severe', and 'degree of disability not defined'.

Source: ABS (unpublished) NATSISS 2008; table 4A.8.6.

For people aged 18 years and over living in non-remote areas of Australia, after taking into account the different age structures of the Indigenous and non-Indigenous populations:

- rates for all disability types were significantly higher for Indigenous people than non-Indigenous people in both 2002 and 2008. In 2008, Indigenous people reported one or more disability type(s) at 1.4 times the rate for non-Indigenous people (figure 4.8.2; table 4A.8.6)
- there were no statistically significant changes in the proportions of Indigenous or non-Indigenous people with one or more disability types between 2002 and 2008 (table 4A.8.6)
- physical disability was the most common disability type for both Indigenous and non-Indigenous people (figure 4.8.2):
 - in 2002, 42.1 per cent of Indigenous and 26.3 per cent of non-Indigenous people reported physical disability (figure 4.8.2)
 - in 2008, 41.7 per cent of Indigenous and 28.1 per cent of non-Indigenous people reported physical disability (figure 4.8.2).

Data for Indigenous and non-Indigenous males and females aged 15 years and over are available for non-remote areas of Australia in 2008. In 2008, for people aged 15 years and over, after taking into account the different age structures of the Indigenous and non-Indigenous populations:

- there were significantly higher proportions of Indigenous males and females than non-Indigenous males and females with all disability types, except for males with a sight, hearing or speech disability (table 4A.8.8).

Data for Indigenous people aged 15 years and over were available for both remote and non-remote areas of Australia for 2008.

- A lower proportion of Indigenous people in remote areas reported an intellectual or psychological disability than those in non-remote areas. A higher proportion of Indigenous people in remote areas reported a sight, hearing or speech disability than those in non-remote areas. Similar proportions of Indigenous people in remote and non-remote areas reported a physical disability (table 4A.8.9).

More detailed information about disability type for 2002 and 2008, by remoteness, State and Territory and sex is provided in attachment tables 4A.8.6–14. For information on mental and behavioural disorders and psychological health see section 7.7 ‘Mental health’.

Receipt of disability support pension

Centrelink data on receipts of income support payments show that:

- disability support pensions were the second most common income support received by Indigenous people aged 15 to 64 years in 2010, however Indigenous people received disability support pensions (10.9 per cent) at more than twice the rate for non-Indigenous people (4.4 per cent) (table 8A.4.19)
- between 2003 and 2010, there was a large increase in the proportion of Indigenous people receiving disability support pension (from 6.4 per cent to 10.9 per cent), but little change for non-Indigenous people (5.0 per cent in 2003 and 4.4 per cent in 2010) (table 8A.4.20–27).

For more information on disability income support, see section 8.4 ‘Income support’.

Education, employment and household income for Indigenous people with a disability

Indigenous people with a disability tend to have poorer socio-economic outcomes than Indigenous people with no disability. In 2008:

- half (51.7 per cent) of Indigenous people aged 15 years and over who had a profound or severe core activity restriction had left school at year 9 or below.⁶ This is almost twice the proportion of Indigenous people with no disability who left school at year 9 or below (26.0 per cent) (table 4A.8.15)
- Indigenous people in the working age population (15 to 64 years) who had a severe or profound core activity restriction, had a higher unemployment rate (21.4 per cent) than those with no disability (15.8 per cent) (table 4A.8.16)
- a higher proportion of Indigenous people aged 15 years and over with disability reported an equivalised household income⁷ in the lowest quintile (44.6 per cent) than those who had no disability (35.3 per cent) (table 4A.8.17).

For more information about education, employment and income characteristics of Indigenous people with a disability see tables 4A.8.15–17.

⁶ This proportion is calculated from a total which excludes people who were still at school.

⁷ Equivalised household income is a measure which enables comparison between households of different size and composition. For more information on equivalised household income see box 4.9.3 in the next section.

Results of multinomial regression analysis using data from the ABS NATISS 2008 are presented in Section 13.2 ‘Measuring multiple disadvantage and interactions across the framework’. After controlling for the effect of other factors, the analysis found significant associations between having a severe or profound disability and employment and labour force participation rates. Indigenous males and females aged 15 to 64 years, with severe or profound disability were:

- 13.6 and 15.8 percentage points (respectively) less likely to be employed, than those without severe or profound disability (table 13A.2.3–4),
- 16.5 and 17.1 percentage points (respectively) less likely to be in the labour force than those without severe or profound disability (table 13A.2.3–4).

Carers of people with disability, long term illness or problems related to old age

Family and friends provide significant assistance to people with disability, long term illness or problems related to old age (AIHW 2004, Goddard et al. 2008). The help or supervision, allows people with disability to participate more fully and effectively in society; which improves adaptive behaviour, community participation and contact with family and friends (Young et al. 1998; Goddard et al. 2008).

However, in spite of the positive benefits of being cared for by family and friends, problems accessing formal support may have adverse effects on care-givers (Goddard et al. 2008, AIHW 2004). Research conducted by the Australian Institute of Family Studies found that care-givers have poorer mental and physical health outcomes, and experience greater financial hardship than people in the general population. Although caring responsibilities can limit the ability of carers to participate in the labour force, the study found that a large number of non-employed working age carers expressed a desire to be in some form of paid employment (AIFS 2008).

Care-givers do not always see care-giving as a burden — carers can draw satisfaction and fulfilment from their role. However, the body of research about the stress associated with care-giving indicate a need for adequate resources for support (AIHW 2004, Ellis et al. 2008, Goddard et. al 2008). Ellis et al. (2008) points to the need for culturally safe services that take into account the compounding issues of health for the general Aboriginal and Torres Strait Islander population.

At the time of publication the only national data available on Indigenous carers was from the 2006 ABS Census of Population and Housing. Data about carers from the Census is sourced from one self-reported question and may be conceptually different to carer populations identified from other data sources. It is anticipated that

new data on Indigenous carers from the 2011 ABS Census of Population and Housing will be available for the next report.

In 2006, a higher proportion of younger Indigenous people (aged 15–44 years) provided unpaid care than non-Indigenous people in the same age group. The proportion of Indigenous people aged 15–24 years who were unpaid carers was 1.7 times the rate for non-Indigenous people of the same age (tables 4A.8.18–19).

In 2006, after taking into account the different age structures of the Indigenous and non-Indigenous populations:

- the proportion of Indigenous people who provided unpaid care for a person with disability was 1.2 times the proportion of non-Indigenous people (tables 4A.8.18–19)
- in very remote areas, the proportion of Indigenous people who provided unpaid care to a person with disability was almost twice the proportion reported for non-Indigenous people (tables 4A.8.18–19).

More information on Indigenous carers, from the ABS Census of Population and Housing 2006, is included in tables 4A.8.18–23.

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 National Disability Agreement performance framework includes performance indicators and benchmarks, including a performance indicator on the ‘number of Indigenous people with disability receiving disability services’ and a benchmark to measure ‘an increase in the proportion of Indigenous people with disability receiving services’ (COAG 2009).

In 2008-09 (the most recent year of available data), there were around 12 000 Indigenous disability service users⁸ and 235 000 non-Indigenous users aged less than 65 (AIHW 2011). Among people aged under 65 years, there was a higher proportion of service users who were Indigenous (5 per cent) than was represented in the total Australian population (3 per cent). The median age of Indigenous service users was 26 years compared to 34 years for non-Indigenous service users (AIHW 2011). Of the potential population of Indigenous people with a disability,

⁸ Disability services include National Disability Agreement funded services to support people aged under 65 years with disability, including accommodation support, respite, employment, community access and community support services.

22.6 per cent accessed State and Territory delivered disability support services, around the same proportion as for all people (20.8 per cent) (SCRGSP 2010).

The *Disability Support Services Report* (AIHW 2011), *The Report on Government Services 2011* (SCRGSP 2011) and *National Disability Agreement* performance report (SCRGSP 2010) contain more information on Aboriginal and Torres Strait Islander people aged 0 to 64 years who accessed National Disability Agreement funded services.

Hospitalisation rates for chronic disease and all conditions

This section presents data on the most common principal diagnoses for hospitalisations of Indigenous and other people, including chronic disease. The principal diagnosis is the diagnosis established to be the problem that was chiefly responsible for the patient's episode of care in hospital. 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.

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 (section 7.5) and smoking (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, which presents hospitalisation rates for 'potentially preventable chronic conditions'.

Hospitalisation ratios for chronic disease

Table 4.8.1 Age standardised hospitalisation rates, Indigenous and other people, by type of chronic disease and sex, age standardised, NSW, Victoria, Queensland, WA, SA and public hospitals in the NT, 2008-09^{a, b}

Type of long term health condition	Age standardised rate per 1000 people		Rate ratio ^d	Rate difference ^e
	Indigenous	Other ^c		
Males				
Cancer (C00–C96)	12.3	20.4	0.6	-8.0
Lung cancer (C33–C34)	1.3	1.1	1.2	0.2
Mental and behavioural disorders (F00–F99)	28.4	12.9	2.2	15.5
Circulatory diseases (I00–I99)	38.1	25.3	1.5	12.8
Ischaemic heart diseases (I20–I25)	17.8	9.3	1.9	8.5
Stroke (I60–169)	3.3	2.1	1.6	1.2
Hypertension (I10–I15)	0.6	0.2	2.7	0.4
Rheumatic heart diseases (I05-I09)	0.2	0.1	2.8	0.2
Other				
Diabetes (E10–E14)	14.7	4.2	3.5	10.4
End stage renal diseases (N18–N19, Z49)	455.6	54.8	8.3	400.8
Chronic obstructive pulmonary diseases (J41–J44)	11.6	3.0	3.9	8.6
Females				
Cancer (C00–C96)	10.1	13.6	0.7	-3.5
Lung cancer (C33–C34)	1.2	0.6	2.0	0.6
Cervical cancer (C53)	0.5	0.2	2.9	0.3
Mental and behavioural disorders (F00–F99)	23.5	16.1	1.5	7.4
Circulatory diseases (I00–I99)	32.5	16.4	2.0	16.2
Ischaemic heart diseases (I20–I25)	12.7	4.1	3.1	8.5
Stroke (I60–169)	3.4	1.6	2.2	1.8
Hypertension (I10–I15)	1.0	0.4	2.7	0.6
Rheumatic heart diseases (I05-I09)	0.6	0.1	5.5	0.5
Other				
Diabetes (E10–E14)	15.1	3.1	4.8	12.0
End stage renal diseases (N18–N19, Z49)	453.8	30.5	14.9	423.3
Chronic obstructive pulmonary diseases (J41–J44)	11.9	2.1	5.7	9.9

^a Categories are based on ICD-10-AM classification of diseases (International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Australian Modification). ^b Data are reported by State or Territory of usual residence of the patient hospitalised. ^c 'Other' includes hospitalisation of non-Indigenous people and those for whom Indigenous status was not stated. ^d Rate ratio is the age standardised Indigenous hospitalisation rate divided by 'other' hospitalisation rate. ^e Rate difference is the age standardised Indigenous hospitalisation rate minus the 'other' hospitalisation rate.

Source: AIHW (unpublished) National Hospital Morbidity Database; table 4A.8.28 and 4A.8.33.

In 2008-09, after adjusting for the different age structures in the Indigenous and non-Indigenous populations:

- hospitalisation rates for all chronic diseases except cancer were higher for Indigenous males and females than other males and females (table 4.8.1)
- hospitalisation rates for end stage renal diseases (including dialysis, for which individual patients may be hospitalised frequently) were far higher among Indigenous people than other people. While the rate for Indigenous females with end stage renal diseases (453.8 per 1000) was similar to the rate for Indigenous males (455.6), the gap between Indigenous and other females (rate difference of 423.3 per 1000) was higher than for males (rate difference of 400.8) (table 4.8.1)
- rate differences between Indigenous and other hospitalisations (males and females combined) increased with remoteness for rheumatic heart diseases, diabetes, end stage renal diseases but varied for other chronic conditions. Most notably, in remote areas there was a difference of 666.7 per 1000 in rates of hospitalisation for end stage renal diseases while in major cities the difference was 272.0 per 1000 (table 4A.8.34).

Between 2004-05 and 2008-09, after age standardisation:

- the gap in hospitalisation between Indigenous and other people did not change for most types of chronic disease for both males and females, however rate differences for circulatory diseases (particularly ischaemic heart diseases), diabetes and end stage renal diseases increased over time (tables 4A.8.24–33).
- the hospitalisation rate difference between Indigenous and other males increased for ischaemic heart disease (from 6.3 per 1000 to 8.5 per 1000), although this was partly due to a decrease in rates for hospitalisations of other males which was not seen in rates for Indigenous males (tables 4A.8.24–28)
- the hospitalisation rate difference between Indigenous and other males for end stage renal disease increased from 303.8 per 1000 to 400.8 per 1000. While hospitalisation rates for other males increased slightly over time, rates for Indigenous males increased more (tables 4A.8.24–28)
- the rate difference between Indigenous and other females increased for females for ischaemic heart diseases (from 7.3 per 1000 to 8.5 per 1000) due to an increase in hospitalisation rates among Indigenous females and a decrease in rates among other females (tables 4A.8.29–33)
- the rate difference between Indigenous and other female hospitalisations increased for end stage renal diseases (from 366.4 per 1000 to 423.3 per 1000) (tables 4A.8.29–33).

Hospitalisation rates for all conditions

Table 4.8.2 Hospitalisation rates by principal diagnosis, age standardised, NSW, Victoria, Queensland, WA, SA and public hospitals in the NT, 2008-09^{a, b, c}

<i>Principal diagnoses</i>	<i>Indigenous</i>		<i>Other^d</i>	
	<i>Rate per 1000^e</i>	<i>Rate per 1000^e</i>	<i>Rate per 1000 difference^e</i>	<i>Rate ratio^f</i>
Injury & poisoning & certain other consequences of external causes	46.2	24.3	22.0	1.9
Pregnancy, childbirth and the puerperium	33.6	22.7	10.9	1.5
Diseases of the respiratory system	42.9	16.6	26.3	2.6
Diseases of the digestive system	35.8	38.2	-2.4	0.9
Symptoms, signs and abnormal clinical and laboratory findings	35.1	24.2	10.8	1.4
Mental and behavioural disorders	25.8	14.5	11.4	1.8
Diseases of the circulatory system	34.4	20.7	13.7	1.7
Diseases of the genitourinary system	19.3	17.2	2.1	1.1
Diseases of the skin and subcutaneous tissue	13.1	5.8	7.2	2.2
Endocrine, nutritional and metabolic diseases	20.7	7.1	13.6	2.9
Certain infectious and parasitic diseases	10.6	5.4	5.3	2.0
Other ^g	87.5	122.4	-34.9	0.7
Total (excluding dialysis) ^h	405.0	319.3	85.7	1.3
Care involving dialysis	463.4	41.2	422.2	11.2
Total^h	868.3	360.5	507.8	2.4

^a Categories are based on the ICD-10-AM classification of diseases (International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Australian Modification. ^b Data are reported by State or Territory of usual residence of the patient hospitalised. ^c Directly age-standardised using the Australian 2001 standard population. ^d 'Other' includes hospitalisations of non-Indigenous people and those for whom Indigenous status was not stated. ^e Rate difference is the age standardised Indigenous hospitalisation rate minus the other hospitalisation rate. These were calculated by the SCRGSP from AIHW data. ^f Rate ratio is the age standardised Indigenous hospitalisation rate divided by the other hospitalisation rate. These were calculated by the SCRGSP from AIHW data. ^g Includes diseases of the musculoskeletal system and connective tissue; neoplasms; diseases of the nervous system; certain conditions originating in the perinatal period; diseases of the ear and mastoid process; diseases of the eye and adnexa; diseases of the blood and blood forming organs and certain disorders involving the immune system; congenital malformations, deformations and chromosomal abnormalities; and factors influencing health status and contact with health services (except dialysis). ^h Includes hospitalisations for which no principal diagnosis was recorded.

Source: AIHW (unpublished) National Hospital Morbidity Database; table 4A.8.39.

After adjusting for the different age structures in the Indigenous and non-Indigenous populations, for 2008-09:

- Indigenous people were hospitalised for all conditions at 2.4 times the rate of other people, a difference of 507.8 per 1000 people. Excluding dialysis,

Indigenous people were hospitalised at 1.3 times the rate of other people, a difference of 85.7 per 1000 people (table 4.8.2)

- the greatest differences between hospitalisation rates for Indigenous and other people were for care involving dialysis (11.2 times the rate for other people), endocrine, nutritional and metabolic diseases (2.9 times the rate for other people), diseases of the respiratory system (2.6 times the rate for other people), and diseases of the skin and subcutaneous tissue (2.2 times the rate for other people) (table 4.8.2)
- Indigenous hospitalisation rates increased with remoteness for most conditions, while hospitalisation rates for other people remained similar across remoteness areas for most conditions, except for care involving dialysis which decreased with remoteness (table 4A.8.40)
- hospitalisation rates for Indigenous people for care involving dialysis increased with remoteness, from 320.3 per 1000 in major cities to 531.5 per 1000 in regional areas and 675.0 per 1000 in remote areas (table 4A.8.40).

The AIHW (2010) has assessed six jurisdictions (NSW, Victoria, Queensland, WA, SA and public hospitals in the NT) as having adequate identification of Indigenous people in hospitalisations data for all years from 2004-05 to 2008-09. Attachment tables 4A.8.35–39 compare hospitalisation rates by principal diagnosis for Indigenous and other people for the period 2004-05 to 2008-09. The ratio of Indigenous to other hospitalisation rates increased for all conditions (from 2.2 to 2.4) and for care involving dialysis (from 10.8 to 11.2) (table 4A.8.35–4A.8.39).

Between 2004-05 and 2008-09:

- hospitalisation rates of Indigenous people for all conditions increased from 757.4 per 1000 to 868.3 per 1000, but this varied across jurisdictions. Hospitalisations for all conditions excluding care involving dialysis increased from 371.9 per 1000 to 405.0 per 1000 (tables 4A.8.35–4A.8.39)
- hospitalisation rates for other people for all conditions increased from 339.0 per 1000 to 360.5 per 1000, and 303.4 per 1000 to 319.3 per 1000 for hospitalisations for all conditions excluding dialysis (tables 4A.8.35–4A.8.39)
- the gap in hospitalisation rates for all conditions between Indigenous and other people increased from 418.4 to 507.8 percentage points; and for all conditions excluding dialysis increased from 68.5 to 85.7 percentage points (tables 4A.8.35–39).

4.9 Household and individual income

Box 4.9.1 Key messages

- For people aged 18 years and over, after adjusting for inflation:
 - median (middle) household weekly income (adjusted for household composition) increased for Indigenous people from \$347 in 2002 to \$445 in 2008 (in 2008 dollars) (figure 4.9.1). Similar increases in incomes for non-Indigenous households meant a gap of \$300 per week remained unchanged between 2002 and 2008 (figure 4.9.2)
 - there was no significant change in median (middle) personal weekly income increased for Indigenous or non-Indigenous people from 2004-05 to 2008 (in 2008 dollars). In 2008, Indigenous people received lower median personal gross weekly income (\$400 per week) than non-Indigenous people (\$608 per week) (figure 4.9.5)
 - Indigenous people had lower median household (adjusted for household composition) and personal incomes than non-Indigenous people across all remoteness areas in 2008 (figure 4.9.3).

The extent to which income for Indigenous people is lower than for non-Indigenous people is an indicator of economic wellbeing and material disadvantage. Household and individual income is affected by outcomes in other indicators in this report, particularly those relating to education and economic participation and development.

The primary measures for this indicator are: mean and median

- gross weekly equivalised household income
- personal gross weekly 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 2010). 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 physical health (AIHW 2010).

Chapter 13 of this report discusses in more detail the association between low incomes and educational outcomes, labour force participation and employment, health risk behaviours (including smoking, risky to high risk alcohol consumption and illicit drug use), and other factors.

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 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.

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). Participation in income management was compulsory for recipients of income support payments in selected communities under the NTER program. Income management ensured that a proportion of a person's income support and family payments could be spent only on priority needs such as food, shelter and education and could not be used for alcohol, home brew kits, tobacco, pornography or gambling (FaHCSIA 2009). From 1 July 2010, a new model of income management was rolled out to cover the whole of the NT, not just the NTER communities. Income management in the NT applies to certain high risk groups, including disengaged youth and long-term welfare recipients, as well as people referred by NT child protection authorities (further information on the Child Protection Measure is included in section 8.4). For people with children, an exemption may be granted with evidence of responsible parenting activities such as regular child health checks, or sustained participation in age appropriate, social, learning or physical activities. For people without children, an exemption may be granted for full time study, employment for 15 hours per week over 26 weeks, or an apprenticeship.

Income management is currently operating in various trial locations across metropolitan Perth and the Kimberley in WA, in Cape York in Queensland, and across the whole of the NT.

Box 4.9.2 provides examples of some programs that have been successful in improving financial management skills for Indigenous people.

Box 4.9.2 ‘Things that work’ — income management/financial literacy

The **Cape York Family Income Management** (FIM) project (QLD) 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. 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 locals and overseen by a working group comprising representatives from each community, Australian Government agencies, Westpac, and Cape York Partnerships. Local facilitators and resource workers in each site assist families and individuals to negotiate budget and savings agreements, set up direct deductions from their accounts and provide bill-paying assistance.

- Participants have saved money via FIM arrangements through the Pride of Place program.
- Increasing numbers of participants have been able to purchase household items such as refrigerators, washing machines and air conditioners.

Families have been able to save money for school fees (FaHCSIA unpublished).

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.

A higher proportion of Indigenous people than non-Indigenous people had low incomes, and a lower proportion had high incomes, in 2008. 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.

The main sources of personal income are employment, assets and welfare payments. Levels of income are closely related to paid work (through salaries and wages), but for many people, government income support is the main source of income. In 2008, 40.4 per cent of Indigenous people aged 18–64 years received government pensions and allowances as their main source of personal cash income (figure 8.4.1). Individual income directly reflects the earning capacity of adults in the workforce, which in turn impacts on household income.

Data in this section are from the ABS National Aboriginal and Torres Strait Islander Social Survey 2008 (NATSISS 2008), which measures both personal and household gross (before tax) income. No adjustment is made for differences in the cost of living between different remoteness areas — for example, the cost of fresh food can be high in remote areas, however, rent in remote areas is, on average, less than half the rent levels in major cities.

Non-Indigenous data are taken from the NHS 2007-08, which allows for comparisons over time (between this and previous editions of the report) and remoteness areas. For reporting against the National Indigenous Reform Agreement (NIRA), the Steering Committee uses data derived from the ABS Survey of Education and Work for non-Indigenous people, which maintains consistency between reporting for the NIRA and other COAG National Agreements. Data from the Survey of Education and Work are not used here as they are not available by remoteness and are not suitable for time series comparison with non-Indigenous data for earlier years, which is an essential component of the analysis in this report.

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).

(Continued next page)

Box 4.9.3 (continued)

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 household income estimates in the NATSISS are adjusted by equivalence factors 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.

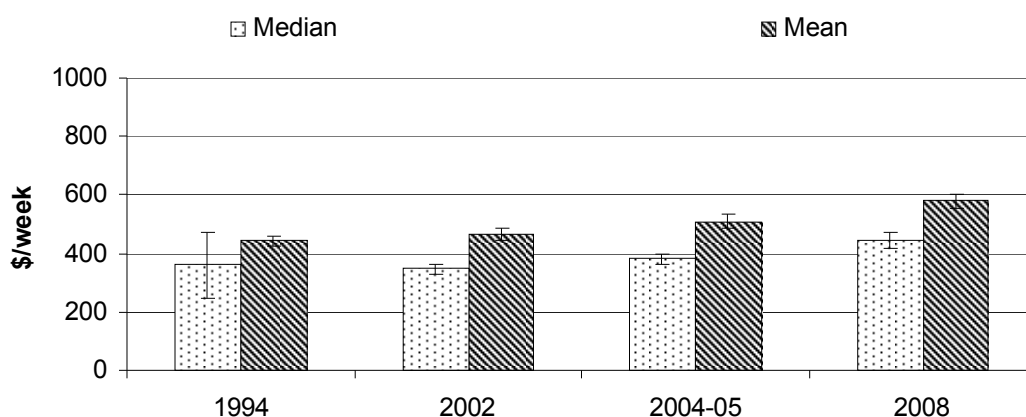
The measure used in this report for household income is gross weekly equivalised household (GWEH) income (box 4.9.3). Although GWEH income calculated for Indigenous people is adjusted for household size and composition, it may not adequately reflect the household circumstances of Indigenous people. Hunter, Kennedy and Smith (2003) found substantial differences in the family size and composition of 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.

Figure 4.9.1 presents data on median and mean real gross weekly equivalised household income (for more information on median and mean income measures, see box 4.9.3). Income data are adjusted for the effects of inflation, allowing for comparisons to be made between incomes in different years, by holding purchasing power constant. Median and mean income data in this section have been converted into 2008 dollars using the ABS consumer price index.

Figure 4.9.1 Median and mean equivalised gross weekly household income, Indigenous people aged 18 years and over, 1994, 2002, 2004-05 and 2008 (2008 dollars)^{a, b}



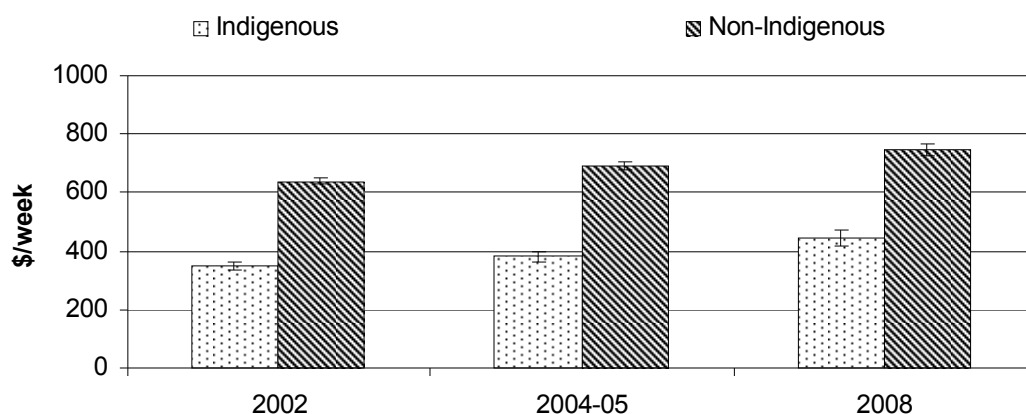
^a Adjusted for inflation using the Consumer Price Index for the June quarter 1994, the December quarter 2002, the March quarter 2004-05. ^b Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information).

Source: ABS (unpublished) NATSIS 1994; ABS (unpublished) NATSISS 2002; ABS (unpublished) NATSIHS 2004-05; ABS (unpublished) NATSISS 2008; ABS *Consumer Price Index, Australia*, Cat. no. 6401.0; table 4A.9.1.

For Indigenous people aged 18 years and over:

- the level of mean GWEH income received increased between 1994 and 2008, from \$422 per week to \$580 per week (in 2008 dollars) (figure 4.9.1)
- the level of median GWEH income received increased between 2002 and 2008, from \$347 per week to \$445 per week (in 2008 dollars) (figure 4.9.1).

Figure 4.9.2 **Median equivalised gross weekly household cash income, people aged 18 years and over, 2002, 2004–05 and 2008 (2008 dollars)^{a, b}**



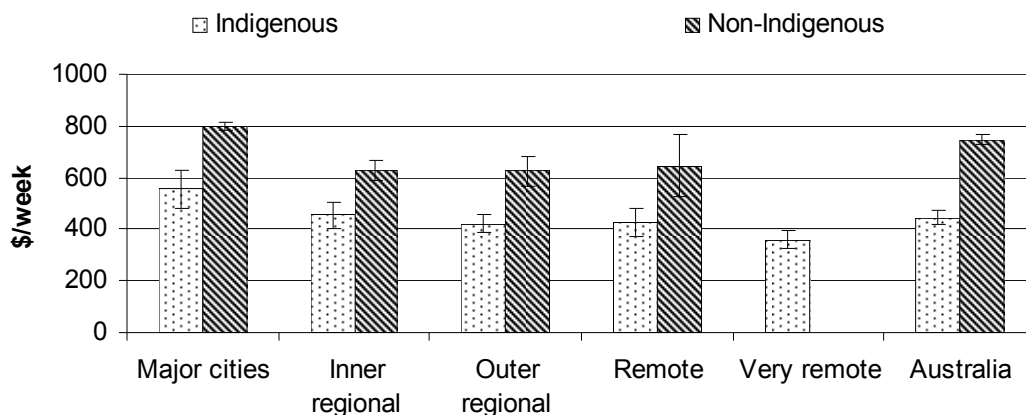
^a Adjusted for inflation using the Consumer Price Index for the December quarter 2002 and the March quarter 2004-05, and the December quarter 2008. ^b Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information).

Source: ABS (unpublished) NATSISS 2002; ABS (unpublished) GSS 2002; ABS (unpublished) NHS 2004–05; ABS (unpublished) NATSIHS 2004–05; ABS (unpublished) NATSISS 2008; ABS (unpublished) NHS 2007–08; ABS *Consumer Price Index, Australia*, Cat. no. 6401.0; table 4A.9.2.

Between 2002 and 2008 (in 2008 dollars), for people aged 18 years and over:

- median GWEH incomes increased for both Indigenous households (from \$347 per week to \$445 per week) and non-Indigenous households (from \$640 per week to \$746 per week) (figure 4.9.2)
- there was no significant change in the gap between Indigenous and non-Indigenous median GWEH incomes (figure 4.9.2).

Figure 4.9.3 Median equivalised gross weekly household cash income, people aged 18 years and over, 2008^a



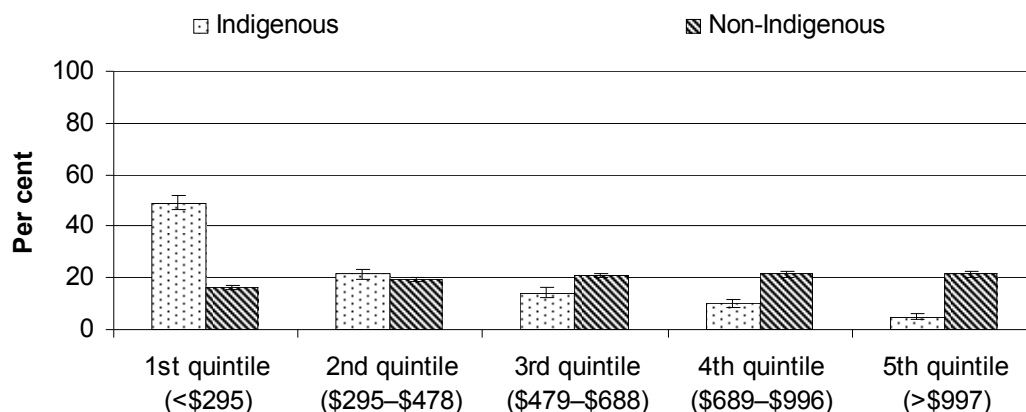
^a Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information).

Source: ABS (unpublished) NATSISS 2008; ABS (unpublished) NHS 2007-08; table 4A.9.2.

In 2008, for people aged 18 years and over:

- Indigenous people had lower median GWEH incomes than non-Indigenous people across all remoteness areas (figure 4.9.3)
- nationally, Indigenous people's median GWEH income was \$300 per week less than that of non-Indigenous people (\$445 per week and \$746 per week, respectively) (figure 4.9.3)
- both Indigenous and non-Indigenous median GWEH incomes were highest in major cities (\$556 per week and \$800 per week, respectively) (figure 4.9.3).

Figure 4.9.4 Distribution of equivalised gross weekly household incomes, people aged 18 years or over, 2008^{a, b}



^a The income quintiles shown here 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 Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information).

Source: ABS (unpublished) NATSISS 2008; ABS (unpublished) NHS 2007-08; table 4A.9.3.

In 2008, for people aged 18 years and over:

- the proportion of Indigenous people with a GWEH income in the quintile was three times the proportion of non-Indigenous households (with 49.2 per cent compared with 16.3 per cent) (figure 4.9.4)
- the proportions of Indigenous people with a GWEH income in the third, fourth and fifth quintiles were significantly lower than the corresponding proportions of non-Indigenous people (with 4.9 per cent of Indigenous people receiving income in the fifth quintile, compared to 21.4 per cent of non-Indigenous people) (figure 4.9.4).

Box 4.9.4 Income distribution measures

The distribution of household income is a measure 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.

(Continued next page)

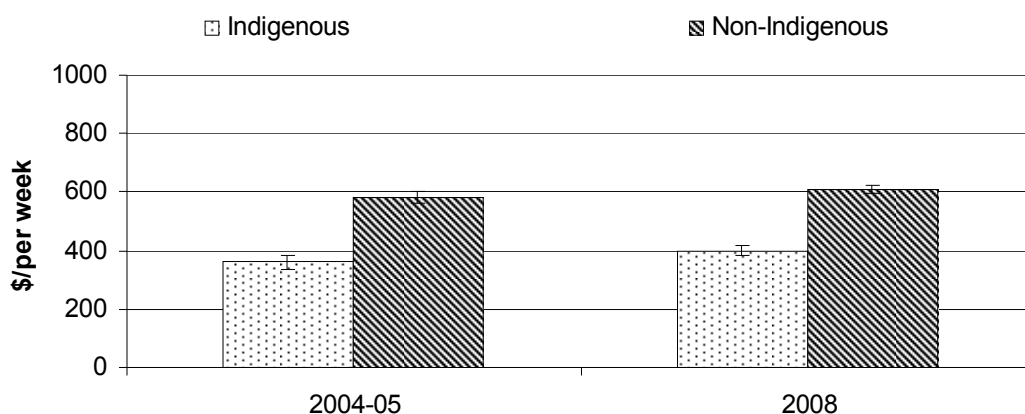
Box 4.9.4 (Continued)

Income quintiles are used to define the boundaries of income ranges shown in this report. 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 ABS NHS 2007–08.

Personal individual income

Figure 4.9.5 **Median personal gross weekly income, people 18 years or over, 2004-05 and 2008 (2008 dollars)^{a, b}**



^a Adjusted for inflation using the Consumer Price Index for the March quarter 2004-05 and December quarter 2008. ^b Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information).

Source: ABS (unpublished) NHS 2004–05; ABS (unpublished) NATSIHS 2004–05; ABS (unpublished) NATSISS 2008; ABS (unpublished) NHS 2007–08; ABS *Consumer Price Index, Australia*, Cat. no. 6401.0; table 4A.9.5.

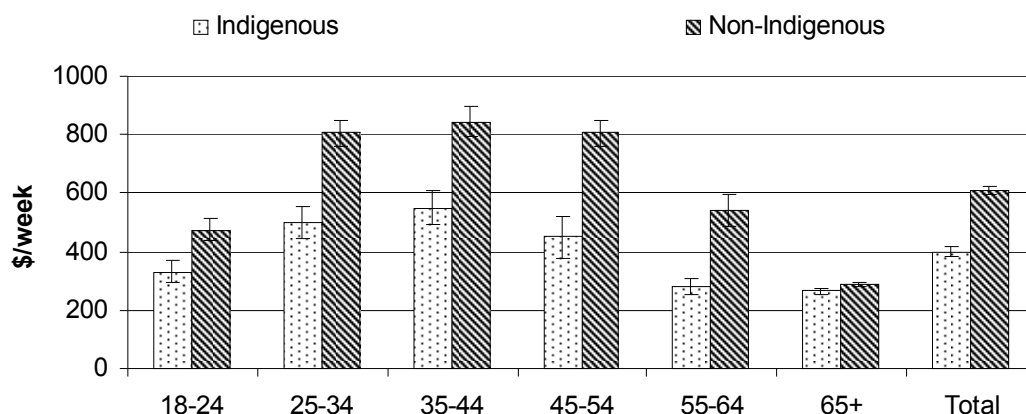
Between 2004–05 and 2008 (in 2008 dollars), for people aged 18 years and over:

- there was no significant change to Indigenous and non-Indigenous median personal gross weekly incomes (figure 4.9.5)

In 2008, for people aged 18 years and over:

- Indigenous people received lower median personal gross weekly income (\$400 per week) than non-Indigenous people (\$608 per week) (figure 4.9.5).

Figure 4.9.6 **Median personal gross weekly income, people 18 years or over, 2008^a**



^a Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information).

Source: ABS (unpublished) NATSISS 2008; ABS (unpublished) NHS 2007-08; ABS *Consumer Price Index, Australia*, Cat. no. 6401.0; table 4A.9.5.

In 2008:

- Indigenous people had lower median personal gross weekly income than non-Indigenous people across all age groups (figure 4.9.6)
- the gap in personal earnings between Indigenous and non-Indigenous people was highest for those aged 45–54 years old (\$450 per week compared with \$805 per week) (figure 4.9.6).

4.10 Substantiated child abuse and neglect

Box 4.10.1 Key messages

- The substantiation rate for Indigenous children aged 0–16 years (37.1 per 1000 children) was 7.4 times the rate for non-Indigenous children (5.0 per 1000 children) in 2009-10 (figures 4.10.1 and 4.10.2).
- The substantiation rate for Indigenous children increased from 14.8 to 37.1 per 1000 children between 1999-2000 and 2009-10, while the rate for non-Indigenous children increased from 4.2 to 5.0 per 1000 children, leading to a significant increase in the gap (figure 4.10.1).
- In 2010, 48.3 per 1000 Indigenous children aged 0–17 years were on care and protection orders, compared to 5.4 per 1000 non-Indigenous children (table 4.10.1).

The need for child protection can be indicative of Indigenous disadvantage across several key indicators.⁹ Indigenous families are more likely than non-Indigenous families to face the challenges of raising children in sub-standard living conditions, lacking essential infrastructure and services to secure their children's safety and wellbeing (Bamblett, Bath and Roseby 2010).

The primary measure for this indicator is the proportion of Indigenous children who were the subject of substantiated child protection notifications and/or care and protection orders (compared with non-Indigenous children). These data should be interpreted with caution, as numbers of substantiations can be affected by service levels and propensity to report, as well as underlying rates of child abuse or neglect. This section also includes data on the related measures: placement in accordance with the Aboriginal Child Placement Principle, and diagnoses of sexually transmitted infections (STIs) in children.

Child abuse and neglect has become an issue of national concern. On 30 April 2009, COAG endorsed *Protecting Children is Everyone's Business: National Framework for Protecting Australia's Children 2009–2020*, a national initiative to address child protection issues, with an emphasis on prevention (COAG 2009). The framework follows a number of independent State and Territory inquiries into child welfare over the past decade.

Generally speaking, the inquiries have concluded the following:

- rates of child abuse are higher in Indigenous than non-Indigenous communities
- diversity and complexity of family and household structures means that non-Indigenous people are also victims and perpetrators of child abuse in Indigenous households
- factors contributing to child abuse and neglect include: ongoing identification with the stolen generation through immediate and/or extended family personal experiences, and the loss of cultural identity and control. This can be further compounded by poor health, alcohol and drug use, unemployment, poor education, and overcrowded housing
- rates of non-disclosure of child abuse can be higher in Indigenous than non-Indigenous communities due to fears the child may be removed from the community; mistrust in agencies governing child protection services; a lack of

⁹ Key indicators potentially influencing child abuse and neglect include employment (section 4.6); family and community violence (section 4.11); maternal health (section 5.1); teenage birth rate (section 5.2); access to primary health care (section 7.1); overcrowding in housing (section 9.1); alcohol consumption and harm (section 10.3); and drug and other substance use and harm (section 10.4).

understanding about what constitutes child abuse; and geographic isolation (Bamblett, Bath and Roseby 2010; Higgins 2010; Willis 2011).

Experiencing maltreatment as a child can be a risk factor for later involvement in the criminal justice system (Griffith University 2002; see section 4.12 ‘Imprisonment and juvenile detention rates’).¹⁰ This link may be explained by intervening risk factors, such as substance misuse (sections 10.3 and 10.4), mental health problems (section 7.7), school difficulties (sections 4.4, 4.5, 6.1, 6.3, 6.4 and 6.5), negative peer networks, and running away from home (Bender 2010).

Substantiated child protection notifications

Child protection data show how many children can come into contact with child protection services, and these data are the only data routinely collected in Australia on the number of children experiencing child abuse and neglect. Different definitions of what constitutes child abuse and neglect in each State and Territory mean that it is difficult to obtain consistent and comparable national data (Lamont 2011). As many cases of child abuse and neglect are not disclosed to authorities, the data do not reliably indicate how many Indigenous children are abused or neglected in any given year (Berlyn and Bromfield 2010). The likelihood that cases are reported may vary over time, hence time series data should be interpreted with caution.

Children can come into contact with State and Territory child protection services in various ways, including reports of concerns about a child’s maltreatment or living conditions made by the child, community members, mandated professionals, organisations, and family or relatives (AIHW 2011).

Before a matter is considered ‘substantiated’ by authorities, it must first be notified and investigated. A notification will be substantiated where it is concluded that the child has been, is being, or is likely to be, abused, neglected or otherwise harmed. Although 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 2011).

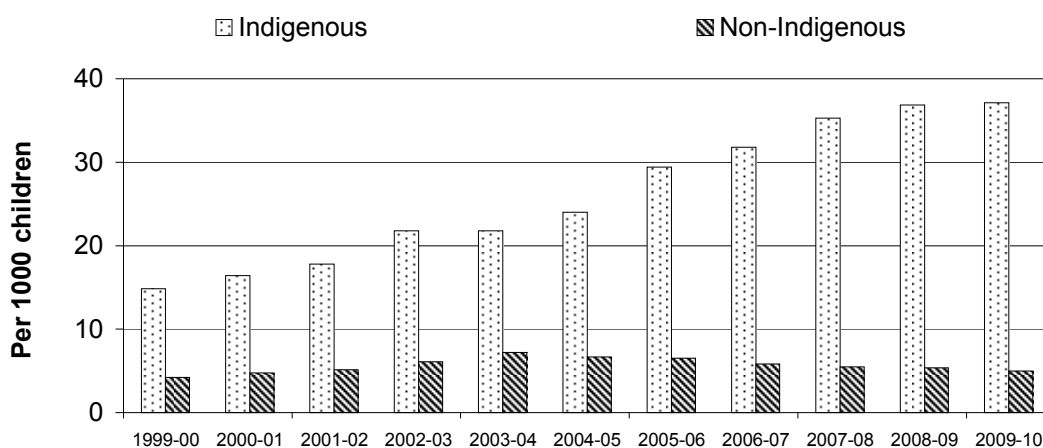
Increases in the proportion of Indigenous children in the child protection system over time may be due to improvements in the identification of Indigenous children

¹⁰ See section 10.6 ‘Repeat offending’ for an updated analysis of the Griffith University study.

and/or increases in the number of Indigenous children requiring protection (Holzer and Bromfield 2008; AIHW 2011). Improved community awareness of child abuse and neglect may also lead to increases in children coming into contact with child protection systems.

Government expenditure on child protection may 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 \$921.3 million from 2005-06 to 2009-10 (an average annual increase over the four year period of 11.9 per cent) (SCRGSP 2011).

Figure 4.10.1 Rate per 1000 children aged 0–16 years who were the subject of substantiations^{a, b}



^a Non-Indigenous includes children for whom Indigenous status was 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.10.2.

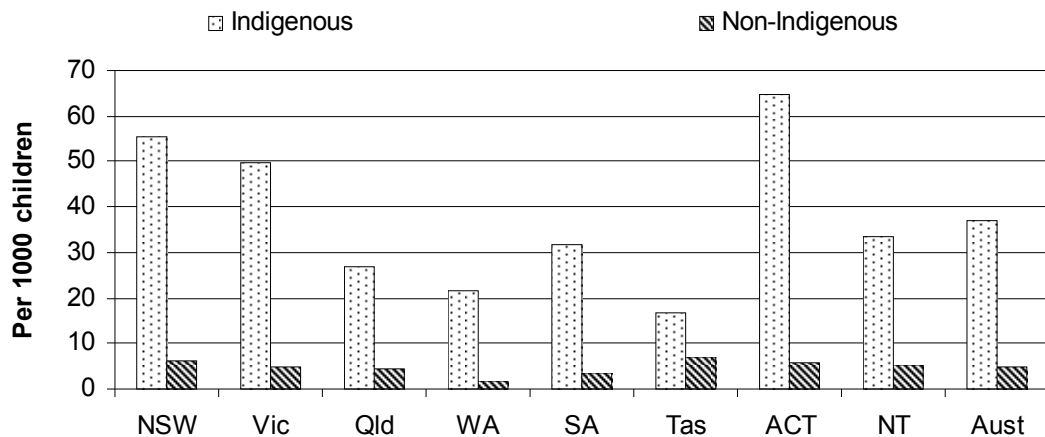
From 1999-2000 to 2009-10, for children aged 0–16 years:

- the substantiation rate for Indigenous children increased from 14.8 to 37.1 per 1000 children (figure 4.10.1).
- the rate for non-Indigenous children increased from 4.2 to 5.0 per 1000 children (figure 4.10.1).
- the difference between the rates of Indigenous and non-Indigenous children subject to substantiations has increased significantly (from 10.6 to 32.1 per 1000 children).

Attachment table 4A.10.2 includes the number and rates of substantiations for children aged 0–16 years by State and Territory for 1999-2000 to 2009-10.

From 2009-10, substantiations were recorded for children aged 0–17 years and are shown in table 4A.10.1.

Figure 4.10.2 Rate per 1000 children aged 0–16 years who were the subject of substantiations, 2009-10^{a, b, c}



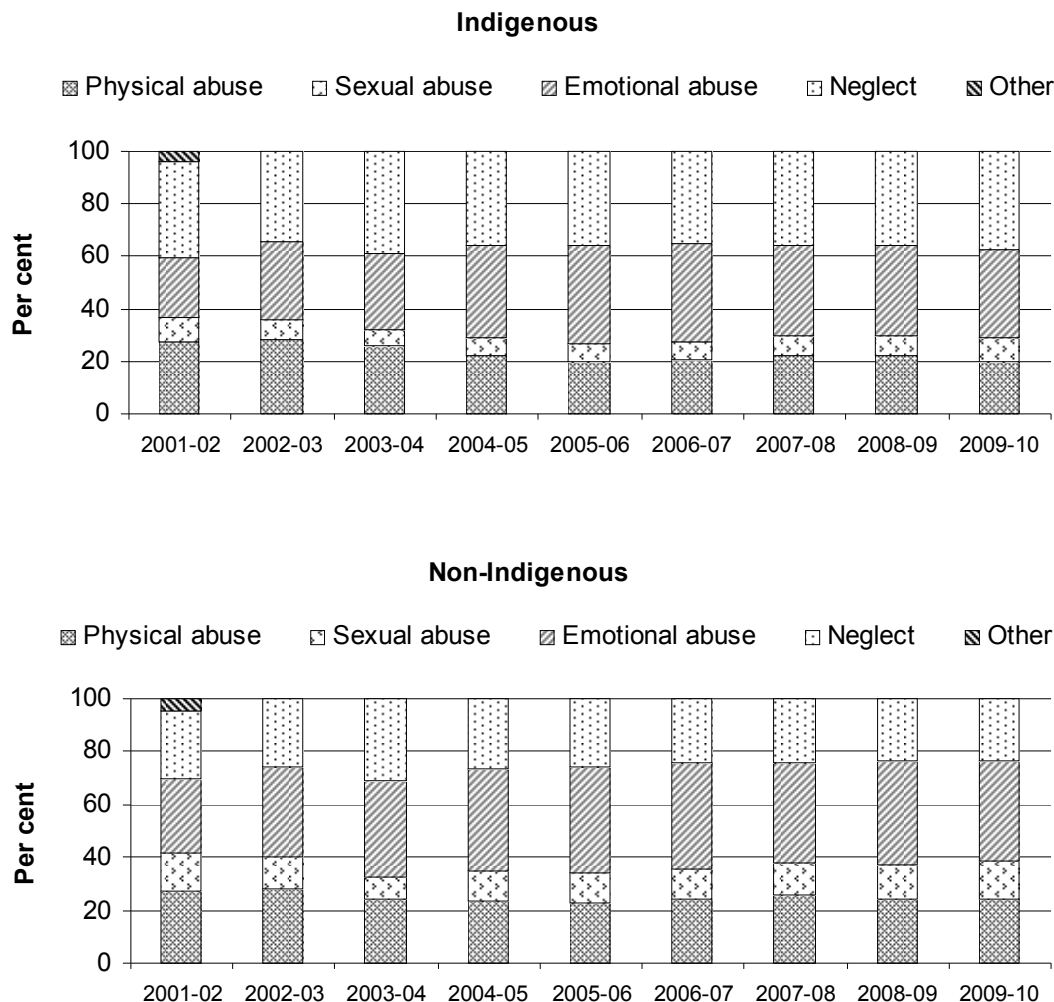
^a Non-Indigenous includes children for whom Indigenous status was not stated. ^b Rates of children in substantiations were calculated as the number of children aged 0–16 years in each category (including those whose age was not stated) divided by the estimated population of children aged 0–16 years at 31 December, multiplied by 1000. ^c Differences in substantiation rates between States may reflect differences in each jurisdiction’s legal and service frameworks.

Source: AIHW (unpublished), derived from *Child Protection Notifications, Investigations and Substantiations, Australia* data collection; table 4A.10.2.

In 2009-10, for children aged 0–16 years:

- nationally, Indigenous children were subject to a substantiation at 7.4 times the rate of non-Indigenous children (figure 4.10.2)
- the substantiation rate for Indigenous children was higher than the rate for non-Indigenous children in all jurisdictions (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, e}



^a Non-Indigenous includes children for whom Indigenous status was not stated. ^b If a child was the subject of more than one type of abuse or neglect as part of the same notification, then the abuse and/or neglect is the one considered by the child protection workers to cause the most harm to the child. Where a child is the subject of more than one substantiation during the year, then the type of abuse reported in this table is the type of abuse and/or neglect associated with the first substantiation decision during the year. ^c In 2001-02, the category 'other' was used in NSW and comprised children identified as being at high risk but with no identifiable injury; Queensland data relate 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. ^e Increases in emotional abuse may be due in part to the widening definition of emotional abuse, for example, including children who have witnessed domestic violence (Holzer and Bromfield 2008).

Source: AIHW (unpublished), derived from *Child Protection Notifications, Investigations and Substantiations, Australia* data collection; table 4A.10.4.

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).

In 2009-10:

- neglect (37.6 per cent) was the most common reason for substantiation for Indigenous children aged 0–16 years, followed by emotional abuse (33.7 per cent), physical abuse (20.0 per cent) and sexual abuse (8.7 per cent) (figure 4.10.3).
- emotional abuse (38.1 per cent) was the most common reason for substantiation for non-Indigenous children aged 0–16 years, followed by physical abuse (23.9 per cent), neglect (23.1 per cent) and sexual abuse (14.8 per cent) (figure 4.10.3).
- substantiation rates were higher for Indigenous children than non-Indigenous children for all types of abuse and neglect (table 4A.10.4).

From 2001-02 to 2009-10:

- the proportions of substantiations for Indigenous children aged 0–16 years remained fairly constant for neglect and sexual abuse, while the proportion due to physical abuse decreased (from 27.5 per cent to 20 per cent), and the proportion due to emotional abuse increased (22.6 per cent to 33.7 per cent) (figure 4.10.3).

Data on substantiation rates per 1000 children by type of abuse or neglect are available in table 4A.10.4, nationally and by State/Territory.

Between 2006-07 and 2009-10:

- substantiation rates for Indigenous children aged 0–16 years increased for physical abuse (from 7.0 to 7.4 per 1000), sexual abuse (from 2.5 to 3.2 per 1000) and neglect (from 12.0 to 13.9 per 1000), while remaining relatively constant for emotional abuse (around 12.6 per 1000) (table 4A.10.4)
- substantiation rates for non-Indigenous children aged 0–16 years decreased for physical abuse (from 1.5 to 1.2 per 1000), emotional abuse (from 2.4 to 1.9 per 1000) and neglect (from 1.4 to 1.2 per 1000), while remaining constant for sexual abuse (0.7 per 1000) (table 4A.10.4).

For 2008-09 and 2009-10, data by type of abuse or neglect are also available for children aged 0-17 years (table 4A.10.3).

Children on care and protection orders

Once a notification of child abuse and neglect has been substantiated, the authorities have a number of options available, including: family conferencing; supervision and support; referral to other services; or a care and protection order.

A care and protection order involves a court order for protective reasons, and is used as a last resort. Recourse to court usually occurs if the family is not engaging with the relevant agency over a period of time or the removal of a child to out-of-home care requires legal authorisation (AIHW 2011). Some children are on care and protection orders for reasons other than abuse or neglect; for example, where there is irretrievable breakdown in the relationships in the family. However, data on care and protection orders do provide some insight into the most serious and/or long term instances of child abuse and neglect.

Although the care and protection orders that can be issued vary across States and Territories, five general categories are applicable at a national level:

- *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 (AIHW 2011).

Table 4.10.1 provides information on the five general categories of care and protection orders listed above. See AIHW (2011) for more information on the variations across states and territories in the types of care and protection orders that can be issued.

Table 4.10.1 Children (0–17 years) on care and protection orders, 30 June 2010^{a, b}

	Number of children			Rate per 1000 children			Ratio Indigenous to Non-Indigenous
	Indigenous	Non-Indigenous	Total	Indigenous	Non-Indigenous	Total	
NSW	4 555	10 132	14 689	64.4	6.5	9.0	10.0
Victoria	948	5 549	6 515	62.4	4.6	5.3	13.7
Queensland	2 969	5 118	8 090	42.4	5.0	7.4	8.4
WA	1 525	1 906	3 432	49.1	3.8	6.4	13.0
SA	631	1 877	2 543	50.1	5.5	7.1	9.2
Tasmania	157	955	1 112	18.9	8.6	9.4	2.2
ACT	159	492	653	82.5	6.3	8.2	13.0
NT	507	186	696	18.6	5.2	11.1	3.6
Australia	11 451	26 215	37 730	48.3	5.4	7.4	9.0

^a Total includes children for whom Indigenous status was not stated. ^b Rates of children on care and protection orders were calculated as the number of children aged 0–17 years (including those whose age was not stated) who were on a care and protection order at 30 June, divided by the estimated population aged 0–17 years at 31 March.

Source: AIHW (unpublished), derived from *Children on Care and Protection Orders, Australia* data collection; table 4A.10.5.

As at 30 June 2010:

- 48.3 per 1000 Indigenous children aged 0–17 years were on care and protection orders compared to 5.4 per 1000 non-Indigenous children (table 4.10.1).

From 2000 to 2010:

- the rate of Indigenous children aged 0–17 years on care and protection orders increased from 19.9 to 48.3 per 1000 children; for non-Indigenous children the rate increased from 3.3 to 5.4 per 1000 children (table 4A.10.5).

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, and has been endorsed by all Australian states and territories (Richardson, Irenyi and Horsfall 2010). The 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. In most cases, children in out-of-home care will also be subject to a care and protection order (AIHW 2011).

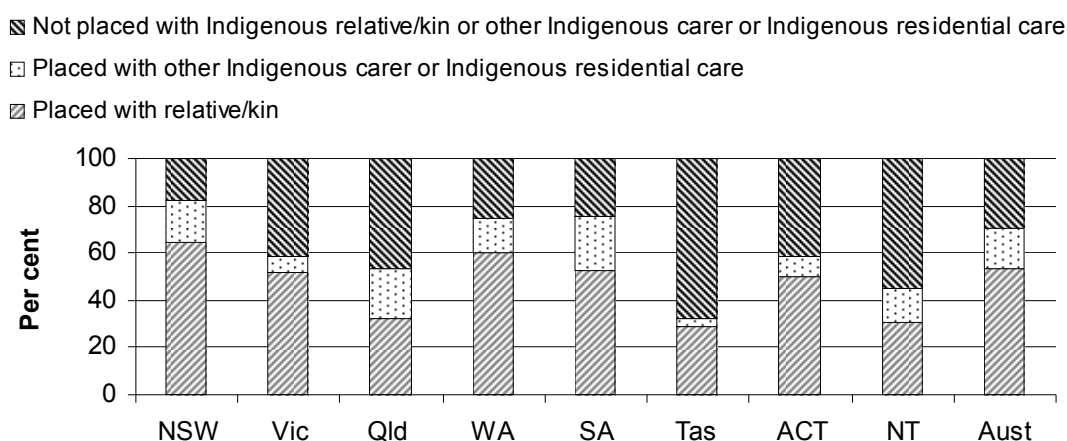
According to the Aboriginal Child Placement Principle (NLRC 1997), the following hierarchy or placement preference should be pursued in protecting the safety and welfare of Indigenous children:

- 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.

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 in figure 4.10.4 show the proportions of children placed (i) with relative/kin, (ii) with another 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 2010^{a, b, c, d}



^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 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.10.6.

As at 30 June 2010:

- the proportion of Indigenous children in out-of-home care who were placed with ‘Indigenous or non-Indigenous relatives or kin’ or with ‘other Indigenous carer or in Indigenous residential care’ varied across jurisdictions (figure 4.10.4).
- nationally, Indigenous children were ‘placed with a relative/kin’ or ‘other Indigenous carer or Indigenous residential care’ at twice the rate of ‘not placed with Indigenous relative/kin or other Indigenous carer or Indigenous residential care’ (figure 4.10.4).

Diagnoses of sexually transmitted infection in children

Much negative attention has focused on the occurrence of sexually transmitted infections among young Indigenous people and its relationship to child sexual assault. While sexually transmitted infections are likely indicative of child sexual assault in younger children, a significant proportion of sexually transmitted infections among Indigenous people in the 5–14 year age group may be the result of early sexual debut and/or sex with peer-aged partners (NCHECR 2010b). Rates are also likely to be affected by both overall infection rates in each population and awareness and use of preventative measures (in 2009, per 100 000 population, Indigenous people had rates of chlamydia and infectious syphilis that were 4 to 5 times the rate for non-Indigenous people and rates of gonorrhoea that were 37 times the rate for non-Indigenous people) (NCHECR 2010a).

Notifications of sexually transmitted infections 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 and rate of diagnoses of chlamydia, gonorrhoea and syphilis in children by age group, 2005–09^{a, b, c}

	Number of children		Rate per 100 000 children	
	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous
Children aged 0–4 years				
Chlamydia	14	99	21.7	8.00
Gonorrhoea	30	12	46.6	1.0
Syphilis	1	2	1.6	0.2
Total	45	113	69.9	9.1
Children aged 5–14 years				
Chlamydia	695	554	535.3	21.2
Gonorrhoea	777	75	598.5	2.9
Syphilis	31	7	23.9	0.3
Total	1503	636	1157.7	24.4

^a Data for children aged 0–4 years 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, Tasmania and the NT); gonorrhoea (Victoria, Queensland, WA, SA, Tasmania and the NT); and infectious syphilis (all jurisdictions except the ACT). ^c Includes diagnoses in people whose Indigenous status was not reported.

Source: NNDSS published in NCHECR (2010a); 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; table 4A.10.7.

For the period 2005–09:

- both 0–4 year old and 5–14 year old Indigenous children had much higher rates of chlamydia, gonorrhoea and syphilis than non-Indigenous children (table 4.10.2)
- Indigenous children aged 0–4 years had much lower rates of sexually transmitted infection than Indigenous children aged 5–14 years (table 4.10.2).

4.11 Family and community violence

Box 4.11.1 Key messages

- A higher proportion of Indigenous people (19.5 per cent in 2008) than non-Indigenous people (10.8 per cent in 2006) aged 18 years and over had been a victim of physical or threatened violence in the previous 12 months (table 4A.11.1).
- The proportion of Indigenous people who had experienced physical or threatened violence in the previous 12 months did not change significantly between 2002 and 2008 (table 4A.11.4).
- After taking into account the different age structures of the populations:
 - in 2008-09, hospitalisation rates for injuries caused by assault were much higher for Indigenous men (seven times as high) and women (31 times) as for other Australian men and women (table 4A.11.8)
 - in remote areas, Indigenous people were hospitalised as a result of family violence at 35.6 times the rate of other people in 2008-09 (table 4A.11.7).

There is no primary measure for this indicator. This section provides data on measures that, in combination, inform our understanding of Indigenous and non-Indigenous people's experience of family and community violence, including:

- incidence and prevalence of violence (survey data)
- victims of assault and other violence (including data on the relationship between victim and perpetrator) (police data)
- associated harm (deaths resulting from family and intimate partner violence, and hospitalisations for family violence related and other assault)
- services for victims of violence (persons accessing the Supported Accommodation Assistance Program (SAAP) because of family violence).

Since the *Little Children are Sacred* report (Anderson and Wild 2007) was published, the body of literature on violence in Indigenous communities has grown exponentially. Some reports show that violence and abuse is so prevalent in some communities that the people who live there regard it as inevitable (Willis 2011) and a 'language of minimisation' — describing instances of violence as everyday or innocuous — is used in communities to avoid confrontation or aggravate the situation (Cripps 2010).

Family and community violence problems are interrelated with other social, economic and environmental problems (Clapham, Stevenson and Lo 2006; Matthews 1997; Stanley 2005). While some of these relationships are not unique to Indigenous communities, others are (Bryant 2009; Willis 2011). Alcohol and

substance use are known to contribute significantly to violence in Indigenous communities (HREOC 2006; Gordon, Hallahan and Henry 2002; Memmott et al. 2001; Meuleners et al. 2010; Mouzos 2001; Weatherburn, Snowball and Hunter 2006; Wundersitz 2010). Sections 10.3 and 10.4 provide information on the role of alcohol and drug and substance misuse in Indigenous homicides.

Historical factors — such as the impact of colonisation, dispossession of land, removal from family, contact with the criminal justice system and being subject to violence as a child — also increase the likelihood of being a victim of violence (Bryant and Willis 2008; Bryant 2009; Cripps 2010). In remote areas, Indigenous mothers who had been removed from their natural families during childhood had nearly three times the risk of being victims of violence as Indigenous mothers who had not been removed from their natural families (Cripps et al. 2009).

The safety and wellbeing of children is particularly at risk in families that experience violence or substance misuse. Bromfield et al. (2010) explained how domestic violence, poor mental health and substance misuse affect parenting behaviour. 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), and 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). Section 4.10 provides information about the abuse and neglect of Indigenous children.

Indigenous women, young Indigenous females and Indigenous children are more vulnerable and more likely to be victims of violence than any other section of Australian society (ILC 2010). However, Indigenous women of older maternal age and women with partners residing in the household faced a lower likelihood of violence than other Indigenous women (Cripps et al. 2009).

The *National Plan to Reduce Violence Against Women and their Children 2010–2020* (COAG 2010) acknowledges there is no nationally agreed definition of domestic or family violence. To some, domestic violence implies violence by an intimate partner or member of the immediate family. However, 'family violence' can also be used to identify a broad range of marital and kin relationships in which violence may occur — aunts, uncles, grandparents, cousins and others in the wider community, as is the experience of many Indigenous people (HREOC 2008; Macdonald 2001). The United Nations (1993) Declaration on the Elimination of Violence against Women defines violence against women as 'any act of gender-based violence that results in, or is likely to result in, physical, sexual or psychological harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or private life.'

The lack of a nationally agreed definition and inconsistency in methods of data collection affect the quality and comparability of data on family violence (Cripps 2008; Cripps 2010; Hardman 2010; NSW LRC and ALRC 2010; Wundersitz 2010). In addition, existing sources of data do not capture the extent of family and community violence as they only include data on reported violence. For many reasons, not all victims report violence or seek assistance (Cripps 2010; Willis 2010; Willis 2011).

Some initiatives that may have contributed to a reduction in family and community violence are described in box 4.11.2. Programs that reduce alcohol misuse can help reduce violent behaviour in Indigenous communities (see section 10.3). Programs that reduce the involvement of Indigenous people in the criminal justice and corrections systems or that lower rates of re-offending can also contribute to reducing violent crime (see sections 4.12, 10.5 and 10.6).

Box 4.11.2 ‘Things that work’ — reducing violence in Indigenous communities

The Cross Borders Remote Area Program (SA, WA and NT) runs four week courses for men addressing the incidence of physical and psychological harm in Aboriginal communities of Central Australia. Course content includes anger management, substance misuse, motivation, controlling behaviours, personal change planning, and ways of speaking and listening and fathering. The program began in January 2007 and has been run 33 times in 12 communities, with 208 completions out of 314 participants (181 mandated by departments of Corrections and 27 volunteer completions). The Cross Borders Remote Area Program is now training other services to run the program (G. Pearce pers. comm. 2011; Shaw and Brooks 2009).

Aboriginal Women Against Violence (NSW) is a safe space in which Aboriginal and Torres Strait Islander women in the Liverpool and Campbelltown areas learn to become trainers, mentors and advocates against violence in their own communities. Since 2008, five mentor programs have been run, training 56 women. The program introduces participants to local services, and provides pathways for women to commence further education and find employment. The project has increased participants’ ability to identify domestic violence and reject it as illegal and unacceptable, and also increased cultural awareness among support services and built trust between Aboriginal women and service providers (M. Rawsthorne pers. comm. 2011; Rawsthorne 2010).

The **Through Young Black Eyes Workshop Kit** (national) raises awareness about the effects of family violence and abuse and neglect of children. The Kit was developed following the success of the book, *Through Black Eyes* (Sam 1991) and the *Through Young Black Eyes Handbook* — now in its third edition.

(Continued next page)

Box 4.11.2 (Continued)

The Kit includes information, activity ideas and other resources that are used to run workshops throughout Australia. Over 1100 copies have been distributed, including over 600 to child and family services working with Aboriginal or Torres Strait Islander children and families, including community patrols. The Workshop Kit is easily accessible (www.snaicc.asn.au).

The Through Black Eyes series has been widely referenced in parliamentary debate and literature about Indigenous family issues and domestic violence, and the NT National Emergency Response Bill 2007.

Prevalence of violence

Survey data provide the best estimates of the prevalence of violence. The ABS National Aboriginal and Torres Strait Islander Social Survey 2002 and 2008, National Aboriginal and Torres Strait Islander Social Survey 1994 and the General Social Survey 2002 and 2006 collected data on people's experience of physical or threatened violence. The data presented here include general assault and perceptions of safety (such as the threat of racial violence) in addition to family violence.

After adjusting for the different age profiles of the two populations, for Indigenous people aged 18 years and over in 2008 and non-Indigenous people aged 18 years and over in 2006:

- a higher proportion of Indigenous people (19.5 per cent) than non-Indigenous people (10.8 per cent) had been a victim of physical or threatened violence in the previous 12 months (table 4A.11.1)
- 19.2 per cent of Indigenous women had experienced physical or threatened violence in the previous 12 months, compared with 8.2 per cent of non-Indigenous women (table 4A.11.1).

Using non-age-standardised data for Indigenous people aged 18 years and over in 2008, and for non-Indigenous people aged 18 years and over in 2006:

- Indigenous people in all remoteness areas had been a victim of physical or threatened violence in the previous 12 months at around twice the rate for non-Indigenous people (table 4A.11.2)
- the proportion of Indigenous people (25.4 per cent) who felt unsafe or very unsafe walking alone in the local area after dark was greater than the proportion of non-Indigenous people (17.9 per cent) (table 4A.11.3).

Between 2002 and 2008:

- the proportion of Indigenous people who had been a victim of physical or threatened violence in the previous 12 months did not change significantly (23.3 per cent and 22.9 per cent, respectively) (table 4A.11.4).

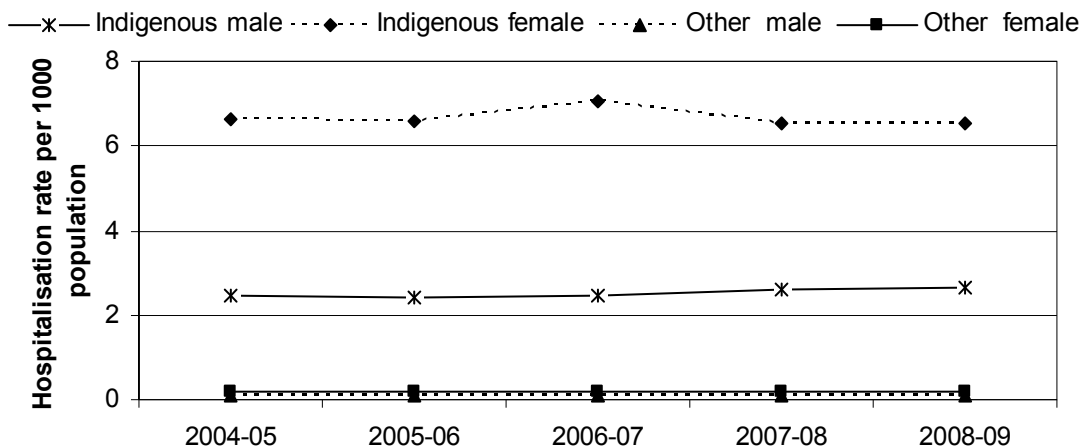
Additional data on people's experience of physical or threatened violence (including data for Indigenous people in 1994 based on a slightly different question), feelings of safety and community and neighbourhood problems are included in tables 4A.11.1–5.

Associated harm

Hospitalisations for assault

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.

Figure 4.11.1 Hospitalisation rate for family violence related assaults, per 1000 population, NSW, Victoria, Queensland, WA, SA, and public hospitals in the NT^{a, b, c, d, e, f}



^a Data are from public and most private hospitals. Data exclude private hospitals in the NT. ^b Family violence related assaults include assaults by a spouse/domestic partner, parent or other family member. ^c Data based on state/territory of usual residence of the patient hospitalised. ^d Data are reported for the following jurisdictions: NSW, Victoria, Queensland, WA, SA and NT. These six jurisdictions are considered to have acceptable quality of Indigenous identification in hospitalisation data. ^e 'Other' Includes hospitalisations where Indigenous status was recorded as Non-Indigenous or not stated. ^f Rates per 1000 population, directly age standardised using the 2001 Australian population.

Source: AIHW National Hospital Morbidity Database (unpublished); table 4A.11.6.

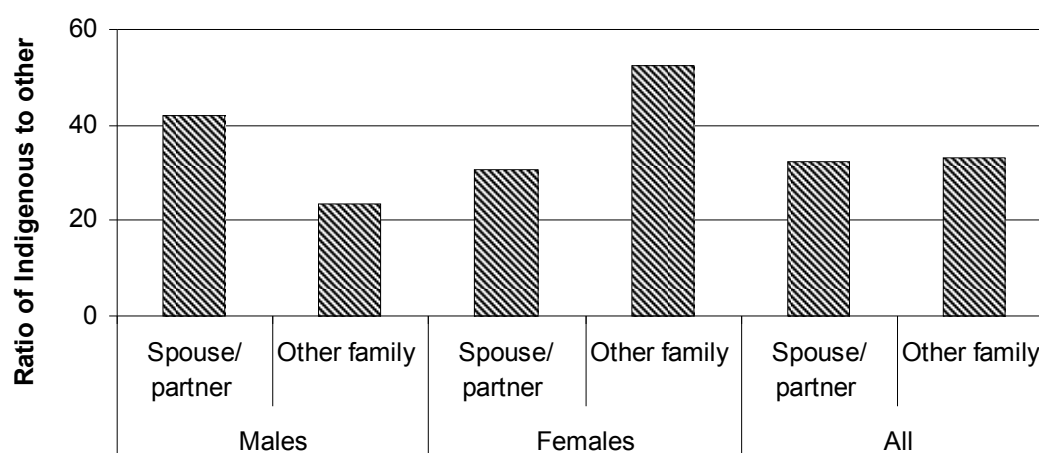
In 2008-09, after adjusting for the different age structures of the Indigenous and other populations:

- Indigenous females were hospitalised for non-fatal family violence assault (6.5 per 1000 Indigenous females) at 31.4 times the rate for other females (0.2 per 1000 other females) (table 4A.11.8)
- Indigenous males were hospitalised for non-fatal family violence assault (2.7 per 1000 Indigenous males) at 24.9 times the rate for other males (0.1 per 1000 other males) (table 4A.11.8)

Between 2004-05 and 2008-09, after adjusting for the different age structures of the Indigenous and other populations:

- the rate of hospitalisations for family violence related assault remained fairly constant for both Indigenous and non-Indigenous people (figure 4.11.6)

Figure 4.11.2 Ratio of Indigenous to other non-fatal hospitalisations for family violence related assault, age standardised, by relationship of victim to perpetrator, NSW, Victoria, Queensland, WA, SA and NT, 2008-09^{a, b, c, d, e}



^a Data are from public and most private hospitals. Data exclude private hospitals in the NT. ^b Non-fatal refers to records where the hospitalisation was not equal to 'died'. ^c Data based on State or Territory of usual residence of the patient hospitalised. ^d Data are reported for NSW, Victoria, Queensland, WA, SA and NT. These six jurisdictions are considered to have acceptable quality of Indigenous identification in hospitalisation data. ^e The ratio is equal to the hospitalisation rate for Indigenous persons divided by the hospitalisation rate for non-Indigenous people (which includes Indigenous status not reported).

Source: AIHW National Hospital Morbidity Database (unpublished); table 4A.11.8.

In 2008-09, after adjusting for the different age structures of the Indigenous and other populations:

- Indigenous people were hospitalised for family violence related assaults at 23.0 times the rate for other people (4.6 per 1000 Indigenous people compared with 0.2 per 1000 other people) (table 4A.11.7)
- hospitalisation rates for family violence related assault were highest among Indigenous females aged 25–34 years (15.1 per 1000) (table 4A.11.6).
- Indigenous females were hospitalised as a result of assault by a family member other than their spouse or partner at 52.6 times the rate for other females (figure 4.11.7)
- Indigenous males were hospitalised as a result of assault by their spouse or partner at 41.8 times the rate for other males (figure 4.11.7)
- in remote areas, Indigenous people were hospitalised as a result of family violence at 35.6 times the rate for other people (table 4A.11.7)

More data on hospitalisations for assaults by sex and by remoteness, for 2004-05 to 2008-09 in NSW, Victoria, Queensland, WA, SA and public hospitals in the NT can be found in tables 4A.11.6–4A.11.15.

Deaths from homicide

The next part of this section reports data on homicides from the Australian Institute of Criminology (AIC) and the ABS. AIC homicide data are based on police records, whereas ABS homicide deaths data are based on death registrations (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.

Between 2005 and 2009, in NSW, Queensland, WA, SA and the NT, after adjusting for the different age structures of the Indigenous and non-Indigenous populations:

- the death rate from homicide for Indigenous people (6.8 per 100 000) was 8.5 times the rate for non-Indigenous people (0.8 per 100 000) (table 4A.11.16)
- the death rate for homicide was higher for Indigenous males (7.2 per 100 000) than Indigenous females (6.4 per 100 000) (table 4A.11.16)
- the death rate from homicide was highest for Indigenous people aged 25 to 34 years (12.5 per 100 000) and 35 to 44 years (16.5 per 100 000) (table 4A.11.17)

-
- the death rate from homicide for Indigenous people in WA (11.0 per 100 000) and the NT (11.8 per 100 000) was 13.8 and 14.8, respectively, times the rate for non-Indigenous people (0.8 per 100 000) (table 4A.11.18).

In 2008-09:

- the rate of Indigenous homicide in remote and very remote areas (7 per 100 000) was 3.5 times the rate of Indigenous homicide in major cities (2 per 100 000) (table 4A.11.26)
- the victim and offender were intimate partners in 60.9 per cent of Indigenous homicides compared with 24.2 per cent of non-Indigenous homicides (table 4A.11.34)
- there were no Indigenous homicides where the victim and the offender were strangers, whereas the victim and offender were strangers in 18.0 per cent of non-Indigenous homicides (table 4A.11.34)
- a domestic altercation was the motive for 66.7 per cent of Indigenous homicides and 34.1 per cent of non-Indigenous homicides (table 4A.11.34).

Sections 10.3 and 10.4 contain information on alcohol and drug involvement in Indigenous and non-Indigenous homicides. More information on Indigenous and non-Indigenous homicides over time, by State and Territory and remoteness is included in tables 4A.11.16–41.

State and Territory police records

Some data on Indigenous crime victimisation reported to police are collected by the ABS and published in *Recorded Crime — Victims, Australia, 2009* (ABS 2010). National data for assault are not available for recorded crime victims. The collection includes data for selected offences for NSW, Queensland, SA and the NT only, and individual State and Territory data should not be used for cross-jurisdiction comparisons. However, data for sexual assault for NSW, Queensland, SA and the NT are comparable.

Data from Victoria, WA, the ACT and Tasmania 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.

There are additional limitations to using police records to measure family and community violence. Police data do not represent all victims of crime, just those who come to the attention of, and whose details are recorded 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).

According to NSW Police records, in 2009:

- Indigenous people were murdered, sexually assaulted, and assaulted at 4.5, 3.7 and 3.3 times, respectively, the rates for non-Indigenous people (table 4A.11.42)
- Indigenous females were victims of assault at twice the number of Indigenous males. In contrast, the number of non-Indigenous female victims of assault was less than the number of non-Indigenous male victims of assault (table 4A.11.43)
- the offender was known to 93.4 per cent of Indigenous female assault victims, compared to 78.9 per cent of non-Indigenous female assault victims. The offender was known to 76.4 per cent of Indigenous male assault victims, while more non-Indigenous males were assaulted by strangers (49.9 per cent) than people known to them (47.4 per cent) (table 4A.11.49).

More information on assault, sexual assault and robbery against victims in NSW is presented in tables 4A.11.42–48. Information on the relationship of offenders to victims in NSW is presented in tables 4A.11.49–52.

According to Queensland police records, in 2009:

- Indigenous people were assaulted and sexually assaulted at 4.3 and 4.1 times, respectively, the rates for non-Indigenous people (table 4A.11.53)
- Indigenous females were victims of assault at twice the number of Indigenous males. In contrast, the number of non-Indigenous female victims of assault was less than the number of non-Indigenous male victims of assault (table 4A.11.54)
- the offender was known to 85.5 per cent of Indigenous female assault victims, compared to 62.7 per cent of non-Indigenous female assault victims. The offender was known to 71.9 per cent of Indigenous male assault victims, while more non-Indigenous males were assaulted by strangers (57.8 per cent) than people known to them (41.1 per cent) (table 4A.11.57).

More information on assault, sexual assault and robbery against victims in Queensland is presented in tables 4A.11.53–56. Information on the relationship of offenders to victims in Queensland is presented in tables 4A.11.57–58.

According to SA police records, in 2009:

- Indigenous people were assaulted, the victim of attempted murder, and sexually assaulted at 6.6, 4.8 and 3.7 times, respectively, the rates for non-Indigenous people (table 4A.11.59)

-
- Indigenous females were victims of assault at twice the number of Indigenous males. In contrast, the number of non-Indigenous female victims of assault was less than the number of non-Indigenous male victims of assault (table 4A.11.60)
 - the offender was known to 92.3 per cent of Indigenous female assault victims, compared to 77.7 per cent of non-Indigenous female assault victims. The offender was known to 71.3 per cent of Indigenous male assault victims, while more non-Indigenous males were assaulted by strangers (55.8 per cent) than people known to them (41.7 per cent) (table 4A.11.66).

More information on assault, sexual assault and robbery against victims in SA is presented in tables 4A.11.59–65. Information on the relationship of offenders to victims in SA is presented in tables 4A.11.66–69.

According to NT Police records, in 2009:

- Indigenous people were assaulted and sexually assaulted at 5.2 and 2.5 times, respectively, the rates for non-Indigenous people (table 4A.11.70)
- Indigenous females were victims of assault at 3.2 times the number of Indigenous males. In contrast, the number of non-Indigenous female victims of assault was less than the number of non-Indigenous male victims of assault (table 4A.11.71)
- the offender was known to 88.4 per cent of Indigenous female assault victims, compared to 64.2 per cent of non-Indigenous female assault victims. The offender was known to 66.0 per cent of Indigenous male assault victims, while more non-Indigenous males were assaulted by strangers (55.6 per cent) than people known to them (33.1 per cent) (table 4A.11.77).

More information on assault, sexual assault and robbery against victims in the NT is presented in tables 4A.11.70–76. Information on the relationship of offenders to victims in the NT is presented in tables 4A.11.77–80.

Use of victim support services

The Supported Accommodation Assistance Program¹¹ (SAAP) National Data Collection provides information on the number of people seeking assistance from

¹¹ The Supported Accommodation Assistance Program (SAAP) was established in 1985 to consolidate a number of Australian Government and State and Territory government programs designed to assist people who are homeless or at risk of being homeless, including women and children escaping domestic violence (AIHW 2010). The SAAP V Multilateral Agreement (2005-2010) ended on 31 December 2008, with the NAHA commencing on 1 January 2009.

agencies funded under the SAAP. Reasons for seeking support include financial difficulties, substance use, homelessness and family violence.

SAAP data does not capture the 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). Valid requests for immediate accommodation assistance were unmet for an average of 91 Indigenous people per day in August 2006 and May 2007. In August 2008 and May 2009 the number of unmet requests was much lower; an average of 67 Indigenous people per day (table 4A.11.81). Since 2006 and 2007, the number of Indigenous people with a valid unmet request for immediate SAAP accommodation has decreased by 26.0 per cent (table 4A.11.81). The greatest reduction in the number of unmet requests, between 2006-07 and 2008-09, was recorded in Western Australia.

In 2008-09:

- the main reason Indigenous and non-Indigenous people sought supported accommodation assistance was domestic/family violence (25.4 per cent and 21.3 per cent, respectively) (table 4A.11.83)
- in very remote areas, 58.8 per cent of Indigenous people who sought assistance did so because of domestic/family violence, compared with around 20.0 per cent in non-remote areas (table 4A.11.84)
- for both Indigenous and non-Indigenous people, domestic violence affects a large proportion of children in SAAP. Of the 195 200 SAAP clients who sought assistance to escape family violence, 33.9 per cent of Indigenous clients and 25.6 per cent of non-Indigenous clients had accompanying children (tables 4A.11.85 and 4A.11.89)
- Indigenous children accompanying SAAP clients escaping family violence attended a SAAP agency at a rate of 501 per 10 000 Indigenous children, while for non-Indigenous children it was 68 per 10 000 (table 4A.11.91)
- the rate of Indigenous females in SAAP accommodation escaping family violence was 39.7 per 1000 compared with 3.4 per 1000 for non-Indigenous females (table 4A.11.93).

More information on the reasons people sought SAAP support between 2005-06 and 2008-09, by Indigenous status, by jurisdiction, and by remoteness can be found in tables 4A.11.81–94.

4.12 Imprisonment and juvenile detention

Box 4.12.1 Key messages

- After adjusting for age differences, Indigenous people were imprisoned at 14.2 times the rate for non-Indigenous people in 2010 (table 4A.12.3).
- The imprisonment rate increased by 58.6 per cent for Indigenous women and by 35.2 per cent for Indigenous men between 2000 and 2010 (table 4A.12.7).
- Indigenous juveniles were detained at 22.7 times the rate for non-Indigenous juveniles at 30 June 2009 (figure 4.12.5).
- The Indigenous juvenile detention rate increased from 318.1 per 100 000 juveniles in 2001 to 420.4 per 100 000 juveniles in 2008, but fell sharply to 365.0 per 100 000 juveniles in 2009 (figure 4.12.5).

This indicator provides an insight into the level of involvement of Indigenous people in the criminal justice system as offenders. The primary measures for this indicator are:

- age standardised imprisonment rates
- juvenile detention rates for people aged 10–17 years.

These data on imprisonment and juvenile detention take account of only one aspect of Indigenous contact with the criminal justice system. By their nature, offences that 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); and police custody (for example, for public drunkenness).

Australia’s Indigenous peoples 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). Indigenous offenders tend to have contact with the criminal justice system at younger ages than their non-Indigenous counterparts and are more likely to progress to the adult justice system and end up in prison (Allard 2010; Lynch, Buckman and Krenske 2003; WA Department of Justice 2002).

Alcohol is regarded as the primary risk factor for violence and offending in Indigenous communities (Putt, Payne and Milner 2005; Weatherburn, Snowball and Hunter 2008; Wundersitz 2010). Dependence on illicit drugs also increases involvement in crime, due in part to the costs of funding a drug habit (Joudo 2008; Legislative Council, Standing Committee on Social Issues, 2008). Poverty,

unemployment, low levels of educational attainment and poor parenting are also risk factors for offending (Allard 2010; Crime and Misconduct Commission 2009; RCIADIC 1991; Weatherburn 1998; Wundersitz 2010).

Ten per cent of Indigenous children aged 0–14 years were reported to have experienced the stressor of a parent or other family member being in gaol (in the 12 months prior to the survey) in 2008 (ABS unpublished). Levy (2008, cited in Brown 2010; Quilty et al. 2004) stated that in NSW, in 2001, one in five Indigenous children had a parent or carer in gaol. High rates of imprisonment remove adults from their important roles in caring for the next generation (Crime and Misconduct Commission 2009) and can lead to the ‘normalisation’ of incarceration. Prison can become more of an expectation than a deterrent; for some it may even become a rite of passage (Brown 2010).

The Royal Commission into Aboriginal Deaths in Custody made recommendations around the cultural appropriateness and responsiveness of the justice system, noting that significant improvements to the number of Indigenous people entering custody requires both operational change as well as complementary action outside the justice system to address extreme socioeconomic disadvantage (RCIADIC 1991). The Murri Court in Queensland has had some success with offenders (see box 4.12.2).

Box 4.12.2 ‘Things that work’ — Murri Court, Queensland

The **Murri Courts** (Queensland) were highlighted in previous reports (2007 and 2009). Five court sites (Brisbane, Caboolture, Mount Isa, Rockhampton and Townsville) were part of an evaluation in 2007–2008. Between January 2007 and December 2008, a total of 1918 referrals were made to Murri Courts across the five sites. Fifty-eight per cent of these referrals were to an Adult Murri Court and the remaining 42 per cent were to a Youth Murri Court.

A 2010 evaluation found that the proportion of offenders who absconded subject to warrant was lower for offenders appearing in a Murri Court compared to the same offenders appearing in mainstream Magistrates or Children’s Courts. However, appearing for sentence in the Murri Court had no impact on the likelihood or seriousness of offending Morgan and Louis (2010).

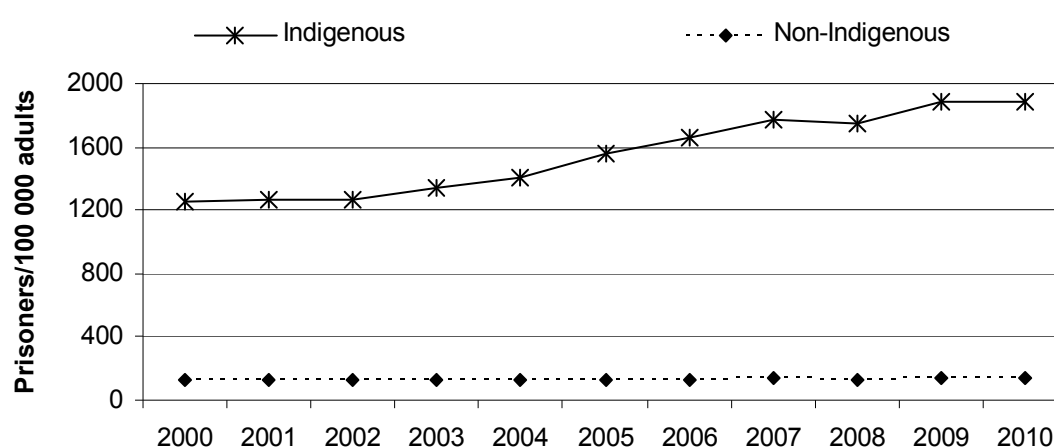
Imprisonment

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 2010). 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).

Figure 4.12.1 Imprisonment rates, age standardised, per 100 000 adult population, Australia^{a, b}

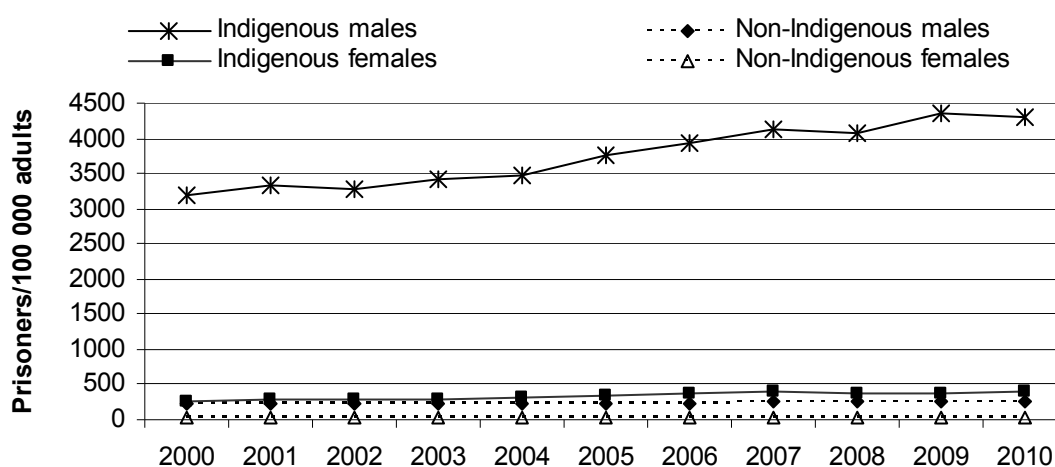


^a Indigenous imprisonment rates are calculated using low series population projections. ^b Rates are based on prisoner census and population data at 30 June each year.

Source: ABS various years, *Prisoners in Australia*, Cat. no. 4517.0; table 4A.12.4.

- In 2010, there were 7584 Indigenous prisoners in Australia (table 4A.12.1), representing 25.5 per cent of the total prisoner population (table 4.12.5). Indigenous people made up an estimated 1.9 per cent of the adult population in 2010 (ABS unpublished).
- After adjusting for differences in the age structure of the Indigenous and non-Indigenous populations:
 - the national Indigenous age standardised imprisonment rate was 14.2 times the non-Indigenous rate in 2010
 - between 2000 and 2010, the Indigenous imprisonment rate increased by 51.5 per cent (from 1248.4 per 100 000 population to 1891.5 per 100 000 population) while the non-Indigenous rate only changed slightly (from 129.5 per 100 000 population to 133.5 per 100 000 population) (figure 4.12.1) (table 4A.12.4)

Figure 4.12.2 Crude imprisonment rate, 30 June, Australia^a



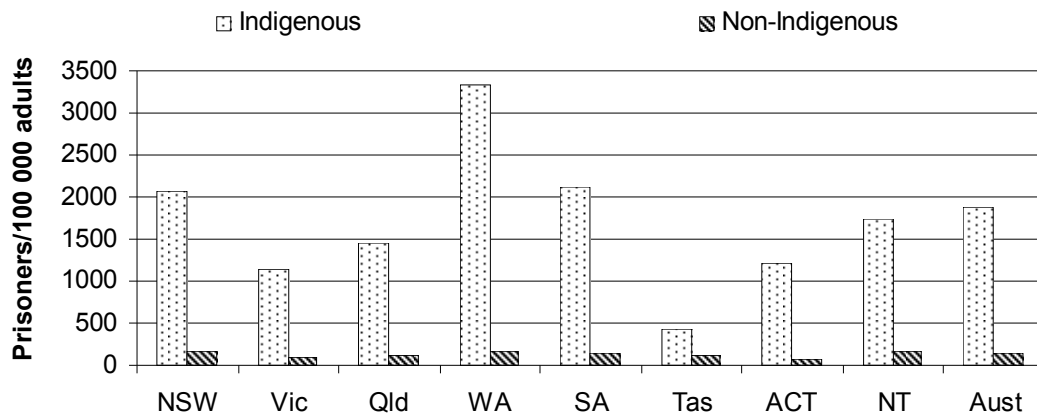
^a Indigenous imprisonment rates are calculated using low series population projections.

Source: ABS various years, *Prisoners in Australia*, Cat. no. 4517.0; table 4A.12.7.

Using crude (not age adjusted) data:

- the imprisonment rate for Indigenous males was 17.7 times the rate for non-Indigenous males, and the imprisonment rate for Indigenous females was 21.5 times the rate for non-Indigenous females in 2010 (table 4A.12.7)
- imprisonment rates for Indigenous males were 10.4 to 13.0 times as high as imprisonment rates for Indigenous females between 2000 and 2010 (figure 4.12.2). Male imprisonment rates drive the national Indigenous imprisonment rate trend as shown in figure 4.12.1
- Indigenous female prisoners comprise a small but steadily rising proportion of the Australian prison population — the imprisonment rate for Indigenous females increased by 58.6 per cent between 2000 and 2010, while the imprisonment rate for Indigenous males increased by 35.2 per cent over the same period (table 4A.12.7). Female prisoners have specific needs not shared by most male prisoners, such as those associated with the role as primary parent (Bartels 2010a).

Figure 4.12.3 **Imprisonment rates, age standardised, per 100 000 adult population, by state and territory, 2010^{a, b, c, d}**

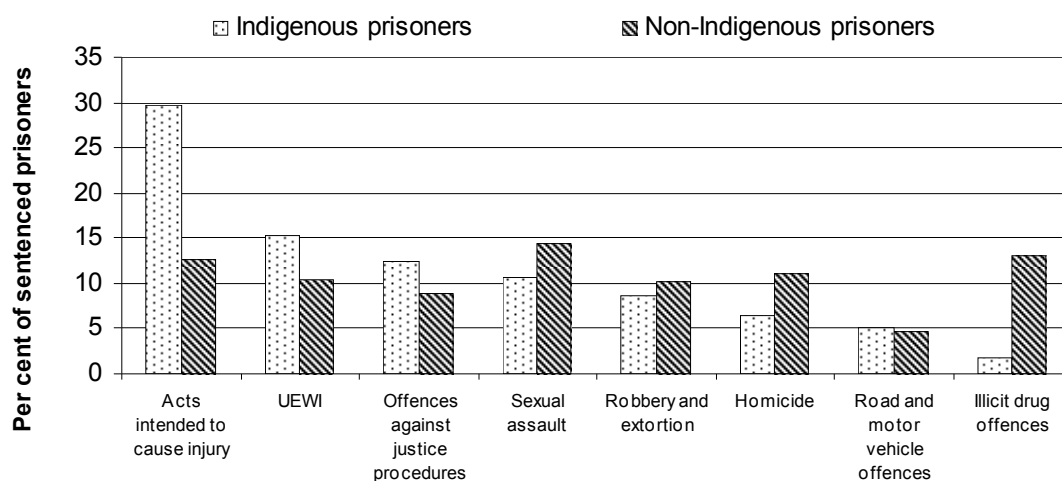


^a Indigenous imprisonment rates are calculated using low series population projections. ^b Rates are based on prisoner census and population data at 30 June 2010. ^c Data for NSW exclude ACT prisoners held in NSW prisons. ^d Data for the ACT include ACT prisoners held in the ACT as well as ACT prisoners held in NSW.

Source: ABS 2010, *Prisoners in Australia*, Cat. no. 4517.0; table 4A.12.4.

- The difference between Indigenous and non-Indigenous age standardised imprisonment rates varied across states and territories in 2010, with WA recording the highest ratio (19.2) and Tasmania reporting the lowest rate ratio (3.4) (figure 4.12.3; table 4A.12.3).
- All states and territories recorded increased age standardised imprisonment rates for Indigenous people between 2000 and 2010 (table 4A.12.4).

Figure 4.12.4 **Sentenced prisoners by most serious offence, 30 June 2010, Australia^{a, b}**



^a UEWI = 'Unlawful entry with intent'. ^b Offences against justice procedures includes offences against government security, government operations, for example, non-payment of fines.

Source: ABS 2010, *Prisoners in Australia*, Cat. no. 4517.0; table 4A.12.8.

Data on sentenced prisoners, by most serious offence, provide a picture of people in prison as at 30 June 2010 and prisoners serving long-term sentences for serious offences are over-represented in these 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 5947 Indigenous sentenced prisoners used to calculate the percentages presented in figure 4.12.4:

- 29.7 per cent had been sentenced with 'acts intended to cause injury' as their most serious offence, 2.3 times the proportion of non-Indigenous prisoners sentenced with the same offence
- 12.4 per cent of Indigenous prisoners had been sentenced with 'offences against justice procedures, government security and government operations' as their most serious offence, compared to 8.8 per cent of non-Indigenous prisoners.
- 1.8 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 (13.1 per cent)

Indigenous prisoners were serving 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 (table 4A.12.8). This pattern of sentencing may suggest that Indigenous people in prison have committed more

minor offences than non-Indigenous prisoners. Bartels (2010b) finds some support for this, particularly for Indigenous women. However, Bond and Jeffries (2009, 2010, 2011a, 2011b) and Jeffries and Bond (2009) found that in Queensland, WA and SA, Indigenous status had no direct effect on the decision to imprison, after adjusting for other sentencing factors (especially past and current criminality).

Data by jurisdiction on the proportion of prisoners on remand¹² are presented in table 4A.12.11. The proportion of unsentenced Indigenous prisoners (21.5 per cent) was similar to the proportion of unsentenced non-Indigenous prisoners (21.0 per cent) in 2010. According to the ABS (2010), unsentenced Indigenous prisoners spent less time in remand for the majority of the offence categories listed in table 4A.12.8 than non-Indigenous prisoners in 2010 (in mean number of months). More information on prisoners is presented in tables 4A.12.1–11.

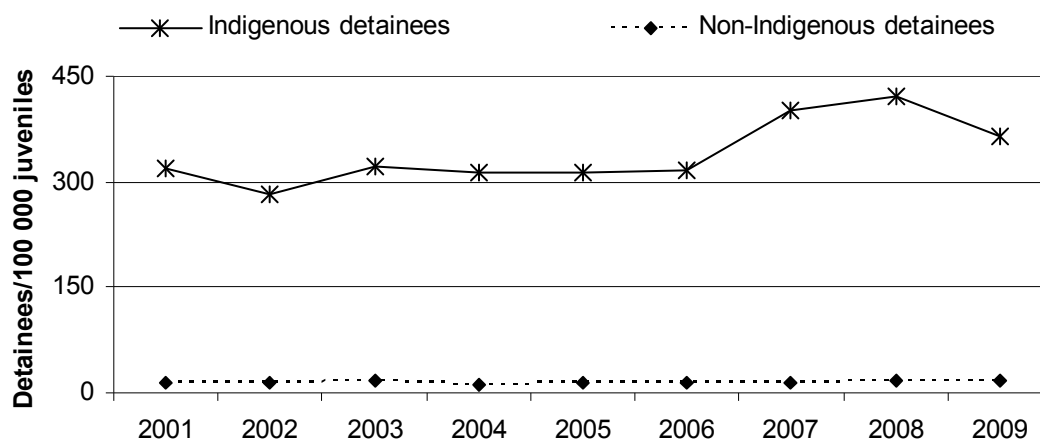
Juvenile detention

Data on juvenile detention are sourced from the Australian Institute of Criminology (AIC). 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 the count is not necessarily representative of the actual daily average of juvenile detainees in each State and Territory.

Information on the number of young people held in juvenile detention centres illustrates 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 orders (Charlton and McCall 2004). The Juvenile Justice National Minimum Data Set includes data on both detention and other forms of supervision (although the data are not as comprehensive across jurisdictions as those from the AIC) (AIHW 2010).

¹² According to the ABS (2010), 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.

Figure 4.12.5 **Juvenile detention rates, people aged 10–17 years, 30 June, Australia^{a, b}**

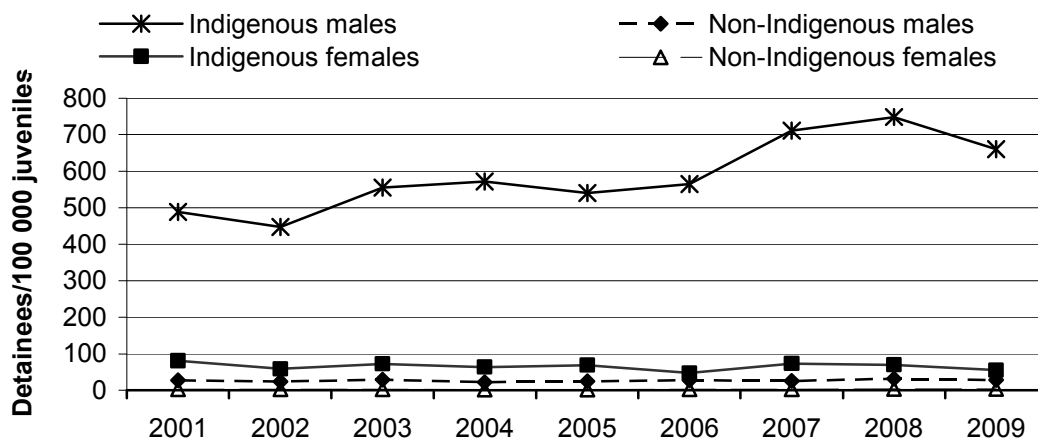


^a All data are taken from the census count at 30 June of the relevant year. ^b Indigenous rates were calculated using high series population data (ABS (unpublished) Cat. no. 3238.0). Any variation in derived rates may be due to the assumptions and limitations of the base population data.

Source: Richards and Lyneham (2010); AIC Juveniles in detention (unpublished); table 4A.12.13.

- The juvenile detention rate for Indigenous juveniles was 22.7 times the rate for non-Indigenous juveniles in 2009 (figure 4.12.5).
- Detention rates for Indigenous juveniles were relatively stable between 2003 and 2006. The rate increased in 2007 and 2008 before decreasing to 365.0 per 100 000 people aged 10–17 years in 2009 (figure 4.12.5).
- There were 405 Indigenous juveniles in detention and 350 non-Indigenous juveniles in detention at 30 June 2009. The number of Indigenous juveniles in detention increased by 55.2 per cent between 2001 and 2009 while the number of non-Indigenous juveniles in detention increased by 14.4 per cent (table 4A.12.12).

Figure 4.12.6 **Juvenile detention rates, people aged 10–17 years, by gender, 30 June, Australia^a**



^a Indigenous rates were calculated using high series population data (ABS (unpublished) Cat. no. 3238.0). Any variation in derived rates may be due to the assumptions and limitations of the base population data.

Source: Richards and Lyneham (2010); AIC Juveniles in detention (unpublished); table 4A.12.15.

- Juvenile detention rates were considerably higher for Indigenous males than females between 2001 and 2009 (figure 4.12.6). Nationally, there were 375 Indigenous males and 30 Indigenous females in juvenile detention in 2009 (table 4A.12.14).
- The juvenile detention rate for Indigenous males was 23.3 times the rate for non-Indigenous males; the juvenile detention rate for Indigenous females was 17.2 times the rate for non-Indigenous females in 2009 (table 4A.12.15). On 30 June 2009, Victoria and Tasmania had no Indigenous females in detention, and Tasmania and the NT had no non-Indigenous females in detention (table 4A.12.14).

Data on the proportion of juveniles who were in detention and under sentence (as opposed to being on remand) are reported in table 4A.12.18. The proportion of unsentenced Indigenous juveniles was 62.2 per cent in 2009 (table 4A.12.18), 2.9 times the unsentenced adult Indigenous prisoner rate in 2010 (table 4A.12.11). Richards and Lyneham (2010) explain some possible reasons for this high juvenile remand rate, including changes to bail legislation and a lack of appropriate accommodation options for juveniles due to homelessness or housing instability.

The numbers and rates of juveniles in detention, by age category and jurisdiction are reported in tables 4A.12.16 and 4A.12.17, respectively. Juvenile detention rates can be highly variable in states and territories with small populations of Indigenous people, and/or small numbers of Indigenous people in juvenile detention. This

particularly applies in Victoria, Tasmania, and the ACT (table 4A.12.12). Data on the number of people in juvenile detention (all ages) are reported in table 4A.12.19.

4.13 Future directions in data

Indigenous mortality

Indigenous mortality data by remoteness were not available for inclusion in this report. The ABS has advised that Indigenous mortality data by remoteness may be available for future editions of the report, once the method of geographic coding of deaths is changed in 2012, and if remoteness is included as a component of data matching between the 2011 Census and Indigenous deaths data.

Early childhood education

The data sources presented in this section contain limited information related to the primary measures for this indicator.

Data from the ABS Childhood Education and Care Survey 2008 were only available for all Australian children and could not be disaggregated by Indigenous status.

In 2010, data on teachers' qualifications was collected as part of the National ECEC Workforce Census (ABS 2011; DEEWR 2011). This provided data about the qualifications of teachers of Indigenous children in childcare services (such as long day care or occasional care centres), and also about whether these childcare services provide a preschool program. However, there are no data about how many Indigenous students were enrolled in the preschool programs and so this data source could not be used as a measure of the quality of preschool teaching for Indigenous children (DEEWR 2011).

Efforts are underway to address these constraints, particularly in an effort to inform the COAG NIRA measure on early childhood education.

The Australian Institute of Health and Welfare (AIHW), under the guidance of the Early Childhood Data Sub Group, through the Early Childhood Development Working Group of Ministerial Council for Education, Early Childhood Development and Youth Affairs (MCEECDYA), has developed an Early Childhood Education and Care National Minimum Data Set (NMDS), which provides a framework for collecting a set of nationally comparable data for preschool programs and services. This framework has assisted the development of standards and

protocols for the collection of more accurate data for the NPA on Early Childhood Education. Guided by the ECEC NMDS framework and coordinated by the ABS, the National ECEC Data Collection was compiled for the first time in 2010 and was not considered robust for reporting against this indicator. The first year of the collection was experimental in nature but is expected that more nationally consistent and comprehensive data will be compiled in 2011.

Key challenges with the ECEC at the time of this report include comprehensive 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 commence primary school in different jurisdictions.

Year 12 attainment

Jurisdictional reporting of the number of year 12 certificates issued to Indigenous and non-Indigenous students ceased on 31 December 2008. These data had previously been reported to DEEWR in Indigenous Education Performance Reports.

Employment

In addition to the ABS program of ongoing Indigenous specific surveys — which includes the NATSISS as well as the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) — Indigenous labour force data is available from the five-yearly ABS Census. The last Census was held in 2006, and provided data used in the 2009 edition of this report. The annual ABS Labour Force Survey also provides Indigenous labour force estimates, however, are of lower quality as they are based on a smaller sample size.

Disability and chronic disease

More research is required on the distinctions between the needs and morbidity rates of people with different types of disability, as well as between people with congenital disability compared with those whose disability was developed later in life.

Analysis of increasing hospital admission rates could usefully identify whether there are issues for particular age groups or other categories of Indigenous people experiencing multiple hospital separations or complex cases.

Household and individual income

In addition to the ABS program of ongoing Indigenous specific surveys — which includes the NATSISS as well as the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) — Indigenous income data are available from the five-yearly ABS Census of Population and Housing. The last Census was held in 2006, and provided data used in the 2009 edition of this report. The next Census will be held in 2011.

Substantiated child abuse and neglect

Under the *National Framework for Protecting Australia's Children 2009–2020*, all states and territories have committed to the development of a unit record data collection for child protection related measures. Unit record data collection will improve the comparability of child protection data across jurisdictions and allow for a wider range of policy-relevant data analyses (AIHW 2011). Currently, the data available for child protection are aggregate (tabular) data only, and thus there is no way of determining the overlap between substantiated child protection notifications, care and protection orders and out-of-home care collections, nor determining how many children appear in the system on multiple occasions (AIHW 2011). Aggregate data provide little information on the experience, pathways and outcomes of the children and young people who receive child protection services.

Family and community violence

The *National Plan to Reduce Violence Against Women and their Children 2010–2022* (COAG 2010) includes a plan to improve data collection. All jurisdictions have committed to a national data collection and reporting framework, to be operational by 2022. In addition, National Community Attitudes Surveys and Personal Safety Surveys are to be undertaken every four years across the life of the National Plan.

Imprisonment and juvenile detention rates

There are no nationally comparable imprisonment or juvenile detention rates by remoteness areas, as a lack of national standards has made collection of these data difficult. The Juvenile Justice National Minimum Data Set, which is maintained by the AIHW, reports annually on juveniles in detention. Given this development, a review of the AIC's Juveniles in Detention Monitoring Report is being undertaken in 2010–11. This is to ensure that AIC's research and monitoring continues to

makes a useful contribution to the field and enables more in-depth analysis of key issues (Richards and Lyneham 2010).

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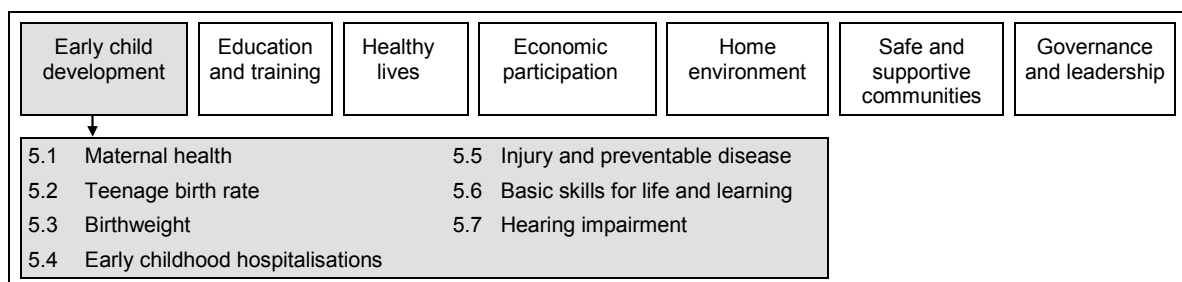
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5 Early child development

Strategic areas of 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. Poor maternal health, growing up in households with multiple disadvantage, or having poor access to effective services can affect children’s development, health, social and cultural participation, educational attainment and employment prospects.

Several 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 area can be affected by outcomes in several other strategic areas for action, or can influence outcomes in other areas:

- healthy lives (access to primary health, obesity and nutrition) (chapter 7)
- economic participation (income support) (chapter 8)

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- 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:

- maternal health — the health of women during pregnancy, childbirth and the period following birth is important for the wellbeing of both women and children. The primary measures for section 5.1 are access to antenatal care; and tobacco, alcohol and illicit drug use during pregnancy
- teenage birth rate — teenage births are associated with lower incomes and poorer educational attainment and employment prospects for young parents. The primary measure for section 5.2 is the birth rates to teenage mothers and fathers
- birthweight — the birthweight of a baby is a key indicator of health status. Low birthweight babies require longer periods of hospitalisation after birth and are more likely to have poor health, or even die in infancy and childhood. Low birthweight is also correlated with poorer health outcomes later in life, including coronary heart disease and type 2 diabetes. The primary measure for section 5.3 is the proportion of low birthweight babies
- 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. Monitoring the causes of hospitalisations can uncover emerging health risks as well as highlighting where there may be a need for more effective primary health care. The primary measure for section 5.4 is the hospitalisation rate of Indigenous children
- injury and preventable disease — most childhood diseases and injuries can be successfully prevented or treated without hospitalisation, and the actions of individuals, communities and governments can promote the health of children. The primary measures for section 5.5 are hospitalisation and death rates for injury and potentially preventable disease
- 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. The measures for section 5.6 are the Australian Early

Development Index; language background; Medicare funded developmental health checks; and informal learning activities

- hearing impairment — 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 impairment. As well as direct health impacts, hearing impairment can affect children's capacity to learn and socialise. The primary measures for section 5.7 are prevalence of hearing conditions and hospitalisations due to poor ear health.

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

- In 2008:
 - in NSW, SA, and the NT, 64.5 per cent of Indigenous mothers attended at least one antenatal visit in their first trimester, compared with 81.6 per cent of non-Indigenous mothers (figure 5.1.1)
 - in Queensland, SA and the NT, 77.2 per cent of Indigenous mothers attended five or more antenatal visits during pregnancy, compared with 92.7 per cent of non-Indigenous mothers (figure 5.1.2)
 - Indigenous mothers in remote areas in Queensland, SA and the NT attended similar numbers of antenatal sessions as those in non-remote areas. Those in remote areas in NSW, SA and the NT tended to start attending antenatal sessions later in their pregnancy than those in non-remote areas (table 5A.1.10).
- Around half of Indigenous mothers smoked during pregnancy in both 2001 and 2008, around three times the rate of non-Indigenous mothers (figure 5.1.3).

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 a smaller proportion of low birthweight babies

(section 5.3, Birthweight). Good maternal health also reduces the likelihood of maternal death.

The Council of Australian Governments (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 (NIRA) (COAG 2008) includes two indicators related to maternal health: antenatal care and tobacco smoking during pregnancy. The primary measures for this section are:

- antenatal care, which is measured as:
 - the proportion of women attending their first antenatal visit during the first trimester
 - the proportion attending at least five antenatal visits during their pregnancy
- tobacco, alcohol and illicit drug use during pregnancy.

The primary measures in this section match those in the NIRA, but this report includes alcohol and drug use during pregnancy in addition to tobacco smoking. This section also includes supplementary measures including health and nutrition during pregnancy and maternal deaths.

Data from the AIHW Perinatal Data Collection on antenatal visits and smoking during pregnancy are collected differently across states and territories. The jurisdictions presented for the various data sets are dependent on data availability and quality of Indigenous data.

- Data on gestational age at first antenatal visit were available for NSW, SA and the NT. Data were not available for other jurisdictions (with the exception of the ACT, for which the quality of Indigenous data is not considered adequate for reporting). Data development to add this item to the Perinatal National Minimal Data Set (NMDS) is occurring from July 2011 onwards (AIHW unpublished).
- Data on the number of antenatal visits during pregnancy were available for Queensland, SA and the NT. Data were not available for other jurisdictions (with the exception of the ACT, for which the quality of Indigenous data is not considered adequate for reporting). Data development is underway to add an item on number of antenatal visits to the Perinatal NMDS (AIHW unpublished).
- States and territories that report data on tobacco smoking during pregnancy vary from year to year (AIHW 2009a). Data items on smoking during pregnancy were added to the Perinatal NMDS between 2008 and 2011 and are expected to be available for reporting from 2011 (AIHW unpublished).

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- Data on maternal mortality, were available for NSW, Queensland, WA, SA and the NT, as these jurisdictions are considered to have adequate identification of Indigenous deaths (AIHW unpublished).

Section 5.3 provides more information on birthweight. Perinatal and infant deaths are discussed in more detail in section 4.2 (Young child mortality). Supplementary data from the Australian Bureau of Statistics (ABS) National Aboriginal and Torres Strait Islander Social Survey 2008 (NATSISS 2008) on gestational age at birth are presented in tables 5A.1.1 and 5A.1.2.

Culturally safe service provision has been found to be a prominent factor for Indigenous women accessing maternity health services. Reibel and Walker (2009) reported that services that had adopted principles of culturally responsive and secure care had better maternal outcomes, including expectant mothers seeking earlier and more frequent maternal health checks. Programs after birth also play an important part in health outcomes for mothers and their children. 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 Anangu Bibi Family Birthing Program (SA) in Port Augusta and Whyalla was introduced following consultations with Aboriginal women, communities and agencies. Aboriginal Maternal and Infant Care (AMIC) workers and midwives work together to provide antenatal, birthing and early childhood care to Aboriginal women. AMIC workers are provided with accredited clinical training and opportunities to take on midwifery studies. 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 feel welcome in the hospital and receive appropriate care. A continuum of care following birth ensures that follow up family support services are provided as required. 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). Recently, the success of the Anangu Bibi program led to the program being expanded into country based hospitals and the introduction of a similar model of care in metropolitan SA (SA Government unpublished).

The **Koori Maternity Services (KMS) Program (Vic)** based in Aboriginal Community Controlled Health Organisations, provides culturally appropriate care to Aboriginal women during pregnancy, birth and in the immediate period after birth, to improve the health and wellbeing of Indigenous women and babies. All employ an Aboriginal Health Worker and provide health promotion, support for pregnant Aboriginal women and liaison with other relevant services.

The program commenced in 2000 with eight KMSs. In 2011 there were 11 KMSs (two in metropolitan Melbourne and nine in rural Victoria) with over 200 clients (Victorian Government unpublished).

The **Aboriginal Maternal and Infant Health Service (AMIHS) (NSW)** is a community-based maternity service providing culturally appropriate care for Aboriginal women and babies. Maternal care is provided by an Aboriginal Health Worker and midwife working in partnership. AMIHS is currently expanding to over 31 locations across NSW.

A 2006 evaluation of AMIHS found that the program delivers positive outcomes for Aboriginal mothers and babies, including decreased rates of premature birth, improved breastfeeding rates and improved access to antenatal care in early pregnancy (NSW Health 2006). AMIHS won the Silver Award at the 2010 Prime Minister's Award for Excellence in Public Sector Management (NSW Government unpublished; NSW Health 2006).

(Continued next page)

Box 5.1.3 (Continued)

The **Coomealla Community Midwifery Outreach Program** (NSW) was established in 2007 to address high risk behaviours of young, adolescent, Indigenous, antenatal and postnatal clients. The program has reduced risk taking behaviours and increased positive birth outcomes. Between July 2010 and March 2011, the program had 19 clients. Of the 19 clients, 17 had their first antenatal visit within the first trimester, and of the 14 babies delivered, only one had a low birthweight (under 2500g). The program won the 2009 NSW Health Aboriginal Health Awards (ARCHI 2010; NSW Government unpublished).

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 age, women during pregnancy, 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 and at higher risk of anaemia, poor nutrition, hypertension, diabetes and glucose intolerance, genital and urinary tract infections, and smoking (AHMAC 2011). Antenatal care also provides an opportunity to educate mothers about breastfeeding, which has benefits for both the mother and child (Queensland Health 2003).

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 evidence-based antenatal care guidelines are being developed by the Department of Health and Ageing in collaboration with State and Territory governments and the National Health and Medical Research Council, with funding from the Australian Health Ministers' Advisory Council (DoHA 2009). 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 2001). After the first visit, antenatal care often follows the standard schedule of 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 2001; Wallace and Oats 2002).

Data from the AIHW Perinatal Data Collection for 2006 show that 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.

- For Indigenous mothers who did not attend any antenatal sessions, 41.6 per cent had babies of low birthweight, while only 8.5 per cent of Indigenous mothers who attended five or more antenatal sessions had babies of low birthweight (table 5A.1.17).
- For Indigenous mothers who did not attend any antenatal sessions, 40.2 per cent had pre-term babies, while only 8.6 per cent of Indigenous mothers who attended five or more antenatal sessions had pre-term babies (table 5A.1.18).
- For Indigenous mothers who did not attend any antenatal sessions, 9.3 per cent resulted in perinatal deaths, while only 0.7 per cent of Indigenous mothers who attended five or more antenatal sessions experienced perinatal deaths (table 5A.1.19).

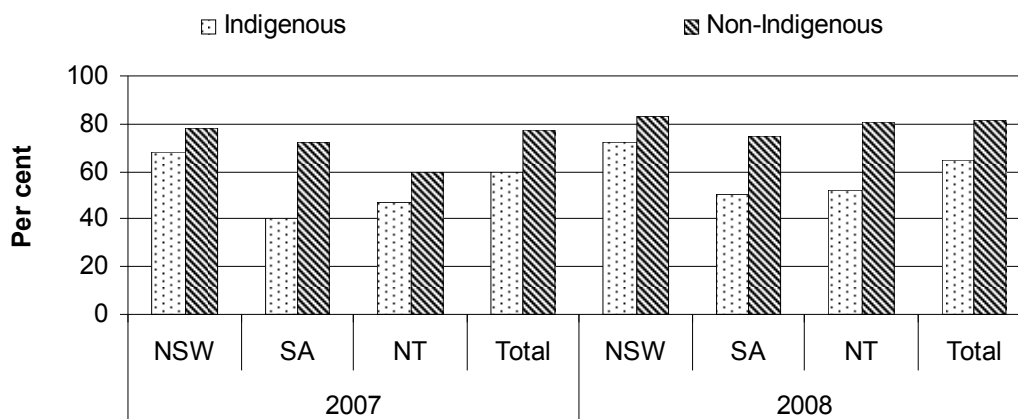
Section 5.3 provides more information on birthweight. Perinatal and infant deaths are discussed in more detail in section 4.2 (Young child mortality).

The ABS NATSISS 2008 found that a large proportion of Aboriginal and Torres Strait Islander mothers had regular pregnancy check ups. Nationally 95.9 per cent of Indigenous mothers attended check ups, with most mothers attending regularly (90.6 per cent) (table 5A.1.1–2). This section provides data from the National Perinatal Data Set 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 considered to be the minimum requirements for good antenatal care.

Antenatal visits in the first trimester

The proportion of mothers who attended at least one antenatal visit in the first trimester is presented for mothers who gave birth at 32 weeks or more gestation. Data presented here are consistent with NIRA reporting methodology, but are more accurate and up to date than what was reported in NIRA 2011, which required minor revisions and updates. The reporting for NIRA in 2012 will reflect these updates.

Figure 5.1.1 **Mothers who gave birth at 32 weeks gestation or more, who attended at least one antenatal visit in the first trimester, NSW, SA and the NT, 2007 and 2008^{a, b, c, d, e}**



^a Women who gave birth in the period, whether resulting in a live or still birth, if the birthweight is at least 400 grams or the gestational age is 32 weeks or more. Excludes births where mother's Indigenous status was not stated. ^b First trimester is up to and including 13 completed weeks. Antenatal visits relates to care provide by skilled birth attendants for reasons related to pregnancy ^c Data are not available for Victoria, Queensland, WA, ACT and Tasmania. Data are by place of usual residence of the mother. Women who gave birth in NSW, SA or the NT but reside in another jurisdiction are not reported due to small numbers. ^d Data are age-standardised using the Australian female population who gave birth in the respective years. ^e Total includes NSW, SA and the NT only. These data are not generalisable to Australia.

Source: AIHW (unpublished) National Perinatal Data Collection; table 5A.1.6 and 5A.1.8.

In NSW, SA and the NT, for mothers who gave birth at 32 weeks gestation or more, and after taking into account the different age structures of the Indigenous and non-Indigenous populations:

- in each jurisdiction in 2007 and 2008, lower proportions of Indigenous than non-Indigenous mothers attended at least one antenatal visit in the first trimester (figure 5.1.1)
- in all jurisdictions combined in 2008, just under two-thirds (64.5 per cent) of Indigenous mothers, attended at least one antenatal visit in their first trimester, lower than the rate for non-Indigenous mothers (81.6 per cent) (figure 5.1.1).

In 2007 and 2008, Indigenous mothers from remote areas, who gave birth at 32 weeks gestation or more, accessed similar numbers of antenatal sessions as those in non-remote areas, but tended to attend their first antenatal session later in pregnancy:

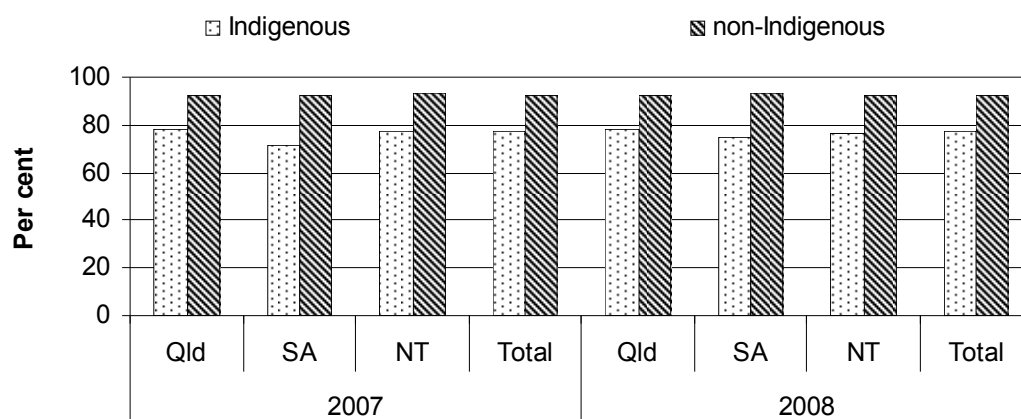
- in Queensland, SA and the NT combined, around three quarters of Indigenous mothers accessed 5 or more antenatal visits in all remoteness areas in both 2007 and 2008 (table 5A.1.9 and table 5A.1.10)
- in NSW, SA and the NT combined, proportions of Indigenous women who had their first antenatal visit in their third trimester increased with remoteness, 12.4 per cent in major cities to 29.0 per cent in very remote areas in 2008 (NSW, SA and the NT combined) (table 5A.1.10).

Data on antenatal visits by mothers who gave birth at 32 weeks gestation or more by remoteness and State and Territory are presented in tables 5A.1.5–10.

Five or more antenatal visits

The proportion of mothers who have five or more antenatal visits is calculated for mothers who gave birth at 32 weeks or more, as they are likely to have had enough time in their pregnancy to have attended 5 or more antenatal visits. This measure is consistent with that used to assess progress against the antenatal care indicator in the NIRA (COAG 2011).

Figure 5.1.2 Mothers who gave birth at 32 weeks gestation or more, who attended five or more antenatal visits, Queensland, SA and the NT, 2007 and 2008^{a, b, c, d, e}



^a Women who gave birth in the period, whether resulting in a live or stillbirth of at least 400 grams or 32 weeks or more gestation. Excludes births where mother's Indigenous status was not stated. ^b Antenatal visits relates to care provided by skilled birth attendants for reasons related to pregnancy. ^c Data are not available for NSW, Victoria, WA, ACT and Tasmania. Data are by place of usual residence of the mother. ^d Data are directly age-standardised using the Australian female population who gave birth in the respective years. ^e Total includes Queensland, SA and the NT only. These data are not generalisable to Australia.

Source: AIHW (unpublished) National Perinatal Data Collection; tables 5A.1.5 and table 5A.1.7.

In Queensland, SA and the NT, after taking into account the different age structures of the Indigenous and non-Indigenous populations, for mothers who gave birth at 32 weeks gestation or more:

- in each jurisdiction in 2007 and 2008 a lower proportion of Indigenous than non-Indigenous mothers attended at least five antenatal sessions in each of the three jurisdictions (figure 5.1.2)
- in the three jurisdictions combined in 2008, 77.2 per cent of Indigenous mothers and 92.7 per cent of non-Indigenous mothers attended five or more antenatal visits (table 5A.1.7).

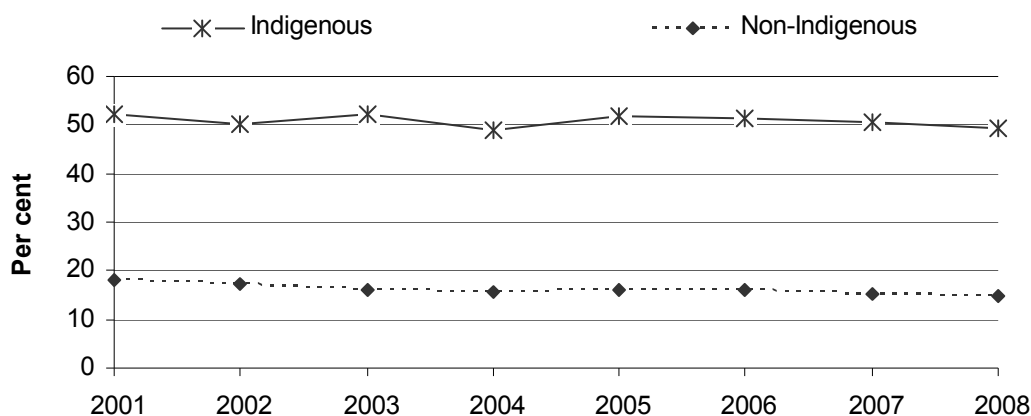
Data on the number of antenatal sessions attended by mothers who gave birth at 32 weeks gestation or more are presented in tables 5A.1.5, 5A.1.7, and 5A.1.9–10.

Tobacco, alcohol and illicit drug use during pregnancy

Tobacco consumption during pregnancy

Smoking in pregnancy can lead to miscarriage, stillbirth or premature birth and low birthweight (Graham et al. 2007; Gilligan et al. 2007; Wills and Coory 2008; Walters 2009). When a pregnant woman smokes, fetal levels of nicotine have been found to be 15 per cent higher than maternal levels (Julvez et al. 2007). Fetal nicotine exposure can damage the brain and lead to behavioural and cognitive problems which emerge later in life (Julvez et al. 2007) and may be a factor in the infant's temperament and irritability (Hutchinson et al. 2009; Pickett et al. 2008; Roza et al. 2009; Stone et al. 2010; Stroud et al. 2009). Negative health effects of tobacco smoking may continue after birth via nicotine in breast milk and via passive smoking if one or both parents smoke (Julvez et al. 2007). 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). Gilligan et al. (2009) and Wood et al. (2008) explored some of the barriers to Indigenous women ceasing smoking during pregnancy. 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.

Figure 5.1.3 Age standardised rates of mothers reporting smoking during pregnancy, 2001 to 2008^{a, b, c, d}



^a Women who gave birth in the period, whether resulting in a live or still birth, if the birthweight is at least 400 grams or the gestational age is 20 weeks or more. Excludes births where mother's Indigenous status was not stated. ^b Data for 2001 to 2004 are for NSW, WA, SA, the ACT and the NT only. ^c Data for 2005 are for NSW, WA, SA, Tasmania, the ACT, the NT and includes six months of Queensland data. ^d Data for 2006, 2007 and 2008 exclude Victoria.

Source: AIHW (unpublished) National Perinatal Data Collection; table 5A.1.11.

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. Between 2001 and 2008, after taking into account the different age structures of the Indigenous and non-Indigenous populations:

- around half of Indigenous mothers smoked during pregnancy and the proportion has remained relatively constant (figure 5.1.3)
- the proportion of non-Indigenous mothers who smoked during pregnancy declined slightly from 18.1 per cent to 14.8 per cent (figure 5.1.3; table 5A.1.11).

For more information on tobacco consumption during pregnancy, see tables 5A.1.11–15. Supplementary data from the ABS NATSISS 2008, on children aged 0–3 years whose mothers used tobacco during pregnancy, are presented in figure 5.1.4 and tables 5A.1.3–4. The ABS NATSISS and the AIHW National Perinatal Data Collection have different methods of collection and data are presented for different populations (children aged 0 to 3 years and mothers who gave birth in selected states and territories, respectively) and are not directly comparable.

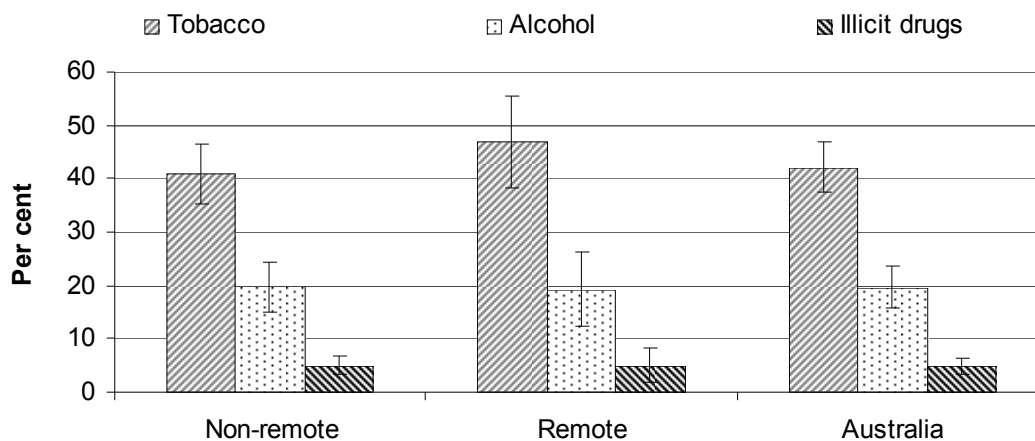
Alcohol consumption during pregnancy

Heavy alcohol consumption during pregnancy is a risk factor for fetal alcohol syndrome (FAS) and fetal alcohol spectrum disorder (FASD) (O'Leary et al. 2007; NHMRC 2001; World Bank 2000). FAS and FASD are 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; O'Leary et al. 2007; Rothstein, Heazlewood and Fraser 2007; World Bank 2000). Abstaining from drinking alcohol during pregnancy will prevent FAS and FASD.

In Australia, the lack of data on the prevalence of FAS or FASD is a barrier to obtaining a true estimate of its prevalence in the Indigenous population. Some relevant information is available from the following studies:

- a study in far north Queensland estimated a FASD prevalence of 1.5 per cent in the Aboriginal child population, with a prevalence of 3.6 per cent in one Cape York community (Rothstein, Heazlewood and Fraser 2007)
- the Well Person's Health Check program from 1998 to 2000 collected data through a survey administered as part of a health screening program in 45 rural and remote locations in north Queensland. This study 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).
- Elliott et al. (2008) reported on an active national case finding study of FAS. The data are based on monthly reporting of incident cases of patients aged less than 15 years by over 1150 paediatricians between January 2001 and December 2004. Ninety-two cases of FAS were reported during the period, of which 65 per cent were Indigenous.

Figure 5.1.4 Indigenous children aged 0 to 3 years whose mothers consumed tobacco, alcohol or illicit drugs during pregnancy, 2008^{a, b, c}



^a Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information). ^b Information on some aspects of maternal health could not be obtained from all respondents. Proportions for use of alcohol, tobacco and illicit substances during pregnancy have therefore been calculated on the responding population. ^c Differences between rates for children in non-remote areas and remote areas are not statistically significant.

Source: ABS (unpublished) NATSISS 2008; table 5A.1.4.

According to the ABS NATSISS 2008 among mothers of Indigenous children aged 0 to 3 years:

- around one in five mothers (19.6 per cent) consumed alcohol during pregnancy (figure 5.1.4)
- there were similar rates of consumption of alcohol during pregnancy in each State and Territory (table 5A.1.3) and for each remoteness area (table 5A.1.4).

Illicit drug use during pregnancy

Illicit drug use during pregnancy has detrimental effects on the fetus and the mother's health during pregnancy. The effects on the mother and baby differ according to which illicit drug or drugs were used by the mother during pregnancy. Effects can range from fetal drug dependency (neonatal abstinence syndrome), prematurity, and mortality, problems with normal brain development, low birthweight, and problems with behaviour such as sleeping patterns, mood, attention and cognitive deficits (Derauf et al. 2009, Farid et al. 2008, Hutchings et al. 1993, Kelly, Davis and Henschke 2010). Often the effects are compounded by consumption of multiple licit and illicit substances.

Data from the ABS NATSISS 2008 showed that among mothers of Indigenous children aged 0 to 3 years:

- one in twenty (5.0 per cent) reported using illicit drugs or substances during pregnancy (figure 5.1.4)
- there were similar rates of illicit drug or substance use during pregnancy for each State and Territory (table 5A.1.3) and each remoteness area (table 5A.1.4).

As there are no comparable non-Indigenous data available, the prevalence of illicit drug use within that population is unknown.

Health and nutrition during pregnancy

Health problems during pregnancy include gestational diabetes, high blood pressure and poor nutrition. Nutrition and diet are important for the health of the mother and baby during pregnancy. Pregnant women and women considering pregnancy are advised to have a balanced diet and in particular to maintain adequate folate levels to decrease the risk of neural tube defects such as spina bifida.¹ A number of studies have reported poor nutrition for Indigenous women of childbearing age and during pregnancy (McDermott et al. 2009, Wen et al. 2010).

The onset of gestational diabetes can result in the baby being large for its gestational age, or being jaundiced and having low blood sugar. Gestational diabetes also increases the risk of the mother developing type 2 diabetes mellitus and cardiovascular disease (McDermott et al. 2009). Being even moderately overweight during pregnancy increases the risk of gestational diabetes (McDermott et al. 2009). Indigenous women are at high risk of having Type 2 diabetes and gestational diabetes: conditions that, during pregnancy, pose a heightened risk of pre-term birth, delivery with no labour, caesarean section, hypertension, and longer stay in hospital (AIHW 2010). In 2005–2007, nearly 7 per cent of Indigenous mothers had diabetes during pregnancy: 1.5 per cent had pre-existing diabetes and 5.1 per cent had gestational diabetes. Although Indigenous mothers with either pre-existing or gestational diabetes both had higher risks during

¹ Adequate folate intake is recommended in the period before and after conception and the recommendations are applicable for all women considering pregnancy or of childbearing age. Neural tube defects are where an opening in the spinal cord or brain occurs during early fetal development. During pregnancy in about the third or fourth week, cells begin to form and fuse to form the neural tube. When the neural tube does not close completely, neural tube defects develop. Spina bifida is one form of neural tube defect that affects development of the spine.

pregnancy than those without diabetes, Indigenous mothers with pre-existing diabetes had the highest likelihood of poor maternal outcomes (AIHW 2010).

High blood pressure during pregnancy can have mild to severe effects on the mother and baby. Risks for the mother include kidney and other organ damage. Risks for the baby are low birthweight and early delivery. Severe high blood pressure can threaten the lives of both the mother and the fetus.

In a study of 667 first time mothers (both Indigenous and non-Indigenous) in South Western Sydney, only 7 per cent of mothers reported meeting the National Health and Medical Research Council recommended daily vegetable consumption and only 13 per cent reported meeting the recommended daily fruit consumption (Wen et al. 2010). McDermott et al. (2009) found that in some rural communities in North Queensland, young Indigenous women of childbearing age had poor nutritional status and risky health behaviours. Women in the study presented with high prevalence and incidence of obesity and diabetes, poor nutrition, high rates of alcohol use and tobacco smoking and low red cell folate levels.

The ABS NATSISS 2008 found that among mothers of Indigenous children aged 0 to 3 years;

- 8.4 per cent had diabetes or sugar problems during pregnancy (table 5A.1.1)
- 50.7 per cent took folate prior to or during pregnancy (table 5A.1.1)
- 43.1 per cent took other medicines or supplements during pregnancy (table 5A.1.1)
- 44.7 per cent sought advice or information about pregnancy or childbirth (table 5A.1.1)
- 14.1 per cent had high blood pressure during pregnancy (table 5A.1.1).

There were no significant differences in the prevalence rates of both gestational diabetes and high blood pressure for those living in non-remote and remote areas in 2008 (ABS and AIHW 2010). Among birth-mothers who sought advice and information about pregnancy and childbirth, well over half (63 per cent) reported taking folate before or during pregnancy. Seeking advice, however, had no apparent bearing on whether or not they took other medications or supplements during pregnancy (ABS and AIHW 2010).

Maternal deaths

No new data on maternal mortality from AIHW is available due to ceasing of funding for the collection. Data on Indigenous maternal mortality should be interpreted with caution as Indigenous status cannot be ascertained in all cases and numbers of deaths are small. Small numbers of both Indigenous and non-Indigenous women die during pregnancy and childbirth and a small variation in numbers from one year to the next can significantly alter rates. 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 2009b).

Table 5.1.1 **Indigenous maternal mortality rates 1991–1993 to 2003–2005**

Years	Indigenous 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

^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. * Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons at the $p < 0.05$ level.

Source: AIHW (2009b) *Aboriginal and Torres Strait Islander Health Performance Framework 2008 Report: Detailed Findings*; table 5A.1.16.

- 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 2006–2008, these differences were generally not statistically significant (table 5.1.1).

5.2 Teenage birth rate

Box 5.2.1 Key messages

- There were 78.7 births per 1000 Indigenous teenage women compared with 13.9 births per 1000 non-Indigenous teenage women in 2009 (table 5A.2.31).
- Between 2005 and 2009:
 - in 10 per cent of births to Indigenous men, the father was a teenager (figure 5.2.2)
 - in 20 per cent of births to Indigenous women, the mother was a teenager (table 5A.2.28).

Giving birth as a teenager poses additional risks for both the mother and the baby. Indigenous teenagers have a much higher birth rate and poorer outcomes compared to their non-Indigenous counterparts. However, it is difficult to determine whether poor outcomes are caused by age alone, or are affected by pre-existing circumstances (Larkins et al. 2011).

The primary measure for this indicator is the teenage birth rate, measured as the number of women aged less than 20 years who gave birth as a proportion of all women aged 15 to 19 years.

This section also includes data on related measures:

- births by age of the mother
- births by age of the father
- teenage birth rates (where both the mother and father were aged under 20 years).

Indigenous parents tend to be younger than non-Indigenous parents. Between 2005 and 2009, the median age for Indigenous births was 25 years for mothers and 28 years for fathers. The median ages for non-Indigenous births were 31 years for mothers and 33 years for fathers (tables 5A.2.20–24).

Australia's overall 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), New Zealand (29.8), United Kingdom (29.7), and Canada (20.1) (Morehead and Soriano 2005). However, Australia's teenage birth rate is moderate compared to other Organisation for Economic Co-operation and Development (OECD) member countries. In 2005, of 36 OECD countries Australia had the 15th highest teenage birth rate (OECD 2008). In less developed countries teenage birth rates tend to be

much higher — some in excess of 100 babies per 1000 women (UNFPA 2004). As the data in this section demonstrate, Indigenous teenage birth rates in Australia are much higher than non-Indigenous teenage birth rates (tables 5A.2.13–24). In Australia in 2009, the teenage birth rate for Indigenous females was 78.7 babies per 1000 women, in contrast to 13.9 babies per 1000 non-Indigenous females (table 5A.2.31). Similar results have been found for other Indigenous peoples. Luong (2008) noted that, for Canadian Aboriginals, teenage pregnancy is much more common than for other Canadians. Teenage pregnancy is also much more common for Māori than other New Zealanders (Dickson et al. 2000). Intergenerational factors may contribute to the relatively high Indigenous teenage birth rate. Research for other populations suggests that daughters of teenage mothers are much more likely to become teenage mothers themselves (Anderson and Kahn 1992; Meade, Kershaw and Ickovics 2008) and sons of teenage fathers are also much more likely to become teenage fathers themselves (Sipsma et al. 2010).

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 had 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. However, most teenage mothers in the study left school at the age of 15 or 16, before they were pregnant. Some of these teenagers would have been eligible to receive Newstart, before they received the main income support for single mothers. In Australia, teenage mothers are overrepresented among recipients of the main income support payment for single mothers (Morehead and Soriano 2005), and are overrepresented among disability support payment recipients (Jeon, Kalb and Vu 2008).

International research shows that, particularly in developing areas, improvement in women's education is linked with lower rates of adolescent childbearing (Singh 1998) and with women choosing to delay having their first child and using contraception (UN 2010; Wellings, et al. 1999). Educational institutions are important way to educate young people about sexual health (Zubrick et al. 2004b) and provide a place for young people to raise their concerns and questions about sexual health, however, this opportunity can be confounded by high rates of absenteeism and disengagement with the school system by Indigenous young people (Larkins et. al 2007). Education is also important for mitigating some of the

poor outcomes associated with teenage births. When teenage mothers continue their education, poor home environment problems, such as low cognitive stimulation and lack of emotional support are alleviated (Sullivan et al. 2010).

While research for other populations suggests that teenage pregnancies are associated with heightened physical health risks for both the mother and her baby (Hendrickson 1998), Indigenous specific research shows that some selected outcomes, including rates of smoking, pre-term birth and low birthweight, vary little by age of mother (AIHW 2011).

- In 2007, rates of smoking during pregnancy were three times as high among Indigenous than non-Indigenous mothers (50.5 per cent compared with 14.8 per cent). For those jurisdictions where data were available, rates varied little by age for Indigenous mothers, but were lower with increasing age for non-Indigenous mothers (table 5A.2.33).
- In 2005–2007, higher proportions of Indigenous than non-Indigenous teenage mothers gave birth to low birthweight babies (13.0 per cent compared with 7.8 per cent) and had births that were pre-term² (13.1 per cent compared with 9.6 per cent) (table 5A.2.34). These differences were similar to those found in rates for Indigenous and non-Indigenous mothers of all ages (AIHW 2011).
- In 2005–2007, perinatal mortality rates for Indigenous teenage mothers (18.2 per 1000), were similar to rates for non-Indigenous teenage mothers (20.0 per 1000) (table 5A.2.34). However, for births to women of all ages in 2004-2008, the AIHW found that the Indigenous perinatal mortality rate (around 13 per 1000 births) was higher other people (9 per 1000 births) (AIHW 2011).

Comparison of teenage birth outcomes to total population outcomes may be skewed by poorer outcomes at each end of the age spectrum, as research shows that mothers aged over 35 are also more likely to have complications relative to mothers in their 20s and early 30s (Jolly et al. 2000). Furthermore, younger teenage females have higher risks than older teenagers because their bodies have not had time to fully develop (Hendrickson 1998).

There are also concerns about the emotional maturity of teenager mothers and fathers and their capacity to care for their children. Teenage mothers are more likely to experience depression than older mothers (Liao 2003). Zubrick et al. (2004a) found that mothers who gave birth before the age of 18 years of age were less likely to be the primary carers for their children. Around one quarter of mothers less than

² Pre-term birth is where the gestational age of the child is less than 37 weeks (AIHW unpublished).

16 years of age were not caring for their 0 to 3 year olds. However, for some young women, motherhood can have transformative potential. Larkins et al. (2011) found that teenage women in their Townsville study took motherhood very seriously and spoke about how becoming a mother gave meaning to their lives. These young women, while acknowledging the considerable challenges they faced with housing, transport, finances, employment and childcare, as well as the real and perceived judgement by society about being a teenage mother, spoke about the way they were taking responsibility and their plans and dreams for the future. Those who had supportive families that provided emotional and practical support found the transition to motherhood easier than those who did not (Larkins et al. 2011).

Teenage mothers are more likely to come from disadvantaged backgrounds and are more likely to be disadvantaged later in life, but causation is difficult to determine (Bradbury 2006; Hotz, McElroy and Sanders 2005). Larkins et al. (2011) found the young mothers in their study were highly mobile and generally had poor relationships with their mothers, distrust of men and a family history of early parenting. Some of these women also had experienced sexual or physical abuse or domestic violence in their families (Larkins et al. 2011). A British study found that early-life factors such as low birthweight for gestational age, and low paternal involvement during childhood may affect women's reproductive development, as the teenage women in their study who had these characteristics were more likely to intend to, and achieve, giving birth before the age of 20 (Nettle, Coall and Dickins 2010).

International research indicates that children of young and teenage fathers have an increased risk of adverse birth outcomes such as preterm birth, low birthweight, small for gestational age births, low Apgar Score³ and infant mortality (Chen et al. 2008; Lundström et al. 2010), mental health problems (Krishnaswamy et al. 2009; Rodriguez et al. 2010), congenital malformations such as gastroschisis and trisomy 13 (Archer et al. 2007), schizophrenia (Whol and Gorwood 2006), and some studies have found associations for neural tube defects (Kazaura, Lie and Skjaerven 2004; McIntosh, Olshen and Baird 1995). To date there have been no studies into these health issues for the children born to Australian Indigenous teenage fathers.

³ The Apgar score is a numerical score that indicates a baby's condition shortly after birth. Apgar scores are based on an assessment of the baby's heart rate, breathing, colour, muscle tone and reflex irritability. Between 0 and 2 points are given for each of these five characteristics and the total score is between 0 and 10. The Apgar score is routinely assessed at one and five minutes after birth, and subsequently at five minute intervals if it is still low at five minutes (Day et al. 1999). The future health of babies with lower Apgar scores is often poorer than those with higher scores.

There is little research into why teenage men enter fatherhood, or why males father babies to teenage females, or on the social effects of these births. Larkins et al. (2011) found that young Indigenous men who had not yet become parents had idealised perceptions about teenage pregnancy and parenthood (Larkins et al. 2011). Information about the age of fathers of babies born to teenage females can assist in developing age appropriate programs to reduce teenage birth rates. In 2009:

- most fathers of babies born to Indigenous and non-Indigenous teenage mothers were men aged 18 to 25 years (table 5A.2.32)
- nationally, 29.6 per cent of births to Indigenous teenage women and 13.9 per cent of births to non-Indigenous teenage women had an unknown age for the father of the baby, with proportions for unknown age increasing by remoteness. (table 5A.2.32).

This section defines a teenage birth as a birth where the mother or father is under the age of 20 at the time of birth. A small number of births to girls under the age of 13 are counted as teenage births. This section examines the following types of births:

- Indigenous births — births to an Indigenous mother or father
- births to Indigenous mothers — births to an Indigenous mother
- births to Indigenous fathers — births to an Indigenous father
- births where both parents are Indigenous
- non-Indigenous births — births where both the mother and father are non-Indigenous.

Programs have been developed to assist teenage and young mothers to care for their children. Box 5.2.2 provides examples of programs designed to assist young Indigenous mothers.

Box 5.2.2 Things that work

The **Aboriginal Mothers and Daughters Gathering Program** (NSW) is a community based health education short-course for mothers and their daughters provided in a culturally safe environment. It covers topics such as: puberty, fertility, contraception, pregnancy, birth, communication, self esteem and body image, protective behaviours, and advocacy for service utilisation and school attendance. The program has been delivered four times in Bathurst, Gilgandra and Wellington with 50 participants.

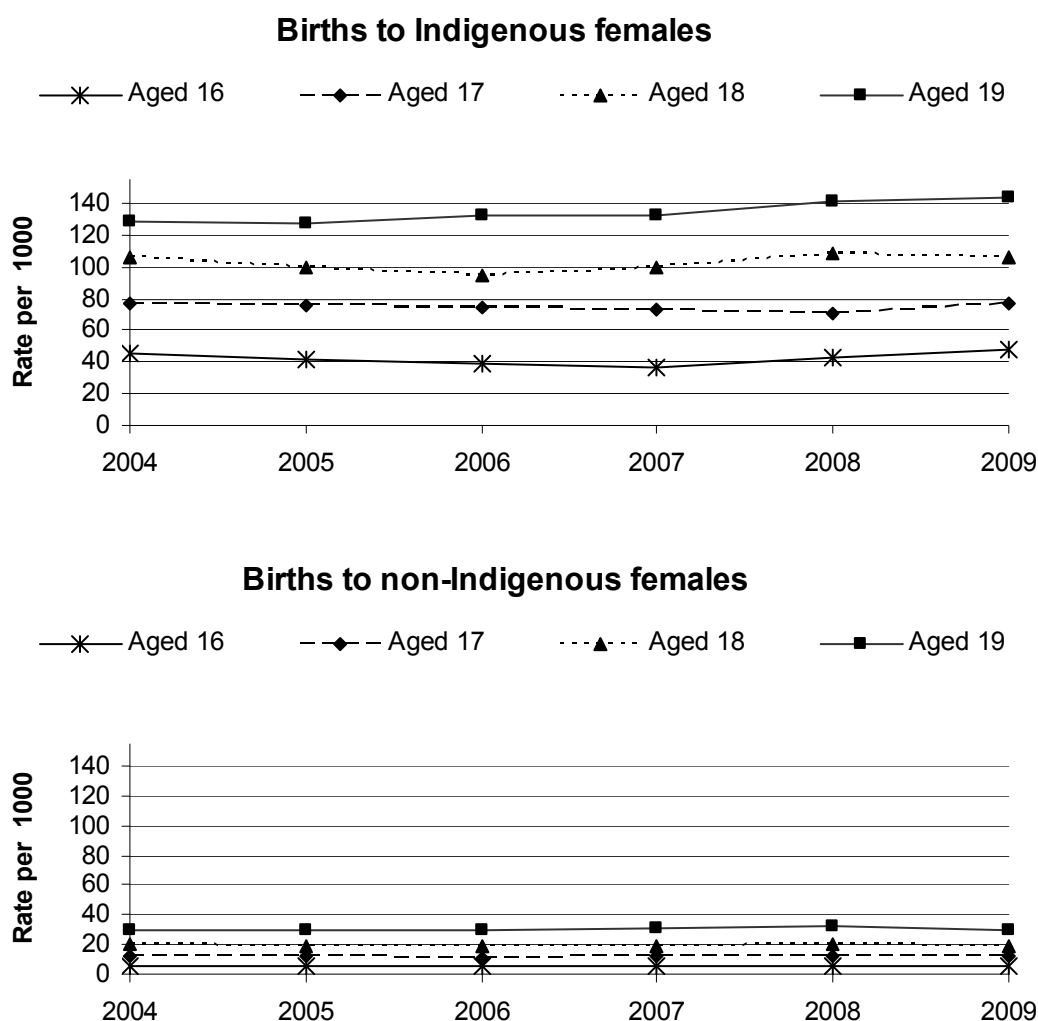
In the short term, the program aims to empower women and girls to look after themselves, make healthy life choices, to promote the use of health services (particularly women's health services). Longer term aims are to increase pap smear uptake rates and reduce cervical cancer mortality rates in the region, and to work more closely with the Aboriginal community on health promotion (Hagan and Collins 2010; NSW Government unpublished).

The **Strong Young Mum's Program** (NSW) started in Bourke in mid 2005 and has had over 120 participants. The program has a strong focus on re-engagement with education, as well as teaching about parenting skills and providing information about service supports. Participants receive regular home visits from the family workers and may receive supported referral if a particular need is identified. Women can also participate in playgroups, guest speaker sessions and training, with childcare available while the women attend training.

Sixty per cent of participants have engaged in informal and accredited training, ranging from art and photography workshops, short courses such as the Responsible Service of Alcohol, Responsible Conduct of Gambling and Safe Food handling, to certificate level II and III courses in areas such as childcare, aged care, hospitality, and fashion. Some women have also completed their School Certificate and their Higher School Certificate through the program. A quarter of the women have also found employment. Most (95 per cent) of the women participated in play and support groups, building stronger bonds with their children, other mothers and support services. Seventy per cent of the women reported that they had a greater awareness of support services with most accessing these more regularly (NSW Government unpublished).

Teenage birth rate and births to teenage Indigenous mothers

Figure 5.2.1 Teenage birth rate per 1000 in population, by age and Indigenous status of mother, 2004 to 2009^a



^a Non-Indigenous population estimates are available for Census years only. In the absence of non-Indigenous population figures for other years, it is possible to derive denominators for calculating non-Indigenous rates by subtracting the Indigenous population from the total population. Such figures have a degree of uncertainty and should be used with caution, particularly as the time from the base year of the projection series increases.

Source: ABS *Births, Australia 2004–09*; ABS (unpublished) 2009, ABS (2009) *Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians, 1991 to 2021*, Cat. no. 3238.0; ABS 2010, *Population by Age and Sex, Australian States and Territories* Cat. no. 3201.0; table 5A.2.30.

The birth rate is calculated as the number births per 1000 females in the population. In 2009:

- there were 78.7 births per 1000 Indigenous teenage women and 13.9 births per 1000 non-Indigenous teenage women (table 5A.2.31)
- the proportion of teenage births to Indigenous women increased with remoteness, from 16.6 per cent in major cities to 23.0 per cent in very remote areas. In contrast, inner and outer regional areas had the highest proportions of non-Indigenous teenage births (table 5A.2.10).

Between 2004 and 2009:

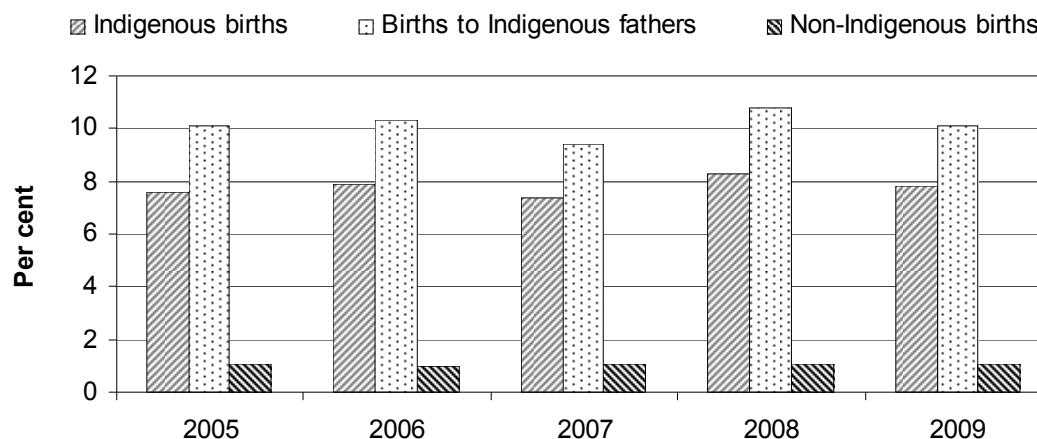
- birth rates for Indigenous females aged up to 19 years increased for each year of age, and were higher than birth rates for non-Indigenous females. Although birth rates varied over time, the average birth rate across these years:
 - for 16 year olds was on average 42 births per 1000 Indigenous women, and 5 births per 1000 non-Indigenous women
 - for 17 year olds was on average 75 births per 1000 Indigenous women, and 12 births per 1000 non-Indigenous women
 - for 18 year olds was on average 102 births per 1000 Indigenous women, and 19 per 1000 non-Indigenous women
 - for 19 year olds was on average 134 births per 1000 Indigenous women, and 30 births per 1000 non-Indigenous women (figure 5.2.1; table 5A.2.30)
- the rate ratio between Indigenous and non-Indigenous teenage birth rates remained fairly steady over time. The rate ratio was highest for 16 year olds and decreased for each year of age. On average, Indigenous birth rates for 16 year old females were 8.1 times those for non-Indigenous 16 year olds, for 17 year olds 6.3 times, for 18 year olds 5.3 times and for 19 year olds 4.5 times the rate of non-Indigenous females (table 5A.2.30).

Between 1998 and 2009:

- one in five births to Indigenous women were teenage births. These rates fluctuated over time, with no obvious increasing or decreasing trends (table 5A.2.28).

Births to teenage fathers

Figure 5.2.2 Proportion of births to teenage fathers 2005 to 2009^{a, b, c, d}



a Births to teenage fathers comprise births where the father was aged less than 20 at the time of the birth. **b** 'Indigenous births' comprise births where either the mother or father identify as being of Aboriginal or Torres Strait Islander origin. Indigenous births also include births where the mother identifies as Indigenous and the father's Indigenous status is unknown. **c** 'Births to Indigenous fathers' comprise births where the father identifies as being of Aboriginal or Torres Strait Islander origin. **d** 'Non-Indigenous births' comprise births where neither the mother nor father identify as being of Aboriginal or Torres Strait Islander origin.

Source: ABS (unpublished) *Births Australia*; table 5A.2.26.

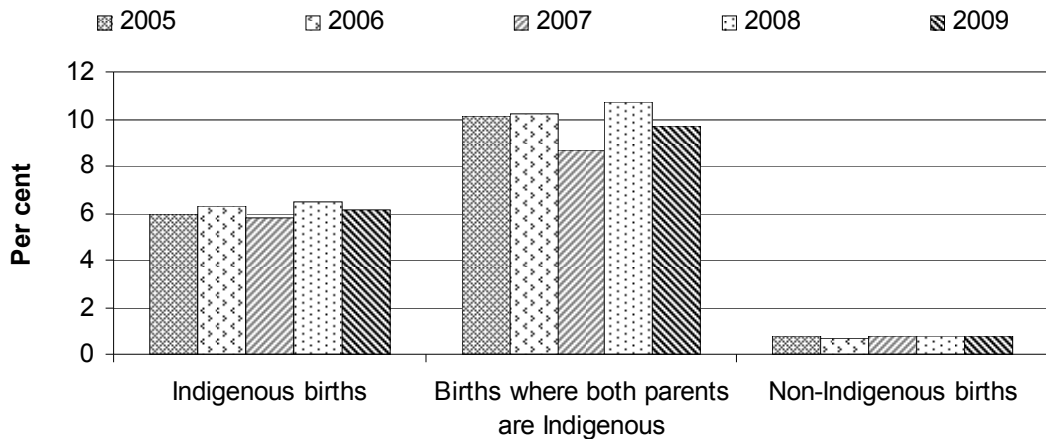
In 2009:

- in one out of ten births to Indigenous fathers, the father was a teenager.
- the rate of teenage fatherhood was 9.2 times as high for births to Indigenous males as it was for births to non-Indigenous males
- nationally, the proportions of births to Indigenous teenage males were around half the proportions of births to Indigenous teenage females (tables 5A.2.26 and 5A.2.25)
- proportions of births to teenage fathers were similar across remoteness areas for Indigenous and non-Indigenous males (table 5A.2.11).

Between 2005 and 2009, proportions of teenage paternity for Indigenous births and births to Indigenous males were much higher than for non-Indigenous births and changed little over time (figure 5.2.2; table 5A.2.26).

Births where both mother and father are teenagers

Figure 5.2.3 Proportion of births to two teenage parents, 2005 to 2009^{a, b, c, d}



^a Births to teenage parents comprise births where both the mother and father were aged less than 20 at the time of the birth. ^b The proportion of births to teenage parents are of total births, which includes births where the age of either the mother or father were 'not stated' or 'unknown'. ^c Indigenous births are where at least one parent identifies as being Aboriginal or Torres Strait Islander. ^d Non-Indigenous births are where both parents are non-Indigenous.

Source: ABS (unpublished) *Births Australia*; table 5A.2.27.

Data for teenage births presented here are for births where both parents were teenagers. Between 2005 and 2009:

- around 6 per cent of Indigenous births (where either parent was Indigenous) were to teenage parents
- around 10 per cent of births where both parents were Indigenous were to teenage parents. Less than one per cent of non-Indigenous births were to teenage parents (figure 5.2.3).

5.3 Birthweight

Box 5.3.1 Key messages

- 11.2 per cent of Indigenous mothers had low birthweight babies in 2006–08, compared to 4.5 per cent of non-Indigenous mothers (table 5.3.2).
- Proportions of low birthweight babies to Indigenous and non-Indigenous mothers were relatively constant between 1998–2000 and 2006–2008, with no change in the gap (tables 5A.3.5–15).

The birthweight of a baby is a key indicator of health status. Children with a low birthweight require longer periods of hospitalisation after birth and are more likely to have poor health, or even die in infancy (ABS and AIHW 2008). Low birthweight can also increase the likelihood of developing chronic diseases in adulthood, including diabetes and heart disease (Mackerras 1998; Fall et al. 1995, Hack et al. 2002). 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).

The primary measure for this section is the proportion of low birthweight babies.

Low birthweight is defined as less than 2500 grams (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 2008).

Data from the ABS National Aboriginal and Torres Strait Islander Social Survey 2008 show that among Indigenous children aged 0–3 years:

- 11.2 per cent were of low birthweight (less than 2500 g) (ABS 2009).

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, a baby born at the normal time (after 37 weeks gestational age) may be of low birthweight, indicating a failure to grow at the normal rate. Low birthweight can therefore occur because of preterm birth, poor fetal growth or both (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 remote Kimberley region of WA, identified pre-term birth as the more common cause of low birthweight.

In addition to the predictors identified by Mackerras (1998) listed in table 5.3.1, multifetal pregnancy is also a predictor for fetal growth retardation and pre-term birth. Some predictors cannot be altered, for example, infant sex or ethnic origin, 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 2008). There is incontrovertible evidence that smoking harms unborn babies (Wills and Coory 2008). In 2008, Indigenous mothers were more than three times as likely as non-Indigenous mothers to smoke during pregnancy (section 5.1). Teenage pregnancies are also associated with lower birthweights and Indigenous teenagers have a much higher birth rate than non-Indigenous teenagers. In 2009, 19.2 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 5A.2.28).

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, 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 births to 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 risk 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, Lancaster and Huang 1996). In 2008, 62.0 per cent of Indigenous women in NSW, SA and the NT accessed antenatal care in their first trimester compared with 81.8 per cent of non-Indigenous women (section 5.1 and table 5A.1.8).

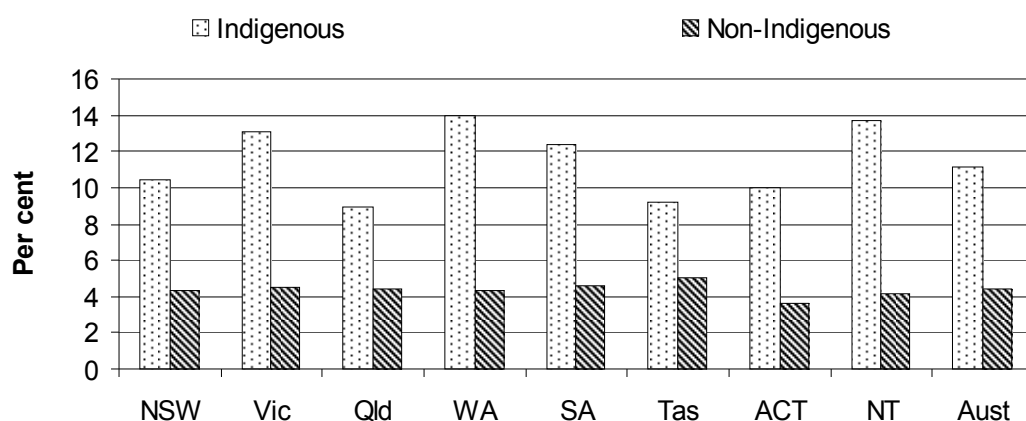
Information on associations between birthweight and maternal health are in attachment table 5A.3.1.

This section contains data from the AIHW National Perinatal Data Collection (NPDC). Midwives and other staff, use information from mothers and from hospital or other records to complete notification forms for each birth. Not all Indigenous mothers are identified as Indigenous in hospital records and therefore, not all babies born to Indigenous mothers are recorded as Indigenous. Caution needs to be exercised when examining data from jurisdictions with small numbers of babies born to Indigenous mothers (see appendix 4 for more information).

The NPDC does not record any information about fathers. Therefore, births in the Indigenous population reported here comprise babies born to Indigenous mothers, and do not include births to Indigenous fathers where the mother is non-Indigenous. Hence, these figures underestimate the total number of Indigenous babies born in a given period. Over one-quarter (27 per cent) of Indigenous births registered in 2009 were to an Indigenous father and a non-Indigenous mother (ABS 2010).

Low birthweight

Figure 5.3.1 Incidence of low birthweight among liveborn singleton babies, by Indigenous status of mothers, 2008^{a, b, c, d, e, f}



^a Singleton births are births of one infant. ^b Data relate to live births. Data exclude stillbirths; births both less than 20 weeks gestation and less than 400g birthweight; and multiple births. ^c Data are by place of usual residence of the mother. Table excludes non-residents, external territories and not stated State/Territory of residence. ^d Victorian totals have not been confirmed due to the nature of this collection. The totals vary due to women residing in Victoria giving birth interstate. ^e Birthweight data on babies born to Indigenous mothers residing in the ACT and Tasmania should be viewed with caution as they are based on small numbers of births. ^f Data on Indigenous births relate to babies born to Indigenous mothers only, and do not include babies born to non-Indigenous mothers and Indigenous fathers. Therefore, the information may not represent the total count of Indigenous babies.

Source: AIHW (unpublished) National Perinatal Data Collection; table 5A.3.2.

According to the NPDC, for women who gave birth to liveborn singleton babies in 2008:

- Indigenous mothers were two and a half times as likely as non-Indigenous mothers to have low birthweight babies (11.2 per cent compared with 4.4 per cent) (figure 5.3.1)
- Indigenous mothers were at least 1.8 times as likely as non-Indigenous mothers to have low birthweight babies in all jurisdictions, but rates varied across states and territories (figure 5.3.1).

Table 5.3.2 Singleton birthweight by live births and fetal deaths, 2006–08^{a, b, c}

	<i>Live births</i>		<i>Fetal deaths^e</i>		<i>Total births</i>	
	no.	%	no.	%	no.	%
<i>Births to Indigenous mothers</i>						
Mean birthweight (grams) ^d	3 207		1 413		3 186	
Low birthweight (<2500g)	3 531	11.2	311	81.6	3 842	12.1
Very low birthweight (<1500g)	589	1.9	256	67.2	845	2.7
Extremely low birthweight (<1000)	282	0.9	214	56.2	496	1.6
All births to Indigenous mothers	31 438	100.0	381	100.0	31 819	100.0
<i>Births to non-Indigenous mothers</i>						
Mean birthweight (grams)	3 416		1 468		3 403	
Low birthweight (<2500g)	36 092	4.5	4 131	77.5	40 223	5.0
Very low birthweight (<1500g)	5 778	0.7	3 514	65.9	9 292	1.1
Extremely low birthweight (<1000)	2 644	0.3	3 173	59.5	5 817	0.7
All births to non-Indigenous mothers	805 777	100.0	5 333	100.0	811 111	100.0
<i>All births^f</i>						
Mean birthweight (grams)	3 408		1 457		3 395	
Low birthweight (<2500g)	39 714	4.7	4 525	78.0	44 239	5.2
Very low birthweight (<1500g)	6 393	0.8	3 850	66.4	10 243	1.2
Extremely low birthweight (<1000)	2 936	0.4	3 466	59.7	6 402	0.8
All births	838 371	100.0	5 802	100.0	844 174	100.0

^a Singleton births are births of one infant. Data exclude multiple births. ^b Birthweight is collected at birth and includes stillbirths of at least 20 weeks gestation or 400g birthweight. ^c Data are presented in a three year grouping due to small numbers from year to year. ^d Indigenous data relate to babies born to Indigenous mothers only, and do not include babies born to non-Indigenous mothers and Indigenous fathers. Thus, the information is not based on the total count of Indigenous babies. ^e The denominator for the fetal death percentages is fetal deaths rather than births. ^f Includes babies to mothers of unknown Indigenous status.

Source: AIHW (unpublished) National Perinatal Data Collection; Victorian Perinatal Data Collection Unit (unpublished); table 5A.3.4.

Data are presented in a three year grouping due to small numbers from year to year in the numbers of Indigenous births, especially once they are disaggregated into low birthweight, very low birthweight and extremely low birthweight.

During 2006–2008, 11.2 per cent of live births to Indigenous mothers were of low birthweight compared with 4.5 per cent for births to non-Indigenous mothers (table 5.3.2).

For all live births, including both singleton and multiple births, mean birthweights and proportions of low birthweight babies born to Indigenous and non-Indigenous mothers were relatively constant between 1998–2000 and 2006–2008 (table 5A.3.5 to 5A.3.14).

5.4 Early childhood hospitalisations

Box 5.4.1 Key messages

- For children aged 0–4 years:
 - hospitalisation rates for Indigenous children increased from 287.6 per 1000 in 2004-05 to 327.4 per 1000 in 2008-09. Rates for other children remained relatively stable around 236 per 1000, leading to an increase in the gap (figure 5.4.1)
 - hospitalisation rates were similar for Indigenous and other children in major cities (227.1 per 1000 compared with 235.8 per 1000), but rates in regional areas were 1.3 times as high for Indigenous children as for other children (324.4 per 1000 compared with 243.0 per 1000) and in remote areas were twice as high (437.8 per 1000 compared with 223.0 per 1000) (table 5A.4.6).

Early childhood hospitalisation rates are an indicator of the health of young children. However, hospitalisations represent the most serious cases and are not 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. A high rate of hospitalisation may also indicate differential access and use of primary health care, as many hospital admissions could be prevented if more effective non-hospital care were available and used (AHMAC 2011). Monitoring the leading causes of hospitalisations can uncover emerging health risks as well as highlighting where there may be a need for more effective primary health care.

The primary measure for this indicator is the hospitalisation rate of Indigenous children aged 0–4 years by principal diagnoses. This section and the next section (section 5.5 Injury and preventable diseases) should be read together. Section 5.5 provides data on a subset of hospitalisations that are potentially preventable.

The Council of Australian Governments (COAG) National Indigenous Reform Agreement includes hospitalisation rates by principal diagnosis as a progress indicator for 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.

The types of major diseases children present with, the number of multiple diagnoses and the duration and frequency of children’s hospitalisations are important measures of the health of Indigenous children. A study by the Telethon Institute of Child Health (Carville et al. 2007), on children’s hospitalisations before the age of two, found that the most common reason for hospitalisation was infection (mainly respiratory and gastrointestinal) accounting for 34 per cent of all admissions. Aboriginal children had significantly higher admission and comorbidity rates, stayed longer and were more likely than non-Aboriginal children to die in hospital. Hospitalisation rates for Aboriginal children for infections were more than four times as high as for non-Aboriginal children (Carville et. al. 2007).

The significant contribution that infections and respiratory illnesses make to the hospitalisation rates for Indigenous children is confirmed by numerous studies and data sets. Data used in this section from the AIHW National Hospital Morbidity Database show that, in 2008-09, diseases of the respiratory system were the most common cause of hospitalisation of Indigenous children aged 0–4 years, with 90.0 per 1000 Indigenous children hospitalised nationally. The rate for other children was far lower at 48.8 per 1000 (table 5.4.1; table 5A.4.5).

A study by O’Grady, Torzillo and Chang (2010) found that:

- one in five Indigenous infants⁴ between 1999 and 2004 in the NT were hospitalised with an acute lower respiratory infection at least once, with half of these hospitalisations occurring before the child was 5 months old. In 45 per cent of episodes the child was also diagnosed with other health problems such as anaemia, gastroenteritis or malnutrition

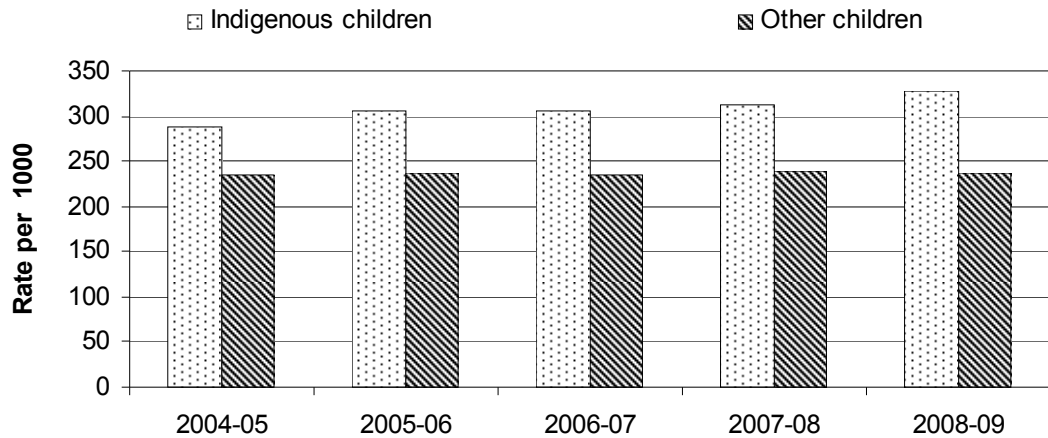
⁴ ‘Infants’, in the study by O’Grady, Torzillo and Chang (2010), refers to children aged less than 12 months.

-
- hospitalisations for acute lower respiratory infections were higher for NT Indigenous infants¹ (427 per 1000 child-years⁵) than for American Indian or Alaskan Native infants (116 per 1000 child-years). The NT Indigenous infant rate was also notably higher than for children aged less than 5 years in developing countries (290 episodes per 1000 child-years)
 - NT Indigenous infants¹ had 78.4 episodes per 1000 child-years for pneumonia, the highest published incidence in the world (of World Health Organisation-defined radiologically confirmed pneumonia).

This section uses data from the AIHW National Hospital Morbidity Database for NSW, Victoria, Queensland, WA, SA and public hospitals in the NT combined, and Tasmania and ACT separately. As explained in chapter 2 and appendix 3, hospitalisation data for Indigenous people in Tasmania and the ACT should be interpreted with caution until further assessment of Indigenous identification is completed. Hospitalisation data are for episodes of care, so some children may be included more than once in the data.

⁵ Rates ‘per 1000 child-years’ indicates the number of hospitalisations per 1000 years lived by the children observed in the study. In the study by O’Grady, Torzillo and Chang (2010) there were 9295 infants, 8498 child-years of observation and 15 948 hospitalised episodes of care over the study period.

Figure 5.4.1 Hospitalisations per 1000 children aged 0–4 years, NSW, Victoria, Queensland, WA, SA and public hospitals in the NT, 2004–2005 to 2008–2009^{a, b, c, d, e}

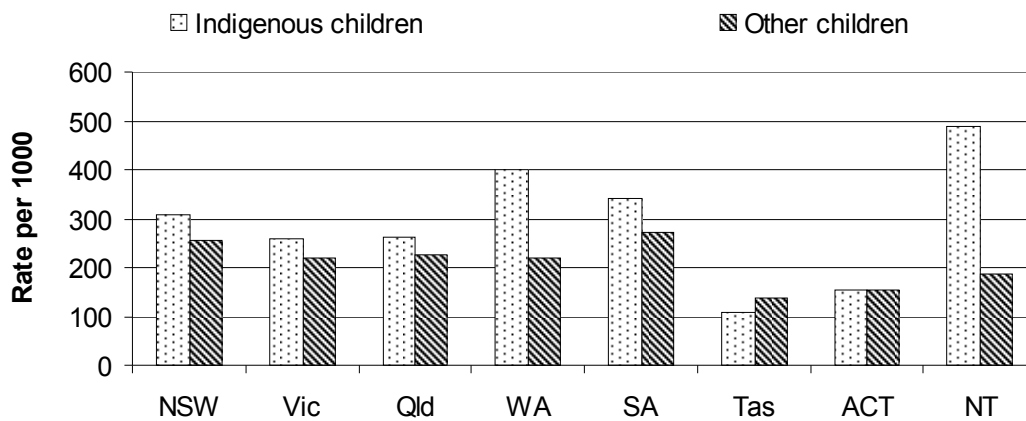


^a Data includes six jurisdictions for which the quality of Indigenous identification in hospitalisation data is considered acceptable (NSW, Victoria, Queensland, WA, SA and the NT only). ^b Data are based on principal diagnosis as classified by the ICD-10-AM classification of diseases (International Statistical Classification of Diseases) 10th Revision, Australian Modification. ^c Data are based on State of usual residence. ^d Age specific rates are per 1000 people in that age group (based on ABS Indigenous population projections). ^e 'Other children' includes hospitalisations of non-Indigenous children and those for whom Indigenous status was not stated.

Source: AIHW (unpublished) National Hospital Morbidity Database; tables 5A.4.1–5.

- Between 2004-05 and 2008-09, hospitalisation rates for Indigenous children aged 0–4 years were between 1.2 and 1.4 times as high as hospitalisation rates for other children aged 0–4 years (figure 5.4.1).
- Hospitalisation rates for Indigenous children aged 0–4 years increased from 287.6 per 1000 in 2004-05 to 327.4 per 1000 in 2008-09, while rates for other children aged 0–4 years remained relatively stable over time (between 234.2 and 236.9 per 1000) (figure 5.4.1).

Figure 5.4.2 Hospitalisations per 1000 children aged 0–4 years, by State and Territory, 2008-09^{a, b, c, d, e, f}



^a Data for NT, Tasmania and ACT are for hospitalisations in public hospitals only. ^b Data for Tasmania and ACT should be interpreted with caution until further assessment of Indigenous identification is completed. ^c Data are based on principal diagnosis as classified by the ICD-10-AM classification of diseases (International Statistical Classification of Diseases) 10th Revision, Australian Modification. ^d Data are based on State of usual residence. ^e Age specific rates are per 1000 people in that age group (based on ABS Indigenous population projections). ^f 'Other children' includes hospitalisations of non-Indigenous children and those for whom Indigenous status was not stated.

Source: AIHW (unpublished) National Hospital Morbidity Database; table 5A.4.5.

- Hospitalisation rates for Indigenous children aged 0–4 years were higher than rates for other children aged 0–4 years in 2008-09 in all states and territories except the ACT and Tasmania (figure 5.4.2).
- While hospitalisation rates for Indigenous children aged 0–4 years were similar to corresponding rates for other children in major cities (227.1 per 1000 compared with 235.8 per 1000), Indigenous children's rates were 1.3 times as high as other children's rates in regional areas (324.4 per 1000 compared with 243.0 per 1000) and 2 times as high in remote areas (437.8 per 1000 compared with 223.0 per 1000) (table 5A.4.6).

Table 5.4.1 Hospitalisations of children aged 0–4 years, NSW, Victoria, Queensland, WA, SA and public hospitals in the NT, by principal diagnoses, 2008–09^{a, b}

	<i>No. of hospitalisations</i>		<i>Age-specific rate^c</i>		<i>Rate ratio</i>
	<i>Indigenous</i>	<i>Other^d</i>	<i>Indigenous</i>	<i>Other^d</i>	
Diseases of the respiratory system	5 674	61 556	90.0	48.8	1.8
Certain conditions originating in the perinatal period	3 005	51 404	47.6	40.8	1.2
Certain infectious & parasitic diseases	2 123	18 618	33.7	14.8	2.3
Injury and poisoning & certain other consequences of external causes	1 691	21 925	26.8	17.4	1.5
Contact with health services	1 644	31 759	26.1	25.2	1.0
Symptoms, signs & abnormal clinical & laboratory findings	1 223	21 801	19.4	17.3	1.1
<i>Total (top 6 diagnoses)</i>	15 360	207 063	243.5	164.3	1.5
Other	5 289	91 439	83.9	72.5	1.2
Total hospitalisations	20 650	298 628	327.4	236.9	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 'Other' includes hospitalisations of non-Indigenous people and those for whom Indigenous status was not stated.

Source: AIHW (unpublished) National Hospital Morbidity Database; table 5A.4.5.

- The most common causes for hospitalisation amongst both Indigenous and other children aged 0–4 years in 2008-09 were: diseases of the respiratory system and certain conditions originating in the perinatal period (table 5.4.1).
- Indigenous children aged 0–4 years were 2.3 times as likely as other children to be hospitalised due to infectious and parasitic diseases and 1.8 times as likely as other children to be hospitalised due to diseases of the respiratory system (table 5.4.1).
- Indigenous children's hospitalisation rates for diseases of the respiratory system increased with remoteness, from 57.4 per 1000 in major cities; to 88.6 per 1000 in regional areas and 140.1 per 1000 in remote areas. In remote areas the rate for Indigenous children was 2.5 times as high as for other children (table 5A.4.6).
- Indigenous children's hospitalisation rates for certain infectious and parasitic disease also increased with remoteness. In remote areas the rate for Indigenous children was 3.9 times as high as for other children (table 5A.4.6).

5.5 Injury and preventable disease

Box 5.5.1 Key messages

- For children aged less than 5 years:
 - in NSW, Victoria, Queensland, WA, SA and public hospitals in the NT in 2008-09, 192.1 per 1000 Indigenous children were hospitalised for potentially preventable diseases and injuries, compared to 104.3 per 1000 other children (table 5.5.1)
 - in 2005–2009, for NSW, Queensland, WA, SA and the NT combined, the death rate for Indigenous children (13.5 deaths per 10 000 children) was more than twice the rate for non-Indigenous children (6.2 deaths per 10 000 children) (table 5A.5.7).

In Australia, many childhood diseases are generally prevented or successfully treated without hospitalisation. The main focus of this indicator is to examine the diseases and injuries experienced by children that result in a hospital admission, which represent the most serious cases of disease and injury. The primary measures for this indicator are hospitalisation and death rates for injury and potentially preventable disease, for children aged less than five years.

A wide range of social, cultural, physical and economic factors influence the health of children. Communities and governments can assist in preventing disease, and promote the health of children, with improved access to quality medical care, disease registers to improve follow up care, free vaccination programs, the provision of adequate housing, education on the benefits of good nutrition and sanitation and policies, and promotion to reduce the risk of injury. Breastfeeding can reduce the risk hospitalisation for a range of acute childhood illnesses, including gastrointestinal diseases and infections, and prevent the development of infections and chronic diseases such as diabetes and obesity in later life (Queensland Health 2003).

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).⁶ The major pathogen of skin

⁶ 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).

The WA Aboriginal Child Health Survey (WAACHS) (Zubrick 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.
- 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.
- An estimated 5.6 per cent of Indigenous children suffered from recurring gastrointestinal infections, with infection rates twice as high in extremely isolated areas⁷ as in other areas. Prevalence decreased significantly after 11 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 of infection.

Access to effective and appropriate health care services (including dental and immunisation services) can influence the health of children in the short and long

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).

⁷ The WAACHS used the Levels of Relative Isolation (LORI) geographical classifications. There are five categories of isolation in the LORI: None (Perth Metropolitan area), Low, Moderate, High and Extreme. The LORI differs from the Accessibility/Remoteness Index of Australia used to classify remoteness elsewhere in this report. For more information about LORI see Zubrick et al. 2004, Appendix C.

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). See chapter 9 for more information on diseases associated with poor environmental health.

Box 5.5.2 describes a program to reduce rates of preventable disease for Indigenous children.

Box 5.5.2 'Things that work' – injury and preventable disease

The **Nganampa Health Council (NHC)** (SA), provides primary healthcare services for the Anangu people of SA, with an emphasis on child health. The NHC provides a range of successful programs for children, including immunisation, school aged screening, child growth monitoring for children aged less than 5 years, and child nutrition:

- all patients 6 months to 2 years, and 99.5 per cent of patients aged 2 to 6 years were fully immunised under the childhood immunisation program
- 83 per cent of eligible children received child health screening between January and August 2009 (even though 47 of 178 eligible children resided out of the local area for all, or part, of the screening year)
- growth monitoring and surveillance was provided for 384 eligible children aged less than 5 years, with an average of around 5 child growth monitoring encounters per child in 2009 (although some children were screened more frequently than others) (NHC 2010).

Potentially preventable hospitalisations

Monitoring the leading causes of preventable hospitalisations can uncover emerging health risks as well as highlighting where there may be a need for more effective primary health care. However, hospitalisation rates 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. A high rate of hospitalisation may also indicate differential access to primary health care, as many hospital admissions could be prevented if more effective non-hospital care were available (AHMAC 2011).

Research suggests that parents of Indigenous infants may use health services for their children differently to parents of non-Indigenous infants. Ou et. al (2010), using the Longitudinal Study of Australian Children, found that the health status of Indigenous infants in the study was poorer than that of non-Indigenous infants, and that parents of Indigenous infants accessed certain health services less frequently than non-Indigenous parents. The parents of Indigenous infants were less likely to have used maternal and child health centres, help lines, maternal and child health nurse visits, general practitioners and paediatricians. However, Indigenous infants were more likely than other Australian children to have received treatment at hospital outpatient clinics or to have been hospitalised (Ou et al. 2010).

The conditions included in table 5.5.1 are based on AIHW advice and include conditions that potentially could have been prevented by the provision of appropriate non-hospital health services, and injuries that potentially could have been prevented (usually outside the health system in broader society).

This section presents data on potentially preventable hospitalisations of children, by principal diagnoses. The principal diagnosis is the problem that was chiefly responsible for the patient's hospitalisation. While hospitalisation rates 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.

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, 2008-09^{a, b, c}

ICD-10-AM code and description	Hospitalisations (number)			Age specific rate (per 1000 population) ^d	
	Indigenous	Other ^e	Total	Indigenous	Other ^e
Certain infectious & parasitic diseases (A00–B99)	2 123	18 618	20 741	33.7	14.8
Nutritional anaemias (D50–D53) & malnutrition (E40–E46)	157	172	329	2.5	0.1
Diseases of the ear & mastoid process (H60–H95)	620	16 689	17 309	9.8	13.3
Diseases of the respiratory system (J00–J99)	5 674	61 556	67 230	90.0	49.0
Diseases of oral cavity, salivary glands & jaws (K00–K14)	820	7 184	8 004	13.0	5.7
Diseases of the skin & subcutaneous tissue (L00–L99)	1 030	5 004	6 034	16.3	4.0
Injury, poisoning & certain other consequences of external causes (S00–T98) ^f	1 691	21 925	23 616	26.8	17.4
Transport accidents (V01–V99) ^f	110	807	917	1.7	0.6
Other external causes of accidental injury (W00–X59) ^f	1 391	18 669	20 060	22.1	14.8
Assault (X85–Y09)	58	190	248	0.9	0.2
Complications of medical & surgical care (Y40–Y84) ^f	114	2 114	2 228	1.8	1.7
Other ^f	16	135	151	0.3	0.1
Total potentially preventable hospitalisations	12 115	131 148	143 263	192.1	104.3

^a Data includes six jurisdictions for which the quality of Indigenous identification in hospitalisation data is considered acceptable (NSW, Victoria, Queensland, WA, SA and public hospitals in the NT only). ^b Data are for principal diagnosis as based on International Classification of Diseases-10th Edition-Australian Modification classification of diseases. Some of the disease codes may also include some non-preventable conditions. ^c Data are based on State of usual residence of the patient hospitalised. ^d Age specific rates are per 1000 population of children aged 0-4 years (based on ABS Indigenous population projections). ^e 'Other' includes hospitalisations of non-Indigenous children and those for whom Indigenous status was not stated. ^f External causes sub-categories classified by first external cause.

Source: AIHW National Hospital Morbidity Database (unpublished); table 5A.5.5.

In NSW, Victoria, Queensland, WA, SA and public hospitals in the NT, for children aged less than 5 years in 2008-09:

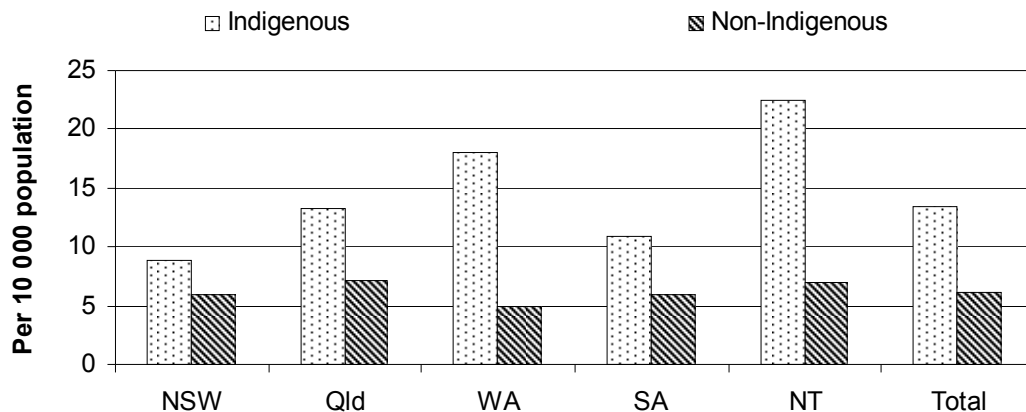
- Indigenous children were 1.8 times as likely as other children to be hospitalised for potentially preventable diseases and injuries (192.1 per 1000 compared to 104.3 per 1000) (table 5.5.1)

-
- diseases of the respiratory system were the most common cause of potentially preventable hospitalisations for both Indigenous and other children, but the rate for Indigenous children (90.0 per 1000) was 1.8 times as high as the rate for other children (49.0 per 1000) (table 5.5.1)
 - certain infectious and parasitic diseases was the second most common cause of potentially preventable hospitalisations for Indigenous children (33.7 per 1000), which was 2.3 times as high as the rate for other children (14.8 per 1000)
 - Indigenous children's hospitalisations for injury and preventable diseases increased with remoteness from 125.0 per 1000 in major cities, to 181.8 per 1000 in regional areas and 307.5 per 1000 in remote areas (table 5A.5.6)
 - hospitalisation rates for potentially preventable diseases and injuries were higher for Indigenous than other children aged less than five years in all jurisdictions with available data (table 5A.5.5).

Hospitalisation rates for potentially preventable diseases and injuries remained relatively constant throughout the period 2004-05 to 2008-09 for both Indigenous and other children aged less than five years (tables 5A.5.1–5A.5.5).

Potentially preventable deaths of Indigenous children

Figure 5.5.1 Deaths rates from external causes and preventable diseases for children aged less than five years, 2005–2009^{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 Non-Indigenous estimates are available for census years only. In the intervening years, Indigenous population figures are derived from assumptions about past and future levels of fertility, mortality and migration. In the absence of non-Indigenous population figures for these years, it is possible to derive denominators for calculating non-Indigenous rates by subtracting the projected Indigenous population from the total population. Such figures have a degree of uncertainty and should be used with caution, particularly as the time from the base year of the projection series increases. ^c Non-Indigenous includes deaths with a 'Not stated' Indigenous status. ^d Total includes data for NSW, Queensland, WA, SA and the NT only. These 5 states and territories have been included due to there being evidence of sufficient levels of identification and sufficient numbers of deaths to support mortality analysis.

Source: ABS (unpublished) *Causes of Death, Australia, 2009*; table 5A.5.7.

In 2005–2009, for children aged less than 5 years:

- for NSW, Queensland, WA, SA and the NT combined, the death rate for Indigenous children (13.5 deaths per 10 000 children) was more than twice the rate for non-Indigenous children (6.2 deaths per 10 000 children) (table 5A.5.7)
- death rates for Indigenous children for external causes and preventable diseases were highest in the NT, with 22.4 deaths per 10 000, which was more than three times the rate for non-Indigenous children (6.9 deaths per 10 000) (table 5A.5.7).

5.6 Basic skills for life and learning

Box 5.6.1 Key messages

- 52.0 per cent of Indigenous five year old children were classified as 'at risk' or 'vulnerable' in the domain of language and cognitive skills in 2009, compared to 21.4 per cent of non-Indigenous five year olds (table 5A.6.1).
- The proportion of Indigenous five year old children classified as 'at risk' or 'vulnerable' in the domain of language and cognitive skills increased with remoteness in 2009, from 43.1 per cent in major cities to 72.8 per cent in very remote areas (table 5A.6.2).
- 31.0 per cent of Indigenous children received a fourth year developmental Aboriginal and Torres Strait Islander child health check in 2009-10 (table 5A.6.5).

This indicator focuses on the developmental health and learning of children before they enter primary school. It contains four measures:

- the Australian Early Development Index (AEDI)
- language background
- Medicare funded developmental health checks
- informal learning activities of children between the ages of three and fourteen years.

Australian Early Development Index (AEDI)

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 using a checklist completed for each child by their teacher. In 2009, the AEDI checklist was completed for 261 203 children — 97.5 per cent of the estimated five year old Australian population — including 12 452 Indigenous children — 99.3 per cent of the projected 2009 five year old Indigenous population (ABS unpublished).

The checklist comprises over 100 questions, and measures five domains:

- physical health and wellbeing
- social competence

- emotional maturity
- language and cognitive skills
- communication skills and general knowledge.

These developmental domains are closely linked to predictors of adult health, education and social outcomes. Children who score in the lowest 10 per cent of the AEDI population are classified as ‘developmentally vulnerable’. Between the 10th and 25th percentile, children are classified as ‘developmentally at risk’. Children who score above the 25th percentile are classified as ‘on track’.

Each of the five developmental domains of the AEDI are explored in the AEDI survey through sub-domains. The domains and sub-domains of the AEDI are presented in table 5.6.1.

Table 5.6.1 AEDI domains of children’s development

<i>Physical health and wellbeing</i>	<i>Social competence</i>	<i>Emotional maturity</i>	<i>Language and cognitive skills (school-based)</i>	<i>Communication skills and general knowledge</i>
Physical readiness for the day	Overall social competence	Pro-social and helping behaviour	Basic literacy	Communication skills and general knowledge
Physical independence	Responsibility and respect	Anxious and fearful behaviour	Interest in literacy, numeracy and memory	
Gross and fine motor skills	Approaches to learning Readiness to explore new things	Aggressive behaviour Hyperactivity and inattention	Advanced literacy Basic numeracy	

Source: Centre for Community Child Health and Telethon Institute for Child Health Research (2009) A Snapshot of Early Childhood Development in Australia — AEDI National Report 2009, Canberra.

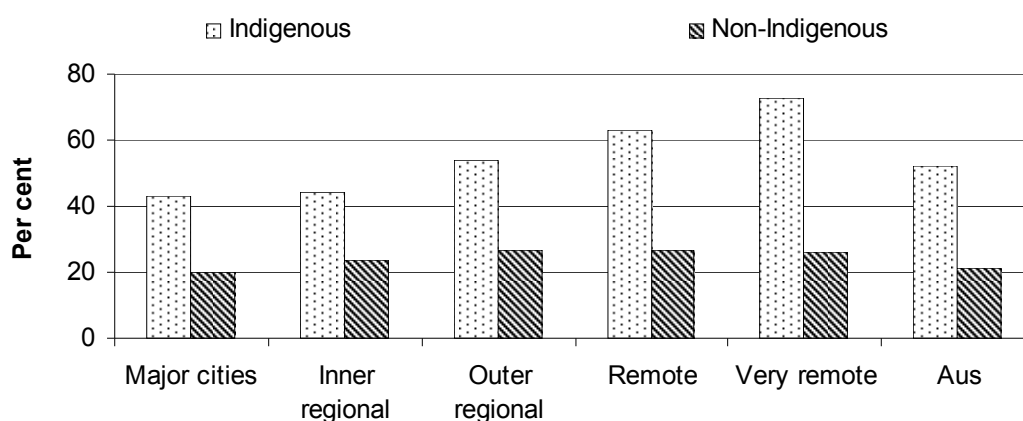
In 2009:

- Indigenous children were more likely to be classified as ‘at risk’ or ‘vulnerable’ in all of the five AEDI domains. (table 5A.6.1)
- Indigenous children were more likely to be classified as ‘on track’ in the ‘physical health and wellbeing’ and ‘social competence’ domains than the ‘language and cognitive skills’ and ‘communication skills and general knowledge’ domains (table 5A.6.1). AEDI research suggests that Indigenous children often fare better in the ‘physical independence’ sub-domain of the overall ‘physical health and wellbeing’ domain in comparison to non-Indigenous children and, when results are controlled for socioeconomic status, Indigenous children score equivalently on the gross and fine motor skills

sub-domain (Brinkman, S., Perth, Telethon Institute for Child Health Research, pers. comm., 1 April 2011)

- ‘Social competence’ and ‘emotional maturity’ are the two domains where Indigenous and non-Indigenous children vary the least (table 5A.6.1)
- ‘Physical health and wellbeing’, ‘social competence’ and ‘emotional maturity’ are less affected by remoteness than ‘language and cognitive skills’ and ‘communication skills and general knowledge’ (table 5A.6.1 and 5A.6.2).

Figure 5.6.1 Australian Early Development Index, proportion of five year old children classified ‘at risk’ or ‘vulnerable’ in the language and cognitive skills domain^a



^a ‘At risk’ and ‘vulnerable’ children score in the lowest 25th percentile of the AEDI.

Source: Australian Early Development Index (unpublished); table 5A.6.2.

The greatest disparity between AEDI results for Indigenous and non-Indigenous five year old children was in the domain of language and cognitive skills. In 2009:

- the proportion of Indigenous five year old children classified ‘at risk’ or ‘vulnerable’ in the domain of language and cognitive skills (52.0 per cent) was 2.4 times the proportion for non-Indigenous children (21.4 per cent) (table 5A.6.1)
- the proportion of Indigenous children classified as ‘at risk’ or ‘vulnerable’ increased with remoteness from 43.1 per cent in major cities to 72.8 per cent in very remote areas (figure 5.6.1)
- the greatest difference between Indigenous and non-Indigenous children occurred in the NT, where 71.0 per cent of Indigenous children were classified

‘at risk’ or ‘vulnerable’, compared with 21.4 per cent of non-Indigenous children (table 5A.6.1).

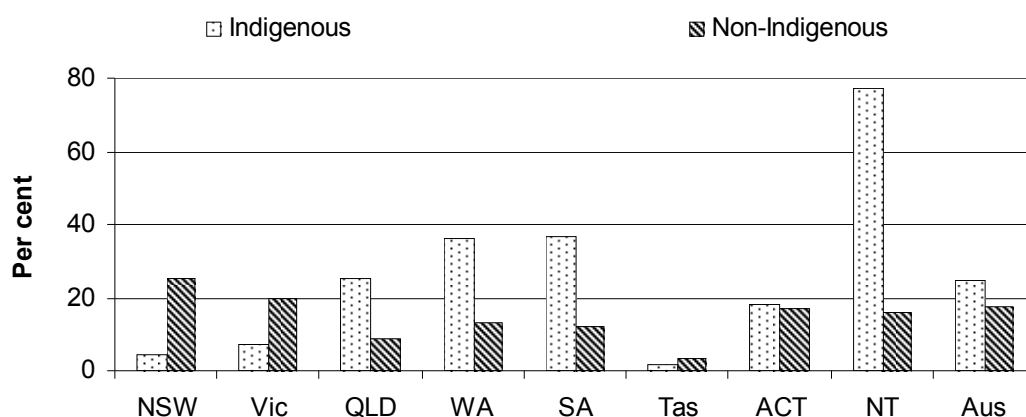
Language background

Language development is one of the dimensions that determines a child’s readiness for school (Dockett et. al. 2008). A child whose first language is not English may be disadvantaged in an English learning environment (Dockett et. al. 2010; Kral and Morphy 2009; Zubrick et. al. 2006).

Language is also important for life. Research indicates that a person’s primary language — the first language learnt, or the mother tongue — is used to gain knowledge of the world and is inextricably linked with how people become social beings and form their earliest memories. Language forms a significant component of a person’s cultural identity (Kral and Morphy 2006, Lo Bianco and Slaughter 2010).

This section reports data on language background other than English. That is, children who speak languages other than, or additional to, English at home, or are reported by teachers to have English as a Second Language status.

Figure 5.6.2 **Five year old children with language background other than English**



Source: Centre for Community Child Health and Telethon Institute for Child Health Research (2009) *A snapshot of Early Childhood Development in Australia — AEDI National Report 2009*, Canberra; table 5A.6.3.

In 2009:

- a higher proportion of Indigenous (24.6 per cent) than non-Indigenous five year old children (17.7 per cent) had a language background other than English (figure 5.6.2)
- in the NT, the proportion of Indigenous five year old children with a language background other than English was 4.9 times the proportion of non-Indigenous children (figure 5.6.2).

Data for the primary language of Indigenous five year old children is provided in tables 5A.6.4 and 5A.6.5.

Medicare funded developmental health checks

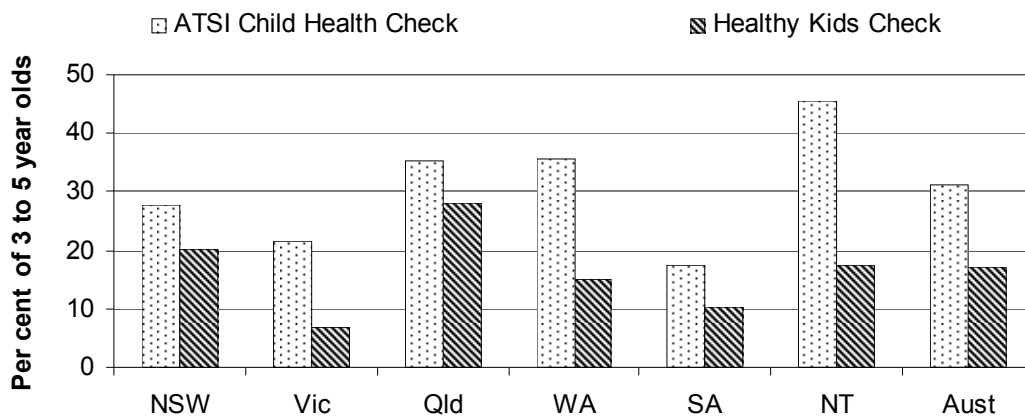
The Medicare Benefits Schedule (MBS) includes a Healthy Kids Check that aims to improve the health and wellbeing of Australian children by promoting early detection of lifestyle risk factors and delayed development. It can be provided by a medical practitioner, a practice nurse or a registered Aboriginal health worker, and is available to all children aged 3, 4 or 5 years (it is usually delivered in conjunction with the four year old immunisation).

The MBS also includes health assessment items for Aboriginal and Torres Strait Islander people to help ensure they receive primary health care matched to their needs, by encouraging early detection, diagnosis and intervention. These health assessments are available to Aboriginal and Torres Strait Islander people in three age groups (0–14 years, 15–55 years, and 55 years and over). The health assessment for 0–14 year old Indigenous children is called the Aboriginal and Torres Strait Islander Child Health Check.

Babies and young children may also receive regular developmental health checks from maternal and child health nurses employed by State, Territory or local governments. Data for health checks provided by maternal and child health nurses are not available.

This section provides data on the number of children receiving a fourth year developmental health check. Indigenous children aged three to five years can receive an Aboriginal and Torres Strait Islander Child Health Check. Both Indigenous and non-Indigenous children aged three to five years can receive a Healthy Kids Check.

Figure 5.6.3 Children receiving a fourth year developmental health check, 2009-10^{a, b, c, d}



^a Limited to health checks available under Medicare. ^b Data for Indigenous children include claims for MBS Item 708 (Aboriginal and Torres Strait Islander Child Health Check) and Item 715 (Aboriginal and Torres Strait Islander Peoples Health Assessment) for children aged 3–5 years. ^c Data include claims for MBS Items 709 and 711 (Healthy Kids Check) and Items 701, 703, 705, 707 and 10 986 (Health Assessment) for all children (Indigenous status not specified) aged 3–5 years. ^d Data for Indigenous children are not published for Tasmania or the ACT.

Source: DoHA (unpublished) MBS data collection; ABS (2009) *Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians 1991 to 2021*, Cat. no. 3238.0; ABS (unpublished) *Australian Demographic Statistics*, Cat. no. 3101.0; table 5A.6.6.

In 2009-10:

- 31.0 per cent of Indigenous children aged three to five years received a Aboriginal and Torres Strait Islander Child Health Check (table 5A.6.6)
- the NT had the highest reported rate (45.5 per cent) and SA had the lowest reported rate (17.3 per cent) of three to five year old Indigenous children receiving an Aboriginal and Torres Strait Islander Child Health Check (figure 5.6.3).

Data for the number of Indigenous children aged 0–14 years who received a health check or assessment in 2009-10 are provided in table 5A.6.7.

Informal learning activities

The 2008 National Aboriginal and Torres Strait Islander Social Survey (NATSISS) collected data about the informal learning activities of Indigenous children aged 0–14 years.

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- Watching television, a video or a DVD (88.9 per cent) was the most common informal learning activity a carer undertook with an Indigenous child. Taking part in or attending a playgroup (7.6 per cent) was the least common activity a carer and an Indigenous child did together in 2008 (table 5A.6.8).
 - The proportion of Indigenous children told a story by their carer was higher for those living in remote and very remote areas (49.9 per cent) than major cities (38.6 per cent). However, the proportions of Indigenous children living in major cities who were assisted with their homework (56.6 per cent), spent time with their carer on the computer (42.9 per cent), or were read a book (50.2 per cent) was higher than for Indigenous children living in remote areas undertaking the same activities (31.5 per cent, 16.1 per cent, and 41.2 per cent, respectively) (table 5A.6.9).

There are no data about informal learning activities specific to non-Indigenous children aged 0–14 years. However, *Childhood Education and Care, 2008* (ABS 2009) provides data for all children aged 0–8 years.

- 96 per cent of all children aged 3–8 years and 80 per cent of all children aged 0–2 years were told stories, read to or were listened to while they read (tables 5A.6.10 and 5A.6.11).

5.7 Hearing impairment

Box 5.7.1 Key messages

- Indigenous children living in remote communities have the highest internationally published prevalence rates for otitis media. Of Indigenous children who had a Northern Territory Emergency Response audiology check, 74 per cent had at least one middle ear condition and 54 per cent had some hearing loss. (AIHW and Department of Health and Ageing 2009; Department of Health and Ageing unpublished).
- Indigenous 0–14 year olds had higher rates of hearing problems than non-Indigenous 0–14 year olds in 2001, 2004–05 and 2008, and the gap remained unchanged (figure 5.7.1).
- The prevalence of hearing problems among Indigenous 0–14 year olds in remote areas decreased from 17.7 per cent in 2001 to 10.3 per cent in 2008. The rate in non-remote areas remained relatively stable around 8 per cent (table 5A.7.3).
- In major cities, Indigenous 0–14 year olds had lower rates of hospitalisation for all diseases of the middle ear and mastoid than other children (5.5 per 1000 compared with 7.3 per 1000) but in remote areas the rate for Indigenous children (14.7 per 1000) was 2.3 times as high as for other children (6.4 per 1000) (table 5A.7.9).

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).

The primary measures for this indicator are:

- prevalence of hearing conditions in children aged 0–14 years
- hospitalisation rates where the principal diagnosis was diseases of the ear and mastoid process for children aged 0–14 years.

Among non-Indigenous children, otitis media typically resolves with age and is rarely seen in 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 (Kong and Coates 2009;

Morris et al. 2006; WHO 2004). Some Indigenous communities have a prevalence rate of 40 per cent (Couzos, Metcalf and Murray 2007).

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; Rothstein, Heazlewood and Fraser 2007). Hearing assessments for school-age children in the Anangu Pitjantjatjara Yunkunytjatjara Lands (APY) and Tjarutja Lands between 2002 and 2008 found that 74 per cent of children failed a standard hearing test and more than 30 per cent of children had eardrum perforations, about half of which had active disease (discharging ears) (Gent 2008). The worst affected children met the hearing impairment criteria for government disability support (CRCAH 2009).

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; Senate Community Affairs References Committee 2010; 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 (Aithal, Yonovitz and Aithal 2008; Brouwer et al. 2005; Couzos, Metcalf and Murray 2007; Nienhuys 1992; Williams and Jacobs 2009; Zubrick et al. 2004).

Studies have suggested a number of risk factors for otitis media, including exposure to cigarette smoke (Di Franza and Lew 1996; Jacoby et al. 2008; Kirkham et al. 2010), lack of immunity (Boswell and Nienhuys 1996; Morris et al. 2006; Smith-Vaughan et al. 2008), overcrowded housing (Kirkham et al. 2010; Smith-Vaughan et al. 2008), malnutrition (Jones and Smith 2006), and lack of access to primary health care and treatment (Wiertsema and Leach 2009). Smoking and access to primary health care are discussed in section 7.4 and section 7.1, respectively.

To a large extent, otitis media is 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; O'Leary and Triolo 2009). 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).

Prevalence of hearing conditions

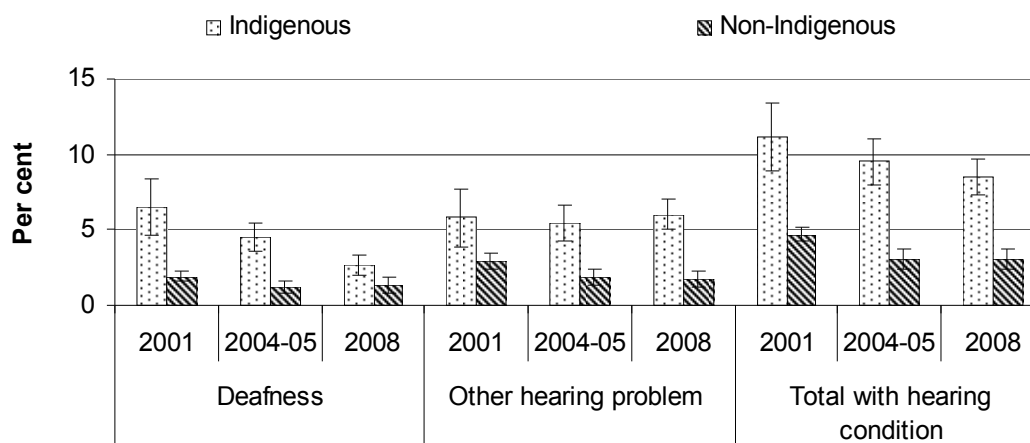
The Northern Territory Emergency Response announced by the former Australian Government on 21 June 2007 introduced a child health check initiative. Indigenous children aged up to 15 years who lived in prescribed areas of the NT were eligible for a Northern Territory Emergency Response child health check.

Between July 2007 and June 2010, 4004 Indigenous children had a hearing check. Of these children:

- 54 per cent had some hearing loss
- 74 per cent had at least one middle ear condition, the most common type being otitis media with effusion (31 per cent)
- 18 per cent had eardrum perforation
- nearly 11 per cent had chronic suppurative otitis media (AIHW and Department of Health and Ageing 2009; Department of Health and Ageing unpublished). The World Health Organisation has identified a prevalence of chronic suppurative otitis media of greater than 4 per cent as a massive public health problem that requires urgent attention (WHO and CIBA Foundation 1998).

Data on the prevalence of hearing conditions among Indigenous and non-Indigenous children aged 0–14 years are derived from various ABS surveys, including the National Aboriginal and Torres Strait Islander Social Survey 2008 and the National Health Survey 2007-08.

Figure 5.7.1 Prevalence of hearing condition in children aged 0–14 years^{a, b, c, d}



^a Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information) ^b Deafness includes partial hearing loss and deafness in one ear. ^c Other hearing problem includes otitis media, tinnitus, Meniere's disease/vertiginous syndrome and 'type of hearing problem not known'. Data for 2008 also includes otitis externa. ^d Components may not add to total as persons may have reported more than one type ear/hearing problem.

Source: ABS (unpublished) NHS 2001; ABS (unpublished) NHS and NATSIHS 2004-05; ABS (unpublished) NATSISS 2008; ABS (unpublished) NHS 2007-08; table 5A.7.1.

- In 2008, the prevalence of hearing problems among Indigenous children aged 0–14 years was 2.8 times the prevalence for non-Indigenous children (figure 5.7.1 and table 5A.7.1).
- In 2001, 2004-05 and 2008, higher proportions of Indigenous children aged 0–14 years suffered from a hearing problem than non-Indigenous children. Between 2001 to 2008, there was a statistically significant decrease in the prevalence of hearing problems among non-Indigenous children aged 0–14 years (figure 5.7.1).
- There was a statistically significant decrease in complete or partial deafness among Indigenous children from 6.5 per cent in 2001 to 2.7 per cent in 2008 (figure 5.7.1 and table 5A.7.1).

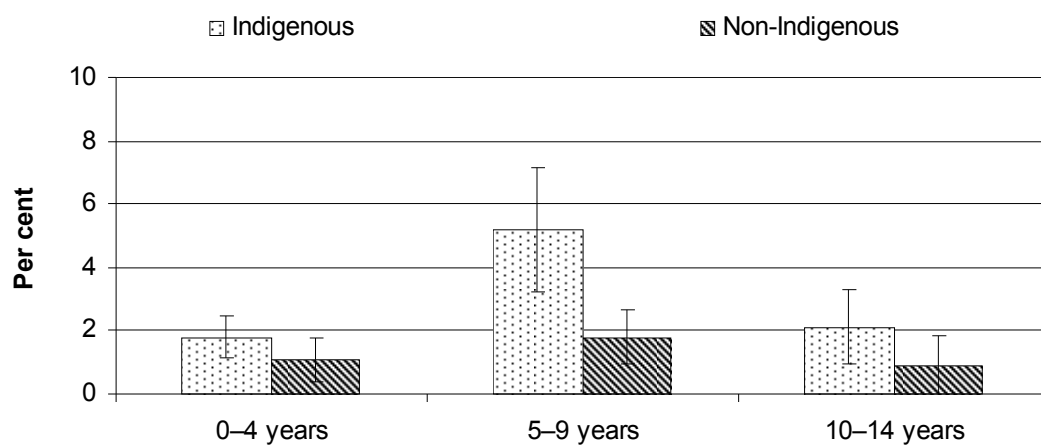
Data on the prevalence of hearing conditions for Indigenous children aged 0–14 years were available for both remote and non-remote areas of Australia for 2001, 2004-05 and 2008.

- In 2008, the rate of complete or partial deafness was significantly higher for Indigenous children living in remote areas (3.9 per cent) than for those in non-remote areas (2.4 per cent). For otitis media and other types of hearing

conditions, there were no statistically significant differences between the rates for remote and non-remote areas (table 5A.7.3).

- There was a statistically significant decrease in the prevalence of hearing problems among Indigenous children aged 0–14 years in remote areas between 2001 and 2008 (17.7 per cent to 10.3 per cent). There was no statistically significant difference in non-remote areas (table 5A.7.3).

Figure 5.7.2 Prevalence of otitis media, 2008^a



^a Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information).

Source: ABS (unpublished) NATSISS 2008; ABS (unpublished) NHS 2007-08; table 5A.7.2.

- In 2008, the prevalence of otitis media among Indigenous children aged 5–9 years was 5.2 per cent, compared with 1.8 per cent for non-Indigenous children (figure 5.7.2).

Between 2001 and 2008:

- there were no statistically significant differences in the prevalence of otitis media across different age groups of Indigenous children
- the prevalence of otitis media among non-Indigenous children aged 0–4 years old decreased (from 2.9 per cent to 1.1 per cent, respectively) but there were no statistically significant differences for non-Indigenous children aged 5–9 and 10–14 years (table 5A.7.2).

Hospitalisations for ear and hearing problems

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 2011).

Between July 2002 and June 2004, Indigenous children were hospitalised for tympanoplasty (reconstructive surgery for a perforated eardrum due to middle ear infection) procedures at five times the rate of other children (AHMAC 2006); from July 2004 to June 2006 the rate was almost four times the rate of other children (AIHW 2008); and from July 2006 to June 2008 the rate was again almost four times the rate of other children (AHMAC 2011).

Data presented below are for ear or hearing problems that resulted in admission to a hospital for NSW, Victoria, Queensland, WA, SA and public hospitals in the NT. Overall, the quality of Indigenous identification in hospital separations data has improved since last assessed by the AIHW in 2007. However, the quality of Indigenous identification still varies substantially between jurisdictions. Data are available for remoteness areas across states and territories in aggregate, with Indigenous identification highest in remote and very remote areas (AIHW 2010).

Table 5.7.1 Age specific hospitalisations where the principal diagnosis was diseases of the ear and mastoid process, NSW, Victoria, Queensland, WA, SA and public hospitals in the NT, 2008-09^{a, b}

<i>Principal diagnosis</i>	<i>Indig.</i>	<i>Other</i>	<i>Not stated</i>	<i>Total</i>	<i>Indig.</i>	<i>Other^c</i>
	no.	no.	no.	no.	per 1000	
People aged 0–3 years						
Diseases of external ear	20	181	5	206	0.4	0.2
Diseases of middle ear and mastoid	466	12 364	307	13 137	9.1	12.5
Suppurative and unspecified otitis media	237	3699	86	4 022	4.6	3.7
Diseases of inner ear	np	16	np	17	np	–
Other disorders of ear	11	572	5	588	0.2	0.6
People aged 4–14 years						
Diseases of external ear	28	556	15	599	0.2	0.2
Diseases of middle ear and mastoid	1 099	13 142	273	14 514	8.1	4.9
Suppurative and unspecified otitis media	276	2 583	58	2 917	2.0	1.0
Diseases of inner ear	np	50	np	53	np	–
Other disorders of ear	44	541	7	592	0.3	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 separations where Indigenous status was reported as non-Indigenous or not stated. – Nil or rounded to zero. **np** Not published.

Source: AIHW National Hospital Morbidity Database (unpublished); table 5A.7.4.

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 whose parents may not be aware that their children have an ear or hearing problem or where access to hospitals may be limited.

For 2008-09:

- the most common principal diagnosis (for both populations and both age groups) was for diseases of the middle ear and mastoid (table 5.7.1)
- Indigenous children up to three years of age had a higher hospitalisation rate for suppurative and unspecified otitis media than other children (4.6 per 1000 compared with 3.7 per 1000) but a lower rate of hospitalisation for all diseases of the middle ear and mastoid (table 5.7.1)
- for both Indigenous and other children, the hospitalisation rate for suppurative and unspecified otitis media for children aged 0–3 years was higher than the hospitalisation rate for children aged 4–14 years (table 5.7.1)
- in major cities, Indigenous children aged 0–14 years had lower rates of hospitalisation for all diseases of the middle ear and mastoid than other children

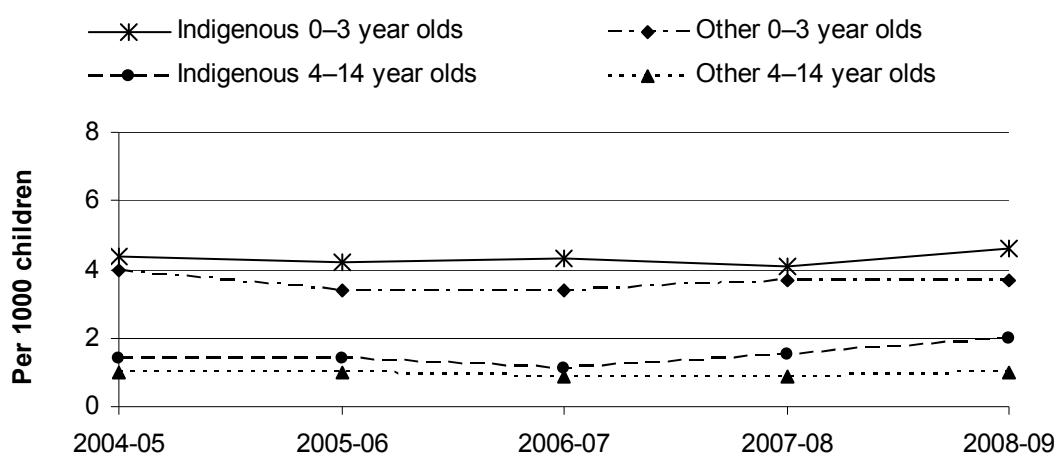
(5.5 per 1000 compared with 7.3 per 1000) but in remote areas Indigenous children had rates 2.3 times as high as for other children (14.7 per 1000 compared with 6.4 per 1000) (table 5A.7.9)

- the hospitalisation rate for all diseases of the middle ear and mastoid for Indigenous children aged 0–14 years increased with remoteness (table 5A.7.9).

Between 2004-05 and 2008-09 the hospitalisation rate for middle ear and mastoid disease:

- increased for Indigenous 0–3 year olds (from 8.1 per 1000 to 9.1 per 1000) while the rate for other children decreased (from 13.0 per 1000 to 12.5 per 1000)
- increased for Indigenous 4–14 year olds (from 5.9 per 1000 to 8.1 per 1000) while the rate for other children decreased (from 5.0 per 1000 to 4.9 per 1000) (tables 5A.7.4 and 5A.7.8).

Figure 5.7.3 Age specific hospitalisations (per 1000) where the principal diagnosis was suppurative and unspecified otitis media, NSW, Victoria, Queensland, WA, SA and public hospitals in NT^{a, b, c}



^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 Other includes separations where Indigenous status was reported as non-Indigenous or not stated.

Source: AIHW National Hospital Morbidity Database (unpublished); tables 5A.7.4–8.

From 2004-05 to 2008-09:

- the hospitalisation rate for suppurative and unspecified otitis media increased for Indigenous children aged 0–3 years (from 4.4 per 1000 to 4.6 per 1000) and decreased for other children (from 4.0 per 1000 to 3.7 per 1000)

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- the hospitalisation rate for suppurative and unspecified otitis media increased for Indigenous 4–14 year olds (from 1.4 per 1000 to 2.0 per 1000), while the rate for other children remained stable (figure 5.7.3).

5.8 Future directions in data

Maternal health

There were constraints in obtaining nationally consistent data for reporting against measures in this indicator. Work is being done to address some of these issues, particularly those that relate to measures in the NIRA.

The National Perinatal Data Collection (NPDC) comprises data items specified in the Perinatal National Minimum Dataset (NMDS) plus additional items collected by the states and territories. There are constraints with items in both these collections in terms of national consistency, response rates and standard definitions. As agreed under schedule F of the National Indigenous Reform Agreement, the AIHW is developing an enhanced, nationally consistent Perinatal NMDS, which will positively affect some items previously supplied from the NPDC. However, at the time of this report there were still problems with these collections such as; inconsistency of antenatal care and smoking during pregnancy data across jurisdictions, no collection of the Indigenous status of the father or child.

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. A nationally consistent collection of data on attendance at antenatal care sessions by Indigenous status for all jurisdictions is essential. Data presented in this section on attendance at antenatal care sessions are from the NPDC, however, these data were available only for NSW, Queensland, SA and the NT, and were collected using non-standardised definitions and with variable response rates. There have been some efforts to improve these data. Data items on gestational age and pregnancy duration at the first antenatal care visit have been agreed upon for the Perinatal NMDS. National collation and collection commenced on 1 July 2010 and will be available for reporting in 2013. 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).

Both the Perinatal NMDS and the NPDC include information on the Indigenous status of the mother only. No formal national assessment has been undertaken to determine completeness of the coverage or identification of Indigenous mothers in the Perinatal NMDS or the NPDC or to determine variability between states and territories. The current data have not been adjusted for the likely under-identification of Indigenous status of the mother. A data item on Indigenous status of the baby has also been developed and national collection will commence on 1 July 2012.

Data for tobacco smoking during pregnancy are from the NPDC. From 2008, data on smoking during pregnancy were available for all jurisdictions. However, definitions of smoking during pregnancy differ among jurisdictions and comparisons of states and territories must be made with caution. Data items on smoking were added to the Perinatal NMDS in 2009 and will be available for reporting in late 2011.

There is a lack of data on alcohol consumption during pregnancy and on the prevalence of Fetal Alcohol Syndrome (FAS) or Fetal Alcohol Spectrum Disorder (FASD) (although some data are available for North Queensland). The AIHW is continuing work on consistent data items on alcohol use and antenatal care for national collection. The Department of Health and Ageing has contracted the AIHW to undertake a scoping project to identify ways of collecting and reporting information about children with FASD. The report is expected to be published in late 2011.

There are also limited ABS data on maternal and infant health. Data on the nutrition and health of Indigenous mothers of children aged 0–3 years during pregnancy are available from the ABS NATSISS 2008. However, there are no non-Indigenous data for comparison.

Data on maternal mortality will be sourced from the ABS Deaths Collection in future iterations of this report, as the AIHW Maternal Mortality Collection has ceased.

Teenage birth rate

There are few data on teenage mothers' and fathers' educational attainment and access to sexual or reproductive health services. Apart from the number of antenatal health check-ups, there is little information about Indigenous women's access to reproductive health information and services. Data on contraception use are available for women aged 18 to 49 years from the ABS National Health Survey

2001 and for Indigenous women aged 18 to 49 in the ABS National Aboriginal and Torres Strait Islander Health Survey 2004-05. Teenage girls' and young women's access to reproductive and sexual health information and services may be further complicated in rural and remote areas, particularly by a lack of access to transport. There are no data on Indigenous young women's access to culturally safe services.

Births, Australia, is published annually by the ABS and provides data on Indigenous births, births to Indigenous women and non-Indigenous births (ABS 2009). While data are available from this source for age of the father, most published research on teenage pregnancy is heavily concerned with the age of the mother. In a high proportion of cases, the age of the father is unknown. This is an obstacle to analysis and impedes program development to assist young fathers and mothers to reduce teenage pregnancy rates.

The AIHW National Perinatal Statistics Unit collects information from states and territories about birth and maternal demographics including the Indigenous status of the mother, but it does not collect information about the father (AIHW 2010).

A complete estimation of teenage pregnancy rates would combine abortion figures with numbers of births and perinatal deaths. There are no national data for abortion figures that incorporate both the first and second trimesters (FPQ 2010; ARHA 2004). Some national data are available from Medicare service statistics and the ABS Causes of Deaths collection. State level data are available for WA and SA where abortions are legal and are reported annually. However, relevant Medicare items are not available by Indigenous status and apply to procedures which are not specifically pregnancy terminations, but include procedures which are undertaken as a result of a miscarriage or fetal death (FPQ 2010).

Medicare figures may be replicated in ABS Causes of Deaths and perinatal deaths statistical collections where fetal deaths by abortions are listed for fetuses aged 20 weeks of gestation or more (ABS 2011). It is impossible to gain a precise figure for the number of abortions performed, either in the first or second trimester for Indigenous teenage women.

Birthweight

The National Perinatal Data Collection currently only identifies births to Indigenous mothers, and does not identify births to Indigenous fathers where the mother is non-Indigenous. Hence, data from the collection underestimate the total number of Indigenous babies born in a given period. In 2009, over a quarter of Indigenous births were to Indigenous fathers and non-Indigenous mothers (ABS 2010). A data

item on the Indigenous status of the baby (rather than of the mother) has been developed and national collection will commence on 1 July 2012.

Injury and preventable disease

Longitudinal data will be available from the 'Footprints in Time Longitudinal Study on Indigenous children' for the next report. The Study contains questions about children's illnesses and their general health. Data on Indigenous children's preventable diseases may also be available from the ABS National Aboriginal and Torres Strait Islander Health Survey, which is being conducted in 2012-13.

Hearing impairment

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. Indigenous data on type of long-term hearing condition from the 2011 Australian Health Surveys are anticipated to become available mid-2013.

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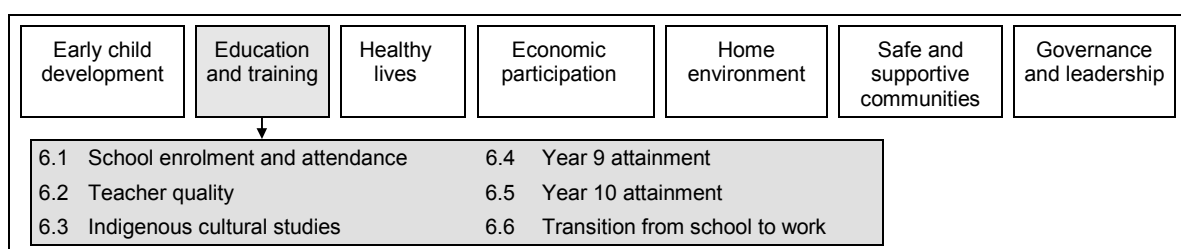
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6 Education and training

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.

Several 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 area can be affected by outcomes in several other strategic areas for action, or can influence outcomes in other areas:

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- early child development (basic skills for life and learning, hearing impairment) (chapter 5)
 - healthy lives (access to primary health care 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. The primary measure for section 6.1 is attendance rates for students enrolled in years 1–10
- teacher quality — the quality of teaching is a key determinant of student learning outcomes. However, defining and measuring teacher quality is contentious. Section 6.2 discusses research into the determinants of teacher quality and identifies measures that might be reported once data become available
- 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. There is no primary measure for section 6.3, but the following information is included: qualitative examples of culturally inclusive curricula; survey data on the teaching of Indigenous culture at school or in further studies; and administrative data on Indigenous employment at schools
- 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. The primary measure for section 6.4 is apparent retention rates from years 7 or 8 to year 9. This section also includes information on: year 9 student attendance rates; year 9 or below as the highest level of schooling for people 15 years and older; and student performance in international testing programs in science, mathematics and reading
- Year 10 attainment — year 10 generally signifies the end of compulsory schooling, and there is a significant drop off in Indigenous enrolments. The primary measure for section 6.5 is apparent retention rates from years 7 or 8 to year 10. This section also includes information on: year 10 student attendance

rates; and people 15 years and older with year 10 or below as the highest level of schooling completed

- transition from school to work — the transition from school to work is a critical period. Young people who are neither actively engaged in education and training, nor employed, are at risk of long term disadvantage. The primary measures for section 6.6 are: the proportion of Indigenous people aged 18 to 24 years who are neither participating in education and training nor employed; and the labour force status of people, aged 18 to 64 years, who have achieved a qualification of certificate level III or higher.

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 5 and 10 were lower for Indigenous students than non-Indigenous students, in all states and territories in 2009 (figure 6.1.1).
- The gap between Indigenous and non-Indigenous students’ attendance rates was greater in year 10 (between 9 and 24 percentage points) than in year 5 (between 3 and 17 percentage points) in 2009 (figure 6.1.1 and table 6A.1.1).

COAG has identified student attendance as one of the progress measures for the Closing the Gap target of halving the gap for Indigenous students in year 12 attainment or equivalent attainment rates by 2020. National and international research identify that regular school attendance is important to achieving core skills, such as literacy and numeracy (UNICEF Innocenti Research Centre 2004; Purdie and Buckley 2010).

The primary measure for this indicator is student attendance rates for students enrolled in years 1–10. The focus of this section is on student attendance rates for years 5 and 10 as indicative of middle and later years of compulsory schooling. Data on student attendance rates for years 1–10, across all school sectors for 2007–2009 are available in tables 6A.1.1–9.

Student attendance data are based on enrolments and therefore do not include children not enrolled. This section therefore includes data on student enrolment rates (enrolments by age compared to the equivalent projected age cohort in the population). Enrolment rates indicate the proportion of children in the community who are enrolled at school. They do not show whether enrolled children actually attend school on a daily basis.

The Western Australian Aboriginal Child Health Survey 2000–2002 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 (see also Schwab and Sutherland 2004; Taylor 2004).

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 15 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.

A 2006 study found that there were three main contributing factors to a child's low school attendance — lack of parental insistence that children go to school in the morning (see also Purdie and Buckley 2010; Taylor 2010), teacher quality and bullying and teasing (DEWR 2006). 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).

A literature review, for the Closing the Gap Clearinghouse, on evaluated programs that were aimed at increasing attendance found very few high-quality evaluations in this area (Purdie and Buckley 2010). As school attendance is one of the progress measures for the COAG Closing the Gap target on year 12 attainment (section 4.5), better evidence is required on what is working in this area. Available evaluations showed that a common feature of the successful programs was collaboration between public agencies and the community (often by engaging parents or community-based organisations) in program design and decision-making (Purdie and Buckley 2010). Some of the programs considered successful in increasing attendance for Indigenous children at school are outlined in box 6.1.2.

Box 6.1.2 'Things that work' — increasing school attendance

The **Clontarf Foundation** has Academies in Victoria, WA and the NT, with 2200 young men participating in the program in 2010. Each Academy operates in partnership (but independent of) a school. Football is used to attract young Indigenous males to school and, while the school caters for their educational needs, the Academy provides high quality coaching, specialist physical conditioning, health education and mentoring in life skills. In order to remain in the Academy, the young men must attend school regularly, apply themselves to the study of appropriate courses and embrace the Academy's requirements for behaviour and self discipline.

Across all partner schools, retention rates were 93.5 per cent and overall attendance rates were 77 per cent in 2009. Average attendance rates for the Alice Springs partner schools increased from 70 per cent in 2007 to 87 per cent in 2008 average and monthly attendance rates at the Roebourne partner school increased from 30 per cent in February 2009 to 67 per cent in December 2009 (Henderson 2009).

In 2009, 110 boys completed year 12 (a 48 per cent increase from 2008), of whom 76 graduated with secondary education certificates. In addition, 87 VET Certificates were earned by boys who variously completed years 10, 11 and 12 (Clontarf Foundation 2010).

The **Catherine Freeman Foundation** (Queensland) has a non-truancy project in the remote Indigenous community of Palm Island. The project presents mountain bikes to students who show the biggest improvements in attendance, academic achievement, attitude to peers, behaviour in school and manners. Other programs include an after-school activity program, a scholarships program (in partnership with the Australian Indigenous Education Foundation), and an educational and aspirations tours program. Over the past 2 years, the program has resulted in a 20 per cent increase in attendance rates at local schools (Purdie and Buckley 2010).

Victorian Wannik Dance Academies (Victoria) have been established in three secondary schools, with academy classes timetabled so that students do not miss regular school. Attendance rates were between 85 per cent and 89 per cent at the three academies in 2010, and significant parental involvement had been achieved, with many parents helping out with performances. (Victorian Government unpublished).

Student attendance

Student attendance is defined as the number of actual full time equivalent student days attended over the collection period¹ as a percentage of the total number of

¹ Presently, the collection period measure is transitional, with most jurisdictions providing government schools data for the first semester, whereas non government schools provide data over a period including the last 20 days in May.

possible student days (see SCRGSP 2011, p. 4.18 for more details on the scope and definitions for this indicator).

In Australia in 2009, school attendance was compulsory for children between 6 (except in Tasmania where it was 5) and 15 years of age with the following variations:

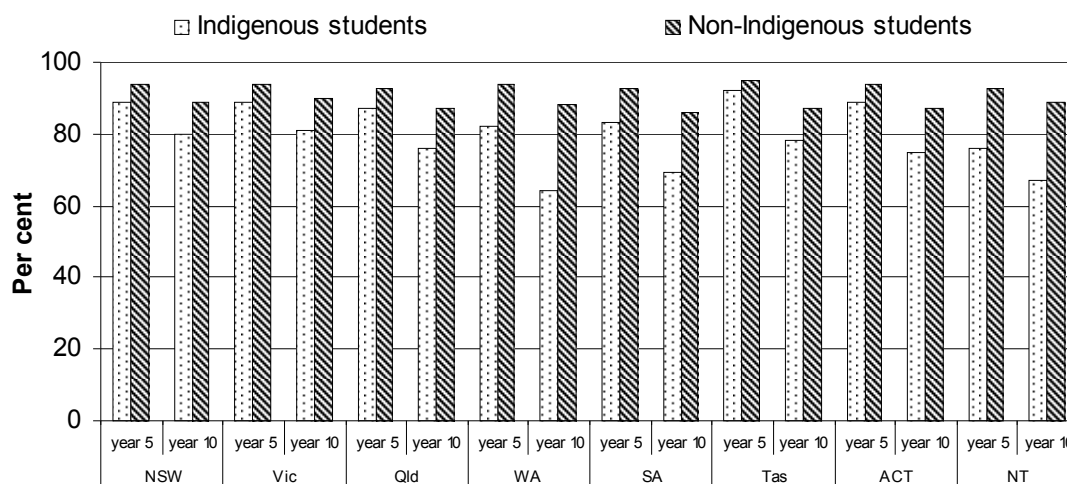
- reaching 15 years of age (NSW, ACT and NT)
- reaching 16 years of age (Victoria, SA² and Tasmania)
- reaching 16 years of age or completing year 10 (Queensland³)
- the end of the year in which students turn 17 years of age (WA).

As part of the Compact with Young Australians, COAG implemented a National Youth Participation Requirement (NYPR), commencing on 1 January 2010 (COAG 2009). Young people will be required to participate in schooling (or an approved equivalent) until they complete year 10, and then participate full-time (at least 25 hours per week) in education, training or employment, or a combination of these activities, until age 17. The NYPR has been implemented through State and Territory legislation where equivalent provisions are not already in place, and exemptions will continue in line with existing State and Territory practice.

² Students in SA are required to be in full-time education or training until the age of 17, or until they gain a qualification (whichever comes first). The compulsory school age remains 16.

³ Queensland students are required to remain in education or training for two years after compulsory schooling or until they turn 17 years of age, or until they complete a Queensland Certificate of Education (or Queensland Certificate of Individual Achievement), Senior Statement or a Certificate III or IV vocational qualification.

Figure 6.1.1 **Student attendance rates for years 5 and 10, government schools, 2009**



Source: Australian Curriculum, Assessment and Reporting Authority (unpublished); table 6A.1.1.

Figure 6.1.1 presents data on student attendance rates for government schools in 2009. Attendance rates cannot be compared across school sectors. Data on student attendance rates across all school sectors for the period 2007–2009 are available in tables 6A.1.1–9. Years 5 and 10 have been selected to represent the middle (primary) and later (secondary) years of schooling.

- Attendance rates for Indigenous students, at government schools, were lower than for non-Indigenous students for years 1–10 in all states and territories (table 6A.1.1).
- Attendance rates declined at government schools in all jurisdictions from year 5 to year 10 for both Indigenous and non-Indigenous students, but declined by more for Indigenous students (figure 6.1.1 and table 6A.1.1).
- From 2007 to 2009, there was little change in the attendance of Indigenous and non-Indigenous students in government schools in years 5 and 10 (tables 6A.1.1–9).
- Across the other school sectors (Catholic schools and independent schools), attendance rates for Indigenous students were generally lower than for non-Indigenous students for years 1–10 (tables 6A.1.2–3).

Attendance rates by geolocation are available for the NT for 2009 and 2010 (NT Department of Education and Training 2011). Attendance rates for Indigenous students, at government schools, in provincial and remote areas was higher (83.0 per cent and 81.1 per cent, respectively) than rates in very remote areas (57.8 per cent) in 2010. The attendance rate for Indigenous students in very remote

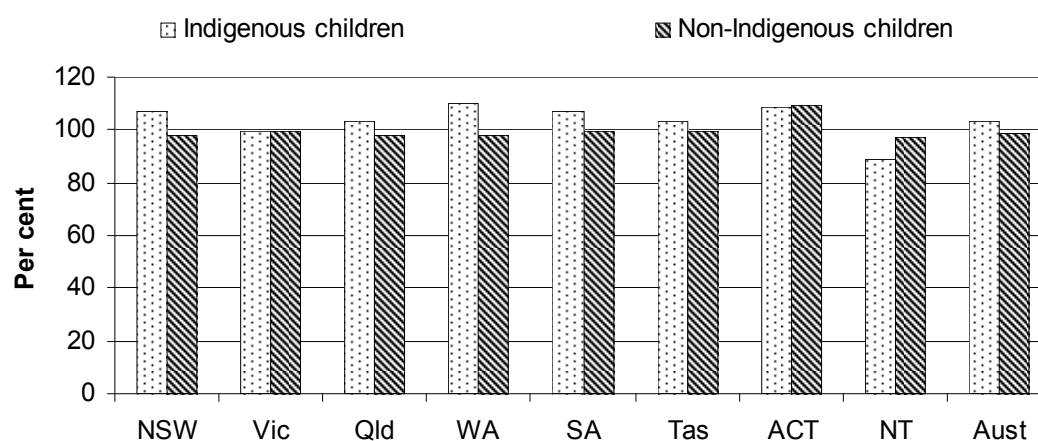
areas decreased from 63.0 per cent in 2009 to 57.8 per cent in 2010 (NT Department of Education and Training 2011).

Student enrolments

The number of children enrolled in school in 2010 was sourced from the 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. Enrolment rates have been derived by dividing the number of children enrolled at school by the estimated population for that age group. School enrolment rates do not measure whether enrolled children have attended school.

Data on student enrolment rates should be interpreted with caution because of quality issues associated with the identification of Indigenous students in both the NSSC and population statistics. For example, rates calculated for most jurisdictions are greater than 100 per cent.

Figure 6.1.2 Proportion of children aged 6–15 years enrolled in school, 2010^a



^a See table 6A.1.10 for detailed explanatory notes on data.

Source: ABS (unpublished) *Schools Australia 2010*, Cat. no. 4221.0; ABS (unpublished) *Population by age and sex, Australian states and territories, June 2010*, Cat. no. 3201.0; ABS (unpublished) *Experimental estimates and projections, Aboriginal and Torres Strait Islander Australians 1991–2021*, Cat. no. 3238.0; table 6A.1.10.

Nationally, 103.7 per cent of Indigenous children aged 6–15 years were enrolled (either full or part time) in schools in 2010, compared with 98.7 per cent of non-Indigenous children. These rates also varied across jurisdictions (figure 6.1.2).

Enrolment rates for Indigenous and non-Indigenous children were relatively stable between 2006 and 2010.

6.2 Teacher quality

Box 6.2.1 Key message

- Teacher quality is considered the most important in-school factor in improving learning outcomes for Indigenous students. COAG has agreed to a National Partnership on Improving Teacher Quality, but no data were available for this report.

Defining and measuring teacher quality is part of COAG's strategy to close the gap in educational outcomes between Indigenous and non-Indigenous students, and has been made a broader priority under the Council of Australian Governments (COAG) National Education Agreement (COAG 2009a). The National Partnership Agreement 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).

The measures identified by COAG for this indicator are:

- the level of 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. Future directions in data are discussed later in this chapter.

Evidence presented in other sections of this report shows that Indigenous students underperform relative to non-Indigenous students on a range of measures. In 2010, 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 proportions of all students (section 4.4). This gap in learning outcomes between Indigenous students and all students increased as the degree of remoteness increased. 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 into teacher quality and associated student outcomes is varied. There is strong evidence that higher student achievement outcomes are linked to teachers' experience level and test scores in obtaining teaching qualifications (Jackson 2009). However, there is also evidence to show that, at secondary school level, measures of teacher quality such as years of teaching experience and the level of teachers' tertiary qualification (bachelors or masters) are not significant predictors of student achievement.

On the other hand, teachers studying at university level the subjects they teach, and receiving training in how to teach, were noted to be more important factors in improving student grades (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 findings that maths and science teachers with degrees in these disciplines had students who achieved higher results.

High quality 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). This is particularly important for remote schools where there are high proportions of Indigenous students and high rates of teacher turnover. These schools can have difficulty attracting and retaining quality teaching staff — either Indigenous

teachers or qualified and experienced non-Indigenous teachers (Maher 2009). For non-Indigenous teachers, this may be due to difficulty in delivering culturally appropriate programs, as well as the isolation associated with living in a remote community where different languages are spoken (Maher 2009).

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). The National Partnership on Improving Teacher Quality focuses on outcomes and outputs (COAG 2009b). Therefore, this report does not explore output and outcome measures of teacher quality.

Under the National Partnership, the Commonwealth, State and Territory governments have agreed to:

- build professional pathways for Indigenous people and Indigenous Education Workers who wish to progress to teaching
- improve support and provide reward structures for teachers and leaders who work in disadvantaged Indigenous, rural/remote and difficult-to-staff schools
- strengthen Indigenous teachers' and school leaders' engagement with community members (Department of Employment, Education and Workplace Relations unpublished).

The National Partnership on Teacher Quality also 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 2009, 19.0 per cent of Indigenous students attended non-government schools (SCRGSP 2011, table 4A.24).

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 (box 6.3.2).
- In 2008, around two-thirds of Indigenous 5 to 24 year olds who had ever attended school or further studies reported being taught Indigenous culture as part of their studies. The proportions of people who had been taught Indigenous culture were lower in older age groups, with the lowest proportions for those in age groups 45 years and over (figure 6.3.1).

In consultations following previous editions of this report, various Indigenous groups, governments and agencies have expressed differing views on the Indigenous cultural studies indicator. Some Indigenous organisations and communities were concerned that attention on culturally appropriate education for Indigenous people could come at the expense of good academic outcomes. Other Indigenous groups considered that cultural studies consolidated community teaching, improved school attendance and could assist in preserving Indigenous language. Many people also argued that Indigenous cultural studies for non-Indigenous students provide an opportunity for Indigenous people to share their knowledge with the wider community and can help overcome ignorance and misunderstanding that may otherwise lead to racism and discrimination.

There is no primary measure for this indicator. Information in this section includes:

- qualitative examples of culturally inclusive curricula
- survey data on the teaching of Indigenous culture at school or in further studies
- administrative data on rates of Indigenous employment at schools.

The approach taken in this report acknowledges that students involved in subjects they feel are relevant, appealing, and culturally appropriate will have increased participation, enjoyment, and confidence, and in turn, be able to develop their skills and abilities to negotiate the hurdles of higher education and the workforce (DEECD 2010). A literature review for the Closing the Gap Clearinghouse, reported that several Indigenous-specific reasons for non-attendance at schools had been proposed:

The majority of which relate to a lack of recognition by schools of Indigenous culture and history; failure to fully engage parents, carers and the community; and ongoing disadvantage in many areas of the daily lives of Indigenous Australians (Purdie and Buckley 2010).

Culturally inclusive curricula

Where cultural perspectives are incorporated into the school curriculum, Indigenous students' performances have been found to be comparatively better than those of Indigenous students in other schools. Watson et al. (2006) reported that Aboriginal students, as a group, had better numeracy performance in schools where teaching methods were culturally inclusive and responsive, language based, and in some cases where teaching incorporated the use of visual and immersive strategies. Although Purdie et al (2000) found that positive self-identity as an Indigenous person was not linked directly to school success, positive self-identity as a student was. Students that had a sense of belonging in the school; had teachers who were warm, supportive and had positive expectations; a curriculum which had relevance; and support and encouragement from family, peers and community, had better educational outcomes (Purdie et al. 2000).

While government directed initiatives, such as culturally inclusive curricula, can influence the cultural awareness and inclusiveness of education systems, other important factors include management structures in schools themselves (through the school philosophy and involvement in their community) and individual teachers (via their teaching methods and attitudes to Indigenous culture) (Purdie et al. 2000).

The *National Report to Parliament on Indigenous Education and Training, 2008* provides qualitative information on the implementation and maintenance of culturally inclusive curricula in schools in 2008. The report includes information on progress in implementing strategies to ensure Indigenous perspectives were incorporated into school curriculum and programs, not only in the traditional areas of history and the social sciences, but also in mathematics, science and environmental studies (DEEWR 2011).

The case studies in box 6.3.2 illustrate how schools and education providers are including Indigenous culture and perspectives into their curricula. These initiatives 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 **Partnership, Acceptance, Learning, Sharing (PALS)** program (WA) funds schools to encourage students to run projects that promote and advance reconciliation, and strengthen relationships between Indigenous and non-Indigenous people in their local community. An initiative of the WA Department of Indigenous Affairs, in partnership with BHP Billiton, the program deals with issues of prejudice and racism by encouraging young people to embrace Aboriginal culture. In 2010, 218 schools were involved in 246 projects and 6 workshops, including: recording oral histories; writing books; learning language; cultural camps; art workshops; student exchanges and dreamtime story learning. Schools can enter their PALS project in the annual PALS Awards, by documenting their communities' views and beliefs before and after the PALS project. Annual surveys of participating schools have found that school and community participants have benefited from a shared understanding of Aboriginal life, history and culture (WA Government unpublished).

The **Teacher Education Scholarship Program** (NSW) supports Indigenous people to become secondary or primary school teachers in public schools. Scholarship holders are appointed as permanent teachers following successful completion of all university teacher education program requirements and Department of Education and Communities' recruitment requirements.

The number of scholarships awarded to Indigenous applicants has grown from 30 scholarships in 2002 to 86 scholarships in 2011. Between 2002 and April 2011, 124 Indigenous scholarship holders were appointed to schools (NSW Government unpublished).

Teaching Indigenous culture in schools

Approaches to incorporating Indigenous content into curriculum vary across education systems and schools. Schools exist in different contexts and have varying numbers of Indigenous students. One fifth of schools had no Indigenous students in 2009 (20.1 per cent). In almost 50 per cent of schools (48.6 per cent), Indigenous students made up less than 5 per cent of enrolments. In 2 per cent of schools, more than 95 per cent of students were Indigenous and in 1 per cent of schools all students were Indigenous (DEEWR unpublished).

Up until 2008, the Australian Government Department of Education, Employment and Workplace Relations (DEEWR) collected limited information related to this indicator, which was completed by education systems and schools who were funded under the *Indigenous Education (Targeted Assistance) Act 2000* (DEEWR 2010). The collection of these data ceased in 2009, following changes to education funding under the COAG National Education Agreement (COAG 2009). DEEWR (2008) reported that, in 2006, over 16 000 Indigenous students and 13 000 non-Indigenous

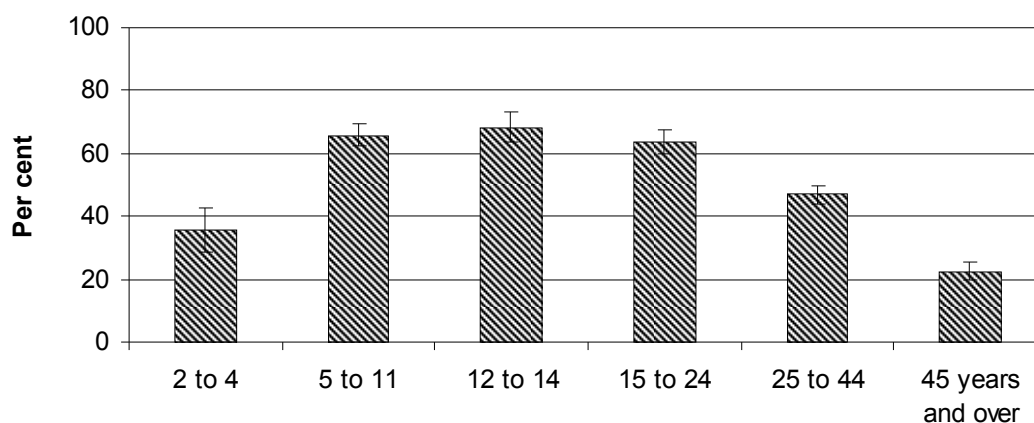
students located in 260 Australian schools were involved in an Indigenous language program. Most participating students attended government schools in NSW, WA, SA and the NT.

The Western Australian Department of Education 2008 census found that Aboriginal languages were taught to 6143 students in 68 schools from kindergarten to year 11, which is an increase of 755 students from the previous year. Across WA, 78 Aboriginal staff have completed Aboriginal Languages Teacher Training and, of these, 54 are currently employed teaching languages. Aboriginal language resource packages have been developed in close consultation with community elders in a variety of languages, including Yindjibarndi, Nyangumarta, Mangala, Bardi, Gooniyandi, Bunuba, Banyjima, Wangkatha, Walmajarri and Wajarri, for use in remote area schools (DEEWR 2011).

An Australian curriculum, spanning subjects in kindergarten to year 12, is currently being developed by the Australian Curriculum, Assessment and Reporting Authority (ACARA). Specific modules about Indigenous culture and history will be incorporated in history subjects and implemented nationally for kindergarten to year 10 by the end of 2013 (ACARA 2009a; 2010). The curricula for all subjects also include specifications to ensure the inclusion of all groups and acknowledges the need for all children in Australia to:

...understand and acknowledge the value of Indigenous cultures and possess the knowledge, skills and understanding to contribute to, and benefit from, reconciliation between Indigenous and non-Indigenous Australians (ACARA 2009b).

Figure 6.3.1 Proportion of Indigenous people who were taught Indigenous culture in school or as part of further studies, by age, 2008^{a, b, c}



^a Proportions for Indigenous children aged 2 to 14 years are calculated as a percentage of the number of children who usually attend school. ^b Proportions for persons aged 15 years and over are calculated as a percentage of the number of people who ever attended school or undertook further studies. ^c Responses to 'Whether taught Indigenous culture in schools' for Indigenous children aged 2 to 14 and some Indigenous people aged 15 to 17 years were provided by an adult proxy.

Source: ABS (unpublished) NATSISS 2008, table 6A.3.1.

The ABS National Aboriginal and Torres Strait Islander Social Survey 2008 (NATSISS 2008) asked Indigenous people of all age groups whether they had ever been taught Indigenous culture in school or as part of further studies. Different responses from different age groups can provide some insight into how Indigenous culture has been incorporated into school and further study curricula over time. According to the NATSISS 2008:

- similar proportions of Indigenous people aged 5 to 11 years (65.9 per cent), 12 to 14 years (68.2 per cent) and 15 to 24 years (63.9 per cent) were taught Indigenous culture at school or as part of further studies (figure 6.3.1)
- lower proportions of Indigenous people were taught Indigenous culture at school or as part of further studies in the 45 years and over age group (22.6 per cent) and 25 to 44 years age group (47.1 per cent) (figure 6.3.1)
- NSW, WA, SA, the ACT and the NT had similar rates of 2 to 14 year old Indigenous students who were taught Indigenous culture at school (around 70 per cent of their respective Indigenous populations) (table 6A.3.1)
- across remoteness areas, proportions of Indigenous children aged 2 to 14 years had been taught Indigenous cultural studies at school ranged from 57.8 to 69.5 per cent). People aged 15 years and over living in very remote areas of

Australia were significantly more likely to have been taught Indigenous culture at school or as part of further studies (56.3 per cent) than people living in other remoteness areas (ranging from 41.3 per cent in outer regional areas to 45.6 per cent in major cities) (table 6A.3.2).

Indigenous employment in schools

The employment of Indigenous teachers and the presence of Indigenous adults in the school have been found to promote positive self-identity among Indigenous students (Purdie et al. 2000). While no specific data are available on Indigenous or non-Indigenous teachers teaching Indigenous studies, some data on Indigenous employment in schools have been included to provide information on Indigenous involvement in school education.

Table 6.3.1 Indigenous employment in schools

	2003	2004	2005	2006	2007	2008
<i>Government schools</i>						
Number of Indigenous teachers ^{a, b}	1 473	1 493	1 459	1 649	1 691	1 845
Indigenous teachers as a proportion of all teachers (%) ^{a, b}	0.8	0.8	0.9	1.0	1.0	1.0
Indigenous students as a proportion of all students (%)	4.9	5.1	5.2	5.4	5.6	5.7
Number of AIEWs in schools ^{a, b, c}	1 435	1 459	1 570	1 745	1 649	1 672
Ratio of Indigenous students to Indigenous teachers and AIEWs ^{a, b}	37.9	38.6	38.8	35.8	38.1	37.1
Number of Indigenous staff in schools ^{a, b, d}	3 507	3 618	3 924	4 395	4 627	4 828
Total number of staff in schools ^d	232 545	236 869	235 037	238 891	249 615	249 754
Indigenous staff as a proportion of all staff in schools (%) ^{a, b}	1.5	1.5	1.7	1.8	1.9	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	4.0
<i>Catholic schools^e</i>						
Number of Indigenous teachers ^{a, b}	72	73	106	110	126	132
Indigenous teachers as a proportion of all teachers (%) ^{a, b}	0.2	0.2	0.2	0.2	0.3	0.2
Indigenous students as a proportion of all students (%) ^f	1.5	1.6	1.7	1.7	2.0	1.9
Number of AIEWs in schools ^{a, b, c}	495	523	461	463	407	460
Ratio of Indigenous students to Indigenous teachers & AIEWs ^{a, b, f}	27.8	27.6	18.7	19.3	23.4	22.8
Number of Indigenous staff in schools ^{a, b, d}	552	562	548	608	613	660
Total number of staff in schools ^d	63 186	64 886	64 205	68 978	67 652	74 495
Indigenous staff as a proportion of all staff in schools (%) ^{a, b}	0.9	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	2.5

AIEWs = Aboriginal and Islander Education Workers. ^a For some states and territories, these data are based on actual numbers and for others it is based on full time equivalents (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 Indigenous Education Strategic Initiatives Programme (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: DEEWR (2011) *National Report to Parliament on Indigenous Education and Training 2008*; DEST IESIP performance reports 2003–2004 (unpublished); DEEWR IEP performance reports 2005–2008 (unpublished); table 6A.3.3.

A general indication of the number of Indigenous teachers and Aboriginal and Islander Education Workers (AIEWs) in 2003 to 2008 is available from table 6A.3.1. The data collection ceased in 2009.

AIEWs provide assistance to Indigenous students and liaise with educational bodies, government agencies and committees. AIEWs have varying levels of formal qualifications, which may affect their ability to provide educational assistance (as opposed to advice and support in relation to cultural matters). In 2008, 50.9 per cent of AIEWs in government schools and 57.6 per cent of AIEWs in Catholic schools had completed or were studying towards formal qualifications, up from 31.3 per cent in government schools and 47.1 per cent in Catholic schools in 2001 (table 6A.3.4).⁴

Between 2003 and 2008, there were increases in the number of Indigenous teachers and other Indigenous staff in schools (table 6.3.1) but Indigenous teachers and other Indigenous staff consistently made up a much smaller proportion of all teachers and staff than did Indigenous students as a proportion of all students (table 6.3.1).

- The number of AIEWs employed in the government system and the Catholic system fluctuated each year between 2003 and 2008 (table 6.3.1).
- The ratio of Indigenous students to Indigenous teachers and AIEWs in government schools increased slightly from 36.4 in 2001 to 37.1 in 2008, indicating that numbers of Indigenous students rose faster than numbers of Indigenous teachers and AIEWs (table 6A.3.3).

⁴ 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.

6.4 Year 9 attainment

Box 6.4.1 Key messages

- Apparent retention rates from years 7 or 8 to year 9 for Indigenous students increased from 95.0 per cent in 1998 to around 100 per cent in 2010 (table 4A.5.19).
- 34.1 per cent of Indigenous people aged 15 years and older reported year 9 or below as their highest level of schooling in 2008, compared to 16.0 per cent of non-Indigenous people aged 15 years and older (table 4A.5.6).
- Around one third of Indigenous students achieved the minimum proficiency level in international tests for science, mathematics and reading literacy in 2009, compared to around two thirds of non-Indigenous students (tables 6.4.1–3).

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 (Zubrick et al. 2006). Early school leaving is associated with poor employment outcomes and income in later life. Some of the causes of early school leaving include poor literacy and numeracy skills; lack of student engagement in learning; the quality of teaching staff; low socioeconomic background (ACER 2002; Bortoli and Thompson 2010; Purdie and Corrigan 2004). Programs that have been successful in encouraging Indigenous students to stay at school can be found in section 4.5, box 4.5.2.

The primary measure for this indicator is apparent retention rates from years 7 or 8 to year 9. This section also includes data on the related measures: year 9 student attendance rates; year 9 or below as the highest level of schooling for people 15 years and older; and science, mathematics and reading test results as indicators of proficiency in these subjects.

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. High enrolment 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, 2010 (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	104.9	106.5	101.8	98.6	103.0	113.6	117.6	80.8	100.9
Female	105.7	105.5	101.0	94.5	96.2	114.1	121.1	88.1	100.8
Total	105.3	106.0	101.4	96.6	99.7	113.9	119.1	84.2	100.8
Non-Indigenous									
Male	99.9	100.8	100.6	100.8	100.5	100.4	101.5	97.0	100.4
Female	100.7	101.3	100.7	101.2	101.0	99.4	101.4	98.7	100.9
Total	100.3	101.1	100.6	101.0	100.8	99.9	101.5	97.8	100.7

^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 (2011); table 4A.5.31.

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 (table 6.4.1). Retention rates can exceed 100 per cent for a variety of reasons, including student transfers between jurisdictions after the base year.

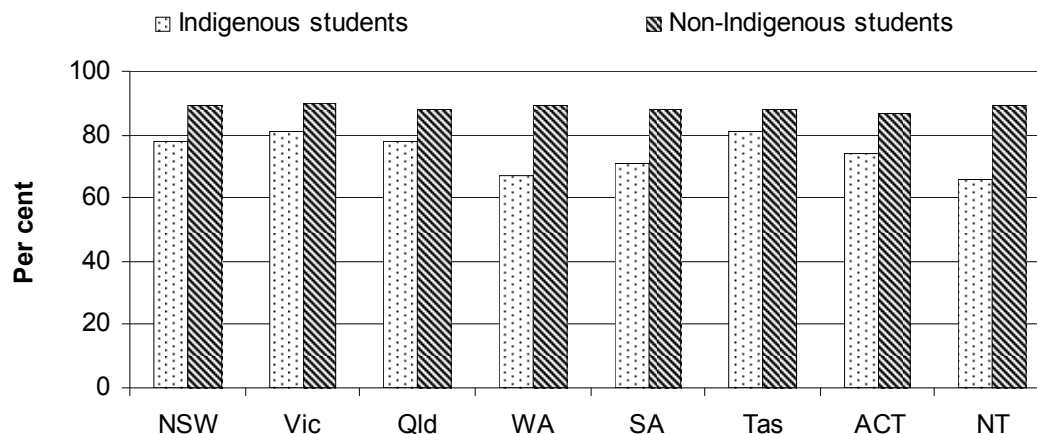
Nationally, from 1998 to 2010 apparent retention rates from years 7 or 8 to year 9 for Indigenous students increased from 95.0 per cent to 100 per cent (table 4A.5.19). Further data on apparent retention rates from 2002 to 2008 by jurisdiction and gender are included in tables 4A.5.23–31.

Student attendance

Student attendance is defined as the number of actual full time equivalent student days attended over the collection period⁵ as a percentage of the total number of possible student days. More information on attendance rates and definitional issues are addressed in section 6.1.

⁵ Presently, the collection period measure is transitional, with most jurisdictions providing government schools data for the first semester, whereas non-government schools provide data over a period including the last 20 days in May.

Figure 6.4.1 Student attendance rates for year 9, government schools, 2009



Source: ACARA (unpublished); table 6A.1.1.

Figure 6.4.1 presents data on student attendance rates for government schools in 2009. Attendance rates cannot be compared across school sectors. Data on student attendance rates across all school sectors for the period 2007–2009 are available in tables 6A.1.1–9.

- Attendance rates for Indigenous students, at government schools, were lower than for non-Indigenous students for year 9 in all states and territories in 2009 (table 6A.1.1).
- Across the other school sectors (Catholic schools and independent schools), attendance rates for Indigenous students were mostly lower than for non-Indigenous students for year 9 in 2009 (tables 6A.1.2–3).
- From 2007 to 2009, there was little change in the attendance rates of Indigenous and non-Indigenous students in government schools in year 9 (tables 6A.1.1, 6A.1.4 and 6A.1.7).

Highest level of schooling completed

Data on the highest level of schooling completed are from the ABS National Aboriginal and Torres Strait Islander Social Survey 2008 (NATSISS 2008) and the ABS National Health Survey 2007-08 (NHS 2007-08), for Indigenous and non-Indigenous people, respectively. These data show that:

-
- the proportion of Indigenous people aged 15 years and over leaving school before completing year 10 decreased significantly between 1994 (52.1 per cent) and 2008 (34.1 per cent) (table 4A.5.10)
 - the proportion of people aged 15 years and over leaving school before completing year 10 was twice as high for Indigenous people (34.1 per cent) as non-Indigenous people (16.0 per cent) in 2008 (table 4A.5.6).

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 Australian Indigenous and non-Indigenous students.

TIMSS data for year 8 students for 2002-03 and 2006-07 were presented in previous reports (2007 and 2009) and can be found in tables 6A.4.4 and 6A.4.5. The TIMSS 2010-11 will be available in 2012. Detailed information about TIMSS is available at <http://www.acer.edu.au/timss>.

The PISA 2009 are the most recent internationally comparable learning outcomes data available. The PISA provides learning outcomes data for 15 year olds in three core assessment domains: reading literacy, mathematical literacy and scientific literacy. The nationally agreed proficiency level is defined as level 3 or above 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. It is different to the year 9 NAPLAN national minimum standard data included in section 4.4.

The PISA participating schools were stratified according to the Ministerial Council for Education, Early Childhood Development and Youth Affairs (MCEECDYA) Schools Geographic Location Classification. In PISA 2009, 68 per cent of schools were located in a metropolitan zone, 28 per cent were in provincial zones and around four per cent of schools were in remote areas (Thomson et al. 2010). Detailed information about PISA 2009 is available in Bortoli and Thompson (2010); Thomson et al. (2010) and OECD (2010).

The 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 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 15 year old secondary students achieving at or above level 3 for reading, mathematics and science literacy (PISA) ^{a, b}

	<i>Science literacy</i>	<i>Mathematics literacy</i>	<i>Reading literacy</i>
2009			
Indigenous students	37.8 (±2.7)	34.5 (±2.6)	34.7 (±2.7)
Non-Indigenous students	68.5 (±0.9)	64.8 (±1.0)	66.3 (±0.9)
2006			
Indigenous students	34.3 (± 2.8)	32.4 (± 2.6)	33.5 (± 2.5)
Non-Indigenous students	68.0 (± 0.9)	67.5 (± 0.9)	66.5 (± 0.9)
2003			
Indigenous students	na	30.1 (± 3.2)	38.4 (± 3.9)
Non-Indigenous students	na	67.9 (± 0.9)	70.6 (± 0.9)
2000			
Indigenous students	na	na	38.1 (± 3.4)
Non-Indigenous students	na	na	69.9 (± 1.3)

^a These data are from assessments conducted for the Programme for International Student Assessment (PISA). The achievement percentages reported in this table include 95 per cent confidence intervals (for example, 80.0 per cent ± 2.7 per cent). ^b The nationally agreed proficiency level is defined as level 3 or above on PISA reading literacy, PISA mathematical literacy and PISA scientific literacy assessments (COAG 2009). **na** Not available.

Source: ACER (unpublished); tables 6A.4.1–3.

Across the three core assessment domains (reading literacy, mathematical literacy and scientific literacy) and four PISA cycles (2000, 2003, 2006 and 2009) Indigenous students were substantially over-represented at the lower end of the assessment domain scales (levels 1 and 2) (tables 6A.4.1–3).

In scientific literacy, the proportion of 15 year olds who achieved the national proficiency level (level 3) or above:

- was 37.8 per cent for Indigenous students compared with 68.5 per cent for non-Indigenous students in 2009
- did not change between 2006 and 2009 for Indigenous or non-Indigenous students (table 6.4.2).

In mathematical literacy, the proportion of 15 year olds who achieved the national proficiency level (level 3) or above:

- was 34.5 per cent for Indigenous students compared with 64.8 per cent for non-Indigenous students in 2009
- did not change for Indigenous students between 2003 and 2009 but there was a statistically significant decline for non-Indigenous students (table 6.4.2).

In reading literacy, the proportion of 15 year olds who achieved the national proficiency level (level 3) or above:

- was 34.7 per cent for Indigenous students compared with 66.3 per cent for non-Indigenous students in 2009
- did not change for Indigenous students between 2000 and 2009 but there was a statistically significant decline for non-Indigenous students (table 6.4.2).

6.5 Year 10 attainment

Box 6.5.1 Key messages

- Apparent retention rates from years 7 or 8 to year 10 for Indigenous students increased from 83.1 per cent in 1998 to 95.8 per cent in 2010. The non-Indigenous rates increased from 97.5 per cent to around 100 per cent (table 4A.5.19).
- 64.8 per cent of Indigenous people aged 15 years and older reported leaving school before completing year 11 or 12 in 2008, compared to 39.5 per cent of non-Indigenous people aged 15 years and older (table 4A.5.6).

Attempts to increase rates of higher level school attainment for Indigenous people 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 roughly to year 10. 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). Programs that have been successful in encouraging Indigenous students to stay at school can be found in section 4.5, box 4.5.2.

The primary measure for this indicator is apparent retention rates from years 7 or 8 to year 10. This section also includes data on the related measures: year 10 student attendance rates; and people 15 years and older with year 10 or below as the highest level of schooling completed.

There is a strong correlation between the level of schooling attained and a person's employment prospects. In 2008, the employment rate of Indigenous people increased with the level of schooling they had attained. The employment rate of Indigenous people aged 15 years and over who had completed schooling only to year 9 or below was 30.0 per cent, while 51.0 per cent of Indigenous people who completed schooling to year 10 or 11 reported being employed. Of the Indigenous people who had a non-school qualification, 70.0 per cent reported having a job (table 4A.5.7).

Household income also increases with the level of education attained. ABS National Aboriginal and Torres Strait Islander Social Survey 2008 (NATSISS 2008) data show that 69.2 per cent of Indigenous people who had completed schooling to year 9 or below were in the lowest equivalised household income quintile. The corresponding proportion of Indigenous people who had completed schooling to years 10 or 11 was 55.3 per cent (table 4A.5.7). Conversely, the proportions of Indigenous people who had completed schooling to year 9 or below, and year 10 or 11 who were in the highest income quintile, were 1.3 per cent and 3.2 per cent, respectively (table 4A.5.7).

Student retention

Apparent retention rates do not reflect school attendance or whether the student completed the school year (because data are collected in August). 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, 2010 (per cent)^{a, b, c}

	<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	94.6	85.9	99.7	89.5	100.6	115.1	93.8	85.9	95.2
Female	101.5	95.4	99.5	92.1	97.8	106.9	100.0	76.6	96.5
Total	98.0	90.7	99.6	90.7	99.2	110.8	96.4	81.0	95.8
Non-Indigenous									
Male	99.3	100.5	101.4	102.9	102.4	99.7	100.7	93.8	100.6
Female	99.5	102.2	102.6	103.0	103.7	100.2	100.6	96.8	101.5
Total	99.4	101.3	102.0	103.0	103.0	100.0	100.6	95.2	101.0

^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.5.31 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 are high proportions 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 (2011); table 4A.5.31.

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 some students in year 10 are of an age at which school education is no longer compulsory. In 2010:

- 95.8 per cent of Indigenous students continued from years 7 or 8 to year 10. All non-Indigenous students continued to year 10 (table 6.5.1)
- apparent retention rates from years 7 or 8 to year 10 for Indigenous students were lower than the corresponding apparent retention rates for non-Indigenous students in all State and Territories, except Tasmania, where the rate was higher (table 6.5.1).

Nationally, from 1998 to 2010, apparent retention rates from years 7 or 8 to year 10 for Indigenous students increased from 83.1 per cent to 95.8 per cent while non-Indigenous rates also increased (table 4A.5.19). Further data on apparent retention rates from 2002 to 2010 by jurisdiction and gender are included in tables 4A.5.23–31.

Table 4A.5.32 shows apparent retention rates for full time students who continued to year 12 from year 10. Nationally, Indigenous students' retention from year 10 to year 12 in 2010 was 52.5 per cent compared with a 79.5 per cent retention rate for non-Indigenous students. Apparent retention rates from year 10 to year 12 for

Indigenous students increased from 46.0 per cent in 2004 to 52.5 per cent in 2010, while non-Indigenous rates remained relatively constant (table 4A.5.32).

Student attendance

Student attendance is defined as the number of actual full time equivalent student days attended over the collection period⁶ as a percentage of the total number of possible student days. More information on attendance rates and definitional issues are addressed in section 6.1. The school attendance rate at government schools was much lower for Indigenous students than non-Indigenous students in year 10 across all jurisdictions in 2009 (table 6A.1.1). Attendance rates for Indigenous students in year 10 were very close to or higher than attendance rates for non-Indigenous students at independent schools in Tasmania (table 6A.1.2) and Catholic schools in Victoria, Queensland, SA, Tasmania, the ACT and the NT (table 6A.1.3).

Highest level of schooling completed

Data on the highest level of schooling completed are derived from the NATSISS 2008 and the ABS National Health Survey 2007-08 (NHS 2007-08), for Indigenous and non-Indigenous people, respectively. These data show that:

- the proportion of Indigenous people aged 15 years and over leaving school before completing year 11 or 12 decreased significantly between 1994 (80.3 per cent) and 2008 (64.8 per cent) (table 4A.5.10)
- the proportion of people aged 15 years and over leaving school before completing year 11 or 12 was significantly higher for Indigenous people (64.8 per cent) than for non-Indigenous people (39.5 per cent) in 2008 (table 4A.5.6).

⁶ Presently, the collection period measure is transitional, with most jurisdictions providing government schools data for the first semester, whereas non government schools provide data over a period including the last 20 days in May.

6.6 Transition from school to work

Box 6.6.1 Key messages

- 40.1 per cent of Indigenous 18 to 24 year olds in 2008 were neither employed (unemployed or not in the labour force) nor studying, compared to 9.8 per cent of non-Indigenous people in the same age group (figure 6.6.1).
- There was no significant change in the proportions of Indigenous and non-Indigenous 18 to 24 year olds who were neither employed nor studying between 2002 and 2008 (figure 6.6.2).

Indigenous people's transition from education to the workforce is an important factor in improving Indigenous employment rates. The primary measures for this indicator are:

- the proportion of young Indigenous people aged 18 to 24 years who are neither participating in education and training nor employed
- labour force status of people, aged 18 to 64 years, who have achieved a qualification of certificate level III or higher.

The first measure identifies a group who may not be successfully making the transition from education to work, and who are 'at risk' of long term disadvantage. The second measure looks at 'outcomes from education', by comparing labour force outcomes for Indigenous and non-Indigenous people aged 18 to 64 years over who have achieved a certain level of education.

School-leavers without a school qualification may have few opportunities for work, and as time passes, their chances of gaining employment or re-entering full time education are likely to decline further (McMillan and Marks 2003). There is also a growing body of research on the 'entrenched disadvantage' faced by Indigenous school-leavers in the transition to employment, including high rates of arrest among Indigenous youth — which both disrupts educational progress and eventually can impact on ability to secure employment — and social exclusion factors such as labour market discrimination and the relatively higher cost of education to those of lower socio-economic status (Hunter 2010).

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. University and TAFE graduates earned significantly more than those who entered the workforce directly from school (Lamb 2001; Lamb and McKenzie 2001). Corrie

and McKenzie (2009) found that early school leavers were more likely to be employed in low level positions in occupations such as labouring, retail sales and hospitality.

Sections 4.5, 6.4 and 6.5 contain more information on secondary school retention and attainment for Indigenous students. Unemployment and labour force participation for Indigenous people aged 15 to 64 years are discussed in section 4.6. More information on employment undertaken by Indigenous people — including employment by full time and part time status, sector, industry and skill level — is in section 8.1.

Opportunities for Indigenous youth to move from education into employment are provided by Job Network providers as well as independent organisations throughout Australia, including programs offered by the Aboriginal Employment Strategy, Quality Industry Training and Employment, and Myuma Pty Ltd which aim to connect Indigenous people with training and employment opportunities (NCVER 2009). Centrelink offers support to young Indigenous jobseekers through the Indigenous Wage Subsidy, which is available to employers to subsidise the cost of wages for new Indigenous employees (Centrelink 2009). In addition to this, the Australian Government's Indigenous Cadetship Program targets Indigenous students, and links them to employers who offer cadetship positions (DEEWR 2009). Box 8.1.2 in chapter 8 provides some examples of successful programs in improving Indigenous employment outcomes.

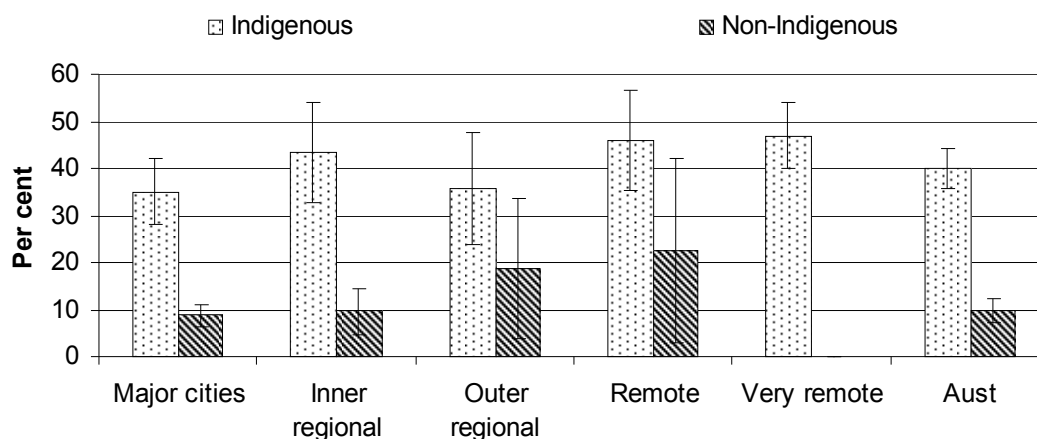
Data for both of the primary measures for this indicator are from the ABS National Aboriginal and Torres Strait Islander Social Survey 2008 and 2002 (NATSISS 2002, 2008) the ABS National Health Survey 2004-05 and 2007-08 (NHS 2004-05, 2007-08), the ABS General Social Survey 2002 (GSS 2002).

Young people at risk of long term disadvantage — people aged 18 to 24 years neither working or studying

This measure looks at the participation in the work force and education system of people aged 18 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, which decreases their chances of finding employment in the future. This cohort of the population is considered 'at risk' of long term difficulties in securing employment.

Figure 6.6.1 **Proportion of 18–24 year olds not employed and not studying, by remoteness, 2008^{a, b}**



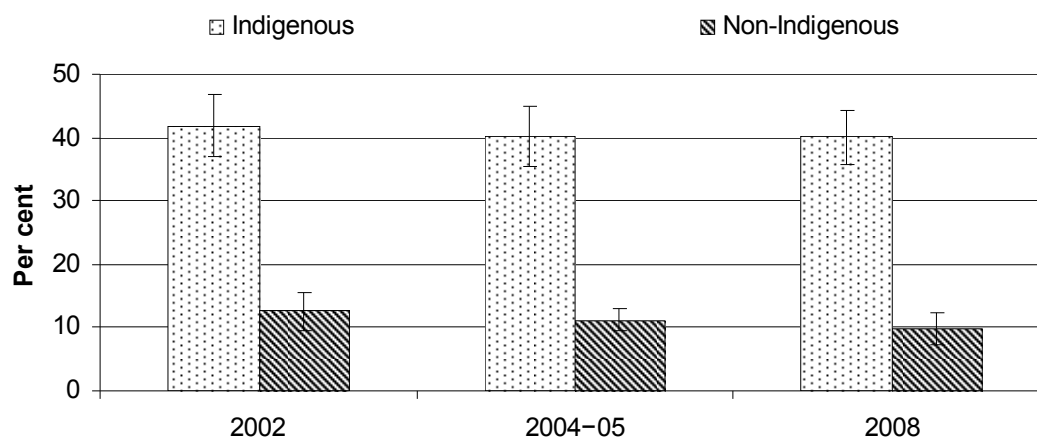
^a Non-Indigenous proportion in very remote areas not available. ^b Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information).

Source: ABS (unpublished) NATSISS 2008; ABS (unpublished) NHS 2007-08; tables 6A.6.1 and 6A.6.2.

In 2008, for those aged 18 to 24 years old:

- nationally, 40.1 per cent of Indigenous people were neither employed (unemployed or not in the labour force) nor studying, compared to 9.8 per cent of non-Indigenous people (figure 6.6.1)
- there was no significant difference between the proportions of Indigenous people who were neither employed nor studying across remoteness areas (figure 6.6.1)
- the proportion of Indigenous people who were neither employed nor studying was highest in WA (50.6 per cent), and lowest in the ACT (25.4 per cent) (table 6A.6.1)
- a lower proportion of Indigenous males (30.2 per cent) than Indigenous females (49.9 per cent) was neither employed and nor studying. Similarly, a lower proportion of non-Indigenous males (7.1 per cent) than non-Indigenous females (12.6 per cent) were neither employed nor studying (table 6A.6.5).

Figure 6.6.2 Proportion of 18–24 year olds not employed and not studying, 2002–2008^a



^a Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information).

Source: ABS (unpublished) NATSISS 2002; ABS (unpublished) NATSISS 2008; ABS (unpublished) NATSIHS 2004-05; ABS (unpublished) GSS 2002; ABS (unpublished) NHS 2004-05; ABS (unpublished) NHS 2007-08; tables 6A.6.1 and 6A.6.2.

Between 2002 and 2008, for people aged 18 to 24 years:

- there was no significant change in the proportions of Indigenous and non-Indigenous people who were not employed and not studying (figure 6.6.2)

Data disaggregated by State and Territory, sex, and remoteness area for people aged 18 to 24 years who were not employed or studying from 2002 to 2008 are included in attachment tables 6A.6.1–5.

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 because they are performing home duties. In 2009, the birth rate of Indigenous females aged 19 years was around five times as high as that for non-Indigenous females (143 babies per 1000 females, and 29 babies per 1000 females, respectively) (table 5A.2.30). In 2008, 24.7 per cent of Indigenous people aged 18 to 24 years who were not in the labour force listed child care as the primary reason. (table 4A.6.25). Teenage birth rates for Indigenous and non-Indigenous females are examined in more detail in section 5.2.

Outcomes from education — labour force status by educational attainment

This measure 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 18–64 years, 2002 and 2008

	2002		2008	
	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous
<i>Labour force participation as a proportion of the population aged 18–64 years (%)</i>				
Certificate III to advanced diploma ^a	81.9	85.6	84.7	86.8
Bachelor degree or higher ^b	90.8	89.2	90.0	87.7
Certificate III and higher	83.9	87.2	85.8	87.2
Other ^c	59.5	72.5	59.9	73.6
<i>Employed people as a proportion of the labour force aged 18–64 years (%)</i>				
Certificate III to advanced diploma ^a	72.6	82.4	77.2	84.7
Bachelor degree or higher ^b	80.4	86.9	85.3	85.4
Certificate III and higher	74.3	84.4	78.8	85.1
Other ^c	46.1	66.7	48.9	70.5

^a Includes Certificate III/IV and advanced diploma/diploma. ^b Includes bachelor degree, graduate diploma/graduate certificate and postgraduate certificate. ^c Includes certificate I and II and those who do not have a non-school qualification.

Source: ABS (unpublished) NATSISS 2002; ABS (unpublished) GSS 2002; ABS (unpublished) NATSISS 2008; ABS NHS 2007-08; table 6A.6.6.

Between 2002 and 2008, for people aged 18 to 64 years:

- the labour force and employment participation rates of Indigenous people with either a certificate III, Bachelor degree, or higher qualification, did not change significantly across the years (table 6.6.1)
- there was little difference in the labour force and employment participation rates of Indigenous people with either a certificate III, Bachelor degree or higher qualification, between remoteness areas or by sex (tables 6A.6.6–7).

Tables 6A.6.6–8 provide data on labour force status by level of qualifications for 2002, 2004–05 and 2008. Table 6A.6.9 presents these data by Community Development Employment Projects (CDEP) status.

The Report on Government Services (SCRGSP 2011) contains data on the proportion of VET graduates who reported being in employment and/or who continued on to further study after completing training.

Nationally, in 2009:

- 67.1 per cent of Indigenous VET graduates indicated that they were employed after completing a course (compared with 78.1 per cent of non-Indigenous VET graduates)
- 34.2 per cent of Indigenous VET graduates reported they had continued on to further study (compared with 32.1 per cent of all TAFE graduates) (SCRGSP 2011, tables 5A.26–7).

Data on VET graduates' employment and/or further study outcomes is also available by State and Territory (SCRGSP 2011).

6.7 Future directions in data

School enrolment and attendance

There are limitations with these data: data on government, catholic and independent school sectors are not able to be aggregated and data for individual school years are not able to be aggregated. The key challenge is to improve comparable reporting on attendance.

Teacher quality

The National Partnership on Teacher Quality 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 used for this indicator to be reported on in future years.

In support of the partnership, a set of National Professional Standards for Teachers were announced on 9 February 2011 (AITSL 2011). These standards aim to provide a nationally consistent basis to recognise teacher quality levels, and include specific descriptors for Aboriginal and Torres Strait Islander students.

Indigenous cultural studies

Data on the Indigenous status of teachers may be available from the National Schools Statistics Collection for future editions of the report. This collection is a joint undertaking of State and Territory departments of education, DEEWR, ABS, and the Ministerial Council for Education, Early Childhood Development and Youth Affairs.

Transition from school to work

The ABS program of ongoing Indigenous specific household surveys will continue to provide selected education and labour data on a three-yearly cycle to report on this indicator. Data on this topic are also available from the five-yearly Census.

Unpublished data on employment and training outcomes for VET graduates are obtained from the National Centre for Vocational Education Research's Student Outcomes Survey, and are reported in the Report on Government Services on an annual basis (SCRGSP 2011).

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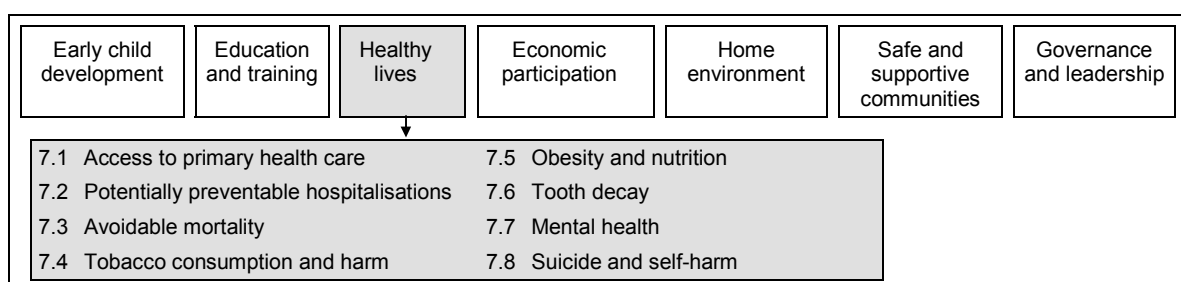
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7 Healthy lives

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 a number of factors, including a healthy living environment, access to and use of 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.

Several 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 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 impairment) (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 services) (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 include the key factors that contribute to positive health outcomes, as well as measures of the outcomes themselves:

- access to primary health care — 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 health risk behaviours and contribute to improved health outcomes. The primary measures for section 7.1 are: self-assessed health status; expenditure on health care services for Indigenous people; immunisation rates; Indigenous people's use of primary health care services; and the Indigenous health workforce
- 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. The primary measures for section 7.2 are hospitalisation rates for: potentially preventable chronic and acute conditions; and injury, poisoning and other external causes
- avoidable mortality — avoidable mortality counts untimely and unnecessary deaths from diseases for which effective public health, medical and other interventions are available. The primary measure for section 7.3 is deaths from avoidable causes
- 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. The primary measure for section 7.4 is the proportion of people aged 18 years or over who are current daily smokers. This section also includes data on hospitalisations related to tobacco use

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- obesity and nutrition — obesity and poor nutrition are significant contributors to poor health outcomes. The primary measure for section 7.5 is the proportion of people aged 18 years or over who are obese. This section also includes data on the consumption of fruit and vegetables
 - 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. The primary measures for section 7.6 are Indigenous adult's and children's dental health. This section also includes information on hospitalisations for dental conditions
 - mental health — mental health plays an important role in the social and emotional wellbeing of Indigenous people. The primary measures for section 7.7 are: the level of psychological distress; and selected indicators of positive wellbeing. This section also includes data on: treatment rates for mental health related services; death rates for mental and behavioural disorders; and information on the mental health of prisoners and juveniles in detention
 - 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. The primary measures for section 7.8 are: suicide deaths; and non-fatal hospitalisations for intentional self harm.

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 care

Box 7.1.1 Key messages

- In 2008:
 - 28.2 per cent of Indigenous people aged 15 years and over reported their health as fair or poor, compared with 14.5 per cent of non-Indigenous people (figure 7.1.1, table 7A.1.1)
 - the proportions of both Indigenous and non-Indigenous people rating their health as fair or poor were higher in older age groups. The gap between Indigenous and non-Indigenous people with fair or poor health increased significantly with age (figure 7.1.2, table 7A.1.1).
- The proportion of Indigenous people rating their health as very good or excellent increased between 2004-05 and 2008 in all age groups except for those aged 15–24 years. The largest increase was in the 45–54 year age group (from 25.0 to 29.6 per cent) (table 7A.1.1).
- In 2006-07, average expenditure per person on primary health care was:
 - 29.5 per cent higher for Indigenous people than non-Indigenous people (table 7.1.2)
 - higher for Indigenous people than for non-Indigenous people for hospital services (\$326 compared with \$211) and community health services (\$1187 compared with \$182) (table 7.1.2)
 - lower for Indigenous people than for non-Indigenous people for medical services (\$342 compared with \$525), dental services (\$140 compared with \$279), pharmaceuticals (\$224 compared with \$509) and aids and appliances (\$37 compared with \$122) (table 7.1.2).

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 providing 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.

The primary measures for this indicator are:

- self-assessed health status
- expenditure on health care services for Indigenous people

-
- 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 designed 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 access. Section 11.3 also contains data on patients discharged from hospital against medical advice.

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, and 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.

Distance is one barrier to accessing primary health care. However, a more comprehensive measure is required to reflect the barriers faced by Indigenous people including cultural, language and racism barriers. Cutcliffe (2004) reported that racism and cultural insensitivity in mainstream health services were not uncommon experiences for Indigenous people, and Grant et al. (2009) noted long-term stressors associated with racism. Paradies (2007) and Paradies, Harris and Anderson (2008) found that a majority of Indigenous people experience racism during their lives, and that racism (from all sources and not only related to health care) had negative impacts on Indigenous health outcomes. 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.

Box 7.1.2 'Things that work' — improving access to primary health care

The community-controlled **Urapuntja Health Service** (NT) conducts regular outreach to deliver preventive activities and primary, acute and chronic care to the Utopia community, made up of 16 remote outstations. A 10 year follow-up study documented better than expected health outcomes in the Utopia community (Rowley et al. 2008). In particular, mortality was significantly lower than that of the general NT Indigenous population. The authors suggested that better outcomes were due to a combination of community-controlled social and health care delivery, and benefits from outstation living, such as increased physical activity and improved diet, limited access to alcohol, and social factors, including connectedness to culture, family and land, and opportunities for self-determination.

The **Inala Indigenous Health Service** (Queensland) was established in 1995, after the mainstream general practice in Inala could identify only 12 Indigenous clients. An Indigenous community focus group attributed poor Indigenous attendance to a lack of Indigenous staff, staff perceived as unfriendly, inflexibility around time, intolerance of Indigenous children's behaviour and a lack of Indigenous artwork and other items. The Inala Indigenous Health Service, under energetic Indigenous leadership, addressed these issues and provided bulk billing, and in 2008 had 3006 Indigenous patients (Hayman, White and Spurling 2009).

The **Anyinginyi Health Aboriginal Corporation** (NT) and their Regional Eye Health Coordinator have partnered with an international non-government organisation to improve the delivery of culturally appropriate eye care services to Indigenous people. They have improved access to spectacles with a low cost spectacle scheme and arrangements that allow spectacles to be paid for via Centrelink deductions. In 2007-08, 1385 patients were seen, with 734 being prescribed spectacles and 146 referred to specialist care (Keys and O'Hara 2009).

Self-assessed health status

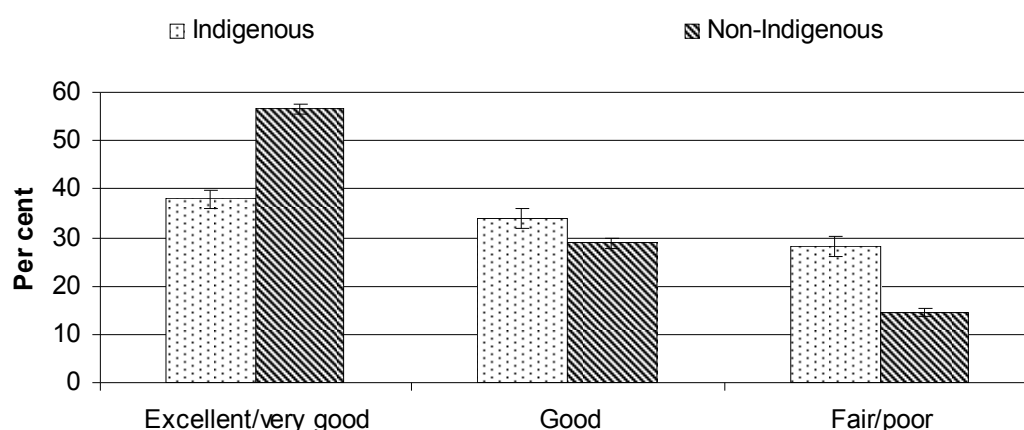
Administrative data on the incidence and prevalence of preventable disease and injury are difficult to obtain, as some people do not seek treatment and others seek treatment from general practitioners and other primary health care providers who do not provide data to national collections about the conditions treated. Hospitalisation data provide information about the most serious cases of disease and injury, and 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.

The data in this section show that Indigenous people generally have poorer self-assessed health status than non-Indigenous people. Other sections in this report confirm Indigenous people's poorer health outcomes — sections 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 impairment), 7.2 (potentially preventable hospitalisations), 7.3 (avoidable mortality), 7.7 (mental health) and 9.2 (rates of diseases associated with poor environmental health).

The ABS National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) 2004-05 and ABS National Health Survey (NHS) 2004-05 collected data on people's self-assessed health status and long term health conditions. The available data do not distinguish between preventable and non-preventable conditions. Section 4.8 contains further information on the burden of disease for Indigenous people.

Figure 7.1.1 Age standardised self-assessed health status, people aged 15 years and over, 2008^a



^a Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information).

Source: ABS (unpublished) NATSISS 2008; ABS (unpublished) NHS 2007-08; table 7A.1.1.

- In 2008, after adjusting for differences in the age structures of the two populations, the rate at which Indigenous people, aged 15 years and over, reported their health as fair or poor (28.2 per cent) was almost twice the rate for non-Indigenous people (14.5 per cent) (figure 7.1.1).
- Non-age-standardised data for 2008 show that 43.7 per cent of Indigenous people aged 15 years and over reported their health as being very good or excellent, 34.0 per cent reported their health as being good and 22.2 per cent reported their health as being fair or poor (table 7A.1.1).

Figure 7.1.2 **Self-assessed health status, by age, 2008**



Source: ABS (unpublished) NATSISS 2008; ABS (unpublished) NHS 2007-08; table 7A.1.1.

In 2008, among people aged 15 years and over:

- the proportions of both Indigenous and non-Indigenous people rating their health as fair or poor was higher in older age groups. The gap between Indigenous and non-Indigenous people with fair/poor health increased significantly with age (figure 7.1.2)
- the proportion of Indigenous people rating their health as very good or excellent increased between 2004-05 and 2008 in all age groups except for those aged 15–24 years. The largest increase was in the 45–54 year age group (from 25.0 to 29.6 per cent) (table 7A.1.1)
- the proportions of Indigenous people reporting fair/poor self-assessed health ranged from 17.5 per cent in the NT to 27.1 per cent in SA (table 7A.1.5)
- the proportions of Indigenous people reporting fair/poor self-assessed health were between 22 and 25 per cent in major cities and regional areas, compared to 16.4 per cent in very remote areas (16.4 per cent) (table 7A.1.7)
- Indigenous people's reported health status varied according to other socioeconomic characteristics. A higher proportion of those whose highest level of schooling was year 9 or below rated their health as fair or poor than those who had completed years 11 or 12. Similarly, a higher proportion of those who were employed rated their health as excellent or very good, than those who were unemployed or not in the labour force. A higher proportion of those in the lowest income quintile rated their health as fair or poor than those in the highest quintile (table 7A.1.8).

Data on self-assessed health status of Indigenous children aged 0–14 years are also available by sex (table 7A.1.2), state and territory (table 7A.1.4) and remoteness (table 7A.1.6).

Expenditure on health care services for Indigenous people

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 (2011) 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 per person on health services provides an indication of the relative use of health care services by Indigenous and non-Indigenous people. There are two collections of data on health expenditure for Indigenous people; *Expenditures on Health for Aboriginal and Torres Strait Islander Peoples 2006-07* (AIHW 2010) and the *Indigenous Expenditure Report* (IERSC 2010).

Care should be taken when comparing estimates presented in the two reports, because they differ in terms of:

- definition of expenditure
- sources of expenditure data
- method used to determine total health expenditure
- time period.

This report presents data from the AIHW report, because it can be split between primary and secondary/tertiary health services expenditure.

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 expenditure also has 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 2010).

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 between 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, 2006-07

Health good or service type	Total expenditure (\$ million)			Expenditure per person (\$)		
	Indigenous	Non-Indigenous	Indigenous share (%)	Indigenous	Non-Indigenous	Ratio
Hospitals	1 483.1	33 687.6	4.2	2 838.3	1 654.6	1.7
Public hospital ^a	1 450.9	26 565.3	5.2	2 776.6	1 304.8	2.1
Admitted patient services	1 123.5	20 817.0	5.1	2 150.0	1 022.4	2.1
Non-admitted patient services	327.4	5 748.3	5.4	626.5	282.3	2.2
Private hospital	32.3	7 122.3	0.5	61.7	349.8	0.2
Patient transport	115.9	1 672.4	6.5	221.8	82.1	2.7
Medical services	220.8	16 544.5	1.3	422.6	812.6	0.5
Medicare services	193.2	13 441.1	1.4	369.7	660.2	0.6
Other	27.6	3 103.4	0.9	52.9	152.4	0.4
Dental services	72.9	5 676.2	1.3	139.5	278.8	0.5
Community health services	620.1	3 706.3	14.3	1 186.7	182.0	6.5
Other professional services	22.3	3 250.8	0.7	42.8	159.7	0.3
Public health	110.9	1 700.2	6.1	212.2	83.5	2.5
Medications	129.4	12 481.0	1.0	247.5	613.0	0.4
Aids and appliances	21.0	3 004.6	0.7	40.3	147.6	0.3
Research	32.1	2 317.0	1.4	61.5	113.8	0.5
Health administration	75.7	2 294.0	3.2	144.8	112.7	1.3
Other health services	5.5	141.9	3.7	10.5	7.0	1.5
Total health	2 909.7	8 6476.4	3.3	5 568.5	4 247.3	1.3

^a Public hospital services exclude any dental services, community health services, patient transport services, public health and health research undertaken by the hospital.

Source: AIHW (2010) *Expenditures on Health for Aboriginal and Torres Strait Islander Peoples 2006-07*, Cat. no. HWE 48, Health and welfare expenditure series no. 39, Canberra; table 7A.1.10.

In 2006-07 across all health services:

- total expenditure on health care for Indigenous people was \$5569 per person compared with \$4247 per non-Indigenous person (table 7.1.1)

- average expenditure per person was lower for Indigenous people on dental services (\$140 compared to \$279), medical services (\$423 compared to \$813), medications (\$248 compared to \$613) and aids and appliances (\$40 compared to \$148) (table 7.1.1)
- expenditure per person on community health services was 6.5 times greater for Indigenous people than non-Indigenous people (\$1187 compared to \$182) (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, 2006-07^{a, b}

Health good or service type	Primary			Secondary/tertiary		
	Expenditure per person (\$)		Ratio	Expenditure per person (\$)		Ratio
	Indigenous	Non-Indigenous		Indigenous	Non-Indigenous	
Total hospital services	325.6	211.1	1.5	2 512.7	1 443.5	1.7
Admitted patient services	..	..	..	2 199.4	1 302.3	1.7
Non-admitted patient services	325.6	211.1	1.5	313.3	141.2	2.2
Patient transport	110.9	16.4	6.8	110.9	65.7	1.7
Medical services	341.5	524.7	0.7	81.1	287.9	0.3
Dental services	139.5	278.8	0.5	..	..	..
Other professional services	21.4	79.8	0.3	21.4	79.8	0.3
Community health services	1 186.7	182.0	6.5	..	..	..
Public health	212.2	83.5	2.5	..	..	..
Medications	224.4	508.5	0.4	23.1	104.5	0.2
Aids and appliances	36.5	122.4	0.3	3.8	25.2	0.2
Total health^a	2 598.7	2 007.3	1.3	2 753.0	2 006.5	1.47

^a Excludes expenditure on health administration, health expenditure 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. .. Not applicable.

Source: AIHW 2010, *Expenditures on Health for Aboriginal and Torres Strait Islander Peoples 2006-07*, Cat. no. HWE 48, Health and welfare expenditure series no. 39, AIHW, Canberra; table 7A.1.11.

In 2006-07, average expenditure per person on primary health care was:

- 29.5 per cent higher for Indigenous people than non-Indigenous people (table 7.1.2)
- higher for Indigenous people for hospital services (\$326 compared to \$211) and community health services (\$1187 compared to \$182) (table 7.1.2)

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- lower for Indigenous people for medical services (\$342 compared to \$525), dental services (\$140 compared to \$279), pharmaceuticals (\$224 compared to \$509) and aids and appliances (\$37 compared to \$122) (table 7.1.2)
 - average expenditure on primary health care for Indigenous people was \$2599 per person compared with \$2007 per non-Indigenous person (table 7.1.2)
 - average primary health care expenditure on medical services¹ per Indigenous person (\$342) was around two thirds of the expenditure per non-Indigenous person (\$525). For dental services, expenditure per Indigenous person (\$140) was half of the expenditure per non-Indigenous person (\$279) (table 7.1.2)
 - average expenditure per person on pharmaceuticals for Indigenous people was less than half that for non-Indigenous people (\$224 compared to \$509) (table 7.1.2).

Immunisation rates

Immunisation is highly effective in preventing sickness and death from vaccine preventable diseases. Burgess (2003) found that, since the introduction of vaccination for children in 1932, deaths from vaccine-preventable diseases had fallen by 99 per cent, despite the Australian population nearly tripling. Under the National Immunisation Program, the Australian Government provides a range of free vaccines for children, adolescents and adults. The Australian Childhood Immunisation Register (ACIR) assesses children for immunisation coverage at 12–15 months, 24–27 months and 60–63 months, by Indigenous status, for all jurisdictions. The Department of Health and Ageing is working with Medicare Australia to improve the quality of Indigenous identification in immunisation data.

Data on immunisation rates for children from the ACIR are shown in table 7.1.3. Childhood immunisation data are provided by general practitioners, local governments and Aboriginal health care providers, and are available for all jurisdictions from 2008.

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).

Table 7.1.3 Vaccination coverage estimates for children, 31 December 2009^a

Vaccine	1 year			2 years			5 years		
	Indigenous	Other	Ratio ^b	Indigenous	Other	Ratio ^b	Indigenous	Other	Ratio ^b
	%	%		%	%		%	%	
Hepatitis B ^c	84.9	92.1	0.9*	92.8	93.7	1.0	na	na	..
DTP	85.0	92.6	0.9*	93.7	94.8	1.0	79.0	83.5	0.95*
Polio	84.9	92.6	0.9*	93.6	94.7	1.0	79.0	83.5	0.95*
HIB ^c	85.9	92.3	0.9*	90.0	93.6	1.0*	na	na	..
MMR ^d	na	na	..	93.1	93.7	1.0	79.5	83.3	0.95*
All vaccines	84.1	92.0	0.9*	87.1	91.1	0.96*	78.2	82.8	0.95*

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 2008, 1 July and 30 September 2007, and 1 July and 30 September 2004, respectively. ^b Ratio—coverage estimate for Indigenous children divided by coverage estimate for other children. ^c Data are not collected for children aged 5 years who receive a HIB or hepatitis B vaccine. ^d Data are not collected for children aged 1 year who receive a MMR vaccine. .. Not applicable. na not available.

Source: AIHW (2011) *Aboriginal and Torres Strait Islander Health Performance Framework, 2010 Report: Detailed Analyses*, Cat. No. IHW 53, Canberra; derived from ACIR Medicare Australia data; table 7A.1.12.

- In 2009, immunisation rates for one year old Indigenous children (84.1 per cent) were lower than for other children of the same age (92.0 per cent). Immunisation rates for children aged two years and five years were similar for Indigenous and other children (table 7.1.3).
- Between 2001 and 2009, there were no significant changes in the proportions of one and two year old Indigenous children who were fully immunised. Over the same period there was a significant increase in the proportion of other children fully immunised at ages one and two years. The proportions of both Indigenous and other children who were fully immunised at five years increased significantly between 2001 and 2009 (AIHW 2011).

Data on childhood immunisation rates by State and Territory are shown in tables 7A.1.12–19.

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).

There are no new data on immunisation of Indigenous adults. 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, per cent, 2004-05

	<i>Indigenous</i>		<i>Non-Indigenous</i>
	<i>50–64 years</i>	<i>65 + years</i>	<i>65 + years</i>
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. **np** Not published.

Source: AIHW (2009) *Aboriginal and Torres Strait Islander Health Performance Framework: Detailed Analyses*, Cat. no. IHW 22, derived from ABS 2004-05 NATSIHS and ABS 2004-05 NHS; table 7A.1.20.

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's use of primary health care services

The most recent data on where Indigenous people usually go when they have a health problem are from the ABS NATSIHS 2004-05. No new data are available. 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 (AHMAC 2011). However, as Aboriginal medical services employ doctors as well as other health professionals, respondents who usually saw a doctor at an Aboriginal medical service might have answered either way. Therefore, these data do not give a clear picture of Indigenous people's use of Aboriginal medical services in comparison to doctors in private practice
- aboriginal medical services were identified 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 (AHMAC 2011)
- the rates at which Indigenous people living in remote areas used Aboriginal medical services (66.0 per cent) or went to hospital (16.1 per cent) were around four times the rates at which Indigenous people living in non-remote areas used Aboriginal medical services (17.4 per cent) or went to hospital (3.7 per cent) (table 7A.1.21)
- 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.1.21).

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 (table 7A.1.22). 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. 22). 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.1.22). 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.1.22). This is lower than expected given the greater burden of illness experienced by Indigenous Australians in remote areas.

Indigenous people reported a variety of reasons for not going to a GP when they had a health problem. More than one 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.1.23). 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.1.23).

Table 7A.1.24 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 both 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. The proportion of Indigenous people living in remote areas who had never consulted a dentist was higher than the proportion for Indigenous people living in non-remote areas in both 2001 and 2004-05 (table 7A.1.24). Information on dental health outcomes for Indigenous people is included in section 7.6.

Table 7A.1.25 compares the 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 reported ‘logistical reasons’³ for not going to a dentist (52.9 per cent) at twice the rate for Indigenous adults in non-remote areas (26.6 per cent). Indigenous adults in non-remote areas reported ‘cost’ as a reason for not seeking dental treatment (33.7 per cent) at twice the rate for Indigenous adults in remote areas (16.2 per cent).

Data on reasons for not going to ‘other health professionals’ by remoteness are reported in table 7A.1.26 and section 11.3. Data on health services usually used by Indigenous children aged 0–14 years are in tables 7A.1.27–7A.1.29.

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. No new data are available for this report.

Aboriginal primary health care centres provide health care services and support to Aboriginal and Torres Strait Islander people. Many of these facilities are community-controlled. 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.1.30 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.

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- 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.1.30).
 - 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.1.30).
 - 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.1.30). Doctors were more likely than registered nurses to visit or work within a discrete Indigenous community on a weekly to monthly basis (table 7A.1.30).
 - 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.1.30).

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, Census data show that Indigenous people represent a small proportion (1.0 per cent) of people working in health-related occupations in Australia (ABS and AIHW 2008, table 7A.1.31). 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.1.31). 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 are trained to be culturally competent.

Increasing the number of Indigenous health workers, requires similar improvements in educational outcomes to those needed for improvement in Indigenous employment more generally. Sections 4.5, 4.6, 4.7 and 8.1 and chapter 6 provide more information on education and employment outcomes and case studies of successful programs.

There is potential to increase the number of Indigenous people in professional health occupations such as nursing by providing Indigenous health workers with

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 NSW, Victoria, Queensland, WA, SA and public hospitals in the NT in 2008-09:
 - the Indigenous hospitalisation rate for potentially preventable chronic conditions was 7.0 times the rate for other people. Complications of all types of diabetes accounted for 83.6 per cent of Indigenous hospitalisations (table 7.2.1)
 - the Indigenous hospitalisation rate for potentially preventable acute conditions was 2.3 times the rate for other people
 - Indigenous hospitalisation rates for potentially preventable chronic conditions, complications of diabetes, potentially preventable acute conditions, vaccine-preventable conditions, sexually transmitted conditions and injury and poisoning and other external causes were much higher in remote areas than in regional areas and major cities (tables 7A.2.2, 7A.2.4, 7A.2.6, 7A.2.8, 7A.2.10 and 7A.2.12)
 - the Indigenous hospitalisation rate for chronic disease in remote areas was 217.2 per 1000 people compared with 140 per 1000 in major cities and regional areas (table 7A.2.2).
- In NSW, Victoria, Queensland, WA, SA and public hospitals in the NT between 2004-05 and 2008-09:
 - hospitalisations of Indigenous people for potentially preventable acute conditions increased from 30.1 to 33.2 per 1000 people while rates for other people increased from 13.3 to 14.7 per 1000 people, leading to a small increase in the gap (table 7A.2.5)
- In NSW, Victoria, Queensland, WA, SA and public hospitals in the NT:
 - hospitalisations for potentially preventable chronic conditions increased from 153.0 per 1000 in 2004-05 to 198.9 in 2007-08 and the gap increased (coding changes mean that data for 2008-09 are not directly comparable) (table 7A.2.1).

The primary measures for this indicator are hospitalisation rates for:

- potentially preventable chronic conditions (diseases that typically persist for at least six months) (tables 7.2.1 and 7.2.2)
 - including complications of diabetes
- potentially preventable acute conditions (serious short term illness) (table 7.2.3)

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- injury, poisoning and other external causes (table 7.2.6).

This section also contains information on hospitalisations for vaccine-preventable and sexually transmitted conditions (tables 7.2.4 and 7.2.5) and a case study of a successful program working to prevent unnecessary hospitalisations (box 7.2.2).

Potentially preventable hospitalisations are those 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 in other ways. This section is closely related to section 7.3 (Avoidable mortality), which examines deaths from potentially avoidable or treatable conditions.

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 is available, either at an earlier stage in disease progression or as an alternative to hospital care (AHMAC 2011). The variation in potentially preventable hospitalisation rates between Indigenous and non-Indigenous people suggests considerable potential for improving Indigenous access to non-hospital care. However, *potentially* preventable hospitalisation cannot always be prevented by primary health care interventions. A major driver of preventable hospitalisations is the increasing incidence of disease, particularly chronic disease, in the population.

Li et al. (2009) found that the rate of avoidable hospitalisations for Aboriginal people in the NT between 1998-99 and 2005-06 was nearly four times the non-Aboriginal rate. They found that the average annual increase in avoidable hospitalisations was 11.6 per cent for Aboriginal people and 3.9 per cent for non-Aboriginal people. The greatest increases were for diabetes complications and for people aged 45 years and over.

Data are reported for the following jurisdictions: NSW, Victoria, Queensland, WA, SA and NT (public hospitals only). These six jurisdictions are considered to have acceptable quality of Indigenous identification in hospitalisation data. Overall, the identification of Indigenous patients in hospital separations data has improved in recent years, but still varies substantially between jurisdictions. Data are available for remoteness areas in aggregate, with Indigenous identification highest in remote and very remote areas (AIHW 2010).

Potentially preventable chronic conditions

In 2008-09, Indigenous people had much higher hospitalisation rates than other people for a range of potentially preventable chronic diseases (diseases that typically persist for at least six 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, 2008-09^{a, b, c}

		<i>Indigenous</i>	<i>Other^d</i>	<i>Rate ratio^e</i>
Asthma	rate	3.6	1.7	2.1
Congestive cardiac failure	rate	6.4	2.0	3.2
Diabetes complications	rate	121.7	12.3	9.9
Chronic obstructive pulmonary diseases	rate	12.9	2.7	4.8
Angina	rate	4.8	1.5	3.3
Iron deficiency anaemia	rate	1.8	1.2	1.4
Hypertension	rate	0.7	0.3	2.6
Nutritional deficiencies	rate	0.1	–	8.7
Total for potentially preventable chronic conditions^f	rate	145.6	20.8	7.0
Total hospitalisations for all conditions	rate	859.5	361.0	2.4

^a Hospitalisation rates are directly age standardised to the Australian 2001 standard population. ^b Data are based on the patient's State or Territory of usual residence. ^c See table 7A.2.8 for the ICD-10-AM codes used to classify potentially preventable chronic conditions. ^d Other includes hospitalisations of people identified as not Indigenous as well as those with a 'not stated' Indigenous status. ^e Rate ratio is the age standardised Indigenous hospitalisation rate divided by the age standardised hospitalisation rate for other people. ^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 7.0 times as high as the rates for other people in 2008-09 (145.6 hospitalisations per 1000 Indigenous people compared to 20.8 hospitalisations per 1000 other people) (table 7.2.1)
- hospitalisation rates for Indigenous people with diabetes complications were 9.9 times as high and for chronic obstructive pulmonary diseases 4.8 times as high as the rates for other people in 2008-09. Hospitalisations for complications of diabetes accounted for 83.6 per cent of Indigenous hospitalisations for potentially preventable chronic conditions (table 7.2.1)

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- hospitalisations for potentially preventable chronic conditions comprised a higher proportion of all hospitalisations for Indigenous people (16.9 per cent) than for other people (5.8 per cent) in 2008-09 (table 7A.2.1), which suggests that inadequate use of, or access to, primary health care services is a major contributor to Indigenous hospitalisation
 - hospitalisations for potentially preventable chronic conditions were much higher for Indigenous people in remote areas (217.2 per 1000) than in major cities (139.8 per 1000) or regional areas (140.5 per 1000) in 2008-09. Hospitalisations for diabetes complications were much higher for Indigenous people in remote areas (188.7 per 1000) than in major cities (121.1 per 1000) or regional areas (112.8). Rates for other people were much lower in all remoteness areas and did not vary by remoteness (table 7A.2.2)
 - hospitalisations for potentially preventable chronic conditions increased every year for Indigenous people from 153.0 per 1000 in 2004-05 to 198.9 in 2007-08 and the gap increased. The coding of diabetes complications with additional diagnoses (the largest component of chronic conditions) changed between 2007-08 and 2008-09. Therefore, the data for 2008-09 are not comparable with data for earlier years and the apparent reduction in hospitalisations shown in table 7A.2.1 reflects only the change in coding and does not represent an improvement in the health of either Indigenous or other people (table 7A.2.1).

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. The data in table 7.2.2 provide more detail on the chronic conditions with the largest number of hospitalisations, with a particular focus on type 2 diabetes.

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, 2008-09^{a, b, c, d}

	<i>Indigenous</i>	<i>Other^e</i>	<i>Rate ratio^f</i>
Circulatory	0.3	0.2	1.7
Renal	2.8	0.3	11.2
Ophthalmic	2.6	1.3	2.0
Other specified	4.5	0.6	7.6
Multiple	3.1	0.5	6.5
No complications	0.1	–	2.5
Total^g	13.5	2.8	4.7

^a Hospitalisation rates are directly age standardised to the Australian 2001 standard population. ^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 Data are based on the patients' State or Territory of usual residence. ^e 'Other' includes hospitalisations identified as not Indigenous as well as those for whom Indigenous status was not stated. ^f Rate ratio is the age standardised Indigenous hospitalisation rate divided by the age standardised hospitalisation rate for other people. ^g Totals include hospitalisations for unspecified complications. – Nil or rounded to zero.

Source: AIHW National Hospital Morbidity Database (unpublished); table 7A.2.3.

For NSW, Victoria, Queensland, WA, SA and public hospitals in the NT:

- Indigenous people were hospitalised with type 2 diabetes as a principal diagnosis at 4.7 times the rate for other people in 2008-09 (13.5 hospitalisations per 1000 Indigenous people compared with 2.8 hospitalisations per 1000 other people) (table 7.2.2). Hospitalisations of Indigenous people in remote areas (21.8 per 1000) were more than twice the rate in major cities (8.5 per 1000) and regional areas (10.8 per 1000) (table 7A.2.4)
- hospitalisations for renal (kidney-related) complications of diabetes were 11.2 times as high for Indigenous people as other people in 2008-09 (table 7.2.2). Hospitalisation of Indigenous people for renal complications were more than twice as high in remote areas (5.1 per 1000) than in major cities (1.5 per 1000) or regional areas (2.3 per 1000). Rates for other people were much lower in all remoteness areas and did not vary by remoteness (table 7A.2.4)
- the hospitalisation rate for complications associated with type 2 diabetes as a principal diagnosis increased for Indigenous people by 19.2 per cent from 2004-05 to 2008-09 (from 11.3 per 1000 people in 2004-05 to 13.5 per 1000 people in 2008-09) (table 7A.2.3)
- the hospitalisation rate for type 2 diabetes also increased for other people between 2004-05 and 2008-09 at a similar rate (21.8 per cent) to that for

Indigenous people (19.2 per cent).⁵ The gap in hospitalisation rates between Indigenous and other people increased slightly from 9.0 to 10.7 per 1000 (table 7A.2.3).

Potentially preventable acute conditions

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, 2008-09^{a, b, c}

	<i>Indigenous</i>	<i>Other^d</i>	<i>Rate ratio^e</i>
Dehydration and gastroenteritis	4.1	2.9	1.5
Pyelonephritis ^f	6.5	2.3	2.8
Perforated/bleeding ulcer	0.4	0.2	1.7
Cellulitis	4.5	1.6	2.8
Pelvic inflammatory disease	0.6	0.2	2.9
Ear, nose and throat infections	3.5	1.7	2.1
Dental conditions	3.5	2.8	1.3
Appendicitis	1.7	1.5	1.1
Convulsions and epilepsy	7.3	1.4	5.1
Gangrene	1.2	0.2	5.6
Total^g	33.2	14.7	2.3

^a Hospitalisation rates are directly age standardised using the 2001 Australian standard population. ^b Data are based on patients' State/Territory of usual residence. ^c See table 7A.2.8 for the ICD-10-AM codes used to classify potentially preventable acute conditions. ^d 'Other' includes hospitalisations of people identified as not Indigenous as well as those for whom Indigenous status was not stated. ^e Rate ratio is the age standardised Indigenous hospitalisation rate divided by the age standardised other hospitalisation rate. ^f Kidney inflammation caused by bacterial infection. ^g Totals may not equal the sum of the individual conditions due to rounding.

Source: AIHW National Hospital Morbidity Database (unpublished); table 7A.2.5.

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 other people in 2008-09 (33.2 hospitalisations per 1000 Indigenous people compared to 14.7 hospitalisations per 1000 other people) (table 7.2.3)

⁵ Percentage changes over time are based on unrounded data underlying table 7A.2.3.

- hospitalisations rates for Indigenous people with potentially preventable acute conditions in 2008-09 were much higher in remote areas (52.0 per 1000) than in major cities (21.5 per 1000) or regional areas (32.8 per 1000) (table 7A.2.6)
- hospitalisation rates for Indigenous people with gangrene were 5.6 times as high and for convulsions and epilepsy 5.1 times as high as the rates for other people in 2008-09 (table 7.2.3)
- hospitalisation rates for potentially preventable acute conditions increased from 30.1 to 33.2 per 1000 Indigenous people and from 13.3 to 14.7 per 1000 other people between 2004-05 and 2008-09, leading to a slight increase in the gap (table 7A.2.5).

Other preventable conditions

Table 7.2.4 presents the hospitalisation rates for influenza and other vaccine-preventable conditions in 2008-09. Section 7.1 contains more information on vaccination rates. Table 7.2.5 presents data on hospitalisations for infections with a predominantly sexual mode of transmission and table 7.2.6 presents data on hospitalisations for injury and poisoning and other consequences of external causes. Section 4.10 contains specific information on sexually transmitted infections in children.

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, 2008-09^{a, b, c}

	<i>Indigenous</i>	<i>Other^d</i>	<i>Rate ratio^e</i>
Influenza	2.0	0.5	3.7
Other vaccine-preventable conditions	0.8	0.2	4.1

^a Hospitalisation rates are directly age standardised using the Australian 2001 standard population. ^b Data are based on patients' State or Territory of usual residence. ^c See table 7A.2.8 for the ICD-10-AM codes used to classify vaccine-preventable conditions. ^d 'Other' includes hospitalisations of people identified as not Indigenous as well as those for whom Indigenous status was not stated. ^e Rate ratio is the age standardised Indigenous hospitalisation rate divided by the age standardised other hospitalisation rate.

Source: AIHW National Hospital Morbidity Database (unpublished); table 7A.2.7.

For NSW, Victoria, Queensland, WA, SA and public hospitals in the NT:

- hospitalisation rates for influenza and other vaccine-preventable conditions for Indigenous people were 3.7 and 4.1 times the hospitalisation rates for other people for the same conditions in 2008-09 (table 7.2.4)

- hospitalisation rates for Indigenous people for influenza in 2008-09 were higher in remote areas (3.5 per 1000) than in major cities (1.1 per 1000) or regional areas (1.7 per 1000) (table 7A.2.8)
- hospitalisation rates for influenza and other vaccine-preventable conditions were higher for Indigenous people than other people in all years between 2004-05 and 2008-09 (table 7A.2.7)
- hospitalisation rates for influenza and other vaccine-preventable conditions fluctuated for both Indigenous and other people between 2004-05 and 2008-09 but there was no clear increase or decrease in rates or the gap over the period (table 7A.2.7).

Hospitalisations for sexually transmitted infections (table 7.2.5) may be preventable through the provision of appropriate primary health care and 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, 2008-09^{a, b, c}

	<i>Indigenous</i>	<i>Other^d</i>	<i>Rate ratio^e</i>
Syphilis	0.4	–	15.6
Gonococcal infection	0.3	–	32.7
Chlamydial infection	0.2	–	8.3
Other sexually transmitted diseases	0.4	0.2	2.5

^a Hospitalisation rates are directly age standardised using the Australian 2001 standard population. ^b Data are based on patients' State or Territory of usual residence. ^c Includes principal or additional diagnosis based on ICD-10-AM classification. ^d 'Other' includes hospitalisations of people identified as not Indigenous as well as those whose Indigenous status was not stated. ^e Rate ratio is the age standardised Indigenous hospitalisation rate divided by the age standardised other hospitalisation rate. – Nil or rounded to zero.

Source: AIHW National Hospital Morbidity Database (unpublished); table 7A.2.9.

For NSW, Victoria, Queensland, WA, SA and public hospitals in the NT:

- hospitalisation rates for sexually transmitted infections were greater for Indigenous people than other people in 2008-09 (table 7.2.5)
- hospitalisation rates for Indigenous people with gonococcal infection were 32.7 times as high, for syphilis 15.6 times as high and for chlamydial infections 8.3 times as high as the rates for other people (table 7.2.5)
- hospitalisation rates for Indigenous people for sexually transmitted infections were much higher in remote areas than in major cities or regional areas (table 7A.2.10)

- for Indigenous people, the hospitalisation rates for syphilis, gonococcal infections, chlamydial infections and other sexually transmitted diseases all remained fairly constant between 2004-05 and 2008-09. Rates for other people also remained constant over this period, and the gap was unchanged (table 7A.2.9).

Hospitalisations for injury and poisoning and other consequences of external causes (table 7.2.6) may be preventable by both appropriate primary health care and educational awareness programs.

Table 7.2.6 Age standardised hospitalisations of Indigenous people, and rate ratios of Indigenous to other people, for injury and poisoning and other consequences of external causes, by sex, NSW, Victoria, Queensland, WA, SA, and public hospitals in the NT, 2008-09^{a, b}

<i>External cause</i>	<i>Males</i>		<i>Females</i>		<i>Persons</i>	
	<i>Rate per 1000^c</i>	<i>Rate ratio^d</i>	<i>Rate per 1000^c</i>	<i>Rate ratio^d</i>	<i>Rate per 1000^c</i>	<i>Rate ratio^d</i>
Assault (X85–Y09)	11.0	6.9	10.7	32.3	10.8	11.3
Falls (W00–W19)	10.1	1.4	9.4	1.2	9.9	1.3
Exposure to inanimate mechanical forces (W20–W49)	6.5	1.5	2.9	2.0	4.6	1.6
Complications of medical and surgical care (Y40–Y84)	6.9	1.5	7.2	1.8	7.1	1.7
Transport accidents (V01–V99)	5.6	1.4	2.4	1.4	3.9	1.4
Other accidental exposures	3.6	1.0	2.2	1.2	2.9	1.1
Intentional self-harm ((X60–X84)	2.5	2.8	3.2	2.1	2.8	2.4
Exposure to animate mechanical forces (W50–W64)	1.9	1.9	1.0	2.3	1.5	2.0
Exposure to electric current/smoke/fire/venomous animals and plants/forces of nature (W85–W99, X00–X39)	1.7	2.4	1.0	2.6	1.3	2.5
Accidental poisoning by and exposure to noxious substances (X40–X49)	0.8	1.7	0.8	2.0	0.8	1.9
Other external causes	1.1	3.0	0.7	2.3	0.9	2.7
Total	51.7	1.8	41.5	2.1	46.6	1.9

^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). ^b Data are based on patients' State or Territory of usual residence. ^c Directly age standardised rate using the Australian 2001 standard population. ^d Rate ratio is the age standardised Indigenous rate divided by the age standardised other rate, where 'other' includes people of non-Indigenous and unknown Indigenous status.

Source: AIHW National Hospital Morbidity Database (unpublished); table 7A.2.11.

In NSW, Victoria, Queensland, WA, SA and public hospitals in the NT:

- Indigenous people were hospitalised for injury and poisoning and other consequences of external causes at 1.9 times the rate for other people in 2008-09 (table 7.2.6)
- assaults and falls were the most common external causes of hospitalisations of Indigenous people in 2008-09. Indigenous people were hospitalised for assault at 11.3 times the rate and hospitalised for falls at 1.3 times the rate for other people (table 7.2.6)
- hospitalisation rates for injury and poisoning and other consequences of external causes were higher for both Indigenous and other males than Indigenous and other females in 2008-09 (table 7A.2.11)
- Indigenous hospitalisations for injury and poisoning and other consequences of external causes increased with remoteness (from 32.1 per 1000 in major cities to 70.7 per 1000 in remote areas) in 2008-09. Indigenous hospitalisations for assault (22.7 per 1000) were more than four times as high in remote areas as in major cities (5.0 per 1000) (table 7A.2.12)
- hospitalisation rates for injury and poisoning and other consequences of external causes increased for Indigenous people from 42.1 per 1000 people in 2004-05 to 46.6 per 1000 in 2008-09, while rates for other people increased from 22.4 per 1000 people to 24.3 per 1000 people, leading to an increase in the gap (table 7A.2.13).

7.3 Avoidable mortality

Box 7.3.1 Key messages

- For 0–74 year olds in NSW, Queensland, WA, SA and the NT between 2005 and 2009:
 - death rates from avoidable causes were 3.5 times as high for Indigenous females than for non-Indigenous females and 1.7 times as high for Indigenous males than for non-Indigenous males (table 7.3.2)
 - the most common causes of avoidable mortality for Indigenous people were ischaemic heart disease (heart attacks) (19.0 per cent), cancer (16.9 per cent) (particularly lung cancer (6.2 per cent)), diabetes (9.9 per cent) and suicide (8.1 per cent). Mortality rates for Indigenous people for all these conditions were significantly higher than for other Australians (table 7.3.3).
- For 0–74 year olds between 1998 and 2009, in NSW, Queensland, WA, SA and the NT combined:
 - mortality rates from avoidable causes declined by 28.8 per cent for Indigenous and by 36.1 per cent for non-Indigenous people (figure 7.3.1)
 - the gap between death rates for Indigenous and non-Indigenous 0–74 year olds from avoidable causes decreased from 482.8 per 100 000 to 358.9 per 100 000 in 2009 (figure 7.3.1).

Avoidable mortality is an indicator of Indigenous people’s access to timely and effective health care and sits alongside potentially preventable hospitalisations (section 7.2) as a measure of health outcomes. Reducing avoidable deaths is a key component of improving Indigenous life expectancy (section 4.1). Avoidable mortality can be reduced through high quality, effective and accessible primary prevention, early intervention and medical treatment. However, factors outside the health system also contribute to mortality — including socioeconomic factors (education, employment and income) described in parts of chapters 4, 6 and 8; 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).

The primary measure for this indicator is deaths from avoidable causes. This section uses causes of death data from the Australian Bureau of Statistics (ABS) 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 2011).

Box 7.3.2 ‘Things that work’ — reducing avoidable mortality

Heart attack survival rates have improved for Indigenous people in the NT through a combination of patients’ response to their condition, initial primary health care management and access to hospital care. For Indigenous people in the NT, incidence of acute myocardial infarction (AMI) (heart attack) increased over the 1990s to be higher than the national rate. However, the increase in incidence was offset by improvement in survival rates. 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). Significant scope for further improvement remains, as NT Indigenous AMI cases still have 44 per cent higher risk of death than non-Indigenous cases (You et al. 2009).

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, 2005–2009^{a, b, c, d, e, f}

	<i>Indigenous</i> per 100 000	<i>Non-Indigenous</i> per 100 000	<i>Rate ratio^g</i>
NSW	374.5	149.9	2.5
Qld	473.8	153.4	3.1
WA	719.4	142.6	5.0
SA	555.7	155.6	3.6
NT	801.8	207.5	3.9
NSW, Qld, WA, SA & the NT	525.9	150.9	3.5

^a Deaths from avoidable causes are defined as those from causes listed in table 7A.3.5. ^b Indirectly age-standardised death rates per 100 000 population. ^c Denominators used in the calculation of rates for the Indigenous population are from ABS *Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians*, Cat. no. 3238.0 (series B, 2006 base). Non-Indigenous estimates are available for Census years only. In the intervening years, Indigenous population figures are derived from assumptions about past and future levels of fertility, mortality and migration. In the absence of non-Indigenous population figures for these years, it is possible to derive denominators for calculating non-Indigenous rates by subtracting the Indigenous population from the total population. Such figures have a degree of uncertainty and should be used with caution, particularly as the time from the base year of the projection series increases. ^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 Indigenous and non-Indigenous data. ^e Non-Indigenous includes deaths with a 'Not stated' Indigenous status. ^f Total data are for NSW, Queensland, WA, SA, and the NT combined, based on State or Territory of usual residence. Victoria, Tasmania and the ACT are excluded due to small numbers of registered Indigenous deaths. ^g Rate ratio Indigenous: non-Indigenous.

Source: ABS (unpublished) *Causes of Death, Australia 2009*, Cat. no. 3303.0; table 7A.3.1.

For NSW, Queensland, WA, SA and the NT from 2005 to 2009 after adjusting for the different age structures of the populations:

- Indigenous people aged 0–74 years (525.9 per 100 000) had higher death rates from avoidable causes than non-Indigenous people (150.9 per 100 000) (table 7.3.1)
- Indigenous people aged 0–74 years had higher death rates from avoidable causes than non-Indigenous people in all states and territories for which data were available (table 7.3.1).

Table 7.3.2 Avoidable mortality, by age and sex, people aged 0–74 years, NSW, Queensland, WA, SA and the NT, 2005–2009^{a, b, c, d, e, f}

Age (years)	Males			Females		
	Deaths per 100 000 ^g			Deaths per 100 000 ^g		
	Indigenous	Non-Indigenous ^{h, i}	Rate ratio ^j	Indigenous	Non-Indigenous ^{h, i}	Rate ratio ^j
Less than 1	543.7	271.3	2.0	384.7	222.2	1.7
1–4	36.7	11.8	3.1	30.2	8.4	3.6
5–14	14.8	4.5	3.3	8.8	3.7	2.4
15–24	125.7	44.3	2.8	54.0	15.5	3.5
25–34	252.0	67.0	3.8	111.9	23.2	4.8
35–44	484.6	94.9	5.1	276.1	48.2	5.7
45–54	816.9	195.5	4.2	501.9	113.8	4.4
55–64	1 452.2	437.2	3.3	1 070.4	251.6	4.3
65–74	3 054.0	1 155.2	2.6	2 090.6	655.9	3.2
Total^k	335.9	202.3	1.7	228.9	115.4	3.5

^a Deaths from avoidable causes are defined as those from causes listed in table 7A.3.5. ^b Causes of death data for 2007 have undergone two years of revisions. Causes of death data for 2008 have been revised and are subject to a revisions process. Causes of death data for 2009 are preliminary and subject to a revisions process. ^c Data are reported for NSW, Queensland, WA, SA and the NT only. These five jurisdictions are considered to have adequate levels of Indigenous identification in mortality data. They do not represent an Australian total. ^d Data are presented in five-year groupings because of the small numbers each year. ^e Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous mortality rate. The completeness of identification of Indigenous deaths can vary by age. ^f Deaths are by year of registration and State/Territory of usual residence. ^g Crude rates calculated per 100 000 population for the mid-point year. 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, series B, 2006 base). ^h Non-Indigenous estimates are available for census years only. In the intervening years, Indigenous population figures are derived from assumptions about past and future levels of fertility, mortality and migration. In the absence of non-Indigenous population figures for these years, it is possible to derive denominators for calculating non-Indigenous rates by subtracting the projected Indigenous population from the total population. Such figures have a degree of uncertainty and should be used with caution, particularly as the time from the base year of the projection series increases. ⁱ Non-Indigenous includes deaths with a 'Not stated' Indigenous status. ^j Rate ratio Indigenous: non-Indigenous. ^k Totals exclude those aged 75 years and over and those for whom age was not stated.

Source: ABS (unpublished) *Causes of Death, Australia 2009*, Cat. no. 3303.0; table 7A.3.2.

In the period 2005–2009 in NSW, Queensland, WA, SA and the NT:

- death rates from avoidable causes for people aged 0–74 years were 3.5 times as high for Indigenous females and 1.7 times as high for Indigenous males as the rates for non-Indigenous females and males (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 3.3 and 5.7 times the non-Indigenous rate (table 7.3.2).

**Table 7.3.3 Avoidable mortality, by cause of death, people aged 0–74 years, NSW, Queensland, WA, SA and the NT, 2005–2009^a,
b, c, d, e, f**

Cause of death	Indigenous	Non-Indigenous	Rate ratio ^g
	per 100 000	per 100 000	
Ischaemic heart disease	111.8	151.0	0.7
Cancer	109.7	27.3	4.0
Lung cancer ^h	43.4	56.9	0.8
Diabetes	64.9	19.9	3.3
Suicide	24.2	4.8	5.0
Road traffic injuries	21.2	11.2	1.9
Alcohol-related disease	27.0	6.3	4.3
Selected invasive bacterial and protozoal infections	18.5	3.9	4.7
Cerebrovascular disease	31.5	3.3	9.5
Chronic obstructive pulmonary disease	31.5	9.0	3.5
Nephritis and nephrosis	21.1	6.8	3.1
Violence	7.6	2.0	3.7
Birth defects	4.6	0.9	5.4
Complications of perinatal period	3.4	2.7	1.2
Rheumatic and other valvular heart disease	6.0	1.5	4.0
Other avoidable ⁱ	51.3	0.4	135.0
Total avoidable	525.9	150.9	3.5

^a Data are reported for NSW, Queensland, WA, SA and the NT only. These five 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 Indirectly 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 table 7A.3.1.

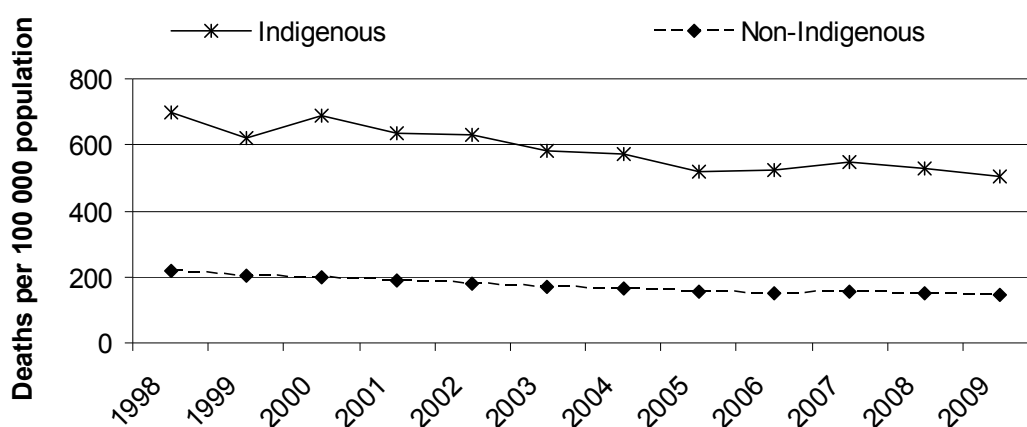
Source: ABS (unpublished) *Causes of Death, Australia 2009*, Cat. no. 3303.0; table 7A.3.3.

The greatest reductions in excess deaths could be achieved by reducing deaths from chronic disease and injury, which cause the greatest proportions of avoidable deaths for Indigenous people and are amenable to both prevention and treatment.

In 2005 to 2009 in NSW, Queensland, WA, SA, and the NT:

- the most common causes of avoidable mortality for Indigenous people aged 0–74 years were ischaemic heart disease (heart attacks) (19.0 per cent), cancer (16.9 per cent) (particularly lung cancer (6.2 per cent)), diabetes (9.9 per cent) and suicide (8.1 per cent). Mortality rates for Indigenous people aged 0–74 years for these conditions were significantly higher than other Australians: 4.0 times as high for cancer, 3.3 times as high for diabetes and 5.0 times as high for suicide (table 7.3.3)
- Indigenous people had higher death rates than non-Indigenous people for most of the avoidable causes listed in 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, b, c, d, e, f, g}



^a Deaths from avoidable causes are defined as those from causes listed in table 7A.3.5. ^b Causes of death data for 2007 have undergone two years of revisions. Causes of death data for 2008 have been revised and are subject to a revisions process. Causes of death data for 2009 are preliminary and subject to a revisions process. ^c Data are reported for NSW, Queensland, WA, SA and the NT only. These five jurisdictions are considered to have adequate levels of Indigenous identification in mortality data. They do not represent an Australian total. ^d Age standardised death rates enable the comparison of death rates between populations with different age structures by relating them to a standard population. The current ABS standard population is all persons in the Australian population at 30 June 2001. Standardised death rates (SDRs) are expressed per 100 000 persons. SDRs in this table have been calculated using the indirect method, age standardised by 5 year age group to 75 years and over. Rates calculated using the indirect method are not comparable to rates calculated using the direct method. ^e Directly age-standardised using the 2001 Australian standard population. ^f 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, Series B, 2006 base). Non-Indigenous estimates are available for Census years only. In the intervening years, Indigenous population figures are derived from assumptions about past and future levels of fertility, mortality and migration. In the absence of non-Indigenous population figures for these years, it is possible to derive denominators for calculating non-Indigenous rates by subtracting the Indigenous population from the total population. Such figures have a degree of uncertainty and should be used with caution, particularly as the time from the base year of the projection series increases. ^g Rates exclude deaths of people for whom Indigenous status was not stated.

Source: ABS (unpublished) *Causes of Death, Australia 2009*, Cat. no. 3303.0; table 7A.3.4.

Between 1998 and 2009, in NSW, Queensland, WA, SA and the NT combined:

- mortality rates from avoidable causes for people aged 0–74 years declined by 28.8 per cent for Indigenous people and by 36.1 per cent for non-Indigenous people (figure 7.3.1)
- the gap between death rates for Indigenous and non-Indigenous people aged 0–74 years from avoidable causes decreased from 482.8 per 100 000 to 358.9 per 100 000 in 2009 (figure 7.3.1)
- the mortality rate from avoidable causes for people aged 0–74 years fell faster for Indigenous males (31.1 per cent) than for Indigenous females (26.3 per cent) (table 7A.3.4).

7.4 Tobacco consumption and harm

Box 7.4.1 Key messages

- Nearly half (47.7 per cent) of Indigenous adults reported that they were current daily smokers in 2008 (table 7A.4.1). The current daily smoking rate for Indigenous adults was 2.4 the rate for non-Indigenous adults (figure 7.4.2).
- The proportions of Indigenous and non-Indigenous adults who were current daily smokers has not changed significantly since 2001 and, between 2001 and 2008 (table 7A.4.1), there was no significant change in the gap in current daily smoking rates between Indigenous and non-Indigenous adults (table 7A.4.4).
- Hospitalisation rates related to tobacco use for Indigenous people were between 3.3 (major cities) and 5.7 (remote) times as high as those for other people in 2008-09 (table 7A.4.9).

Among Indigenous people, tobacco use is the leading risk factor contributing to disease and death (Vos et al. 2007). Tobacco consumption is a performance measure for COAG's target of 'closing the life expectancy gap (between Indigenous and non-Indigenous Australians) within a generation' (COAG 2009). 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).

The primary measure for this indicator is the proportion of people aged 18 years or over who are current daily smokers. This section also includes data on hospitalisations related to tobacco use. Section 5.1 includes data on the proportion of mothers reporting smoking during pregnancy.

Compared to non-Indigenous people, Indigenous people who smoke commence at an earlier age, smoke for longer, and make fewer quitting attempts than non-Indigenous people (CEITC 2010). A broader measure for tobacco consumption are smoking rates that include current daily smokers and occasional smokers. Data on daily and occasional smokers show that for Indigenous people, smoking rates were lower in 2008 (49.8 per cent) than in 1994 (54.5 per cent) (table 7A.4.10). However, data presented below show that since 2001 there has been no statistically significant change in the proportion of Indigenous adults who were current daily smokers.

A 2001 review highlighted the problem of tobacco use among Aboriginal and Torres Strait Islander people and subsequent research has identified a lack of evidence on the effectiveness of tobacco control initiatives in Indigenous communities (Ivers 2001, 2003, 2011). A National Coordinator for Tackling Indigenous Smoking has been appointed to lead and mentor regional tobacco coordinators and action workers (Snowdon 2010). Future reports may discuss the National Coordinator's programs aimed at reducing tobacco use among Indigenous people.

Tobacco use is often associated with other lifestyle related health risk factors, such as excessive alcohol consumption 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. 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 some 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).

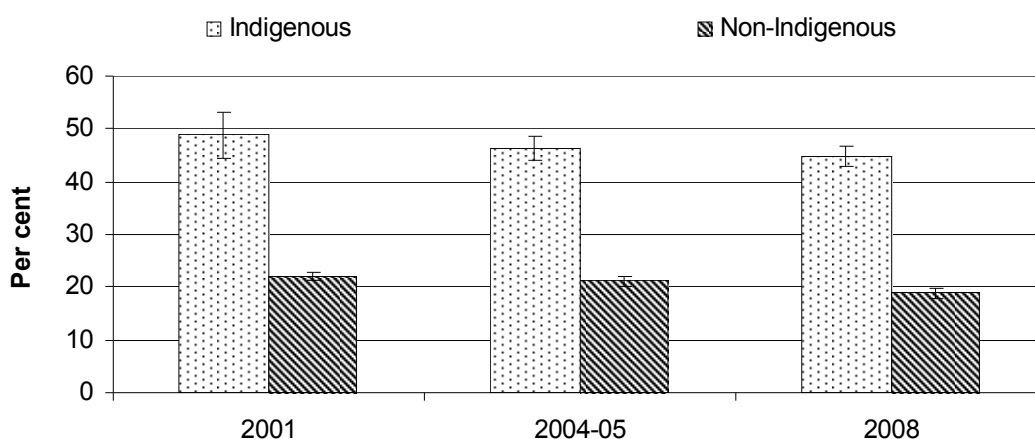
Tobacco consumption

Survey data provide information on current daily smokers. Current daily smokers are people who smoked one or more cigarettes (or pipes or cigars) per day at the time of interview.

The data presented in this section are for people aged 18 years and over. The minimum legal age to purchase tobacco products is 18 years old and the COAG performance measure focuses on is the proportion of people aged 18 years or over

who are current daily smokers. However, Indigenous people are more likely to start smoking at an earlier age than non-Indigenous people — 19.5 per cent of 15–17 year old Indigenous people were current daily smokers compared with 6.1 per cent of non-Indigenous people in 2008 (CEITC 2010; table 7A.4.1).

Figure 7.4.1 Current daily smokers aged 18 years or over, age standardised, 2001–2008^{a, b}



^a Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information). ^b 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.

Source: ABS (unpublished) NHS 2001; ABS (unpublished) NHS and NATSIHS 2004-05; ABS (unpublished) NATSISS 2008; ABS (unpublished) NHS 2007-08; table 7A.4.2.

After accounting for the different age structures in the Indigenous and non-Indigenous populations:

- in 2008, the current daily smoking rate for Indigenous adults was 2.4 times the rate for non-Indigenous adults (44.8 per cent compared to 18.9 per cent) (figure 7.4.1)
- between 2001 and 2008, there was no significant change in the gap in current daily smoking rates between Indigenous and non-Indigenous adults (figure 7.4.1)
- for non-remote areas of Australia, from 1995 to 2008, there was no significant change in the gap in current daily smoking rates between Indigenous and non-Indigenous adults (table 7A.4.3).

Non-age standardised data show that:

- there was no change in current daily smoking rates among Indigenous adults from 2001 to 2008 (table 7A.4.1)
- in 2008, the prevalence of current daily smoking was higher across all age groups for Indigenous people than non-Indigenous people (table 7A.4.1).

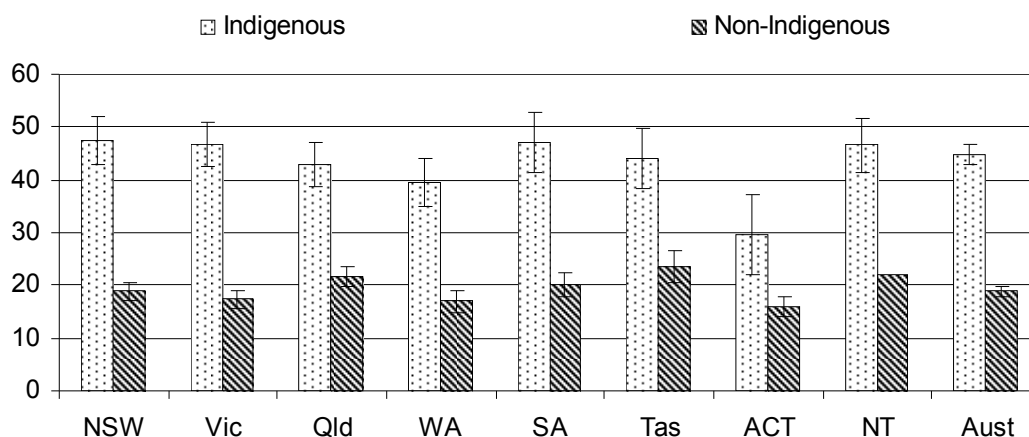
Data on current daily smokers were collected from four remoteness areas (major cities, inner and outer regional areas and remote areas) in 2001, 2004-05 and 2008 (table 7A.4.2). After accounting for the different age structures in the Indigenous and non-Indigenous populations:

- in 2008, across remoteness areas, the current daily smoking rate for Indigenous people was between 1.8 and 2.3 times the rate for non-Indigenous people
- there was a statistically significant decrease in the gap in current daily smoking rates between Indigenous and non-Indigenous adults in outer regional areas between 2001 and 2008 (table 7A.4.2).

Non-age standardised data show that:

- there was a statistically significant decrease in current daily smoking rates for Indigenous adults in outer regional areas from 58.9 per cent in 2001 to 49.1 per cent in 2008
- in 2008, Indigenous adults living in remote and very remote areas combined (51.5 per cent) were more likely to be current daily smokers than those living in non-remote areas (46.3 per cent) (table 7A.4.7).

Figure 7.4.2 **Current daily smokers aged 18 years or over, age standardised, 2008^{a, b}**



^a Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information). ^b 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.

Source: ABS (unpublished) NATSISS 2008; ABS (unpublished) NHS 2007-08; table 7A.4.4.

- After adjusting for differences in the age structure of the two populations, from 2001 to 2008, there was no significant change in the gap in smoking rates between Indigenous and non-Indigenous adults for any State or Territory (table 7A.4.4).
- Non-age standardised data show that between 2001 and 2008, there was a statistically significant decrease in smoking rates for Indigenous adults in the ACT (from 57.4 per cent to 36.4 per cent) (table 7A.4.6).

Data by smoker status (current smoker, never smoked and occasional smoker), by remoteness can be found in table 7A.4.5.

Tobacco related hospitalisations and deaths

Tobacco smoking is the primary cause of premature and preventable death and disease for all people in Australia. 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.

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). Smoking prevalence among pregnant Indigenous women is high relative to the Australian population (Gilligan et. al 2009). See section 5.1 for the proportion of 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. Overall, the quality of Indigenous identification in hospital separations data has improved since last assessed by the AIHW in 2005. However, the quality of Indigenous identification still varies substantially between jurisdictions. Data are available for remoteness areas across states and territories in aggregate, with Indigenous identification highest in remote and very remote areas (AIHW 2010).

Table 7.4.1 Age standardised hospitalisations related to tobacco use, 2008-09 (per 1000 population)^{a, b, c, d}

	Males		Females		People	
	Indigenous	Other ^e	Indigenous	Other ^e	Indigenous	Other ^e
NSW	4.5	1.0	4.4	0.6	4.5	0.8
Victoria	4.0	1.7	3.0	0.9	3.4	1.3
Queensland	1.2	0.5	1.9	0.3	1.6	0.4
WA	2.5	0.9	2.3	0.6	2.4	0.7
SA	1.9	0.7	2.7	0.5	2.3	0.6
NT (public hospitals only)	7.9	2.3	3.8	1.4	5.7	1.9
Total^f	3.6	1.1	3.1	0.6	3.3	0.8
Tas (public hospitals only) ^g	np	0.6	2.4	0.4	1.7	0.5
ACT (public hospitals only) ^g	np	0.5	–	0.3	np	0.4

^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). The ICD-10-AM codes used were F17 (Mental and behavioural disorders due to tobacco use), P04.2 (Fetus and newborn affected by maternal use of tobacco), and T65.2 (Toxic effect of tobacco and nicotine) in any diagnosis field. ^d Data are based on State/Territory of usual residence. ^e Other includes hospitalisations of non-Indigenous people and those for whom Indigenous status was not stated. ^f Total includes six jurisdictions for which the quality of Indigenous identification in hospitalisation data is considered acceptable (NSW, Victoria, Queensland, WA, SA and the NT). ^g Data for Tasmania and ACT should be interpreted with caution until further assessment of Indigenous identification is completed. – Nil or rounded to zero. np Not published.

Source: AIHW (unpublished) National Hospital Morbidity Database; table 7A.4.8.

For NSW, Victoria, Queensland, WA, SA and public hospitals in the NT:

- in 2008-09, the rate of hospitalisations related to tobacco use for Indigenous people (3.3 per 1000 Indigenous people) was four times as high as that for other people (0.8 per 1000 other people) (table 7.4.1)
- in 2008-09, in major cities, the rate of hospitalisations related to tobacco use for Indigenous people (3.0 per 1000 Indigenous people) was 3.3 times as high as that for other people (0.9 per 1000 other people); in regional areas the rate was 5.4 times as high as that for other people (4.1 per 1000 for Indigenous people compared with 0.8 per 1000 for other people); and in remote areas the rate was 5.7 times as high (3.5 per 1000 for Indigenous people compared with 0.6 per 1000 for other people) (table 7A.4.9)
- in 2008-09, the hospitalisation rate for Indigenous males was three times as high as for other males (3.6 per 1000 for Indigenous males compared with 1.1 per 1000 for other males); and Indigenous females had a rate more than five times as high as other females (3.1 per 1000 for Indigenous females compared with 0.6 per 1000 for other females)
- over the period 2004-05 to 2008-09, hospitalisation rates related to tobacco use for both Indigenous and other people remained stable (table 7A.4.8).

7.5 Obesity and nutrition

Box 7.5.1 Key messages

- 30.9 per cent of Indigenous adults were considered obese in 2004-05. After adjusting for differences in the age structure of the two populations, the Indigenous rate was 1.9 times the non-Indigenous rate (table 7A.5.1).
- Among 5–14 year olds in non-remote areas in 2008:
 - 41.6 per cent of Indigenous children met the guidelines for vegetable consumption, compared with 34.2 per cent of non-Indigenous children
 - 49.0 per cent of Indigenous children exceeded the guidelines for fruit consumption, compared with 56.4 per cent of non-Indigenous children (figure 7.5.1).

For Indigenous people, high body mass and physical inactivity are two significant risk factors for poor health outcomes (Thorpe and Browne 2009). Of 11 modifiable risk factors, high body mass, physical inactivity and insufficient fruit and vegetable intake account for 11.4 per cent, 8.4 per cent and 3.5 per cent respectively of the total disease burden for Indigenous people (Vos et al. 2007). Socio-economic factors, geography, environmental health, socialisation and government regulation

can all also influence nutrition (NHMRC 2000). Levels of obesity are a performance measure for COAG's target of 'closing the life expectancy gap (between Indigenous and non-Indigenous Australians) within a generation' (COAG 2009).

The primary measure for this indicator is the proportion of people aged 18 years or over who are obese, with obesity defined as body mass index (BMI) greater than 30. This section also includes data on the consumption of fruit and vegetables by Indigenous and non-Indigenous children.

Indigenous people have a naturally lighter build than non-Indigenous people (O'Dea 2008) and body fat distribution for Indigenous people is significantly different to that for non-Indigenous people. Indigenous people have a tendency toward 'central obesity' (a greater concentration of fat around their stomach) which 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 to traditional country showed improvements in risk factors for type 2 diabetes and cardiovascular disease after just seven weeks (O'Dea 1984). See sections 8.2 and 10.2 for more information on ownership, use and access to traditional lands. In Minjilang (NT) and Looma (WA), community-based intervention projects have demonstrated rapid improvements in risk factors for chronic disease (Lee et al. 1995 and Rowley et al. 2000).

Regular physical activity and intake of a nutritious diet commensurate with energy requirements 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; Eades et al. 2010; Tomkins 2001; WHO 2008).

Inadequate housing in remote areas compounds the issue of providing a daily well balanced diet (House of Representatives Standing Committee on Aboriginal and Torres Strait Islander Affairs 2009; Lee et al. 2009). In one community, less than six per cent of houses had essential kitchen hardware for the storage and preparation

of food (Lee et al. 2009). Section 9.3 provides more information on housing infrastructure.

Studies have found that people on low incomes tend to purchase foods that provide the most calories for the least cost, such as soft drinks (Brimblecombe and O’Dea 2009; Brownell and Frieden 2009; Harrison et al. 2007; WHO 2008). (Section 4.9 provides more information on individual incomes.) Low income, in combination with the high cost of fresh food, contributes to obesity, poor nutrition and the displacement of healthy food choices in remote Aboriginal communities.

There is conflicting evidence about whether income management⁶ in the NT has had any effect on fruit and vegetable sales. Brimblecombe et al. (2010) found that income management had no effect on fruit and vegetable sales, and that although soft drink sales declined in the first six months of income management, sales increased significantly thereafter. On the other hand, AIHW (2009b) found that sales of fresh fruit and vegetables had increased.

Obesity

Obesity is most commonly measured using the body mass index (BMI). 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 (NHMRC 2003a; WHO 2000). 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 7A.5.1).

The ABS National Aboriginal and Torres Strait Islander Health Survey 2004-05 (NATSIHS 2004-05) and the National Health Survey 2004-05 (NHS 2004-05) collected self-reported height and weight and, using the BMI formula, grouped respondents into BMI ranges. Some of the findings from the NATSIHS 2004-05 and the NHS 2004-05 include:

- nationally, 30.9 per cent of Indigenous adults were obese and, after accounting for the different age structures in the two populations, the rate of obesity among Indigenous adults was 1.9 times the rate for non-Indigenous adults in 2004-05 (table 7A.5.2).

⁶ The Northern Territory Emergency Response (NTER) introduced an income management program that mandated 50 per cent of income support (see section 8.4, income support) is spent on essential items (such as food, clothes and basic household items).

-
- 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 2009a).

Data on obesity among Indigenous children are limited. One national study in 2004 found that the proportion of Indigenous 4–5 year olds in higher weight categories was 1.5 times the proportion for non-Indigenous children (Wake et al. 2007).

Child nutrition

The NHMRC Australian dietary guidelines recommend eating a wide variety of nutritious food and drinking plenty of water. The guidelines recommend eating plenty of vegetables, legumes and fruits, cereals, lean meat, fish, poultry, milks, yoghurts and cheeses (reduced-fat varieties should be chosen, where possible). The guidelines also recommend limiting consumption of saturated fat, salt, alcohol and sugars (NHMRC 2003a).

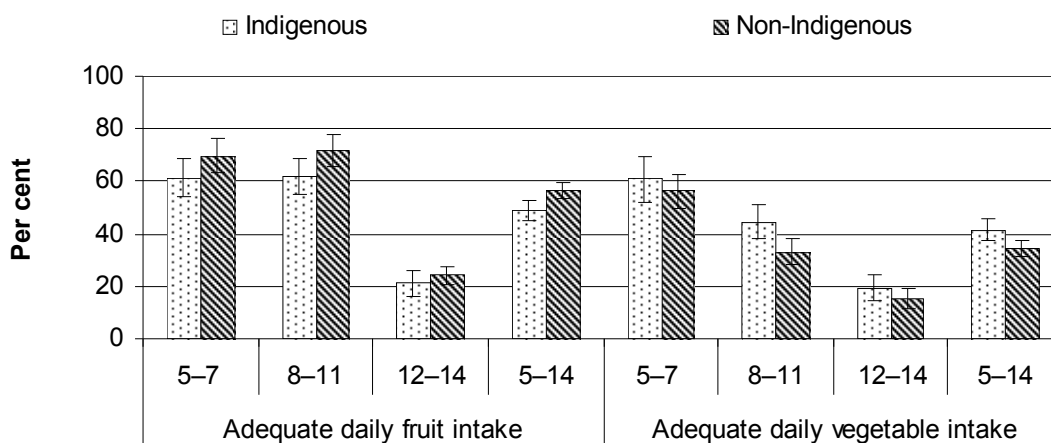
For adults, the NHMRC guidelines recommend a minimum of five serves of vegetables and two serves of fruit per day (NHMRC 2003a). For children, the daily food consumption guidelines recommend one serve of fruit and two serves of vegetables for children aged 4–7 years, one serve of fruit and three serves of vegetables for children aged 8–11 years and three serves of fruit and four serves of vegetables for adolescents aged 12–18 years (NHMRC 2003b).

Self-reported compliance with the NHMRC child dietary guidelines have been collected in various surveys. The ABS National Aboriginal and Torres Strait Islander Social Survey 2008 (NATSISS 2008) and the National Health Survey 2007-08 (NHS 2007-08) provide the most recent self-reported data on fruit and vegetable consumption for children.

NATSISS 2008 provides data by remoteness, for Indigenous children:

- nationally, 58.6 per cent of Indigenous children aged 1–14 years were reported to eat fruit every day in 2008. A higher proportion of children living in remote areas (52.0 per cent) ate fruit daily than those living non-remote areas (60.6 per cent) (table 7A.5.7)
- 52.8 per cent of Indigenous children aged 1–14 years were reported to eat vegetables every day in 2008, and this rate did not differ between non-remote and remote areas (table 7A.5.7).

Figure 7.5.1 **Compliance with fruit and vegetable consumption guidelines for children, non-remote areas, 2008^{a, b, c}**



^a The Australian National Health and Medical Research Council (NHMRC) 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 four serves of vegetables for adolescents aged 12–18 years. ^b For children aged 5–7 years the adequate daily fruit intake shown here exceeds the NHMRC guidelines. ^c Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information).

Source: ABS (unpublished) NATSISS 2008; ABS (unpublished) NHS 2007-08; table 7A.5.3.

Comparable Indigenous and non-Indigenous data are available for non-remote areas. In non-remote areas, in 2008:

- similar proportions of Indigenous and non-Indigenous children aged 5–7 years and 12–14 years were meeting or exceeding the recommended daily intake of fruit and vegetables (figure 7.5.1)
- a higher proportion of Indigenous children aged 8–11 years (44.6 per cent) than non-Indigenous (33.1 per cent) met the guidelines for daily vegetable consumption. However, the converse was true for daily fruit intake (61.8 per cent compared with 71.7 per cent) (figure 7.5.1)
- for both Indigenous and non-Indigenous children aged 5–14 years, a higher proportion of younger children than older children met or exceeded the recommended daily intake of fruit and vegetables (figure 7.5.1)
- among children aged 5–14 years, 41.6 per cent of Indigenous children met the guidelines for vegetable consumption, compared to 34.2 per cent of non-Indigenous children and 49.0 per cent of Indigenous children exceeded the guidelines for fruit consumption, compared to 56.4 per cent of non-Indigenous children (figure 7.5.1).

More information on fruit and vegetable intake for children is presented in tables 7A.5.3–7.

7.6 Tooth decay

Box 7.6.1 Key messages

- The proportion of Indigenous children with decay affected teeth was between 38.5 and 86.8 per cent, up to 1.9 times as high as non-Indigenous children in 2000–2002 in those jurisdictions for which data were available (NSW, SA and the NT) (tables 7A.6.1–2).
- Higher proportions of Indigenous adults than non-Indigenous adults had untreated tooth decay across all age groups in 2004–2006 (around 55 per cent and 25 per cent respectively) (figure 7.6.1).
- In 2008-09, Indigenous people were hospitalised for potentially preventable dental conditions at 1.3 times the rate of non-Indigenous people, in those jurisdictions for which data were available (NSW, Victoria, Queensland, WA, SA and public hospitals in the NT) (figure 7.6.2).

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).

Two of the most frequently occurring oral diseases are dental caries and periodontal disease (Lancet 2009). Dental caries is one of the most prevalent chronic diseases in the world (US DHHS 2000). The primary measures for this indicator are: Indigenous children's dental health and Indigenous adult's dental health. This section also includes information on hospitalisations for dental conditions.

Indigenous children generally have more tooth decay than non-Indigenous children, and the decay is less likely to have been treated (AHMAC 2011). 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 for 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). Among children aged five years or less, 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 often experienced by Indigenous people. For example, the national survey found that Indigenous adults were 1.6 times as likely as non-Indigenous adults to have foregone recommended dental treatment due to cost (Spencer and Harford 2007).

This section contains data on:

- children's dental health from the Child Dental Health Survey (CDHS), conducted by State and Territory School Dental Services. The most recent data available are for NSW from their 2007 CDHS. 2000–2003 Indigenous data are available for NSW, SA and the NT combined
- adult dental health from the National Survey of Adult Oral Health (NSAOH), conducted between 2004 and 2006

-
- potentially preventable hospitalisation for dental conditions from the National Hospital Morbidity Database for 2004-05 to 2008-09.

Box 7.6.2 ‘Things that work’ — Dental care services

The Wuchopperen Indigenous Health Service (Queensland) provides care to approximately 20 000 Indigenous people in and around Cairns. In response to a severe, long-term shortage of dentists, and waiting lists of more than a year for basic dental care in 2005, the **‘Filling the Gap Indigenous Dental Program’** was developed. The privately funded program supplies volunteer dental health professionals to Wuchopperen’s Oral Health Care Unit, operating as a partnership between Wuchopperen, the community it serves, the ‘Filling the Gap’ Steering Committee, and dental volunteers. It commenced operation in January 2006.

Evaluation of the program for the period January 2006 to November 2007 found greatly improved access to services:

- in 2006, 24 weeks of service were provided by 20 volunteer dentists. In 2007, 55 weeks of service were provided by 40 volunteer dentists, and 15 weeks provided by other dental health professionals and dental students
- in 2006, 977 episodes of care took place, including 116 new patients. In 2007, 1560 episodes of care took place, including 280 new patients
- community members were confident about using the service and accepted the turnover of dental volunteers, in part because, the dental clinic is part of the community’s own health service, and long term clinic staff (including Indigenous staff) provide continuity, and support culturally appropriate, effective communication between volunteers and patients (Jackson Pulver et al. 2010).

The **Aboriginal Liaison Program** (SA) was introduced in 2005 to improve Aboriginal people’s access to dental care. Through a partnership between the SA Dental Service and Aboriginal Community Health Services, Aboriginal Health Workers integrate an Oral Health Assessment into a general health check and refer clients who need a dental visit to a SA Dental Service Community Dental Clinic.

The number of Indigenous people accessing dental care through the program increased from 185 people in 2007-08 to 1261 people in 2009-10, and 1269 people in the first half of 2010-11. There are plans to incorporate oral health checks into other Aboriginal Health Programs across a greater number of locations (SA Government unpublished).

Indigenous children’s dental health in NSW, SA and the NT

Three measures of tooth decay in children, by Indigenous status and geographical location, are reported:

- mean number of teeth affected

-
- proportion of children with no tooth decay
 - mean proportion of decayed teeth that are untreated.

Combined data for NSW, SA and the NT on tooth decay among Indigenous and non-Indigenous children in metropolitan and rural/remote areas from the CDHS are for the calendar years 2000 (NSW), 2003 (SA) and 2002 (NT).⁷ Of the 326 099 children examined, 10 743 (3.2 per cent) were Indigenous (Jamieson, Armfield and Roberts-Thomson 2007).

The decayed, missing and filled teeth of a person (DMFT/dmft) is a widely used indicator of oral health status. It measures the number of decayed, missing and filled teeth of a person; uppercase letters denote permanent (adult) teeth and lowercase letters denote deciduous (infant) teeth. The mean (average) number of teeth affected by decay reflects how effectively tooth decay has been prevented.

Between 2000 and 2003 in NSW, SA and the NT, the mean number of decay-affected teeth was higher for Indigenous children than for non-Indigenous children across all ages in rural/remote areas and all ages (except seven year olds) in metropolitan areas (tables 7A.6.1 and 7A.6.2).

The New South Wales Child Dental Health Survey 2007 found that among children aged 5 and 6 years, the mean dmft for Indigenous children was 3.04, more than twice the mean dmft of 1.44 for non-Indigenous children (Centre for Oral Health Strategy NSW 2009).

This inequality in oral health was mirrored in 11 and 12 year old children. The mean DMFT for Indigenous children was 1.17, almost twice the mean DMFT of 0.68 for non-Indigenous children (Centre for Oral Health Strategy NSW 2009).

Findings from the Closing the Gap program in the NT show that the mean total DMFT/dmft score was 5.0 among Indigenous children in prescribed areas of the NT. The mean total DMFT/ dmft was highest in children aged 4–8 years at around 6.0. For children aged 5–12 years, the mean dmft was 4.5, about two-and-a half times Australian and NT rates for the same age group in the CDHS data (AIHW 2011). The data are from the dental follow-up data collection established as part of the Closing the Gap in the NT National Partnership Agreement between the Australian and NT governments. The data cover services delivered from March to December 2009.

⁷ These data were reported in more detail in the 2007 edition of this report (SCRGSP 2007, section 5.5 ‘Children with tooth decay’ and tables 5A.5.3–5A.5.7) and in the 2009 edition of this report (SCRGSP 2009, tables 7A.6.7–7A.6.11).

The proportion of children with no tooth decay reflects how effectively tooth decay has been prevented. Between 2000 and 2003 in NSW, SA and the NT, the proportion of children with decay-free teeth was lower for Indigenous children than for non-Indigenous children, across all ages in rural/remote areas and most ages in metropolitan areas (tables 7A.6.1 and 7A.6.2).

The mean proportion of decayed 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.

Between 2000 and 2003 in NSW, SA and the NT, the proportion of teeth that were untreated was higher for Indigenous children than for non-Indigenous children across all ages in rural/remote areas, and most ages in metropolitan areas (tables 7A.6.1 and 7A.6.2).

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 (table 7A.6.4).

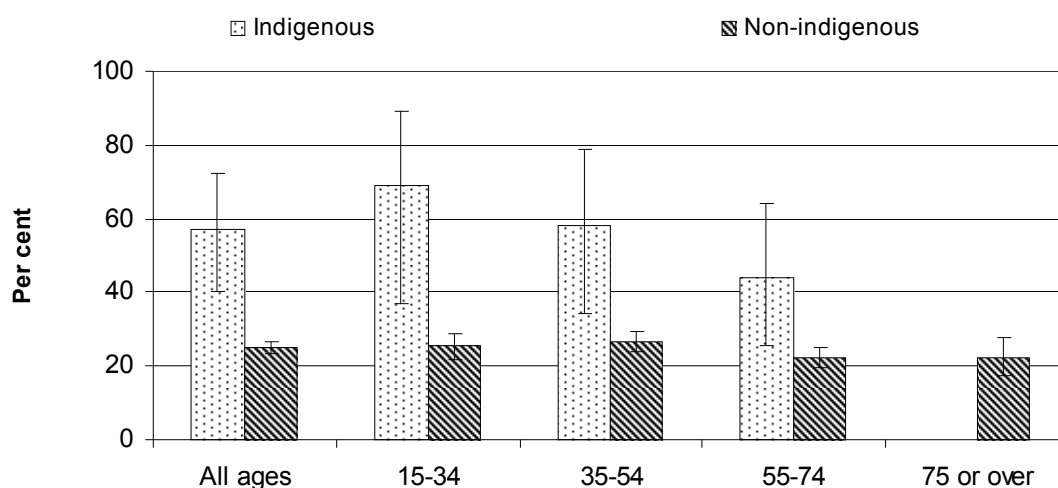
Between 2000 and 2003, for both six and 12 year olds, the proportion of Indigenous children with teeth affected by decay was higher in remote communities across Australia, than in all areas of NSW and SA and was similar to that in all areas of the NT (table 7A.6.4).

Indigenous adults' dental health

Adult dental health data are from the NSAOH, 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 7.6.1). A lower proportion is suggestive of better access to dental treatment services.

Figure 7.6.1 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 3 for more information).

Source: Roberts-Thomson, K.F. and Do, L. (2007); table 7A.6.5.

- The proportion of Indigenous people aged 15–54 years with untreated tooth decay was more than twice the rate for non-Indigenous people in this age range (figure 7.6.1)
- The average number of teeth affected by decay, a measure of prevention, was similar for Indigenous and non-Indigenous adults (table 7A.6.5).

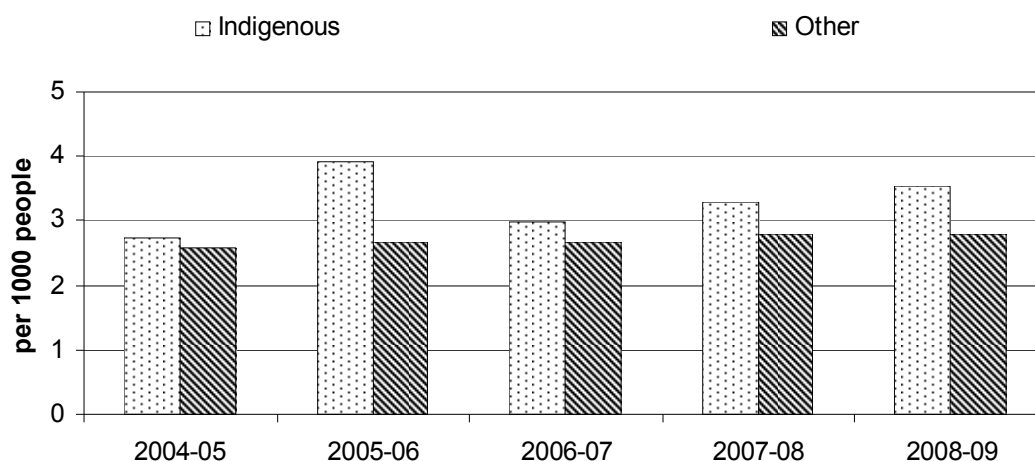
The findings from the Aboriginal Birth Cohort study indicate that young Indigenous adults (aged 16–20 years) experience a disproportionate amount of dental disease relative to their non-Indigenous counterparts, and that this pattern is consistent across the life course (Jamieson et al. 2010).

The mean number of decayed teeth was 8.0 times higher among Aboriginal Birth Cohort study participants than NSAOH participants (their age-matched, nationally representative counterparts), while the prevalence of untreated decayed teeth was 3.1 times higher (Jamieson, Sayers, Roberts-Thomson 2010).

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).

Figure 7.6.2 Potentially preventable hospitalisations for dental conditions, NSW, Victoria, Queensland, WA, SA and public hospitals in the NT^{a, b, c, d, e, f}



^a Data are from public and most private hospitals. Data exclude private hospitals in the NT. ^b Principal diagnosis for ICD-10-AM codes K02, K03, K04, K05, K06, K08, K09.8, K09.9, K12 and K13. Categories are based on ICD-10-AM classification of diseases (International Statistical Classification of Diseases) 10th Edition, Australian Modification. ^c Data are reported by State or Territory of usual residence of the patient hospitalised. ^d Data are reported for the following jurisdictions: NSW, Victoria, Queensland, WA, SA and NT. These six jurisdictions are considered to have acceptable quality of Indigenous identification in hospitalisation data. ^e Hospitalisation rates are directly age standardised using the 2001 Australian population. ^f Other 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.6.6.

- Between 2004-05 and 2008-09, Indigenous people were hospitalised for potentially preventable dental conditions at a higher rate than other people (figure 7.6.2).

Data on hospitalisation rates for Indigenous and other children (includes children for whom Indigenous status is not reported) for dental procedures in 2004-05, 2005-06, 2006-07, 2007-08, and 2008-09 are provided in attachment tables 7A.6.7–7A.6.11.

In NSW, Victoria, Queensland, WA, SA and public hospitals in the NT:

- Indigenous children (aged 0–14 years) were hospitalised for dental conditions at similar rates to other children between 2004-05 and 2008-09 (table 7A.6.7)
- the most common dental procedures that Indigenous and other children were hospitalised for between 2004-05 and 2008-09 were extractions and restorations (table 7A.6.8)

-
- hospital dental procedure rates for Indigenous children increased with remoteness in 2008-09 from 4.0 per 1000 in major cities to 6.8 per 1000 in remote areas (table 7A.6.10).

7.7 Mental health

Box 7.7.1 Key messages

- In 2008:
 - 89.9 per cent of Indigenous people reported feeling ‘happy’, and 82.9 per cent reported feeling ‘calm and peaceful’ most/all/some of the time (table 7A.7.23).
 - However Indigenous people reported experiencing a high/very high level of psychological distress at two and a half times the rate for non-Indigenous people (31.7 per cent compared to 12.2 per cent) (figure 7.7.1).
- Between 2004–05 and 2008:
 - the proportion of people experiencing a high/very high level of psychological distress increased from 26.6 per cent to 31.7 per cent, while the proportion of non-Indigenous people remained relatively stable, leading to an increase in the gap (table 7A.7.2).
- From 2004–05 to 2008–09:
 - Indigenous people were hospitalised for mental and behavioural disorders at around 1.7 times the rate for non-Indigenous people. Rates were relatively stable over the period for both Indigenous people (from 24.3 to 26.5 per 1000) and non-Indigenous people (around 14.5 per 1000) (figure 7.7.2).

Mental health is essential to the overall health and wellbeing of individuals, and closely relates to COAG targets for improved health outcomes. Mental health can also affect outcomes in other areas such as economic participation (chapter 8), and safe and supportive communities (chapter 10).

The primary measures for this indicator are:

- the ‘level of psychological distress’, which classifies survey respondents into one of two categories:
 - low to moderate distress — people who suffer little or no psychological distress
 - high to very high — people who may require professional intervention to treat psychological distress
- selected indicators of positive wellbeing.

This section also includes data on:

- treatment rates for mental health related services (by hospitals, community mental health care clinics, and doctors)
- mental and behavioural disorders as cause of death
- mental health of prisoners and juveniles in detention

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 is considered to include not only mental illness, but the overall mental wellbeing of an individual. Mental illness includes stress, anxiety, depression, dependence on alcohol or drugs, psychotic disorders, affective disorders, and organic and degenerative disorders (DHA 2002), as well as suicidal and self-harm behaviour (explored further in section 7.8). Mental wellbeing, on the other hand, can be affected by a broad range of factors such as domestic violence, substance misuse, physical health problems, incarceration, family breakdown and social disadvantage (AHMAC 2004). Although mental wellbeing problems are distinct from mental illness, the two interact and influence each other.

Vicary and Westerman (2004) suggested that Indigenous culture takes a more holistic approach to mental health and wellbeing, beyond the 'Western' definition, by incorporating elements of mind, body, spirituality and environment. In addition, they argue that socio-historical-political factors particularly influence the mental health of Indigenous people, through the impact of family separation, the taking away of land, social inequity, racism, and the loss of culture and identity.

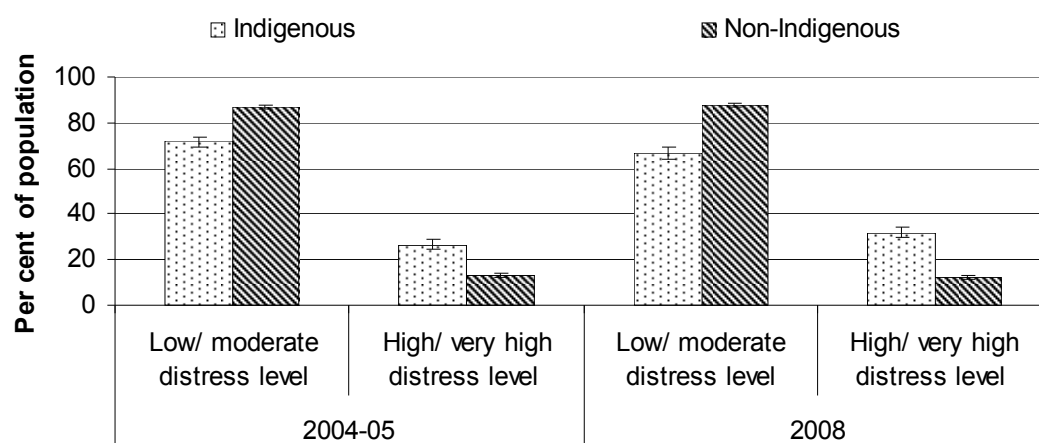
Mental health is designated a national health priority area for Australia. As part of the COAG National Action Plan on Mental Health 2006–2011 (COAG 2006), the Australian Government has undertaken the Mental Health Services in Rural and Remote Areas initiative, which focuses on the provision of mental health services to communities in rural and remote Australia. This is supported by the National Healthcare Agreement (COAG 2009) and the National Health and Hospitals Network Agreement (COAG 2010), which specifically address mental health as a component of overall healthcare.

Level of psychological distress

Both the ABS National Aboriginal and Torres Strait Islander Health Survey 2004–05 (NATSIHS 2004–05) and ABS National Aboriginal and Torres Strait Islander Social Survey 2008 (NATSISS 2008) have included questions from the Kessler Psychological Distress Scale-10 (K10), which measures non-specific

psychological distress. For these surveys, the K10 has been modified to five questions (K5) which measure an individual's level of psychological distress in the past four weeks (ABS 2006).

Figure 7.7.1 K5 level of psychological distress, people aged 18 years and over, by Indigenous status, age standardised, Australia, 2004–05 and 2008^a



^a Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information).

Source: ABS NATSIHS 2004-05; ABS NHS 2004-05; ABS (unpublished) NATSISS 2008; ABS (unpublished) NHS 2007-08; table 7A.7.3.

In 2008, after adjusting for differences in the age structures of the Indigenous and non-Indigenous populations:

- Indigenous adults reported experiencing a high/very high level of psychological distress at 2.6 times the rate of non-Indigenous adults (31.2 per cent compared to 12.3 per cent) to (figure 7.7.1)
- a significantly higher proportion of Indigenous adults than non-Indigenous adults to reported feeling without hope, and/or that every thing was an effort all or some of the time, across all remoteness areas (table 7A.7.15)

Over the period 2004–05 to 2008:

- the proportion of Indigenous adults experiencing a high/very high level of psychological distress increased significantly from 26.6 per cent to 31.7 per cent, while the corresponding proportion of non-Indigenous adults remained relatively similar (from 13.1 per cent to 12.2 per cent) (table 7A.7.3).

Non age standardised data show that in 2008:

- Indigenous adults in remote areas were significantly more likely than those in non-remote areas to report feeling ‘calm and peaceful’, ‘happy’, ‘full of life’ and ‘lots of energy’ (table 7A.7.23)
- nationally, 89.9 per cent of Indigenous adults reported feeling ‘happy’, and 82.9 per cent reported feeling ‘calm and peaceful’ most/all/some of the time (table 7A.7.23).

Treatment rates in mental health related services

Treatment rate data are reported for a selection of mental health services. As data have been obtained from a range of AIHW surveys and administrative data sets, it is not appropriate to compare data across service areas.

These data are reported by ‘occasions of service’, as opposed to total patient numbers. This means the same patient may be reported more than once for multiple occasions of service.

For mental health problems managed by general practitioners, the latest available data were for 2008-09, which showed:

- there were 319 per 1000 Indigenous encounters with a general practitioner, and 597 per 1000 non-Indigenous encounters with a general practitioner (table 7A.7.27).

For all other mental health services treatment rates, the latest available were for 2007-08, which showed:

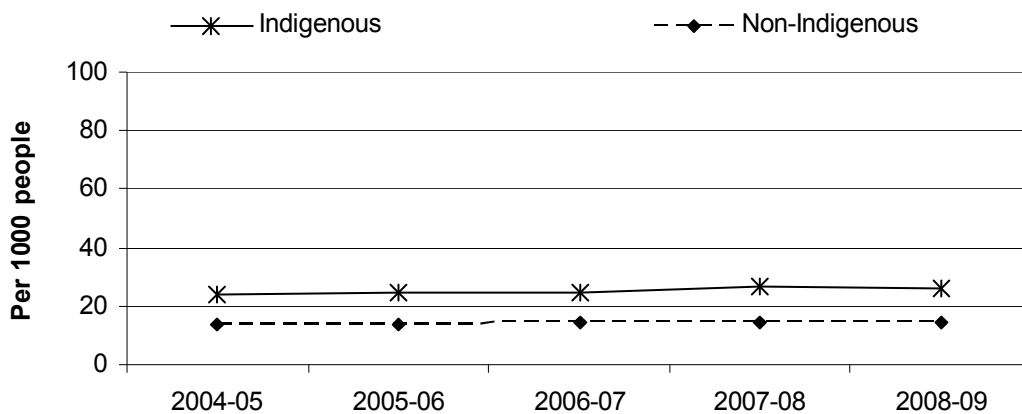
- episodes of residential mental health care were recorded at a rate of 1.9 per 10 000 Indigenous people, and 1.5 per 10 000 non-Indigenous people (table 7A.7.30)
- community mental health service contacts were recorded at a rate of 735.7 per 1000 Indigenous people, and 271.6 per 1000 non-Indigenous people (table 7A.7.29)
- Indigenous people accounted for 5.6 per cent of mental health emergency department presentations, compared to 94.4 per cent for non-Indigenous people (table 7A.7.28).

Hospitalisations for mental and behavioural disorders

Hospitalisations data for mental and behavioural disorders are obtained from the AIHW, and are available for public and private hospitals in NSW, Victoria,

Queensland, WA, SA, and for public hospitals in the NT. Indigenous identification in data collected outside these States and Territories is considered to be of insufficient quality for reporting.

Figure 7.7.2 Hospitalisation rate, per 1000 population, for mental and behavioural disorders, by Indigenous status, NSW, Victoria, Queensland, WA, SA and public hospitals in the NT^{a, b, c, d, e}



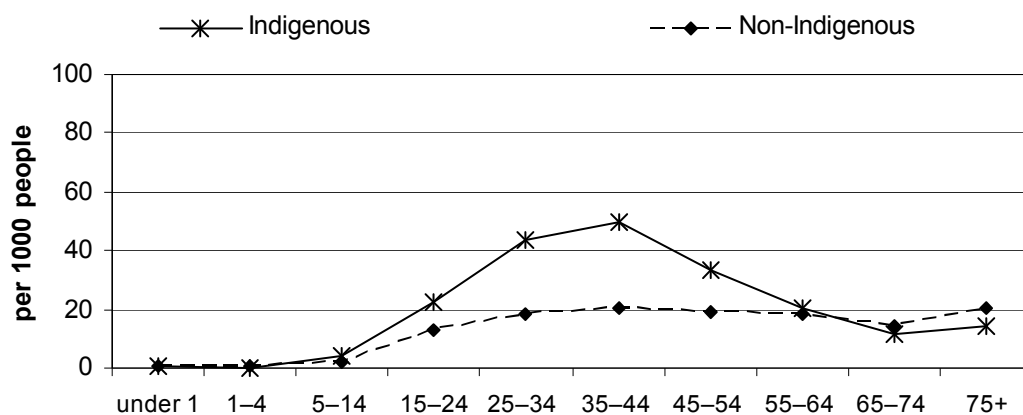
^a Data are from public and most private hospitals. Data exclude private hospitals in the NT. ^b Data are reported by State or Territory of usual residence of the patient hospitalised. ^c Data are reported for the following jurisdictions: NSW, Victoria, Queensland, WA, SA and NT. These six jurisdictions are considered to have acceptable quality of Indigenous identification in hospitalisation data. ^d Directly age-standardised using the Australian 2001 standard population. ^e The ICD-10-AM codes are for principal diagnosis only. Categories are based on ICD-10-AM classification of diseases (International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Australian Modification).

Source: AIHW (unpublished) National hospital morbidity database; table 7A.7.31, table 7A.7.33, table 7A.7.35, table 7A.7.37, table 7A.7.39.

Between 2004–05 and 2008–09:

- hospitalisation rates for mental and behavioural disorders were around 1.7 times higher for Indigenous persons than non-Indigenous persons across all years (figure 7.7.2)
- hospitalisation rates for mental and behavioural disorders have remained relatively stable for both Indigenous people (ranging from 24.3 to 26.5 per 1000) and non-Indigenous people (ranging from 14 to 14.5 per 1000) (figure 7.7.2).

Figure 7.7.3 Hospitalisation rate, per 1000 population, for mental and behavioural disorders, by Indigenous status and age group, NSW, Victoria, Queensland, WA, SA, and public hospitals in the NT, 2008-09^{a, b, c, d, e}



^a Data are from public and most private hospitals. Data exclude private hospitals in the NT. ^b Data are reported by State or Territory of usual residence of the patient hospitalised. ^c Data are reported for the following jurisdictions: NSW, Victoria, Queensland, WA, SA and NT. These six jurisdictions are considered to have acceptable quality of Indigenous identification in hospitalisation data. ^d Directly age-standardised using the Australian 2001 standard population. ^e The ICD-10-AM codes are for principal diagnosis only. Categories are based on ICD-10-AM classification of diseases (International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Australian Modification).

Source: AIHW (unpublished) National hospital morbidity database; table 7A.7.39.

In 2008-09:

- the hospitalisation rate for mental and behavioural disorders was higher for Indigenous people than non-Indigenous people for most age groups, but lower for those aged 65 years and over (figure 7.7.3)
- for both Indigenous and non-Indigenous people, the hospitalisation rate for mental and behavioural disorders was highest among those aged 35–44 years (figure 7.7.3)
- the highest hospitalisation rate for Indigenous males was in the 35–44 year age group (58.8 per 1000 people), where for non-Indigenous males the highest hospitalisation rate was in the 75+ age group (20.9 per 1000 people) (table 7A.7.39)
- the highest hospitalisation rate for Indigenous and non-Indigenous females was in the 35–44 year age group (41.9 per 1000 Indigenous females and 23.4 per 1000 non-Indigenous females) (table 7A.7.39).

Mental and behavioural disorders as cause of death

Table 7.7.1 **Average annual deaths as a result of mental and behavioural disorders per 100 000 population, 2005–2009^{a, b, c, d, e, f, g, h, i, j}**

	<i>NSW</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>NT</i>	<i>Total</i>
Indigenous	9.5	6.6	19.1	11.2	18.4	11.4
Non-Indigenous	27.6	20.1	21.3	33.7	10.4	25.1

^a Mental and behavioural disorders include ICD-10 codes F00-F99. ^b Causes of death data for 2007 have undergone two years of revisions. Causes of death data for 2008 have been revised and are subject to a revisions process. Causes of death data for 2009 are preliminary and subject to a revisions process. ^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 the Indigenous and non-Indigenous data. ^d Total is for five states/territories with data available. ^e Data are presented in five-year groupings due to the volatility of small numbers each year. ^f Data based on reference year. ^g Data cells with small values have been randomly assigned to protect the confidentiality of individuals. As a result, some totals will not equal the sum of their components. It is important to note that cells with a zero value have not been affected by confidentialisation. ^h 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, series B, 2006 base). ⁱ Non-Indigenous estimates are available for census years only. In the intervening years, Indigenous population figures are derived from assumptions about past and future levels of fertility, mortality and migration. In the absence of non-Indigenous population figures for these years, it is possible to derive denominators for calculating non-Indigenous rates by subtracting the projected Indigenous population from the total population. Such figures have a degree of uncertainty and should be used with caution, particularly as the time from the base year of the projection series increases. ^j Non-Indigenous does not include deaths with a 'not stated' Indigenous status.

Source: ABS (unpublished) *Causes of Death, Australia*, Cat. no. 3303.0; table 7A.7.53.

In 2005–2009, for those jurisdictions for which data are available:

- the average annual deaths caused by mental and behavioural disorder were lower for Indigenous people than for non-Indigenous people (11.4 per 100 000 compared to 25.1 per 100 000) (table 7.7.1).

Mental health of prisoners and juveniles in detention

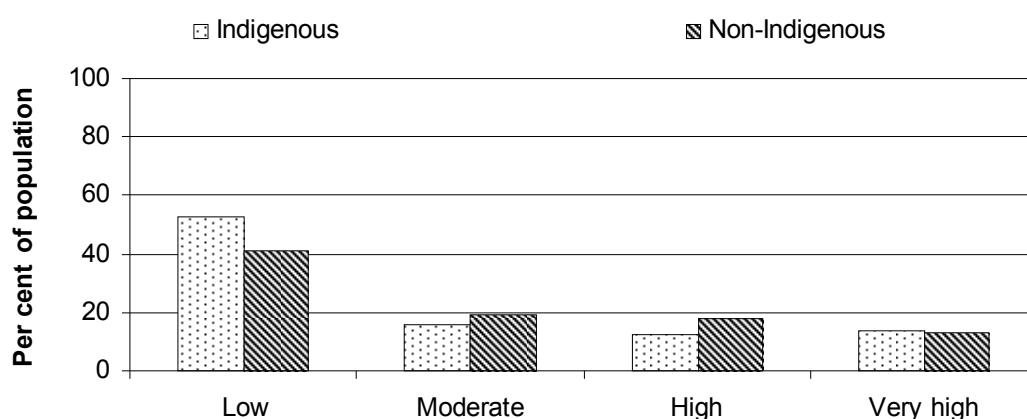
Prisoners

Prisoners exhibit relatively high rates of mental illness and emotional or mental wellbeing problems in comparison with the general population (ABS 2008; Butler and Allnutt 2003; Butler and Milner 2003; Fazel and Danesh 2002; Hockings et al. 2002; Victorian Department of Justice 2003).

The AIHW National Prisoner Health Census 2009 found that non-Indigenous prison entrants were almost twice as likely to have been told they suffer from a mental health disorder than Indigenous prison entrants (41 per cent and 26 per cent

respectively) in 2008 (figure 7.7.4). It was also found that 9 per cent of Indigenous prison entrants were taking a mental health related medication, compared to 20 per cent of non-Indigenous prison entrants (AIHW 2010). However, this does not necessarily reflect the true proportion of Indigenous prisoners suffering mental health disorders, due to the cultural differences associated with diagnosis of these conditions.

Figure 7.7.4 Prison entrants, K10 level of psychological distress by Indigenous status, 2009^{a, b, c}



^a Figure includes NSW, Vic, Queensland, WA, SA and the ACT. ^b Levels of distress as indicated by scores on the K10: low (10–15), moderate (16–21), high (22–29) and very high (30–50). ^c There were 7 entrants of unknown Indigenous status and 43 entrants with unknown or an invalid level of distress score.

Source: AIHW (2010) *The Health of Australia's Prisoners 2009*, Cat. no. PHE 123. Canberra; table 7A.7.51.

The National Prisoner Health Census 2009 uses the full K10 questionnaire to measure psychological distress amongst respondents, rather than the K5 results used for general population data in this chapter. While the two sets of data are not directly comparable, the Prisoner Health Census found higher distress levels for non-Indigenous than Indigenous prisoners, which is the opposite pattern to that found in survey data for the general population.

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. For all deaths between 1990 and 2009, there were 291 cases (19 per cent) where an official diagnosis of the deceased having a mental illness was available (AIC NDICP unpublished). Of these deaths, 50 were Indigenous, and 241 non-Indigenous (AIC NDICP unpublished). Indigenous prisoners comprised 25.5 per cent of the prisoner population in 2010 (table 4A.12.5).

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), and that young people with mental illness are overrepresented in the justice system (Murphy et al. 2010). Previous reports have included findings from two NSW health surveys that examined the mental health of young people in custody and on community orders — however, comparable Indigenous and non-Indigenous data are unavailable (Fasher et al. 1997; Kenny et al. 2006; NSW Department of Juvenile Justice 2003).

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). For Indigenous children, relationships with extended family members are also regarded as important (Williamson et al. 2010). 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).

While limited data are available on the mental health of Indigenous children, the Western Australian Aboriginal Child Health Survey (WAACHS), conducted in 2000-01, collected data on emotional and behavioural difficulties in Aboriginal children and found that:

- 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).

7.8 Suicide and self-harm

Box 7.8.1 Key messages

- In 2005–2009, after taking into account the different age structures of the two populations, for those jurisdictions for which suicide death data are available, the suicide death rate for Indigenous people was 2.5 times the rate for non-Indigenous people (figure 7.8.1).
- After adjusting for differences in the age structure of the two populations, Indigenous people were hospitalised for non-fatal intentional self-harm at two and a half times the rate for non-Indigenous people (3.5 per 1000 compared to 1.4 per 1000 in 2008-09) (table 7A.8.5). There was a slight increase in hospitalisations of Indigenous people for self-harm between 2004-05 and 2008-09 (figure 7.8.4).

Suicide and self-harm cause great grief in both Indigenous and non-Indigenous communities (Senate Community Affairs References Committee 2010). The primary measures for this indicator are suicide deaths and non-fatal hospitalisations for intentional self harm.

Researchers agree that there are significant differences in suicidal behaviour not only between the Indigenous and non-Indigenous populations, but also between different Indigenous communities (Elliott-Farrelly 2004; Hunter et al. 2001; Hunter and Harvey 2002; Parker and Ben Tovim 2001; Tatz 1999). Studies have found that suicides among Indigenous people appear to occur in clusters, and that the victims may share common age groups, genders and methods (Elliott-Farrelly 2004). 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).

Occurrences of suicide and self-harm in the Indigenous population are influenced by a complex set of factors, including:

- intergenerational trauma (Proctor 2005; Ralph, Hamaguchi and Cox 2006) and interpersonal conflicts (Hunter et al. 2001; Tatz 1999)
- low self esteem, being a victim of sexual abuse, untreated depression, high levels of anxiety; feelings of hopelessness, loss of culture and discrimination (Hunter 1993; Wunan 2008)
- past abuse experience, housing and other social and economic issues (Radford et al. 1999)

-
- unemployment and poor long-term job prospects, particularly in regional and remote areas. Section 4.6 presents data showing the higher unemployment rates and lower labour force participation rates of Indigenous people compared to non-Indigenous people
 - mental and behavioural disorders, alcohol and substance abuse (Clough et al. 2006; Shoobridge et al. 2000; Measey et al. 2006; Swan and Raphael 1995; Vicary and Westerman 2004). However, some 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 present data on alcohol and drug and other substance abuse.

Chandler and Lalonde (2008) found that the presence of certain socio-cultural factors in discrete Indigenous Canadian 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. An example of a suicide prevention program can be found in box 7.8.2.

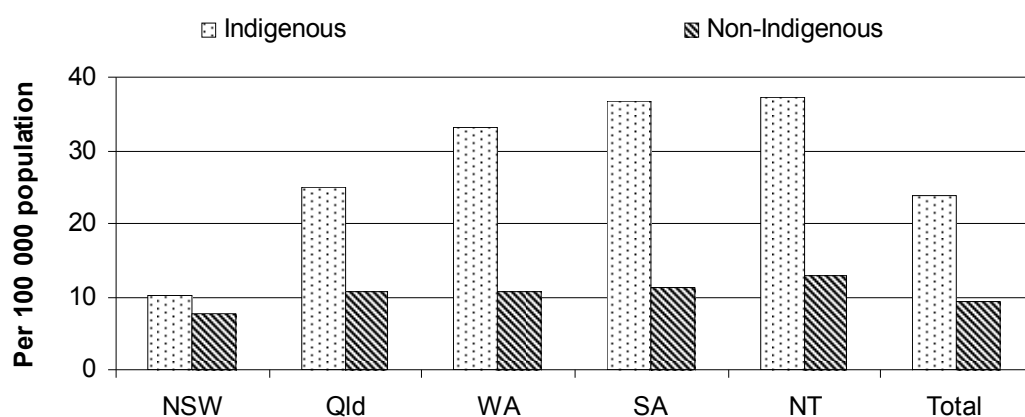
Box 7.8.2 'Things that work' — Suicide prevention

The **StandBy Response Service** (Queensland and WA) is a mainstream bereavement response service, with Indigenous elements that provide a unique model of cultural support for people bereaved by suicide. Speaking about death in Indigenous communities, especially death by suicide, is very complex, with many cultural considerations. In 2002, StandBy was implemented in the Sunshine and Cooloola Coasts region of Queensland with the support of the Kabi Kabi/Gubbi Gubbi community. The StandBy model was further developed with the Yarrabah Aboriginal community in north Queensland, followed by partnerships with other Indigenous communities across the Kimberley (WA), Pilbara (WA) and north Queensland regions. Trained local community members provide people bereaved by suicide with access to timely support and clear pathways to care. StandBy ensures the availability of local responders to local issues, with local knowledge about appropriate cultural protocols and practices (Hanssens 2008).

A 2009 evaluation of StandBy found that it was an effective tool for reducing the potential for suicide and adverse health reactions for people bereaved by suicide. In addition, Standby helped build community capacity to respond to suicide losses (Corporate Diagnostics 2009; Walters, G., United Synergies Ltd, Tewantin, pers. comm., August 2010).

Suicide deaths

Figure 7.8.1 **Average annual intentional self-harm (suicide) deaths, indirectly age standardised rate per 100 000, 2005–2009^{a, b, c, d, e, f}**



^a Deaths from intentional self-harm are defined as causes of death with ICD-10 codes X60–X84, Y87.0.

^b Indirectly age-standardised death rate per 100 000 population. ^c Denominators used in the calculation of rates for the Indigenous population are from ABS *Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians*, Cat. no. 3238.0 (series B, 2006 base). Non-Indigenous estimates are available for Census years only. In the intervening years, Indigenous population figures are derived from assumptions about past and future levels of fertility, mortality and migration. In the absence of non-Indigenous population figures for these years, it is possible to derive denominators for calculating non-Indigenous rates by subtracting the Indigenous population from the total population. Such figures have a degree of uncertainty and should be used with caution, particularly as the time from the base year of the projection series increases.

^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 Indigenous and non-Indigenous data.

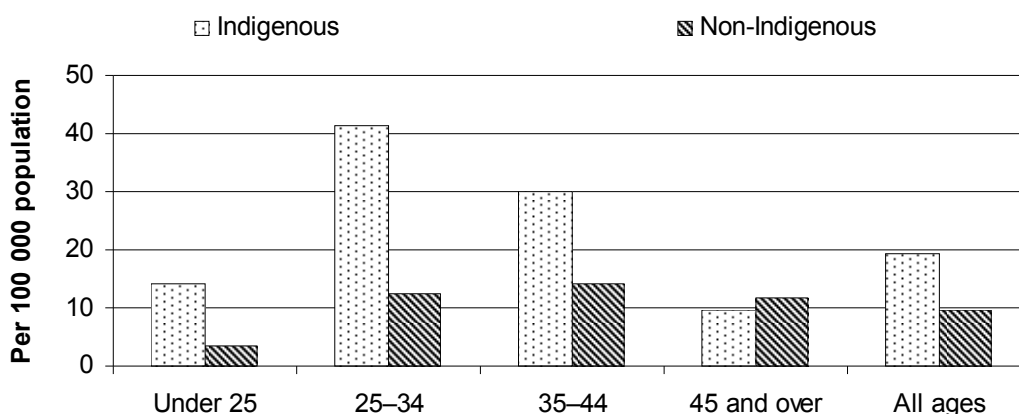
^e Non-Indigenous includes deaths with a 'Not stated' Indigenous status. ^f Total data are for NSW, Queensland, WA, SA, and the NT combined, based on State or Territory of usual residence. Victoria, Tasmania and the ACT are excluded due to small numbers of registered Indigenous deaths.

Source: ABS (unpublished) *Causes of Death, Australia*, Cat. no. 3303.0; table 7A.8.1.

In 2005–2009, after taking into account the different age structures of the two populations, for those jurisdictions for which suicide death data are available (NSW, Queensland, WA, SA, and the NT):

- the total rate for Indigenous people was 2.5 times the rate for non-Indigenous people (figure 7.8.1)
- rates were higher for Indigenous people (between 10.1 and 37.2 per 100 000 population) than non-Indigenous people (between 7.8 and 12.9 per 100 000 population) in NSW, Queensland, WA and SA and the NT (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, NSW, Queensland, WA, SA and the NT, 2005–2009**^{a, b, c, d, e, f}

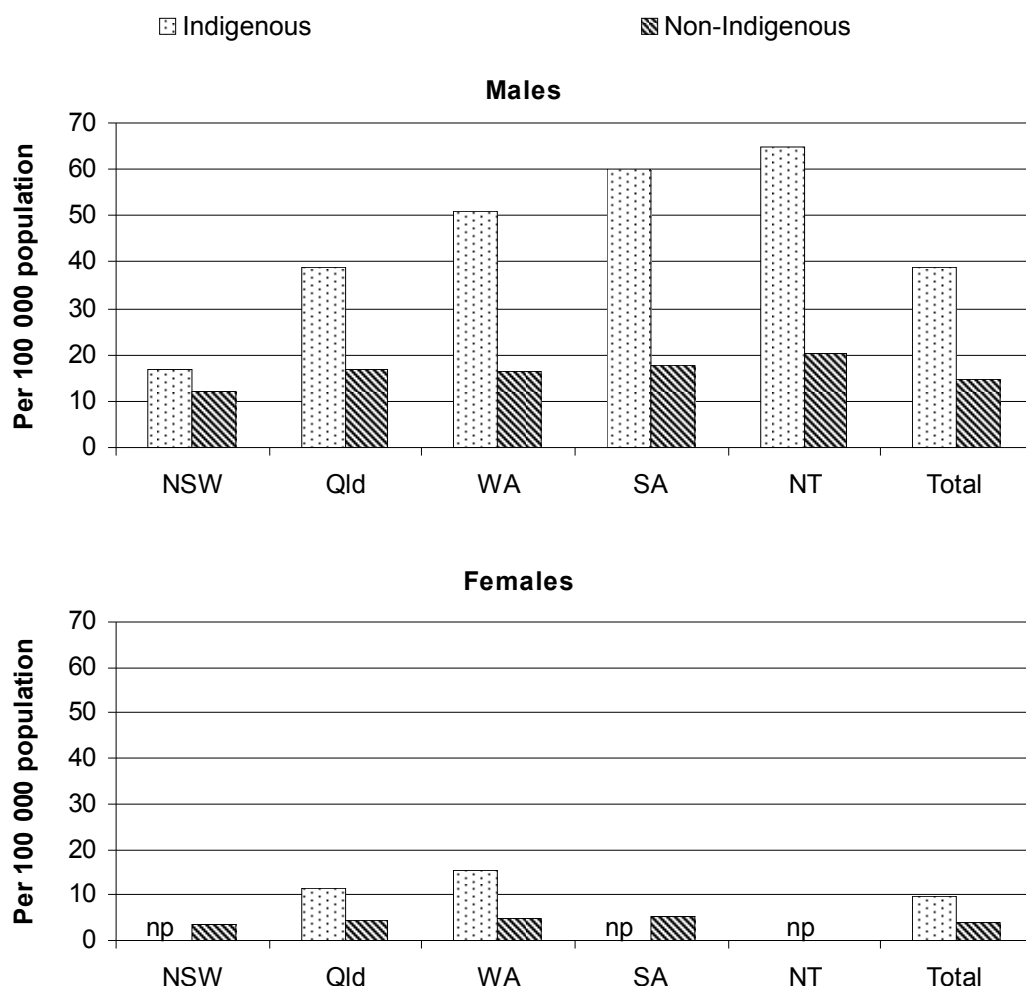


^a Rates are crude rates. ^b All ages includes age 'Not stated'. ^c Deaths from intentional self-harm are defined as causes of death with ICD-10 codes X60–X84, Y87.0. ^d Denominators used in the calculation of rates for the Indigenous population are from ABS *Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians*, Cat. no. 3238.0 (series B, 2006 base). Non-Indigenous estimates are available for Census years only. In the intervening years, Indigenous population figures are derived from assumptions about past and future levels of fertility, mortality and migration. In the absence of non-Indigenous population figures for these years, it is possible to derive denominators for calculating non-Indigenous rates by subtracting the Indigenous population from the total population. Such figures have a degree of uncertainty and should be used with caution, particularly as the time from the base year of the projection series increases. ^e Non-Indigenous includes deaths with a 'Not stated' Indigenous status. ^f Data are for NSW, Queensland, WA, SA, and the NT, based on State or Territory of usual residence. Victoria, Tasmania and the ACT are excluded due to small numbers of registered Indigenous deaths.

Source: ABS (unpublished) *Causes of Death, Australia*, Cat. no. 3303.0; table 7A.8.2.

- Suicide death rates varied by age group in 2005–2009, with Indigenous people aged 25–34 years having particularly high suicide rates (41.3 per 100 000 people) (figure 7.8.2).

Figure 7.8.3 Average annual suicide death rates by sex, indirectly age standardised rate, 2005–2009^{a, b, c, d, e, f, g}



^a Deaths from intentional self-harm are defined as causes of death with ICD-10 codes X60–X84, Y87.0.

^b Indirectly age-standardised death rate per 100 000 population. ^c Denominators used in the calculation of rates for the Indigenous population are from ABS *Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians*, Cat. no. 3238.0 (series B, 2006 base). Non-Indigenous estimates are available for Census years only. In the intervening years, Indigenous population figures are derived from assumptions about past and future levels of fertility, mortality and migration. In the absence of non-Indigenous population figures for these years, it is possible to derive denominators for calculating non-Indigenous rates by subtracting the Indigenous population from the total population. Such figures have a degree of uncertainty and should be used with caution, particularly as the time from the base year of the projection series increases. ^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. ^f Total data are for NSW, Queensland, WA, SA, and the NT combined, based on State or Territory of usual residence. Victoria, Tasmania and the ACT are excluded due to small numbers of registered Indigenous deaths. ^g Some data are not published (np) due to small numbers of deaths. **np** Not published

Source: ABS (unpublished) *Causes of Death, Australia*, Cat. no. 3303.0; table 7A.8.1.

In the period 2005–2009, after taking into account the different age structures of the two populations, for those jurisdictions for which suicide death data are available:

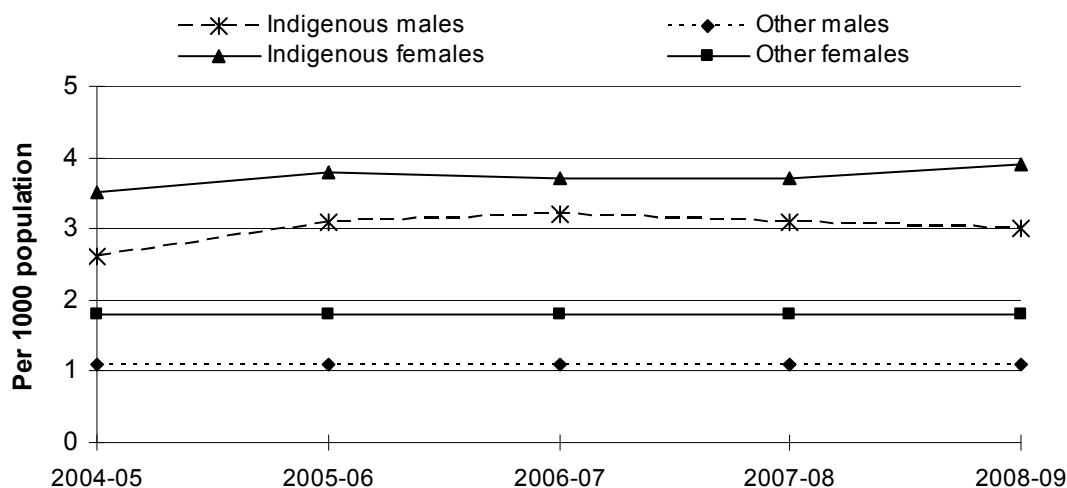
- suicides as a proportion of all deaths were higher for Indigenous people than for non-Indigenous people (4.1 per cent compared to 1.5 per cent) (table 7A.8.4)
- the total rate for Indigenous males was 2.6 times the rate for non-Indigenous males. Suicide death rates for Indigenous males were significantly higher (between 17.0 per 100 000 in NSW and 64.6 per 100 000 in the NT) than those for non-Indigenous males (between 12.3 per 100 000 in NSW and 20.3 per 100 000 in the NT) (figure 7.8.3)
- the total rate for Indigenous females was 2.4 times the rate for non-Indigenous females (figure 7.8.3). Suicide death rates for Indigenous females were significantly higher (between 11.6 per 100 000 in Queensland and 15.4 per 100 000 in WA) than those for non-Indigenous females (between 3.5 per 100 000 in NSW and 5.1 per 100 000 in SA).

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. In the NT there was an 800 per cent increase in Indigenous suicide over the period from 1981 to 2002. Those most at risk were Indigenous males aged 45 years and under. Between 2000 and 2002, the use of alcohol and/or drugs was identified in 71 per cent of cases in the Top End⁸; use of drugs was identified in 16 per cent of cases.

⁸ The Top End refers to the northern part of the NT.

Hospitalisations for self-harm

Figure 7.8.4 Age standardised non-fatal hospitalisations for intentional self-harm, NSW, Victoria, Queensland, WA, SA and public hospitals in the NT^{a, b, c, d, e}



^a Non-fatal refers to records where the hospitalisation did not end with the death of the patient. 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 are based on State of usual residence. ^e Other includes hospitalisations where Indigenous status was recorded as non-Indigenous or not stated.

Source: AIHW (unpublished) National Hospital Morbidity Database; table 7A.8.5.

Numbers of Indigenous non-fatal hospitalisations for intentional self-harm are small and changes in rates over time must be interpreted with caution. The age standardised non-fatal hospitalisation rate for intentional self-harm:

- increased slightly for Indigenous males and females between 2004-05 and 2008-09 and did not change much for non-Indigenous males and females (figure 7.8.4)
- was higher for Indigenous people (3.5 per 1000) than non-Indigenous people (1.4 per 1000) in 2008-09 (table 7A.8.5)
- was higher for Indigenous females (3.9 per 1000) than Indigenous males (3.0 per 1000) in 2008-09 and non-Indigenous females had a higher rate than non-Indigenous males (1.8 and 1.1, respectively) (figure 7.8.4)
- was higher in remote areas (4.1 per 1000) than in major cities (3.5 per 1000) for Indigenous people in 2008-09 (table 7A.8.6).

7.9 Future directions in data

Obesity and nutrition

There are few data from which to draw conclusions about the prevalence and burden of obesity among Indigenous children, and only limited data are available on their dietary behaviours. The ABS National Aboriginal and Torres Strait Islander Health Survey (NATSIHS), scheduled for enumeration in 2012-13, will provide information on BMI and nutrition for Indigenous people.

Mental health

Data are limited from which to draw conclusions about the scope, prevalence and burden of mental health problems in the Indigenous population (especially for vulnerable groups 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.

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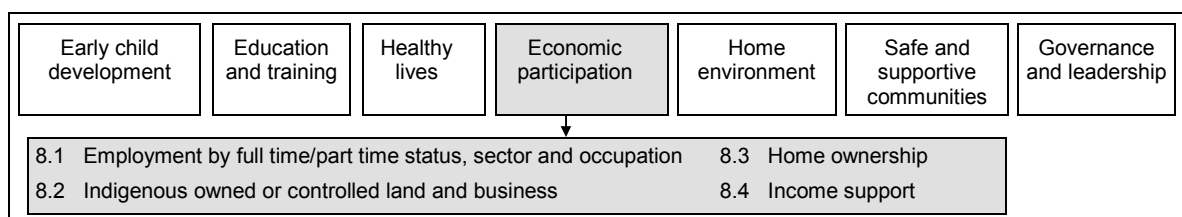
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8 Economic participation

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, including 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.

Economic participation is closely related to one COAG target and one headline indicator:

- employment (section 4.6)
- household and individual income (section 4.9).

Other COAG targets and headline indicators can directly influence economic participation:

- 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 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) (chapter 5)
 - education and training (school attendance and attainment, transition from school to work) (chapter 6)
 - healthy lives (access to primary health care, potentially preventable hospitalisations, avoidable mortality) (chapter 7)
 - safe and supportive communities (alcohol, 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:

- employment by full time/part time status, sector and occupation — examines some of the characteristics of the employment undertaken by Indigenous people. The primary measures for section 8.1 are working hours (full time or part time); sector of employment (public or private); and occupation
- 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, and also in more mainstream industries. The primary measures for section 8.2 are: Indigenous owned or controlled land as a proportion of all land; land where native title has been found to exist wholly or partially as a proportion of all land; the number and area of Indigenous land use agreements; economic benefits of Indigenous rights to land; and self employment and Indigenous business
- 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). The primary measure for section 8.3 is the proportion of Indigenous people living in a home which is owned, with or without a mortgage, by a member of their household
- 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. The primary measures for section 8.4 are the main source of personal cash income and the number of people of workforce age receiving income support payments.

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 Employment by full time/part time status, sector and occupation

Box 8.1.1 Key messages

- In 2008, for employed 18–64 year olds:
 - a lower proportion of Indigenous than non-Indigenous males worked full time (74.3 per cent and 86.2 per cent respectively) (figure 8.1.1)
 - there was no significant difference between the proportions of Indigenous and non-Indigenous females working full time (figure 8.1.1).
- Between 1994 and 2008, for employed Indigenous 18–64 year olds:
 - the rate of full time employment for males and females combined initially fell from 1994 to 2002 (from 60.9 per cent to 54.5 per cent), before rising to 64.1 per cent in 2008 (figure 8.1.2).
- In 2006:
 - 25.8 per cent of employed Indigenous people worked in the public sector, compared to 14.7 per cent of employed non-Indigenous people (table 8A.1.12)
 - Indigenous people were employed as managers and administrators and professionals at a lower rate, and as labourers at a higher rate than non-Indigenous people (table 8A.1.7).

This indicator is one of two indicators in the report dealing with Indigenous employment. Section 4.6 (Employment) includes data on labour market participation, employment and unemployment rates. This section examines some of the characteristics of employment undertaken by Indigenous people. 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 2009a). The primary measures for this indicator are:

- working hours (full time or part time)
- sector of employment (public or private)
- occupation.

Data are also included on employment by industry, sex and remoteness area. Most employment data in this section are from the ABS National Aboriginal and Torres Strait Islander Social Survey 2008 (NATSISS 2008). The results are influenced by the Community Development Employment Projects (CDEP) program, for which the ABS classified participants as employed rather than as unemployed or not in the labour force (more information on CDEP is provided in section 4.6). Non-Indigenous data are taken from the National Health Survey 2007-08 (NHS 2007-08), which allows for comparisons over time (between this and previous editions of the report) and remoteness areas. For reporting against the National Indigenous Reform Agreement (NIRA), the Steering Committee uses data derived from the ABS Survey of Education and Work for non-Indigenous people, which maintains consistency between reporting for the NIRA and other COAG National Agreements. Data from the Survey of Education and Work are not used here as they are not available by remoteness and are not suitable for time series comparison with non-Indigenous data for earlier years, which is an essential component of the analysis in this report.

Employment data used in this section are only available for persons aged 18–64 years, which differs from employment data used elsewhere in this report and for NIRA indicators, which cover persons aged 15–64 years.

Box 8.1.2 provides examples of some programs that have been successful in improving Indigenous employment outcomes.

Box 8.1.2 ‘Things that work’ — improving Indigenous employment

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 1996 to the current level of 6 per cent. In partnership with community stakeholders, Rio Tinto’s employment programs provide education, training and individual support programs such as mentoring, to help Indigenous employees overcome educational barriers.

Rio Tinto has tailored recruitment practices, including one and a half day assessment programs that provide applicants with feedback on their skill levels and guidance on the training they require to be employed. Rio Tinto has also been involved in Australian Government initiatives such as the National Indigenous Cadetship Project (NICP), and the Corporate leaders for Indigenous Employment program (Rio Tinto unpublished).

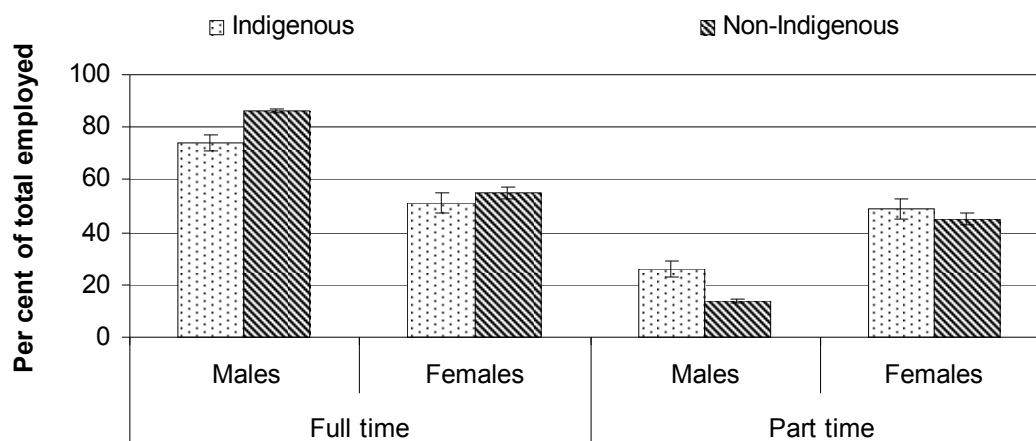
The Dean Rioli Aboriginal Employment program (Vic) is jointly funded by the Australian and Victorian governments. The program is based on partnership with the Indigenous community, industry, trade unions and governments, and aims to place 100 Indigenous young people in employment by 2012. The project currently has 129 registered participants, of whom 100 have been placed in full time employment. As of the December 2010 quarter, 57 participants had been engaged in 16 weeks continuous employment (Vic Government unpublished).

Gunbalanya Station and Meats (NT) is a pastoral business and meatworks being developed by the Indigenous Land Corporation (ILC) through a 15-year agreement with Gunbalanya Meat Supply Ptd Ltd, the Arnhem Land Aboriginal Land Trust and the Northern Land Council. Gunbalanya receives cattle from ILC properties in the NT for the meatworks and finished cattle for live export. The meatworks also improve food security and health and wellbeing in the region through access to affordable fresh meat.

The business is currently in the establishment phase, and during 2009-10, 20 Indigenous people were employed in the pastoral and meatworks operations; 8 Indigenous staff participated in Certificate II in Agriculture, 9 in Certificate II in meat processing, 7 in saddle making school, 10 in horsemanship and knife sharpening courses and 20 in first aid (ILC 2010).

Full time and part time employment status

Figure 8.1.1 Full time and part time employment, employed people aged 18–64 years, by sex, 2008^a



^a Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information).

Source: ABS (unpublished) NATSISS 2008; ABS (unpublished) NHS 2007-08; table 8A.1.1.

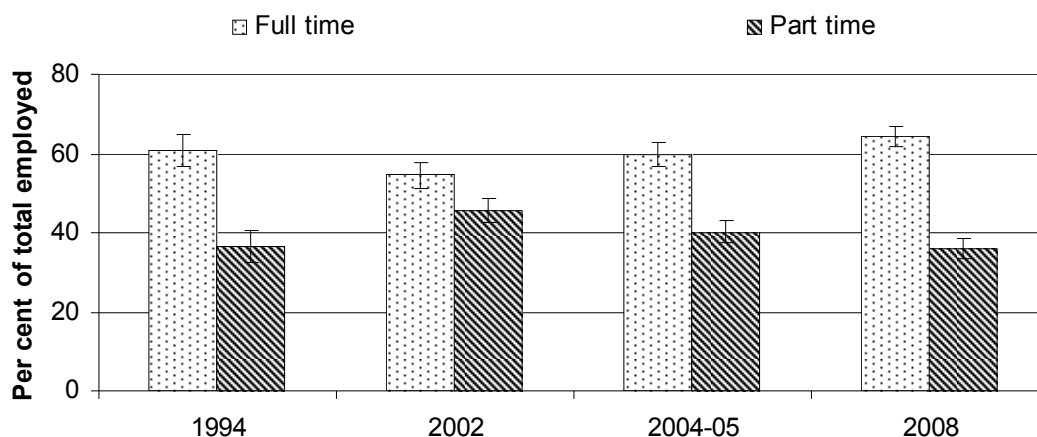
In 2008, for employed people aged 18–64 years:

- a lower proportion of Indigenous males worked full time than non-Indigenous males (74.3 per cent and 86.2 per cent, respectively), but a higher proportion worked part time (25.7 per cent Indigenous males and 13.8 per cent non-Indigenous males) (figure 8.1.1)
- there was no significant difference between the proportions of Indigenous and non-Indigenous females working full time or part time (figure 8.1.1)
- a higher proportion of Indigenous males (74.3 per cent) than Indigenous females (51.0 per cent) worked full time (figure 8.1.1).

While high levels of part time employment may be accounted for by preference, it could in fact mask underemployment — which occurs when an individual would like to, and is available to work more hours. Underemployment has been found to be particularly common among Indigenous employees (Hunter 2002).

For more information on full time and part time employment by State/Territory, age, sex and remoteness, see table 8A.1.1–4.

Figure 8.1.2 **Employment of Indigenous people aged 18–64 years, 1994, 2002, 2004-05 and 2008^a**



^a Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information).

Source: ABS NATSIS 1994; ABS NATSIHS 2004-05 and ABS NATSISS 2002 and 2008; table 8A.1.3.

Between 1994 and 2008, for employed Indigenous people aged 18–64 years:

- full time employment levels initially fell over the period 1994 to 2002 (from 60.9 per cent to 54.5 per cent), before increasing again. In 2008, Indigenous full time employment had reached 64.1 per cent (figure 8.1.2)
- Indigenous part time employment levels rose over the period 1994 to 2002 (from 36.5 per cent to 45.5 per cent), before decreasing to 35.9 per cent in 2008 (figure 8.1.2).

Employment by sector and occupation

Data on occupation of employment by Indigenous status were not available from the ABS NATSISS 2008. The most recent available data, published in the 2009 edition of this report, showed that in both 2001 and 2006 the majority of employed Indigenous and non-Indigenous people worked in the private sector (tables 8A.1.11 and 8A.1.12). 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 8A.1.12). The data also showed Indigenous people were more likely than non-Indigenous people to be employed as labourers, and less likely to be employed as managers, administrators and professionals (table 8A.1.7).

Errata — Overcoming Indigenous Disadvantage: Key Indicators 2011.

The following paragraph from p. 8.8 was amended after the report went to print.

Under the National Partnership Agreement on Indigenous Economic Participation (COAG 2008), COAG agreed to a national target of at least 2.6 per cent of public sector employment for Indigenous people by 2015, to reflect the expected national Indigenous working age population share. The 2009–10 State of the Service Report (APSC 2010) showed Indigenous representation in the Australian public sector to be 2.2 per cent.

Employment by industry

ABS data show that for employed people aged 18–64 years in 2008:

- Indigenous people were most commonly worked in ‘health and community services’ (14.2 per cent), and ‘government administration and defence’ (12.7 per cent) (table 8A.1.5)
- non-Indigenous people most commonly worked in ‘retail trade’ (11.0 per cent), ‘health and community services’ (10.9 per cent), and ‘manufacturing’ (10.3 per cent) (table 8A.1.6).

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. Different forms of tenure overlap and cannot be aggregated, but nationally in 2010:
 - Indigenous people owned or controlled 16.1 per cent of land in Australia. Most of this land (98.1 per cent) was in very remote areas (figure 8.2.2)
 - native title had been determined to exist in full or in part in 12.6 per cent of Australia, up from 4.7 per cent in 2004 (figure 8.2.2)
 - registered Indigenous Land Use Agreements (ILUAs) covered 14.9 per cent of Australia. The cumulative number ILUAs has increased from 84 in June 2003 to 434 in June 2010 (figure 8.2.3).
- For 18 to 64 year olds in non-remote areas:
 - Indigenous people had lower rates of self employment than non-Indigenous people in 2008 (6.7 per cent compared with 10.9 per cent) (table 8A.2.13)
 - there was little change in Indigenous self employment between 1994 and 2008 (table 8A.2.13).

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). 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.

The focus of this section is on Indigenous owned or controlled land and business as measures of economic participation. The social and cultural importance of land to Indigenous people is discussed in section 10.2, (access to traditional land). The primary measures for this indicator are:

- Indigenous owned or controlled land as a proportion of all land
- land where native title has been found to exist wholly or partially as a proportion of all land (with supplementary information on the potential effect of existing broad land tenure on the existence of native title)
- the number and area of Indigenous land use agreements (ILUAs)
- economic benefits of Indigenous rights to land
- self employment and Indigenous business.

Land area alone is an imperfect indicator of the benefits Indigenous people derive from owning land. Much of the Indigenous owned or controlled land in Australia is of low commercial value (although of great cultural significance). 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.

Aboriginal land tenure in NSW is unique in Australia in that Local Aboriginal Land Councils are independent statutory bodies, constituted under the NSW *Aboriginal Land Rights Act 1983*, and hold their land under freehold title. Subject to the provisions of the Land Rights Act and any registered encumbrances, Local Aboriginal Land Councils are able to sell, mortgage, sub-divide or deal with their land as their members decide.

Indigenous owned and controlled land

This section examines the extent to which Indigenous people have rights over land virtually equivalent to freehold title. Data are available on communal ownership or control of land by Indigenous people, resulting from political and legal processes, and government programs designed to protect or create Indigenous land interests. Although individual Indigenous people may buy, or otherwise gain freehold title to land, there is no way to identify this form of land ownership by Indigenous status.

Some aspects of individual land ownership are addressed in section 8.3 (home ownership).

Some land has been acquired by governments on behalf of Indigenous people. The Indigenous Land Corporation (ILC), on behalf of Indigenous people, purchases land that cannot be acquired via other means, such as land held under freehold title which is not available for claim under native title. Between 1995 and 2010, the ILC acquired 231 properties in remote, rural and urban locations covering almost 6 billion hectares, at a total cost of approximately \$228 million (ILC 2010) (see box 8.2.2 for more information on the ILC and table 8A.2.12 for a map of the ILC's land acquisition activity).

Box 8.2.2 'Things that work' — improving Indigenous land acquisition

The **Indigenous Land Corporation** (ILC) acquires and grants land to Indigenous corporations that demonstrate the capacity to manage the property to achieve sustainable economic, environmental, social and cultural benefits for Indigenous people. The ILC's Land Management program assists with managing Indigenous-held land. The ILC has four priorities for achieving Indigenous benefits through acquiring and managing land:

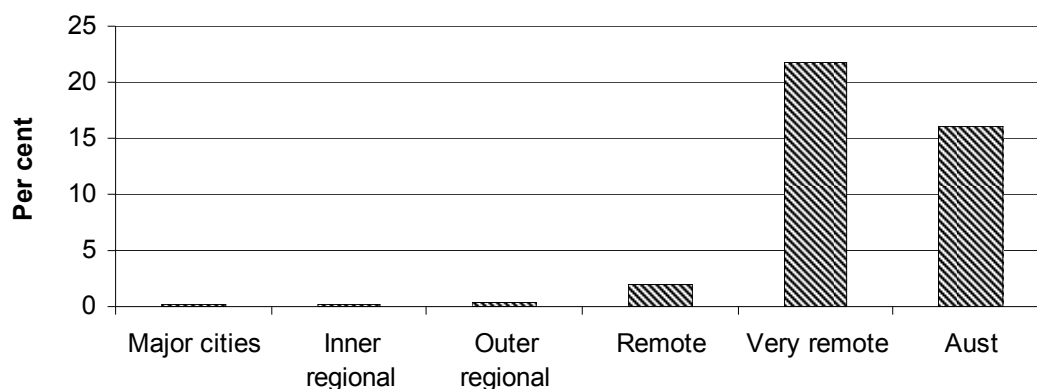
- socio-economic development
- access to education
- sustainable management of Indigenous-held land
- access to and protection of cultural and environmental values.

The ILC is committed to targeting these priority areas to contribute to Closing the Gap between Indigenous and non-Indigenous Australians and to build a secure and sustainable Indigenous land base now and for future generations. The ILC's Land Acquisition and Land Management programs place priority on building capacity through the provision of training, and the achievement of employment outcomes (ILC unpublished).

Area of Indigenous owned and controlled land

The area and distribution of Indigenous communal title largely reflect land rights 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 8.2.1 **Indigenous owned or controlled land as a proportion of all land by remoteness, September 2010^a**



^a The ILC makes no warranties as to the currency or accuracy of this information. Non-ILC land information included in totals is from 2000.

Source: ILC (unpublished); table 8A.2.2.

In 2010:

- Indigenous owned or controlled land comprised 16.1 per cent of the area of Australia (figure 8.2.1)
- Indigenous owned or controlled land comprised 21.7 per cent of the land area of very remote areas of Australia, but only 0.1 per cent of inner regional areas and 0.2 per cent of major cities (figure 8.2.1)
- nearly all (98.1 per cent) Indigenous owned or controlled land was in very remote areas of Australia (figure 8.2.1, table 8A.2.2)
- the bulk of Indigenous owned or controlled land was in the NT (49.0 per cent), WA (29.4 per cent) and SA (16.5 per cent) (table 8A.2.1)
- Indigenous owned or controlled land made up 44.8 per cent of the NT, but only 0.5 per cent of the area of NSW, Victoria, Tasmania and the ACT (table 8A.2.1).

Native title

In 1992, the High Court of Australia decided in the Mabo case that the common law of Australia would recognise native title. This landmark decision led to the Commonwealth *Native Title Act 1993*, which provided a process for native title claims to be determined through the court system. The Federal Court, the National Native Title Tribunal (NNTT), or another individual or body can mediate a claim

(AGD 2009). The NNTT (2009) provides a plain language description of native title:

Native title is the recognition in Australian law that some Indigenous people continue to hold rights to their land and waters, which come from their traditional laws and customs. Native title has its source in the body of law and custom acknowledged and observed by the claimant's ancestors when Australia was colonised by Europeans. Those laws and customs must have been acknowledged and observed in a substantially uninterrupted way from the time of settlement until now.

Native title provides Indigenous people with communal rights and interests, with varying levels of control and management of lands (usually significantly less than freehold title). The rights recognised in a determination of native title vary as they are based on the rights and interests under the 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.

Table 8A.2.11 shows the potential effect of existing broad land tenure on the existence of native title. As at 30 June 2010:

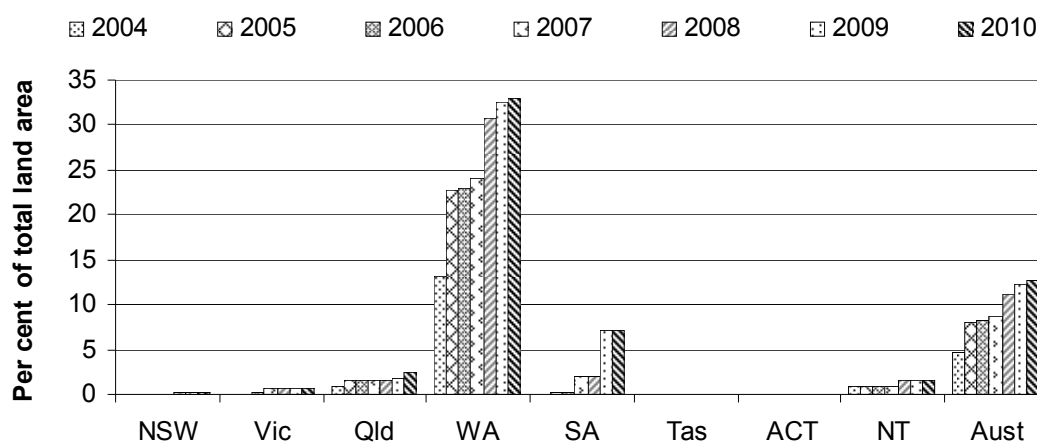
- the majority of NSW, Queensland, Victoria and Tasmania comprise freehold land, scheduled interests, exclusive pastoral leases and certain vested reserves have extinguished native title (table 8A.2.11)
- native title determinations covered 13.2 per cent of Australia, however native title was determined to exist over 12.6 per cent of Australia (table 8A.2.11).

Determinations of native title

The majority of native title applications lodged by Indigenous people are yet to be determined by the Federal Court of Australia. Since 1994, 132 native title determinations have been made, while, as at 30 June 2010, 456 active applications were in the system.

Of those determinations that have been made, 95 found that native title existed over the whole or part of the determination area, and 37 found that native title did not exist (NNTT 2010b). Data are not readily available to summarise the extent of the rights granted where native title was found to exist.

Figure 8.2.2 Determinations that native title exists, 2004–2010^{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 sources 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 30 June 2010:

- native title had been determined to exist in full or in part in 12.6 per cent of the total area of Australia, compared with 4.7 per cent in June 2004 (figure 8.2.2).
- nationally, native title had been determined to exist in around 970 000 km², with WA comprising the major component (86.0 per cent of all native title determinations) (table 8A.2.3)
- native title had been determined to exist in full or in part in 33.0 per cent of WA, but there had been no determinations of native title in Tasmania or the ACT (table 8A.2.3)
- almost all land where native title had been determined to exist was in very remote areas (98.1 per cent). Native title had been found to exist in 17.0 per cent of land in very remote areas (table 8A.2.4).

Tables 8A.2.7 and 8A.2.8 show maps of determinations of native title by State and Territory and remoteness area.

Indigenous Land Use Agreements

Indigenous Land Use Agreements (ILUAs) provide an alternative mechanism for resolving native title issues. ILUAs are agreements about the use and management of land and waters, made between one or more native title groups and other parties such as mining companies. ILUAs are made possible by the *Native Title Act 1993*, and must be registered with the NNTT.

ILUAs provide a less formal and less time consuming process than a native title determination. ILUAs may be used:

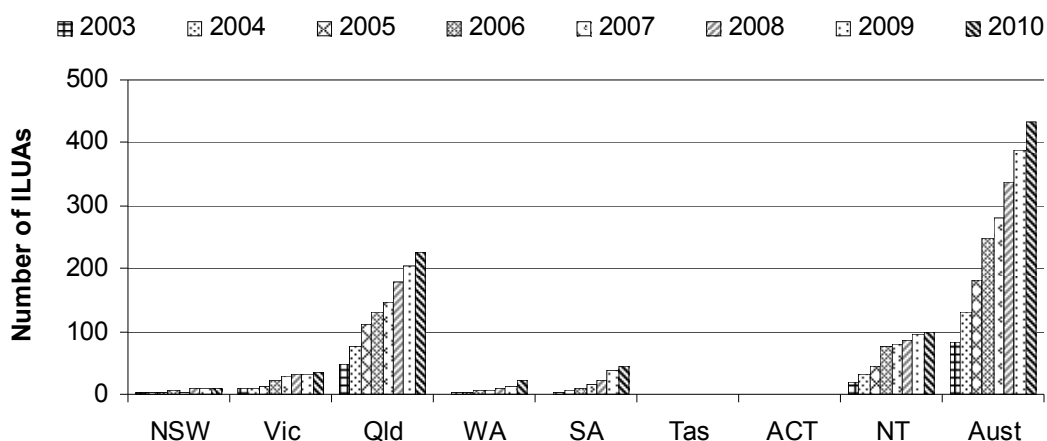
- as a step on the way to a native title determination
- in place of a native title determination
- to agree on matters such as mining developments, sharing land and exercising native title rights and interests (NNTT 2010a).

Although they are not costless, 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 2010a).

There is no information available about the value and benefits of ILUAs to Indigenous people as they are confidential, with the benefits only known to the parties to the agreement.

Number of Indigenous Land Use Agreements

Figure 8.2.3 **Indigenous Land Use Agreements, cumulative number, 2003–2010^a**



^a Total number of ILUAs in place as at 30 June in each year; totals are cumulative.

Source: NNTT (unpublished); table 8A.2.5.

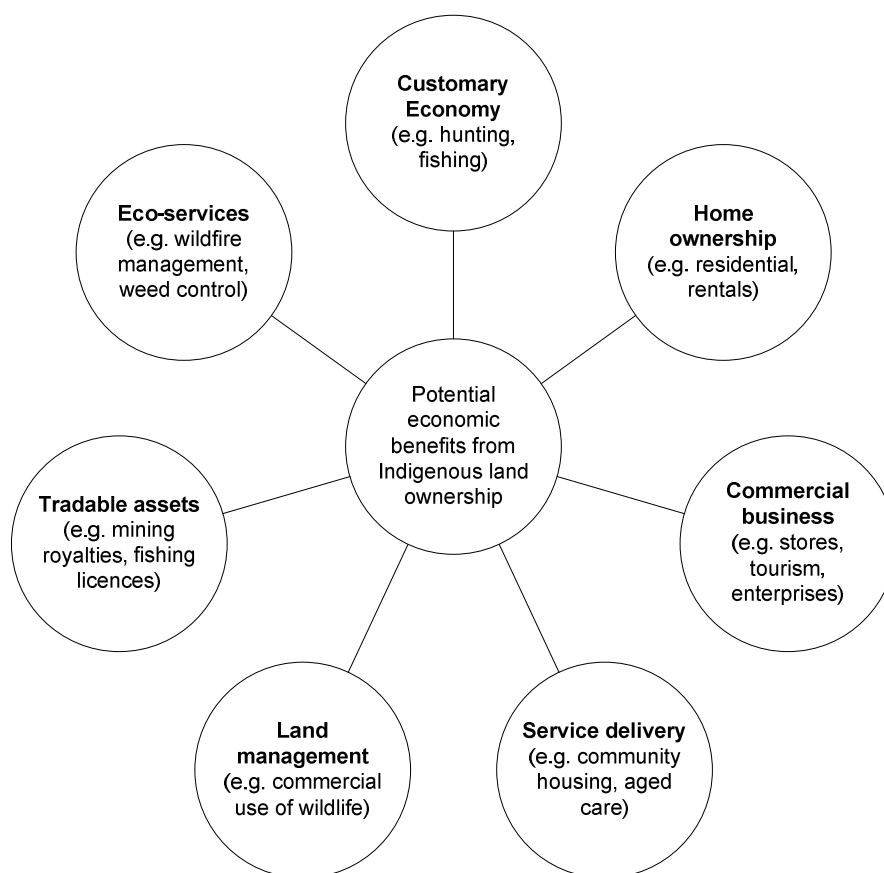
- The cumulative number of registered Indigenous Land Use Agreements (ILUAs) increased from 84 in June 2003 to 434 in June 2010 (figure 8.2.3). Over this period, the total land area covered by registered ILUAs (not counting overlapping ILUAs), grew from 240 000 km² to just over 1 billion km², representing 14.9 per cent of the total area of Australia (table 8A.2.5).
- In 2010, most ILUAs were in Queensland (226) and the NT (98). Other states had relatively few, with none in Tasmania or the ACT (table 8A.2.5).
- In 2010, most of the land covered by registered ILUAs was in very remote (81.3 per cent) or remote (10.4 per cent) areas (table 8A.2.6).

Tables 8A.2.9 and 8A.2.10 contain maps showing the areas covered by registered ILUAs.

The economic benefits of land

Figure 8.2.4 outlines the potential economic benefits that may accrue to Indigenous people from rights to land. Many of these sources of benefits overlap — for example, aspects of the customary economy may contribute to eco-services or commercial business.

Figure 8.2.4 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).¹

¹ Much of the Indigenous owned or controlled land in Australia is inalienable freehold land (table 8A.2.1). While inalienable title ensures that Indigenous land remains in the control of Indigenous people, it can restrict people's ability to develop land for uses such as housing and business. The New South Wales jurisdiction is unique in Australia in that under the NSW *Aboriginal Land Rights Act 1983* Aboriginal Land Councils hold their land under freehold title which is alienable. Therefore, the underlying tenure of Aboriginal Land Councils' land holdings

Home ownership

Private home and land ownership can provide economic benefits from living in, renting out, selling or borrowing against the property (see section 8.3 for more information about home ownership). Communal ownership of land and housing provides benefits such as security of tenure and continuance of Indigenous ownership. Many Indigenous people, particularly in remote and very remote areas, live in community housing built on Indigenous communally owned land.

‘Inalienable’ communally title means land cannot be sold or mortgaged. This ensures ongoing Indigenous ownership of land but can create barriers to individuals using land for housing or business. Developments on communally owned land are typically pursued through sub-leasing arrangements. Some jurisdictions have sought to create greater flexibility in tenure on Indigenous land. Recent amendments to the *Aboriginal Land Rights (Northern Territory) Act 1976* allow for long term township leasing arrangements, which may subsequently lead to sub-leasing for private home ownership, business or other purposes. Township leases are in place for four communities in the NT.

Service delivery

Communal owned land can be used to site and deliver services to Indigenous communities, such as community housing, aged care and postal services, while income from land investments can enable the funding of services. Box 8.2.3 contains case studies of things that work in improving service delivery from sites owned or controlled by Indigenous people, or leveraging Indigenous owned land as a source of funding.

permits their participation in commercial leases and other forms of commercial joint ventures, at the direction of their members and subject to the approval of the peak NSW Aboriginal Land Council.

Box 8.2.3 'Things that work' – improving service delivery

The **Wunan Foundation** is a not-for-profit Indigenous organisation in the East Kimberley (WA). Its strong asset base allows it to support project costs and new social ventures. Started in 1997, 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) (NT)** 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. (See section 11.1, box 11.1.11 for more information on the LDC.)

National Centre of Indigenous Excellence (NCIE) was built by the Indigenous Land Council (ILC) on the former Redfern Public School site in Sydney and opened in 2010. Through its four development pathways of sport, learning and innovation, culture and arts, and health and wellbeing, the NCIE creates personal development and leadership opportunities for young Indigenous people from across the country.

At the completion of the construction program, thirty five people were employed in building the NCIE under the Indigenous Employment Participation Plan. Since opening, the NCIE and its tenants have employed forty seven Indigenous people in various sport, recreation, youth and community, and hospitality positions. Indigenous participation has averaged 70 per cent across all YMCA programs offered at NCIE, including fitness and gymnasium memberships, school camps and sports programs (ILC 2010).

(Continued next page)

Box 8.2.3 Continued

Five Indigenous school-based trainees attained a Certificate II in Sport and Recreation and three Indigenous staff attained a Certificate IV in Sport and Recreation. Other training included first aid, lifesaving, food handling and leadership.

A range of programs delivering benefits to Indigenous people are coordinated from or delivered at the centre, including:

- the National Aboriginal Sporting Chance Academy, which ran a camp for 49 Indigenous students and staff, conducted pre-employment training for 29 Indigenous job seekers and conducted a variety of job-readiness sessions
- the Exodus Foundation Literacy Tutorial Centre, which provided 23 places for primary school aged children and achieved substantial gains in reading accuracy and words read per minute. The Exodus Youth Program provided a second chance in education and training for 25 young people from Redfern and surrounding areas (ILC unpublished; NCIE unpublished).

Booderee National Park (Jervis Bay Territory) has been jointly managed by the Wreck Bay Aboriginal Community and Parks Australia since 1995. A majority of the board of management are Wreck Bay Aboriginal Community members, which provides the Community with a formal consultative process for managing the land and its natural and cultural values. The Wreck Bay Aboriginal Community is also involved in day to day management of the park through direct employment in the park and botanic gardens (currently 14 Aboriginal staff out of 27 positions) and through the provision of services to the park agency through its business enterprise (employing between 20–30 Aboriginal Community members, depending on the season), which is solely owned by the Aboriginal community and was established in 1999 (Australian Government unpublished).

Customary economy

Indigenous people can gain benefits from land they control or own that are related to the customary activities associated with that land:

- the customary economy (fishing, hunting and gathering) remains an important part of some Indigenous communities, particularly for those living in tropical savannas and wetlands (Altman 2001; McDermott et. al. 1998; Rowley et. al. 2008). These activities can provide Indigenous people with fresh and healthy food, and there is some evidence that there are some health benefits for Indigenous people living more traditional lifestyles ‘on country’ (Fordham et al. 2010)
- some Indigenous people have adapted customary activities, such as food gathering, to create products for sale, including bush foods and wild flowers (see section on commercial business below)

-
- other customary activities, such as ‘burning off’ have been recognised as having broader environmental benefits, and Indigenous people have made beneficial agreements with governments, mining companies and other organisations to continue such activities (see section on eco-services/land management below)
 - living on country has also provided opportunities for some Indigenous people to provide local services for government and other organisations (see section on eco-services/land management below).

Tradeable assets/mining

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 (Altman and Levitus 1999; O’Faircheallaigh and Corbett 2005; O’Faircheallaigh 2006). 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.

A number of agreements aim to ensure that Indigenous people benefit from mining operations on Indigenous land, for example:

- The Argyle Participation Agreement between Rio Tinto’s Argyle diamond mine and Aboriginal communities in the East Kimberley (WA) acknowledges the traditional owners as landlords of the mining lease area. The agreement ensures that the mining operations provide benefits to Indigenous people well beyond the life of the mine, including supporting development initiatives that improve social and economic prospects for Indigenous communities, and working in partnership with Indigenous people to manage the environmental and cultural impact of mining activities (Argyle Diamond Mine 2008)
- Century Mine, MMG, in the Gulf region of northern Queensland is a signatory of the Gulf Communities Agreement (GCA). This agreement with the four native title groups Waanyi, Mingginda, Gkuthaarn and Kukatj, promotes economic development opportunities. The company liaises with the native title groups to identify viable Indigenous businesses. The company also provides business assistance and basic business advice (Esteves et. al. 2010)
- BHP Billiton Iron Ore in the Pilbara region in WA has a procurement policy to maximise Indigenous procurement. It involves pre-qualifying Indigenous-owned

businesses, including them on a preferred supplier panel and offering them opportunities in categories of work aligned with their assessed capacities and competencies. The company also assists with business development via an accountancy firm that assists with governance, periodic audits and risk management (Esteves et. al. 2010).

Eco-services/land management

Many Commonwealth, State and Territory programs recognise and employ Indigenous peoples' land management skills. For example:

- In SA, provisions have been included in the *National Parks and Wildlife Act 1972*, for Indigenous groups and the SA Department of Environment and Natural Resources, to co-manage national and conservational parks over Crown land and Aboriginal freehold land. Co-management plans incorporate traditional knowledge with contemporary park management and compliment other co-management agreements already in place (SA Government unpublished). See section 10.2 'Access to Traditional Lands' – 'Things that work'.
- In NSW, the *National Parks and Wildlife Act 1974* provides for Aboriginal people to be owners and joint managers of certain conservation reserves. By 2010 there were 17 conservation areas with various forms of joint management arrangements. Six parks were Aboriginal owned with lease back arrangements, eight parks had joint management agreements, two parks have the potential of Aboriginal ownership and two have Indigenous Land Use Agreements (DECCW 2010)
- In 2010 the Victorian Government funded two land and natural resource management businesses for traditional owner groups in association with native title settlements. After four years, the businesses will be wholly owned and operated by the traditional owner groups (Victorian Government unpublished)
- In Queensland, the *Cape York Peninsula Heritage Act 2007* provides for a new form of land tenure called National Park CYPAL (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). By June 2010 there were three CYPAL national parks spanning 2750 km² (DERM 2010)
- 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 July 2010, there were 39 agreements in place spanning over 235 000 km² (SEWPaC 2010). IPA agreements provide funding that can be used to employ Indigenous people to undertake the work required to meet the goals of the IPA.

Enterprise development, utilising the natural resources found on Indigenous owned or controlled land, provides opportunities for economic development, whilst allowing Indigenous people to maintain close connection to the land and maintain customary practices (Altman and Cochrane 2003; Bawinanga Aboriginal Corporation 2007; Fordham, Fogarty and Fordham 2010). Examples of natural resource enterprises include carbon abatement programs and eco-services, wildlife enterprises involving the collection of native animals and plants for the medicine, bush food and pet trades, tourism businesses, and pastoral businesses such as beef cattle enterprises and orchards. Natural resource enterprises based on sound ecological principals can also contribute to the management and maintenance of the fragile biodiversity that characterises much of Indigenous owned and controlled land, particularly in remote regions (Fordham et. al. 2010).

Case studies of successful programs supporting Indigenous natural resource management enterprises and opportunities for commercial businesses are presented in box 8.2.4.

Box 8.2.4 'Things that work' — natural resource management enterprises and opportunities for commercial businesses

The **Indigenous Land Corporation (ILC)** operates and manages 14 businesses throughout Australia, and in 2009-10 employed 184 Indigenous people in a range of roles, and 207 trainees. 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 (ILC 2010; ILC unpublished). One of the programs associated with the ILC is the **Kimberley Indigenous Management Support Service (KIMSS)** (WA), which is a collaboration between the ILC, the WA Government and Kimberley Indigenous pastoral lease holders. It began in 2002 and has been extended to 2011. The project focuses on developing the technical and management skills of Indigenous directors, managers and workers on Indigenous-owned Kimberley cattle stations. Assistance is provided to 20 pastoral leases. KIMSS has resulted in increased commercial pastoral activity. During 2009-10, 147 courses were attended by Indigenous people, including 55 people in accredited governance training up to Certificate IV level, and 24 new full time jobs and 64 new part time jobs were created (ILC 2010; ILC unpublished).

The **Indigenous Landholder Service (ILS)** (WA) commenced in 2003, expanded in 2006 and is currently funded until 2011. The ILS has successfully expanded beyond the Kimberley region and delivers extension, training and support to over 70 Indigenous managed properties across WA. Demand for the ILS has grown from two properties in 2003 to over 70 properties in 2011, with demand continuing to grow from other Indigenous managed properties. The ILS helps bring Indigenous-held land back into production and develops the capacity of landholders to manage land to deliver benefits to Indigenous people.

Since 2006, the ILS has worked with Indigenous managed properties to:

- attract private industry investment and repay dept
- achieve economic independence and self sufficiency
- create 55 full time and 83 part time Indigenous jobs
- assist 122 people to achieve formal qualifications
- protect culturally and environmentally sensitive areas
- revegetate degraded and saline areas.

The ILS has increased commercial agricultural activity and won a WA Premier's Award in 2004, Prime Minister's Award for Excellence in 2005, a Premier's Award in 2010 and was a finalist for a Prime Minister's Award in 2011 (WA Government unpublished).

Self employment and 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.

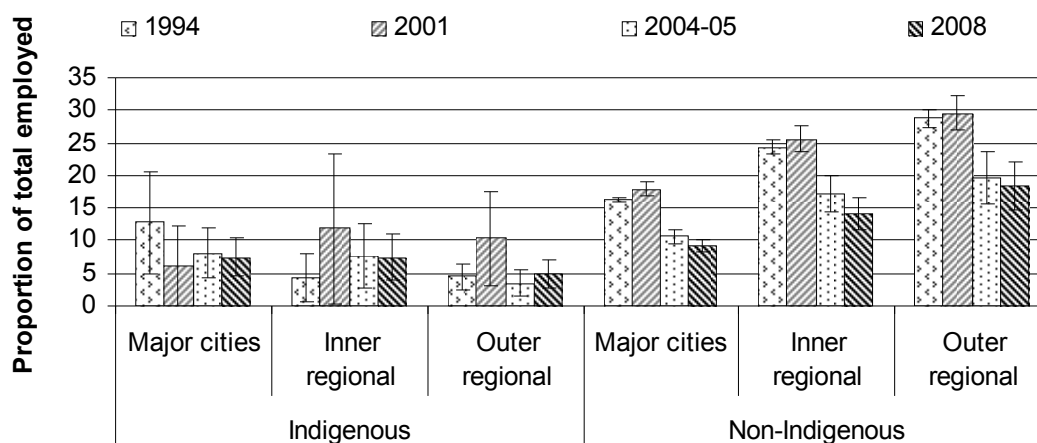
Several factors may influence the low rates of Indigenous self employment and ownership of enterprises. Hunter (1999) noted that governments have typically emphasised business opportunities at the Indigenous community level, rather than self employment. In addition, Indigenous people may have difficulty 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 the ABS National Aboriginal and Torres Strait Islander Survey 1994 (NATSIS 1994), the National Health Survey 2001 (NHS 2001) including the Indigenous supplement (NHS(I)), the National Aboriginal and Torres Strait Islander Social Survey 2008 (NATSISS 2008), the National Aboriginal and Torres Strait Islander Health Survey 2004-05 (NATSIHS 2004-05), and the NHS for 1995, 2004-5 and 2007. The data in this section are for self employment as a proportion of total employment.

Between 1994 and 2008, self employment rates did not change greatly among Indigenous people with rates remaining at around 7 to 8 per cent of those employed. However, among non-Indigenous people, rates were around 20 per cent in 1994 and 2001, but nearly halved to around 11 to 12 per cent in 2004-05 and 2008 (table 8A.2.13).

Figure 8.2.5 **Self employment as a proportion of total employed, people aged 18 to 64 years, non-remote areas, 1994, 2001, 2004-05 and 2008**^{a, b, c, d}



^a People who are self employed include employers and own account workers. ^b Non-remote includes major cities and inner and outer regional areas. See glossary for definitions of remoteness areas. ^c Proportions of self employment amongst Indigenous people in 1994 for major cities and inner regional areas; in 2001 for inner regional and outer regional areas; and in 2004-05 for inner regional areas have RSEs between 25 per cent to 50 per cent and should be interpreted with caution. The proportion of self employed Indigenous people in major cities in 2001 has an RSE greater than 50 per cent and is considered too unreliable for general use. ^d Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information).

Source: ABS (unpublished) NATSIS 1994; ABS (unpublished) NHS 1995; ABS (unpublished) NHS 2001, including the Indigenous supplement (NHS(I)); ABS (unpublished) NATSIHS 2004-05; ABS (unpublished) NHS 2004-05; ABS (unpublished) NATSISS 2008 and ABS (unpublished) NHS 2007-08; table 8A.2.13.

Self employment rates are calculated as a proportion of those employed. For people aged 18 to 64 years, between 1994 and 2008:

- compared with non-Indigenous people, Indigenous people had significantly lower rates of self employment in inner regional and outer regional areas (figure 8.2.5)
- there was little change in Indigenous self employment over time. Among non-Indigenous people, rates were around 20 per cent in 1994 and 2001, but fell to 10.9 per cent in 2008 leading to a decrease in the Indigenous — non-Indigenous gap (table 8A.2.13)
- over time there were no significant changes in rates of self employment for Indigenous people in major cities, inner regional or outer regional areas, however for non-Indigenous people, rates of self employment dropped in each of the non-remote areas over time (figure 8.2.5)
- there was little difference across non-remote areas in rates of self employment among Indigenous people. There were no statistically significant differences

between major cities, inner regional or outer regional areas, except in 1994 and 2004-05 where rates for outer regional areas were significantly lower than those in major cities (table 8A.2.13).

For people aged 18 to 64 years who were employed, in non-remote areas, in 2008:

- Indigenous people had lower rates of self employment than their non-Indigenous counterparts (6.7 per cent compared with 10.9 per cent) (table 8A.2.13)
- in NSW, Queensland, WA and SA rates of self employment for Indigenous people were lower than those for non-Indigenous people, in the other states and territories there was no difference (table 8A.2.13).

Data for the NT are not included in this analysis here due to high relative standard errors. Table 8A.2.13 contains more information about self employment for Indigenous and non-Indigenous people by State and Territory, remoteness, age and sex.

Australia's Indigenous people lag behind New Zealand's Maori people in terms of self employment. In the Australian and New Zealand Censuses of Population and Housing for 2006, 5.4 per cent of Indigenous Australians who were employed, were self employed, compared with 9.8 per cent for New Zealand's Maori population (SCRGSP 2009; Te Puni Kōkiri 2008). It is unknown to what extent variations in the geographical, historical and economic characteristics of Australia and New Zealand may account for these differences.

Indigenous businesses

Case studies of successful programs supporting Indigenous businesses are presented in box 8.2.5.

Box 8.2.5 ‘Things that work’ — supporting the development and maintenance of Indigenous businesses

The **Koori Business Network (KBN)** (Vic) was established in 2000 and helps the development and sustainability of dynamic and diverse Indigenous businesses by:

- providing practical advice and support
- encouraging and facilitating networking
- facilitating partnerships between Indigenous businesses and governments
- showcasing Indigenous enterprises, products and services.

Since 2007, KBN has published the Koori Business Directory an important tool in stimulating business opportunities. In 2010 it included 135 Indigenous businesses (KBN 2010).

Indigenous Business Australia’s (IBA) Business Development Programme, known as IBA Enterprises, directly assists Indigenous people 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 encourages Indigenous people into business and provides them with information and training.

In 2009-10, IBA:

- approved 81 business loans, valued at \$13.6 million
- assisted business 652 times with assessing the feasibility of business ideas, the commencement of a business, business consolidation or expansion
- created or supported around 170 jobs
- recorded a 90 per cent survival rate for businesses in the first 12 months, 78 per cent after two years and 65 per cent after three years (IBA unpublished).

The **Australian Indigenous Minority Supplier Council (AIMSC)** provides a direct business-to-business purchasing link between corporate Australia, government agencies and Indigenous-owned businesses. Indigenous businesses certified by AIMSC gain both financial and business development benefits. In the first 18 months of operation (from 1 October 2009 to 30 March 2011), AIMSC had 76 certified suppliers and 94 members, including some of Australia’s leading corporate, government and not-for-profit organisations. The 76 certified Indigenous suppliers provide a wide range of services, including graphic design, multi-media, corporate gifts and merchandise, legal services, printing, catering and food products, human resources consulting, recruitment, marketing and communications, information technology and telecoms, construction and maintenance, facilities management, cultural training, lighting, auto products and consumer products. In the first 18 months from October 2009, \$13.3 million worth of contracts were signed and \$4.5 million of goods and services purchased (AIMSC 2011; AIMSC unpublished).

8.3 Home ownership

Box 8.3.1 Key messages

- In 2008:
 - 29.0 per cent of Indigenous people lived in a home owned, with or without a mortgage, by a member of their household, compared to 65.2 per cent of non-Indigenous people (figure 8.3.1)
 - Indigenous home ownership rates declined with remoteness, from 36.9 per cent in major cities to 18.4 per cent in remote areas and 5.5 per cent in very remote areas (figure 8.3.1)
- From 1994 to 2008, the proportion of Indigenous people living in a home owned, either with or without a mortgage, by a member of their household, increased from 21.5 per cent to 29.0 per cent (figure 8.3.2).

Home ownership is an important indicator of wealth and saving, as it provides a secure asset base against which people can borrow, and contributes to financial stability. Home ownership is closely related to outcomes in other indicators in this report, particularly those concerning education and economic participation and development. 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’.

The primary measure for this indicator is:

- the proportion of Indigenous people living in a home which is owned, with or without a mortgage, by a member of their household.

This section also contains data on the proportion of people living in public, community and private rental housing.

Not all people living in an owned home (for example, boarders) will share in the long-term economic benefits of home ownership. However, the approach used is reasonably simple to derive and provides a good approximation of levels of home ownership in the Indigenous population.

Home ownership offers many advantages compared to rental housing: a home can be passed from one generation to another, it provides security of tenure (which is not always available with rental housing), and it allows households to build or modify a dwelling to suit their particular needs. Research suggests that Indigenous people aspire to home ownership, as do non-Indigenous people, although they may face greater barriers to attaining it (Birdsall-Jones and Corunna 2008; Memmott et al. 2009; Moran et al. 2002; Szava and Moran 2008).

Szava and Moran (2008), in a study of the perception of home ownership among 58 Indigenous Business Australia clients, noted 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.

The Australian National Audit Office (ANAO) (2010) found that there were barriers preventing Indigenous home ownership. These included: higher unemployment rates; intergenerational welfare dependency; lower incomes and likely lack of savings; limited access to loans; and lack of information about financial planning. These factors were particularly prevalent amongst those living in remote and very remote areas (ANAO 2010).

During consultations for previous editions of this 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, Indigenous people who move frequently for family and cultural reasons may prefer to rent accommodation. Some of 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.

Although some land in regional areas is communally owned, most communally owned land is located in remote and very remote areas. 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, Australia's legislative provisions provide for sub-leasing and private sector financing are different in every State and Territory.

The Queensland and Australian (in the Northern Territory) governments have undertaken Indigenous land tenure reform to enable and encourage home ownership

by Indigenous people. Amendments to land rights and native title legislation have created the potential for varied levels of private property rights on Aboriginal land.

In May 2008, the Queensland Government passed amendments to the *Aboriginal Land Act 1991* and the *Torres Strait Islander Land Act 1991*. These amendments allow the Indigenous trustees of Aboriginal or Torres Strait Islander land to grant 99 year leases of land to Aboriginal members of the community, other individuals, Government or organisations. 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, and Home Ownership Teams who visit Indigenous communities to provide advice to residents. Through the Cape York Welfare Reform Trial the Queensland Government is working closely with Cape York Indigenous communities and the Australian Government to advance home ownership opportunities.

Three major amendments to Indigenous land legislation have affected Aboriginal lands in the NT. 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 Nguiu on the Tiwi Islands in August 2007. In June 2008, the Australian Government passed the *Indigenous Affairs Legislation Amendment Act 2008*, which created 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.

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.

Some examples of government programs successfully encouraging Indigenous home ownership are summarised in box 8.3.2.

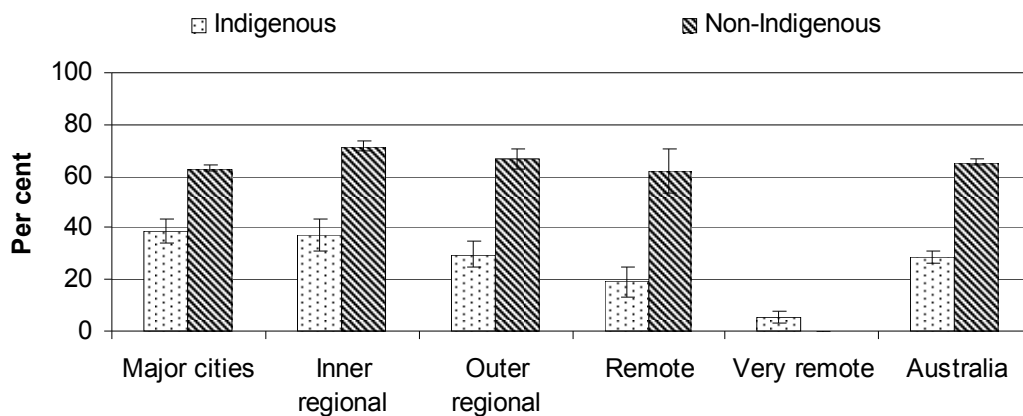
Box 8.3.2 Things that work — home ownership

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 (IBA) in 2005. IBA offers a concessional lending product and tailored after care support targeting those in most need. Since its inception, the program has helped more than 14 100 individuals and families. In 2009-10, IBA approved 363 new loans, valued at \$82.2 million, assisting 1217 Indigenous people.

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's typical borrower is a first home buyer, purchasing a modest home valued at less than \$300 000. Loan repayments are based on a concessional commencing interest rate, currently set at 4.5 per cent. The concessional rate increases gradually until it reaches the IBA Home Loan Rate. IBA adjusts its Home Loan Rate to be 1 per cent below the RBA cash and Commonwealth Bank's standard variable rate (IBA 2010).

Data on home ownership in this report are taken from a range of surveys. The most recent data available are from the Australian Bureau of Statistics (ABS) National Aboriginal and Torres Strait Islander Social Survey 2008 (NATSISS 2008). Time series comparisons use the ABS National Aboriginal and Torres Strait Islander Survey 1994 (NATSIS 1994), ABS NATSISS 2002 and the ABS National Aboriginal and Torres Strait Islander Health Survey 2004–05 (NATSIHS 2004–05). Data for non-Indigenous home ownership are from the ABS General Social Survey 2002 (GSS 2002), the ABS National Health Survey 2004–05 (NHS 2004–05) and ABS National Health Survey 2007–08 (NHS 2007–08). NHS data allow for comparisons over time (between this and previous editions of the report) and remoteness areas. For reporting against the National Indigenous Reform Agreement (NIRA), the Steering Committee uses data derived from the ABS Survey of Education and Work for non-Indigenous people, which maintains consistency between reporting for the NIRA and other COAG National Agreements. Data from the Survey of Education and Work are not used here as they are not available by remoteness and are not suitable for time series comparison with non-Indigenous data for earlier years, which is an essential component of the analysis in this report.

Figure 8.3.1 Proportion of people aged 18 years and over living in home owner/purchaser households, by remoteness, 2008^{a, b, c}



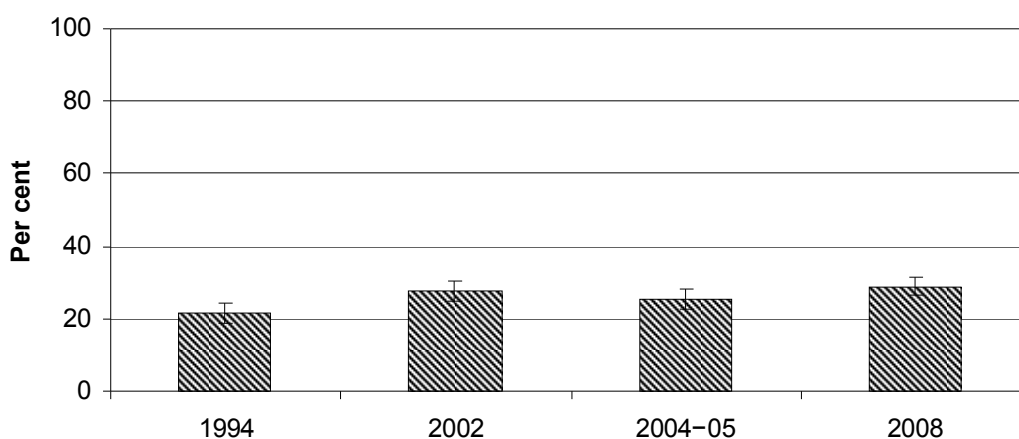
^a Non-Indigenous data for very remote areas of Australia are not available from the 2007-08 National Health Survey. ^b Comprises participants in rent/buy schemes and those living in a household in which payments were being made on mortgages or secured loans towards the purchase of the dwelling. ^c Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information).

Source: ABS (unpublished) NATSISS 2008; ABS (unpublished) NHS 2007-08; tables 8A.3.1 and 8A.3.2.

In 2008:

- nationally, a lower proportion of Indigenous adults (29.0 per cent) than non-Indigenous adults (65.2 per cent) lived in a home owned, with or without a mortgage, by a member of their household (figure 8.3.1)
- the proportion of Indigenous adults living in a home owned, with or without a mortgage, by a member of their household was higher in major cities (38.5 per cent), inner regional (37.2 per cent) and outer regional (29.8 per cent) areas, and lower in remote (19.0 per cent) or very remote (5.4 per cent) areas (figure 8.3.1).

Figure 8.3.2 **Proportion of Indigenous people aged 18 years and over living in home owner/purchaser households, 1994, 2002, 2004–05 and 2008^{a, b}**



^a Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information). ^b Difference between 2002 and 2004–05 data is not statistically significant.

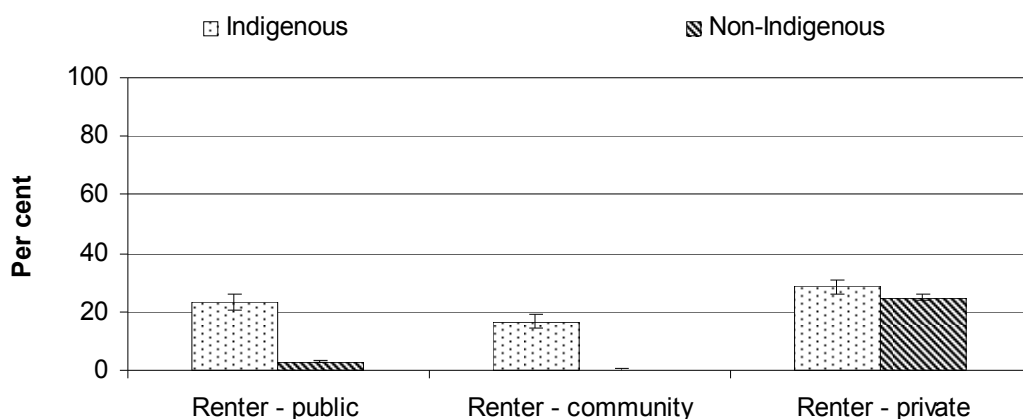
Source: ABS (unpublished) NATSIS 1994; ABS (unpublished) NATSISS 2002; ABS (unpublished) NATSIHS 2004-05; ABS (unpublished) NATSISS 2008; table 8A.3.3.

Over the period 1994–2008:

- the proportion of Indigenous adults living in a home owned, with or without a mortgage, by a member of their household increased from 21.5 per cent to 29.0 per cent (figure 8.3.2)
- the proportion of Indigenous adults living in a home owned by a member of their household with a mortgage increased from 10.6 per cent to 20.3 per cent, while there was no significant change in the proportion of Indigenous people living in a home owned by a member of their household without a mortgage (table 8A.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 that offers some security of tenure.

Figure 8.3.3 Proportion of people aged 18 years and over living in rented homes (public, community and private housing), 2008^{a, b}



^a Comprises people renting from: a State/Territory Housing Authority; a Housing Co-operative; a community or church group; a real estate agent; persons not living in same dwelling; persons living in same dwelling; owner/manager of caravan park or an employer. ^b Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information).

Source: ABS (unpublished) NATSISS 2008; ABS (unpublished); ABS (unpublished) NHS 2007-08; tables 8A.3.1 and 8A.3.2.

In 2008:

- a higher proportion of Indigenous adults (68.8 per cent) than non-Indigenous adults (28.6 per cent) lived in either public, community or private rental housing (tables 8A.3.1 and 8A.3.2)
- the majority of both Indigenous and non-Indigenous renters lived in a private rental home (28.7 per cent and 24.9 per cent, respectively) (figure 8.3.3).

Tables 8A.3.1 to 8A.3.6 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 (figure 8.3.3). More information on public housing provided to Indigenous people is included in the annual Report on Government Services (SCRGSP 2011).

8.4 Income support

Box 8.4.1 Key messages

- For people aged 18–64 years in 2008:
 - 44.0 per cent of Indigenous people and 65.0 per cent of non-Indigenous people received employee income as their main source of personal income (figure 8.4.1)
 - 40.4 per cent of Indigenous people and 13.8 per cent of non-Indigenous people received government pensions and allowances as their main source of personal income (figure 8.4.1).
- For people aged 15–64 years in 2010:
 - a higher proportion of Indigenous people than non-Indigenous people received income support across all major payment types (figure 8.4.5).

Income support is a key indicator of social and economic welfare. Historically, Indigenous people have been overrepresented in the Australian income support system. In 2008, 40.4 per cent of the Indigenous population reported government cash pensions and allowances as their main source of personal income, compared to 13.8 per cent of non-Indigenous people (table 8A.4.2). 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 some local labour markets and lower levels of educational attainment (DEEWR 2009).

The primary measures for this indicator are:

- the main source of personal cash income
- the number of people of workforce age receiving income support payments.

This section uses two sources of data on income support payments:

- ABS survey data on peoples' main source of personal cash income
- Centrelink administrative data on people 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 2010). Income support payments are paid by Centrelink to the aged, people with a disability, carers, youth and students, families with children, the unemployed, and widows (Centrelink 2010).

The Cape York Institute (CYI) argue that major social deterioration in Cape York has occurred since the 1960s. They attribute the breakdown mainly to alcohol abuse and passive welfare dependence, which have become multi-generational in their impacts. CYI argue that long term welfare dependence erodes people's motivation and sense of responsibility. They also suggest that government services introduced to counter the social decline may actually exacerbate the problem of passive welfare (CYI 2009). In response, the Cape York Welfare Reform Trial (discussed later in this section) is a comprehensive social development project to counter these factors and increase the capacity and capabilities of individuals to engage with the economy.

Due to the high proportion of Indigenous income support recipients, welfare reform and income support payment reform for the Australian Indigenous population have been key components of government policy in recent years (where payment reform relates to the way welfare payments are paid to people, while welfare reform relates more broadly to the structure of welfare entitlements). Several government programs specifically target passive reliance on income support payments. The longest running program is the Community Development Employment Projects (CDEP), which allows Indigenous people to work part time for their payments. The Australian Government has changed CDEP significantly since its introduction and participant numbers decreased by nearly half from 2002 to 2008. Since July 2009, new CDEP participants received corresponding income support payments (such as Newstart) rather than wages, which has accounted for a shift in source of income for some Indigenous participants (for more detail see section 4.6).

A recent initiative targeting Indigenous welfare reform is the Northern Territory Emergency Response (NTER). The welfare reform and employment component of the NTER involved income management of a proportion of income support payments. From 1 July 2010 NTER income management was replaced by a new model targeted at long term recipients of certain income support payments, as well as recipients of other income support payments who are considered vulnerable and those who volunteer to participate (further information on the NTER is included in section 11.1).

An evaluation of the NTER income management program was carried out by Australian Institute of Health and Welfare (AIHW) in 2009 through a series of surveys and focus groups with Indigenous communities and retailers. While other studies have yielded different results (see section 7.5), the AIHW study found that since the introduction of income management, sales of fresh fruit and vegetables

had increased, and the majority of interviewees claimed a decrease in their own expenditure on gambling (AIHW 2009). The reduction in readily accessible cash was also believed to lower the incidence of alcohol abuse and violence within the community, and therefore enhance the safety and wellbeing of children (AIHW 2009).

Another significant initiative has been the Child Protection Measure, which has operated in selected areas of WA since 2008. Under this measure, the WA Child Protection Authority can ask Centrelink to manage a person's income support payments in situations where it is believed a child is at risk of neglect. The managed proportion can be spent only on priority needs such as food, shelter and education and cannot be used for alcohol, home brew kits, tobacco, pornography or gambling (FaHCSIA 2009). During the period of income management, the WA Government provides case management support services, including parenting support (Macklin and McSweeney 2009). From 1 July 2010 the Child Protection Measure was also extended to the NT.

Income support payment reform has also occurred as part of the Cape York Welfare Reform Project trial, coordinated by the Cape York Institute in partnership with the Queensland and Australian Governments. The trial commenced in Aurukun, Coen, Hope Vale and Mossman Gorge in July 2008, with support from the Family Responsibilities Commission (FRC). The FRC provides a way for Indigenous people to be involved in the administration of social security through income management, as well as providing a forum for local people to influence the operations of Child Safety Services, schools, the magistrates system, housing tenancy agencies and services providers in their communities. Under the Family Responsibilities Commission Act (Qld), the FRC is comprised of a Commissioner who is a retired senior magistrate, plus 24 Local Commissioners who are respected community members appointed by the Queensland Governor. The FRC can hold conferences with welfare recipients when notification is received that the recipient's child is not enrolled or not attending school, if the child is the subject of a child safety report, or if the recipient has been convicted of an offence in the Magistrates Court or breached a tenancy agreement. Conferences enable recipients to talk to Commissioners about what is going wrong, and what can be done to improve the situation. Commissioners have the power to restore socially responsible behaviour — including referral to other social services, directing compulsory income management, or monitoring the recipient's future through an FRC case plan (Australian Government unpublished). Information on the Cape York Welfare Reform project is also included in section 11.1.

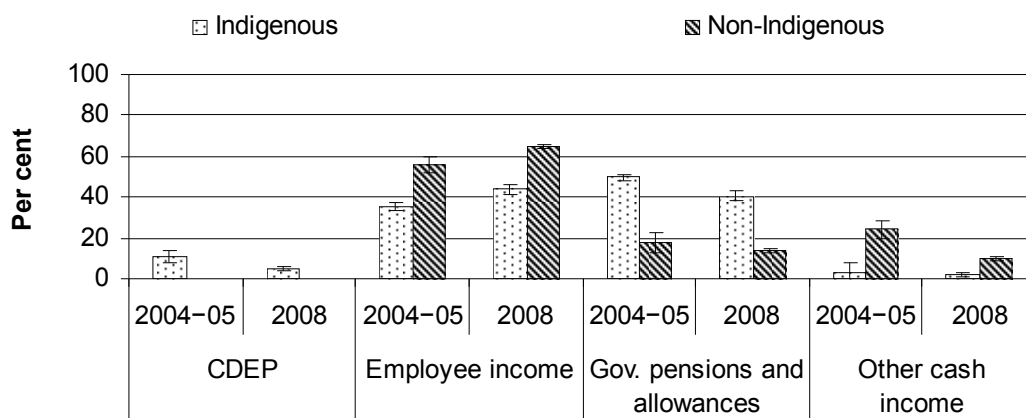
Data on income support in this report are taken from a range of sources. The most recent data available are from the Australian Bureau of Statistics (ABS) National Aboriginal and Torres Strait Islander Social Survey 2008 (NATSISS 2008). Time

series comparisons use the ABS National Aboriginal and Torres Strait Islander Health Survey 2004–05 (NATSIHS 2004–05). Data for non-Indigenous income support are from the ABS National Health Survey 2004–05 and 2007–08 (NHS 2004–05 and 2007–08). Centrelink administrative data and ABS population data are used for calculating the proportion of people receiving different income support payments.

Personal income

Figure 8.4.1 contains ABS survey data on people’s main source of personal cash income.

Figure 8.4.1 Main source of personal cash income, people aged 18–64 years, 2004–05 and 2008^{a, b, c, d}



^aFor the Indigenous population, includes unincorporated business, property, other pension, and other regular sources. ^b For the non-Indigenous population, includes profit or loss from own unincorporated business, profit or loss from rental property, dividends or interest, child support or maintenance, superannuation or annuity, worker's compensation and other regular source. ^c Includes persons whose main source of cash income was not stated or not known, and those who had no source of income. ^d Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information).

Source: ABS (unpublished) NATSIHS 2004-05; ABS (unpublished) NHS 2004-05; ABS (unpublished) NATSISS 2008; ABS (unpublished) NHS 2007-08; table 8A.4.2.

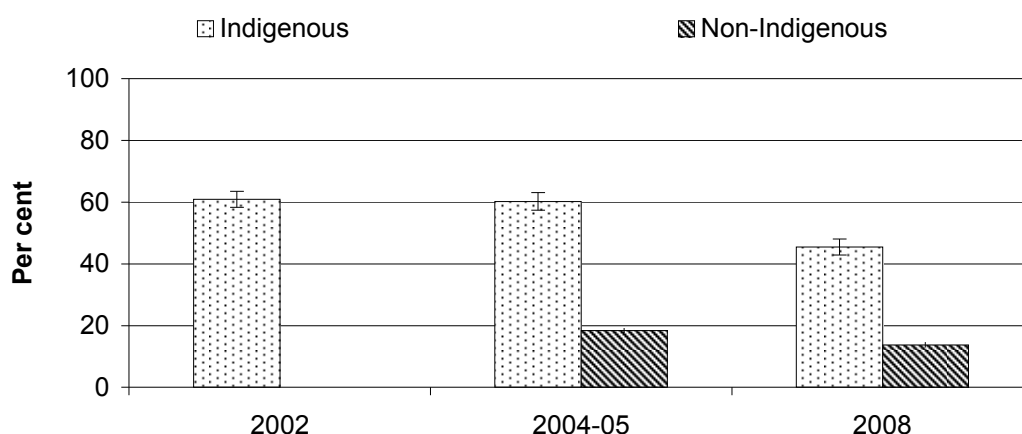
For the *main* source of personal cash income, for people aged 18–64 years, in 2008:

- employee income was the main source of personal income for both Indigenous people (44.0 per cent) and non-Indigenous people (65.0 per cent) (figure 8.4.1)
- a higher proportion of Indigenous people (40.4 per cent) than non-Indigenous people (13.8 per cent), received government pensions and allowances as their main source of personal cash income (figure 8.4.1).

Between 2004–05 and 2008, for people aged 18–64 years:

- the proportion of Indigenous people whose main source of personal cash income was CDEP declined from 10.5 per cent to 5.1 per cent (figure 8.4.1)
- the proportion of Indigenous people receiving government cash pensions and allowances as their main source of income declined from 49.7 per cent to 40.4 per cent, and the gap between Indigenous and non-Indigenous recipients narrowed by 4.7 percentage points (table 8A.4.2)
- the proportion of Indigenous people receiving employee income as their main source of cash income increased from 35.3 per cent to 44.0 per cent, but the proportion of non-Indigenous recipients also rose, leaving the gap unchanged at approximately 21 percentage points (table 8A.4.2).

Figure 8.4.2 Proportion of people aged 18–64 years whose main source of personal income was government pensions and allowances (including CDEP), 2002, 2004–05 and 2008^{a, b, c}



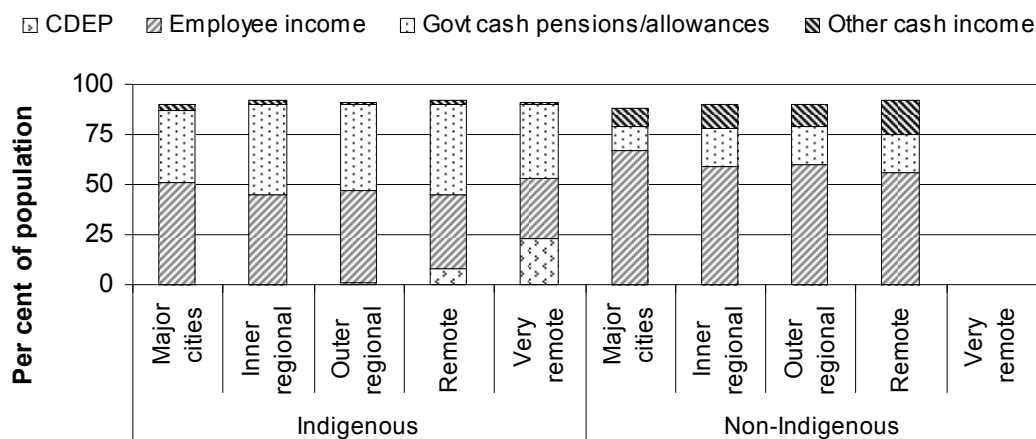
^a CDEP payments are available only to Indigenous recipients. ^b Non-Indigenous data are not available for 2002. ^c Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information).

Source: ABS (unpublished) NATSISS 2002; ABS (unpublished) NATSIHS 2004–05; ABS (unpublished) NHS 2004–05; ABS (unpublished) NATSISS 2008; and ABS (unpublished) NHS 2007–08; table 8A.4.2.

Between 2002 and 2008, the total proportion of people aged 18–64 years whose main source of personal cash income was CDEP payments or government cash pensions and allowances:

- fell for Indigenous people (from 60.9 per cent in 2002 and 60.2 per cent in 2004–05) to 45.5 per cent in 2008 (figure 8.4.2)
- decreased slightly for non-Indigenous people (from 18.4 per cent in 2004–05 to 13.8 per cent in 2008) (figure 8.4.2).

Figure 8.4.3 Main sources of personal cash income, by remoteness area, people aged 18–64 years, 2008^{a, b}



^aTotals do not add up to 100 per cent because the denominator includes persons whose main source of cash income was not stated or not known, and those who had no source of income. ^bNo data are available for non-Indigenous people in very remote areas.

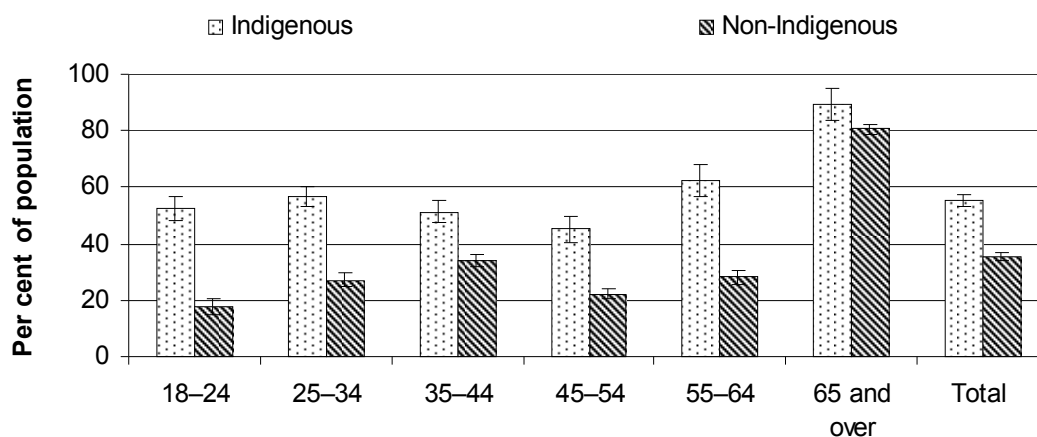
Source: ABS (unpublished) NATSISS 2008; and ABS (unpublished) NHS 2007-08; table 8A.4.2.

In 2008, for people aged 18–64 years:

- employee income was the main source of personal cash income for Indigenous people in major cities (51.3 per cent) and non-Indigenous people in all remoteness areas (figure 8.4.3)
- the proportion of Indigenous people for whom government cash pensions and allowances was the main source of personal cash income was similar across remoteness areas (figure 8.4.3)
- the proportion of non-Indigenous people for whom government cash pensions and allowances was the main source of personal cash income was lower than for Indigenous people in all remoteness areas (figure 8.4.3).

Figure 8.4.4 presents data on all people aged 18–64 years receiving government cash pensions and allowances as either a main or secondary source of income. These are distinct from data presented in figure 8.4.3 on the main source of personal cash income, where only one main source could be nominated.

Figure 8.4.4 **People receiving government pensions and allowances, by age group, 2008^a**



^a Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information).

Source: ABS (unpublished) NATSIHS 2004-05; ABS (unpublished) NHS 2004-05; ABS (unpublished) NATSISS 2008; and ABS (unpublished) NHS 2007-08; table 8A.4.6.

In 2008:

- for all age groups over 18 years, Indigenous people were more likely to receive government pensions and allowances than non-Indigenous people (figure 8.4.4)
- for both Indigenous and non-Indigenous adults aged 18–64 years, a greater proportion of females than males received income support payments (68.2 per cent of Indigenous females and 36.3 per cent of Indigenous males, and 34.3 per cent of non-Indigenous females and 18.4 per cent of non-Indigenous males) (table 8A.4.6)
- a higher proportion of Indigenous than non-Indigenous adults aged 18–64 years received government pensions and allowances in all States and Territories (table 8A.4.4).

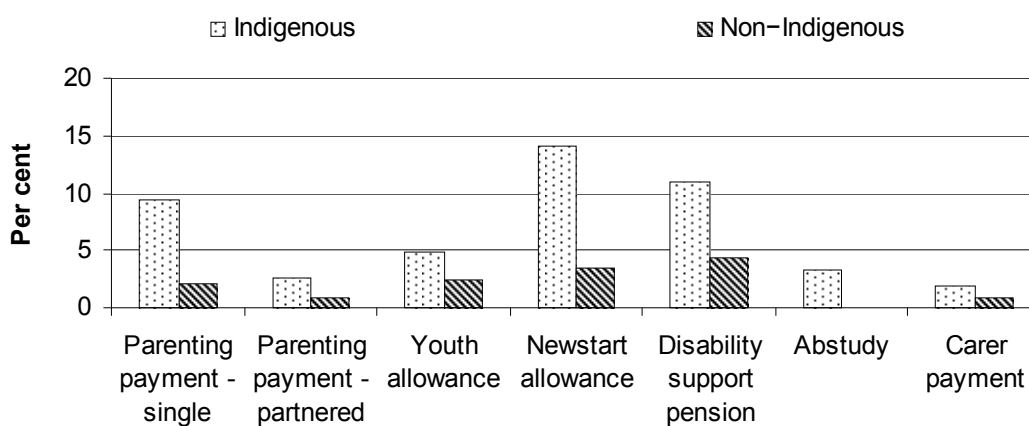
More information on sources of income and proportions of people receiving government pensions and allowances by age, State/Territory and remoteness is included in tables 8A.4.1–8A.4.9.

The 2009 report included survey data on sources of household income, but these data could not be updated for this report. The 2009 report data are reproduced in attachment tables 8A.4.10 and 8A.4.11.

People receiving income support payments — administrative data

Figure 8.4.5 uses Centrelink administrative data to calculate 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.

Figure 8.4.5 **People aged 15–64 years receiving income support payments, by selected payment types, 2010^{a, b, c}**



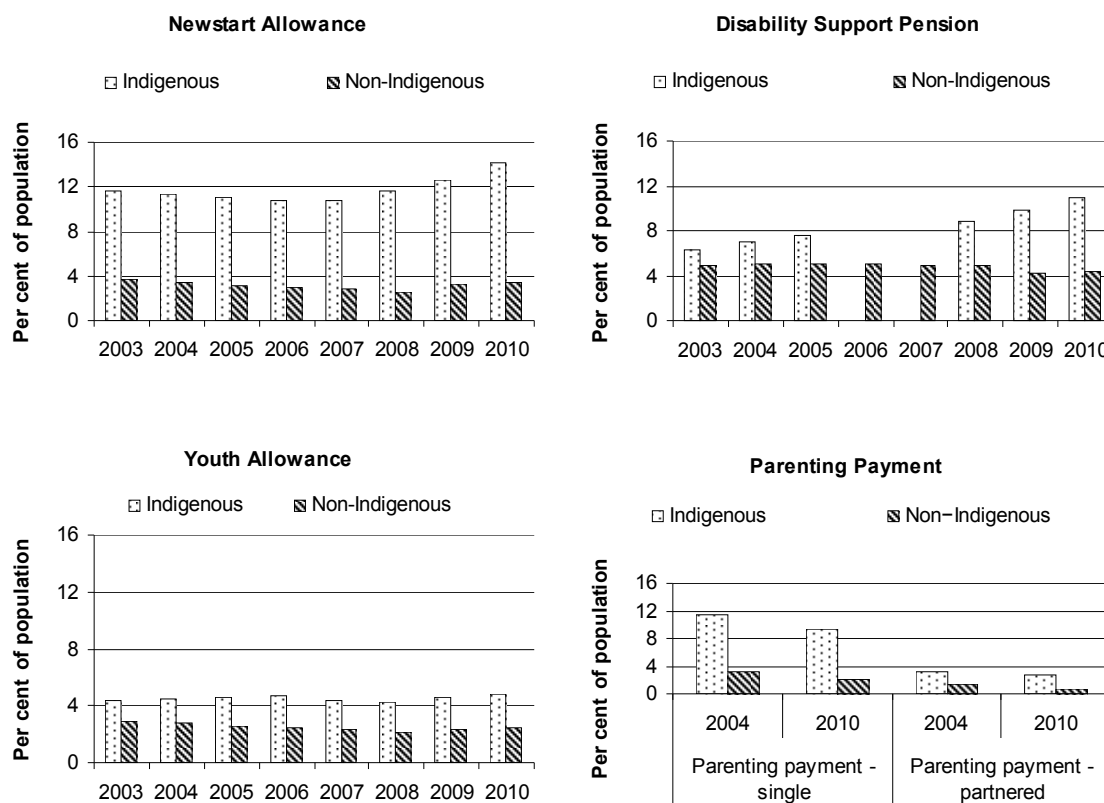
^a Non-Indigenous people are not eligible to receive Abstudy. ^b All data are point in time data. Depending on the particular payment type data are reported at various points in time across June. ^c Proportions of Indigenous income support payments were calculated by dividing Centrelink data on total number of recipients for each payment, by ABS 2010 Indigenous population estimates. Proportions of non-Indigenous income support payments calculated by dividing Centrelink data on total number of recipients for each payment, by ABS Estimated Residential Population data, minus Indigenous population estimates.

Source: Centrelink (unpublished); ABS *Australian Demographic Statistics, June 2010*, Cat. no. 3101.0; ABS *Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians*, Cat. no. 3238.0; table 8A.4.19.

In 2010, for people aged 15–64 years:

- a higher proportion of Indigenous than non-Indigenous people received each of the selected income support payments (figure 8.4.5)
- Newstart allowance was the most common income support payment received by Indigenous people (14.2 per cent), followed by disability support pension (10.9 per cent) and parenting payment single (9.4 per cent) (figure 8.4.5)
- disability support pension was the most common income support payment received by non-Indigenous people (4.4 per cent), followed by Newstart allowance (3.4 per cent) and youth allowance (2.5 per cent) (figure 8.4.5).

Figure 8.4.6 **People aged 15–64 years receiving income support payments, by selected payment types^{a, b, c, d}**



^a Non-Indigenous people are not eligible to receive Abstuday. ^b All data are for a point in time. Depending on the particular payment type, data are reported at various points in time across June. ^c Proportions of Indigenous income support payments were calculated by dividing Centrelink data on total number of recipients for each payment, by ABS 2010 Indigenous population estimates. Proportions of non-Indigenous income support payments calculated by dividing Centrelink data on total number of recipients for each payment, by ABS Estimated Residential Population data, minus Indigenous population estimates. ^d Non-Indigenous estimates of Disability Support Pension were unavailable for the years 2006 and 2007.

Source: Centrelink (unpublished); ABS *Australian Demographic Statistics, June 2010*, Cat. no. 3101.0; ABS *Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians*, Cat. no. 3238.0; tables 8A.4.20–27.

Between 2003 and 2010, for people aged 15–64 years:

- the proportion of the Indigenous population receiving Newstart allowance increased (from 11.5 per cent in 2003, to 14.2 per cent in 2010), but for non-Indigenous people remained relatively stable (3.7 per cent in 2003 and 3.4 per cent in 2010). The gap between Indigenous and non-Indigenous Newstart recipients increased over the period from 7.9 percentage points in 2003, to 10.8 per cent in 2010 (figure 8.4.6)
- there was a large increase in the proportion of Indigenous recipients of disability support pension (from 6.4 per cent to 10.9 per cent), but little change in the

proportion of non-Indigenous recipients (5.0 per cent in 2003 and 4.4 per cent in 2010) (figure 8.4.6)

- the proportions of both Indigenous and non-Indigenous people receiving youth allowance remained relatively stable (figure 8.4.6).

In 2004 and 2010, for people aged 15–64 years:

- a higher proportion of Indigenous than non-Indigenous people received both single and partnered parenting payments. The proportion of total parenting payment recipients decreased over the period 2004 to 2010, for both Indigenous and non-Indigenous people (figure 8.4.6).

Attachment tables 8A.4.12 to 8A.4.35 present numbers of Indigenous and non-Indigenous people on income support by payment types, sex, State and Territory and remoteness from 2003 to 2010.

8.5 Future directions in data

Employment by full time/part time status, sector and occupation

In addition to the ABS program of ongoing Indigenous specific surveys — which includes the NATSISS as well as the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) — Indigenous labour force data are available from the five-yearly ABS Census. The last Census was held in 2006, and provided data used in the 2009 edition of this report. The annual ABS Labour Force Survey also provides Indigenous labour force estimates, however, are of lower quality as they are based on a smaller sample size.

Indigenous owned or controlled land and business

Data on self employment are available from the ABS from a variety of Indigenous specific surveys and other surveys which provided comparable non-Indigenous data. No data are available on self employment in remote or very remote areas, although remote area business development is an important and growing avenue for employment and income generation for Indigenous people. It is expected that information from the 2011 Census of Population and Housing will provide information about self employment in these areas.

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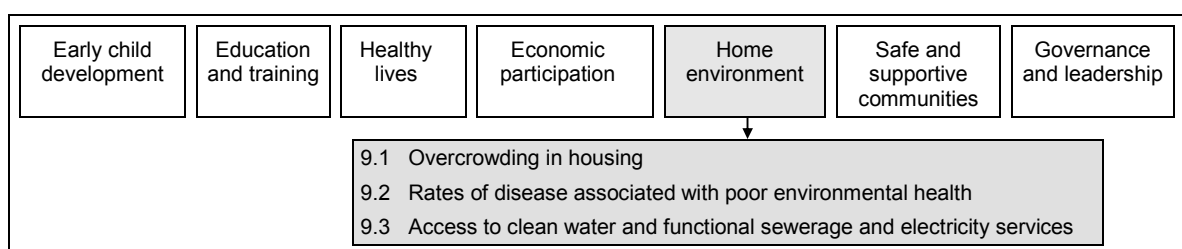
CYI (Cape York Institute for Policy and Leadership) 2009, *Welfare Reform*, <http://cyi.org.au/welfarereform.aspx> (accessed 2 February 2009).

FaHCSIA (Department of Families, Housing, Community Services and Indigenous Affairs) 2009, *Child Protection Measure*, <http://www.fahcsia.gov.au/sa/families/progserv/welfarereform/Pages/ChildProtectionMeasure.aspx> (accessed 5 October 2010).

Macklin, J. (Minister for Families, Housing, Community Services and Indigenous Affairs) and McSweeney, R. (WA Minister for Child Protection) 2009, *Income Management Program*, media release, 12 January.

9 Home environment

Strategic areas for action



This chapter covers some of the key environmental influences on people's health and wellbeing, including appropriate housing conditions, access to clean water, functional sewerage and reliable electricity services. Many other environmental factors also influence health; for example, air quality, noise pollution, occupational health, hygiene, food quality and pest control.

The home environment affects several COAG targets and headline indicators:

- 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 the home environment:

- employment (section 4.6)
- post secondary education (section 4.7)
- household and individual income (section 4.9).

Outcomes in the home environment area can be affected by outcomes in several other strategic areas for action, or can influence outcomes in other areas:

- early child development (birthweight, early childhood hospitalisations, injury and preventable disease, hearing impairment) (chapter 5)

-
- healthy lives (access to primary health care, potentially preventable hospitalisations, avoidable mortality, mental health) (chapter 7)
 - economic participation (employment, home ownership, income support) (chapter 8)
 - governance and leadership (engagement with service delivery) (chapter 11).

The indicators in this strategic area focus on some factors that contribute to a healthy home environment and good environmental health. Poor infrastructure, ineffective utilities and overcrowding are associated with illnesses including skin infections, infectious diseases, rheumatic fever and gastrointestinal illnesses (Urbis Keys Young 2002), respiratory illnesses and asthma symptoms (Dharmage et. al. 1999; Jaakkola, Hwang and Jaakkola 2010). Poor housing design can fail to protect households from pests (such as mosquitoes and flies) which carry diseases (Bailie and Wayte 2006). Poor environmental health can have worse outcomes for vulnerable groups and can be especially detrimental for childhood physical and emotional development (Bailie and Wayte 2006), and can result in:

- inadequate school attendance due to illnesses associated with unhealthy houses or lack of housing security (Young 2006)
- an increase in chronic infections, which can lead to poor development. Recurrent ear infections can lead to hearing impairment and consequent learning difficulties (Bailie and Wayte 2006)
- lack of physical activity due to perceptions of neighbourhood safety and neighbourhood problems (Butterworth 2000; DEECD 2010)
- exacerbation of existing health problems, for example residential proximity to major motorways, flight paths and industry can cause noise and air pollution which can exacerbate existing heart and lung conditions, and affect language development (DEECD 2010; Evans and Maxwell 1997).

The indicators in this strategic area for action focus on some of the key influences on the 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. The primary measure for section 9.1 is the proportion of Indigenous people who live in overcrowded houses

-
- 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. The primary measures for section 9.2 are hospitalisation and death rates for diseases associated with poor environmental health
 - 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. The primary measures for section 9.3 are access to common water, sewerage and electricity services, essential household facilities and housing of an appropriate standard.

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

- In 2008:
 - overcrowding rates for Indigenous people (27.5 per cent) were almost five times those for non-Indigenous people (5.7 per cent) (figure 9.1.1)
 - overcrowding rates for Indigenous people increased with remoteness, from 13.3 per cent in major cities to 58.2 per cent in very remote areas (figure 9.1.2).
- Between 2002 and 2008:
 - there was no statistically significant change in the proportion of Indigenous people aged 15 years and over living in overcrowded households, across all remoteness areas (figure 9.1.2).

The prevalence of housing overcrowding has been identified by COAG as an indicator of community health and wellbeing outcomes, and is included in the National Partnership Agreement on Remote Indigenous Housing (COAG 2008).

The primary measure for this indicator is the proportion of Indigenous people who live in overcrowded houses.

Overcrowding is calculated according to the Canadian National Occupancy Standard for housing appropriateness, which is explained in box 9.1.2.

A much higher proportion of Indigenous people than non-Indigenous people live in overcrowded conditions. 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), contributing to poor health (AIHIN 2008; Bailie et al. 2005; McDonald et al. 2009; Tong et al. 2008). Overcrowding can also lead to poor educational outcomes (Biddle 2007), gambling problems (Stevens and Young 2009) and social stress which may facilitate family violence (Bailie and Wayte 2006).

Reasons for overcrowding

Cultural and social factors influence the way housing is used by different communities. Households with many members, often of multiple generations and including extended family, are not unusual in Indigenous communities, and may be the preferred way of living for some families. 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). 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. Houses in the Thamarrurr region averaged three bedrooms each, giving an average occupancy rate of approximately five people per bedroom.

When overcrowded living is unintentional, it can be due to inadequate, inappropriate or poorly maintained housing stock. Access to affordable public housing is a problem for many disadvantaged people in Australia due to a high level of demand and unmet supply, and this is particularly so for the Indigenous population (Flatau 2005). In remote and very remote areas in particular, it is more expensive and logistically more difficult to construct and maintain housing and associated infrastructure.

The Western Australian Aboriginal Child Health Survey (Silburn et al. 2006), conducted between 2000–01, identified factors associated with Aboriginal children living in overcrowded housing. Overcrowded housing was associated with:

- poor 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 housing overcrowding and labour force status and education for Indigenous and non-Indigenous people are discussed in chapter 13 of this report. Income and housing affordability also play a role in overcrowding, with Indigenous people having substantially lower incomes than non-Indigenous people (discussed further in section 4.9 of this report). 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 in relation to their population size: in 2008–09, 18 per cent of clients aged 10 years and over were estimated to be Indigenous. Indigenous people comprise only 2.5 per cent of the Australian population (AIHW 2010).

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. 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. Indigenous cultures and lifestyles vary widely across Australia, as do climates. In climatic conditions such as extreme heat, it is likely that all members of the household will occupy the most comfortable area of the house (FaHCSIA 2008). 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).

The Canadian National Occupancy Standard determines overcrowding by comparing the number of bedrooms with the number and characteristics of people in a dwelling. It does not take into account the number of bathrooms and toilets, and the size of kitchens, bedrooms and other living spaces, even though these may be as important as, or more important than, the number of bedrooms, particularly in larger households.

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.

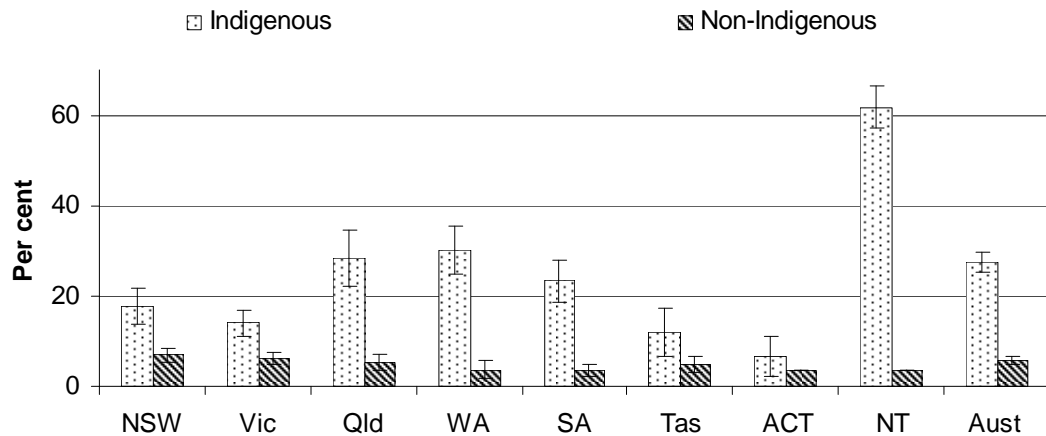
Source: ABS (2004).

Overcrowding in housing for both Indigenous and non-Indigenous people is reported here using data from the ABS National Aboriginal and Torres Strait Islander Social Survey 2008 (NATSISS 2008), ABS National Aboriginal and Torres Strait Islander Health Survey 2004–05 (NATSIHS 2004–05), and ABS National Health Survey 2007–08 (NHS 2007–08). The 2009 report used data from the 2001 and the 2006 Censuses to measure housing overcrowding, which are not comparable to the data in this report.

Errata — Overcoming Indigenous Disadvantage: Key Indicators 2011.

The following material from p.9.8 was amended after the report went to print.

Figure 9.1.1 People living in overcrowded housing, by State and Territory, 2008^{a, b, c}



^a Households requiring at least one additional bedroom, based on the Canadian National Occupancy Standard for housing appropriateness. ^b Differences between 2008 Indigenous and non-Indigenous overcrowding rates are statistically significant for Australia and all jurisdictions except the ACT. ^c Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information).

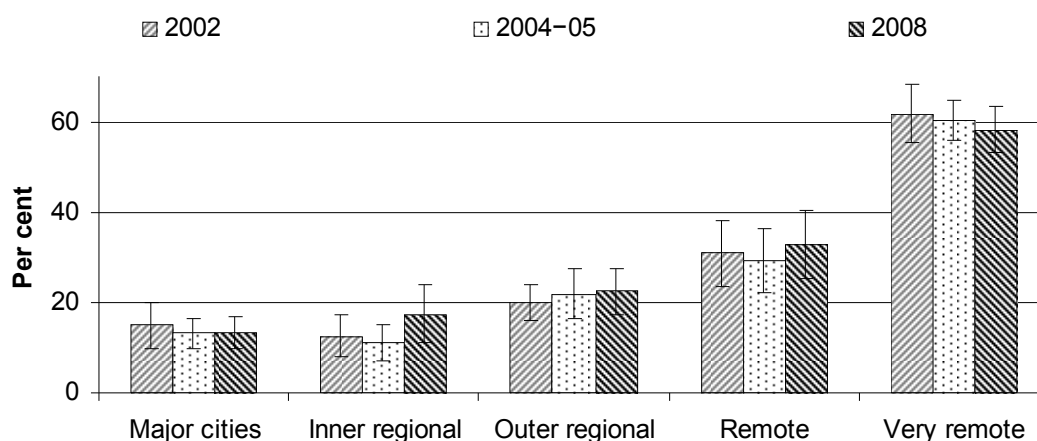
Source: ABS (unpublished) NATSISS 2002; ABS (unpublished) NATSIHS 2004-05; ABS (unpublished) NATSISS 2008; ABS (unpublished) NHS 2007-08; table 9A.1.1.

In 2008:

- Indigenous people were almost five times as likely to live in overcrowded housing (27.5 per cent) than non-Indigenous people (5.7 per cent) (figure 9.1.1)
- Indigenous housing overcrowding was highest in the NT (61.8 per cent), followed by WA (30.0 per cent) and Queensland (28.3 per cent), and lowest in the ACT (6.7 per cent) and Tasmania (12.1 per cent) (figure 9.1.1)
- the proportion of non-Indigenous housing overcrowding varied across states and territories, ranging from 6.9 per cent in NSW to 3.4 per cent in the NT (figure 9.1.1).

Figure 9.1.2 shows housing overcrowding for Indigenous people over time. Data are for people aged 15 years and over because data for those aged under 15 years were not available for 2002.

Figure 9.1.2 Indigenous people aged 15 years old and over, living in overcrowded households, by remoteness^{a, b}



^a Households requiring at least one additional bedroom, based on the Canadian National Occupancy Standard for Housing Appropriateness. ^b Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information).

Source: ABS (unpublished) NATSISS (unpublished) 2002; ABS (unpublished) NATSIHS 2004-05; ABS (unpublished) NATSISS 2008; table 9A.1.2.

In 2008:

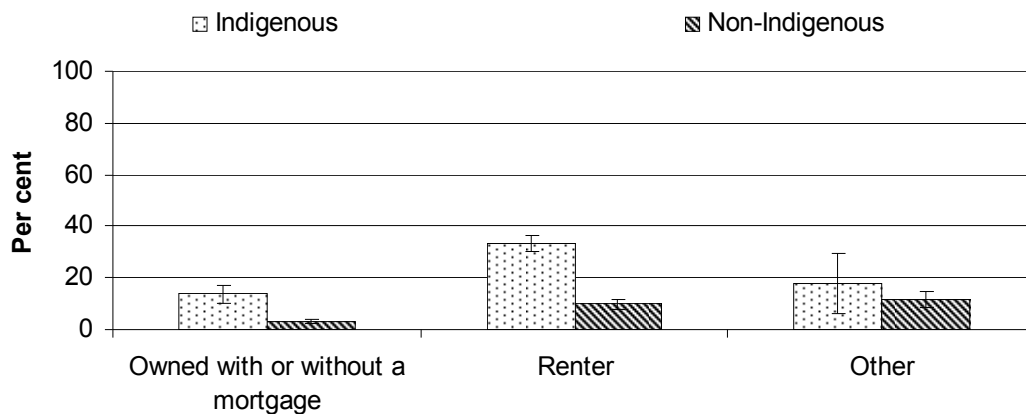
- overcrowding rates for Indigenous people increased with remoteness, from 13.3 per cent in major cities to 58.2 per cent in very remote areas (figure 9.1.2)

Between 2002 and 2008:

- there was no statistically significant change in the proportion of Indigenous people aged 15 years and over living in overcrowded households, across all remoteness areas over time (figure 9.1.2).

However, there is some evidence that the impact of overcrowding may have declined over this period. ABS survey data indicate that the proportion of Indigenous people aged 18 years and over who reported ‘overcrowded housing’ as a stressor (for themselves, their families, or friends) in the last 12 months declined from 20.8 per cent in 2002 to 12.7 per cent in 2008 (table 9A.1.6). However, as the survey data apply only to adults aged over 18 years, they do not take into account children suffering stress through overcrowded living conditions.

Figure 9.1.3 People living in overcrowded households, by status and selected housing tenure, 2008^{a, b, c, d}



^a 'Housing tenure' refers to the nature of a household's legal right to occupy the dwelling in which the household members usually reside. Tenure is determined according to whether any person living in the household owns the dwelling outright, owns the dwelling but has a mortgage or loan secured against it, is paying rent to live in the dwelling, or has some other arrangement to occupy the dwelling. ^b Households requiring at least one additional bedroom, based on the Canadian National Occupancy Standard for Housing Appropriateness. ^c Difference between 2008 Indigenous and non-Indigenous overcrowding rates is statistically significant for all tenure types, except 'Other'. ^d Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information).

Source: ABS (unpublished) NATSISS 2008; ABS (unpublished) NHS 2007-08; table 9A.1.5.

In 2008, for people of all ages:

- higher proportions of both Indigenous and non-Indigenous living in rented homes were overcrowded (33.2 per cent and 9.7 per cent, respectively) compared with people living in homes owned or being bought by someone in the household (13.7 per cent and 3.3 per cent respectively) (figure 9.1.3)

9.2 Rates of disease associated with poor environmental health

Box 9.2.1 Key messages

- In 2008-09:
 - Indigenous people experienced higher rates of hospitalisation than other people for infectious diseases, bacterial diseases, acute hepatitis A and B, scabies, rheumatic and respiratory conditions, influenza and pneumonia (table 9.2.1)
 - hospitalisation rates for Indigenous people for most conditions associated with poor environmental health increased with remoteness. Remoteness had little effect on hospitalisation rates for other people (table 9A.2.16).
- Between 2004-05 and 2008-09, there was little change in hospitalisation rates for conditions associated with poor environmental health for Indigenous or other people (figure 9.2.2).

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 large 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 (DHAC 1999; enHealth 2007).

The primary measures for this indicator are:

- hospitalisation rates for diseases associated with poor environmental health
- death rates for diseases associated with poor environmental health.

The hospitalisation data used in this section are 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 the overall incidence of disease as 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 2010a).

Data are reported for the following jurisdictions: NSW, Victoria, Queensland, WA, SA and public hospitals in the NT. These six jurisdictions are considered to have acceptable quality of Indigenous identification in hospitalisation data. Overall, the

quality of Indigenous identification in hospital separations data has improved since previously assessed by the AIHW in 2005. However, the completeness of Indigenous identification still varies substantially between jurisdictions. Data are available for remoteness areas across states and territories in aggregate, with Indigenous identification highest in remote and very remote areas (AIHW 2010b).

Box 9.2.2 provides examples of programs that assist in improving environmental health for Indigenous people.

Box 9.2.2 ‘Things that work’ — improving environmental health for Indigenous people

The Environmental Health Worker Program and the Feral and Domestic Animal Management and Welfare Program (Queensland) were developed by Queensland Health. The programs often work together to improve environmental health conditions, and the health and welfare of domestic animals, and to reduce the incidence of disease. Strong community based programs also aim to improve social determinants of health through the provision of relevant training and local employment. Major achievements of the programs include:

- a large skilled workforce — the programs provide for the training and employment of 61 workers
- improvements in the operation of major environmental health infrastructure (including sewerage, drinking water and waste management)
- a reduction in numbers of domestic animals and improved care and welfare of animals
- greater community understanding of environmental health issues
- improved capacity of local government to meet legislative requirements (Queensland Health unpublished).

The **No Germs on Me — Hand Washing Campaign** (NT) is a social marketing campaign to promote the benefits of hand washing with soap after going to the toilet, after changing babies’ nappies and before touching food. Established in 2006, campaign materials include TV commercials, posters, stickers, and point of sale materials to encourage people to purchase more soap. The campaign uses humour and a non-judgemental tone to encourage people to adopt hand washing with soap as a routine practice. A survey conducted as part of the initial pilot indicated that the campaign was well understood and appreciated by the target audience, and was helpful in prompting more regular hand washing. The campaign is being utilised internationally, most recently in Papua New Guinea (CDC 2008, CRCAH 2009; NT Government unpublished).

Table 9.2.1 Age standardised hospitalisation rates (per 1000 population) for selected diseases associated with poor environmental health, by Indigenous status, NSW, Victoria, Queensland, WA, SA, and public hospitals in the NT, 2008-09^{a, b, c, d}

ICD-10 diagnosis codes and descriptions	Indigenous			Other ^d			Total Australians		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
Intestinal infectious diseases (A00–A09)	7.64	9.30	8.53	4.26	5.45	4.87	4.36	5.55	4.97
Tuberculosis (A15–A19)	0.20	0.15	0.17	0.06	0.05	0.06	0.07	0.05	0.06
Bacterial diseases (A20–A49)	7.81	7.01	7.36	2.93	1.99	2.42	3.02	2.08	2.50
Diphtheria (A36)	np	–	np	np	np	–	–	np	–
Whooping cough (A37)	0.16	0.27	0.22	0.06	0.06	0.06	0.06	0.07	0.07
Meningococcal infection (A39)	0.07	0.05	0.06	0.02	0.02	0.02	0.02	0.02	0.02
Trachoma (A71)	np	np	0.02	–	np	–	0.00	–	–
Acute hepatitis A (B15)	–	np	np	0.01	0.01	0.01	0.01	0.01	0.01
Acute hepatitis B (B16)	0.08	0.12	0.10	0.02	0.01	0.01	0.02	0.01	0.02
Scabies (B86)	2.06	2.23	2.16	0.04	0.03	0.03	0.09	0.08	0.08
Acute rheumatic fever (I00–I02)	0.17	0.24	0.20	–	0.01	–	0.01	0.01	0.01
Chronic rheumatic heart diseases (I05–I09)	0.24	0.58	0.42	0.08	0.11	0.10	0.09	0.12	0.10
Acute upper respiratory infections (J00–J06)	2.77	3.33	3.07	1.64	1.49	1.57	1.68	1.55	1.62
Influenza and pneumonia (J10–J18)	11.97	11.30	11.58	3.49	2.75	3.08	3.64	2.90	3.23
Asthma (J45)	2.47	4.16	3.38	1.50	1.56	1.54	1.53	1.61	1.58
Lung disease due to external agents (J60–J70)	0.95	0.28	0.57	0.49	0.25	0.36	0.50	0.25	0.36
Pneumonitis due to solids and liquids (J69)	0.92	0.28	0.56	0.45	0.23	0.33	0.46	0.24	0.34
Toxic effects of metals (T56)	np	np	0.01	0.01	0.01	0.01	0.01	0.01	0.01

^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 'Other' includes hospitalisations identified as non-Indigenous as well as those with a 'not stated' Indigenous status. – Nil or rounded to zero. np not published.

Source: AIHW National Hospital Morbidity Database (unpublished); tables 9A.2.13–15.

In 2008-09, after adjusting for age differences between the Indigenous and other 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 other people (table 9.2.1)
- for Indigenous people, increasing remoteness was associated with higher rates of hospitalisation for most diseases associated with poor environmental health, most notably for influenza and pneumonia, which increased from 5.7 per 1000 in major cities to 21.4 per 1000 in remote areas. For other people, there was little difference in rates of hospitalisation between remoteness areas for most conditions (table 9A.2.16)
- Indigenous people were hospitalised at 20 to 30 times the rate of other people with acute rheumatic fever in regional and remote areas, and 8 times the rate of other people in major cities. Hospitalisation rates for chronic rheumatic diseases were higher for Indigenous people than other people across all areas of Australia (table 9A.2.16).¹

Acute rheumatic fever and trachoma are virtually unknown in the non-Indigenous population but remain at relatively high rates among some populations of Indigenous Australians (AIHW 2011a). Acute rheumatic fever and trachoma predominately occur in areas with inadequate living environments and poor hygiene practices (AIHW 2011; Taylor 2001; Taylor and Stanford 2010). Living conditions such as housing overcrowding (section 9.1), a lack of access to clean water and functional sewerage (section 9.3), limited access to medical care (section 7.1), and poor nutrition (section 7.5), are associated with the diseases.

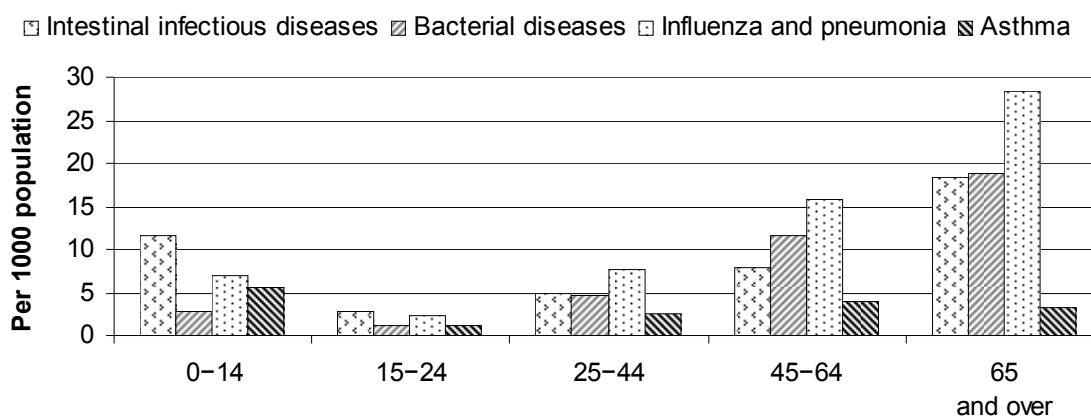
Trachoma hospitalisation rates are low, as trachoma is usually treated by non-hospital eye care services, such as optometrists, ophthalmologists, clinics or outpatient services. Taylor et. al. (2009) conducted the National Indigenous Eye Health Survey (NIEHS) in 2008, which showed that:

- endemic trachoma existed in 60 per cent of very remote communities
- trachoma affected 7 per cent of children aged 5–15 years in very remote regions
- trachoma associated scarring and in-turned eyelashes (trichiasis) continues to affect older Indigenous people across Australia.

Antibiotic treatment and the promotion of facial hygiene practices can significantly reduce the prevalence of trachoma in Indigenous communities (Lansingh, Mukesh, Keeffe and Taylor 2010).

¹ Acute rheumatic fever can lead to chronic rheumatic heart diseases if left untreated.

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, 2008-09^{a, b}



^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.

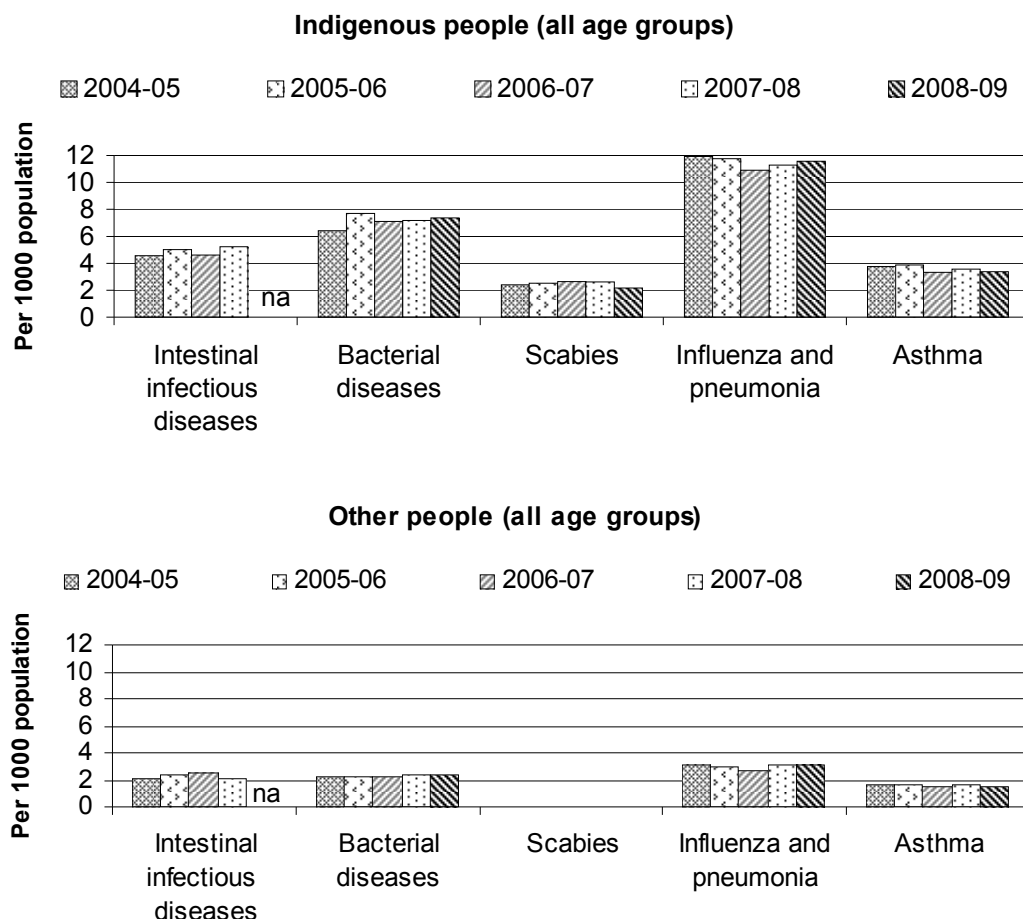
Source: AIHW (unpublished) National Hospital Morbidity Database; table 9A.2.15.

In 2008-09, for two vulnerable Indigenous age groups:

- Indigenous children aged 0–14 years had the highest rates of hospitalisation for asthma (5.65 per 1000 people) (figure 9.2.1)
- Indigenous people aged 65 years and over had the highest rates for intestinal infectious diseases (18.3 per 1000 people), bacterial diseases (18.9 per 1000 people) and influenza and pneumonia (28.4 per 1000 people) (figure 9.2.1)
- for intestinal infectious diseases associated with poor environmental health, both Indigenous children (0–14 years) and the Indigenous elderly (65 years and over) had higher hospitalisation rates than the other age groups (figure 9.2.1).

Both of these age groups for other people were also the most at risk of hospitalisation for diseases associated with poor environmental health (tables 9A.2.13–15).

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 Identification of Indigenous patients is incomplete and completeness varies across jurisdictions. ^b Directly age standardised using the 2001 Australian population. ^c 'Other people' includes 'non-Indigenous' and cases where Indigenous status was 'not stated'. ^d Data for 2008-09 for 'intestinal infectious diseases' are not presented here as data for persons aged 15 years and over are not comparable with previous years due to changes in coding standards (for more information see table 4A.8.15). **na** Not available.

Source: AIHW (unpublished) National Hospital Morbidity Database; tables 9A.2.3, 9A.2.6, 9A.2.9, 9A.2.12, 9A.2.15.

Between 2004-05 and 2008-09:

- hospitalisation rates for selected diseases associated with poor environmental health were much higher for Indigenous people than other people, with Indigenous people in 2008-09 hospitalised at 3.0 times the rate of other people for bacterial disease, 3.8 times the rate of other people for influenza and pneumonia and 2.2 times the rate of other people for asthma (figure 9.2.2)

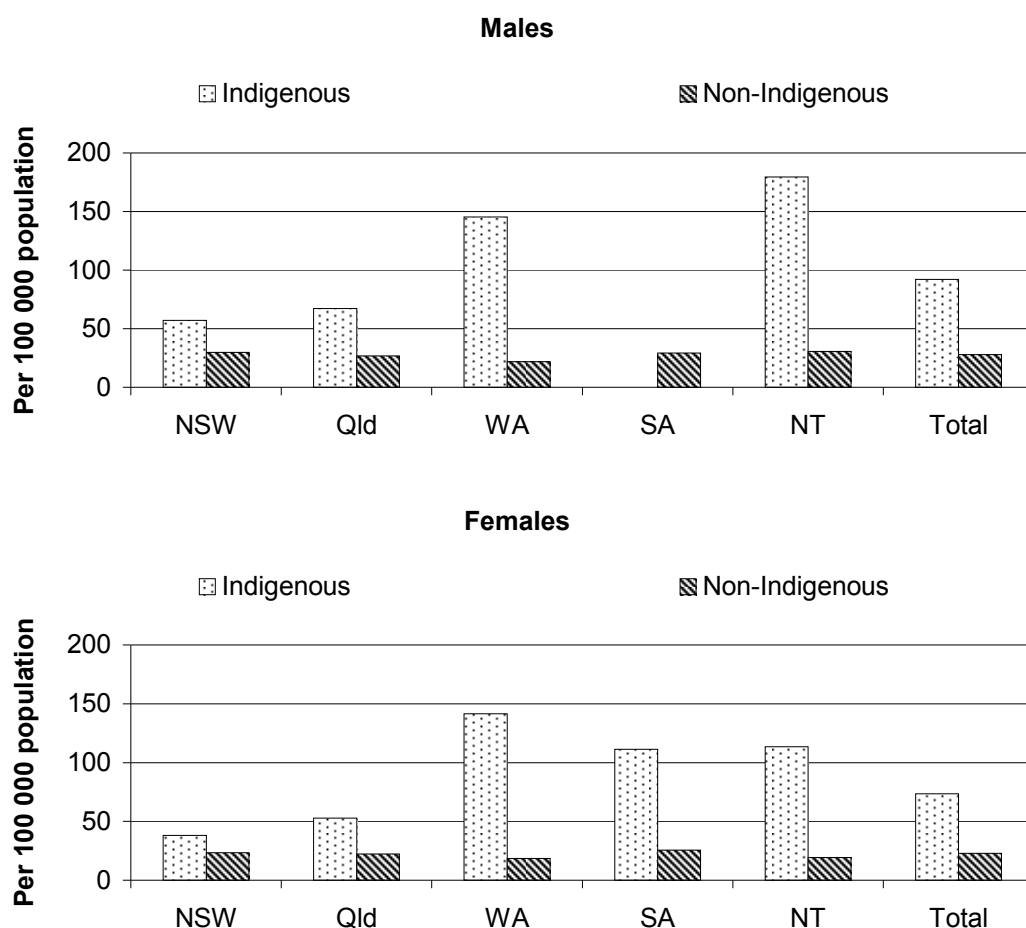
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- hospitalisation rates for these conditions remained fairly constant for both Indigenous and other people, with no clear trends (figure 9.2.2).

For two vulnerable Indigenous age groups, between 2004-05 and 2008-09:

- for Indigenous children aged 0–14 years, hospitalisation rates decreased for intestinal infectious diseases² and showed no change for scabies, acute upper respiratory infections and influenza and pneumonia (tables 9A.2.3, 9A.2.6, 9A.2.9, 9A.2.12, 9A.2.15)
- for Indigenous people aged 65 years and over, hospitalisation rates for bacterial diseases, scabies and acute upper respiratory infections remained steady and showed no clear trends over time. Hospitalisation rates for influenza and pneumonia fluctuated from year by year with no clear trend (tables 9A.2.3, 9A.2.6, 9A.2.9, 9A.2.12, 9A.2.15).

² Data for 2008-09 for adult (aged 15 years and over) hospitalisation for intestinal infectious diseases are not comparable with data for previous years due to changes in coding standards. Data for 2008-09 for ‘intestinal infectious diseases’ for children (aged less than 15 years) are comparable with previous years. For more information see tables 9A.2.13–15.

Figure 9.2.3 Death rates from diseases associated with poor environmental health, age standardised, 2005 to 2009
a, b, c, d, e, f, g



a ICD-10 codes for deaths from conditions associated with poor environmental health include; intestinal infectious diseases (A00–A09); tuberculosis (A15–A19); bacterial disease (A20–A49); trachoma (A71); acute hepatitis A (B15); acute hepatitis B (B16); scabies (B86); acute rheumatic fever (I00–I02); chronic rheumatic heart diseases (I05–I09); acute upper respiratory infections (J00–J06); influenza and pneumonia (J10–J18); asthma (J45) and lung disease due to external agents (J60–J70). **b** 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 taken in analysing these data, particularly in making comparisons across states and territories and between the Indigenous and non-Indigenous data. **c** Data are reported by jurisdiction of residence for NSW, Queensland, WA, SA and the NT only. These 5 states have been included due to there being evidence of sufficient levels of identification and sufficient numbers of deaths to support mortality analysis. Total includes data for NSW, Queensland, WA, SA and the NT only. **d** 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, series B, 2006 base). **e** Non-Indigenous estimates are available for census years only. In the intervening years, Indigenous population figures are derived from assumptions about past and future levels of fertility, mortality and migration. In the absence of non-Indigenous population figures for these years, it is possible to derive denominators for calculating non-Indigenous rates by subtracting the projected Indigenous population from the total population. Such figures have a degree of uncertainty and should be used with caution, particularly as the time from the base year of the projection series increases. **f** 'Non-Indigenous' does not include deaths with a 'not stated' Indigenous status. **g** 'Total' include deaths with 'not stated' Indigenous status.

Source: ABS (unpublished) *Causes of Death, Australia*, Cat. no. 3303.0; table 9A.2.18.

In NSW, Queensland, WA, SA and the NT, between 2005 and 2009:

- death rates for diseases associated with poor environmental health were much higher for Indigenous people than non-Indigenous people (figure 9.2.3)
- Indigenous male death rates for diseases associated with poor environmental health were highest in the NT (179.5 per 100 000) and lowest in NSW (57.2 per 100 000) (figure 9.2.3)
- Indigenous female death rates for diseases associated with poor environmental health were highest in WA (141.4 per 100 000) and lowest in NSW (38.2 per 100 000) (figure 9.2.3).

9.3 Access to clean water, functional sewerage and electricity services

Box 9.3.1 Key messages

- There were improvements in access to clean water and functioning sewerage and electricity services in discrete Indigenous communities between 2001 and 2006. In 2006, 182 discrete Indigenous communities (44 563 people) had experienced water supply interruptions; 142 (30 140 people) had experienced sewerage overflows or leakages; and 275 (67 849 people) had experienced an electricity interruption; in the previous 12 months (tables 9A.3.2, 9A.3.5 and 9A.3.7).
- In both 2002 and 2008, high proportions of Indigenous households had working facilities for washing people, working facilities for washing clothes and bedding, working facilities for preparing food, and working sewerage facilities; although there were small decreases in proportions over time (tables 9A.3.8–9).

This indicator complements the indicator on rates of diseases associated with poor environmental health (section 9.2). To prevent disease, a community needs a clean, 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, and running household appliances, such as washing machines. A reliable electricity supply is also critical for the delivery of education, business and many government services.

The primary measures for this indicator are:

- access to common/community water, sewerage and electricity services
- access to essential household facilities and housing of an appropriate standard.

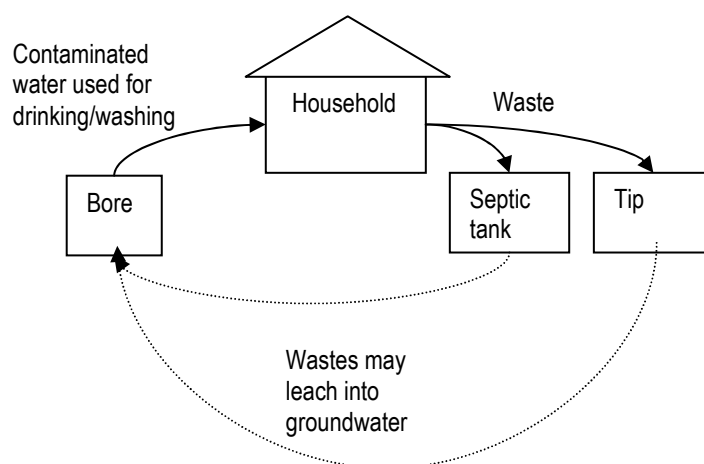
These two measures show access to water, sewerage and electricity services from two perspectives. The first is a top down community perspective, which shows the availability, reliability and quality of communal services and to which individual households can connect. The second perspective considers the availability of services and facilities within individual homes — water, sewerage or electricity services may be available in a community but are of little use if taps, toilets, drains or electrical wiring within the home do not work or are unsafe.

This section provides national data on access to water, sewerage and electricity services across all tenure types. More specific information on condition of housing and connection to water and sewerage services in Indigenous community housing is also published regularly (AIHW 2010; SCRGSP 2011)

Many Indigenous people live in urban areas where reliable drinking water, sewerage and electricity systems are available to 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. Electricity services are usually 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. Torzillo et al. (2008) and Lea and Pholeros (2010) have found that much of poor functioning of Indigenous social housing is due to lack of maintenance (65 per cent), and poor construction/installation and choice of materials (25 per cent), and only 10 per cent due to householder damage or misuse. The health hardware surveys both collected valuable data and directly improved outcomes for Indigenous people. Further details and examples of programs that are improving the quality of Indigenous housing are provided in box 9.3.2.

Box 9.3.2 'Things that work' — water, sewerage, and electricity services and quality of housing

The **Health Hardware survey** (NSW), funded by the Australian Government and the NSW Department of Health, involved a detailed assessment of 250 'health hardware' items in 4343 houses in 132 Indigenous communities between 1999 and 2006. After the initial assessment, limited cost repairs of non-functioning health hardware were undertaken. After six months, a repeat assessment was conducted in 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, the follow up assessment found these numbers rose to 62 per cent, 76 per cent, 54 per cent and 31 per cent, respectively (Torzillo et al 2008).

The **Housing for Health** program (NSW) is a health focused repair and maintenance program to improve safety and health in Aboriginal community housing. The program engages the community to assist in identifying required works, and prioritises all work using evidence-based criteria called healthy living practices.

Over 11 500 Aboriginal people living in 2714 houses in 72 Aboriginal communities have benefitted from the program, with over 72 000 items fixed to improve safety and health. This has led to measurable improvements in the condition of those houses, and an evaluation of the program in February 2010 found that the program population were 40 per cent less likely to be hospitalised with infectious diseases than the rest of the rural NSW Aboriginal population. The delivery of immediate and tangible improvements to housing has built a bridge of goodwill between communities and public health units, across which other public health programs have been run, including injury prevention; fire education; electrical safety education; health screening; community clean-ups; vermin reduction, water monitoring and service improvement (NSW Health 2010; Standen, Khalaj and Smith 2009, NSW Government unpublished).

Power and Water Corporation (PWC) (NT) through **Indigenous Essential Services Pty Ltd**, provides utility services in 72 growth towns and communities in the NT. Local Essential Service Operators (ESO) do the day to day operation and maintenance under contracts with shire councils, private contractors, pastoral companies, Indigenous incorporated bodies or community government councils. Nearly 40 per cent of the ESOs are Indigenous. PWC helps ESOs acquire skills and experience in power, water and sewerage infrastructure, operations and customer services through regular residential training courses, as well as on-site training and mentoring. PWC has also partnered with NT Correctional Services to deliver training in Alice Springs for inmates aspiring to work in remote communities as an ESO.

(Continued next page)

Box 9.3.2 (continued)

PWC has also developed structured water and energy conservations programs for selected high risk communities. In 2010, a program was delivered in Millingimbi, with the assistance of consultants who spoke the local language. The program found common ground between traditional and contemporary knowledge on water and participants designed a water conservation program together. PWC is developing an overall evaluation strategy for water and energy conservation programs.

Access to common/community water, sewerage and electricity services

This section contains data from the ABS Community Housing and Infrastructure Needs Survey (CHINS) 2001 and 2006 for access to clean water, functional sewerage and electricity services in discrete Indigenous communities and are the most recent data currently available (ABS 2007). ABS 2006 CHINS data on access to clean water and functional sewerage were included in the 2007 and 2009 reports. CHINS data are limited to discrete Indigenous communities and are not comparable with performance indicators commonly used by mainstream water, sewerage and electricity utilities to measure performance.

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)³ lived in 1187 discrete Indigenous communities.⁴ The majority (74.5 per cent or 69 253) of people in discrete Indigenous communities lived in very remote areas, 12.1 per cent (11 237) lived in remote areas, 11.0 (10 254) in outer regional areas and the remaining 2.4 per cent (2216) in inner regional areas and major cities (ABS 2007).

Source of drinking water supply

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

³ CHINS population data include both Indigenous and non-Indigenous people living in discrete Indigenous communities.

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.

small, discrete Indigenous communities. People who live outside areas serviced by utilities rely on other sources for their drinking water.

In Australia in 2008-09, 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 (ABS 2010).

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 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. In 2006:

- 182 discrete Indigenous communities reported having experienced drinking water interruptions in the previous 12 months (table 9A.3.2). The total reported usual population of discrete Indigenous communities reporting water supply interruptions was 44 563 (47.9 per cent of all people in discrete communities) (table 9A.3.2).
- 69 communities (with a reported usual population of 21 291 people) reported having experienced five or more water supply interruptions in the previous 12 months (table 9A.3.2).

Water quality

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 testing of drinking water are included here as an indicator of the quality of drinking water.

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’⁵ 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 nearby mainstream 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 reported usual 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 system⁶, 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 (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 reported usual 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

⁵ Administered communities are small communities where the provision of services is administered from a larger nearby community.

⁶ Organised sewerage systems include: town systems, community water borne systems, septic tanks and pit toilets.

communities with a population of fewer than 50 people reported that a sewerage system was not connected to all permanent dwellings (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.

In 2006:

- 142 communities, with a reported usual population of 30 140 people (32.4 per cent of all people in discrete communities) reported sewerage overflows or leakages in the previous 12 months (table 9A.3.5)
- 31 communities had experienced 10 or more overflows or leakages in the previous 12 months (table 9A.3.6).

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) 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).

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).

In 2006:

- 275 communities, with a total reported usual population of 67 849 people reported electricity supply interruptions (table 9A.3.7)
- 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).

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- 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).

Access to essential household facilities and housing of an appropriate standard

Access to household facilities

Housing provides a range of essential functions that can influence the health of household members. The ABS National Aboriginal and Torres Strait Islander Social Survey (NATSISS) 2002 and 2008 collected data on whether respondents' homes had: working facilities for washing people; working facilities for washing clothes and bedding; working facilities for storing/preparing food; and working sewerage facilities.

In 2008:

- most Indigenous households had working household facilities:
 - 97.8 per cent had working facilities for washing people
 - 93.4 per cent had working facilities for washing clothes and bedding
 - 93.1 per cent had working facilities for preparing food
 - 97.7 per cent had working sewerage facilities (table 9A.3.8)
- a lower proportion of households in very remote areas than other areas had working facilities for washing people and working facilities for washing clothes (table 9A.3.9)
- a significantly lower proportion of Indigenous households in very remote and remote areas had access to working facilities for preparing food than Indigenous households in non-remote areas (table 9A.3.9)
- a lower proportion of Indigenous households in very remote areas than other areas had working sewerage facilities (table 9A.3.9)
- access to household facilities was similar across states and territories, although the NT had a lower proportion of households with working facilities for preparing food (81.8 per cent) (table 9A.3.8).

Between 2002 and 2008:

- the proportion of Indigenous households with working facilities decreased:
 - from 99.0 to 97.8 per cent for working facilities for washing people;

-
- from 97.9 to 93.4 per cent for working facilities for washing clothes and bedding
 - from 95.0 to 93.1 per cent for working facilities for preparing food
 - from 98.8 to 97.7 per cent for working sewerage facilities (tables 9A.3.8–9).

Housing with major structural problems

The ABS NATSISS 2008 and the ABS Survey of Income and Housing 2007-08 collected data on households whose dwellings had major structural problems.

In 2008:

- a higher proportion of Indigenous (26.1 per cent) than non-Indigenous (16.1 per cent) households lived in dwellings with major structural problems (table 9A.3.10)
- a higher proportion of Indigenous households in total remote areas (remote plus very remote) (34.0 per cent) lived in dwellings with major structural problems than Indigenous households in non-remote areas (24.5 per cent) (table 9A.3.12)
- the proportion of Indigenous households living in dwellings with major structural problems was similar across most states and territories (table 9A.3.10)
- the most common major structural problems in dwellings occupied by Indigenous households were major cracks in walls/floors (12.0 per cent), walls or windows not straight (7.2 per cent), sinking or moving foundations (6.0 per cent), wood rot/termite damage and major plumbing problems (both 5.9 per cent) (table 9A.3.10).

Indigenous households living in housing of an acceptable standard

Reporting against the COAG National Affordable Housing Agreement (SCRGSP 2010) includes an indicator of Indigenous households living in housing of an acceptable standard. This indicator uses data from the ABS NATSISS 2008 and is a combination of the working facilities and structural problems measures mentioned above. It is defined as:

- a household with four working facilities (for washing people, for washing clothes/bedding, for storing/preparing food, and sewerage) and not more than two major structural problems.

In 2008:

- 83.2 per cent of Indigenous households were living in houses of an acceptable standard (tables 9A.3.14–15)

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- there was no significant difference in the proportion of Indigenous households living in houses of an acceptable standard in capital cities compared to other parts of states and territories (tables 9A.3.14–15)
 - a lower proportion of Indigenous households in the NT (71.8 per cent) lived in houses of an acceptable standard compared to Indigenous households in other states and territories (tables 9A.3.14–15).

Tables 9A.3.14–23 provide further data on the proportion of Indigenous households living in housing of an acceptable standard by State/Territory, number of bedrooms, household type, household size and income.

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 3 and appendix 4 for more information.

Access to clean water, functional sewerage and electricity supply

ABS Community Housing and Infrastructure Needs Survey (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.

New data on access to water, sewerage and electricity services and the condition of Indigenous housing are available infrequently. The CHINS was conducted in 1994, 2001 and 2006. The Australian Government Department of Families, Housing, Community Services and Indigenous Affairs (FaHCSIA) plans to work with the ABS and others on the development of a CHINS-like replacement survey for implementation in 2011-12 (FaHCSIA unpublished).

Data on the access to household facilities and condition of Indigenous housing are collected every six years in the ABS National Aboriginal and Torres Strait Islander Social Survey.

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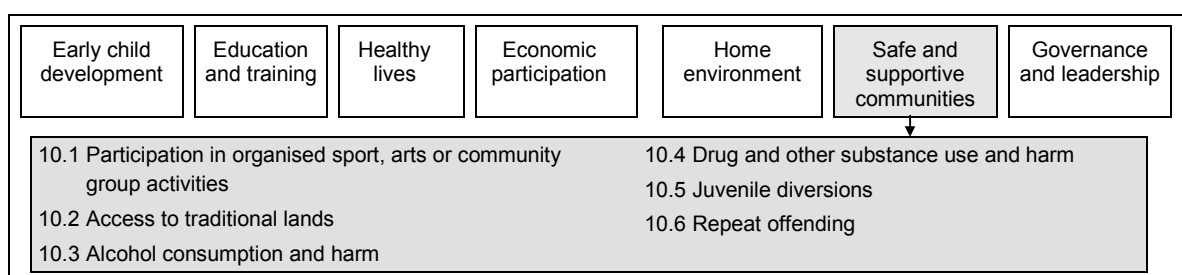
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10 Safe and supportive communities

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’). Outcomes in safe and supportive communities can positively influence several COAG targets and headline indicators:

- life expectancy (section 4.1)
- young child mortality (section 4.2)
- early childhood education (section 4.3)
- reading, writing and numeracy (section 4.4)
- year 12 attainment (section 4.5)
- employment (section 4.6)
- post secondary education (section 4.7).

Problems in families and communities 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 (employment status, Indigenous owned and controlled land and business, home ownership, income support) (chapter 8)
- home environment (overcrowding, access to water, sewerage and electricity) (chapter 9)
- 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 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. The primary measures for section 10.1 are participation in sport and recreational activities, and involvement in arts and cultural events and activities
- 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 primary measures for section 10.2 are the proportions of Indigenous people who recognise an area as their homelands, live on their homelands, or are allowed to visit their homelands
- 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, family breakdown, family violence, and crime. The primary measure for section 10.3 is alcohol consumption and associated risk levels. This section also includes data on alcohol related hospitalisations, deaths and crime

- 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. The primary measure for section 10.4 is the proportion of people aged 18 years or over who recently used illicit drugs. This section also includes data on drug related hospitalisations, deaths and crime
- 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. The primary measure for section 10.5 is juvenile diversions as a proportion of all juvenile offenders. The focus is on diversionary measures as alternatives to court proceedings; that is, diversion before contact with the formal criminal justice system
- 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). The primary measures for section 10.6 are adult repeat offending (the proportion of prisoners currently under sentence with known prior adult imprisonment) and juvenile repeat offending (independent cohort studies measuring longitudinal juvenile offending patterns).

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 Indigenous people aged 15 years and over, between 2002 and 2008:
 - there were increases in the proportions of people who participated in sporting events and recreational events (from 49.3 per cent to 57.4 per cent) (table 10A.1.13)
 - there was a decrease in the proportion of people who attended cultural events (from 68.1 to 62.9 per cent) (table 10A.1.13).
- For Indigenous people aged 15 years and over in 2008:
 - there were no significant differences between proportions of people in different remoteness areas participating in sporting activities (table 10A.1.12)
 - attendance at cultural events increased with remoteness; from 56 per cent in major cities to 84 per cent in very remote areas (table 10A.1.12).
- Nearly two thirds of Indigenous 3 to 24 year olds participated in at least one cultural activity in 2008, including fishing, hunting, gathering wild plants/berries, Aboriginal or Torres Strait Islander arts or crafts, performing Aboriginal or Torres Strait Islander music, dance or theatre and writing or telling Aboriginal or Torres Strait Islander stories (table 10A.1.14).

Involvement 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.

The primary measures for this section are:

- participation in sport and recreational activities
- involvement in arts and cultural events and activities.

Supplementary data for Indigenous children's and young people's participation in organised sport and selected art and cultural activities are also presented.

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 youth.

Participation in sport and recreational 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 and assist those with chronic diseases in their health programs (Fereday et al. 2009)
 - preparing infants for future learning
 - reducing the risk of clinically significant emotional or behavioural difficulties — the Western Australian Aboriginal Child Health Survey (WAACHS 2005) 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 (Street, James and Cutt 2007). 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. 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).

Community arts and cultural programs are beneficial in a variety of ways:

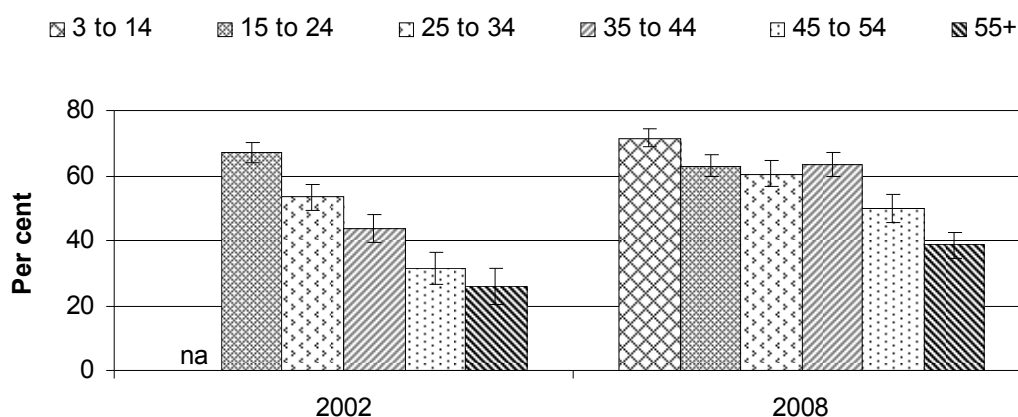
- Participation in community arts and cultural programs benefits individual and community wellbeing, and can create opportunities for employment, education and training (Barraket and Kaiser 2007; Dockery 2009; Mills and Brown 2004; Savage, Bailey and O’Connell 2003; VicHealth 2003).
- The ABS found that in 2008 in remote areas feeling happy was associated with participating in cultural activities, with 83 per cent of Indigenous people who were involved in art, craft, dance, music or story-telling reporting they felt happy some or most of the time (ABS 2010a).
- An evaluation of the Croc Festivals, Woodford Dreaming Festival, Garma Festival and the Melbourne Yalukit William Ngargee program found that Indigenous festivals developed local leadership skills, provided social, cultural and economic initiatives and were an opportunity for governments and other service providers to engage with communities (Phipps and Slater 2010).
- Community cultural development in rural and remote communities has been shown to be particularly helpful in strengthening the community (Mills and Brown 2004). Ungar et. al. (2007) found that culture is linked with resilience, with culture providing a framework for recognising risks and challenges and how to overcome them, and also providing meaning to a person living through adversity. Preliminary results from research conducted by the Victorian Aboriginal Child Care Agency showed that resilience was greater amongst families that had a strong sense of cultural identity (DEECD 2010).
- Mulligan et al. (2006) found that participation in community arts can give victims of discrimination a voice and encourage respect for cultural diversity.

Data in this section are from the ABS National Aboriginal and Torres Strait Islander Social Survey (NATSISS) 2002 and 2008 and the ABS Children’s Participation in Cultural and Leisure Activities Survey (CPiCLAS) 2009. The latter part of this section provides some examples of sports and community programs that have benefited Indigenous people and communities.

Data in this edition of the report are focused on the recreational, cultural and community aspects of sporting activity, rather than on the physical health benefits that may come with participating in sporting activity. Physical health benefits were the focus of this section of the 2007 and 2009 reports.

Participation in sport and recreational activities

Figure 10.1.1 **Participation in sport and recreational activities in the previous 12 months, Indigenous people aged 3 years and over, 2002 and 2008^{a, b, c}**



^a Children aged 3–14 years were not included in the ABS NATSISS 2002. Responses for children aged 3–14 years in 2008 were provided by an adult proxy. ^b In 2002 and 2008 some responses for 15–17 year olds were provided by an adult proxy. ^c Sports activities refers to participation in sporting and recreational activities including being a 'coach, instructor or teacher', 'referee, umpire or official', 'committee member or administrator', 'player or participant', or in 'other capacity'. **na** Not available.

Source: ABS NATSISS 2002; ABS NATSISS 2008; table 10A.1.13.

In the ABS NATSISS 2002 and 2008, Indigenous people were asked about their involvement in sporting activities in the previous 12 months. Between 2002 and 2008:

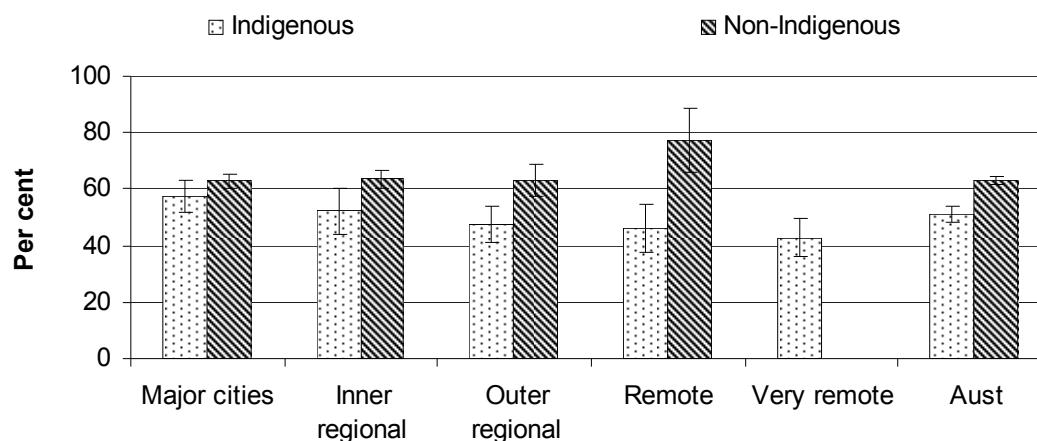
- there were significant increases for each age group in proportions of Indigenous people who participated in sport or recreational activities, except for the group aged 15 to 24 years for which rates were similar (figure 10.1.1).

In 2008, for people aged 15 years and over:

- there were no significant differences between proportions of Indigenous people in different remoteness areas participating in sporting activities (table 10A.1.12)
- across the states and territories, similar proportions of Indigenous people participated in sporting activities, except for the ACT where participation was significantly higher (table 10A.1.11).

Data for physical activities and organised sport for Indigenous and non-Indigenous children are available from the ABS NATSISS 2008 and the ABS (CPiCLAS) 2009.

Figure 10.1.2 Children's (aged 5 to 14 years) participation in organised sport in the last 12 months, 2008^a



^a Includes participation in sports organised through a school or a club, outside school hours.

Source: ABS (unpublished) NATSISS 2008; ABS CPiCLAS 2009; table 10A.1.2.

In 2008, for children aged 5 to 14 years:

- lower proportions of Indigenous than non-Indigenous children participated in organised sports in inner regional, outer regional and remote areas. In major cities Indigenous and non-Indigenous children were equally likely to have participated in organised sport in the previous 12 months (figure 10.1.2)
- a significantly lower proportion of Indigenous than non-Indigenous children spent time playing or training for organised sports outside school hours in the previous 12 months (51.0 per cent compared with 63.1 per cent) (figure 10.1.2)
- there were no significant differences between states and territories for Indigenous children's participation in organised sports in the previous 12 months (table 10A.1.1).

Whilst only half (51.0 per cent) of Indigenous children aged 5 to 14 years participated in organised sport in the previous 12 months, three quarters (72.7 per cent) were physically active for at least one hour every day in the previous week (table 10A.1.1). There were no equivalent data available for non-Indigenous children.

In 2008, the main factors stopping Indigenous children aged 5 to 14 years from playing organised sport were: don't want to play sport (33.3 per cent); not enough time (15.9 per cent); costs too much (14.9 per cent); and organised sport unavailable (13.1 per cent) (table 10A.1.1). There are no comparable data for non-Indigenous children.

The availability of sporting facilities is likely to affect participation in sport and recreation. Among Indigenous households in 2008:

- over 90 per cent of Indigenous households had access to outdoor playing fields and play areas. There were no statistically significant differences between rates of access in major cities, regional areas and remote areas
- in major cities and regional areas, around 80 per cent of Indigenous households had access to a swimming pool (82.0 per cent and 80.6 per cent, respectively). In remote areas, access to a swimming pool was less common (63.5 per cent)
- access to indoor sporting facilities was less common in remote areas (58.9 per cent) than in major cities (77.1 per cent) and regional areas (76.4 per cent) (ABS 2010b).

In discrete Indigenous communities, access to sporting facilities is less common than in other areas of Australia. The ABS Community Housing and Infrastructure Needs Survey (CHINS) 2006 found that 66.8 per cent of Indigenous communities with a population of 50 or more had some form of sporting facilities. The most common sporting facilities in these communities were outdoor courts for ballgames (such as basketball and netball) and sports grounds (ABS 2008).

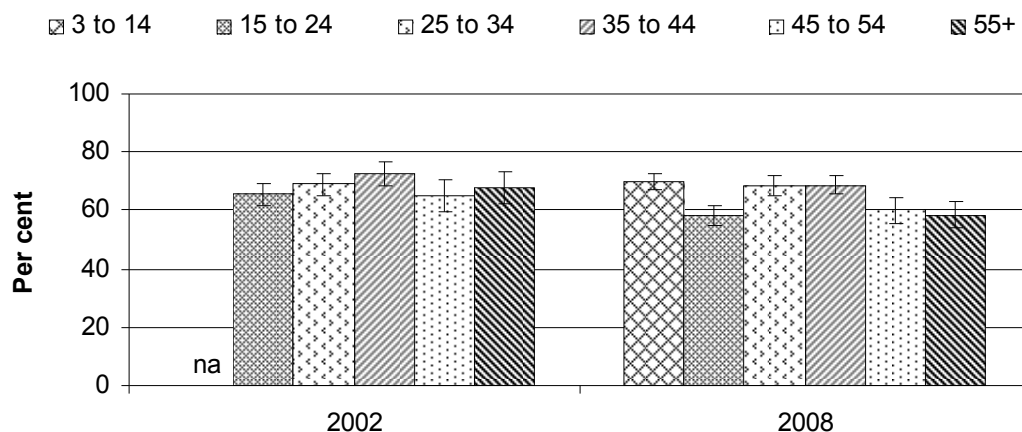
Involvement in arts and cultural events and activities

Involvement in arts and cultural events and activities may improve social cohesion and contribute to community wellbeing. Participation in Indigenous arts and cultural activities may include both:

- more traditional forms of Indigenous arts or cultural involvement
- 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.

The production of Indigenous art is also an important economic activity for many Indigenous people. There is further discussion of self employment in section 8.2.

Figure 10.1.3 Attendance in cultural events, in the previous 12 months, Indigenous people, 2002 and 2008^{a, b}



^a Cultural events refers to attendance at cultural events including 'funeral', 'ceremony', 'sports carnival', 'festival/carnival involving arts, craft, music or dance', 'involved with Aboriginal/Torres Strait Islander organisation'. In 2008 'funeral' also included 'sorry business' and 'sports carnival' specified 'excluding NAIDOC week activities' which were asked about separately. For comparability purposes, data for attendance at NAIDOC week activities have been included for 2008. See table 10A.1.13 for more information. ^b Children 3 to 14 year olds were not included in the ABS NATSISS 2002. **na** Not available.

Source: ABS (unpublished) NATSISS 2002 and 2008; table 10A.1.13.

In the ABS NATSISS 2002 and 2008, Indigenous people were asked about their attendance at cultural events in the 12 months prior to the survey. Between 2002 and 2008:

- there were significant decreases in the proportions of people aged 15 to 24 years and 55 years and over who had attended cultural events. The proportions of people in other age groups remained similar (figure 10.1.3).

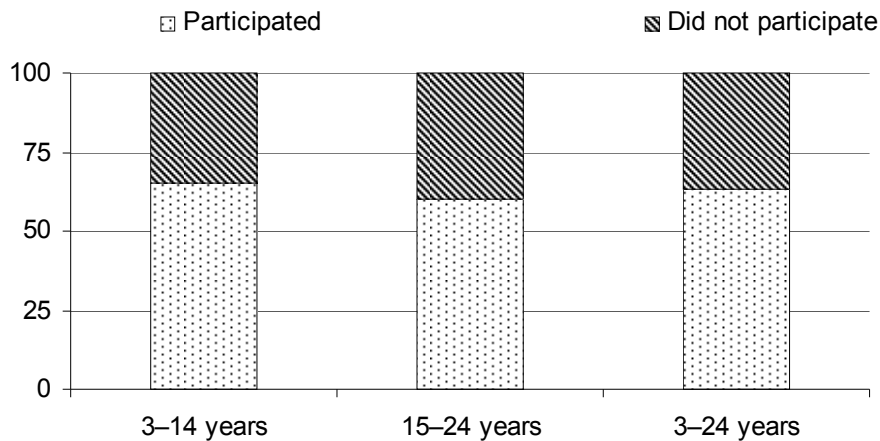
In 2008, amongst Indigenous people aged 15 years and over:

- attendance at cultural events varied greatly across states and territories, with Tasmania (31.5 per cent) significantly lower, and the NT (81.3 per cent) significantly higher, than other states and territories (table 10A.1.11)
- attendance at cultural events increased with remoteness; major cities (56.4 per cent); inner regional areas (52.5 per cent); outer regional (62.1 per cent); remote (75.0 per cent) and very remote areas (83.6 per cent) (table 10A.1.12).

Participation in cultural activities is an important means for passing on traditional knowledge and strengthening cultural identity for Indigenous children and young people. The ABS NATSISS 2008 included questions for children and young people about their participation in cultural activities, including activities such as fishing,

hunting, gathering wild plants/berries, Aboriginal or Torres Strait Islander arts or crafts, performing Aboriginal or Torres Strait Islander music, dance or theatre and writing or telling Aboriginal or Torres Strait Islander stories.

Figure 10.1.4 Indigenous children and young people aged 3–24 years, participation in cultural activities in the last 12 months, 2008^{a, b}



^a Cultural activities include: fished, hunted, gathered wild plants or berries, made Aboriginal or Torres Strait Islander arts and crafts, performed any Aboriginal or Torres Strait Islander music/dance/theatre and wrote or told any Aboriginal or Torres Strait Islander stories. ^b Responses for 3–14 year olds and some 15–17 year olds were provided by an adult proxy.

Source: DEECD 2010; ABS NATSISS 2008; table 10A.1.14.

- In 2008, around two-thirds (63.1 per cent) of Indigenous children and young people aged 3 to 24 years had participated in at least one of the selected cultural activities; 23.7 per cent had participated in Indigenous arts or crafts; 16.0 per cent had performed Indigenous music, dance or theatre; and 10.9 per cent had written or told Aboriginal stories (table 10A.1.14).

Case studies on participation in sports, arts and community group activities

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 activities

Sporting Chance (national) started in 2007 and delivers a range of sport and recreation based activities to engage Aboriginal and Torres Strait Islander students in their schooling and improve education, training and employment outcomes. Activities cover health and positive lifestyles, mentoring and leadership, and include exposure to community and sports role models. In 2010, 22 providers delivered 59 projects to around 10 000 primary and secondary school students. The average attendance rate for Sporting Chance Program school-based academy students was 77 per cent, compared with 72 per cent for the total Aboriginal and Torres Strait Islander student cohort in participating schools. Sixty one per cent of academy students were reported to be improving their school performance (DEEWR 2010; DEEWR unpublished).

Pintubi Anmatjere Warlpiri Media (PAW Media) (NT) began in Yuendumu in 1985 as Warlpiri Media Association — an Aboriginal television broadcaster. In 2001, the PAW Radio Network commenced producing local music, supporting local talent and conducting outside broadcasts from major local sporting events. PAW Media now coordinates community radio and television services across 14 communities in three local language areas (Pintubi, Anmatjere and Warlpiri) with an Indigenous population of over 3000 people. Funding and support are provided by the Australian Government.

PAW Media is a voice for remote Indigenous communities, providing an interface between the community and shire council, and NT and Australian Government agencies (Australian Government unpublished).

Papunya Tula Artists (PTA) (NT), 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 2010). PTA operates a gallery in Alice Springs and has funded the construction of a new arts centre and community initiatives including a remote renal dialysis unit and the construction of a swimming pool at the Kintore community. It also provides financial support for ceremonies, community funerals, sporting equipment and school excursions (Sweeney 2006).

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Box 10.1.2 (Continued)

The **Culture, Art and Heritage Project**, (Queensland) was developed by the Torres Strait Regional Authority to support the regional arts and crafts industry. It aims to increase the number of active Torres Strait Islander arts centres and artists and the profile of Torres Strait Islander and Aboriginal arts and culture. During 2009-10, 54 artists participated in the Annual Art Award; 67 artists took part in the Aiewal Exhibition and 90 arts and craftspeople were supported through the Gift Shop and Gallery. The Gab Titui Cultural Centre received 14 605 visitors between July 2009 and June 2010 and sold \$177 900 worth of art on behalf of Torres Strait Islander artists and craftspeople (Torres Strait Regional Authority 2010).

The **Galiwin'ku Gumurr Marthakal Healthy Lifestyle Festival** (NT), first held in 2001, is an annual event organised by the Galiwin'ku Community on Elcho Island, in northeast Arnhem Land. The festival is supported by the Australian Government. The festival aims to strengthen traditional understandings of health and healing through strong cultural frameworks and local ownership. It draws community-wide attendance, particularly by 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 previous years, high profile Indigenous bands performed and held workshops with local musicians, resulting in the development of songs advocating healthy lifestyles and the formation of a sustainable business model for musicians in isolated communities. In 2010, over 3000 people attended and 90 per cent of the planning and implementation was done by local community members. In 2010, the Galiwin'ku organisers assisted other remote Yolngu communities to develop experience in festival management, by inviting their community organisers, artists and performers to participate in a mentor program in the lead-up to the festival. Galiwin'ku mentors worked closely with members of the other communities to help them to initiate their own cultural and healthy lifestyle events (Australian Government unpublished).

The **Swim and Survive Program** (NSW) has included a targeted Indigenous component since 2007, with funding provided through the Australian Government's Indigenous Sport and Recreation Program. The program is designed to increase Indigenous involvement in physical activities, particularly Indigenous children's participation in swimming lessons. The program also encourages Indigenous community management of sport and physical recreation activities, by assisting local Indigenous adults to gain swimming teaching qualifications.

In 2006–07, prior to the targeted Indigenous component, 53 Indigenous children participated in the program, representing 2 per cent of total enrolments. Following the establishment of the targeted component, participation by Indigenous children increased significantly. In 2009-10 and 2010-11, over 400 Indigenous children participated, around 10 per cent of total enrolments (NSW government unpublished).

10.2 Access to traditional lands

Box 10.2.1 Key messages

- In 2008, among Indigenous people aged 15 years and over:
 - 25.3 per cent lived on their homelands and a further 44.6 per cent were allowed to visit their homelands (figure 10.2.1)
 - the proportion who lived on their homelands varied with remoteness, from 9.5 per cent in major cities to 51.0 per cent in very remote areas (figure 10.2.1)
 - 28.3 per cent did not recognise an area as their homelands or traditional country (figure 10.2.1).
- Between 1994 and 2008, for Indigenous people aged 15 years and over:
 - the proportion who lived on their homelands decreased from 29.2 per cent to 25.3 per cent
 - there was no statistically significant change over this period in the proportions who were allowed to visit their homelands or who did not recognise an area as their homelands (figure 10.2.2).

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 on the Urapuntja Health Service in Utopia in the NT, where outstation living may have contributed to better than expected health outcomes through physical activity and diet, limited access to alcohol, and connectedness to culture, family and land, and opportunities for self-determination, as well as community-controlled social and health care.

The primary measures for this indicator are the proportions of Indigenous people who recognise an area as their homelands, live on their homelands, or are allowed to visit their homelands.

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). Indigenous people may also have rights over lands under heritage and other legislation.

Box 10.2.2 contains examples of things that are working in improving access to traditional lands.

Box 10.2.2 ‘Things that work’ — access to traditional lands

The **Indigenous Heritage Program** (national) supports the identification, conservation and promotion (where appropriate) of Indigenous heritage across Australia. A 2009 audit found that the program was supported by well established and sound policies and procedures; was achieving its stated outcomes; and in was generating broad social and economic benefits for Indigenous communities (OEA 2009).

The Jawoyn Association Aboriginal Corporation project within the program provides an example of the program’s outcomes, which are often broader than the immediate project goals:

A large number of Jawoyn people who have participated in the previous Rock Art Projects have completely stopped drinking alcohol. A similar number stopped drinking alcohol to excess.... Children and adults are always requesting to take part in recording Rock Art and the projects appear to have encouraged much more interaction between the Elders and children, with the children requesting more cultural and traditional information from the adults. [There is] ...a greater sense of harmony in the communities — possibly brought about by a new found pride in their culture and history (Department of Sustainability, Environment, Water, Population and Communities unpublished).

The **Working on Country program (national)** provides funding to enable Indigenous people to work and spend time on lands where they have a traditional or historical connection. As at January 2011, 625 rangers were employed across regional and remote Australia to carry out environmental, cultural and heritage activities, such as visiting cultural sites, working with elders to record traditional ecological knowledge, fire management, biodiversity survey and management, managing weeds and controlling feral animals.

Some projects are undertaken on Indigenous-owned lands, with Indigenous rangers living and working on their homelands. In other cases, Indigenous groups have formed partnerships to gain access to land owned or managed by others. For example, in the Yorta Yorta Indigenous Ranger Program, Indigenous rangers do environmental and cultural heritage work across three State Government managed national parks and protected areas. This enables Yorta Yorta people to access and manage their traditional lands, and protect their cultural heritage through meaningful employment.

(Continued next page)

Box 10.2.2 (Continued)

The rangers' regular trips out on country with elders and young people are an important way of sharing knowledge and fulfilling cultural responsibilities. Rangers are strengthening their leadership skills as well as natural resource management knowledge. They are respected in their community as workers with strong culture and as young leaders and mentors, and have been approached by schools to be involved in the school curriculum (Department of Sustainability, Environment, Water, Population and Communities unpublished).

The Parks and Wildlife Service (Tasmania), with assistance from the Australian Government's Working on Country program, has employed five Aboriginal trainee rangers on a four-year traineeship. Trainees are assigned to a number of field and office locations during the four years and, in addition to the responsibilities of mainstream reserve management, also undertake a number of special projects as a group, working with the Aboriginal community on Aboriginal land. Each trainee is supported by a mentor in the field and two training officers in the Hobart Office. The trainees are expected to attain a Certificate IV or Diploma in Conservation Land Management, and on completion of the program will become permanent rangers.

The program has helped to develop positive relationships between Aboriginal communities and the Parks and Wildlife Service, has built the skills of participants to undertake professional land management work and provides long term employment for young Aboriginal people (Tasmanian Government unpublished).

Co-management of parks is a key aspiration of many native title claimant groups. **The Department of Environment and Natural Resources** (SA) is working closely with Aboriginal people to identify opportunities for co-operative arrangements. Provisions have been included in the *National Parks and Wildlife Act 1972* to create framework for the co-operative management of national and conservation parks a co-management board. The co-management framework also provides for the establishment of an advisory structure.

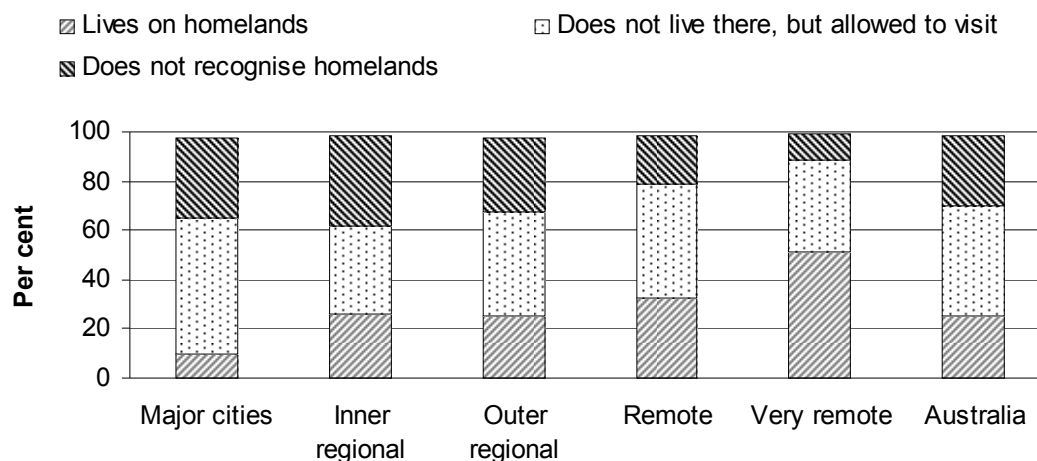
Three of the current five co-management agreements in place are linked to successful negotiations in resolving native title claims. These are over the Vulkathunha-Gammon Ranges National Park with the Adnyamathanha Traditional Lands Association; Witjira National Park with the Irwanyere Aboriginal Corporation and the Coongie National Park with the Yandruwandha-Yawarrawarrka Traditional Land Owners. There are also co-management agreements for the Mamungari (formally Unnamed) Conservation Park with Maralinga Tjarutja and Pila Nguru and the Ngaut Ngaut Conservation Park with the Mannum Aboriginal Corporation. Co-management negotiations are advanced over a number of other reserves. The co-management model in SA is a partnership with Aboriginal people with shared goals with a synergistic and inclusive approach combining traditional knowledge with contemporary park management. Traditional knowledge and land management practices can inform and improve contemporary approaches to science and park management and enhance visitor experiences (SA Government unpublished).

Data for this indicator come from the ABS National Aboriginal and Torres Strait Islander Survey 1994 (NATSIS 1994), and the National Aboriginal and Torres Strait Islander Social Survey 2002 (NATSISS 2002) and NATSISS 2008. The data show whether Indigenous people live on, 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 rights of Indigenous people to control or make decisions about land are discussed in section 8.2.

The data 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 own homelands or traditional country. Since European colonisation, 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 to identify their traditional country.

Some Indigenous people living in cities and towns with a majority of non-Indigenous people may report that 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.

Figure 10.2.1 Proportion of Indigenous people aged 15 years and over living on their homelands/traditional country or allowed to visit, by remoteness, 2008^a



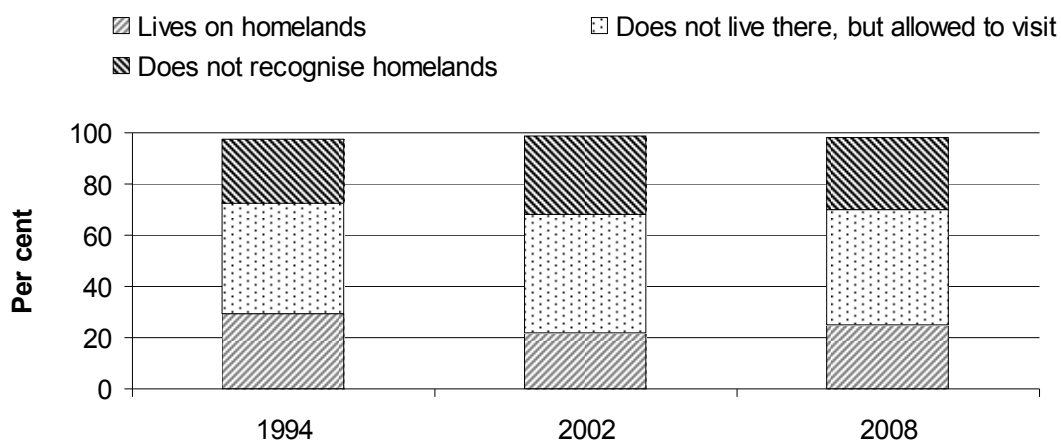
^a Survey respondents were asked about their 'homelands or traditional country', which were not defined in the questionnaire. Indigenous people's own understanding of what constitutes their homelands or traditional country may vary across different places.

Source: ABS (unpublished) NATSISS 2008; table 10A.2.1.

In 2008, among Indigenous people aged 15 years and over:

- 28.3 per cent did not recognise an area as their homelands or traditional country (figure 10.2.1)
- the proportion who did not recognise an area as their homelands or traditional country varied from 33.1 per cent in non-remote areas to 13.9 per cent in remote areas (figure 10.2.1)
- 25.3 per cent lived on their homelands and a further 44.6 per cent were allowed to visit their homelands (figure 10.2.1)
- the proportion who lived on their homelands varied with remoteness, from 9.5 per cent in major cities to 51.0 per cent in very remote areas (figure 10.2.1)
- 71.7 per cent recognised an area as their homelands or traditional country and only a very small proportion (0.6 per cent) were not allowed to visit their homelands (table 10A.2.1).

Figure 10.2.2 **Proportion of Indigenous people aged 15 years and over living on their homelands/traditional country or allowed to visit^a**



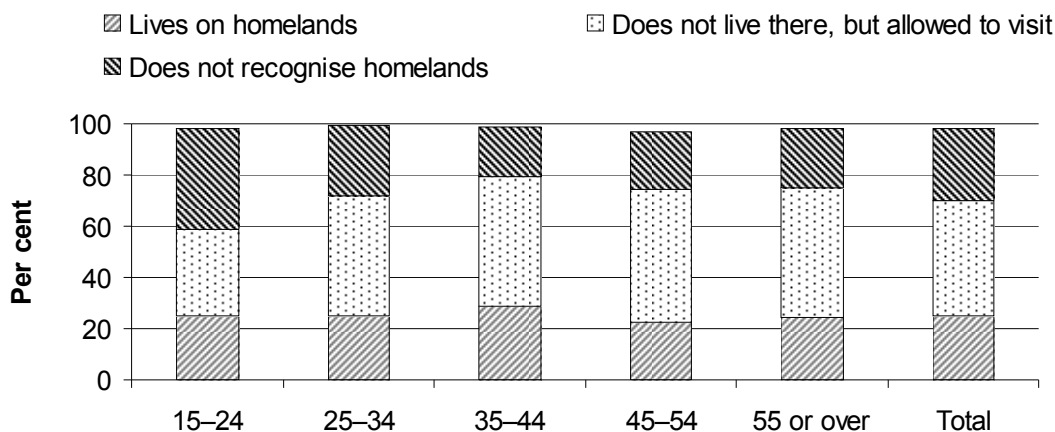
^a Survey respondents were asked about their 'homelands or traditional country', which were not defined in the questionnaire. Indigenous people's own understanding of what constitutes their homelands or traditional country may vary across different places.

Source: ABS (unpublished) NATSISS 2008; table 10A.2.2.

For Indigenous people aged 15 years and over:

- the proportion who lived on their homelands decreased from 29.2 per cent in 1994, to 25.3 per cent in 2008. The proportion who were allowed to visit their homelands did not change significantly between 1994 and 2008 (figure 10.2.2)
- there was no statistically significant change in the proportion who did not recognise an area as their homelands (figure 10.2.2).

Figure 10.2.3 Proportion of Indigenous people living on their homelands/traditional country or allowed to visit, by age, 2008^a



^a Survey respondents were asked about their 'homelands or traditional country', which were not defined in the questionnaire. Indigenous people's own understanding of what constitutes their homelands or traditional country may vary across different places.

Source: ABS (unpublished) NATSISS 2008; table 10A.2.3.

For Indigenous people in 2008:

- those aged from 15 to 24 years (39.4 per cent) had lower rates of recognising an area as their homelands than those in older age groups (figure 10.2.3).

Further information on identification with clan, tribal or language group, recognition of homelands, and frequency and duration of visits to homelands is included in tables 10A.2.1 to 10A.2.3.

10.3 Alcohol consumption and harm

Box 10.3.1 Key messages

- Between 2002 and 2008, for Indigenous people aged 15 years and over:
 - the proportion who reported that they did not drink or had never drunk alcohol decreased from 30.6 to 27.0 per cent (table 10A.3.3)
 - there was no change in the proportions who reported drinking at chronic risky/high risk levels (17.2 per cent) or binge drinking in the two weeks prior to interview (36.8 per cent) (figure 10.3.1 and table 10A.3.8).
- A 2004-05 survey found that a lower proportion of Indigenous than non-Indigenous adults had consumed alcohol in the week prior to interview (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 (SCRGSP 2009).
- Indigenous people were hospitalised for alcohol related conditions at rates between 1.5 and 7.9 times those of other people in 2008-09 (table 10.3.1).
- 71.4 per cent of Indigenous homicides over the period 1999-2000 to 2008-09 involved both the victim and offender having consumed alcohol at the time of the offence, compared with 24.7 per cent of non-Indigenous homicides (figure 10.3.2).

Alcohol consumption is a performance measure for COAG's target of 'closing the life expectancy gap (between Indigenous and non-Indigenous Australians) within a generation' (COAG 2009). The primary measure for this indicator is alcohol consumption and associated risk levels. This section also includes data on alcohol related hospitalisations, deaths and crime.

Alcohol consumption has health and social consequences through intoxication (drunkenness), alcohol dependence and other long term health effects (NHMRC 2009; Whetton et al. 2009). Years of alcohol misuse can lead to chronic diseases and increases the risk of heart, stroke and vascular diseases, liver cirrhosis, several types of cancers (AIHW 2005) and alcohol-related brain injury. It also contributes to disability and death indirectly through associated accidents, violence, suicide and homicide (Calabria et al. 2010).

Alcohol misuse also affects 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 (Anderson and Wild 2007; Laslett et. al 2010; WHO 2000, 2004). 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 strong association between alcohol consumption and violence. High-risk alcohol consumption had a stronger association with violent behaviour than any other variable examined, including those measuring social disorganisation and social deprivation.¹ Their study provides support to those who, like Pearson (2001, 2006) have argued that violence is a result of alcohol and substance misuse and not a symptom of disadvantage. However, other research has found that socioeconomic status is a significant determinant of health risk factors such as smoking, alcohol misuse, physical inactivity and excess weight (Glover, Hetzel and Tennant 2004; Gray and Wilkes 2010).

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 Following extensive consultations with Indigenous people in the NT during 2009 there was strong consensus that the restrictions should continue (FaHCSIA 2009) but individual communities may ask to have local restrictions tailored to their circumstances, based on agreed alcohol management plans. A number of communities in the NT have already successfully negotiated and implemented tailored alcohol management plans (FaHCSIA 2010).

There is some evidence that supply reduction, demand reduction and harm minimisation interventions may be effective in addressing the harm caused by excessive alcohol consumption (Douglas 1998; Gray et al. 2000; Gray and Wilkes 2010). However, Hudson (2011) argues that, to be effective, alcohol restrictions should go hand in hand with initiatives that address the underlying causes of the problem, such as poor education and lack of employment. Box 10.3.2 provides examples of some successful interventions.

¹ Even in the presence of controls for financial stress, unemployment, family breakdown and geographic mobility.

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

Several governments and Indigenous communities have introduced alcohol reforms.

- In **Cape York** (Queensland) the development of Alcohol Management Plans in 2002 and 2003 contributed to reduced aero-medical retrieval rates for serious injury (Margolis, Ypinazar and Muller 2008) and a decline in people convicted of carrying alcohol in breach of the restrictions (Office for Aboriginal and Torres Strait Islander Partnerships 2009).
- In **Fitzroy Crossing** (WA) alcohol restrictions were implemented in October 2007. The one year evaluation indicated that liquor restrictions, in combination with support services, brought about immediate improvements in the number of people seeking treatment for alcohol related injuries and a reduction in alcohol related violence (Kinnane et al. 2009). The two year evaluation indicated that the effects of the initial ban had peaked and that enforcement issues and the availability of alcohol in Broome had seen the reintroduction of alcohol into the community (Kinnane et al. 2010).
- The **Groote Eylandt Liquor Management System** (NT) was initiated by leaders from the Aboriginal communities in June 2005. The system has received widespread support and is seen as making a positive contribution to managing community public order issues (Conigrave, Proude and d’Abbs 2007).
- The town of **Katherine** (NT) introduced an Alcohol Management Plan in 2008. An evaluation found a decline in recorded assaults, disturbances and anti-social behaviour in the first six months of the plan, but that reductions in alcohol related harms have not been sustained (d’Abbs et al. 2010a).
- The Tennant Creek (NT) Alcohol Management Plan took effect from August 2008. An evaluation found a decline in community public orders issues under the plan, but no identifiable decrease in alcohol sales or hospitalisations for alcohol-related disorders or assaults (d’Abbs et al. 2010b).

Patterns of alcohol consumption

This section examines patterns of alcohol consumption. There are two broad alcohol consumption risk levels:

- chronic alcohol consumption (or long-term risk, based on the amount of alcohol consumed on a usual drinking day, as well as the frequency of consumption, in the previous 12 months)
- binge drinking (or short-term risk, based on the largest quantity of alcohol consumed on a single day during the fortnight prior to interview).

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 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) outlined alcohol consumption risk levels separately for men and women (see table 10A.3.1). The data presented here are based on the NHMRC 2001 guidelines, to allow for comparisons over time (between this and previous editions of the report).

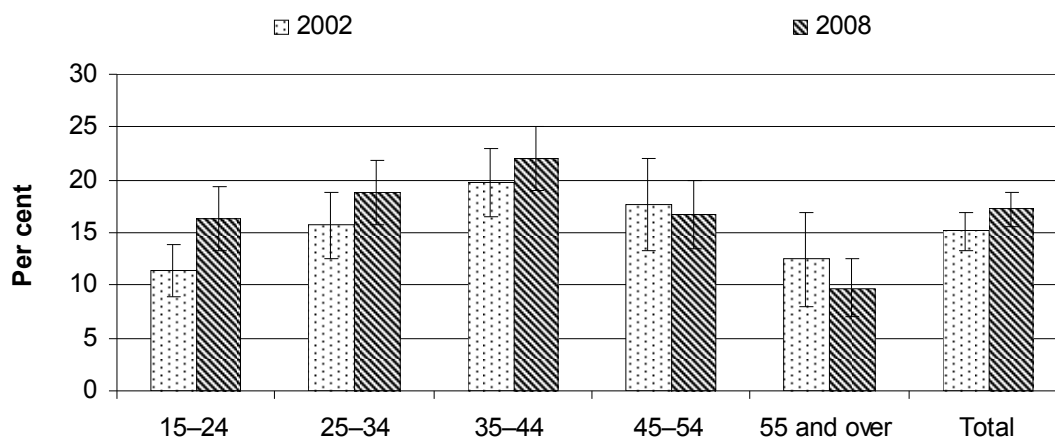
For reporting against the National Indigenous Reform Agreement (NIRA), the Steering Committee uses data derived from the ABS 2004-05 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) for Indigenous people and the National Health Survey 2004-05 (NHS) for non-Indigenous people. This maintains consistency between reporting for the NIRA and other COAG National Agreements.

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 (SCRGSP 2009).

More recent non-Indigenous comparisons are unavailable. However, the National Drug Strategy Household Survey (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.3.2). Care should be taken in interpreting these data due to the small size of the Indigenous sample (fewer than 500 respondents) in the NDSHS. According to the 2007 NDSHS, 27.4 per cent of Indigenous people reported ‘binge’ drinking 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.3.2).

The ABS National Aboriginal and Torres Strait Islander Social Survey 2008 (NATSISS 2008) provides the most recent data on alcohol consumption by Indigenous people but data on alcohol consumption by non-Indigenous people are not available for comparison.

Figure 10.3.1 **Chronic drinking at risky/high risk levels for Indigenous people aged 15 years or over, 2002 and 2008^{a, b, c, d}**



^a Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information). ^b Chronic drinking or long-term risky drinking was collected for Indigenous persons aged 15 years and over, based on the self-reported amount of alcohol consumed on a usual drinking day, as well as the frequency of consumption in the 12 months prior to interview.

Source: ABS (unpublished) NATSISS 2002 and 2008; table 10A.3.7.

In 2008, over one quarter (27.0 per cent) of Indigenous people aged 15 years and over reported that they had abstained from drinking alcohol in the previous 12 months. This was slightly lower than the proportion in 2002 (30.6 per cent) (table 10A.3.3). People in remote area (40.7 per cent) were more likely than people in non-remote area (22.4 per cent) to report abstaining from drinking (table 10A.3.5).

Looking at chronic alcohol consumption in 2008:

- 17.2 per cent of Indigenous people aged 15 years and over reported drinking at chronic risky/high risk levels (figure 10.3.1) (table 10A.3.3)
- Indigenous males aged 15 years and over (20.3 per cent) were more likely than Indigenous females (14.3 per cent) to report drinking at chronic risky/high risk levels (table 10A.3.4)
- rates of drinking at chronic risky/high risk levels were similar for Indigenous people living in remote (16.9 per cent) and non-remote areas (17.3 per cent) (table 10A.3.5).

The only statistically significant changes in chronic risky alcohol consumption by Indigenous people between 2002 and 2008 were for:

-
- outer regional areas (an increase from 12.7 per cent to 19.8 per cent) and nationally (from 15.1 per cent to 17.2 per cent) (table 10A.3.5)
 - Indigenous 15–24 year olds (an increase from 11.4 per cent to 16.4 per cent) (figure 10.3.1) (table 10A.3.7).

Looking at binge drinking:

- 36.8 per cent of Indigenous people aged 15 years and over reported binge drinking in the two weeks prior to interview in 2008, similar to the rate reported in 2002 (34.9 per cent) (table 10A.3.8)
- in 2008, rates of binge drinking were higher for males than females, both nationally and for all remoteness areas (table 10A.3.9).
- 46.1 per cent of males reported binge drinking compared to 28.2 per cent of women in 2008, representing no statistically significant change from 2002 (table 10A.3.8)

More data on alcohol consumption and associated risk levels for 2002 and 2008 are included in tables 10A.3.3–10A.3.9.

Alcohol related hospitalisations and deaths

This section examines alcohol related harms, including alcohol related hospitalisations and deaths. Both binge drinking and chronic alcohol consumption can cause harm, including illnesses, injuries and deaths. Binge drinking can cause injuries or deaths from associated violence, falls, road crashes and drowning. Chronic alcohol consumption 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) 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 available data on fetal alcohol syndrome rates.

Data on hospitalisations related to alcohol use 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.

National hospitalisation data are available for NSW, Victoria, Queensland, WA, SA and public hospitals in the NT. Data for Tasmania and ACT are not included in national totals. Tables 10A.3.12–10A.3.16 include data by State and Territory (including Tasmania and the ACT separately with caveats). Overall, the quality of Indigenous identification in hospital separations data has improved in recent years, but still varies substantially between jurisdictions. Data are available for remoteness areas across states and territories in aggregate, with Indigenous identification highest in remote and very remote areas (AIHW 2010). Data for other people comprise hospitalisations of non-Indigenous people and those for whom Indigenous status was not stated.

Table 10.3.1 Hospitalisations related to alcohol use, NSW, Victoria, Queensland, WA, SA, and public hospitals in the NT, 2008-09 (per 1000 population)^{a, b, c, d, e}

	<i>Males</i>	<i>Females</i>	<i>All persons</i>
<i>Indigenous</i>			
Mental/behavioural disorders (F10)	10.8	5.6	8.1
Acute intoxication (F10.0)	5.0	3.5	4.2
Harmful use (F10.1)	0.6	0.3	0.5
Dependence syndrome (F10.2)	2.4	1.1	1.8
Other (F10.3–F10.9)	2.7	0.7	1.7
Alcoholic liver disease (K70)	1.7	1.0	1.3
Other inflammatory liver disease (K75)	0.1	0.1	0.1
Toxic effect of alcohol (T51)	0.1	0.1	0.1
Accidental poisoning by and exposure to alcohol (X45)	0.1	0.1	0.1
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>Other</i>			
Mental/behavioural disorders (F10)	2.3	1.6	2.0
Acute intoxication (F10.0)	0.7	0.4	0.5
Harmful use (F10.1)	0.1	0.1	0.1
Dependence syndrome (F10.2)	1.3	1.1	1.2
Other (F10.3–F10.9)	0.3	0.1	0.2
Alcoholic liver disease (K70)	0.3	0.1	0.2
Other inflammatory liver disease (K75)	–	0.1	0.1
Toxic effect of alcohol (T51)	–	–	–
Accidental poisoning by and exposure to alcohol (X45)	0.1	–	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)	0.1	0.1	0.1

^a The hospitalisation 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). Data are from public and most private hospitals. Data exclude private hospitals in the NT. ^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). ICD-10-AM codes F10, K70, K75 and T51 are based on principal diagnosis. External cause codes X45, X65 and Y15 are based on any external cause reported. ^d Data are based on State of usual residence. ^e 'Other' includes hospitalisations of non-Indigenous people and those for whom Indigenous status was not stated. – Nil or rounded to zero.

Source: AIHW (unpublished) National Hospital Morbidity Database; table 10A.3.10.

In 2008-09, for NSW, Victoria, Queensland, WA, SA and public hospitals in the NT:

- Indigenous people were hospitalised for alcohol related conditions at rates between 1.5 and 7.9 times those of other people (table 10.3.1)
- the most common type of mental and behavioural disorder due to alcohol use for Indigenous people was acute intoxication (4.2 per 1000), followed by dependence syndrome (1.8 per 1000) (table 10.3.1)
- the hospitalisation rate for acute intoxication for Indigenous people was 5.4 per 1000 in remote areas and 3.9 per 1000 in major cities (table 10A.3.11).

Over the period 2004-05 to 2008-09, hospitalisation rates for all alcohol related conditions for both Indigenous and other people did not change significantly (table 10A.3.10).

Table 10.3.2 Alcohol related death rates, age standardised, 2005–2009^{a, b, c, d}

	Indigenous ^e						Non-Indigenous ^f					
	NSW	Qld	WA	SA	NT	Total ^g	NSW	Qld	WA	SA	NT	Total ^g
Males	41.1	34.2	62.4	64.6	72.4	47.9	7.6	7.0	6.6	6.8	8.7	7.2
Females	15.6	15.6	36.3	np	41.3	22.8	2.0	2.0	2.2	1.9	np	2.1
Persons	27.7	24.3	48.8	42.3	55.5	34.6	4.8	4.5	4.4	4.3	6.9	4.6

^a Causes of death attributable to alcohol are based on codes of the International Classification of Diseases, 10th Revision (ICD-10) ^b Indirectly age-standardised death rate per 100 000 population. ^c Denominators used in the calculation of rates for the Indigenous population are from ABS *Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians*, Cat. no. 3238.0 (series B, 2006 base). Non-Indigenous estimates are available for Census years only. In the intervening years, Indigenous population figures are derived from assumptions about past and future levels of fertility, mortality and migration. In the absence of non-Indigenous population figures for these years, it is possible to derive denominators for calculating non-Indigenous rates by subtracting the Indigenous population from the total population. Such figures have a degree of uncertainty and should be used with caution, particularly as the time from the base year of the projection series increases. ^d Some data are not published (np) due to small numbers of deaths. ^e 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 Indigenous and non-Indigenous rates. ^f Non-Indigenous includes deaths with a 'Not stated' Indigenous status. ^g Data are for NSW, Queensland, WA, SA, and the NT combined, based on State or Territory of usual residence. Victoria, Tasmania and the ACT are excluded due to small numbers of registered Indigenous deaths. **np** Not published.

Source: ABS (unpublished) *Causes of Death, Australia*, Cat. no. 3303.0; table 10A.3.17.

In 2005–2009, for those jurisdictions for which alcohol related deaths data are available (NSW, Queensland, WA, SA and the NT):

- overall the rate for Indigenous people was 7.5 times the rate for non-Indigenous people. Rates were higher for Indigenous people than non-Indigenous in NSW, Queensland, WA, SA and the NT.

-
- rates for Indigenous and non-Indigenous males were higher than rates for Indigenous and non-Indigenous females (table 10.3.2).

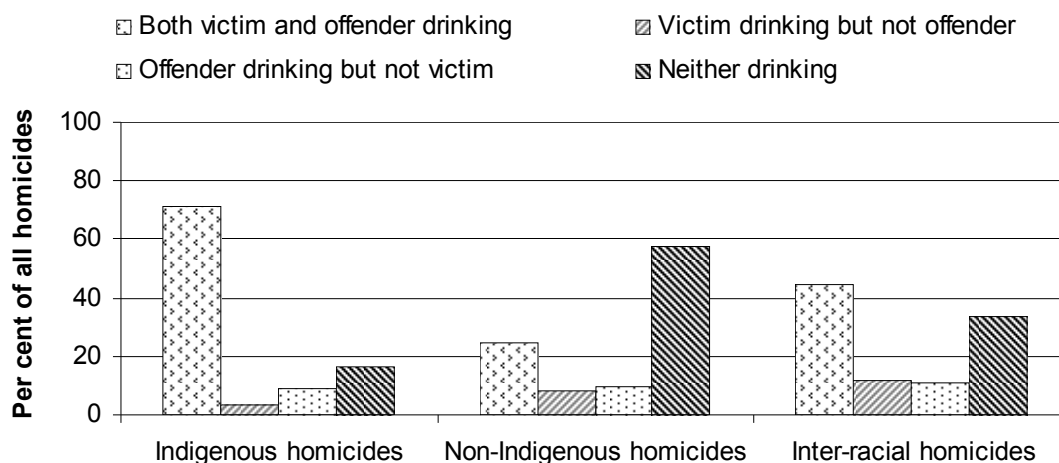
Alcohol influenced crime

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).

A recent report by the National Indigenous Drug and Alcohol Committee (2009) highlighted the relationship between alcohol, crime and injury for Australian Indigenous people. Research by Putt, Payne and Milner (2005) found that alcohol is a well known factor in offending among Indigenous Australians and 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 2008-09^{a, b, c, d, e}**



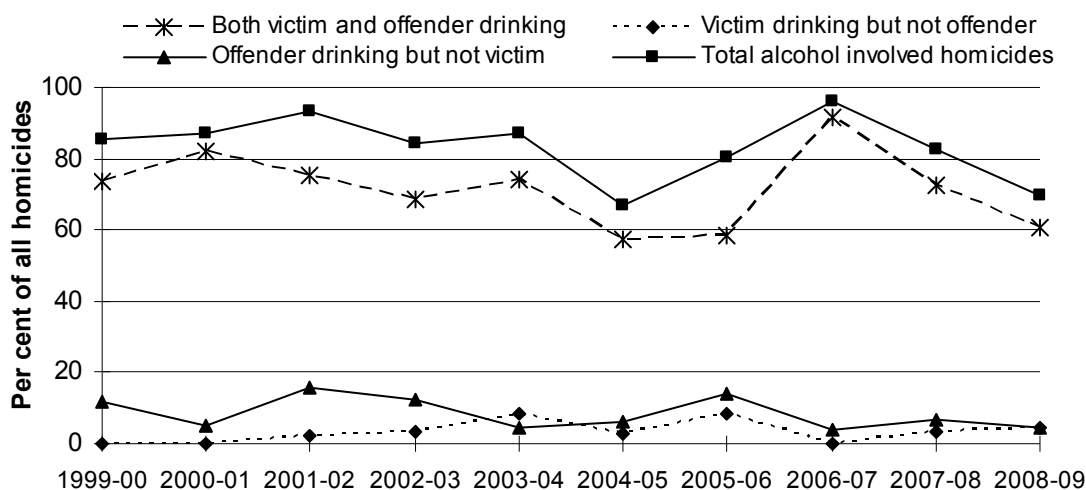
^a Homicide includes murder and manslaughter, but excludes driving causing death. Data reflect information available at the time of reporting and are subject to change. ^b Excludes data where Indigenous status of victim or offender, or alcohol involvement is unknown. In the case of multiple offenders, data include the primary victim and offender only (based on AIC NHMP incident classification). ^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 [computer file] (unpublished); table 10A.3.18.

Among the total recorded homicides over the period from 1999-2000 to 2008-09:

- 71.4 per cent of Indigenous homicides involved both the victim and offender having consumed alcohol at the time of the offence, compared with 24.7 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 similar for Indigenous homicides (9.1 per cent) and non-Indigenous homicides (9.4 per cent) (figure 10.3.2).

Figure 10.3.3 Alcohol involvement in Indigenous homicides, 1999-2000 to 2008-09^{a, b, c}



^a Homicide includes murder and manslaughter, but excludes driving causing death. Data reflect information available at the time of reporting and are subject to change. ^b Excludes data where Indigenous status of victim or offender, or alcohol involvement is unknown. In the case of multiple offenders, data include the primary victim and offender only (based on AIC NHMP incident classification). ^c 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'.

Source: AIC NHMP [computer file] (unpublished); table 10A.3.18.

Over the ten year period from 1999-2000 to 2008-09, the extent to which alcohol has been a contributing factor in Indigenous homicides has fluctuated (figure 10.3.3). With between 23 and 36 Indigenous homicides per year over the past five years, small changes in numbers can cause large changes in calculated proportions. The number of Indigenous homicides where both offender and victim were drinking (14) was lower in 2008-09 than any year in the previous nine years (table 10A.3.18).

10.4 Drug and other substance use and harm

Box 10.4.1 Key messages

- In 2007, Indigenous people were recent users of illicit substances at almost twice the rate of other Australians (AIHW 2008; table 10A.4.1).
- In 2008, 23.3 per cent of Indigenous people aged 18 years or over had used illicit drugs in the past 12 months, with cannabis the most commonly used drug (table 10.4.1).
- Apart from kava, illicit drug use was higher for Indigenous people in non-remote areas than remote areas in 2008 (table 10A.4.3).
- There was no change in illicit drug use among Indigenous people between 2002 and 2008 (figure 10.4.1).
- Indigenous people were hospitalised for mental and behavioural disorders caused by drug use at three times the rate for other people (table 10A.4.6) and hospitalised for accidental poisoning between 2004-05 and 2008-09 at nearly twice the rate for other people (table 10A.4.7).
- For all homicides recorded from 1999-2000 to 2008-09, a lower proportion of Indigenous homicides than non-Indigenous homicides occurred under the influence of drugs (23.9 per cent compared to 30.2 per cent) (table 10A.4.11).

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 (Catto and Thomson 2008). Reducing drug related harm will improve health, social and economic outcomes at both individual and community levels. Drug related problems were more likely to be a stressor experienced by Indigenous people (14.2 per cent) than non-Indigenous people (5.7 per cent) in 2008 (table 10A.4.12). Programs that have been effective in reducing substance use among Indigenous people are discussed in box 10.4.2.

The primary measure for this indicator is the proportion of people aged 18 years or over who recently used illicit drugs. This section also includes data on drug related hospitalisations, deaths and crime.

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 of prescription drugs in combination with alcohol).

Among illegal drugs, research suggests that cannabis consumption in Indigenous communities is increasing (Clough et al. 2004; Putt and Delahunty 2006; Senior and

Chenhall 2008). Heavy cannabis use has been associated with moderate to severe symptoms of depression (Lee et al. 2008). The misuse of kava is a concern in some Indigenous communities, as it can lead to liver damage and malnutrition and can also have a negative impact on families and communities (DHA 2003; DHA 2004; Clough and Jones 2004; Urquhart and Thomson 2009).

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 the social alienation of sniffers, violence and crime (Access Economics 2006; Community Affairs References Committee 2006).

Box 10.4.2 ‘Things that work’ — reducing substance use and harm

Since the roll out of **Opal fuel** in the Central Desert (SA and the NT) and the East Kimberley regions (WA), reports of petrol sniffing have been minimal (CIRA 2010). An evaluation in 2008 found that petrol sniffing had declined in 17 of the 20 communities evaluated. Petrol sniffing had fallen by 70 per cent overall, and in nine communities there was no sniffing (d’Abbs and Shaw 2008b).

The **Aboriginal Substance Misuse Connection Program** (SA) assists Aboriginal clients through assessment, detoxification, rehabilitation and integration with other services. A case management and harm minimisation approach empowers clients to reach their goals and explore options that can lead to improved health and reductions in alcohol and drug use. The program has been operating since 2007 and an evaluation in 2010 found that the program is flexible and responsive to individual needs. Since January 2010, 291 client goals have been achieved in the areas of accommodation/housing, mental and physical health, family/significant other and disability/legal/financial (SA Government unpublished).

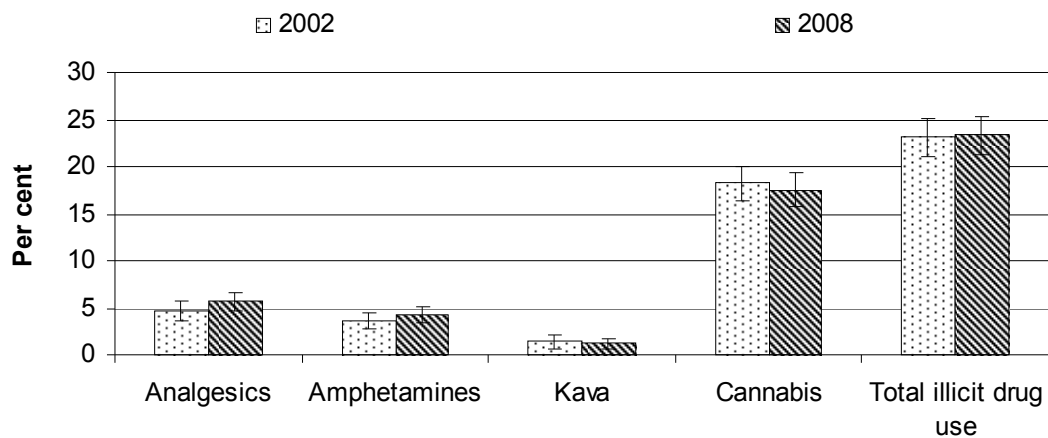
Illicit drug use

It is difficult to obtain accurate data on the use of illicit drugs. The illegality of some drugs makes it difficult to address with population surveys. Data from use of health systems or interaction with the criminal justice system tend to identify heavy users and those who succumb to drugs’ effects, while evidence suggests that the majority of illicit drug users use drugs infrequently without becoming addicted (Makkai and McAllister 1998).

Data on the proportion of Indigenous people aged 18 years or over who recently used illicit drugs are derived from ABS Indigenous specific surveys. Non-Indigenous comparisons from ABS collections are unavailable. However, results from the AIHW 2007 National Drug Strategy Household Survey (NDSHS)

showed that Indigenous people were almost twice as likely as other Australians to be recent users of illicit substances (AIHW 2008; table 10A.4.1). Care should be taken in interpreting NDSHS data due to the small size of the Indigenous sample (fewer than 500 respondents). In 2008, 58.4 per cent of Indigenous people living in remote and very remote areas were aware of neighbourhood drug and alcohol problems, compared with 42.9 per cent of Indigenous people living in non-remote areas (table 10A.4.12).

Figure 10.4.1 Indigenous people aged 18 years or over who had recently used illicit drugs, 2002 and 2008^{a, b, c, d}



^a Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information). ^b Analgesics includes sedatives for non-medical use, pain killers, tranquilisers and sleeping pills. ^c Cannabis includes marijuana, hashish or cannabis resin. ^d Total illicit drug use includes heroin, cocaine, petrol, LSD/synthetic hallucinogens, naturally occurring hallucinogens, ecstasy/designer drugs, and other inhalants. Includes methadone in 2008. Sum of components may be more than total as persons may have reported more than one type of substance used.

Source: ABS (unpublished) NATSISS 2002 and 2008; table 10A.4.2.

In both 2002 and 2008, among Indigenous people who accepted the substance use form:³

- 23.3 per cent of respondents had recently used illicit drugs (table 10A.4.2)
- cannabis was the most commonly used substance (18.2 per cent in 2002; 17.6 per cent in 2008) (figure 10.4.1; table 10A.4.2).

³ The substance use questions in the 2008 NATSISS are comparable to those used in the 2002 NATSISS. However, when comparing between 2002 and 2008 it should be noted that there were changes in the proportion of people who did not accept the substance use form, with the 2002 NATSISS having a 6 per cent non-response compared with 9 per cent for the 2008 NATSISS.

Data on illicit drug use in non-remote areas in 2004-05 by State and Territory and sex are available in tables 10A.4.4 and 10A.4.5.

Table 10.4.1 Indigenous people aged 18 years or over who had recently used illicit drugs, 2008^{a, b, c, d, e}

	<i>Males</i>	<i>Females</i>	<i>Persons</i>
Used substances	%	%	%
Used substances in last 12 months			
Analgesics and sedatives for non-medical use ^a	6.1	5.2	5.6
Amphetamines or speed	6.1	2.8	4.3
Marijuana, hashish or cannabis resin	24.3	11.6	17.6
Kava	1.8*	0.7*	1.2
Total used substances in last 12 months ^b	29.8	17.6	23.3
Used substances but not in last 12 months	24.4	19.8	22.0
Total used substance(s) ^c	54.3	37.5	45.4
Never used substances	45.4	61.7	54.1
Not stated ^d	0.3*	0.8*	0.6*
Total ^e	100.0	100.0	100.0
People who accepted substance use form as a proportion of all people in the survey (%)	90.3	92.3	91.3

*indicates the relative standard error for the estimate is greater than 25 per cent and should be used with caution.

^a Includes pain killers, tranquilisers and sleeping pills. ^b Includes heroin, cocaine, petrol, LSD/synthetic hallucinogens, naturally occurring hallucinogens, ecstasy/designer drugs, methadone and other inhalants. Sum of components may be more than total as persons may have reported using more than one type of substance used. ^c Includes 'whether used in last 12 months' not known. ^d This category are people who accepted the substance use form but did not state if they had ever used substances. ^e People who accepted the substance use form.

Source: ABS (unpublished) NATSISS 2008; table 10A.4.2.

Table 10.4.1 shows that in 2008, among Indigenous people aged 18 years or over who accepted the substance use form:

- 23.3 per cent reported having recently used illicit drugs (that is, in the 12 months prior to interview) and 45.4 per cent reported having used illicit drugs at least once in their lifetime
- males were more likely than females to have used illicit drugs in the last 12 months (29.8 per cent compared with 17.6 per cent)
- marijuana, hashish or cannabis resin were the most commonly used drugs in the last 12 months (17.6 per cent).

In 2008, apart from kava, illicit drug use was higher for Indigenous people in non-remote areas than remote areas (table 10A.4.3).

Between 2002 and 2008, there was no change in illicit drug use across remoteness areas (table 10A.4.3). More data on illicit drug use, by type, across remoteness areas can be found in table 10A.4.3.

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 use, and that past inhalant use is a predictor of other substance use (AIHW 2002; Catto and Thomson 2008; Clough et al. 2002; Clough et al. 2004; Clough and Jones 2004). There are no reliable national data on the number of people involved in petrol sniffing 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, baseline data on the prevalence of petrol sniffing were collected in 74 remote communities (covering parts of Queensland, WA, SA and the NT). There were an estimated 1281 sniffers among the Indigenous population of 30 209 (d'Abbs and Shaw 2008a). Regions with the highest proportions of petrol sniffers were South Central Australia (16.4 per cent) and the Ngaanyatjarra Lands in WA (13.9 per cent) (AIHW 2011). Regions with the lowest proportion of petrol sniffers were the Northern Central Australia subregion and Alice Springs Town Camps, both with less than 1 per cent (AIHW 2011). Some Indigenous communities have expressed concern about the vulnerability of young people to the practice of petrol sniffing, 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 had success in reducing petrol sniffing in some communities (Burns et al. 1995; Campbell and Stojanovski 2001). However, a black market for conventional fuel, specifically for petrol sniffing, has emerged in some communities (NT Select Committee on Substance Abuse 2007). Box 10.4.2 provides examples of how petrol sniffing is being addressed in some communities.

Drug related hospitalisations

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.

National hospitalisation data are available for NSW, Victoria, Queensland, WA, SA and public hospitals in the NT. Data for Tasmania and ACT are not included in national totals. Table 10A.4.8 includes data by State and Territory (including Tasmania and the ACT separately with caveats). Overall, the quality of Indigenous identification in hospital separations data has improved in recent years, but still varies substantially between jurisdictions. Data are available for remoteness areas across states and territories in aggregate, with Indigenous identification highest in remote and very remote areas (AIHW 2010). Data for other people includes hospitalisations of non-Indigenous people and those for whom Indigenous status was not stated.

For NSW, Victoria, Queensland, WA, SA and public hospitals in the NT between 2004-05 and 2008-09:

- the most common drug-related conditions resulting in hospitalisations of both Indigenous and other people were poisoning and mental and behavioural disorders (tables 10A.4.6 and 10A.4.7)
- the rates of hospitalisations for poisoning due to antiepileptic, sedative-hypnotic and antiparkinsonism drugs were higher for Indigenous people than for other people (table 10A.4.6)
- the hospitalisation rate for Indigenous people for mental and behavioural disorders caused by drug use was three times the rate for other people (table 10A.4.6); and the hospitalisation rate for Indigenous people for accidental poisoning was nearly twice the rate for other people (table 10A.4.7). There were no changes over time in the hospitalisation rates for Indigenous and other people for drug related conditions (tables 10A.4.6 and 10A.4.7)
- the hospitalisation rate for drug related conditions for Indigenous people decreased with remoteness (table 10A.4.9).

Drug related deaths

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 10.4.2 Drug related death rates, age standardised, 2005–2009^{a, b, c, d}

	Indigenous ^e						Non-Indigenous ^f					
	NSW	Qld	WA	SA	NT	Total ^g	NSW	Qld	WA	SA	NT	Total ^g
Males	14.3	np	np	np	np	9.5	7.1	5.4	6.8	7.1	8.0	6.6
Females	8.9	np	np	np	np	6.1	4.1	3.3	4.0	5.5	np	4.0
Persons	11.5	4.0	9.3	17.8	np	7.8	5.5	4.3	5.4	6.3	5.9	5.3

^a Causes of death attributable to drug-induced mortality are based on codes of the International Classification of Diseases, 10th Revision (ICD-10) ^b Indirectly age-standardised death rate per 100 000 population. ^c Denominators used in the calculation of rates for the Indigenous population are from ABS *Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians*, Cat. no. 3238.0 (series B, 2006 base). Non-Indigenous estimates are available for census years only. In the intervening years, Indigenous population figures are derived from assumptions about past and future levels of fertility, mortality and migration. In the absence of non-Indigenous population figures for these years, it is possible to derive denominators for calculating non-Indigenous rates by subtracting the Indigenous population from the total population. Such figures have a degree of uncertainty and should be used with caution, particularly as the time from the base year of the projection series increases. ^d Some data are not published (np) due to small numbers of deaths. ^e 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. ^f Non-Indigenous includes deaths with a 'Not stated' Indigenous status. ^g Data are for NSW, Queensland, SA, WA, and NT combined, based on State or Territory of usual residence. Victoria, Tasmania and the ACT are excluded due to small numbers of registered Indigenous deaths. **np** Not published
Source: ABS (unpublished) *Causes of Death, Australia*, Cat. no. 3303.0; table 10A.4.10.

In 2005–2009, for those jurisdictions for which drug related deaths data are available (NSW, Queensland, WA, SA and the NT):

- rates were higher for Indigenous people than non-Indigenous in NSW, WA and SA, and similar in Queensland
- rates for Indigenous and non-Indigenous males were higher than rates for Indigenous and non-Indigenous females (table 10.4.2).

Drug related crime

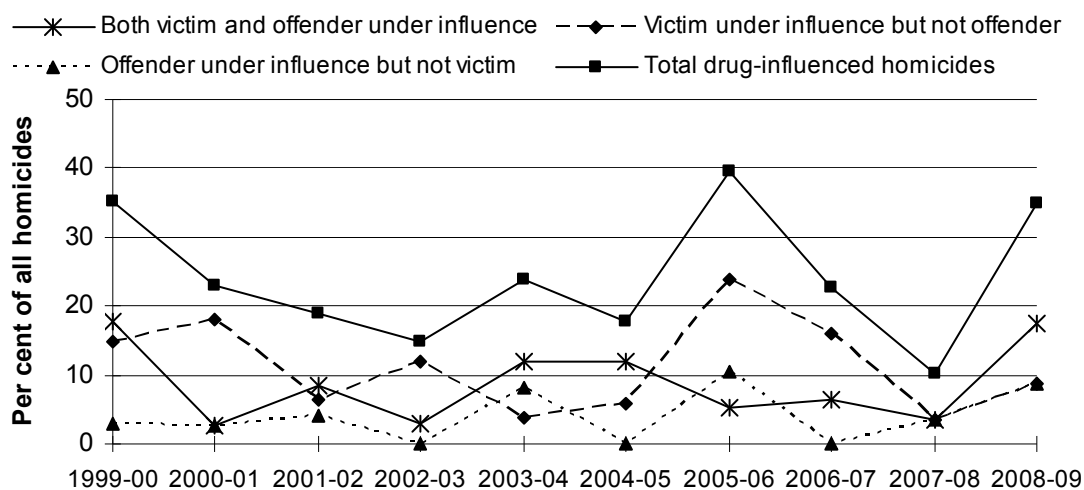
Broadly speaking, there are three types of drug related crime: violence associated with illegal drug markets; crimes committed by individuals under the influence of drugs; and crimes committed by drug users to pay for their drug purchases.

Although the link between drug use and crime is complex, many studies have found 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). For example:

- the use of inhalants has been linked with an increased likelihood of committing burglary, assault or wilful damage offences (Brady 1992)
- 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/or other drugs (DHA 2003)
- in juvenile detention centres across Australia in 2003-04 Indigenous and non-Indigenous youths had 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)
- illicit drugs have been associated with both violent and property crime (Wilczynski and Pigott 2004)
- among police detainees, between 1995 and 2005, 79 per cent of Indigenous detainees tested positive to a drug at the time of being detained by police, compared with 67 per cent of non-Indigenous detainees (AIC 2008)
- 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).

Data from the Australian Institute of Criminology (AIC) National Homicide Monitoring Program (NHMP) on drug influenced crimes are included in this section. These data do not reflect the full extent of crimes committed 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 15 per year over the past five years). Other limitations of the NHMP data are discussed in appendix 4.

Figure 10.4.2 **Drug influenced Indigenous homicides, 1999-2000 to 2008-09**^{a, b, c}



^a Homicide includes murder and manslaughter, but excludes driving causing death. Data reflect information available at the time of reporting and are subject to change. ^b Excludes data where Indigenous status of victim or offender, or alcohol involvement is unknown. In the case of multiple offenders, data include the primary victim and offender only (based on AIC NHMP incident classification). ^c 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.4.11.

- Over the ten year period from 1999-2000 to 2008-09, the level of drug influenced Indigenous homicides has fluctuated. It is not possible to identify any clear trends (figure 10.4.2).
- Over the past five years there have been between 23 and 38 Indigenous homicides per year, and the number of drug influenced Indigenous homicides has fluctuated in even smaller numbers (between 3 and 15), small changes in numbers can cause large changes in proportions calculated (table 10A.4.11).
- Among all homicides recorded in the AIC NHMP database between 1999-2000 to 2008-09, a lower proportion of Indigenous homicides than non-Indigenous homicides were associated with the use of drugs at the time of the offence (23.9 per cent compared to 30.2 per cent) (table 10A.4.11).

10.5 Juvenile diversions

Box 10.5.1 Key messages

- Rates of diversion from formal criminal justice processes for Indigenous juveniles were around one-half to two-thirds those for non-Indigenous juveniles in states and territories for which data were available (tables 10.5.1–2 and figures 10.5.1–4).
- In recent years, Indigenous juvenile diversion rates have remained relatively constant in most states and territories (tables 10A.5.5–7, 10.5.2 and figures 10.5.1 and 10.5.3).

Following initial contact with police, young offenders who have committed less serious offences can be eligible for diversion as an alternative to traditional court processes (Polk 2003). Diverting offenders away from the criminal justice system serves various restorative justice purposes, including:

- avoiding the negative labelling and stigma associated with formal contact with the criminal justice system
- preventing further offending by minimising initial contact with the criminal justice system
- providing appropriate interventions to those offenders in need of treatment or other services (Joudo 2008).

The primary measure for this indicator is juvenile diversions as a proportion of all juvenile offenders. The focus is on diversionary measures as alternatives to court proceedings — that is, diversion before contact with the formal criminal justice system.

Indigenous over-representation in the criminal justice system is an important social policy issue, and could be lessened through increased use of diversionary measures (Allard et al. 2010). Research has indicated that diversion from formal court processes can reduce the likelihood of re-offending (section 10.6), although this is less likely for Indigenous than non-Indigenous offenders (Allard et al. 2010; NSW DOJJ 2007; Cunningham 2007). Similarly, juvenile diversions may lead to a reduction in imprisonment and juvenile detention rates (section 4.12), and a decrease in occurrences of suicide and self-harm (section 7.8).

Diversionary programs can also contribute to improved socio-economic outcomes for Indigenous people, as interaction with the formal justice system may restrict access to educational and employment opportunities (sections 4.5, 4.6, 4.7, 6.6 and 8.1), and interfere with positive peer networks (Allard et al. 2009).

State and Territory governments have individual responsibility for juvenile diversion programs and methods vary from informal police cautioning to legislated youth conferencing programs (AIHW 2010; Joudo 2008). Although a wide range of diversionary alternatives are available to young offenders, Indigenous juvenile offenders may have difficulty accessing such programs. Research has shown that Indigenous offenders are more likely to be excluded from diversionary programs due to:

- limitations imposed by some programs requiring admission of guilt before diversion can occur
- eligibility criteria that preclude offenders with multiple charges and prior convictions. Section 10.6 ‘Repeat offending’ shows that Indigenous juvenile offenders have a higher level of repeat offending than non-Indigenous juveniles.
- lack of treatment programs available in remote areas (Bryant and Joudo 2008).

Some programs that have successfully made diversionary alternatives more accessible for Indigenous juvenile offenders are described in box 10.5.2.

Box 10.5.2 ‘Things that work’ — improving Indigenous access to youth diversionary measures

The **Koori Youth Contact and Cautioning Program** (Victoria) was developed in 2007 by the Victorian Aboriginal Legal Service in partnership with Victoria Police, with a pilot in the regional areas of Mildura and the Latrobe Valley.

The program’s objective is to decrease Indigenous youth contact with the criminal justice system, by increasing access to police cautions, which can be issued for up to a third offence. The program increases family and local community involvement in the diversion process, with Koori youth justice workers to provide advice. The program also aims to overcome any police bias in the use of diversionary alternatives, by requiring police to fill out a ‘failure to caution form’ when a caution is not issued.

An evaluation of the program in 2007-08 found an increase in cautioning for first time Indigenous youth offenders in both pilot sites (a 45 per cent increase in Mildura and a 32 per cent increase in the Latrobe Valley). The success of the pilot has seen its expansion to other areas within Victoria (VALS 2010; DCPC 2009).

The Regional Youth Justice Service Program (WA) was introduced by the Department of Corrective Services in 2008. The program focuses on the prevention and diversion of young people from formal justice processes through the provision of advice and support, youth bail options, in-court assistance and supervision of community based orders.

The program was initially trialled in Kalgoorlie and Geraldton, where the number of police cautions in Kalgoorlie has increased by 41.4 per cent, and the number of police and judge referrals to a Juvenile Justice Service team in Geraldton increased by 82 per cent. The services were proposed for adoption in other regions in WA in 2011 (DIA 2010).

Data are available for this report from NSW, Victoria, Queensland, WA, SA and the NT. Data from Tasmania and the ACT have not been published in this section, as they are not of sufficient numbers or quality to publish.

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. Differences in programs and data collection mean that data are not comparable across jurisdictions:

- For example, 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 identify as Aboriginal or Torres Strait Islander.

-
- Juvenile diversions in NSW are legislated under the *Young Offenders Act 1997* (NSW) and administered by the NSW Department of Juvenile Justice. Under the Act, young offenders can be diverted using warnings, police cautions and youth justice conferences. Warnings apply for the least serious offences, while more serious offences may elicit cautions, conferences and finally court for the most serious offences. Infringement notices consisting of an on-the-spot fine can be issued for certain offences. 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).
 - In Victoria, data on juvenile apprehensions describe offences charged by police as either an ‘arrest’ or ‘summons’, and a diversion as a ‘caution’. Victoria is the only state where the cautioning of offenders is not legislated and thus is left to the discretion of police officers.
 - Queensland Police data include diversionary methods of processing as ‘caution’ and ‘community conference’, as alternatives to ‘arrest’, ‘notice to appear’, ‘summons’ or ‘warrant’.
 - In WA, juvenile diversions are legislated under the *Young Offenders Act 1994* (WA). Under the Act, police officers can issue juvenile offenders with a formal written caution, or the matter can be transferred to a Juvenile Justice Team (JJT) via police or court referral. Where the matter is referred to a JJT, young people are held accountable for their offending behaviour through meetings with their families, victims and police. No criminal conviction is recorded against the young person.
 - The SA youth justice system has a three tiered system of diversion, involving informal cautions, formal cautions and family conferences. These diversionary options are legislated by the *Young Offenders Act 1993* (SA).
 - NT police data refer to apprehension cases rather than individual persons, and therefore several cases can relate to the same offender.

New South Wales

Table 10.5.1 **NSW, number and proportion of juveniles diverted, 2009**^{a, b, c, d, e, f}

	<i>Unit</i>	<i>Indigenous</i>	<i>Non-Indigenous</i>	<i>Total^f</i>
Proceeded against other than to court				
Youth justice conference	no.	515	2 075	2 680
Caution – Young Offenders Act	no.	1 700	9 715	11 997
Infringement notice	no.	362	7 316	8 141
Total	no.	2 577	19 106	22 818
Proceeded against to court	no.	5 475	10 916	17 021
Proportion of juveniles diverted	%	32.0	63.6	57.3

^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 'Warnings' have been excluded from this data. ^f 'Total' includes those juveniles whose status is unknown.

Source: NSW Bureau of Crime Statistics and Research (unpublished); table 10A.5.7.

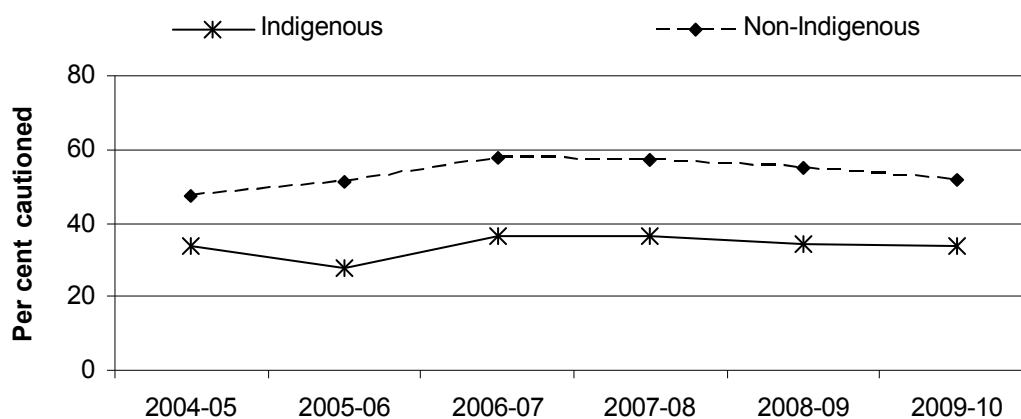
Table 10.5.1 shows the various legal processes NSW Police can employ against alleged young offenders. The proportion of juveniles diverted includes those referred to a 'youth justice conference' and those given a 'caution' or 'infringement notice'. Compared to NSW data in the 2009 report, 'warnings' are no longer recorded due to changes in reporting requirements, which has led to a discontinuity in the data.

- Indigenous juveniles were diverted at nearly half the rate of non-Indigenous juveniles in 2009 (32.0 per cent compared to 63.6 per cent) (table 10.5.1).
- The difference between Indigenous and non-Indigenous juvenile alleged offenders being diverted has remained relatively the same since 2004 (a gap of 34.1 percentage points in 2004 compared to 31.6 percentage points in 2009) (tables 10A.5.5–7).

Tables 10A.5.1–7 provide more information on juvenile diversions by sex and offence over time.

Victoria

Figure 10.5.1 **Victoria, Indigenous and non-Indigenous juvenile alleged offenders and cautions, 2004-05 – 2009-10^{a, b}**



^a Indigenous status is derived from the racial appearance of the offender which is a subjective assessment of the police officer. ^b Percentages represent the number of distinct juvenile offenders cautioned when first processed by police in a financial year.

Source: Victorian Government (2011); table 10A.5.8.

- In Victoria in 2009-10, 33.8 per cent of Indigenous juvenile offenders were cautioned when first processed by police, compared with 51.8 per cent of non-Indigenous juvenile offenders (figure 10.5.1).

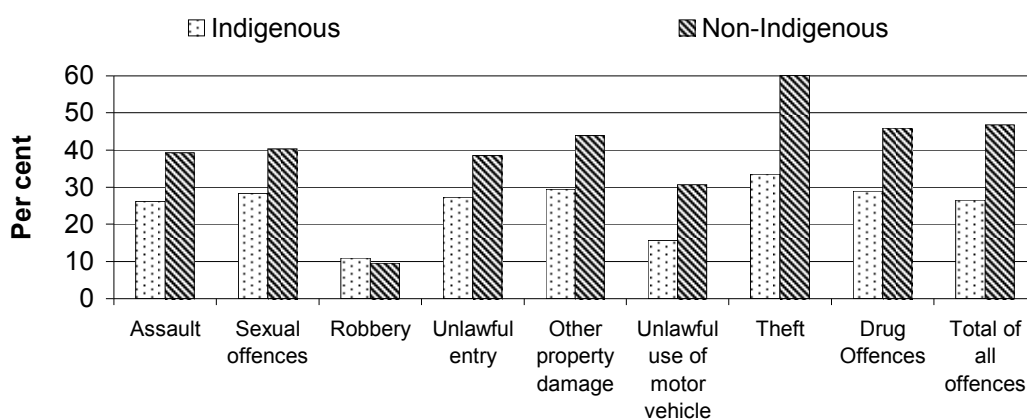
Between 2004-05 and 2009-10, for juvenile offenders first processed by police:

- the proportion of Indigenous juvenile offenders cautioned changed little (33.6 per cent in 2004-05 and 33.8 per cent in 2009-10), while the proportion of non-Indigenous juvenile offenders cautioned increased from 47.6 per cent to 51.8 per cent (figure 10.5.1)
- the gap between the proportions of Indigenous and non-Indigenous juvenile offenders receiving a caution increased slightly (from a gap of 14.0 percentage points to a gap of 18.0 percentage points) (figure 10.5.1).

Tables 10A.5.9–22 provide more information on juvenile diversions in Victoria by remoteness, offence type and over time.

Queensland

Figure 10.5.2 Queensland, proportion of Indigenous and non-Indigenous juvenile alleged offences receiving a caution, by type of offence, 2009-10^{a, b, c, d, e}



^a Proportions are calculated using data in table 10A.5.22. 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 'Other property damage' refers to property damage not classified as unlawful entry, arson, unlawful use of motor vehicle, other theft, fraud, or handling stolen goods ^e The 'Total of all offences' includes all of the offences listed in table 10A.5.23.

Source: Queensland Police Service (2010); table 10A.5.23.

Figure 10.5.2 presents police data on the number of offences, rather than the number of young offenders. Therefore, these data should be interpreted with caution.

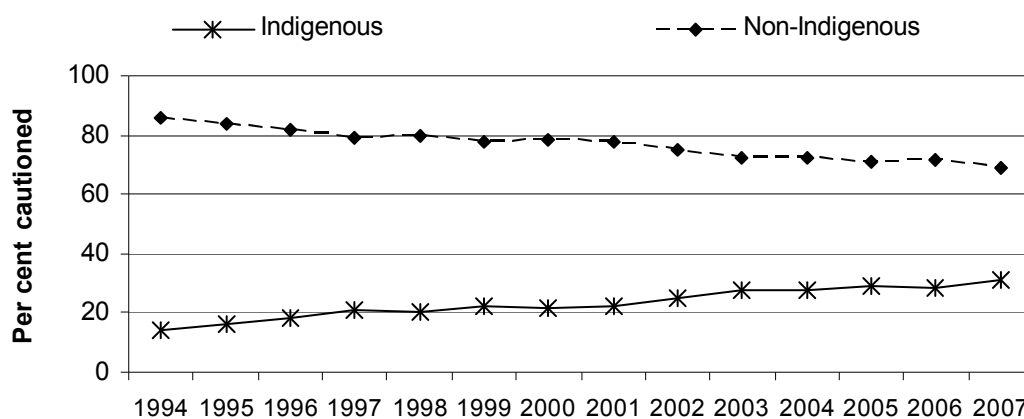
In Queensland in 2009-10:

- Indigenous juveniles received cautions at a lower rate than non-Indigenous juveniles for most of the selected offences presented in figure 10.5.2.
- for the offence of robbery, Indigenous juveniles were cautioned at a marginally higher rate (10.9 per cent) than non-Indigenous juveniles (9.5 per cent) (figure 10.5.2).
- for the majority of all offence categories, Indigenous juveniles had a lower rate of cautions or transfers to community conferences than non-Indigenous juveniles (table 10A.5.23).

Tables 10A.5.23–26 contain more information on juvenile diversions in Queensland by offence type and over time.

Western Australia

Figure 10.5.3 **WA, Indigenous and non-Indigenous juvenile cautions, 1994–2007^a**



^a Indigenous status is based on the attending officer's subjective assessment of the offender's appearance and is recorded for operational purposes only.

Source: University of Western Australia, Crime Research Centre, Juvenile Research Database, unpublished; table 10A.5.31.

In WA in 2007:

- 31.4 per cent of Indigenous juvenile offenders were issued with a caution compared with 68.6 per cent of non-Indigenous juvenile offenders (figure 10.5.3)
- Indigenous juvenile offenders were cautioned at a higher rate for property offences than non-Indigenous juvenile offenders — but were cautioned at a lower rate for liquor offences, drug offences, traffic offences, good order offences and other offences (table 10A.5.30).

Between 1994 and 2007:

- the proportion of Indigenous juvenile offenders issued with a caution increased from 13.9 per cent to 31.4 per cent, while the proportion of non-Indigenous juvenile offenders issued with a caution decreased from 86.1 per cent to 68.6 per cent (figure 10.5.3)
- the gap between the proportions of Indigenous and non-Indigenous juvenile offenders being cautioned decreased from 72.2 percentage points to 37.2 percentage points (figure 10.5.3).

For the period 2003–2007, 55.8 per cent of Indigenous juveniles were either cautioned or referred to a Juvenile Justice Team, compared to 74.9 per cent of non-Indigenous juvenile offenders (table 10A.5.27).

Tables 10A.5.30–33 provide more detail on the number and proportion of juveniles cautioned by sex and age group, and by type of offence over time. Tables 10A.5.27–29 provide more information of the number and proportion of juvenile diversions (including referrals to a Juvenile Justice Team) by sex and age group, and by type of offence over time.

South Australia

Table 10.5.2 **SA, Indigenous and non-Indigenous juvenile apprehensions and diversions^{a, b, c}**

	<i>Unit</i>	<i>Indigenous</i>	<i>Non-Indigenous</i>
<i>1 January to 31 December 2007</i>			
Juvenile apprehensions ^c	no.	1 267	5 083
Formal caution	no.	212	1 529
Transfer to family conference	no.	208	971
Proportion diverted	%	33.1	49.2
<i>1 January to 31 December 2006</i>			
Juvenile apprehensions ^c	no.	1 235	4 681
Formal caution	no.	225	1 341
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	1 247
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 (2010); table 10A.5.34.

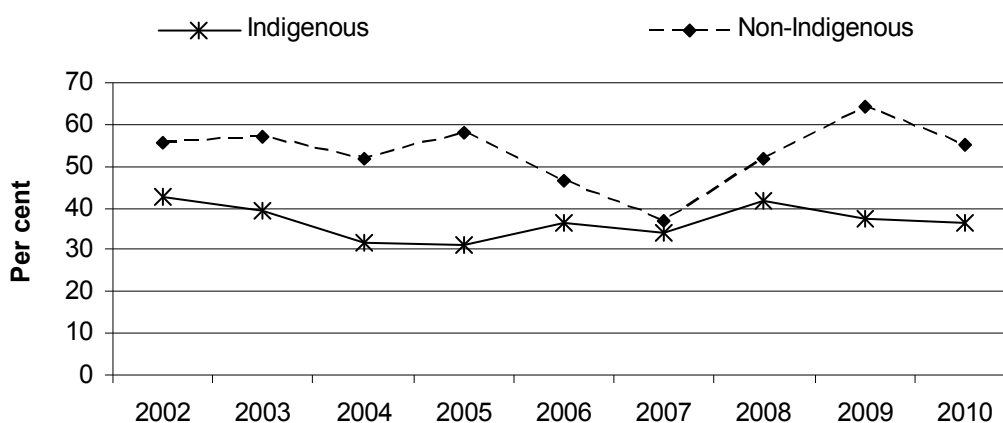
- In SA in 2007, Indigenous juveniles were diverted via formal cautions and transfers to family at a lesser rate than non-Indigenous juveniles (table 10.5.2).

- In SA from 2004 – 2007, the proportion of Indigenous juvenile apprehensions diverted from court decreased slightly from 36.1 per cent to 33.1 per cent.

Tables 10A.5.34–39 provide further information on juvenile diversions by type of offence.

Northern Territory

Figure 10.5.4 NT, proportion of Indigenous and non-Indigenous alleged offences receiving a diversion, 2002–2010^{a, b, c}



^a Data are for apprehension cases rather than individual persons, therefore, several cases may relate to one person. ^b Indigenous data are based on self-identification by the juvenile. ^c Cases that did not result in a diversion either proceeded to court or were resolved in some other manner (it is not an indicator of the number of matters referred to the courts).

Source: NT Police (unpublished); table 10A.5.40.

- In the NT in 2010, 36.4 per cent of Indigenous juvenile alleged offenders received a diversion compared to 55.3 per cent of non-Indigenous juvenile alleged offenders (figure 10.5.4).
- The proportions of Indigenous and non-Indigenous juveniles in the NT receiving a diversion fluctuated between 2002 and 2010, with no clear trends (figure 10.5.4).

10.6 Repeat offending

Box 10.6.1 Key messages

- A greater proportion of Indigenous prisoners (73.7 per cent) than non-Indigenous prisoners (48.6 per cent) had prior adult imprisonment as at 30 June 2010 (figure 10.6.1).
- Among prisoners released from prison between 1994 and 2007, 58 per cent of Indigenous people were reimprisoned within ten years, compared with 35 per cent of non-Indigenous people (ABS 2010a).
- Between 2000 and 2010, the proportion of Indigenous prisoners with prior imprisonment fell from 76.2 per cent to 73.7 per cent, and the proportion of non-Indigenous prisoners with prior imprisonment fell from 52.1 per cent to 48.6 per cent (table 10A.6.5).
- Studies on juvenile repeat offending carried out in NSW, Queensland, WA and SA indicate that Indigenous juvenile offenders had higher rates of reoffending than non-Indigenous juvenile offenders (tables 10A.6.10–17).

Reducing the number of prisoners who repeatedly offend is a key objective of any criminal justice system (ABS 2010a; Smith 2010). A number of Australian recidivism (or repeat offending) studies have focused on the relationship between an offender's Indigenous status and propensity to reoffend, generally concluding that Indigenous offenders are more likely to have further contact with the criminal justice system than non-Indigenous offenders (Payne 2007; Joudo 2008).

This section presents data on both adult and juvenile repeat offending. The primary measure for adult repeat offending is the proportion of prisoners currently under sentence with known prior adult imprisonment (ABS 2010b). Generally, data on juvenile repeat offending are from independent cohort studies measuring longitudinal outcomes of juvenile offending patterns. There is no systematic national data collection which provides information about the prevalence of prior detention among juvenile detainees and thus data are limited to four jurisdictions: NSW, Queensland, WA and SA (Payne 2007).

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). Evidence strongly suggests that early involvement with the criminal justice system can result in entrenched involvement in repeat offending (DCPC 2009; AIC 2002).

Payne (2007) canvassed the literature on recidivism in Australia and found that certain characteristics are predictive of repeat offending, including:

-
- age of offender — criminal offending peaks in the mid to late teens, diminishing in adulthood
 - criminal history — the younger the age of first offence, the greater the likelihood of higher levels of offending
 - gender— for the majority of offences, females are less likely to reoffend
 - Indigenous status — Indigenous offenders are generally more likely to reoffend, and Indigenous offenders are more likely to be reconvicted or reimprisoned upon release from prison

Situational factors potentially influencing repeat offending can include:

- unemployment (section 4.6)
- education and schooling — those with lower educational attainment are more likely to reoffend (sections 4.5 and 4.7)
- residential location — those living in low socioeconomic areas or who are homeless are more likely to reoffend (section 4.9 and chapter 9)
- family attachment — those with limited family attachment are more likely to reoffend
- poor mental health (section 7.7)
- drug use (section 10.4) (Payne 2007).

Services that aim to support Indigenous offenders who have experienced imprisonment can 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).

Given the extent of Indigenous imprisonment (section 4.12), it is important that released offenders have the opportunity to integrate back into the community and lead positive and productive lives. The Standing Committee on Social Issues (2008) found that a major factor leading to recidivism was the lack of suitable support available to ex-offenders attempting to integrate themselves into society.

Box 10.6.2 describes successful initiatives in Victoria aimed at reducing repeat offending among Indigenous people.

Box 10.6.2 'Things that work' – repeat offending

The **Local Justice Worker** and **Koori Offender Mentoring and Support** programs (Victoria) are designed to reduce the number of Indigenous offenders breaching community correctional orders. Local justice workers in 10 community organisations help establish culturally appropriate worksites for Indigenous offenders, and assist offenders to comply with their orders. More than 30 worksites have been established and assistance provided to over 1000 clients since 2008.

In addition, Koori Elders and Respected Persons provide support, mentoring, advice and cultural connection to Indigenous offenders to assist them to meet the requirements of their intensive community correctional orders.

Since these programs began in 2007-08, there has been an increase in the number and proportion of community correctional orders successfully completed by Indigenous offenders, and by 2009-10, the successful completion rates for Indigenous and non-Indigenous Victorians were almost identical (Victorian Government unpublished).

Adult repeat offending

Repeat imprisonment trends 1994–2007

Recent research undertaken by the ABS has linked the annual prisoner data collections from 1994–2007 to analyse repeat imprisonment trends (ABS 2010a).⁴ The research focused on a cohort of prisoners released during the period July 1994 to June 1997 and followed any repeat imprisonment trends until June 2007, a period of at least ten years. A key finding of the research was that reimprisonment was strongly associated with being young, being Indigenous or having previously been imprisoned.⁵

The 1994–1997 release cohort comprised 28 584 people, of whom 18.0 per cent were Indigenous and 94.0 per cent were male. Indigenous people (58.0 per cent) were 1.7 times the rate of non-Indigenous people to be reimprisoned (35.0 per cent) within ten years of release. The NT had a particularly high rate of reimprisonment (48.0 per cent compared to the national average of 39.0 per cent) due to higher proportions of young and Indigenous offenders in the prisoner population in that jurisdiction.

⁴ Because the prisoner census does not collect information on the release of prisoners, the research paper uses people's disappearance from the Prisoner Census between successive years as a proxy for their release from prison, and their reappearance in the census as a proxy for their reimprisonment.

⁵ Having previously been imprisoned refers to a prisoner who had already served time in prison prior to the prison episode from which they were released in 1994–1997.

Annual data on prior imprisonment under sentence

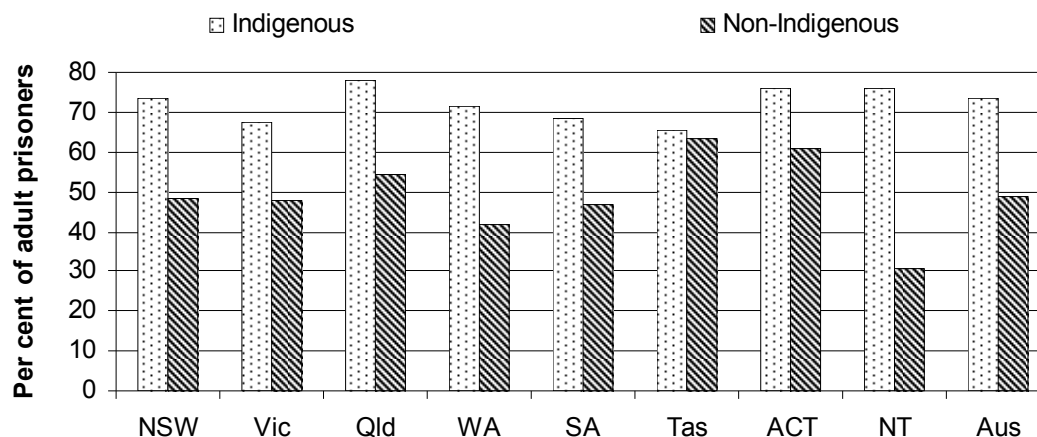
Data on the prior imprisonment of adults under sentence are from the ABS *Prisoners in Australia* publication (ABS 2010b) and are provided for each State and Territory. These data need to be interpreted with caution, and are subject to the following limitations:

- 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 reoffending 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)
- the data do not capture the entire inflow and outflow of prisoners during each year. Prisoners who are imprisoned after 30 June one year but released before 30 June the next year are not recorded.

As such, the true level of adult repeat offending could be underestimated as not all offences are necessarily detected or recorded by police, and court convictions do not necessarily result in contact with corrective services. Adult repeat offending could also be overestimated as an offender on remand will not necessarily be convicted and sentenced for a particular offence (Payne 2007).

Figures 10.6.1–3 present data on the proportion of prisoners with known prior adult imprisonment under sentence at 30 June 2010.

Figure 10.6.1 Proportion of prisoners with known prior adult imprisonment under sentence, 30 June 2010^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 (2010b); table 10A.6.1.

Nationally, at 30 June 2010:

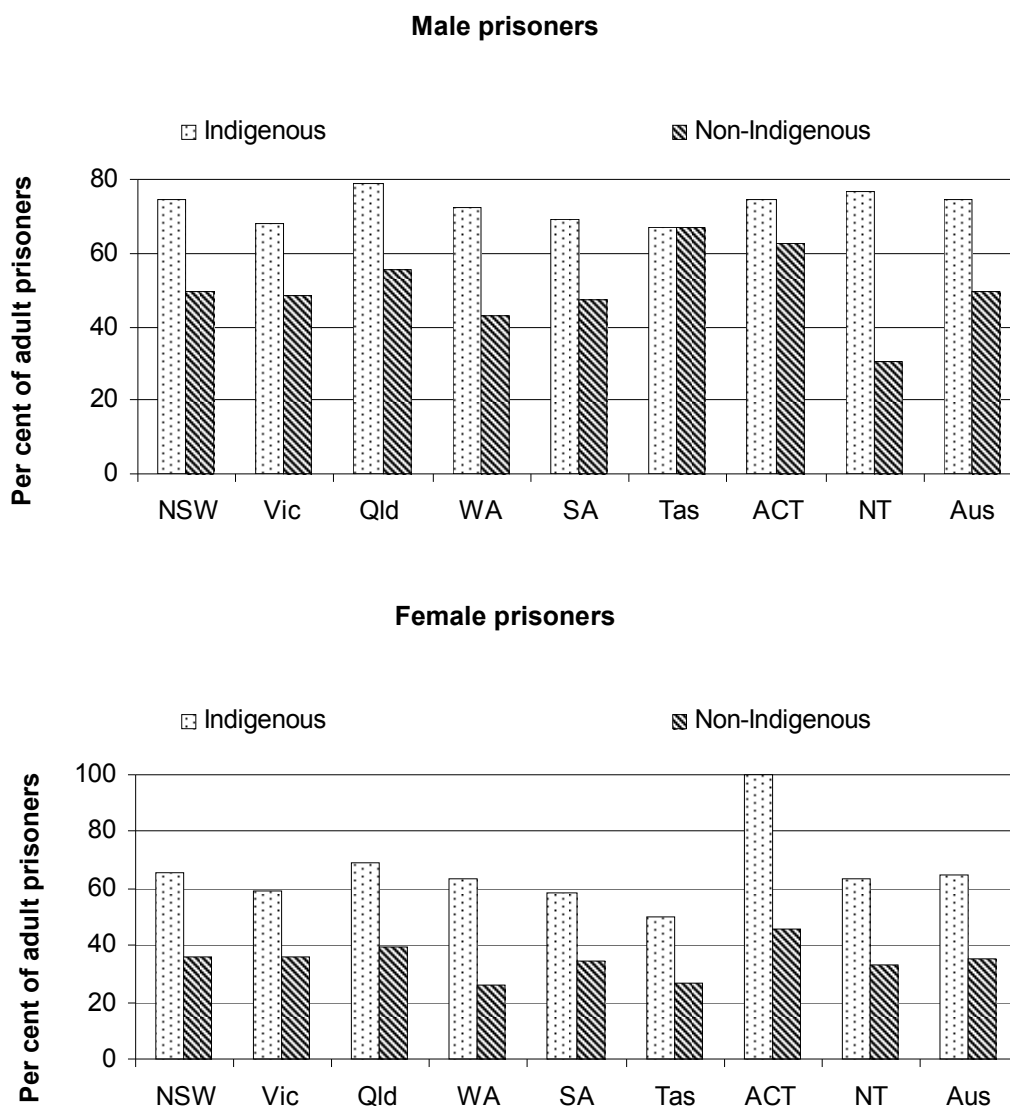
- the proportion of Indigenous prisoners who had experienced prior adult imprisonment was 73.7 per cent whereas for non-Indigenous prisoners it was 48.6 per cent (figure 10.6.1).
- the proportion of Indigenous prisoners who had experienced prior adult imprisonment under sentence was higher than for non-Indigenous prisoners in all states and territories (figure 10.6.1).

From 2000 to 2010:

- nationally, there were decreases in the percentages of Indigenous (from 76.2 per cent to 73.7 per cent) and non-Indigenous prisoners (from 52.1 per cent to 48.6 per cent) with prior imprisonment (table 10A.6.5).

Data on the proportion of prisoners with known prior adult imprisonment under sentence, by State/Territory and sex, are also available for 30 June 2007, 2008 and 2009 (see tables 10A.6.2–4).

Figure 10.6.2 Proportion of prisoners with known prior adult imprisonment under sentence, by sex, 30 June 2010^{a, b}



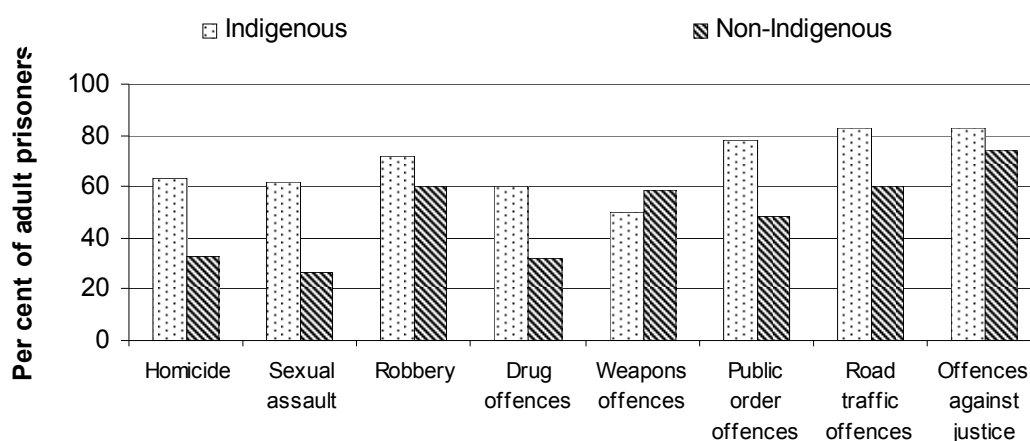
^a People known to have had prior imprisonment under sentence in a gazetted adult prison. A prior sentence of periodic detention is included as prior imprisonment. Some states and territories may also include episodes on remand as prior imprisonment. Prisoners who have had previous adult imprisonment in another State or Territory may not be counted as having prior imprisonment. ^b Only three Indigenous female prisoners were under sentence in the ACT as at 30 June 2010, of whom all had known prior imprisonment. Thus, the high percentage shown should be interpreted with caution.

Source: ABS (2010b); table 10A.6.1.

- At 30 June 2010, the proportion of prisoners who had experienced 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 except for males in Tasmania, where the Indigenous and non-Indigenous proportions were the same (figure 10.6.2).

- Nationally in 2010, 74.5 per cent of Indigenous male prisoners had experienced prior adult imprisonment, compared with 65.0 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 2010^{a, b}



^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. ^b See table 10A.6.6 for more information on the offences included in each category.

Source: ABS (2010b); table 10A.6.6.

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.

As at 30 June 2010:

- the proportion of Indigenous prisoners who had been in prison previously was higher than the proportion of non-Indigenous prisoners in most offence categories shown in figure 10.6.3.
- The difference between the proportion of Indigenous and non-Indigenous prisoners with prior adult imprisonment was highest for those sentenced for sexual assault offences (a gap of 35.5 percentage points) (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.6.6 (for 2010) and 10A.6.7 (for 2009), 10A.6.8 (2008) and 10A.6.9 (2007). In 2009, 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 (table 10A.6.7).

Juvenile repeat offending

Data on juvenile repeat offending are limited to four jurisdictions: NSW, Queensland, WA and SA, and are mostly based on separate 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, WA and SA include some updated information since the 2009 report. Data for Queensland are as shown in the 2009 report.

Data on juvenile repeat offending should be interpreted with caution as a large number of young people who come into contact with the criminal justice system are diverted through a range of processes (see section 10.5 ‘Juvenile Diversions’).

New South Wales

Table 10A.6.10 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 reoffending behaviour of the cohort. The average number of court reappearances per person in the follow-up period was 2.4 times as high for Indigenous juveniles as 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.

Another recidivism study measured the reoffending rates of young people in NSW who participated in a youth justice conference in 1999 (Vignaendra and Fitzgerald 2006). The study included 1711 young people, including 16.5 per cent Indigenous youth, who had been referred to a youth justice conference in 1999, and

measured how many had reoffended between 1999 and 2004.⁶ The study found that Indigenous offenders had higher rates of reoffending (80.9 per cent) compared to non-Indigenous offenders (55.5 per cent) (table 10A.6.11). Moreover, Indigenous offenders were 3.5 times the rate of non-Indigenous offenders to receive a custodial sentence following the initial conference (30.0 per cent compared to 8.6 per cent) (table 10A.6.11).

Queensland

A research project by Griffith University School of Criminology and Criminal Justice (2005) examined the links between child maltreatment, police cautioning and subsequent juvenile offending.⁷ The study followed all Queensland children born in the 1983 and 1984 birth cohorts until they had reached 17 years of age, and took note of those who had recorded contact with either the Department of Families for a child protection matter or juvenile justice matter and/or the Queensland police service resulting in a formal police caution. In total, data pertaining to 24 305 children were collected and analysed in this study (Griffith University 2005).

Of the 24 305 children in the study, 14 572 had received a police caution and, of these, only 31.3 per cent (no. 4566) went on to reoffend (resulting in either a further caution or a finalised court appearance) (Griffith University 2005). Of the 14 572 young people cautioned, just over 7.0 per cent (no. 1041) had a history of maltreatment. Those with a history of maltreatment were almost four times more likely to reoffend than children with no such history (Griffith University 2005).

Data were not available to examine the impact of Indigenous status on a young person's experience of cautioning, however, information on Indigenous status was available for those children who had suffered maltreatment. Out of a total of 993 children who had received a police caution and suffered maltreatment, 62.3 per cent (no. 619) went on to reoffend. Indigenous boys who had been maltreated (no. 88) had the highest rates of reoffending (82.2 per cent) compared to non-Indigenous boys (66.0 per cent or no. 321). Similar differences were recorded for Indigenous girls (74.1 per cent or no. 63) compared to non-Indigenous girls (46.7 per cent or no. 147) (table 10A.6.12).

For both Indigenous and non-Indigenous juveniles, greater proportions re-offended if their first contact with the juvenile justice system resulted in a finalised court

⁶ Reoffending is defined as an appearance in the Children's Local and District Courts for a proven offence.

⁷ For the purposes of the study, cases of child maltreatment include 'neglect', 'physical abuse', 'emotional abuse', or 'sexual abuse'.

appearance rather than a police caution (Griffith University 2005). Of those juveniles whose first contact was a finalised court appearance, Indigenous girls (53.4 per cent) were nearly twice as likely to reoffend as non-Indigenous girls (28.2 per cent). Similar patterns were seen for boys (63.5 per cent compared to 39.2 per cent, respectively) (table 10A.6.13).

Western Australia

Data for WA are from a University of WA study. The report examined the proportions of Indigenous and non-Indigenous juveniles who reoffended 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 reoffending 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 reoffended than non-Indigenous juveniles. Among Indigenous juveniles, the greatest proportion reoffended 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 reoffended 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 reoffenders was for juveniles receiving a fine as their first contact with the justice system (56.0 per cent of Indigenous juveniles reoffended after receiving a fine compared to 25.8 per cent of non-Indigenous juveniles) (table 10A.6.14).

A performance examination of the WA juvenile justice system was undertaken for the years 2002-03 to 2006-07 (Auditor General for Western Australia 2008). Key findings suggests that it is critical to address the core problems associated with juvenile repeat offending as significant numbers of young people with high levels of offending suffer from mental health or substance abuse problems. It was reported that Indigenous youth account for 35.0 per cent of all formal contact with police (where Indigenous status was recorded) despite making up only 5.0 per cent of the youth population in WA.

The examination found that 1085 young people each had more than ten formal contacts with police from 2002-03 to 2006-07. Of the 1085 young people, over 80 per cent were male and 75 per cent were Indigenous. A smaller group of 120 young people averaged 25 or more formal police contacts each over the five year

period, and were predominately male and Indigenous juveniles living in regional WA (Auditor General for Western Australia 2008).

South Australia

Data for SA are from the Office for Crime Statistics and Research (OCSAR).

A study by OCSAR in 2005 assessed the extent to which juveniles in SA had formal contact with the juvenile justice system (OCSAR 2005). Each juvenile included in the study was born in 1984 and the follow-up period was 18 years (to 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.

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 the rate of non-Indigenous juveniles to be apprehended at least once (44.4 per cent compared with 15.9 per cent) (table 10A.6.15).

The proportion of Indigenous juveniles who were apprehended on two to four occasions in the 1984 cohort was 3.6 times the rate of non-Indigenous juveniles (16.7 per cent compared with 4.6 per cent) (table 10A.6.16).

More recent data from the 2007 OCSAR juvenile justice publication indicate that, for the years 2004–2007, higher proportions of Indigenous juvenile offenders had two or more police apprehensions than non-Indigenous juvenile offenders. In 2007, 46.2 per cent of Indigenous juvenile offenders had two or more police apprehensions compared with 27.2 per cent of non-Indigenous juvenile offenders (table 10A.6.17). The gap between Indigenous and non-Indigenous juvenile offenders was similar for all years 2004–2007 (see table 10A.6.17).

10.7 Future directions in data

Alcohol consumption and harm

AIC (2005) research has indicated that the earlier young people first drink alcohol, the higher the risk of addiction in the future. There is a paucity of data on patterns of alcohol consumption for young people, including people aged 15 years or under.

This report and previous editions (2005 and 2007) used 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 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 comparable Indigenous and non-Indigenous data on patterns of substance use. This report and previous reports use data on substance use by Indigenous people from several ABS surveys. Data on substance use for both Indigenous and non-Indigenous people (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).

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.

Data on illicit drug use from the ABS Australian Health Survey 2012-13 are anticipated to become available late 2013.

Repeat offending

ABS work on repeat imprisonment trends (ABS 2010a) is an important step forward in understanding patterns of reoffending for those released from prison. Regular updates of this research would provide important insights into trends over time. Improving data on prisoners serving shorter sentences would be a useful addition to imprisonment data.

Research into juvenile repeat offending is now dated. There would be value in repeating and updating the research at regular intervals to explore trends over time.

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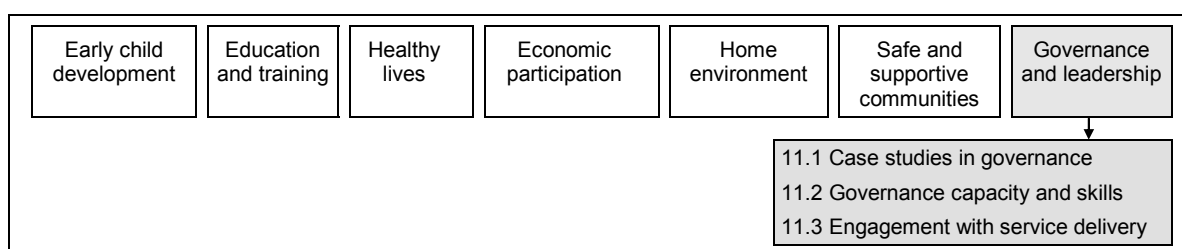
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11 Governance and leadership

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 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.

Consultations following the release of the 2009 report identified a broad consensus about the need for further research in the area of Indigenous governance. 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 work with, and in, Indigenous communities).

Effective governance and leadership play essential parts 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, section 11.1 focuses on six key determinants of good governance: governing institutions; self-determination; leadership; capacity building; cultural match; and resources. These determinants have general application to Indigenous governance (the governance of Indigenous organisations and communities) and

government governance (the way government engages with Indigenous people, organisations and communities)

- governance capacity and skills — 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. The proxy measure for section 11.2 is the proportion of students studying governance related courses (management and commerce, economics and law) at university and vocational education and training levels (although it is acknowledged that students in other courses may also be well equipped to provide leadership and contribute to good governance).
- engagement with service delivery — service engagement is a broad concept that encompasses accessibility (including barriers to access) and appropriate delivery (including the consideration of Indigenous cultural perspectives in the design and delivery of programs). The primary measures for section 11.3 are barriers to service provision; discrimination; communication with service providers; and discharges from hospital against medical advice.

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 and government governance:
 - governing institutions
 - leadership
 - self-determination
 - capacity building
 - cultural match
 - resources.
- The existence of these determinants contributes to the success of the efforts to improve outcomes for Indigenous people. The lack of these determinants is often linked to failure.

A consistent message from consultations with Indigenous people and governments is that good governance arrangements have a positive impact on Indigenous

outcomes (SCRGSP 2007). Many strong Indigenous corporations contribute to improving the social and economic outcomes for Indigenous people (ORIC 2009). Good government governance is particularly important to ‘drive real change on the ground’ (CGRIS 2010, p. 65).

This section addresses six determinants of good governance based on those identified by the Harvard Project on American Indian Economic Development in the USA (Harvard Project 2003-04). These six determinants of good governance are discussed and supported by examples of Indigenous governance (the governance of Indigenous organisations and communities) and government governance (the way government engages with Indigenous people, organisations and communities).

Many of the examples of good Indigenous governance practice have come from the biennial Indigenous Governance Awards, 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 (SCRGSP)), was a judge for the 2006, 2008 and 2010 Awards.) Other examples are drawn from consultations and studies into governance.

Defining governance

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, are the keys to strengthening Indigenous governance.

Determinants of good governance

Drawing on the Harvard Project on American Indian Economic Development in the USA (Harvard Project 2003-04), the ICGP and broad consultations with Indigenous communities and organisations, the SCRGSP has identified the following six determinants of good governance — relevant to both Indigenous governance and government governance:

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

The ICGP recommendations and key lessons from evaluations and studies of Indigenous reform initiatives over the past four to five years broadly reflect this report's key determinants. The determinants are inter-dependent. No one principle in isolation will lead to good governance — all determinants are necessary for sustained success.

Governing institutions are the way structures of governance are created, leaders chosen, and the extent of constituents' confidence and support. These 'institutions' are made up of both formal mechanisms (such as policies, rules, regulations, 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). Characteristics of good corporate governance include clearly articulated vision, values, and goals, and the structures, processes and programs to achieve them; the legitimacy and authority of those with decision-making power; sound dispute resolution processes; and adequate capacity.

Leadership has been described as 'the process through which an individual influences group members to attain group or organisational goals' (Smillie and Hailey 2001). There is a cultural aspect to Indigenous leadership and 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).

For governments, leadership at the ministerial, senior executive and planning levels, and at the level of service delivery, assists in improving processes and outcomes (Morgan Disney et al 2007). 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. 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 and all levels of government; integrity; strategic policy and evaluation skills and cross cultural awareness.¹ Succession planning is important to develop the next generation of leaders.

Self-determination is a complex concept, with its roots in human rights. It refers to Indigenous people as ‘...actors in their own lives instead of being acted upon by others’ (Wehmeyer 2002). For many Indigenous people, self-determination has close links with issues of customary law, land rights and economic development — the presence of certain socio-cultural factors in discrete Indigenous Canadian communities significantly reduced the risk of youth suicide in those communities (Chandler and Lalonde 2008). 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. Within the context of government, self-determination may be defined as government officials having appropriate authority to act. That is, relevant government officials having appropriate authority to make decisions and negotiate outcomes with Indigenous people and/or communities.

Governance capacity is having the capabilities that are needed to ‘get things done’. 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). Governance capacity also refers to government staff engaged in whole of government initiatives having the skills and knowledge to do whole of government work (Morgan Disney et al 2007).

Cultural match is the ‘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).

¹ These characteristics were derived from the content of the Certificate in Leadership program conducted by the Australian Indigenous Leadership Centre (see http://www.indigenousleadership.org.au/images/stories/pdfs/general/cert_iv_fact_sheet.pdf).

Cultural match also refers to government staff respecting relevant protocols and processes in Indigenous communities (Morgan Disney et al 2007).

Resources are the economic, cultural, social and natural resources, and information technology necessary to underpin successful governance. ‘Resources’ has close links to the ‘self-determination’ aspect of good governance. Organisations that are not reliant on one revenue stream can have greater long-term viability and are able to run programs as Indigenous people want them to be run (IGA 2006, p. 41). Sources of revenue can include 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.

Indigenous governance

The top 500 Indigenous corporations for 2007-08 collectively generated over \$1 billion in income in that year and employed 6948 people (ORIC 2009). The main source of funding for the top 500 Indigenous corporations was government funding (most of this was provided to support service delivery) and almost half operated in the health and community services sector (ORIC 2009).

This section draws on examples of Indigenous governance from the ICGP and the Reconciliation Australia/BHP Billiton Indigenous Governance Awards. The Awards are open to all Indigenous community organisations incorporated under legislation (see www.reconciliation.org.au/igawards for the assessment criteria). The 2010 Indigenous Governance Awards winners were:

Organisations established for less than 10 years	Organisations established for more than 10 years
<i>Winner</i>	<i>Winner</i>
Carbon Media Events Pty Ltd (Brisbane, Queensland)	Laynhapuy Homelands Association Incorporated (Yirrkala, NT)
<i>Highly commended</i>	<i>Highly commended</i>
Noongar Mia Mia Pty Ltd (Perth, WA)	North Coast Aboriginal Corporation for Community Health (Marochydore, Queensland)
<i>Finalists</i>	<i>Finalists</i>
<ul style="list-style-type: none"> • Mirrimbeena Aboriginal Education Group Inc. (Echuca, Victoria) • Napranum Preschool PaL Group (Weipa, Queensland) 	<ul style="list-style-type: none"> • Association of Northern, Kimberley and Arnhem Aboriginal Artists (Darwin, NT) • Australian Indigenous Doctors Association Limited (Parkes, ACT)

Governing institutions

Research into the key characteristics of Indigenous corporate failure has found that a clear majority failed because of poor corporate governance or poor management (this is consistent with mainstream research on business failure) (ORIC 2010). Governing institutions establish the framework within which Indigenous bodies function. Good corporate governance coupled with Indigenous cultural values, relationships and systems of authority produce governing order and good outcomes (Hunt et al. 2008, Hunt and Smith 2007). Good corporate governance is illustrated in the approaches to decision making of the 2010 Indigenous Governance Awards applicants (box 11.1.2).

Box 11.1.2 Decision making

The **North Coast Aboriginal Corporation for Community Health (NCACCH)** board positions are filled on a 2 year rotational basis and all decisions are made in a democratic manner. NCACCH have a decision making matrix and regularly refer to the International Principles of Governance in their decision making process.

Danila Dilba Health Service's decision making process is embedded in the organisation's constitution. In the case of ordinary meetings, all directors hold one vote, and resolutions can be decided through a majority show of hands or if requested through a formal poll. Prior to the vote, the board of directors obtain full briefings on decisions to be made and, if required, request the assistance of external consultants or professionals to ensure that decisions are made in the best interests of the organisation.

Napranum Preschool PaL Group (NPPG) has a board of three directors and the NPPG company of members acts as a management committee guiding the strategic direction and policies of the organisation. NPPG company of members meetings are held quarterly. Meetings cannot proceed unless the quorum of 4 members has been met. Agenda items are discussed and any resolutions with regard to each item are voted on by a show of hands. Each member is entitled to attend and vote in person, via technology or by proxy.

Source: Reconciliation Australia 2010 www.reconciliation.org.au/igawards (unpublished).

Good governing institutions do not just spontaneously arise. They are the result of often lengthy processes of developing capacity and leadership, 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 2010 Indigenous Governance Award applicants are summarised in box 11.1.3.

Box 11.1.3 Governance training

Danila Dilba Health Service provides training to all new governing committee members on election. This training is a set package covering all areas of governance, including roles and responsibilities, organisational policies and frameworks as well as the strategic plan. The organisation has also engaged the services of an external consultant to support the committee in higher level strategic areas including the drafting process of strategic directions.

Napranum Preschool PaL Group company of members and board of directors undertook corporate governance training provided by external consultants in December 2009. This ensures members are fully conversant with the information and skills to uphold the corporate management responsibilities of the organisation to the highest standards of quality and effectiveness.

The **Noongar Mia Mia Pty Ltd** chairperson and managing director at have completed training at the Institute of Company Directors.

Winnunga Nimmityjah Aboriginal Health Service board members undertake an induction and receive ongoing training. The board undertakes formal governance training for two days annually. Winnunga utilises consultants who assist with planning, reviews and strategic processes such as succession training for board members, which ensures older members plan for leaving while developing future leaders.

Source: Reconciliation Australia 2010 www.reconciliation.org.au/igawards (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

A recent study found that many Indigenous corporations failed because their directors failed in the performance of their duties (ORIC 2010). Good Indigenous leaders are critical to the development of a strong governance culture within organisations and communities. Indigenous leadership often requires people to be able to walk confidently and with influence in two worlds — Indigenous and non-Indigenous. 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)

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 2010 Indigenous Governance Awards applicants’ approaches to developing their leaders’ skills, and information on the Cape York Leadership Academy, an Indigenous organisation that has been particularly successful in developing the leadership skills of Cape York people.

Box 11.1.4 Leadership development

Girringun Aboriginal Corporation utilises its in-house training facility to provide a range of staff development and training programs. These focus on skills development in finance and administration, traditional knowledge recording, traditional cultural practices and language maintenance, cultural heritage management, cross-cultural awareness and project management.

Napranum Preschool PaL Group (NPPG) recognises that by employing local community people and providing training, NPPG assists in building confidence and capacity in both parents and tutors. Opportunities for NPPG members and personnel to attend leadership programs and workshops are sought and encouraged, and mentoring and support are provided to NPPG members and personnel to take on lead roles in presentations, interviews, workshops and meetings.

Cape York Leadership Academy at the Cape York Institute for Policy and Leadership provides ongoing engagement with leaders rather than one-off seminars, workshops or short courses. The focus is on the individual rather than collective education, and the Academy adopts a holistic approach which goes beyond the professional or vocational domains to incorporate the social, emotional and personal domains of learning. The Academy caters for leaders and potential leaders from all layers and levels of community life (not just those with positional or formal authority) and thus has the potential to unearth new leaders. An independent review in 2008 found a very high level of satisfaction with the Academy — over 90 per cent of participants felt that the leadership program was improving their leadership skills and making a positive difference to their personal lives (McCarthy 2008). In 2010, three Academy members were appointed to the Cape York Institute for Policy and Leadership board. In July 2010, the first Academy community workshop was conducted in Wujal Wujal. The entire community was engaged in the social and educational activities and the Academy had the support and assistance of the entire council and key community organisations (Westerhout, J., Cape York Institute for Policy and Leadership, Cairns, pers. comm., 26 August 2010).

Source: Reconciliation Australia 2010 www.reconciliation.org.au/igawards (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 2010 Indigenous Governance Awards applicants' approaches to succession planning.

Box 11.1.5 Succession planning

The **North Coast Aboriginal Corporation for Community Health** board positions are filled on a 2 year rotational basis to maximise the retention of corporate knowledge and governance capacity and to ensure that the board provides a consistent best practice service. An elder on the board assists in the development of the younger members.

Danila Dilba Health Service management committee is elected through a staggered rollover to maximise the retention of corporate knowledge and governance capacity. All members of the management committee are elected for 2 year terms.

The **Warlayirti Artists Aboriginal Corporation** director and art centre manager are each training a 'shadow' who will learn all parts of their job. The corporation has a succession plan in place to ensure that least two of the core positions (director, art centre manager or Indigenous employment mentor) are held by an Indigenous person from the Kutjunga region.

Source: Reconciliation Australia 2010 www.reconciliation.org.au/igawards (unpublished).

Developing the next generation of leaders is a specific aspect of succession planning. Several 2010 Indigenous Governance Awards applicants have specific programs to develop young 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 assist 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 young leaders

Kapululangu Aboriginal Women's Association encourages young women aged 15 to 18 to attend meetings and activities, where they are mentored by elders and work at the direction of the middle-generation tilitja (culture workers). Each experience immerses them in their people's cultural heritage, building their self-esteem and self-confidence. Kapululangu runs regular Young Women's Sleepovers at the Women's Law Ground and, on occasion, Young Women's Culture Camps out bush with their elders to sites of significance. Kapululangu women also train their children to be 'Strong for Law, Strong for Culture', by working in the local primary school running cultural classes and arranging for the school to send girls and young women to join the elders on the Women's Law Ground, where they learn traditional dancing and song.

MiiMi Aboriginal Corporation encourages young Indigenous women to participate in the governance of the organisation. One board member is a young Gumbaynggirr woman who has recently become the treasurer of MiiMi. MiiMi has a mentoring program which involves two community workers providing mentoring and support for youth in Bowraville.

Carbon Media Events Pty Ltd in conjunction with partners, nurtures and supports the training of Indigenous young people. Carbon offers Certificate IV in Training and Assessment and Certificate IV in Screen and Media courses and offers mentoring. Two people have been mentored by Carbon and are now embarking on media careers of their own.

Danila Dilba Health Service staff who show interest in progressing within the organisation are assigned internal senior staff as mentors; for example, a member of the administration team has shown interest in pursuing a career in finance and an internal traineeship has been developed, with a plan including relevant study and mentoring support from the director of finance.

Mirrimbeena Aboriginal Education Group Inc. offers studies in leadership skills, teaching the ways to be a truly good leader. Elders of the Yorta Yorta people are available for mentoring and young people are encouraged to expand on their skills and to enjoy learning new ones.

Laynhapuy Homelands Association provides training opportunities to members through conferences, speaking engagements and leadership courses. Young people are encouraged to attend board meetings, special purpose meetings and high level discussions and meetings with government. Laynhapuy Homelands Association also works with homelands schools and the education department to ensure there are career pathways for local children leaving school.

Source: Reconciliation Australia 2010 www.reconciliation.org.au/igawards (unpublished).

Self-determination

Self-determination has close links with issues of customary law and the ‘cultural match’ aspect of good governance. ‘Self-determination’ is having the right and ability to determine priorities and design instruments of governance, within broad ‘external’ governing institutions; while ‘cultural match’ is about the way things are done that win the support, participation, and trust of the people (Cornell and Begay 2003).

Self-determination has been given different definitions by different researchers (Calma 2006; Hunt and Smith 2006; Hunt et al. 2008; ICGP 2006; IGA 2006) but put simply ‘self-determined people are actors in their own lives instead of being acted upon by others’ (Wehmeyer 2002). 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)

Honoring Nations (Harvard Project on American Indian Economic Development 2009) is an American awards program that highlights American Indian tribal government successes. Self-governance plays a crucial role in building and sustaining strong, healthy Indian nations. Some stories of successful self-determination from the *Honoring Nations* program are presented in box 11.1.7. Forms of self-determination are determined partly by the legal and constitutional constraints and freedoms in each country. Although there are institutional differences between Australia and the United States, the examples in box 11.1.7 are useful illustrations of the potential benefits of Indigenous self-determination.

Box 11.1.7 American Indian self-determination

For decades the **Tohono O’odham Nation** in Arizona had no control over the care delivered to its own people. Tohono O’odham elders in need of skilled nursing had to move to nursing homes off the reservation. In the 1990s, the Nation formed the Tohono O’odham Nursing Care Authority and built (and now operate) the Archie Hendricks, Sr. Skilled Nursing Facility. Tohono O’odham elders can now remain in the community and receive world-class clinical care with traditional values. The nursing home has become one of the finest elder care facilities anywhere in the United States.

The **Chickasaw Nation** in Oklahoma created the Chickasaw Press in 2006 to help the Nation tell its stories on its own terms. The Press publishes books written by Chickasaw citizens, using the highest standards of professional editing and production. In doing so, it gives new life to an ancient storytelling tradition.

The **Citizen Potawatomi Nation** in Oklahoma has engaged in constitutional reform over the last two decades and now has a judicial system of trial and appeals courts. The judicial system functions at a level of sufficiently high quality that it has attracted tens of millions of dollars of capital to the Nation’s business enterprises and induced a neighbouring non-Indian township to opt into the Potawatomi system and out of the State of Oklahoma system for its municipal court services.

After more than a century of rules imposed by outsiders, the **Osage Nation** in Oklahoma began the task of designing a new government that would better represent and serve all Osages. As a result of the Osage Government Reform Initiative, the Osage Nation adopted a new constitution in June 2006. Written by the Osage people, it has brought back into the tribal community the thousands of citizens who had once been excluded.

Source: Cornell and Kalt 2010; Harvard Project on American Indian Economic Development 2009.

An important aspect of self-determination is ‘cultural legitimacy’ — the extent to which there is:

- culturally legitimate participation and control of decision-making. In 2008, only one quarter (24.9 per cent) of Indigenous people aged 15 years and over felt they were able to have their say within the community on important issues all or most of time; 44.7 per cent felt they had a say some or a little of the time but 30.4 per cent never had a say (table 11A.1.1). More data on participation within the community on important issues by jurisdiction, remoteness area and age groups are available in tables 11A.1.1–3
- community participation in community governance institutions
- specific actions to meet the needs of specific communities, for example, community courts, community policing and Indigenous schools

-
- flexible funding that facilitates (and does not hinder) the development of appropriate programs at the community level.

Box 11.1.8 illustrates some of the 2010 Indigenous Governance Awards applicants' approaches to ensuring cultural legitimacy.

Box 11.1.8 Cultural legitimacy

North Coast Aboriginal Corporation for Community Health board members come from across the region, providing comprehensive geographical representation for community members of the Sunshine Coast and Cooloola regions.

Kapululangu Aboriginal Women's Association (KAWA) has a structure based on Yiwarrar Kutjarra or Two-Ways/Roads framework of two distinct ways of governance; Indigenous/Traditional and non-Indigenous/Contemporary. KAWA incorporates practices and values pertinent to local Indigenous Women's Law.

Noongar Mia Mia Pty Ltd has a strong relationship with its members and listens and acts on concerns and questions raised by members. Advice is equally given and taken between members of the organisation. All business at Noongar Mia Mia is influenced by and conducted according to traditional values.

Laynhapuy Homelands Association is controlled by Yolgnu communities. The organisation recognises ceremonial responsibilities and has a forum of Laynhapuy Homeland Mala Leaders (in addition to formal corporate structures). The organisation's hierarchy reflects the traditional law and leadership. Most of the board of directors represent their traditional clan estates. Laynhapuy Homelands Association involves homelands members in decision making and in plans and strategic pathways to ensure success.

Girringun Aboriginal Corporation was conceived at a 1994 meeting of senior elders. Traditional knowledge and practices — including extended oral histories — have been retained by elders. Many traditional practices, including languages, are fostered within member groups. Cross-generational transfer activities are promoted and fostered within member groups and through popular Girringun-facilitated projects.

Source: Reconciliation Australia 2010 www.reconciliation.org.au/igawards (unpublished).

Capacity building

Governance capacity is having the capabilities that are needed to 'get things done'. Research has found that the majority of Indigenous corporate failures was due to poor performance of directors and staff (ORIC 2010). This poor performance may be related to 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 are also a major risk for organisations (OIPC 2006; ORIC 2010). The OIPC (2006) red

tape evaluation found that only half the organisations examined were satisfied with the skills and staff they had available (OIPC 2006).

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 corporations that are incorporated under the Act 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). Section 11.2 examines in greater detail some specific aspects of formal training in areas relevant to governance capacity.

Box 11.1.9 provides some examples of capacity building by Indigenous organisations from the 2010 Indigenous Governance Awards.

Box 11.1.9 Building capacity

Laynhapuy Homelands Association supports and sustains Laynhapuy homelands by providing services and infrastructure and facilitating capacity development. The organisation supports Yolngu members of the homeland communities through programs such as maintenance and protection of country and culture, employment, training, economic development opportunities, advocacy and social justice services. Laynhapuy Homelands Association advocates for service delivery and opportunities on country that can contribute to building the capacity of Yolngu people.

Laynhapuy Homelands Association employs skilled non-Indigenous people but ensures skills are transferred to Yolngu staff so that Yolngu people can transition to these positions. The organisation is the largest employer of Yolngu people in North East Arnhem Land. Laynhapuy Homelands Association staff have access to the organisation's internal training unit and various program areas that can provide staff development and training. The organisation's training plans are based on staff reviews, and include identified skills development, management skills, leadership training and specific program area training.

Source: Reconciliation Australia 2010 www.reconciliation.org.au/igawards (unpublished).

Cultural match

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 'governing institutions' earlier in this section). There are close links between the 'cultural match' and 'self-determination' determinants of good governance. Cultural match is about the way things are done (rather than who makes the decisions).

Cultural match refers to the way things are done and the balance 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; Cornell and Begay 2003). The West Central Arnhem Regional Authority (Interim Council) call it governing 'two-ways' (Hunt et al. 2008).

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).

Approaches to cultural match by the applicants to the 2010 Indigenous Governance Awards are summarised in box 11.1.10. Some successful approaches to address cultural match are:

- ensuring specific sectors of the organisation's community (for example, language, skin or clan groups), especially elders, are represented on their board or are 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).

Box 11.1.10 Cultural norms

The **Kapululangu Aboriginal Women's Association (KAWA)** is immersed in the community and believes in the importance of remaining flexible and responsive to changing law and culture demands and obligations. For example, board meetings may be rescheduled if sorry business or other cultural responsibilities make a meeting impossible.

Carbon Media Events Pty Ltd breaks down preconceived ideas about what it is to be Indigenous. The organisation has been able to bring a positive perspective on Indigenous affairs to a wide audience via broadcasts that have succeeded in generating debate, creating positive profiles and tackling complex issues in a proactive and constructive manner. Carbon Media Events nurtures and supports the training of Indigenous people who want a career in multimedia.

(Continued next page)

Box 11.1.10 (Continued)

Napranum Preschool PaL Group was created to support the Parents and Learning (PaL) Program, which developed from community need and directly reflects the cultural norms and values of members. The PaL Program was developed by Indigenous people for Indigenous people and ensures Indigenous participation and consultation in all stages of the program.

The **Warlayirti Artists Aboriginal Corporation** decision making process respects cultural norms. For example, cultural protocols may not allow the female director of the corporation to make decisions regarding a male artist. In this case, the male chairperson will be consulted to make the appropriate decision.

Laynhapuy Homelands Association is committed to training staff and mentoring young people who could eventually become staff and board members. The association has a membership and leadership structure that conforms to the norms of good governance as laid out in the relevant legislative framework. Yet it also operates in a way that is heavily imbued with Yolngu principles of governance (Hunt et al. 2008).

Source: Reconciliation Australia 2010 www.reconciliation.org.au/igawards (unpublished).

Resources

Resources, including financial, physical and human resources, are major factors in successful governance arrangements (SCRGSP 2007). For many Indigenous organisations, ‘human capital’ is much more of an issue than basic administrative equipment (OIPC 2006; ORIC 2010). 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.

Financial diversity can give Indigenous organisations a degree of independence and enable Indigenous organisations to run programs as Indigenous people want them to be run (IGA 2006, p. 41). In 2007-08, more than 95 per cent of the top 500 Indigenous corporations were not-for-profit. Table 11.1.1 compares the top 20 Indigenous corporations with other economically significant not-for-profit organisations. In 2007-08, most of the income for the top 20 Indigenous corporations was generated from government funding compared with other not-for-profit organisations where the main source of income is self-generated revenue (for example, funds derived from fees and charges or investment income) (ORIC 2009).

Table 11.1.1 Sources of income, (per cent)

	<i>Top 20 Indigenous corporations^a</i>	<i>Not-for-profit organisations^b</i>
Government funding ^c	46.9	33.2
Self-generated revenue	38.2	49.6
Other revenue sources	14.9	7.7
Philanthropic gifts	0.01	9.4

^a Data are for 2007-08 and derived from ORIC (2009), p. 2. ^b Data are for 2006-07 and are derived from Productivity Commission, (2010) p. 72. ^c Includes grants (not tied to expected outputs) and funding to support service delivery.

Source: ORIC 2009; Productivity Commission 2010.

Both Dwyer et al. (2009) and the OIPC red tape evaluation (OIPC 2006) found that most service providers viewed much of their annual or triennially renewed funding as ongoing — government grants continue year after year, with little change in the circumstances or risk profile of the funded organisations. This raises the question of the value in annual funding applications if in reality most funding is long term. Dwyer et al. (2009) concluded that long term funding (funding contracts of at least five years) for core primary health care was needed to reduce transaction costs and allow flexibility for local priority setting.

During consultation for this report, participants suggested that, while governments have seen short term funding as a way of avoiding risk, it has actually increased the risk of failure. Short term funding and frequent reporting provide governments with a greater sense of ‘control’ over perceived risky organisations.

However, short term funding can increase the risk of organisational failure, because it creates uncertainty that makes it difficult to recruit and retain staff and build capacity. In addition, frequent reporting creates a costly administrative burden.

The Indigenous Governance Awards noted that financial diversity and greater self-reliance were goals for many organisations. Box 11.1.11 provides examples of some 2010 Indigenous Governance Awards applicants that were pursuing financial independence and also includes the Larakia Development Corporation (which has been included in previous reports) as an example of an Indigenous organisation that has been particularly successful at generating its own resources.

Box 11.1.11 Resources

Carbon Media Events Pty Ltd is a privately funded organisation which has achieved 30 per cent annual growth since its inception in 2006. Carbon Media Events has composed and implemented a financial plan that will see it continue to be financially sustainable and profitable for the next five years.

Napranum Preschool PaL Group (NPPG) has three main revenue sources:

- foundation sponsors (support from Rio Tinto has been a major factor in the growth and development of PaL)
- community/site funding partners (revenue is received on a project by project basis)
- specific project grants (for example, government grants for development of a business plan and employment of a business development officer for 12 months).

NPPG aims to be financially self-sufficient and not reliant on any one primary source of revenue.

Noongar Mia Mia Pty Ltd aims to increase income by using its own properties to generate income through property development.

Warlayirti Artists Aboriginal Corporation has two operational parts — an art centre and a culture centre. The art centre is self funded at an operational level. All core salaries, art supplies, power, phone and travel are paid for from commissions from artwork sales. The culture centre is primarily subsidised through a range of government and non-government grants. It generates some income through sales of self-produced DVDs, books, baskets and other cultural merchandise. Warlayirti Artists Aboriginal Corporation aims to introduce additional income streams to the cultural centre to ensure that it can generate its own funding to complement its grant subsidies.

Danila Dilba Health Service is monitoring opportunities to maximise income from alternate funding sources such as Medicare. The organisation aims to become self-sustaining and is investigating opportunities (such as software development) that are marketable to both the Indigenous and mainstream health sectors.

(Continued next page)

Box 11.1.11 (Continued)

The **Larrakia Development Corporation's** first commercial operation was a residential housing development of 370 lots. The healthy profits from this venture were used as a catalyst for further business development. Since its inception in 2001, the company has grown into a highly successful property developer and multi-faceted business. Ventures include construction, landscaping, a turf farm, property maintenance, employment referrals, new business development and a mini-bus service. All of these businesses provide employment and training opportunities for local Aboriginal people.

Income is divided evenly between the Larrakia Development Trust (established to coordinate community projects for the Larrakia people) and reinvestment into the company. The corporation 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: LDC 2010; Reconciliation Australia 2010 www.reconciliation.org.au/igawards (unpublished).

Government governance

Discussion of Indigenous governance also needs to look at *government governance*, governments' engagement with Indigenous people. This section examines formal arrangements for 'high level' engagement between governments and Indigenous people, and then applies the six determinants of good governance, as outlined above, to explore the relationship between government and Indigenous groups, organisations and communities.

Indigenous advisory bodies

The National Congress of Australia's First People (National Congress) is an Indigenous initiated and controlled representative body. The Australian Government has provided \$6.0 million for the establishment of the body and an additional \$23.2 million will be provided for the operation of the body from January 2011 to December 2013 (Macklin 2009). The National Congress is in development and setup stage but future reports may discuss the role of the national representative body in working with Australian governments.

Some jurisdictions have established Indigenous advisory bodies to provide advice to governments on Indigenous policy issues. Examples of these arrangements can be found in box 11.1.12.

Box 11.1.12 Indigenous advisory bodies

The **NSW Partnership Community Program (PCP)** is designed to improve government service delivery. The program commenced in 2008 with 40 Aboriginal communities around the State. The aim of the program is to bring the community together to form a single representative governance group. A member of the La Perouse Governance Group, explained that the PCP ‘...has brought the community together and we’re all going forward in the same direction...it’s whole of community that takes control and makes decisions — this is positive’ (NSW Government unpublished).

Victoria has several statewide advisory bodies and 38 Local Indigenous Networks:

- The Victorian Aboriginal Heritage Council is the primary source of advice to government about the protection of Aboriginal cultural heritage in Victoria. The Council has statutory decision making functions and all its members must be traditional owners.
- Local Indigenous Networks (LINs) are made up of Indigenous people who work together to provide a voice for their community, identify local issues and priorities, and plan for the future. Each LIN develops a local community plan that identifies strengths and resources and describes the vision, aspirations and priorities of the local community. Nineteen plans have been developed to date; almost 80 per cent highlight education and training as a key concern, followed by concerns about cultural and community strengthening.

The ten members of the **South Australian Aboriginal Advisory Council (SAAAC)** are appointed by the Minister for Aboriginal Affairs and Reconciliation for a term of two years. The Council meets at least four times a year, with additional meetings as required. SAAAC provides advice on existing and future programs and policies relating to Aboriginal people, ensuring that Aboriginal views are part of government policy making. The SAAAC also provides advice to government agencies about appropriate consultation processes with Aboriginal communities. The Council may provide advice on its own initiative or at the request of the Minister. The Minister attends each meeting for one hour and discusses key items personally with the Council. The Council hosts forums throughout the year to increase the government’s engagement with the Aboriginal community. SAAAC members use their positions in the Aboriginal community to identify and inform the Government of emerging issues.

(Continued next page)

Box 11.1.12 (Continued)

The **ACT Aboriginal and Torres Strait Islander Elected Body** (ATSIEB) comprises seven members who are elected to the ATSIEB every three years. The ATSIEB 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. The ATSIEB provides Indigenous people living in the ACT with an opportunity to participate in the formulation, coordination and implementation of government policies for Indigenous people. Since it was established, the Elected Body has had a significant impact on improving service delivery to Aboriginal and Torres Strait Islander people in the ACT.

The 16 members of the **NT Indigenous Affairs Advisory Council** are appointed by the NT Government. The primary role of the Indigenous Affairs Advisory Council is to provide advice on overcoming Indigenous disadvantage in the NT and assist the NT Government to effectively engage with Indigenous people, organisations and communities. The Indigenous Affairs Advisory Council has developed an Indigenous language policy for NT Government.

Source: NSW Government unpublished; Department of Planning and Community Development 2010; Victorian Government (unpublished); SA Government (unpublished); ACT Government (unpublished); NT Government (unpublished).

Determinants of government governance

The ‘governance of governments’ matters to the governance of Indigenous communities and organisations (Hunt and Smith 2006, Hunt et al. 2008). Poor government governance, such as a lack of coordination among agencies, duplication of services, failure to adapt to change, an unstable policy environment and ineffective processes, affect the governance of Indigenous organisations and outcomes for Indigenous people. The *Overburden Report* (Dwyer et al. 2009) found that the machinery of government (specifically, the fragmented funding processes) is an administrative burden to organisations delivering primary health care services to Indigenous people. A ‘different way of thinking about the relationship between government and the sector’ is required to improve the efficiency and effectiveness of primary health care services to Indigenous people (Dwyer et al 2009, p. 58).

Australian governments have made several collective commitments to improve government governance, including: commissioning this report (COAG 2002); agreeing to the ‘Service Delivery Principles for Programs and Services for Indigenous Australians’ (COAG 2008a), which drew upon the ‘National Framework of Principles for Government Service Delivery to Indigenous Australians’ (COAG 2004); establishing a national framework for reporting expenditure on services to Indigenous Australians (IERSC 2009, 2010) and

supporting the development and operation of the new national Indigenous representative body — the National Congress (Macklin 2009).

At the program level, Australian governments have committed to sharing their learning about what works to close the gap on Indigenous disadvantage. The ‘Closing the Gap Clearinghouse’(AIHW and AIFS 2010) provides access to a collection of evidence-based research on what works to overcome Indigenous disadvantage.

There is information on the use of mainstream services by Indigenous peoples (see the Indigenous Expenditure Report (IERSC 2010) and the Indigenous Compendium of the Report on Government Services (SCRGSP 2011) for available data) but very little information on the barriers to access and use of services faced by Indigenous people (see section 11.3 on Indigenous engagement with service delivery).

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*, the OIPC (2006) ‘red tape’ evaluation, and the evaluation and performance audit reports of Indigenous programs conducted by the Australian Government Office of Evaluation and Audit (Indigenous Programs) (now part of the Australian National Audit Office) were all discussed in detail in previous reports. Such evaluations are crucial to inform improvements in government governance in Indigenous affairs.

A meta-review of evaluations and studies of Indigenous reform initiatives over the past four to five years was undertaken to inform COAG’s remote service delivery strategy. The key lessons from the meta-review broadly reflect this report’s key determinants of good government governance:

- community involvement is needed in program design and decision-making
- sustainable change requires the agency of communities and individuals
- the need for a strengths based approach that focuses on capacity building and capability development
- cooperative approaches between Indigenous people and government (cultural competence is intrinsic to this relationship)
- community and government leadership (government leaders have the authority to make decisions and change at the local level)
- a long-term commitment and investment (Australia’s international aid commitments can be 15 to 20 year commitments with periodic reviews — this same approach is relevant to addressing change for Indigenous communities.)

(Department of Families, Housing, Community Services and Indigenous Affairs, pers. comm., 8 July 2010).

There are similarities between the determinants of good government governance, the ‘things that work’ success factors in this report (see chapter 3) and the international community development principles that Hunt (2010) identified as important in the way non-government organisations work with Indigenous Australian communities. They all reflect the ‘bottom-up’ approach and the self-determination and capacity building determinants of good governance.

The implementation of the National Partnership on Remote Service Delivery (NPRSD) is an example of government governance in Indigenous affairs (box 11.1.13). The NPRSD (COAG 2008b) drew on the findings from the meta-review of evaluations of Indigenous reform initiatives. The NPRSD came into effect in January 2009 and will cease in June 2014. The initial focus is on 29 communities across Australia. The Coordinator General for Remote Indigenous Services (CGRIS) oversees planning and strategic investment in the 29 communities. The CGRIS produces six-monthly progress reports to governments (CGRIS 2010, 2011). The CGRIS (2010) *Six Monthly Report: December 2009 – August 2010* had a strong focus on the governance gap in communities and the capacity gap in governments.

Box 11.1.13 **National Partnership on Remote Service Delivery (NPRSD)**

The key determinants of good governance are relevant to the implementation arrangements of the NPRSD. The NPRSD is intended to contribute to the achievement of COAG's Closing the Gap targets. At the community level, the COAG targets are translated into action through local implementation plans. The *December 2009 – August 2010* six-monthly progress report commented on NPRSD governance (summarised here according to the SCRGSP determinants of good governance):

- *Governing institutions* — each participating jurisdiction has a board of management that consists of Australian Government and State/Territory officials; regional operations centres provide a single government interface in communities; and each community has a government business manager and an Indigenous engagement officer.
- *Leadership* — leadership of the boards of management is strong but governments are not working together effectively at some of the regional operations centres.
- *Self determination* — designing and developing local implementation plans required a community engagement process. Genuine community engagement was not consistent across all communities. On occasion, governments presented highly developed plans to communities as a starting point for discussion. Genuine community engagement in future iterations of local implementation plans will be needed to ensure community ownership of the process.
- *Capacity building* — Indigenous engagement officers are employed in each community. Some local implementation plans include governance and leadership training for community members. Capacity building is important to ensure communities 'play their role in Closing the Gap'.
- *Cultural match* — the depth of engagement with communities to develop local implementation plans varied. Traditionally trained public servants may not have the capabilities to work with remote Indigenous communities. Targeted education programs are needed to ensure officers have the appropriate skills and cultural competency to work in Indigenous communities. In WA, attention was given to recruiting officers who had the capabilities to engage communities.
- *Resources* — the Australian Government and the relevant States and Territories have committed to investing \$291.2 million over six years in the 29 priority communities.

An evaluation framework is being developed for the NPRSD. Findings from the evaluation may be available for inclusion in the next report.

Source: CGRIS 2010.

The Northern Territory Emergency Response² (NTER) (box 11.1.14) was included in the 2009 report as an example of government governance in Indigenous affairs. An evaluation of the NTER is to be completed by 2011. The NTER evaluation will examine the program from a whole of government perspective — have governments been effective in delivering a coordinated and integrated suite of services and initiatives that improve outcomes for Indigenous people in the NT? The findings from this evaluation may be available for inclusion in the next report.

Box 11.1.14 Northern Territory Emergency response (NTER)

The NTER was announced by the former Australian Government in June 2007, in response to the *Ampe Akelyernemane Meke Mekarle: 'Little Children are Sacred'* report (Anderson and Wild 2007). The 2009 report included information on the key elements of the NTER. The key determinants of good governance are relevant to the implementation arrangements of the NTER.

- *Governing institutions* — a 2009 survey of government business managers found that half (51 per cent) believed that the various government agencies work well together in the community (Snow and Eichhorn 2010).
- *Leadership* — there was a lack of coordination and communication within and between agencies in delivering their services to the communities (NTER Review Board 2008).
- *Self determination* — local Indigenous community members have been employed to provide community input into Government decision-making (FaHCSIA unpublished). From June to August 2009, the Australian Government consulted widely with Aboriginal people across the NT about future directions for the NTER. These consultations provided an opportunity for community engagement in redesigning NTER measures (FaHCSIA 2009).
- *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

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² Key elements of the NTER include income management of welfare payments, changes to the CDEP program, alcohol, drug and pornography restrictions, increased policing, enforced school attendance, programs aimed at supporting child development, health checks for all children, improving housing arrangements, and appointing managers of all government business in communities. See <http://www.fahcsia.gov.au/sa/indigenous/progserv/ntresponse> for more information on the set of measures that are designed to close the gap in the NT.

Box 11.1.14 (Continued)

- *Cultural match* — 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.

Source: FaHCSIA 2009, (unpublished); NTER Review Board 2008; Snow and Eichhorn 2010.

The Cape York Welfare Reform (CYWR) trial (box 11.1.15) was included in the 2009 report as an example of government governance in Indigenous affairs.³

An implementation review of the CYWR Family Responsibilities Commission (FRC) was completed in September 2010 (KPMG 2010). Some of the FRC evaluation outcomes can be found in box 11.1.15. An evaluation of the CYWR trial was occurring at the time of writing. The CYWR evaluation will examine the implementation of projects and investigate outcomes for individuals, families and communities in a summary report, drawing together overall conclusions about the impact of the trial.

³ Programs covering housing, education, social responsibility and economic opportunity are part of the CYWR trial. The CYWR trial includes the FRC which is an independent statutory body established to help rebuild social norms in the four CYWR communities. The FRC can make recommendations to quarantine welfare payments.

Box 11.1.15 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. The CYWR trial commenced 1 July 2008 and will conclude on 31 December 2011. The 2009 report included information on the programs being implemented as part of the CYWR trial. 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 the 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 designing and developing 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 FRC consists of a legally qualified commissioner and six local commissioners for each of the four CYWR communities. An implementation evaluation of the FRC found that: it had been implemented as intended; it contributes to restoring Indigenous authority by supporting local and emerging leaders in local commissioner roles; the FRC's jurisdiction is targeted appropriately; and it is engaging community members in a very complex environment (KPMG 2010).
- *Resources* — the Australian and Queensland governments have committed substantial resources to the four year trial.

Source: FaHCSIA (unpublished); KPMG (2010); Queensland Government (unpublished).

11.2 Governance capacity and skills

Box 11.2.1 Key message

- Indigenous students enrolled in university and VET courses relevant to governance in 2009 at lower rates than non-Indigenous students:
 - 15.0 per cent of Indigenous university students compared with 33.3 per cent of non-Indigenous university students
 - 13.9 per cent of Indigenous VET students compared with 20.0 per cent of non-Indigenous VET students (figure 11.2.1).

Governance refers to the way that a society 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 and personal attributes that contribute to the knowledge, ability and commitment essential to good governance (see key determinants of good governance, section 11.1). This indicator complements the case studies in governance (section 11.1).

There are few quantitative data available on governance capacity and skills, and the proxy measure for this indicator is the proportion of students studying governance-related courses (management, commerce, business law, economics and econometrics, governance and administration and business) at university and Vocational Education and Training (VET) levels. While other forms of training are also valuable, training in the areas of leadership, finance or management is most directly 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.

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 post-school institutions (including colleges of Technical and Further Education (TAFE)).

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, ORIC 2009; 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).

The *Analysing Key Characteristics in Indigenous Corporate Failure* report (ORIC 2010) found that the majority of Indigenous corporate failures were due to poor performance of directors and staff. This poor performance may be related to 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 are also a major risk for organisations (OIPC 2006; ORIC 2010).

Although the focus of the proxy measure is on students studying governance-related courses, it is generally recognised that a broader based community development approach is important (OEA 2009). Hunt and Smith (2007) noted that governance capacity development requires a community development approach. A community development approach emphasises empowering communities to take responsibility and control over their own futures (Gerritson 2001, Hunt and Smith 2007). Improving the capacity of organisations usually requires a sustained focus on the organisation as a whole rather than on individuals. Strong, well-governed Indigenous communities and organisations are the key to real success in achieving lasting change on the ground which means developing community capacity to engage (CGRIS 2010). A House of Representatives (2004) inquiry into capacity building and service delivery in Indigenous communities supported the community development approach to building governance capacity.

Box 11.2.2 gives examples of accredited training programs strengthening governance capacity and skills of Indigenous communities and organisations.

Box 11.2.2 'Things that work' — Increasing governance capacity and skills

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. Previous editions of this report (2007 and 2009) highlighted the 'Managing in Two Worlds' program. In November 2009, ORIC won the prestigious Business/Higher Education Round Table collaborative community engagement project award for this program. In 2010:

- the 'Managing in Two Worlds' program delivered 12 three-day Introduction to Corporate Governance workshops, involving 227 participants from 170 organisations
- two Certificate IV in Business (Governance) courses were delivered to 25 students representing 29 organisations, with an 84 per cent completion rate
- one Diploma of Business (Governance) course was delivered to 13 students from 12 organisations, with an 85 per cent completion rate
- five three-day Building Strong Stores workshops were delivered in the NT to 103 participants from 55 licensed community stores
- six one day Annual General Meeting director training program workshops were delivered to 120 participants from 78 corporations
- corporation specific training was delivered to 177 participants from 33 organisations (Registrar, ORIC, pers. comm., 3 February 2011).

A **Governance Training Program** (Victoria) administered by the Victorian Government through a partnership with the ORIC began in March 2006. It consists of three interdependent levels of accredited and non-accredited training:

- three-day Introductory Workshops (551 participants from over 100 organisations)
- certificate IV in Business (Governance) (159 graduates from over 50 organisations)
- Diploma of Business (Governance) (27 graduates from 15 organisations).

An evaluation of the programs in 2010 found that more than 75 per cent of all Aboriginal Community Controlled Organisations (ACCOs) had participated in governance training, with significant improvements in compliance in the sector (Victorian Government unpublished).

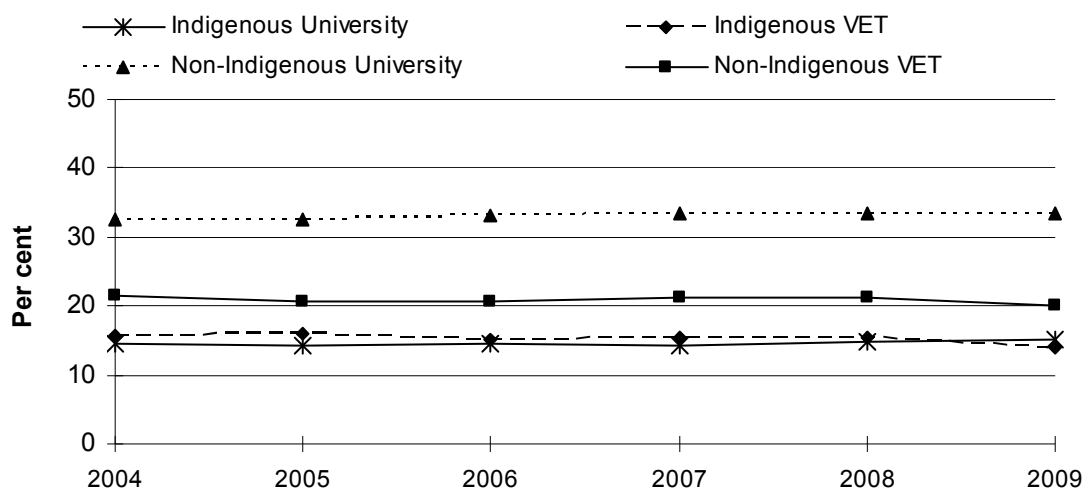
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Box 11.2.2 (continued)

The Fellowship for Indigenous Leadership (Victoria) is an intensive, flexible, highly individualized program. Fellows (supported for five years) and emerging leaders (supported for one year) have the opportunity to further their leadership skills, networks and community projects. Fellowship committee members provide mentoring, and links to a wide range of corporate and business leaders. Since beginning in 2005, the program has supported two fellows, and six emerging leaders have received assistance (Victorian Government unpublished).

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. 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 organisational and community governance.

Figure 11.2.1 Students of governance-related courses: management, commerce, business law, economics and econometrics, 2004–2009^a



^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).

Source: DEEWR; NCVET (unpublished); table 11A.2.8.

- In 2009, 15.0 per cent of Indigenous university students studied courses relevant to governance, compared with 33.3 per cent of non-Indigenous university students. At VET levels, 13.9 per cent of Indigenous students studied courses relevant to governance compared with 20.0 per cent of non-Indigenous students (figure 11.2.1).

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- From 2004 to 2009, participation rates for governance training at both university and VET levels, did not change significantly for Indigenous or non-Indigenous students (figure 11.2.1).
 - In 2009, 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 courses relevant to governance. 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, 17.7 per cent of Indigenous students from major cities and 7.8 per cent from remote areas were enrolled in governance training, compared to 35.5 per cent and 18.0 per cent for non-Indigenous students, respectively (tables 11A.2.2 and 11A.2.5).
 - At the VET level, 16.3 per cent of Indigenous students from major cities and 11.3 per cent from very remote areas were enrolled in governance training, compared to 21.8 per cent and 15.4 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 can found in tables 11A.2.2 and 11A.2.3.

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). ORIC provides accredited training programs for Indigenous corporations and their governing committees/boards. See box 11.2.2 for more information. 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 leadership courses for Indigenous people.

Table 11.2.1 Number of students in selected courses (governance), by Indigenous status, Australia, 2003–2009

	2003	2004	2005	2006	2007	2008	2009
Training package							
Certificate IV in Business (Governance)							
Indigenous	122	337	550	509	296	257	176
Non-Indigenous	26	34	49	80	77	81	63
Diploma of Business (Governance)							
Indigenous	26	3	–	21	36	51	26
Non-Indigenous	1	4	–	–	2	3	6
Courses							
Certificate II in Introduction to Community Governance							
Indigenous	5	18	46	32	13	2	–
Non-Indigenous	4	–	2	2	–	–	–

– Nil or rounded to zero.

Source: NCVER (unpublished); table 11A.2.7.

- In 2009, the participation of Indigenous students in Certificate IV in Business (Governance) was higher than that of non-Indigenous students (176 Indigenous participants compared to 63 non-Indigenous participants) (table 11.2.1).
- The number of Indigenous participants in Certificate IV in Business and Certificate II in Introduction to Community Governance fluctuated over the period 2003 to 2009 (table 11.2.1).

11.3 Engagement with service delivery

Box 11.3.1 Key messages

- Among Indigenous people aged 15 years and over, in 2008:
 - 29.9 per cent reported that they had problems accessing one or more services (figure 11.3.1). The largest numbers of people had problems accessing dentists (19.5 per cent) and doctors (9.5 per cent) (table 11A.3.7)
 - 27.3 per cent felt discriminated against in one or more situations or places. Most commonly, Indigenous people felt discriminated against by ‘members of the public’ (11.2 per cent), followed by ‘the police, security people, lawyers or in a court of law’ (10.9 per cent) (figure 11.3.2 and table 11A.3.7).
- Hospital discharges against medical advice for Indigenous people were six times as high as those for other people in 2008–09 (figure 11.3.4).

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 a lack of services and long distances necessary to access those that do exist.

The primary measures for this indicator are:

- barriers to service provision, measured by the types of services Indigenous people had problems accessing and the types of barriers they faced
- discrimination, measured by the types of situations or places where Indigenous people felt discriminated against, how often they felt discriminated against and whether they avoided situations because of past discrimination
- communication with service providers, measured by Indigenous people's difficulty understanding and/or being understood by service providers
- discharges from hospital against medical advice.

Effective services are a key component of the National Indigenous Reform Agreement and the Council of Australian Governments (COAG) has stipulated that governments will reform service delivery systems to ensure that the investments:

- deliver effective and accessible services that are taken up by Indigenous people in urban and regional locations
- deliver culturally competent services that achieve good outcomes for Indigenous Australians
- maximise linkages between Indigenous-specific and mainstream services, and
- deliver service models that respond to high levels of mobility amongst Indigenous Australians (COAG 2009, p.70).

In January 2009, the Commonwealth and State and Territory governments signed the National Partnership Agreement on Remote Service Delivery, which aims to improve coordination of remote service delivery (COAG 2008). Every six months, the Coordinator General for Remote Indigenous Services reports on progress under the National Partnership (CGRIS 2010).

Barriers to accessing programs include the way programs are designed, how they are presented and the cost to users (CGC 2001; Hudson 2010). In remote areas, barriers can be exacerbated by lack of services, lack of commercial competition and difficulties caused by the physical distance to services (Altman and Ward 2002; CGC 2001; Hudson 2010). Cultural barriers, including lack of cultural awareness on the part of service providers, racism, social inequality and social exclusion can lead to reduced access to resources such as education, housing, mental and medical care

and social support (Reilly et al. 2008; Scrimgeour and Scrimgeour 2008; Sheldon 1997; Zubrick et al 2010).

Ineffective service delivery and poor access to programs and services compound the disadvantage experienced by Indigenous people (CGC 2001). Problems with access to and engagement with services span a multitude of different service areas, for example:

- some 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)
- failure to register births can make it 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. In 2008, there were 11188 births to Indigenous mothers but only 10950 registered births (ABS 2009; Laws, Li and Sullivan 2010).

Having access to services at all is a problem for some Indigenous communities. The 2000-01 Western Australian Aboriginal Child Health Survey found that, even though a high proportion of Aboriginal children were 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 Community Housing and Infrastructure Needs Survey 2006 (CHINS 2006) collected data from 1187 discrete Indigenous communities. Data show that:

- 245 out of 1187 communities (20.6 per cent) had a primary school located within the community. Of the 245 communities with primary schools, 212 were located in very remote Australia (ABS 2007)
- 755 discrete Indigenous communities (63.6 per cent) were located 100 kilometres or more from the nearest hospital (ABS 2007).

Transportation problems can hinder access to services. The ABS CHINS 2006 found in 894 communities, the roads were the main mode of transport to get into towns that provided major services; for 95 communities it was air transport and in 27 communities it was sea transport (ABS 2007). Access roads to the community being cut (for example, by flooding during the rainy season) was a problem for 139 communities (ABS 2007). The ABS Census of Population and Housing 2006 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.3.1).

Where services do exist, there is little information about Indigenous people's perceptions about the quality of services or whether services effectively meet their needs. The ABS National Aboriginal and Torres Strait Islander Health Survey 2004-05 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).

Engagement with service delivery is inextricably linked with governance issues. In his second six monthly report, the Coordinator General for Remote Indigenous Services noted that quality of governance was critical to the success of the Remote Service Delivery National Partnership:

It was apparent from the first steps of the Remote Service Delivery process that without a strong focus on strengthening governance, some communities would struggle to engage effectively with government to drive outcomes on the ground. It was also clear that the way governments work with, and in, communities – the 'governance of government' – would be a key condition of Remote Service Delivery success. (CGRIS 2010, p.12)

More information about governance is in sections 11.1 (Case studies in governance) and 11.2 (Governance capacity and skills).

Effective service delivery is highlighted throughout this report in 'things that work' case studies. The Steering Committee has identified four key success factors by analysing the 'things that work' and through wide consultation with Indigenous people and governments. They are:

- cooperative approaches between Indigenous people and governments
- community involvement in program design and decision making
- good governance
- ongoing government support.

Chapter 3 explores these success factors in more detail.

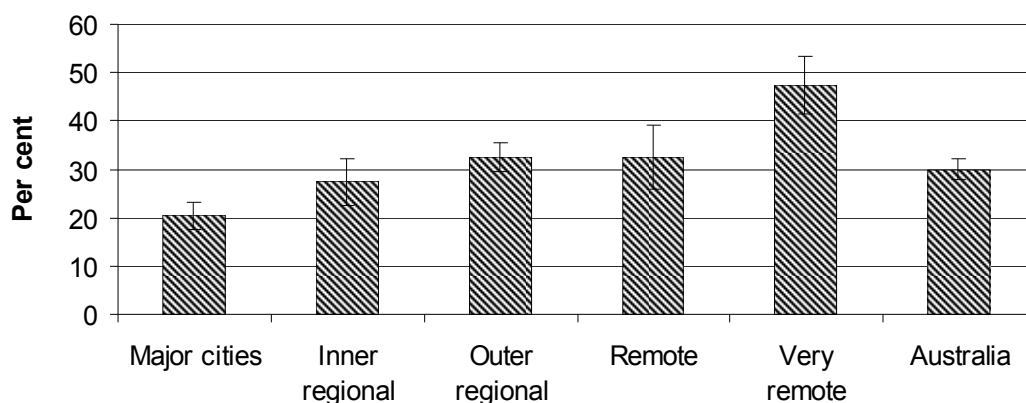
Data on access to clean water and functional sewerage and electricity services can be found in section 9.2. Information about primary health care services is reported in section 7.1. Information on the availability and quality of education can be found in sections 6.2 and 6.3 and other sections related to educational outcomes.

Barriers, discrimination and communication with service providers

This section presents survey data on barriers to service provision; situations or places where people felt discriminated against; and communication with service providers. These data are from the ABS National Aboriginal and Torres Strait Islander Social Surveys 2002 (NATSISS 2002) and NATSISS 2008.

Problems accessing services

Figure 11.3.1 **Proportion of Indigenous people 15 years and over who had problem(s) accessing services, by remoteness, 2008^{a, b}**



^a 'Total who reported problem(s)' includes people who reported 'other services (not further defined)'. ^b Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information).

Source: ABS (unpublished) NATSISS 2008; table 11A.3.4.

Among Indigenous people aged 15 years and over, in 2008:

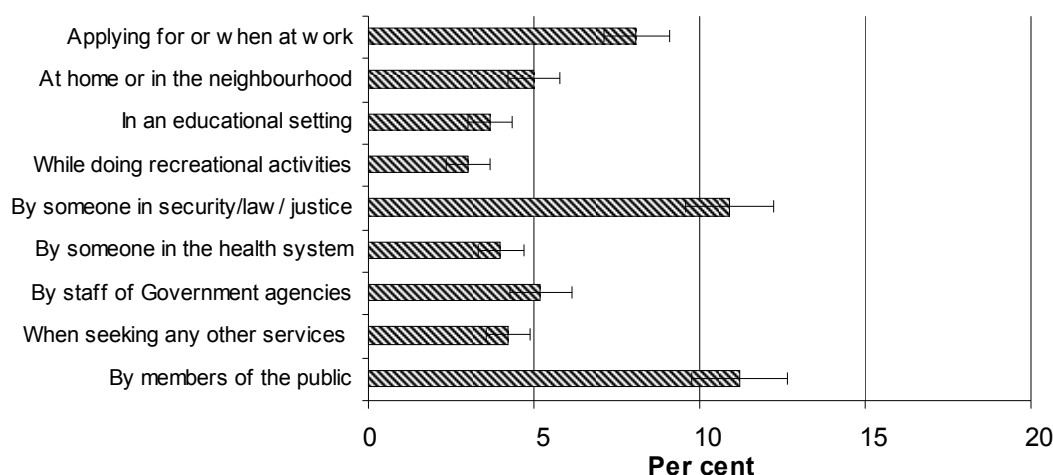
- 70.1 per cent reported that they did not have problems accessing services, while 29.9 per cent (97 900 people) reported that they had problems accessing one or more services in the previous 12 months. The types of services most people had problems accessing were dentists (19.5 per cent) and doctors (9.5 per cent) (figure 11.3.1 and table 11A.3.3)
- problems accessing services increased with remoteness. In major cities one in five Indigenous people (20.4 per cent) reported problems. Close to half of the population in very remote areas (47.4 per cent) had problems with accessing services (figure 11.3.1)
- the NT (39.8 per cent) and WA (33.5 per cent) had the highest proportions of people with problems accessing services (table 11A.3.3)

- the most common barrier people experienced was ‘waiting time too long or not available at time required’ (14.8 per cent), ‘not enough services in the area’ (11.7 per cent) and ‘no services in the area’ (11.5 per cent) (table 11.A.3.4).

For more information about barriers to service provision by State and Territory and remoteness see attachment tables 11A.3.3 and 11A.3.4.

Discrimination

Figure 11.3.2 Proportion of Indigenous people aged 15 years and over who felt discriminated against in the last 12 months, by situation or place, 2008^{a, b, c}



^a Some variable labels have been shortened. Refer to tables 11A.3.5–6 for original labelling of variables. ^b Sum of components may be more than total as persons may have reported having experienced discrimination in more than one situation and/or place. ^c Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information).

Source: ABS (unpublished) NATSISS 2008; tables 11A.3.5 and 11A.3.6.

Among Indigenous people aged 15 years and over, in 2008:

- over a quarter (27.3 per cent) felt they had been discriminated against in the previous 12 months (table 11A.3.3). Most commonly, Indigenous people felt discriminated against by ‘members of the public’ (11.2 per cent), followed by ‘the police, security people, lawyers or in a court of law’ (10.9 per cent) (figure 11.3.2)
- Tasmania had a significantly lower proportion of people who felt discriminated against in the previous 12 months (9.3 per cent) than the other jurisdictions (ranging from 24.6 to 35.8 per cent) (table 11A.3.5)

-
- there were no significant differences between remoteness areas in the proportions of people who felt discriminated against in the past 12 months (table 11A.3.6)
 - in addition to the people who had experienced discrimination in the past 12 months, 3.8 per cent of people had avoided situations due to past discrimination (table 11A.3.5).

For more information about discrimination in situations or places in the past 12 months and whether Indigenous people avoided situations due to past discrimination, see attachment tables 11A.3.5–7.

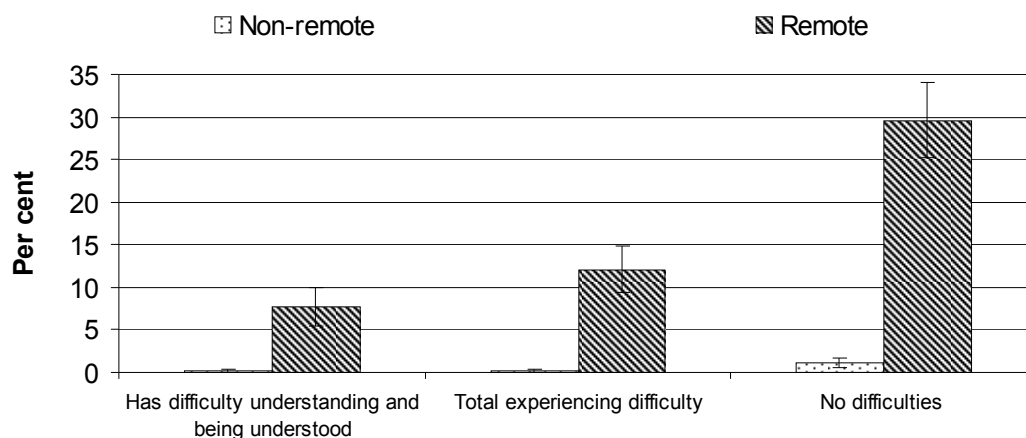
Communication with service providers

Effective communication is not solely limited by the primary language that people speak, but by a multitude of issues including (but not limited to) the communicators' knowledge of the subject matter, emotional response, body language, and cultural and linguistic nuances. Furthermore, miscommunications may not always be recognised (Cass et al. 2002).

In the ABS NATSISS 2002, a question about communication problems was asked of all respondents, whether or not their main language was a traditional Indigenous language. One quarter (25.0 per cent) of the 34 000 Indigenous people whose main language *was* an Indigenous language had communication difficulties, and 8.3 per cent of the 248 200 Indigenous people whose main language was *not* an Indigenous language, also reported that they had experienced communication difficulties. Overall, 10.3 per cent of all Indigenous people aged 15 years and over experienced difficulty communicating with service providers in 2002 (table 11A.3.8). While problems communicating with service providers were more common for people whose language was an Indigenous language, there was a substantial proportion who did not speak an Indigenous language as their main language and still experienced difficulty.

In the ABS NATSISS 2008, only people who spoke an Indigenous language as their main language were asked whether they had problems communicating with service providers. Consequently, the following analysis is limited to the 37 600 Indigenous people whose main language is an Indigenous language.

Figure 11.3.3 Whether Indigenous people aged 15 years and over, whose main language was an Indigenous language, had communication difficulties with service providers, by remoteness, 2008^{a, b}



^a In 2008, whether had difficulty communicating with service providers was only asked of people who spoke an Indigenous language in the NATSISS 2008. ^b Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information).

Source: ABS (unpublished) NATSISS 2002 and NATSISS 2008; table 11A.3.8–9.

Among Indigenous people aged 15 years and over, in 2008:

- 11.5 per cent (37 600) spoke an Indigenous language as their main language (table 11A.3.8)
- a higher proportion of people in remote areas (12.1 per cent) experienced difficulty communicating with service providers than people in non-remote areas (0.2 per cent) (figure 11.3.3). The proportions did not change significantly between 2002 and 2008 (table 11A.3.8)
- 3.2 per cent spoke an Indigenous language as their main language and had difficulty communicating with service providers (equal to 27.7 per cent of Indigenous people who spoke as Indigenous language as their main language) and 8.3 per cent did not have difficulties (equal to 72.3 per cent of Indigenous people who spoke an Indigenous language as their main language) (table 11A.3.8).

While similar proportions of older and younger Indigenous people reported speaking an Indigenous language as their main language, a higher proportion of older Indigenous people (aged 55 years and over) had difficulty communicating with service providers. In 2008, there were 6200 people aged 55 years and over who spoke an Indigenous language as their main language; this accounted for 1.9 per cent of the total Indigenous population aged 15 years and over. Around a

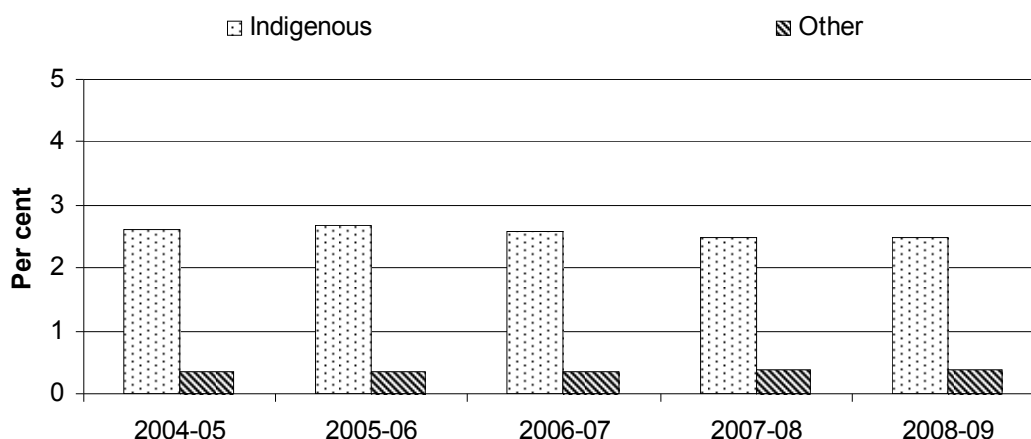
third of them (33.9 per cent) had difficulties communicating with service providers compared to 26.2 per cent of Indigenous people aged 15 to 54 years who spoke an Indigenous language as their main language (table 11A.3.9).

More information about communication with service providers by sex, remoteness, and age groups is available in attachment tables 11A.3.8–9.

Discharges from hospital against medical advice

The National Hospital Morbidity Database provides information on the number and proportion of discharges 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 whether there are differences between Indigenous and non-Indigenous people's reasons. Nor do they provide information on the nature of the person's medical condition. In the absence of evidence to the contrary, the differences in the proportion of Indigenous and non-Indigenous discharges against medical advice may reflect 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 factors.

Figure 11.3.4 Proportion of hospitalisations where patients were discharged from hospital against medical advice, NSW, Victoria, Queensland, WA, SA and public hospitals in the NT^{a, b, c, d, e, f}



^a Data are from public and most private hospitals. Data exclude private hospitals in the NT. ^b Excludes hospitalisations with a principal diagnoses of 'Mental and behavioural disorders' (ICD-10AM codes 'F00-F99' based on the International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Australian Modification). ^c Data are based on State/Territory of usual residence of the patient hospitalised. ^d Data are reported for NSW, Victoria, Queensland, WA, SA and NT. These six jurisdiction are considered to have acceptable quality of Indigenous identification in hospitalisation data. ^e 'Other' includes hospitalisations where Indigenous status was recorded as 'non-Indigenous' or 'not stated'. ^f Directly age standardised using the Australian 2001 standard population.

Source: AIHW (unpublished) *National Hospital Morbidity Database*; table 11A.3.10.

- The proportion of hospital discharges against medical advice remained stable at around 2.5 per cent for Indigenous hospitalisations and around 0.4 per cent for hospitalisations of other people between 2004-05 and 2008-09 (figure 11.3.4).
- The proportion of hospital discharges against medical advice for Indigenous people was 6.3 times the proportion for other people in 2008-09 (figure 11.3.4).
- Increasing remoteness of Indigenous patients' usual area of residence was linked with increasing proportions of hospital discharges against medical advice (1.9 per cent in major cities compared to 3.3 per cent in remote areas). The proportions of hospital discharges against medical advice were similar across remoteness areas for other people (table 11A.3.11).

More information on hospital discharges against medical advice by State and Territory and remoteness are in attachment tables 11A.3.10–11.

Case studies on service engagement

The following case studies in box 11.3.2 provide examples of initiatives to improve service engagement. These include acknowledging Indigenous cultural perspectives in the design and delivery of programs, and improving communication between Indigenous people and health services.

Box 11.3.2 'Things that work' – improving service engagement

The **Yarrenyty-Artere Learning Centre** (NT) started in 2000, and over time has developed into a Family Resource Centre and an Inter-generational Centre where adults and children work and learn side by side. The centre runs programs covering health, education, social support and culture, and assists mainstream programs to provide services to community members. Planning and direction are provided by the Learning Centre Committee, comprising residents and families of people who use the centre, including young people. The Committee also liaises with the Yarrenyte Artere Housing Association, which represents the whole of the town camp. Using culturally appropriate methods, and recognising the central role of the family in the lives of Aboriginal people, the Centre has increased educational and health outcomes for the children in the community. Learning hubs help children to enter the mainstream school system using play groups, homework centres and after school programs. The Centre has also strengthened the community, with decreases in inhalant misuse, domestic violence, crime and neglect (Foster et al. 2005; Tangentyere Council 2008; Sloan 2009).

The **Aboriginal Birth Certificate Registration project** (NSW) was initiated in 2006, because the absence of a birth certificate was preventing Aboriginal people from participating in organised sport and other community activities. The Office of Sport, Recreation and Communities worked with the Registry of Births, Deaths and Marriages, and members of the Indigenous community in western NSW, to identify practical solutions to the problem.

The program has operated in Brewarrina, Coonamble, Walgett and Dubbo, and led to an increase in participation in mainstream community sport by previously non-participating Aboriginal people. In August 2010, the project was offered again in Walgett, and expanded to Wilcannia. A total of 396 applications were processed, with the people from one month to 84 years old applying for birth certificates. 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).

(Continued next page)

Box 11.3.2 (continued)

The **Aboriginal Affairs Coordinating Committee** (WA), re-established in 2008-09, is made up of Directors General from the Departments of Indigenous Affairs, Premier and Cabinet, Treasury and Finance, Health, Child Protection, Education and Training, Housing and WA Police. The AACC provides a coordinated, strategic approach to delivering WA and Federal Government policy and strategy.

The AACC identified the priority communities of Oombulgurri, Roebourne and Armadale as models for introducing sustainable improvement in remote, regional and metropolitan towns, through partnership with government and community. On the ground, a Chief Operating Officer is employed jointly by the Directors General on the Committee, and has the authority to cut through 'red tape' to support new ways to deliver outcomes for Aboriginal people. Within the Armadale community, a One-Stop-Shop (hub) for government services was established in partnership with local government. The inaugural One-Stop-Shop Expo and Forum brought together Aboriginal people and service providers to work on the model and inform Aboriginal people of the services available (WA Government unpublished).

The **Improving Care for Aboriginal and Torres Strait Islander Patients** program (Victoria), established in 2004, has led to increased identification of Aboriginal patients, increased employment of Aboriginal staff in health services and development of culturally responsive models of care, including strong partnerships with the Aboriginal community and Aboriginal Community Controlled Health Organisations (ACCHO).

A recent review highlighted a number of good practice examples, particularly the provision of shared care models of maternity services. In Geelong, women had the choice of participating in a shared care program based at Wathaurong Health Service or receiving care from an Aboriginal midwife based at the hospital. The Koori Maternity Strategy at the Victorian Aboriginal Health Service provided monthly Boorai (baby) classes with a specialist attending from Mercy Hospital for Women (Victorian Government unpublished).

(Continued next page)

Box 11.3.2 (continued)

The **Let's Start program** (NT) is run over 10 weeks, during school terms, for children aged 4 to 7 years, whose behaviour is of concern. The program aims to strengthen parenting and parent-child relationships, and to support children during their transition to school.

The program has been running on the Tiwi Islands since 2005, and in 2009 was extended under the NT Emergency Response to the Victoria Daly Shire region at Nganmariyanga (Palumpa) and an urban program in Darwin. As at 2011, nine schools were involved in the Tiwi Islands and Victoria Daly Shire, with scope to deliver programs in urban areas again in 2012. Parents are satisfied with the program, and improvements in children's behaviour.

The project has used different approaches in the diverse social settings of remote communities, fringe communities and suburbs in large towns and major centres, and highlighted the need to train Indigenous people in strategies for early intervention (CRAH 2008; Menzies School of Health Research (unpublished); Robinson et al. 2009).

11.4 Future directions in data

Case studies in governance arrangements

There has been significant progress in examining Indigenous governance since the first report in 2003. The introduction of the Indigenous Governance Awards has helped identify and highlight many examples of good practice. The ICGP by CAEPR and Reconciliation Australia has provided academic rigour to the examination of governance practices. Among governments, evaluations and studies of Indigenous reform initiatives (Dwyer et al. 2009; NTER Review Board 2008; OIPC 2006) help identify aspects of government governance that can assist or impede Indigenous governance. Future reports will be able to discuss the representative arrangements for Indigenous people nationally (the National Congress) and draw on the NPRSD, NTER and CYWR evaluations. That said, there is still more to be done before future reports can include an objective measure of governance.

Engagement with service delivery

Data on Indigenous people's perceptions of the quality of different services are very limited, particularly with regard to services for Indigenous children and youth. The

key challenges are to expand existing Indigenous specific surveys and longitudinal studies of Indigenous children to collect information on service engagement for young people.

The ABS NATSISS 2008 only asked people who spoke an Indigenous language as their main language about problems communicating with service providers. Data on communication problems with service providers amongst *all* Indigenous adults would be beneficial, as communication problems are not limited to those who mainly speak a traditional Indigenous language. Furthermore, miscommunications may not always be recognised and it would be useful to ascertain how prevalent unrecognised miscommunications are in different services. This information could be collected in program evaluations.

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12 Outcomes for Torres Strait Islander people

Box 12.1 Key messages

- In 2008:
 - the proportion of Torres Strait Islander people aged 18 years and over who had completed year 12 or post-secondary education (44.2 per cent) was higher than for Aboriginal people (34.0 per cent), but much lower than for non-Indigenous people (62.2 per cent) (table 12A.1.1, figure 12.1)
 - the proportion of Torres Strait Islander people who were employed (65.1 per cent) was higher than for Aboriginal people (55.5 per cent), but lower than for non-Indigenous people (78.0 per cent) (figure 12.3)
 - the proportions of Torres Strait Islander and Aboriginal people who lived in a home owned by a member of the household (29.0 per cent) were much lower than for non-Indigenous people (65.2 per cent) (figure 12.5)
 - there was no statistically significant difference between the individual median weekly income for Torres Strait Islander people (\$550) and non-Indigenous people (\$608), but incomes for Aboriginal people were lower (\$400) (figure 12.4).

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) identified as Torres Strait Islander people. This included people who identified as being of Torres Strait Islander origin only (6.4 per cent of the Indigenous population) and people who identified as being both Aboriginal and Torres Strait Islander (3.9 per cent of the Indigenous population). The majority (62.8 per cent) of Torres Strait Islander people lived in Queensland (ABS 2009b).

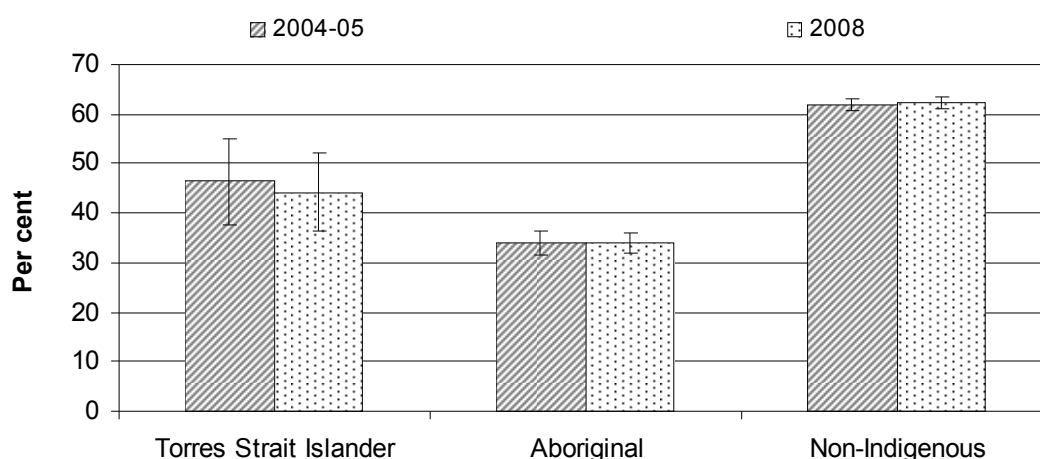
Torres Strait Islander people make up a very small proportion of the Australian population (0.16 per cent), making it difficult to source reliable data (ABS 2008). This chapter presents a selection of results from the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) 2004-05; the ABS National Health Survey (NHS) 2004-05 and 2007-08; and the ABS National Aboriginal and Torres Strait Islander Social Survey (NATSISS) 2008. More extensive data from the 2006

census were presented in the 2009 report (SCRGSP 2009). In this chapter, selected outcomes for Torres Strait Islander, Aboriginal and non-Indigenous people are presented. In these data, ‘Torres Strait Islander’ includes both people who identified as ‘Torres Strait Islander only’ and people who identified as ‘Both Aboriginal and Torres Strait Islander’. For comparison purposes, ‘Aboriginal’ in this chapter has been limited to people who identified as ‘Aboriginal only’.

Data for this chapter are disaggregated into two geographical areas that reflect the distribution of Torres Strait Islander people across Australia; Queensland (which includes the Torres Strait Indigenous region); and the Balance of Australia (which comprises the remainder of Australia).

Year 12 or a post-secondary education

Figure 12.1 Proportion of people aged 18 years and over who had completed year 12 or a post-secondary education^{a, b, c, d, e}



^a Torres Strait Islander includes people who identified as Torres Strait Islander only or both Aboriginal and Torres Strait Islander. ^b Aboriginal includes people who identified as being of Aboriginal origin only. ^c Post-secondary education includes people who had achieved a level 3 certificate or higher qualification. ^d Calculations exclude those who did not state their highest year of schooling completed. ^e Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information).

Source: ABS (unpublished) NHS and NATSIHS 2004-05; ABS (unpublished) NATSISS 2008; ABS (unpublished) NHS 2007-08; table 12A.1.1.

In 2008, for those aged 18 years and over:

- the proportion of Torres Strait Islander people who had completed year 12 or a post-secondary education (44.2 per cent) was higher than for Aboriginal people (34.0 per cent) but much lower than for non-Indigenous people (62.2 per cent) (figure 12.1)

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- there were no statistically significant differences in educational attainment between Torres Strait Islander people living in Queensland and in the Balance of Australia (table 12A.1.1).

Between 2004-05 and 2008, for those aged 18 years and over:

- there were no statistically significant differences in the proportions of Torres Strait Islander, Aboriginal or non-Indigenous people who had completed year 12 or a post-secondary education (figure 12.1)
- the proportion of Torres Strait Islander people who had completed year 12 or a post-secondary education did not change significantly for either those residing in Queensland or those residing in the Balance of Australia (table 12A.1.1).

Post-secondary education

In 2008, for people aged 18 years and over, the proportion of Torres Strait Islander people with a post-secondary qualification (27.6 per cent) was not significantly different to the proportion for Aboriginal people (23.6 per cent), but much lower than the proportion for non-Indigenous people (46.3 per cent) (table 12A.1.1).

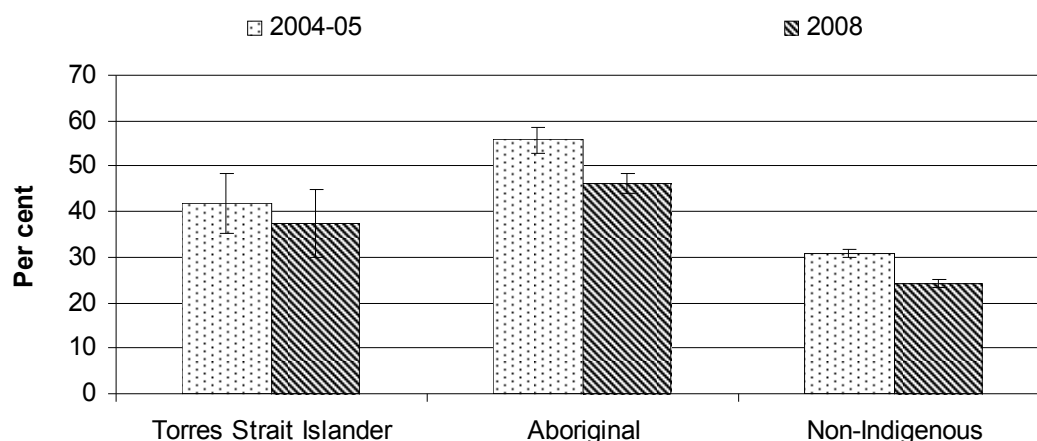
Between 2004-05 and 2008, for people aged 18 years and over:

- there was no statistically significant difference in the proportion of Torres Strait Islander people with a post-secondary qualification (table 12A.1.1)
- the proportions of Aboriginal and non-Indigenous people with a post-secondary qualification both increased significantly over the same period (table 12A.1.1).

In both 2004-05 and 2008, the proportion of Torres Strait Islander people aged 18 years and over with a post-secondary qualification did not vary significantly between those people living in Queensland or in the Balance of Australia (table 12A.1.1).

Year 10 education

Figure 12.2 Proportion of people aged 18 years and over who had completed year 10 or below as their highest qualification^{a, b, c, d}



^a Torres Strait Islander includes people who identified as Torres Strait Islander only or both Aboriginal and Torres Strait Islander. ^b Aboriginal includes people who identified as being of Aboriginal origin only. ^c Calculations exclude those who did not state their highest year of schooling completed. ^d Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information).

Source: ABS (unpublished) NHS and NATSIHS 2004-05; ABS (unpublished) NATSISS 2008; ABS (unpublished) NHS 2007-08; table 12A.1.1.

In 2008, for those aged 18 years and over:

- the proportion of Torres Strait Islander people who had completed year 10 or below as their highest level of education (37.3 per cent) was lower than for Aboriginal people (46.2 per cent), but higher than for non-Indigenous people (24.2 per cent) (figure 12.2)
- The proportion of Torres Strait Islander people who had completed year 10 as their highest level of education did not vary between those who lived in Queensland or in the Balance of Australia (table 12A.1.1).

Between 2004-05 and 2008:

- There was no statistically significant change in the proportion of Torres Strait Islanders who had completed year 10 as their highest level of education (figure 12.2)
- There were statistically significant decreases in the proportions of Aboriginal people who had completed year 10 as their highest level of education (from 55.7 per cent in 2004-05 to 46.2 per cent in 2008) and non-Indigenous people

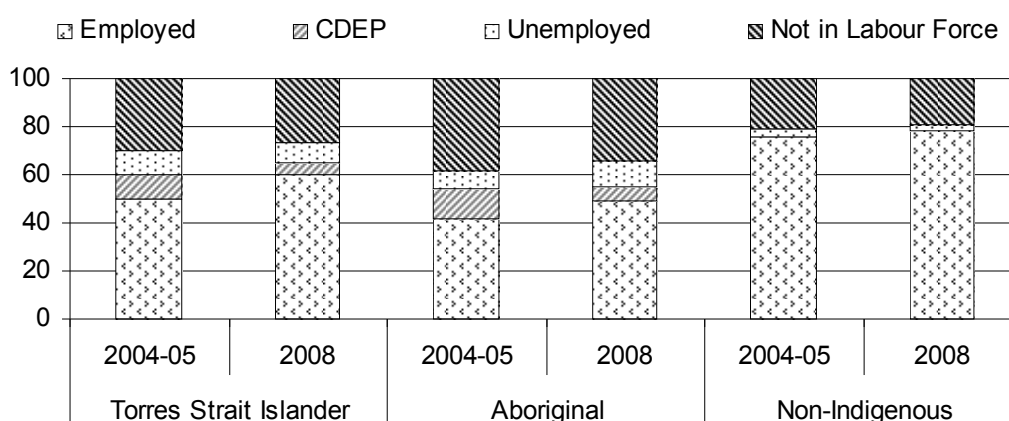
who had completed year 10 as their highest level of education (from 31.0 per cent in 2004-05 to 24.2 per cent in 2008) (figure 12.2).

More detailed information on educational outcomes for Indigenous and non-Indigenous people can be found in sections 4.5, 4.7 and 6.5.

Labour force status

This section presents data for mainstream employment, employment under the Community Development Employment Projects (CDEP) program, unemployment and persons not in the labour force, as proportions of the working age population (18–64 years).

Figure 12.3 Labour force status, people aged 18–64 years, 2004-05 and 2008^{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 These data may differ from labour force data elsewhere in the report due to different age-groups measured. ^c Calculations exclude those who did not state their labour force status.

Source: ABS (unpublished) NHS and NATSIHS 2004-05; ABS (unpublished) NATSISS 2008; ABS (unpublished) NHS 2007-08; tables 12A.1.4 and 4A.6.12.

In 2008, for people aged 18–64 years:

- higher proportions of Torres Strait Islander (26.6 per cent) and Aboriginal people (34.2 per cent) were not in the labour force compared with non-Indigenous people (19.4 per cent) (figure 12.3)
- similar proportions of Torres Strait Islander (8.3 per cent) and Aboriginal people (10.4 per cent) were unemployed, significantly higher than the corresponding proportion of non-Indigenous people (2.6 per cent) (figure 12.3).

-
- Torres Strait Islander people (59.9 per cent) were employed in non-CDEP employment at a lesser rate than non-Indigenous people (78.0 per cent), but employed in mainstream jobs at a higher rate than Aboriginal people (49.3 per cent) (figure 12.3)
 - there were no significant differences between the proportions of Torres Strait Islander people employed in non-CDEP employment in Queensland or in the Balance of Australia (table 12A.1.4)
 - similar proportions of Torres Strait Islander (5.2 per cent) and Aboriginal people (6.1 per cent) were employed under the CDEP program (figure 12.3)
 - for total employment, including CDEP employment, higher proportions of Torres Strait Islander people (65.1 per cent) than Aboriginal people (55.5 per cent) were employed. These proportions were lower than the proportion of employed non-Indigenous people (78.0 per cent) (figure 12.3).

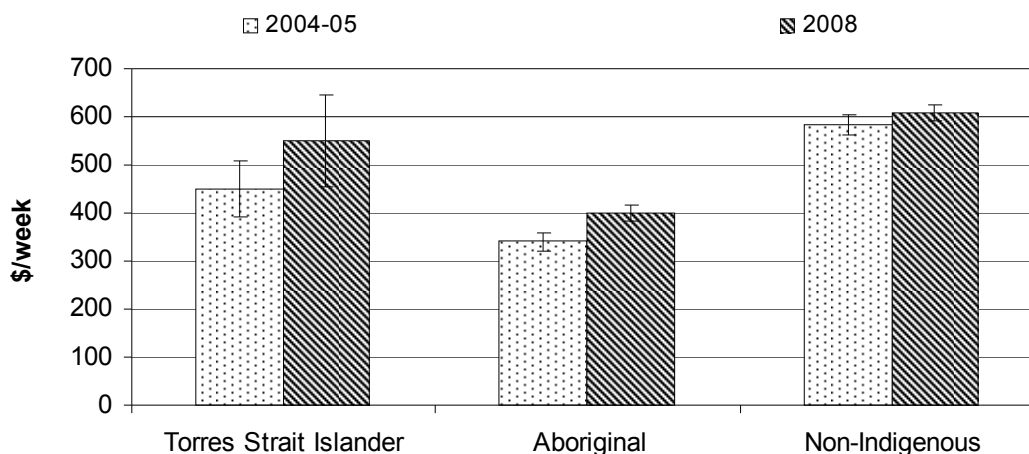
Between 2004-05 and 2008, for people aged 18–64 years:

- there were no statistically significant differences in the proportions of Torres Strait Islander people employed under CDEP; otherwise (non-CDEP) employed; unemployed; or not in the labour force (figure 12.3)
- there were significant changes in the proportions of Aboriginal people employed under CDEP (from 12.1 to 6.1 per cent); otherwise (non-CDEP) employed (from 41.9 to 49.3 per cent); and unemployed (from 7.9 to 10.4 per cent) (figure 12.3).

For more information on Indigenous employment outcomes (including CDEP) see sections 4.6 and 8.1.

Income

Figure 12.4 **Median real gross weekly individual income, people aged 18 years and over (2008 dollars)^{a, b, c, d}**



^a Torres Strait Islander includes people who identified as Torres Strait Islander only or both Aboriginal and Torres Strait Islander. 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 2004-05 data are adjusted for inflation using the Consumer Price Index for the March quarter 2005 and the December quarter 2008 (ABS 2009a). ^c Calculations exclude those who did not state their income. ^d Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information).

Source: ABS (unpublished) NHS and NATSIHS 2004-05; ABS (unpublished) NATSISS 2008; ABS (unpublished) NHS 2007-08; table 12A.1.3.

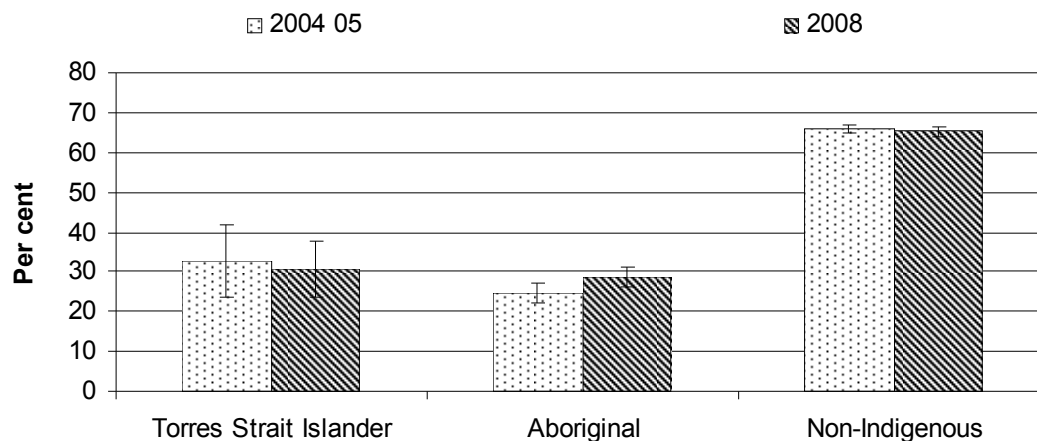
After adjusting for the effects of inflation, for people aged 18 years and over:

- in 2004-05, the real individual median weekly income for Torres Strait Islander people was \$450, which was higher than for Aboriginal people (\$341 per week) but much lower than for non-Indigenous people (\$583 per week) (figure 12.4)
- in 2008, the difference between the individual median weekly income for Torres Strait Islander people (\$550) and non-Indigenous people (\$608) was not statistically significant. However, the individual median weekly income for both Torres Strait Islander people and non-Indigenous people was higher than for Aboriginal people (\$400) (figure 12.4)
- between 2004-05 and 2008, the apparent increase in real individual median incomes for Torres Strait Islander people was not statistically significant. However, there were statistically significant increases in real individual median incomes for Aboriginal and non-Indigenous people (figure 12.4).

See table 12A.1.3 for more detail on individual weekly income for the Torres Strait region, Queensland and the remainder of Australia. Sections 4.9 and 8.4 provide more detailed information on incomes for Indigenous and non-Indigenous people.

Home ownership

Figure 12.5 Proportion of people living in a home owned by a member of the household, 2004-05 and 2008^{a, b, c}



^a Torres Strait Islander includes people who identified as Torres Strait Islander only or both Aboriginal and Torres Strait Islander. Aboriginal includes people who identified as being Aboriginal only. ^b Includes people living in a home owned with or without a mortgage, or as part of a rent/buy scheme by a member of the household. ^c Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information).

Source: ABS (unpublished) NHS and NATSIHS 2004-05; ABS (unpublished) NATSISS 2008; ABS (unpublished) NHS 2007-08; table 12A.1.2.

In 2008, the proportion of Torres Strait Islander people (30.6 per cent) and Aboriginal people (28.8 per cent) living in a home owned (with or without a mortgage) by a member of the household was much lower than for non-Indigenous people (65.2 per cent) (figure 12.5).

Between 2004-05 and 2008, the proportion of people living in a home owned by a member of the household:

- did not change significantly for Torres Strait Islander people (around 30 per cent) or non-Indigenous people (around 65 per cent) (figure 12.5)
- increased for Aboriginal people (from 24.6 per cent to 28.8 per cent) (figure 12.5). Over the same period, the proportion of Aboriginal people living in rented accommodation decreased (from 74.2 per cent to 70.1 per cent) (table 12A.1.2).

Section 8.3 contains more information on Indigenous home ownership.

Overcrowding in housing

- In 2008, for people aged 15 years and over, Torres Strait Islander (19.9 per cent) and Aboriginal people (25.7 per cent) lived in overcrowded housing at a much higher rate than non-Indigenous people (4.8 per cent) (table 9A.1.3).
- Between 2004-05 and 2008, there were no statistically significant changes in the proportions of Torres Strait Islander people and Aboriginal people living in overcrowded housing (table 9A.1.3).

More detailed data on the levels of overcrowding for Indigenous people can be found in section 9.1 and table 9A.1.3.

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) 2009a, *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 10 March 2011).

— 2009b, *Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians, 1991 – 2021*, Cat. no. 3238.0, ABS, Canberra.

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

13 Measuring multiple disadvantage and interactions across the framework

Box 13.1 Key messages

- This chapter uses two approaches to examine the interactions between various indicators of disadvantage:
 - The first approach examines associations between different aspects of disadvantage. Where people who experience one type of disadvantage also tend to experience another kind of disadvantage, the two aspects of disadvantage may be linked or associated in some way. The analysis shows that rates of multiple disadvantage are higher for Indigenous people than non-Indigenous people in the areas of education, income, health, housing, crime and violence.
 - The second approach uses a statistical technique to isolate the possible contribution of one factor at a time (such as education), holding other modelled factors (such as health or age) constant. This information can be used to analyse the possible effect of factors that might be influenced by government policy, while controlling for other factors.

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 low income. This chapter uses data from the ABS National Aboriginal and Torres Strait Islander Social Survey 2008 (NATSISS 2008) and the ABS National Health Survey 2007–08 (NHS 2007–08) to present information on the interactions between various indicators of disadvantage. The data presented in this chapter do not indicate cause and effect relationships between different aspects of disadvantage — that is, the data do not demonstrate that disadvantage in one area is the cause of another poor outcome — rather, they show where there are correlations between different aspects of disadvantage. Section 13.1 examines patterns of disadvantage against selected proxy measures of the COAG targets and headline indicators.

Section 13.2 uses data from the ABS NATSISS 2008 to analyse the determinants of Indigenous labour market outcomes. In this section, statistical techniques have been used to isolate the contribution of one factor at a time, holding other modelled factors constant. Because the analytical technique used in this section accounts separately for possible effects of different factors on labour market outcomes, the results are not comparable with other sections of this chapter or other chapters of the report (such as sections 4.6 and 8.1, which are also focussed on labour market outcomes).

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 at least 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 multiple disadvantage

This section examines where different aspects of disadvantage tend to occur simultaneously. Where analysis shows that a particular population who experience one type of disadvantage also experience another kind of disadvantage, the two aspects of disadvantage are assumed to be linked or associated in some way; for example, low levels of educational attainment appear to be linked with high levels of unemployment.

This section looks at both Indigenous and non-Indigenous outcomes to compare patterns of disadvantage. Aboriginal and Torres Strait Islander cultures contain protective factors that strengthen the resilience of individuals, families and communities in the face of a history of dispossession (Bamblett 2006). Examining the different patterns of multiple disadvantage helps in understanding the many barriers Indigenous people face, however, during our consultations Indigenous organisations and groups have emphasised the importance of a strengths-based approach to addressing disadvantage. Throughout this report the ‘Things that Work’ case studies display many examples of practices that have addressed the risk of disadvantage whilst building on the existing strengths within Indigenous communities.

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 13.1.1.

Box 13.1.1 Measuring associations between the selected proxy measures of the COAG targets and other headline indicators and other COAG targets and headline indicators or strategic areas for action

The analysis in this section looks at outcomes in education, employment and income, against selected indicators of disadvantage using data from the ABS NATSISS 2008 and the ABS NHS 2007-08. Subgroups with different education, employment and income characteristics are compared against selected indicators of disadvantage. These are chosen to highlight areas related to COAG targets and other headline indicators.

<i>Selected measures of disadvantage</i>	<i>COAG target/ other headline indicator</i>
• Unemployment	• 4.6 Employment
• Long term unemployment	• 4.6 Employment
• Not in the labour force	• 4.6 Employment
• Without a non-school qualification	• 4.7 Post secondary education
• Has profound or severe core activity restriction	• 4.8 Disability and chronic disease
• In the lowest quintile of equivalised gross weekly household income	• 4.9 Household and individual income
• In the lowest quintile of personal gross weekly income	• 4.9 Household and individual income
• Household members could not raise \$2000 in an emergency	• 4.9 Household and individual income
• Household members ran out of money in the last two weeks for basic living expenses	• 4.9 Household and individual income
• Has been arrested in the last 5 years	• 4.12 Imprisonment and juvenile detention rates
• Has been incarcerated	• 4.12 Imprisonment and juvenile detention rates
• Highest year of school completed was year 9	• 6 Education and training
• Has fair/poor self-assessed health status	• 7 Healthy lives
• Current daily smoker	• 7.4 Tobacco consumption and harm
• Has high/very high psychological distress (K5)	• 7.7 Mental health
• Living in a home not owned by someone in the household	• 8.3 Home ownership
• Principal source of personal income was government pension, allowance or benefits	• 8.4 Income support
• Principal source of personal income was CDEP	• 8.4 Income support
• Living in an overcrowded household	• 9.1 Overcrowding in housing
• Not able to get support from outside the household in time of crisis	• 10 Safe and supportive communities
• Removal – self or a relative has been taken away from family	• 10 Safe and supportive communities

(Continued next page)

Box 13.1.1 (continued)

- | | |
|---|---|
| • High risk alcohol consumption in the last 12 months | • 10.3 Alcohol consumption and harm |
| • Risky/high risk alcohol consumption in the last 12 months | • 10.3 Alcohol consumption and harm |
| • Has difficulty communicating with English speakers | • 11.3 Engagement with service delivery |

The analysis:

- classifies the population into various subgroups; (for example has a non-school qualification or has no non-school qualification; employed or unemployed)
- compares the proportions of people in each population subgroup who experience other outcomes (for example, proportions of people living in an overcrowded household higher among those without a non-school qualification than those with a non-school qualification?)
- compares the proportions of people in the Indigenous subgroup who experience selected indicators of disadvantage with a comparable subgroup in the non-Indigenous population (for example, is the proportion of Indigenous people without a non-school qualification who have low household income, higher or lower than the proportion for non-Indigenous people with these characteristics?)

The results in this section show that in 2008:

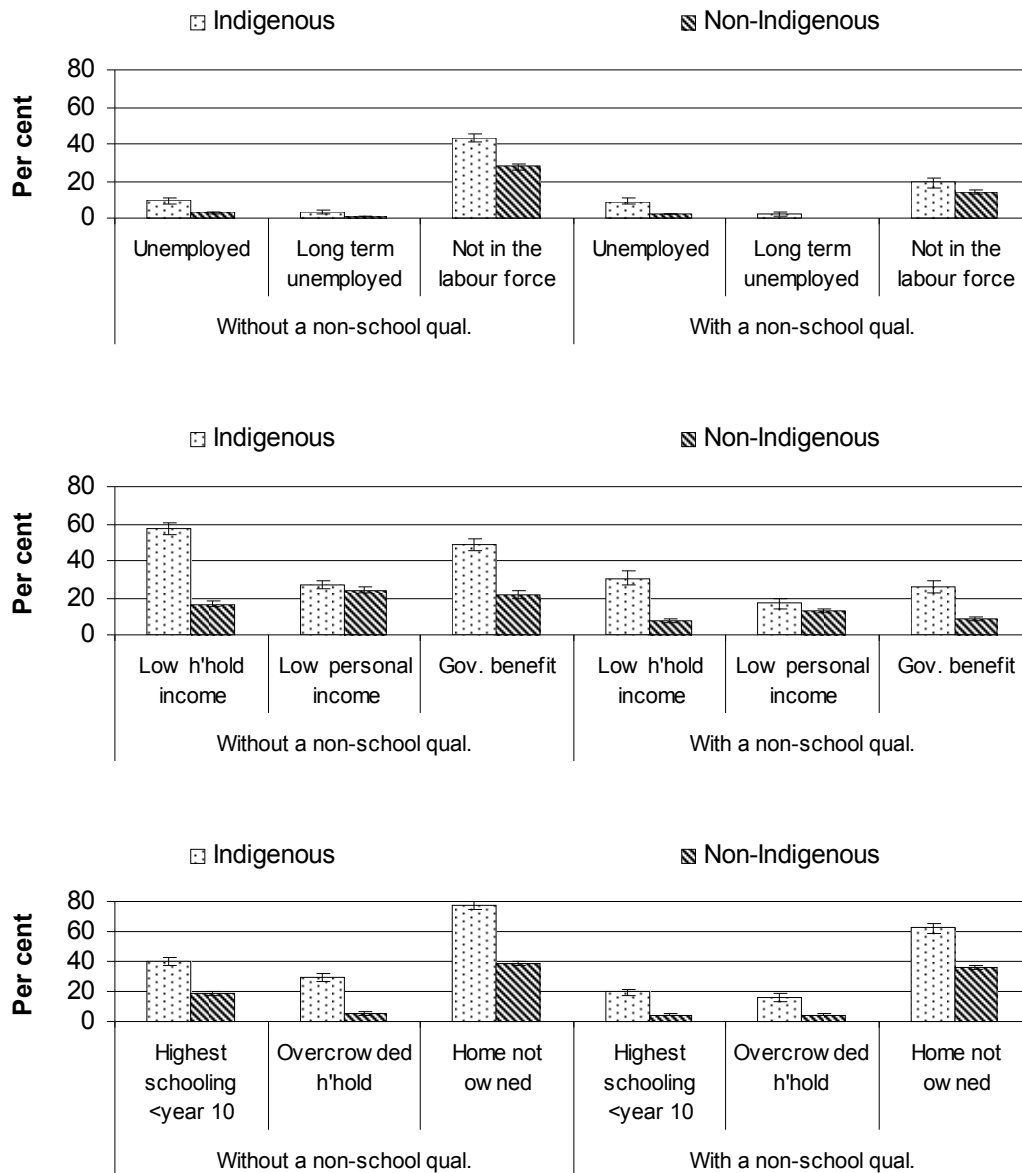
- both Indigenous and non-Indigenous people with lower educational attainment, low incomes, who were unemployed or not in the labour force and/or whose principal source of income was a government pension, allowance or benefit were more likely to experience other socioeconomic disadvantages (figures 13.1.1–5)
- higher proportions of Indigenous than non-Indigenous people experienced multiple disadvantage (figures 13.1.1–5).

Indicators across this report show that, on average, Indigenous people experience poorer outcomes than non-Indigenous people in the areas of education, income, health, housing, crime and violence. The data in this chapter show that more Indigenous than non-Indigenous people experienced multiple disadvantages in 2008.

The data in this chapter should be interpreted carefully. The measures used are broad and may cover a range of outcomes; for example, the measure ‘With a non-school qualification’ includes a wide range of different non-school qualifications, from certificate III through to post graduate degrees. If non-Indigenous people have obtained non-school qualifications at different levels or in different fields, they may have different income and employment outcomes.

Non-school qualifications

Figure 13.1.1 **People aged 20–64 years with (and without) non-school qualifications — associations with selected characteristics, 2008^{a, b, c, d}**



^a Includes a small number of persons aged 20–24 years who were still at school. ^b Indicator labels have been shortened. ^c Highest schooling <year 10 includes persons who never attended school. ^d Low household income and low personal income is based on national income quintiles as defined in the NATSISS 2008 user guide. Proportions for these are based on persons in households in which, and persons for whom income was stated.

Source: ABS (unpublished) NATSISS 2008; ABS (unpublished) NHS 2007-08; tables 13A.1–4.

In 2008, Indigenous people aged 20–64 years without a non-school qualification had higher rates of other disadvantages than those with a non-school qualification, including:

- being out of the labour force (42.9 per cent compared with 19.0 per cent), living in a low income household (57.4 per cent compared with 30.7 per cent), having low personal income (26.8 per cent compared with 16.8 per cent), and having a government pension, allowance or benefit as their principal source of income (48.7 per cent compared with 26.4 per cent) (figure 13.1.1)
- having left school before year 10 (40.1 per cent compared with 19.4 per cent), living in an overcrowded household (29.2 per cent compared with 16.5 per cent) and to living in a home not owned by someone in the household (76.8 compared with 62.1 per cent) (figure 13.1.1)

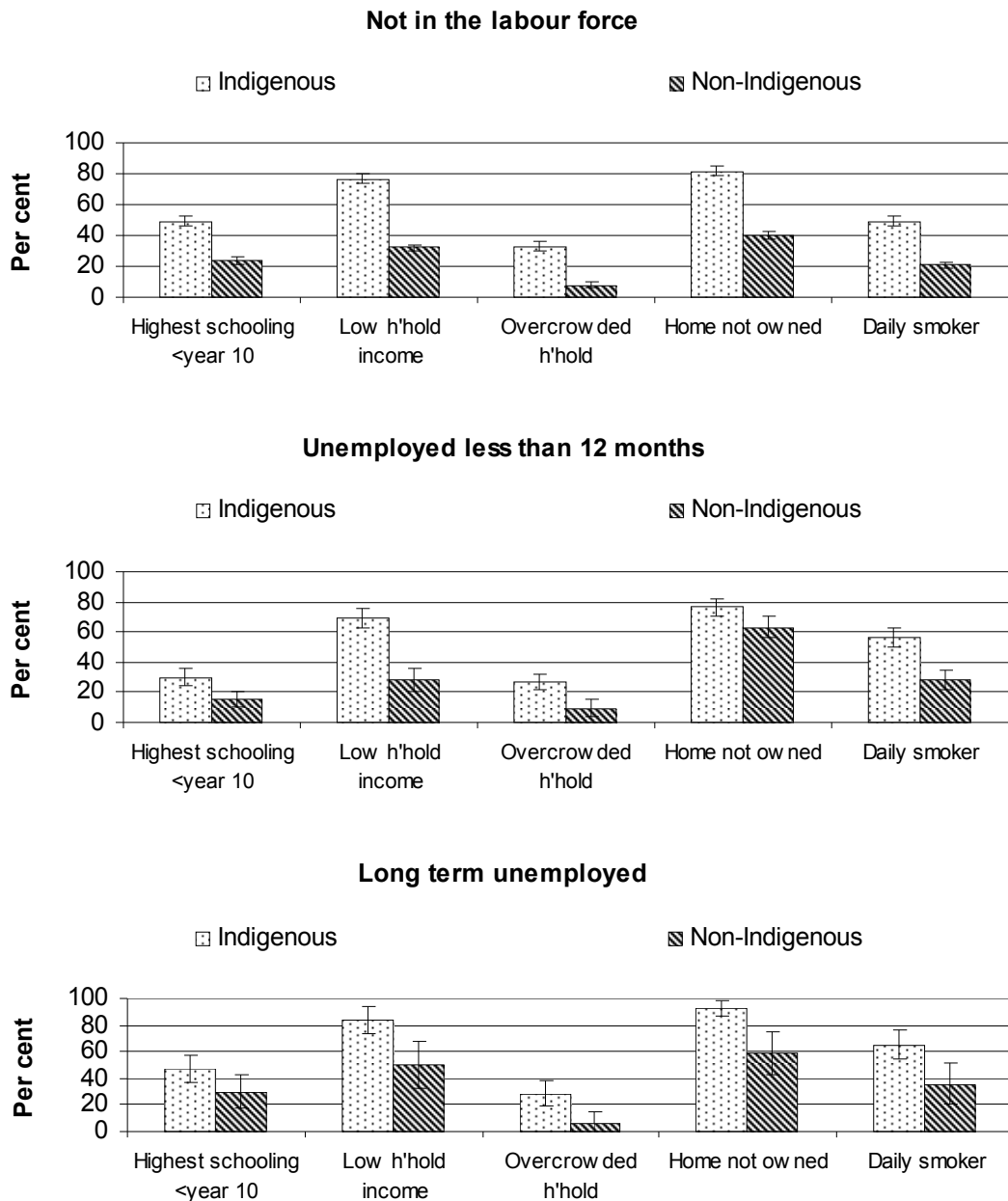
Indigenous people had significantly higher rates of all the selected indicators of disadvantage than non-Indigenous people with the same levels of educational attainment.

- Non-Indigenous people without a non-school qualification had higher rates of being out of the labour force, having lower household and personal incomes, having a government pension, allowance or benefit as their principal source of income and having left school before completing year 10 than non-Indigenous people with a non-school qualification (figure 13.1.1).
- However, there was little difference in the proportions of non-Indigenous people with and without a non-school qualification who lived in overcrowded households or in a home not owned by a member of the household (figure 13.1.1).

For more information about associations between non-school qualifications and other characteristics of disadvantage see tables 13A.1.1–4. For more information about non-school qualifications in general, see section 4.7 ‘Post secondary education — participation and attainment’.

Unemployment and participation in the labour force

Figure 13.1.2 **People aged 15–64 years, unemployed and not in the labour force — associations with selected characteristics, 2008^{a, b, c, d, e}**



^a Indicator labels have been shortened. ^b Highest schooling <year 10 includes people who never went to school. ^c 'Low household income' is based on national income quintiles as defined in the 2008 NATSISS user guide. Proportions are based on people in households in which income was stated. ^d Proportions for overcrowded households are based on persons for whom housing utilisation could be determined. ^e Proportions for non-Indigenous rates of overcrowded households are not shown here due to high RSEs.

Source: ABS (unpublished) NATSISS 2008; ABS (unpublished) NHS 2007-08; table 13A.5–8.

In 2008, for those aged 15–64 years:

- among Indigenous people who were not in the labour force:
 - high proportions were without a non-school qualification (82.1 per cent), in low income households (76.5 per cent) and receiving a government pension, allowance or benefit as their main source of personal income (77.7 per cent)
 - one in three had fair/poor self assessed health status (30.0 per cent); a larger proportion than in the total Indigenous population (20.8 per cent), but similar to the corresponding population of the long term unemployed (24.5 per cent)
 - over one-tenth had a profound or severe core activity limitation (11.8 per cent), a higher proportion than for the total Indigenous population (7.3 per cent) and higher than the proportion for the long term unemployed (5.7 per cent) (table 13A.1.5).¹
- Indigenous people who had been unemployed for less than 12 months had lower rates than the long term unemployed for:
 - having their principal source of personal income a government pension, allowance or benefit (69.7 per cent compared with 86.4 per cent)
 - having left school at or below year 9 (30.1 compared with 47.2 per cent)
 - living in a low income household (69.1 per cent compared with 84.3 per cent) or living in a home that was not owned by a member of the household (76.5 per cent compared with 92.6 per cent) (table 13.A.1.5)
- one in three (35.3 per cent) Indigenous people who were long term unemployed had been arrested in the last 5 years, twice the rate for the total Indigenous population (15.7 per cent) and also twice the rate for those who were not in the labour force (15.0 per cent) (table 13A.1.5)
- Indigenous people who were unemployed, or who were not in the labour force, had higher rates of other disadvantages than non-Indigenous people with the same labour force characteristics. Indigenous people had higher rates of :
 - having their highest year of school completed as year 9 or below
 - living in an overcrowded household or in a home not owned by someone in the household
 - being a current daily smoker

¹ Because health and disability are age-related, the proportions not in the labour force with these characteristics are higher than the proportions of unemployed as people not in the labour force are likely to have an older age profile than the unemployed population (ABS unpublished).

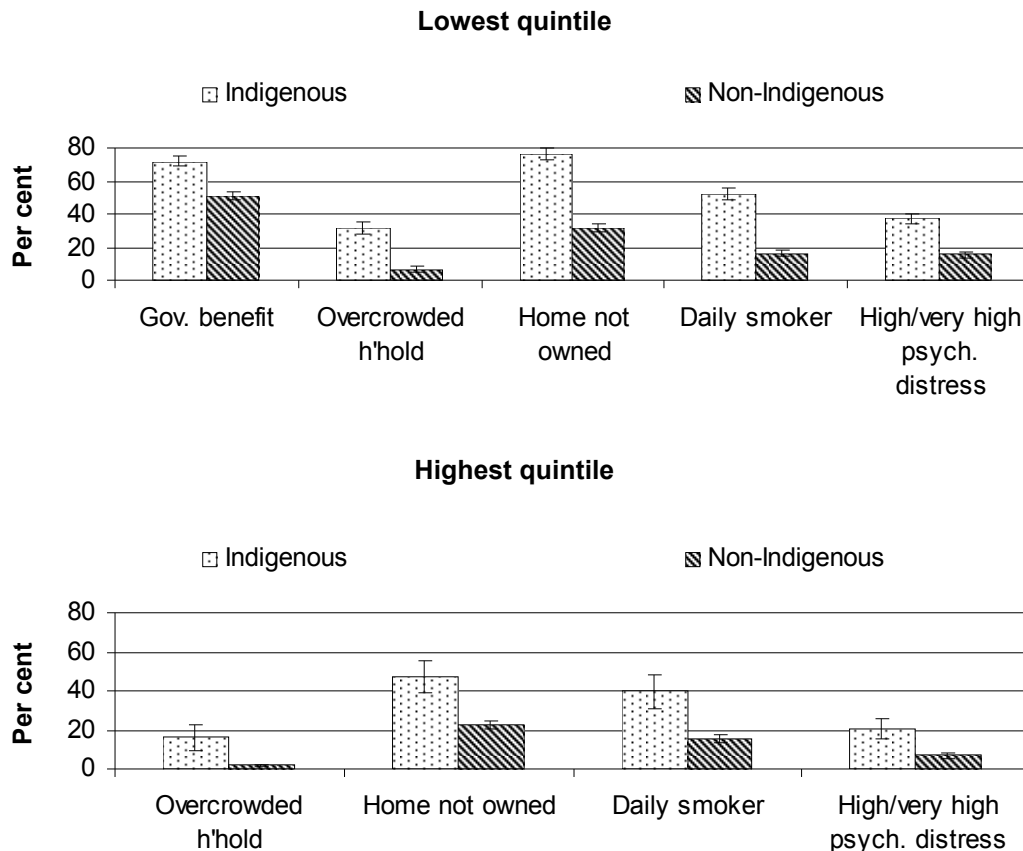
-
- living in a low income household ² (figure 13.1.2)

For more information on characteristics of disadvantage for people who were unemployed or not in the labour force, see tables 13A.1.5–8. For more information about unemployment or labour force characteristics in general see sections 4.6 or 8.1. Multinomial regression analysis on these topics is covered in section 13.2.

² Low income households are in the ‘lowest equivalised gross weekly household income’ quintile.

Personal gross weekly income

Figure 13.1.3 **People aged 18 years and over, personal gross weekly income — associations with selected characteristics, 2008^{a, b, c, d}**



^a Government benefit is not shown for people in the highest quintile due to high relative standard errors. ^b Indicator labels have been shortened. ^c Quintiles of personal gross weekly income are based on national income quintiles defined in the 2008 NATSISS user guide. Proportions are of people whose income was stated. ^d Proportions for overcrowded households are for people whose housing utilisation could be determined.

Source: ABS (unpublished) NATSISS 2008; ABS (unpublished) NHS 2007-08; tables 13A.1.9–12.

In 2008, for those aged 18 years and over:

- three quarters of Indigenous people in the lowest quintile of personal gross weekly income were without a non-school qualification (74.8 per cent); lived in a home not owned by someone in the household (76.0 per cent) and were in the lowest quintile of gross weekly household income (75.0 per cent) (table 13A.1.9)

-
- Indigenous people in the lowest quintile of personal gross weekly income had significantly higher rates of other disadvantages than non-Indigenous people in the lowest quintile³.
 - The proportions of Indigenous people with low income⁴ who lived in an overcrowded household, were five times higher than for low-income⁴ non-Indigenous people (31.7 per cent compared to 6.4 per cent) (figure 13.1.3; tables 13A.1.9–12).
 - Higher proportions of Indigenous than non-Indigenous people with low income⁴ were unemployed (24.5 per cent compared with 8.3 per cent) and much higher proportions of Indigenous than non-Indigenous people with low income⁴ were also long term unemployed (7.1 per cent compared to 1.6 per cent) (figure 13.1.3; tables 13A.1.9–12).
 - Higher proportions of Indigenous than non-Indigenous people were current daily smokers (52.1 per cent compared with 16.2 per cent (figure 13.1.3; tables 13A.1.9–12).

For more information on multiple disadvantage by quintiles of personal gross weekly income see tables 13A.1.9–12. Section 4.9 contains more data on income.

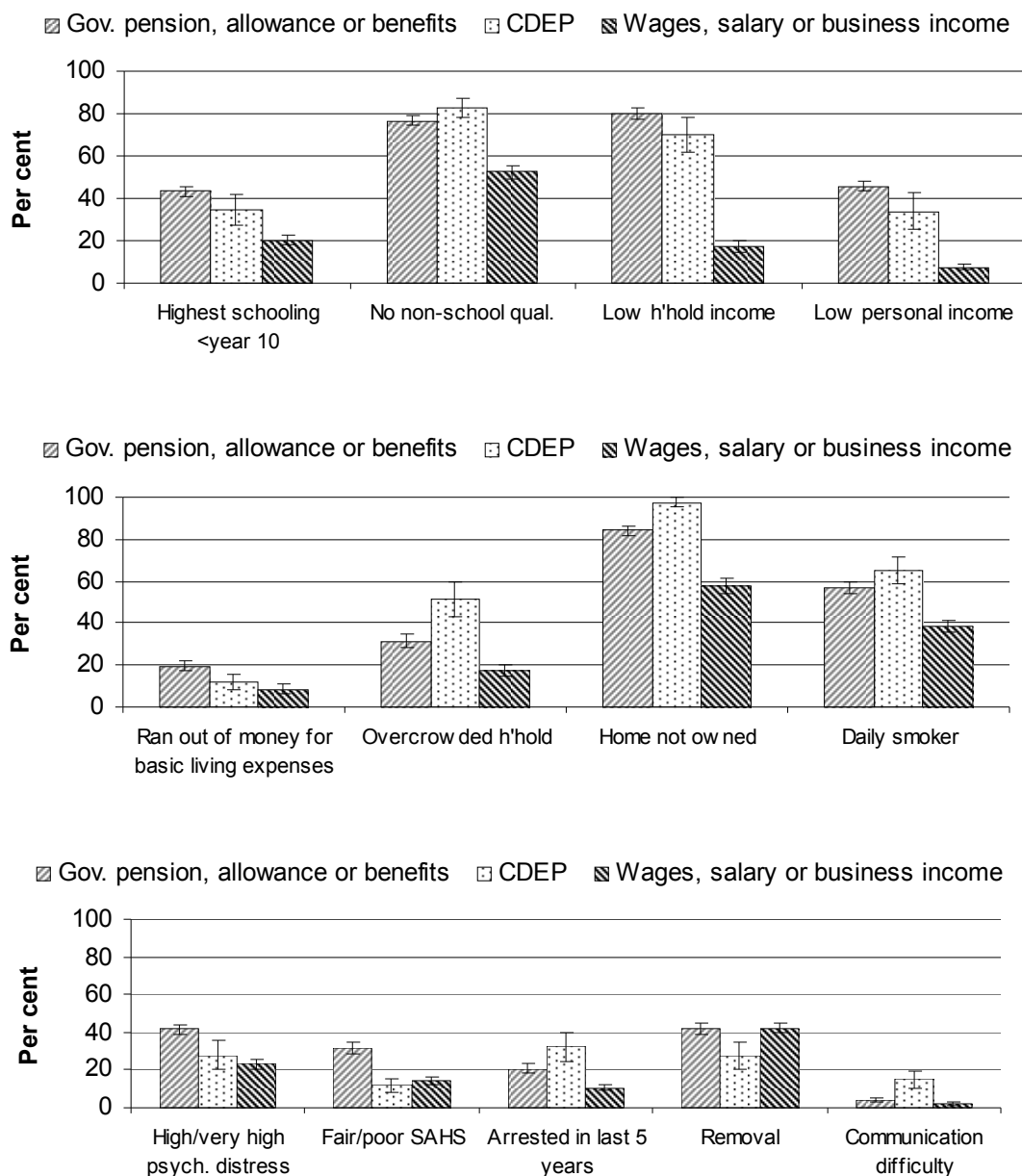
Principal source of personal income

Data on correlations between source of personal income and various measures of disadvantage are presented first for Indigenous people aged 15–64 years and then more briefly as a comparison between Indigenous and non-Indigenous people aged 18–64 years. Analysis of data for Indigenous people aged 15–64 years (figure 13.1.4) allows a broader coverage of the full working age population including those aged 15–17 years. However, income data for non-Indigenous people from the NHS 2007-08 are only available for those aged 18 years and over, hence the age group 18–64 years is used for comparing Indigenous and non-Indigenous outcomes (figure 13.1.5).

³ Among people in the lowest quintile of personal gross weekly income, Indigenous rates were higher than non-Indigenous rates for most indicators of disadvantage including: ‘highest year of school completed was year 9 or below’; ‘without a non-school qualification’; ‘unemployed’; ‘not in the labour force’; ‘in the lowest quintile of equivalised gross weekly household income’; ‘principal source of personal income was government pension, allowance or benefits’; ‘living in an overcrowded household’; ‘living in a home not owned by someone in the household’; ‘current daily smoker’; ‘has high/very high psychological distress (K5)’; ‘has fair/poor self-assessed health status’; and ‘has a profound or severe core activity limitation’. The only indicator where Indigenous rates were significantly lower than non-Indigenous rates was for ‘not in the labour force’ (57.7 per cent compared to 69.2 per cent) (tables 13A.1.9–12).

⁴ Low income refers to people in the lowest quintile of personal gross weekly income.

Figure 13.1.4 Indigenous people aged 15–64 years, principal source of personal income — associations with selected characteristics, 2008 ^{a, b, c, d, e, f}



^a Indicator labels have been shortened: CDEP=Community Development Employment Projects, SAHS=Self Assessed Health Status ^b 'Wages, salary or unincorporated business income' includes people whose principal source was: property; other sources; no sources; and not stated. ^c 'Highest school <year 10' includes people who never went to school ^d 'No non-school qual.' includes a some persons who were still at school. ^e 'Overcrowded household' based on persons whose housing utilisation could be determined ^f 'Communication difficulty' refers to difficulty communicating with English speakers.

Source: ABS (unpublished) NATSISS 2008; tables 13A.1.13–14.

-
- In 2008, Indigenous people aged 15–64 years whose principal source of personal income was government pension, allowance or benefit, had significantly higher rates of disadvantage across all indicators than those whose principal income was wages, salary or unincorporated business income (except for risky drinking and removal of self or family member from family, for which there were no significant differences) (figure 13.1.4 and table 13A.1.13).

In 2008, Indigenous people aged 15–64 years whose primary source of personal income was CDEP:

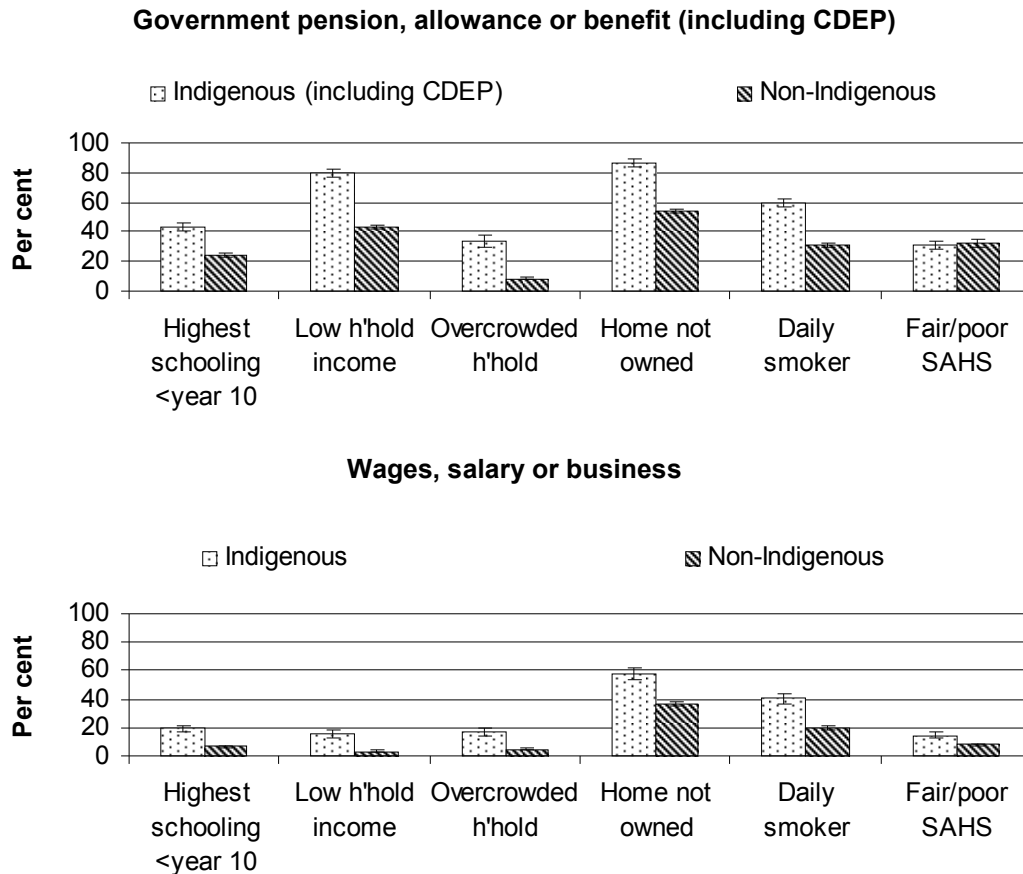
- had significantly lower rates of also being in the lowest quintile of equivalised gross weekly household income, the lowest quintile of gross weekly personal income, and/or living in a household that had run out of money in the last week for basic living expenses, than those whose primary source of personal income was government pension, allowance or benefit (table 13A.1.13)
- had significantly lower rates of high/very high psychological distress, fair/poor self-assessed health status, or were affected by removal (self or a relative has been taken away from family) than those whose primary source of personal income was government pension, allowance or benefit (table 13A.1.13).

However, significantly higher proportions of Indigenous people whose principal source of personal income was CDEP did not have a non-school qualification, lived in an overcrowded household or a home that was not owned by anyone in the household, were current daily smokers, had been arrested in the last 5 years, or had experienced difficulty communicating with English speakers (table 13A.1.13).

CDEP participation is much higher in remote than non-remote areas; therefore, some of the characteristics associated with people who have CDEP as a principal source of income are likely to reflect the circumstances of all Indigenous people living in remote areas.

The analysis in figure 13.1.5 is for people aged 18–64 years in 2008.

Figure 13.1.5 **People aged 18–64 years, principal source of personal income — associations with selected characteristics, 2008**^{a, b, c, d, e, f, g}



^a Indicator labels have been shortened. ^b Wages, salary or unincorporated business income includes people whose principal source was: property; other sources; no sources; and not stated. ^c 'Highest school < year 10' includes people who never went to school. ^d Low household income is based on national income quintiles as defined in the 2008 NATSISS user guide and are based on persons in households for whom income was stated. ^e 'Overcrowded h'hold' based on persons whose housing utilisation could be determined. ^f SAHS=Self assessed health status. ^g 'Communication difficulty' refers to difficulty communicating with English speakers.

Source: ABS (unpublished) NATSISS 2008 and ABS (unpublished) NHS 2007-08; tables 13A.1.15–18.

- In 2008, higher proportions of both Indigenous and non-Indigenous people aged 18–64 years whose principal source of personal income was a government pension, allowance or benefit (including CDEP) than those whose principal source was wages, salary or business income:
 - had a highest year of school completion of year 9 or below
 - were in the lowest quintile of equivalised gross weekly household income
 - lived in an overcrowded household
 - lived in a home not owned by anyone in the household

-
- currently smoked daily
 - had fair/poor self-assessed health status (tables 13A.1.15–19).
 - Among people whose principal source of personal income was a government pension, allowance or benefit, Indigenous people had significantly higher rates of disadvantage than non-Indigenous people for all measures in figure 13.1.5 except fair/poor self assessed health status.

For more information on association with indicators of disadvantage for principal source of personal income see tables 13A.1.13–18. Section 4.6 (‘Employment’) contains general analysis on CDEP. Section 8.4 (‘Income support’) contains analysis on government pensions, allowances and benefits. Section 4.9 (‘Household and individual income’) contains more information on income.

13.2 Labour market outcomes

This section uses the National Aboriginal and Torres Strait Islander Social Survey (NATSISS 2008) dataset, and a technique known as multinomial regression analysis, to analyse labour market outcomes (LMOs) for Indigenous people.⁵ The NATSISS is a rich source of information on the characteristics of Indigenous people, and includes data on LMOs and many factors that might influence them (table 13A.2.1 contains a description of the variables included in the analysis). The purpose of this analysis is to quantify the likely influence of various factors on LMOs. This information can be used to analyse the effect of factors that might be influenced by government policy (such as education and health) while controlling for the effects of other factors (such as age).

There are four labour market outcomes of interest — ‘mainstream (non-CDEP) employment’, ‘unemployment’, ‘CDEP participation’ and ‘not in the labour force’. Unless otherwise specified, references to ‘employment’ are to ‘non-CDEP employment’. The analysis excludes full time students and, importantly, the NATSISS excludes people who are not permanent residents of private dwellings (and therefore excludes prisoners).

The starting point for this analysis is the neoclassical human capital model of labour supply, where labour force participation and employment improve with increases in education and work experience, and health improvements. The influence of labour demand, which tends to be weaker in remote areas, is captured by including

⁵ This analysis is for Indigenous people only, unlike the analysis for the 2009 OID which used the 2006 Census to compare Indigenous and non-Indigenous people.

remoteness as an explanatory variable. Labour demand may also have been affected by the global recession during the survey period, which was August 2008 to April 2009, as unemployment rates began to increase early 2009. Regression analysis is used to estimate the change in the probability of a particular labour market state, given a change in a particular factor. This is known as the ‘marginal effect’ of the factor on the outcome (box 13.2.1). A discussion of the choice of explanatory variables can be found in Biddle and Webster (2007) and Stephens (2010). The set of variables included in this analysis is limited by the variables available in the NATSISS data set and in some cases, the technical limitations of regression analysis.

Box 13.2.1 Understanding the results

Regression analysis is a statistical tool that is used to measure the association between an explanatory variable and a dependent variable while holding all other variables constant. For example, in this study, the marginal effect measures the change in the probability of an individual being employed that is associated with a change in their educational attainment, while controlling for their age and other factors that might influence their employment prospects.

Discrete dependent variables

The choice of model depends on the data available. In this case, the data are sourced from the NATSISS survey, which provides information on many individual characteristics, including labour market outcomes (LMOs). The LMOs considered in this analysis are discrete (a person belongs only to one labour market state) and unordered (being ‘not in the labour force’ is not ranked higher or lower than being ‘unemployed’, for example). The most suitable model is a multinomial probit model.

Base predicted probability

The base predicted probability (table 13A.2.7) is the probability associated with the LMO of a ‘base person’. The base person in this study is someone who is 37 years old, is married, lives in a non-remote area, has no difficulty communicating in English, is in good health, has low levels of psychological distress, does not have a severe or profound disability, has a year 10 or 11 education and no non-school qualifications, has not been arrested in the last five years and has never been imprisoned.

Marginal effects

A marginal effect is the change in the value of a dependent variable (in this case, the predicted probability of a LMO) that is associated with a one unit (or marginal) change in an explanatory variable, holding all other explanatory variables constant. The results are presented as percentage point changes, relative to the predicted probability of a particular LMO for the base person.

(Continued next page)

Box 13.2.1 (continued)

The marginal effects represent the percentage point change in the probability of a labour market outcome associated with:

- for continuous variables, a one unit increase in the variable from its mean value
- for binary variables other than the education variables, a change from '0' to '1'
- for the education variables, a change in education compared to having year 10 or 11 and no non-school qualification

while holding the value of all other explanatory variables constant.

In discrete choice modelling, estimated marginal effects and their significance depend on the values at which other variables are held. In this study, marginal effects are calculated with continuous variables held at mean values and binary variables held at the mode (most common) values.

Statistical significance

Statistical significance tests are used to gauge the reliability of estimates. In the results tables, the stars next to the estimated marginal effects represent the level of statistical significance. (In the attachment tables, the standard errors are also reported.) One, two and three stars represent significance at the 10, 5 and 1 per cent levels, respectively — the more stars, the more confidence in the estimate. If a marginal effect is significant at the 5 per cent level (at least two stars) then it is unlikely that the result has arisen by chance. In the charts, error bars indicate 95 per cent confidence intervals for the estimates that show the range of values for which it is unlikely that the result has arisen by chance.

If an explanatory variable is determined not to be statistically significant (for example, for some of the results with no stars) it does not necessarily mean that there is no relationship between the variables, but that there is not sufficient evidence, based on the survey sample, to indicate that a relationship exists. If there are relatively few people in a sample with a particular characteristic, or in a particular outcome category, it may be difficult to detect a statistically significant association between variables. This is particularly an issue for the CDEP and unemployment outcomes in this model, because the number of people in these categories is relatively small.

Results

A selection of results is presented in this section. One of the LMOs discussed in this section is that of 'not in the labour force'. For ease of expression, the results are usually discussed in terms of 'labour force participation'.

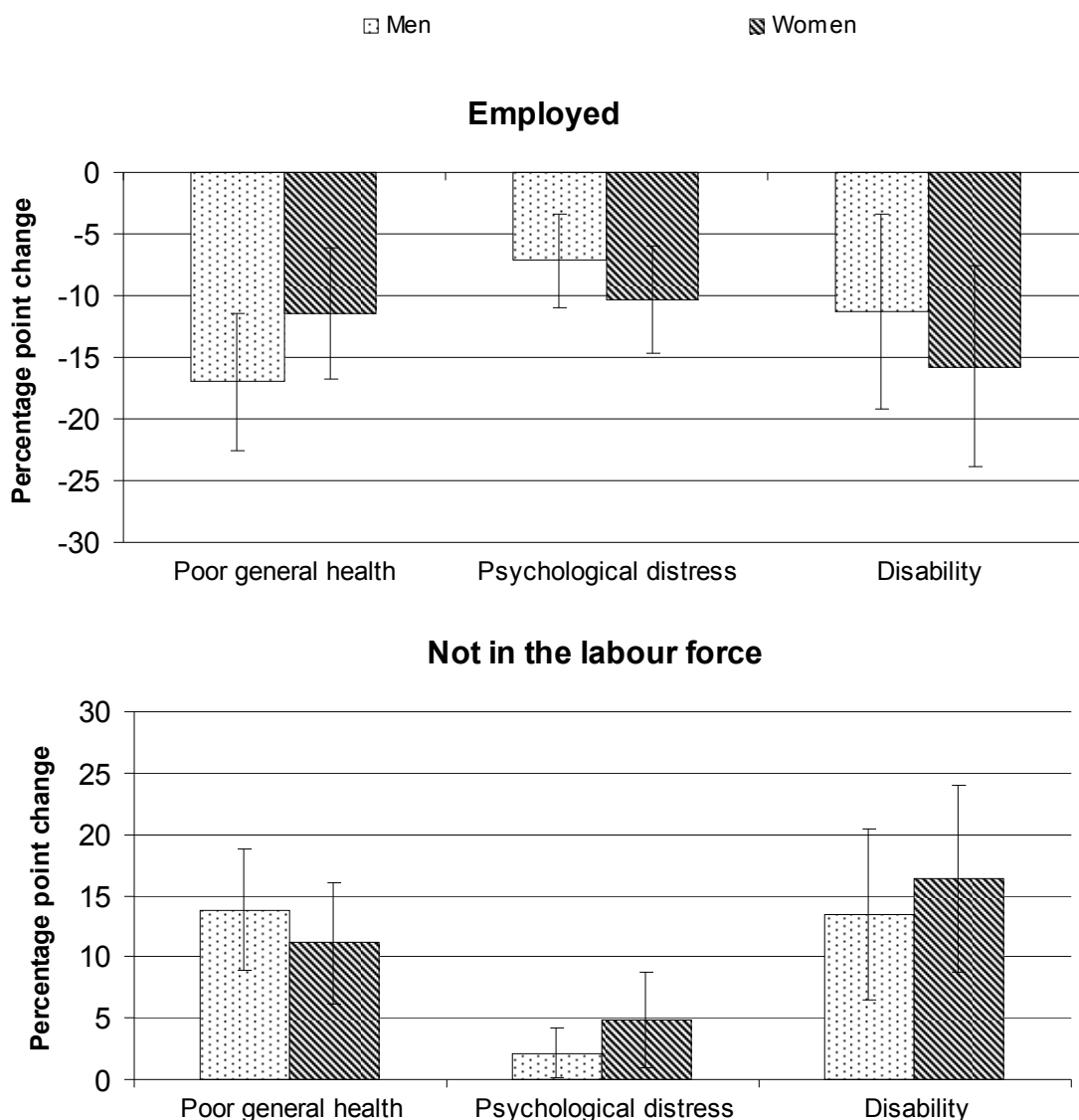
More results can be found in Attachment 13A. A description of the variables can be found in table 13A.2.1 and descriptive statistics in table 13A.2.2. All results for the marginal effects can be found in tables 13A.2.3 and 13A.2.4. Coefficient estimates

can be found in tables 13A.2.5 and 13A.2.6 for researchers who want to undertake more complex analysis, such as deriving marginal effects for particular subgroups. Diagnostic statistics and predicted probabilities are in table 13A.2.7.

Health

Better health is typically associated with better labour market outcomes. People with good general and mental health, and without a severe disability, are likely to participate in the paid labour market, and be employed, holding other factors constant. The marginal effects estimates of these three elements of health on the probability of being employed and not in the labour force of are reported in figure 13.2.1. The marginal effects for all three elements of health are significant for employment and labour force participation, with general health and disability having the largest marginal effects.

Figure 13.2.1 **Marginal effects of health, 2008^{a, b, c}**



^a General health and disability are self assessed. Mental health is measured in terms of psychological distress using responses to questions from the Kessler Psychological Distress Scale. The estimated marginal effect indicates the change in the predicted probability of a labour market outcome for changing from: being in good, very good or excellent health, to being in fair or poor health (self assessed); having low/moderate to having high/very high levels of psychological distress (as indicated by the Kessler Psychological Distress Scale); and having no disability to having a severe or profound disability. ^b The probability of the base person being employed is 88 per cent for men and 62 per cent for women. The probability of the base person not participating in the labour force is 5 per cent for men and 29 per cent for women. Definitions of all variables and the standard errors of the estimates are in attachment 13A. The definitions of marginal effects, predicted probability and the base person are in box 13.2.1. ^c The bars attached to each estimate indicate the 95 per cent confidence interval of the estimate.

Source: Productivity Commission estimates based on NATSISS 2008; tables 13A.2.3, 13A.2.4 and 13A.2.7.

- Indigenous males in poor or fair general health were 14 percentage points less likely to participate in the labour force, and 17 percentage points less likely to be

employed, compared with Indigenous males in good general health (figure 13.2.1).

- Indigenous females in poor or fair general health were 11 percentage points less likely to participate in the labour force, and 12 percentage points less likely to be employed, compared with Indigenous females in good general health (figure 13.2.1).
- Indigenous males and females with a severe or profound disability were 11 and 16 percentage points respectively less likely to be employed than those without (figure 13.2.1).
- Indigenous males and females with high levels of psychological distress were 7 and 10 percentage points respectively less likely to be employed (figure 13.2.1), and 5 percentage points more likely to be unemployed (tables 13A.2.3 and 13A.2.4).
- Indigenous men with a disability are 3 percentage points less likely to be unemployed. This counter-intuitive result might be explained by the large increased probability of Indigenous men with a disability being out of the labour force (14 percentage points) and that people with a disability who select in the labour force are more likely to be employed than unemployed.

Education

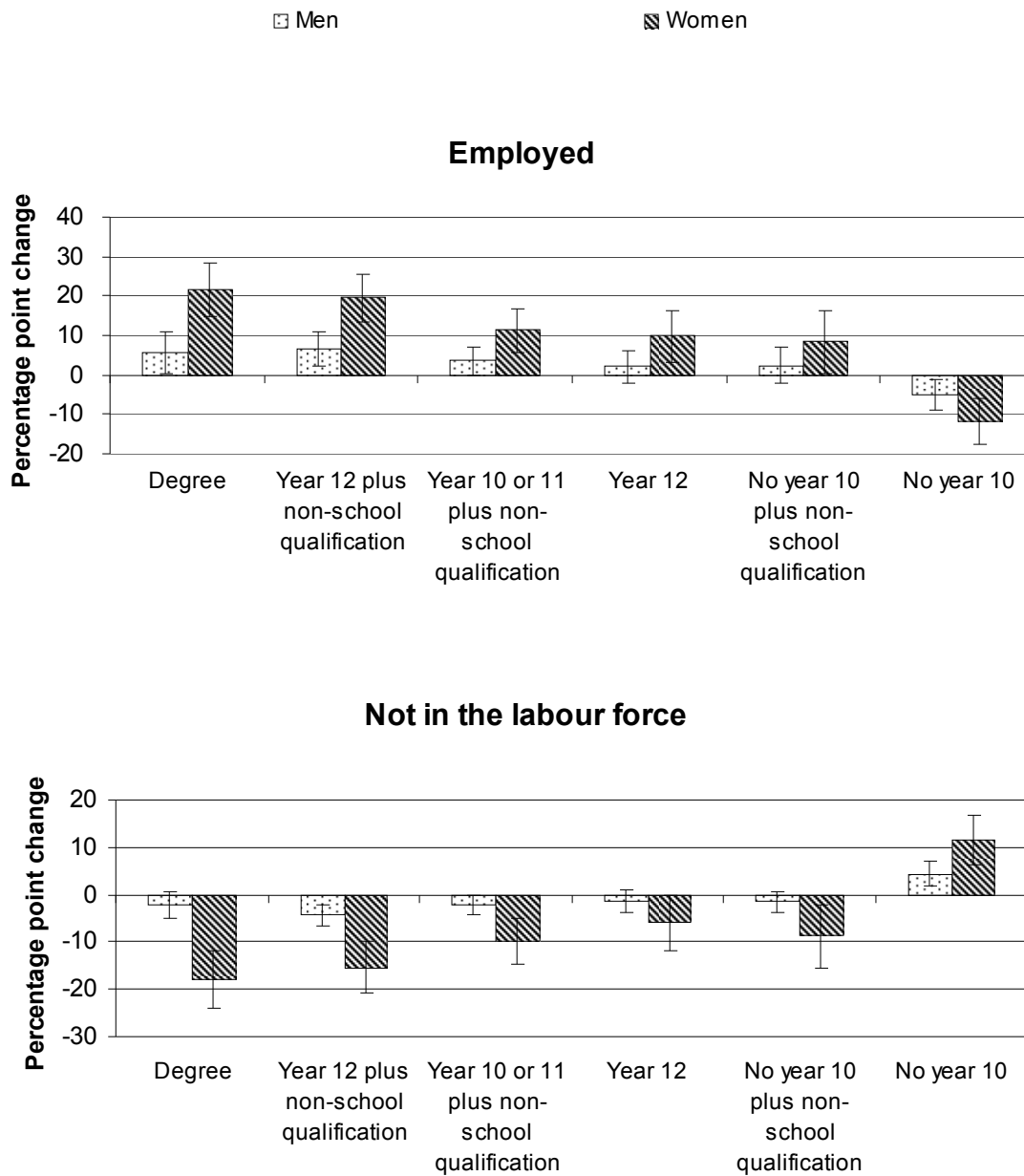
Most studies find that higher levels of education attainment are associated with improved labour market outcomes, holding other factors constant. This study examines the marginal effects of educational attainment relative to having completed year 10 or 11. For this report, a ‘pathways’ approach was used to combine years of schooling with non-school qualifications, recognising that people may take a number of different pathways through the education system.⁶ In this study, the marginal effect of having a non-school (diploma or certificate) qualification was estimated separately for people who completed year 12, who completed year 10 or 11 only, and who had not completed year 10. The marginal effect of having a degree was estimated separately from the other education categories.

The estimated marginal effects of education on the probability of being employed and not in the labour force are reported in figure 13.2.2. For women, any education

⁶ This approach is particularly relevant to the way that Indigenous people tend to engage with the education system compared to non-Indigenous people — on average, Indigenous people have lower levels of non-school qualifications and obtain them at a later age, often without having completed year 12.

above the lowest level of education (no year 10) was associated with an increased probability of being in the labour force and with being employed. For men, the results were more varied. Some education pathways were associated with better LMOs, for example, a non-school qualification improved the probability of being employed provided it was accompanied by at least year 10 or 11. However, year 12 on its own, and non-school qualifications without year 10, were not associated with improved LMOs.

Figure 13.2.2 Marginal effects of education, 2008^{a, b, c}



^a Education variables reflect the combinations of years of secondary schooling and non-school qualifications. The estimated marginal effect indicates the change in the predicted probability of a labour market outcome for a change from year 10 or 11 and no non-school qualification. ^b The probability of the base person being employed is 88 per cent for men and 62 per cent for women. The probability of the base person not participating in the labour force is 5 per cent for men and 29 per cent for women. Definitions of all variables and the standard errors of the estimates are in attachment 13A. The definitions of marginal effects, predicted probability and the base person are in box 13.2.1. ^c The bars attached to each estimate indicate the 95 per cent confidence interval of the estimate.

Source: Productivity Commission estimates based on NATSISS 2008; tables 13A.2.3, 13A.2.4 and 13A.2.7.

The marginal effects for employment and labour force participation for women were statistically significant and relatively large. Indigenous women with a degree were 22 percentage points more likely to be employed and 18 percentage points more likely to be in the labour force, compared to Indigenous women with a year 10 or year 11 and no non-school qualification (figure 13.2.2).

For men, the relationship between some education variables and improved labour market outcomes was weaker. An Indigenous man with a degree was 6 percentage points more likely to be employed, compared to an Indigenous man with a year 10 or 11 and no non-school qualification. However, an Indigenous man with year 12 and no non-school qualification was no more likely to be employed than an Indigenous man with year 10 or year 11 and no non-school qualification (figure 13.2.2). Indigenous men with degrees were 1 percentage point less likely to participate in CDEP, and there was no statistically significant relationship between education and unemployment for men (most likely due to high standard errors resulting from the small sample size for this outcome (table 13A.2.3).

The relative magnitudes of the estimated marginal effects imply the following benefits⁷ to higher levels of education:

- Indigenous men with year 10 or 11 plus a non-school qualification were 7 percentage points more likely to be in the labour force, and 9 percentage points more likely to be employed compared to Indigenous men with no year 10 and no non-school qualifications.
- Indigenous women with a degree were 12 percentage points more likely to be in the labour force compared to Indigenous women with year 12 and no non-school qualification.
- Indigenous women who had not completed year 10 but had a diploma or certificate qualification were around 20 percentage points more likely to participate in the labour force, compared to Indigenous women without year 10 or a non-school qualification.

Other factors

The marginal effects of years of workplace experience, remoteness, living in a socio-economic disadvantaged location, having difficulty with the English language, and history of arrest and imprisonment associated with labour force participation and employment are presented in table 13.2.1.

⁷ To the extent that other factors, not included in the model, might influence LMOs, the association between LMOs and education could be overstated (see box 13.2.2 on omitted variable bias).

Table 13.2.1 Marginal effects of other factors, 2008^a

Explanatory variable	Unit	Men		Women	
		Employed	Not in the labour force	Employed	Not in the labour force
Experience ^b	Years	2 ***	-1 ***	4 ***	-3 ***
Remoteness ^c	Binary	-14 ***	-2 **	3	-4 **
SEIFA ^d	No.	2 ***	-1 **	3 ***	-2 ***
Difficulty with English language ^e	Binary	-5	6 **	12	11 *
History of arrest ^f	Binary	8 ***	2 *	17 ***	9 ***
History of imprisonment ^g	Binary	9 ***	4 **	0	2

*** = 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). No stars indicate that the variable is not statistically significant (box 13.2.1). ^a The probability of the base person being employed is 88 per cent for men and 62 per cent for women. The probability of the base person not participating in the labour force is 5 per cent for men and 29 per cent for women. Definitions of all variables and the standard errors of the estimates are in attachment 13A. The definitions of marginal effects, predicted probability and the base person are in box 13.2.1. ^b The estimated marginal effect of experience represents the total effect of the experience and experienced squared variables. The estimated marginal effect indicates the change in the predicted probability of a labour market outcome for an increase in one year of experience over the average number of years of experience (15 years for men and 11 years for women). ^c The estimated marginal effect for remoteness indicates the change in the predicted probability of a labour market outcome for changing from living in a non-remote area to living in a remote area. ^d The estimated marginal effect for SEIFA indicates the change in the predicted probability of a labour market outcome associated with a change from living in an area with a SEIFA score in decile 3 to 4. ^e The estimated marginal effect for difficulty with English language indicates the change in the predicted probability of a labour market outcome for changing from having no difficulty to having difficulty. ^f The estimated marginal effect for history of arrest indicates the change in the predicted probability of a labour market outcome for changing from having no history of arrest to being arrested in the last five years. ^g The estimated marginal effect for history of imprisonment indicates the change in the predicted probability of a labour market outcome for changing from not having been in gaol to having been in gaol.

Source: Productivity Commission estimates based on NATSISS 2008; tables 13A.2.2, 13A.2.3, 13A.2.4 and 13A.2.7.

- An additional year of experience in the workplace was associated with an increase in the likelihood of employment of 2 and 4 percentage points for men and women respectively, compared to someone with average years of experience (around 15 years for men and 11 years for women). For Indigenous women, this was reflected in a 3 percentage point increase in the probability of participating in the labour force. For men, the associated increase in the likelihood of labour force participation was around 1 percentage point (table 13.2.1).
- English language skills⁸ were associated with an increase in the probability of participating in the labour force. Indigenous men were approximately 6 percentage points, and women around 11 percentage points, more likely to

⁸ Difficulty in speaking English is highly correlated with remoteness.

participate in the labour force compared with Indigenous men and women who had difficulty communicating in English (table 13.2.1).

- Arrest in the last five years had a highly significant negative association with the probability of employment.⁹ An Indigenous woman who had been arrested in the past five years was 17 percentage points less likely to be employed than an Indigenous woman without a recent history of arrest. The comparable result for Indigenous men was 8 percentage points. The magnitudes of the associations between history of arrest and labour force participation are smaller compared to the association with employment (2 percentage point decrease for men and 9 percentage point decrease for women). This may mean that arrest did not fully discourage labour force participation, but may have affected the ability to obtain a job (table 13.2.1).
- After accounting for other factors, including recent history of arrest,¹⁰ an Indigenous man who had been imprisoned in his lifetime had a reduced probability of employment of 9 percentage points and a reduced probability of participation in the labour force of 4 percentage points compared to an Indigenous man who has never been imprisoned (table 13.2.1). The results indicate no significant impact of imprisonment on LMOs for women, although this may reflect the small number of women in the sample who had a history of imprisonment (box 13.2.1).
- Remoteness was associated with a increased probability of participating in the labour force of 2 percentage points for Indigenous men and 4 percentage points for Indigenous women (table 13.2.1). This might reflect the strong association between remoteness and CDEP participation. The results suggest that living in a remote area increased the probability of CDEP participation by 18 percentage points for Indigenous men and 10 percentage points for Indigenous women, relative to someone who does not live in a remote area (tables 13A.2.3 and 13A.2.4).
- Living in a relatively less disadvantaged area (as indicated by a higher SEIFA score) increased the probability of employment for Indigenous men by 2 percentage points and 3 percentage points for Indigenous women, compared to those that lived in a relatively more disadvantaged area (table 13A.2.3 and 13A.2.4).

⁹ Variables related to crime are likely to be strongly affected by what is known as endogeneity bias as people who are employed are less likely to engage in criminal activity (box 13.2.2). Previous studies show that people who are unemployed are more likely to commit crimes (Freeman (1999)).

¹⁰ Arrest and gaol are correlated with each other.

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- Indigenous men who had been arrested in the last five years or imprisoned were 5 percentage points more likely to be unemployed. Indigenous women who had been arrested in the last five years were around 7 percentage points more likely to be unemployed (table 13A.2.3 and 13A.2.4).

Some qualifications

Several qualifications need to be understood in interpreting and using the results of these kinds of models. The results provide estimates of the sign and magnitude of relationships between the LMOs and the explanatory variables. Whether the estimates are accurate depends on the extent to which assumptions that underlie the model (box 13.2.2) are true. These assumptions generally relate to:

- whether factors not included in the model influence LMOs (omitted variable bias)
- the direction of causality between the dependent and explanatory variables (endogeneity)
- the relatedness of the explanatory variables (multicollinearity)
- the coverage of the survey (sample selection bias).

Where it is not clear that these assumptions hold, results must be interpreted with caution. For example, a number of the explanatory variables are related to each other (remoteness and difficulty speaking English, arrest and imprisonment), which increases the standard errors of those explanatory variables, and makes it less likely that the estimates of the marginal effects will appear statistically significant. There are a number of omitted variables that theory suggests should be included in the model but that are not available from the NATSISS data set (for example, motivation and aptitude), which will bias results. Endogeneity is likely to play a role in the influence of health and crime on LMOs, and the simultaneous influence of LMOs on health and crime. And the sample may not be representative of all Indigenous people.

These qualifications are particularly important when seeking to use the results to quantify the increase in employment or labour force participation that might be expected, for example, from meeting COAG targets for year 12 attainment. A large and significant marginal effect between an explanatory variable and the dependent variable does not necessarily mean that the explanatory variable causes the LMO, or that a change in a particular factor will necessarily result in a change in the LMO of the magnitude implied by the marginal effect. This means that the relationships between the LMOs and the explanatory variables are best described as associations.

Notwithstanding these qualifications, estimates from regression analysis are likely to be more accurate for the purposes of quantifying benefits from policy than those obtained from bivariate analysis, because regression analysis allows the effects of the factors of interest to be identified separately. Bivariate analysis, which also measures associations and are subject to the same sorts of bias, does not account for the concurrent effects of other relevant factors on the outcome of interest.

Box 13.2.2 Qualifications to the results

Four fundamental assumptions in regression analysis are that:

- the explanatory variables influence the dependent variable but not the other way around (the direction of causality is one way)
- all variables that influence the dependent variables are included in the model
- the explanatory variables are not strongly related to each other
- the data are from a survey in which individuals are drawn at random from the population of interest.

When these assumptions are true, the estimates can provide meaningful information about the sign, magnitude and significance of the influence each explanatory variable has on the dependent variable. Where these assumptions are not satisfied, the estimates can be biased or significance tests can be misleading, and in such cases results need to be understood as associations and interpreted with caution.

Omitted variable bias

A model's results may be biased when the dependent variable and an explanatory variable are linked via a third variable that is not included in the model. An example is education and LMOs. A person's educational attainment and LMOs may be influenced by personal attributes, such as motivation, aptitude and preferences, some of which cannot readily be captured by surveys (resulting in what is known as omitted variable bias, in this case due to 'unobserved heterogeneity'). Omitting these attributes from the model could result in the marginal effects of education on LMOs being biased, since the marginal effects might capture in part the effects of these omitted attributes.

Results of other studies (Laplagne et al (2007), Cai (2009)) — using models of labour force participation and health, and Australian survey data — support the hypothesis of unobserved heterogeneity, especially for females, and concluded that results in these studies are likely to be upper bound estimates.

In the model developed for this study, omitted variable bias could mean that results represent an upper bound of the magnitude of the association between education and LMOs.

(Continued next page)

Box 13.2.2 (continued)

Endogeneity (simultaneity) bias

Results may also be biased when the direction of causality runs both ways between the dependent variable and an explanatory variable. An example is health and LMOs. People who are in good health are more likely to be able to work, but it is also true that working could affect a person's health (in some cases positively; in other cases negatively). This means that a person's health affects their LMO, but their LMO also affects their health. This is known as endogeneity bias.

The impact of this type of bias on model estimates is unknown. The marginal effects are likely to represent the 'net effect' of a change in the explanatory variable (that is, the change in the dependent variable caused by the change in the explanatory variable, in combination with the change in the explanatory variable caused by the change in the dependent variable).

An alternative type of model, such as a simultaneous equation model, might be considered where dependent and explanatory variables are likely to be interdependent. Using a simultaneous equation model that sought to identify endogeneity bias, Laplagne et al (2007) concluded that endogeneity was present in a model of labour force participation and health that used Australian survey data. Cai (2009) found that health had a positive effect¹¹ on labour force participation for men and women, and that labour force participation had a negative effect on health for men, and a positive effect for women.

Multicollinearity

Multicollinearity occurs when explanatory variables are highly correlated with each other, that is, they have a strong relationship. This might occur when people suffer multiple disadvantage (for example, poor health, poor education and a criminal record) and the factors associated with disadvantage are all included in the model. Multicollinearity will not bias estimates, but may inflate their standard errors, and make some explanatory variables appear not significant when they are.

Sample selection bias

When each person in the relevant population has an equal chance of being selected for the survey, the survey sample is described as being an 'equal probability of selection' sample design. In practice, this is difficult, and most surveys will produce various form of sample selection bias which might arise from particular groups having different probabilities of being selected in the sample, or from undercoverage where particular groups have no probability of being selected.¹² In particular, people in

(Continued next page)

¹¹ The simultaneous equation model developed for Cai (2009) estimates the joint determination of health on labour force participation, and of labour force participation on health, and therefore allows the relationship to be described as an effect rather than an association.

¹² More information on NATSISS sampling and non-sampling errors can be found at ABS (2009).

Box 13.2.2 (continued)

non-private dwellings (including prisons) were excluded from the NATSISS. The 2008 NATSISS has a relatively high level of undercoverage and potential different selection probabilities for population groups, for example, in remote and non-remote areas. This is likely to result in the estimated results being biased due to sample selection.

Sample selection bias is often corrected by applying weights to the data. In this study, weighted data were not used because the added level of complexity makes it difficult to interpret results. This means that the estimated results are best described as representing the associations for individuals in the sample, and results cannot necessarily be extrapolated to the whole Indigenous population.

Summary

The analysis presented in this section examined factors affecting Indigenous labour market outcomes. The results indicate that better levels of health, more education and additional years of work experience are associated with a greater probability of being in the labour force and being employed. History of arrest is negatively associated with the probability of being employed and participating in the labour force. Imprisonment is also negatively associated with the probability of being employed and participating in the labour force for men. The size and significance of the marginal effects vary for different explanatory variables and should be interpreted with caution, noting the issues of sample selection, heterogeneity, endogeneity and multicollinearity in the data (box 13.2.2).

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Appendix 1 COAG Communiqués

Extract from COAG Communiqué 3 November 2000

Aboriginal reconciliation

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.

Extract from COAG Communiqué 5 April 2002

Reconciliation

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.

Extract from COAG Communiqué 14 July 2006

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 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 Generational Reform

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.¹

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 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.

Extract from COAG Communiqué 26 March 2008

Indigenous Reform

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.

¹ The ABS have since revised life expectancy data for Indigenous Australians, however, the COAG target to halve it within a generation remains.

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.

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 29 November 2008

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.

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.

Extract from COAG Communiqué 30 April 2009

Coordinator-General for Remote Indigenous Services

COAG agreed to the operating arrangements for the Coordinator-General for Remote Indigenous Services (the Coordinator General). The Coordinator-General will work with coordinators identified by Commonwealth agencies and State and Northern Territory coordinators-general to coordinate planning for, and monitor the delivery of, programs and services in the 26 locations selected under the Remote Service Delivery National Partnership (NP) agreed by COAG at its November 2008 meeting.

Extract from COAG Communiqué 2 July 2009

As agreed at its meeting in Perth last October, COAG focused today on its Closing the Gap commitments in relation to Indigenous disadvantage.

The Chair of the Productivity Commission, Mr Gary Banks AO, gave a presentation to COAG on the findings of the report *Overcoming Indigenous Disadvantage: Key Indicators 2009*. The report shows that while there has been some progress against the Closing the Gap targets, such as infant mortality, employment and home

ownership, overall the gap between Indigenous and non-Indigenous Australians remains unacceptable. This presentation coincided with the joint launch of the report by the Minister for Families, Housing, Community Services and Indigenous Affairs, the Hon Jenny Macklin MP, and Mr Banks.

Given this context, COAG agreed that effective implementation of the existing National Agreements and National Partnership Agreements was vital to close the gap in Indigenous outcomes. As part of COAG's increasing focus on implementation issues, particular effort will be needed on Indigenous outcomes.

This work will be supported by the Coordinator-General for Remote Indigenous Services, Mr Brian Gleeson, who has recently been appointed and will report to Minister Macklin and COAG. The Coordinator-General's role is to cut through bureaucratic blockages and red tape, and to make sure services are delivered in remote communities.

While the Productivity Commission's Report has framed the significant work to be undertaken, each First Minister gave a presentation to COAG on programs that are working within each jurisdiction to demonstrate the critical success factors that underpin Closing the Gap.

In addition, COAG asked the Working Group on Indigenous Reform to prepare a national strategy to improve food security for Indigenous people living in remote Australia before the end of 2009, adopted a National Integrated Strategy for Closing the Gap, agreed to a Closing the Gap: National Indigenous Education Statement, and signed a Closing the Gap: National Partnership Agreement on Remote Indigenous Public Internet Access. COAG also agreed to a Closing the Gap: National Urban and Regional Service Delivery Strategy to address Indigenous disadvantage in urban and regional locations.

National Integrated Strategy for Closing the Gap in Indigenous Disadvantage

The National Integrated Strategy for Closing the Gap in Indigenous Disadvantage, which COAG endorsed, identifies how investment of additional funds under existing COAG agreements will make a real difference in addressing Indigenous disadvantage. As part of the Integrated Strategy, the Commonwealth is to provide an additional \$46.4 million over four years to fund work undertaken by national data agencies, such as the Australian Bureau of Statistics and the Australian Institute of Health and Welfare, to improve the evidence base and address data gaps.

Closing the Gap: National Urban and Regional Service Delivery Strategy

To close the gap, there will need to be a concerted effort by government among the 75 per cent of Indigenous Australians who live in urban and regional locations across Australia.

COAG therefore agreed to a Closing the Gap: National Urban and Regional Service Delivery Strategy, which commits governments to coordinate and target the substantial funding provided under mainstream and Indigenous-specific programs to address Indigenous disadvantage in urban and regional locations.

Extract from COAG Communiqué 7 December 2009

Report from the Coordinator-General for Remote Indigenous Services

COAG noted the first report from the Coordinator-General for Remote Indigenous Services had been launched on 4 December 2009. The Report recommends improved coordination of Commonwealth and State service delivery in the 29 priority remote communities, particularly in efforts to improve community governance, education and training, delivery of renal health services and reporting. COAG has requested the WGIR report in early 2010 on actions taken to address the recommendations contained in the report.

Extract from COAG Communiqué 19 April 2010

COAG noted the Working Group on Indigenous Reform's progress status report addressing the recommendations of the 4 December 2009 report of the Coordinator-General for Remote Indigenous Services.

In noting the report from the Working Group, COAG restated its commitment to closing the gap on Indigenous disadvantage and to continued active consideration of the needs of the 29 priority communities under the National Partnership on Remote Service Delivery when implementing COAG National Partnerships relevant to remote communities. COAG also committed to continuing its monitoring of progress of the National Partnership on Remote Service Delivery through existing mechanisms.

Extract from COAG Communiqué 13 February 2011

COAG adopted a streamlined agenda built around five themes of strategic importance that lie at the intersection of jurisdictional responsibilities:

- a long-term strategy for economic and social participation;
- a national economy driven by our competitive advantages;
- a more sustainable and liveable Australia;
- better health services and a more sustainable health system for all Australians
- Closing the Gap on Indigenous disadvantage.

COAG renewed its commitment to strong ongoing monitoring and reporting of important national initiatives to ensure that they meet their goals and are delivered in a timely way. As part of the emphasis placed on implementation, governments committed to prioritising the passage of legislation to give effect to agreements reached by COAG.

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 continues its strong commitment to closing the gap between Indigenous and non-Indigenous Australians. It does so by undertaking important policy reforms and committing significant expenditures to find solutions to the complex problems which underpin the disadvantage faced by many Indigenous Australians.

The Australian Government's agenda to close the gap is driven by three key imperatives: to overcome past under-investment, to encourage and support personal responsibility, and to build new understanding and respect between Indigenous and non-Indigenous Australians. Closing the gap is an issue of national importance which will require sustained effort over many years, as well as ongoing collaboration between all levels of government working together with Indigenous Australians, the corporate sector and community organisations.

The Council of Australian Governments (COAG) has agreed to six ambitious close the gap targets. COAG has also identified a strategic platform with seven key 'building blocks' addressing specific areas of Indigenous disadvantage in early childhood, schooling, health, economic participation, healthy homes, safe communities, and governance and leadership.

The targets and building blocks are brought together in the National Indigenous Reform Agreement (NIRA) which sets out the objectives, outcomes, outputs, performance indicators, and performance benchmarks that will be used to assess progress in closing the gap. COAG has also tasked the independent COAG Reform Council (CRC) to monitor and report annually on the progress achieved nationally and in each jurisdiction on the closing the gap targets.

In February 2011 COAG agreed to a set of annual trajectories for each state and territory jurisdiction to measure progress on achieving the closing the gap targets. These trajectories provide the required annual progress points that the CRC will compare with the actual outcomes in their annual reports. The reports will assess whether progress at the national level and in the state and territory jurisdictions are at a sufficient pace to meet the targets within the specified time periods.

The Prime Minister reports annually to Parliament on the Government's closing the gap agenda. The 2011 Report noted progress was being made against the closing the gap targets and highlighted the significant improvements seen in child mortality. It stated also that meeting the targets will continue to be a major

challenge for the nation. The report also noted the unprecedented levels of public investment committed to actions under the seven building blocks to improve life outcomes and opportunities for Indigenous Australians.

A significant portion of these investments is provided through several Indigenous-specific National Partnerships (NP) agreed to by COAG. For instance, the NP on Remote Indigenous Housing commits \$5.5 billion over ten years (to 2017-18) to build and refurbish homes and related infrastructure. Another \$1.6 billion is committed over four years (to 2012-13) through the NP on Closing the Gap in Indigenous Health Outcomes. The NP on Closing the Gap in the Northern Territory, agreed to between the Australian and Northern Territory governments in July 2009, provides \$807 million over a three year period (to 2011-12). Other Indigenous-specific NPs cover Indigenous Early Childhood Development, Indigenous Economic Participation, and Indigenous Remote Service Delivery.

Additional public investments in closing the gap are made through funding for mainstream programs with a significant connection with Indigenous Australians. For instance, the NP on Low Socio-Economic Status School Communities, designed to improve student learning outcomes in schools with high numbers of disadvantaged students, will impact upon many Indigenous students.

The Australian Government has also reaffirmed its commitment to closing the gap in the 2011-12 Budget by maintaining its focus on structural reforms across all policy sectors and by providing \$526.6 million over the next five years.

The first *Indigenous Expenditure Report*, commissioned by COAG, was released in February 2011. It estimates the total expenditure on Indigenous Australians made in 2008-09 by the Australian and state and territory governments. These estimates incorporate attributed shares of Indigenous persons in all mainstream spending (including programs not related to closing the gap, such as defence expenditure) as well as Indigenous-specific spending. The total Indigenous expenditure of the Australian government in 2008-09 was estimated at \$13.5 billion, of which \$4.0 billion was spending on Indigenous specific programs.

In November 2009, the Australian Government committed \$29.2 million over five years to support the establishment and initial operation of the National Congress of Australia's First Peoples. The National Congress is expected to play a key role in engagement between the Australian Government and Indigenous peoples. The first meeting of the National Congress occurred in June 2011.

New South Wales Government comments

The NSW Government is acutely aware of the current gaps that exist between Aboriginal and non-Aboriginal people in NSW. To date, Governments efforts have done little to decrease the gaps in outcomes of life expectancy, child mortality, child abuse and neglect, employment, imprisonment and juvenile detention, overcrowding and alcohol and tobacco consumption.

While there have been some improvements in Aboriginal development, they have been limited at best. Given that NSW is home to the largest population of Aboriginal and Torres Strait Islander people in Australia, the need to address this gap is more pressing than ever and our approach must be re-vitalised.

The NSW Government is committed to assisting Aboriginal and Torres Strait Islander people to meet their aspirations, seize opportunities and share in the State's prosperity.

The NSW Government will make decisions hand in hand with Aboriginal communities, in accordance with the following principles: strong political leadership and accountability; evidence based programs; locally driven solutions; early intervention and prevention; economic and cultural strength; greater opportunity and individual responsibility and a long term vision. These principles will help to improve outcomes across all seven strategic areas in the *Overcoming Indigenous Disadvantage* framework.

NSW is a signatory to the *National Partnership Agreement on Indigenous Economic Participation* and we will continue to implement key elements of the Agreement. Following an evaluation of current programs and their effectiveness, the Government will also create opportunities for economic development and increased employment participation.

NSW is also a signatory to the *National Partnership Agreement on Indigenous Education, Closing the Gap in Indigenous Health Outcomes and Closing the Gap Indigenous Early Childhood Development*. The Government is committed to intervening early to improve the educational and health outcomes for Aboriginal people, whilst assisting Aboriginal people and communities to attain academic and cultural excellence in education.

NSW is currently revising its Aboriginal Affairs strategic framework as the *Two Ways Together* NSW Aboriginal Affairs Plan comes to a close. While the biennial *Two Ways Together* Report has facilitated greater awareness of the extent of

disadvantage; the Report highlights the lack of program evaluation and evidence based decision making. The Auditor-General's report chiefly acknowledges that *Two Ways Together* '...has not delivered the improvement in overall outcomes for Aboriginal people that were intended' (NSW Auditor General's Report 2011, *Two Ways Together — NSW Aboriginal Affairs Plan*, p.3).

This report provides a platform from which the NSW Government can work with local Aboriginal people to reform our approach to closing the gap.

Local Partnerships with Aboriginal Communities

At the local level, 21 Aboriginal Community Engagement Groups have been locally established under the Partnership Community Program (PCP). The PCP is a place-based program supporting the development and recognition of a community engagement group in each of the 40 Partnership Communities.

The program is based upon the principle of recognising that Aboriginal people know best the needs of their communities, and that government agencies need to work in partnership with them, so that their individual needs can be targeted in a culturally appropriate way.

The Office of Aboriginal Affairs NSW will continue to work with all other stakeholders within the targeted communities, including the NSW Aboriginal Land Council (ALC) network. The role of the non-government sector in the NSW Governments approach will be fundamental to delivering locally driven solutions.

Partnering Regionally

The NSW Government is committed to working together as equal partners with Aboriginal people and the Australian Government through *Regional Partnership Agreements* (RPAs). There are currently four RPAs in place in NSW: Murdi Paaki; Many Rivers; Illawarra and the Northern LALC. The evaluation of these RPAs is critical to their future and will occur as soon as practicable.

Partnering with the Commonwealth

The NSW Government will continue to work closely with the Australian Government through the *Overarching Bilateral Indigenous Plan* to close the gap in Aboriginal disadvantage.

Victorian Government comments

The Victorian Government is committed to improving the quality of life of Indigenous Victorians and closing the gaps between Indigenous and non-Indigenous Victorians.

Closing the gaps will require sustained effort from all governments, Indigenous communities and their organisations as well as the private and philanthropic sectors and the broader Victorian community.

From late 2010 the Government has commenced building on previous efforts in areas such as maternal health, early childhood development, education and economic participation to improve outcomes. Actions in these areas by both the State and the Commonwealth Governments will be decisive in helping individuals, families and communities breaking the cycle of disadvantage.

There are areas highlighted in this and in other national and State reports that reinforce the message for Victoria that more needs to be done across the board but particularly in areas such school retention rates, smoking, alcohol abuse and child protection.

In February 2011 Victoria recommitted to the updated COAG National Indigenous Reform Agreement and is working with the Commonwealth Government to ensure better coordination of effort by both Governments.

Partnership with Indigenous Victorians

Victoria has well established consultative and engagement arrangements with Victorian Indigenous communities and their organisations. Victoria's Local Indigenous Networks (LINs) established across the State provide a critical focus for work and priority setting in local areas. Around 1600 community members have participated in the LINs to date. This accounts for around eight per cent of Victorias Indigenous adult population.

Statewide engagement processes are also in place at the program or issue based level in areas such as justice, health and education.

Partnerships are vital in both identifying priorities and in implementing measures. on the ground.

Victorian Indigenous Affairs Framework

The present Framework has six Strategic Areas for Action that, consistent with the NIRA, adopts a lifecourse approach to closing the gaps. This approach gives strong emphasis on providing a healthy start to life and ensuring better access to and outcomes from early childhood development, education and participation in the economy.

Other Areas for Action focus on achieving better justice and family safety outcomes, improved health and well being and on building the capacity of Indigenous communities.

The Victorian Government has commenced a review of policy settings. This review is designed to strengthen the performance of government programs in contributing to closure of the gaps.

The Review to be completed by 2012 will respond to the real opportunities and challenges of:

- a demographic structure where the Indigenous population is growing and half the population is under the age of 22
- the significant gaps between Indigenous and non-Indigenous Victorians on key economic, social and health indicators.

Victoria will continue to publish an Annual Indigenous Affairs Report that outlines performance against the Framework.

Progress in Victoria

There have been positive movements in some key areas. More three and four year old Indigenous children are accessing kindergarten and Indigenous student performance in NAPLAN is continuing to improve. Better outcomes in these areas are expected to have positive ‘downstream’ effects for individuals including their future participation in the economy.

Queensland Government comments

The Queensland Government works in partnership with Aboriginal and Torres Strait Islander peoples to provide services and support to Close the Gap, advance reconciliation and promote Indigenous cultures.

A key focus is reducing the gap in health outcomes. The *Queensland Health Aboriginal and Torres Strait Islander Cultural Capability Framework 2010–2033* aims to make health services and clinical practices more effective and culturally appropriate for Indigenous Queenslanders. Further, the Southern Queensland Centre of Excellence for Indigenous Primary Health Care, launched in 2009, will provide best practice health services, undertake research, and train health professionals to support improvements in Indigenous health outcomes.

Improving economic participation is another focus of effort. The Queensland Government is committed to increasing public sector employment to reflect Queensland Indigenous working age population share by 30 June 2013. The Skilling Queenslanders for Work program also includes a focus on Aboriginal and Torres Strait Islander peoples and aims to help them obtain skills and training to compete for full-time jobs. The Jail to Jobs program will also support 200 Indigenous people leaving jail each year to be transitioned into employment.

Achieving at school is critical, as is supporting Indigenous students to transition from year 12 to further education, training and employment. To this end, the *Learn, Earn, Legend! Year 12 Destinations* initiative commenced late in 2010. It aims to case manage every Indigenous Year 12 student during the final year of schooling and then transition them into further education, training or meaningful employment for a minimum of 26 weeks post school.

These streams of work are brought together under *LEAP: a strategy for greater access to education, employment, health and housing opportunities for Aboriginal and Torres Strait Islander Queenslanders in urban and regional areas*. This strategy targets the 78 per cent of the Aboriginal and Torres Strait Islander population living in urban and regional areas, and particular focuses on increased employment and economic participation, early childhood development, targeted sport and recreation activities and the delivery of local ‘closing the gap’ actions.

Recognising culture and moving towards reconciliation are also important. The *Aboriginal and Torres Strait Islander Arts Policy 2009–2013* supports Aboriginal and Torres Strait Islander peoples to preserve culture and develop sustainable arts and cultural industries. The Queensland Government Reconciliation Action Plan

aims to strengthen relationships; celebrate the achievements of Indigenous Queenslanders; and increase educational and economic opportunities.

Queensland has also implemented initiatives to respond to the particular issues and high level of need in rural and remote Indigenous communities. In Queensland, six communities have been designated priority communities under the Remote Service Delivery National Partnership and are benefitting from the increased focus on raising the quality of government services and facilities and better supporting Indigenous governance and leadership. Four of these communities are also Cape York Welfare Reform (CYWR) Trial communities.

The CYWR Trial is a collaboration between the Commonwealth and Queensland Governments and the Cape York Institute for Policy and Leadership. It commenced in 2008, and aims to reduce reliance on passive welfare, re-establish positive social norms, restore local Indigenous authority, and create incentives for four Cape communities to engage in the real economy. The Family Responsibilities Commission (FRC) is a key component of the Trial and appoints respected Elders to Local Commissioner positions, thereby rebuilding local authority. The FRC sends a consistent message about the expected behavior of individuals and families and, where appropriate, refers individuals to support services. The Trial has already contributed to positive changes in school attendance and increased commitment to education by parents.

Covering 19 communities, Queensland's strengthened alcohol reform laws came into effect on 1 July 2008, along with a range of support services. These initiatives aim to provide opportunities to rebuild social norms and healthy families by reducing alcohol consumption and associated violence. In many alcohol reform communities, violence has trended downwards and in the majority of communities school attendance has also been maintained or has improved.

The Bound for Success Pre-Prep Program commits to ensuring children aged two and a half to three and a half living in 29 Indigenous communities have access to high quality, consistent early childhood education programs.

In 34 remote Queensland Indigenous communities, the Remote Indigenous Housing capital works program will see more than 1100 new dwellings and upgrades to more than 1200 homes by 2018. To ensure Indigenous people benefit broadly from this investment, Queensland has committed to 20 per cent of the employment hours on government construction projects in Indigenous communities be dedicated to employing and training local Indigenous people.

Western Australian Government comments

The Western Australian Government is committed to addressing the unacceptable levels of disadvantage experienced by our Aboriginal people across the OID priority outcomes areas and COAG's six national Closing the Gap targets.

While fully supporting COAG related reforms and activities, it is also recognised that significant and sustainable change will only occur if there is strong state based leadership in tackling Indigenous disadvantage.

There is need for a deep understanding and responsiveness to the unique challenges that exist in WA in relation to improving life outcomes for Aboriginal people.

WA has the third largest Indigenous population in Australia, which is projected to grow by 20 per cent in the next 10 years. A very high proportion (42.6 per cent) of our Aboriginal population is living in remote or very remote areas, within more than 280 town based and remote communities, posing complex challenges for service delivery. Furthermore, almost 80 per cent of Western Australia's Aboriginal population is under the age of 40 years and most significantly the life expectancy of our Aboriginal people is the lowest of all states and territories.

Responding to these attributes will require targeted and intensive state focus on the regional and local needs of our young and growing population, to strengthen their health, education and employment prospects, as well as on the service needs of Aboriginal communities in remote locations to ensure they receive the same amenities enjoyed by the broader community.

Way Forward

In the past, crisis management in Aboriginal affairs has often diverted organisational focus away from the overall intent and strategic approach essential to improving Aboriginal outcomes. A more systemic and integrated approach is needed to ensure the maximum benefit is achieved from investment in programs and services.

A failure to change the way we operate will continue to result in the development of ineffectual solutions with unintended consequences. Some of the key issues and challenges include:

- a failure to learn from the past, resulting in a lack of real change

-
- a history of reactive and ineffective crisis driven policy development in Aboriginal affairs and a tendency to focus on symptoms rather than underlying causes
 - an incomplete understanding of patterns and levels of expenditure on services for Aboriginal people to better identify areas for investment that can result in greater social and economic benefits
 - incomplete, skewed or fragmented intelligence relating to Aboriginal people and communities leading to service identification and delivery that is ill targeted and timed, duplicated, overcooked or insufficient to meet needs.

Consequently, the WA government is developing a framework for Indigenous affairs that will drive the coordination of action across government in tackling the challenges. The framework will take account of work being undertaken as a result of commitments under various National Agreements and National Partnership Agreements (NPAs), as well as incorporating additional effort by government across agreed focus areas. The framework will also link in to WA's Overarching Bilateral Indigenous Plan (OBIP), an agreement that brings together all COAG related activities aimed at Closing the Gap targets.

Work already underway includes a range of initiatives implemented through the Indigenous NPAs (such as commencement of construction of Children and Family Centres; new and refurbished housing in remote communities; and creation of 156 real jobs to replace positions previously existing in the Community Development Employment Program) as well as the continuance of long established and effective programs as presented in case studies interspersed throughout this report.

Authentic engagement with Aboriginal people will underpin the framework which will ensure that Aboriginal people and communities have a level of trust and capacity to be active participants in the identification of critical issues and sustainable solutions that will shape their destiny.

The framework will foster better connectedness across WA Government agencies, between State and Commonwealth governments, and with the non-government and private sectors. This will ensure that effort and investment is more clearly identified, coordinated and implemented.

South Australian Government comments

The South Australian Government is committed to building on the strengths of the Aboriginal community to improve wellbeing and close the gap in Aboriginal disadvantage

Strategic Policy Framework

South Australia's Strategic Plan, through SASP T6.1 provides the overarching framework to improve the wellbeing of Aboriginal South Australians. The framework comprises the seven COAG building blocks with the addition of reconciliation, culture and traditional lands, recognising the significance of these to Aboriginal South Australians. Twenty one indicators that align to the OID and COAG frameworks are reported annually.

The Chief Executives Group on Aboriginal Affairs (CEGAA) sets direction and monitors outcomes across the strategic framework.

Engagement and Partnership

The South Australian Aboriginal Advisory Council is the peak advisory body for the South Australian Government. The ten members are appointed by the Minister following a public nomination process. This forum provides strategic advice to government across all departments and has met with CEGAA to drive the government policy agenda.

Urban and Regional Initiative

Over 2010 CEGAA, with advice from SAAAC, developed new government coordination and community engagement mechanisms for two locations in South Australia, northern Adelaide and Port Augusta. Over 2011 these mechanisms will be implemented, resulting in community driven action agreements that outline commitments on behalf of Government and community to close the gap in Aboriginal Disadvantage in each location. Improved co-ordination across the three tiers of government is also being implemented – to make better use of existing resources in these locations – to improve accessibility, accountability and sustainability.

Urban and Remote Service Delivery

Local Implementation Plans for Amata and Mimili were developed in partnership with communities and the Commonwealth Government. These plans are now being implemented.

Legislative Reform

The Government is currently conducting comprehensive reviews of both the *Aboriginal Lands Trust Act 1966* (the ALT Act) and the *Aboriginal Heritage Act 1988* (the AHA).

The reforms proposed for the ALT Act will enable Aboriginal South Australians that live in ALT residential communities to achieve increased investment in and long term security over where they live through long term leasing arrangements for housing. The reforms will also provide a platform for economic and commercial development of ALT held land, providing employment and income generation opportunities. Finally, the changes will empower communities and people with traditional and familial links (including native title links) to manage land for environmental and cultural sustainability.

The review of the AHA is not yet complete but current policy directions are to promote the management and protection of Aboriginal heritage through planning and agreement making. While employment opportunities are not (and should not be) a central focus of the review, building the capacity of Aboriginal people to participate in making decisions about the management and protection of Aboriginal heritage will enable Aboriginal South Australians to make the most of their cultural assets.

Tasmanian Government comments

The Tasmanian Government continues to address the causes and symptoms of Indigenous disadvantage through Aboriginal specific programs and services and services designed to address disadvantage in the wider community. Increasingly, mainstream services are adopting practices that consider cultural appropriateness, such as cultural competency training, cultural awareness training and the establishment of Aboriginal advisory committees and groups.

These activities build on the strong foundation for reconciliation set down by the *Stolen Generations of Aboriginal Children Act 2006*, which allowed for 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.

National Agreements and Partnerships

The Tasmanian Government has negotiated a number of general and Aboriginal specific National Agreements, National Partnership Agreements and National Strategies and Frameworks to progress Closing the Gap targets, including the Indigenous Early Childhood Development National Partnership Agreement, the Closing the Gap in Indigenous Health Outcomes National Partnership Agreement and the National Partnership on Remote Indigenous Housing.

Overarching Bilateral Indigenous Plan

During 2010, the Tasmanian Government negotiated an Overarching Bilateral Indigenous Plan for the State. The first of its type between the Australian and Tasmanian Governments, the plan underpins Tasmania's commitment to the National Indigenous Reform Agreement — focussing effort on urban and regional service delivery and the improvement of data quality.

Early Childhood

The Kids Come First project is a whole-of-government outcomes-based framework to improve health and wellbeing outcomes for Tasmanian children. A database allows analysis of a number of indicators for children from birth to age 17, including health, wellbeing, safety, development and learning. During 2010, the project prioritised the collection and reporting of data for Aboriginal children.

Education

Closing the Gap in Aboriginal Educational Outcomes — A Tasmanian Strategy for Aboriginal Student Success through School Improvement aims to Close the Gap in educational achievement. The strategy focuses on readiness for school; engagement and connections; attendance; literacy and numeracy; leadership; quality teaching and workforce development; and pathways to real post-school options.

Economic Participation

During 2010, the Tasmanian Government facilitated a statewide tour of *Deadly Dollars*, a New South Wales performance based consumer rights and financial literacy program, with assistance from the Australian Government. Performances provided an entertaining, engaging and educational approach to avoiding debt, household spending, interest free deals, mobile phone bills and other credit matters.

Safe Communities

During 2010, Colony 47 secured Australian Government funding to deliver the Healing Our Way (HOW) program in Tasmania, to assist the Aboriginal community and service providers to work effectively with incarcerated male Aboriginal offenders and their families through the delivery of a culturally-focused healing program — reducing re-offending while building community leadership capacity.

Governance and Leadership

The Aboriginal Outdoor Recreation Program fosters Aboriginal community leadership through a partnership with Wilderness Therapy Programs. The partnership delivers tailored courses in facilitating wilderness therapy to the Aboriginal community topics that equip participants with the necessary skills to facilitate Wilderness Therapy Programs in Tasmania.

Australian Capital Territory Government comments

Building Block: Early Childhood

On 2 May 2011, the new West Belconnen Child and Family Centre was officially opened. It is the first of 38 multi-purpose centres to be built across Australia through the National Partnership Agreement on Indigenous Early Childhood Development, providing a tailored range of children and family services. The centre caters for the needs of families in the local community, particularly Aboriginal and Torres Strait Islander children, families and carers. The centre offers access to early learning activities, play group and parental courses, as well as other vital services such as maternal, child health and allied health services.

Building Block: Schooling

The ACT Government has appointed two Indigenous Student Aspirations Coordinators who commenced work at the beginning of term 3, 2009. The coordinators work with ACT public primary schools, high schools and colleges in each school district.

The ACT performance against the 2010 NAPLAN indicated that the proportion of Indigenous students at or above the national minimum standard was not below the 2010 progress point in any year level or domain. In 2010, the participation rate of Indigenous students was higher than the Australian average for year 3 but below for years 5, 7 and 9. Apart from year 7 (a 5.6 percentage point increase) there were small changes to participation rates between 2009 and 2010.

Building Block: Health

The Aboriginal and Torres Strait Islander population is not of sufficient size to allow for calculation of life expectancy and child mortality rates in the ACT. ACT Health is committed to improving data collection on Aboriginal and Torres Strait Islander people within the health sector. The Aboriginal and Torres Strait Islander Health Unit and the Pathology Unit at The Canberra Hospital agreed to introduce a new procedure to ensure all clients are asked if they identify as an Aboriginal or Torres Strait Islander.

The ACT Government committed \$200 000 per annum over four years to implement initiatives to decrease tobacco smoking rates amongst the ACT Aboriginal and Torres Strait Islander population. A steering committee has been established to guide the implementation of the Strategy's recommendations.

Building Block: Economic Participation

The ACT Government launched its Employment Strategy for Aboriginal and Torres Strait Islander People that will aim to double its Aboriginal and Torres Strait Islander workforce by 2015.

Building Block: Healthy Homes

Allocation of new tenancies to Aboriginal and Torres Strait Islander households increased by 19 per cent in 2009-10 with 69 new tenancies allocated. This exceeded the 10 per cent target set by Housing ACT. An increase has also occurred of self identified tenancies with 365 on 30 June 2009 to 434 on 30 June 2010, housing a total of 892 Aboriginal and Torres Strait Islander residents.

Building Block: Safe Communities

On 28 September 2010, the Attorney General, Simon Corbell and Chairperson of the ACT Aboriginal and Torres Strait Islander Elected Body, Terry Williams, signed the ACT Aboriginal and Torres Strait Islander Justice Agreement.

The Aboriginal and Torres Strait Islander Justice Agreement ensures a higher level of understanding and a mutual commitment to addressing the needs of local Aboriginal and Torres Strait Islander people in the justice system.

The agreement recognises that supporting Aboriginal and Torres Strait Islander people and families into positive pathways requires a coordinated range of responses in the areas of health, housing, justice, education and employment.

Building Block: Governance and Leadership

The ACT has established the Aboriginal and Torres Strait Islander Elected Body. The Elected Body was established in 2008, so that Aboriginal and Torres Strait Islander people in the ACT have a strong democratically elected voice. It consists of seven people who are elected by the Aboriginal and Torres Strait Islander population of the ACT to represent their interests and aspirations.

The ACT Government as part of the whole-of-government Information System for Indigenous Data Project will continue the work to develop proxy measures to assist in service delivery reporting for this Schedule.

Northern Territory Government comments

The Northern Territory Government continues with its commitment to improve the lives of Indigenous Territorians and close the gap between Indigenous and non-Indigenous Territorians. Reform in the education and health sectors, balancing the housing market and making genuine progress in regional and remote areas are immediate priorities in the Territory 2030 strategic plan.

To make progress, joint effort occurs in partnership with agencies across government and non-government sectors to implement specific Indigenous programs and services in a range of key areas including governance, housing and infrastructure, health, education, safer communities and economic development.

Overarching Bilateral Indigenous Plan

The Northern Territory Overarching Bilateral Indigenous Plan (OBIP) was negotiated as part of the National Indigenous Reform Agreement. The OBIP commits both the Northern Territory and Australian Governments to working collaboratively with Indigenous Territorians to take action to strengthen cultural identity and wellbeing and to address entrenched levels of disadvantage. The OBIP consolidates the key initiatives and commitments in the Northern Territory relating to each COAG building block — early childhood, schooling, health, economic participation, healthy homes, safe communities and governance and leadership.

National Agreements and Partnerships

The Northern Territory Government has negotiated a number of significant National Agreements, National Partnerships and strategies that support effort to overcome Indigenous disadvantage in the Northern Territory. In particular, the Indigenous specific Remote Service Delivery National Partnership Agreement (the NPA) aims to establish effective service delivery models to enable remote Indigenous communities in priority locations to receive and actively participate in government services, at a level broadly comparable with that in non-Indigenous communities of similar size, location and need elsewhere in Australia.

The Remote Service Delivery Framework, as set out under the NPA, emphasises:

- improving access to culturally sensitive services
- increasing the range and standards of services

-
- increasing economic and social participation
 - promoting personal responsibility and engagement.

Working Future

Working Future is the Northern Territory Government's plan for improving the lives of remote Territorians. This visionary plan is developing large service towns (Territory Growth Towns), setting a new path for outstations and homelands, and coordinating the delivery of infrastructure, services and development in remote regions of the Territory. As a key element of the Northern Territory Government's strategic plan for the next 20 years, Territory 2030, Working Future will strengthen services through a hub and spoke service delivery model. All parts of Working Future are critical for effective and efficient delivery of government services to remote areas of the Territory — Territory Growth Towns; outstations and homelands; remote service delivery; employment and economic development; remote transport strategy; and targets and evaluation.

Engagement

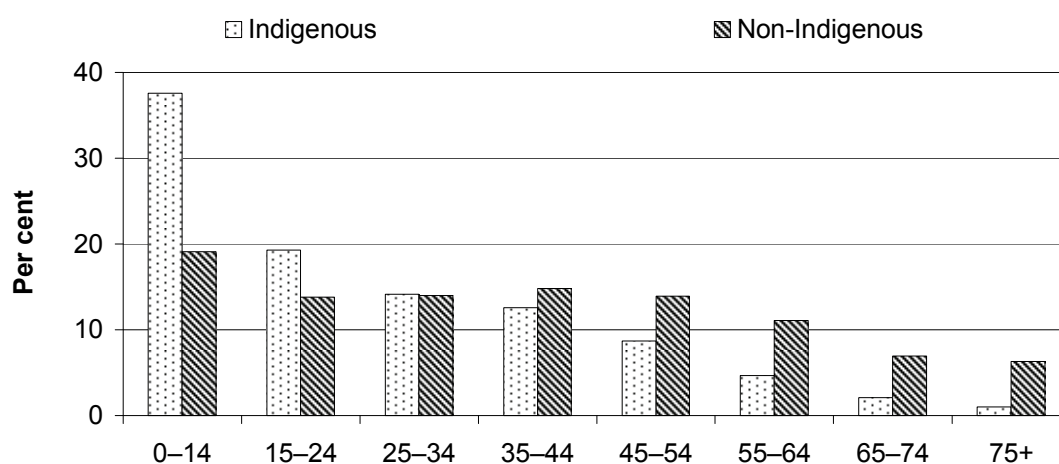
The Indigenous Affairs Advisory Council (IAAC) was appointed by the Northern Territory Government in 2009. There are 16 members who have a wide range of experience in Indigenous affairs and come from a number of areas across the Territory. The IAAC meets four times a year to provide advice and make recommendations to the Northern Territory Government regarding the implementation of the Working Future initiative.

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. Population estimates are based on the 2006 ABS Census of Population and Housing. Population projections (table A.3) for more recent years used for calculating rates and proportions elsewhere in this report are all based on the estimates for 2006. The next Census will be held in August 2011. This appendix also contains data on Indigenous language use from the ABS National Aboriginal and Torres Strait Islander Social Survey 2008 (NATSISS 2008).

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.

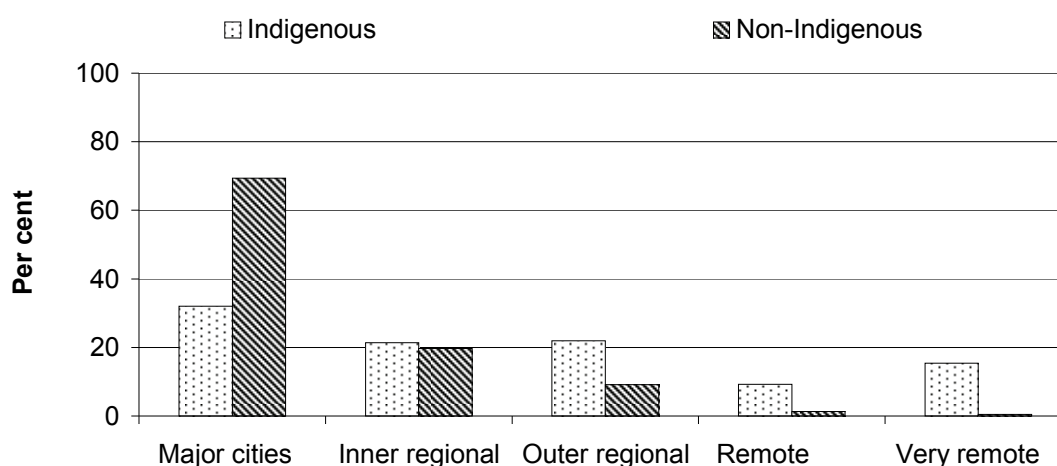
According to experimental estimates of the Australian population in 2006:

- 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

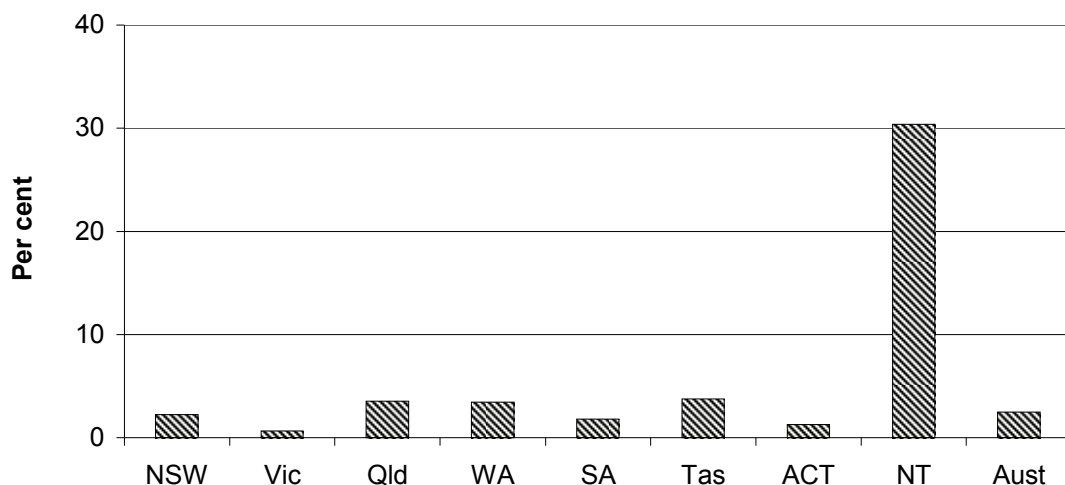


Source: ABS 2008, *Experimental Estimates of Aboriginal and Torres Strait Islander Australians, June 2006*, Cat. no. 3238.0.55.001; table A.2.

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).

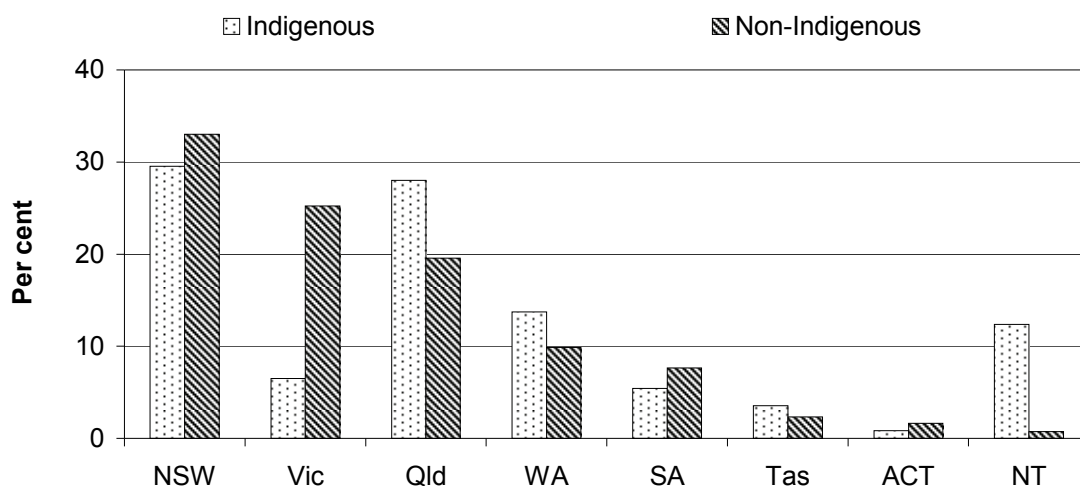
Figure A3.3 Proportion of each State and Territory population who were Indigenous, 2006



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



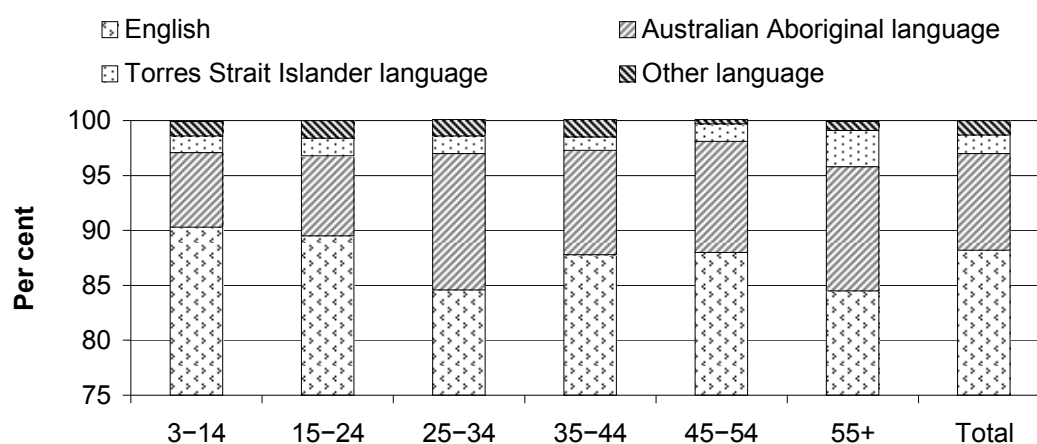
Source: ABS 2008, *Experimental Estimates of Aboriginal and Torres Strait Islander Australians, June 2006*, Cat. no. 3238.0.55.001; table A.2.

In 2006, a higher proportion of the Indigenous population lived in NSW than other states (29.5 per cent). 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. It is estimated that around 250 languages were used by Indigenous Australians prior to European settlement, but today less than 20 are considered strong (Purdie 2010). 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 **Main language spoken at home by Indigenous people, by age, 2008^{a, b}**



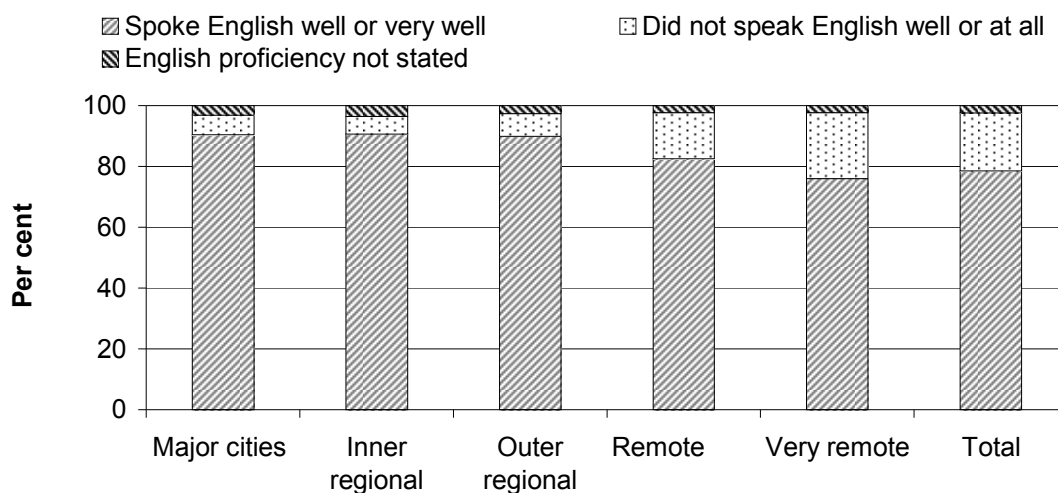
^a Indigenous children age 3–5 years who cannot yet speak are excluded from the analysis. ^b Percentages have been rounded. Although the percentages are correct they may not add to 100 per cent.

Source: ABS (unpublished) NATSISS 2008; table A.4.

In 2008:

- 88.2 per cent of the Indigenous population spoke English as a main language at home. This proportion was similar across all age groups (figure A3.5)
- 8.8 per cent of the Indigenous population spoke an Australian Aboriginal language as a main language at home (figure A3.5).

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.

Data published in the 2009 OID report showed that, in 2006:

- 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).

Table A3.1 Learning an Indigenous language, Indigenous people aged 3 years and over, by remoteness, 2008 (per cent)^{a, b}

	Major cities	Inner regional	Outer regional	Remote	Very remote
Parent	35.5	23.9	31.4	35.5	37.7
Other relative	28.9	26.4	39.1	37.4	57.3
Person from the community	20.6	24.9	18.5	11.1	23.9
Learning institution	29.7	37.5	26.1	41.0	22.6
Other	9.9	7.6	4.7	6.4	5.2

^a People whose main language spoken at home was an Aboriginal or Torres Strait Islander language were not asked whether they were learning an Indigenous language. ^b Components may not add to total as people may have provided more than one response.

Source: ABS (unpublished) NATSISS 2008; table A.7.

In 2008:

- 50 900 Indigenous people were learning an Indigenous language (table A.7)

-
- the proportion of those learning an Indigenous language from a parent was similar across remoteness areas (table A3.1).

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

This appendix contains information on the limitations of the major data sources contained in this report, and is designed to assist readers in their interpretation of data.

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.

Although it is considered that most Indigenous deaths are registered, not all Indigenous people are identified as such in deaths data (ABS 2008a). 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 as Indigenous in a particular collection 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 as Indigenous; and perceptions about the consequences of 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 2008a), from which the ABS concluded that identification of Indigenous people in mortality data was better than had previously been estimated.

Life expectancy data

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.

In November 2008, the ABS released a discussion paper assessing various methods used to calculate life expectancy for Indigenous people (ABS 2008a). 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 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 2008a).

While the life expectancy estimates presented in this report 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. In addition, 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. These estimates are sensitive to the demographic assumptions and differing quality of death registration data across states and territories. Life expectancy estimates for Victoria, SA, Tasmania and the ACT, cannot be produced because of the small number of Indigenous deaths in those states and territories.

Survey data

This report uses data from the ABS National Aboriginal and Torres Strait Islander Survey 1994 (NATSIS 1994), the ABS General Social Survey 2002 (GSS 2002), the ABS National Aboriginal and Torres Strait Islander Health Survey 2004-05 (NATSIHS 2004-05), the ABS National Health Survey 2004-05 and 2008 (NHS 2004-05 and 2008), and the ABS National Aboriginal and Torres Strait Islander Social Surveys 2002 and 2008 (NATSISS 2002 and 2008). 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 indicators at the State and Territory level. Sample size 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 available in NATSISS 2008 User's Guide (ABS 2008b). 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.

Census data

The ABS Census of Population and Housing takes place every five years. The Census is rich in information and has the potential for extensive disaggregation, and the 2006 Census was a major data source for the 2009 report. The next Census will be conducted in August 2011. Because of the five year gap between Censuses, other sources are 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.

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 the 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.

Overall, the quality of Indigenous identification in hospital separations data has improved in recent years, but still varies substantially between jurisdictions. Hospitalisation data for Indigenous patients are considered adequate for reporting purposes for NSW, Victoria, Queensland, WA, SA and public hospitals in the NT. National totals included in this report include these six jurisdictions only. Data were available by remoteness areas for these jurisdictions combined, with Indigenous identification highest in remote and very remote areas (AIHW 2010). Data for Tasmania and the ACT are still considered to be of insufficient robustness to be included in totals or aggregates, but are reported separately with caveats until further audits of the quality of data in these jurisdictions are completed.

The AIHW is currently working with states and territories on a project to improve the quality of Indigenous identification in their hospitalisations data. Changing rates of Indigenous identification in hospitalisation records means that time series and geographic comparisons should be interpreted with caution.

Data relating to admitted patients are incorporated from almost all hospitals, including public acute and psychiatric hospitals, private acute and psychiatric hospitals, and private free-standing day hospital facilities.

Analysis of hospitalisation rates both including and excluding dialysis is provided in section 4.8. Due to the high rates of end-stage renal disease requiring frequent dialysis treatment among Indigenous Australians, it is important to separate hospitalisation rates for dialysis from rates for other conditions.

AIHW and the data providers jointly validate the 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.

The following should be used to guide interpretation of the hospitalisations data:

- 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 (AIHW 2005).
- 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 (AIHW 2005).

Perinatal data come from the National Perinatal Data Collection (NPDC), a national collection maintained by the AIHW comprising of data items as specified in the Perinatal National Minimum Data Set (NMDS), plus additional items collected by the State and Territories. Currently, all jurisdictions collect perinatal data on the Indigenous status of the mother, but not necessarily the Indigenous status of the baby. Therefore, Indigenous births will be underestimated because babies born to Indigenous fathers and non-Indigenous mothers are not included. Collection of data relating to Indigenous status of the baby will commence from 2012 onwards.

The accuracy of Indigenous identification in the NPDC has not been formally assessed and is likely to vary across jurisdictions.

Australian Institute of Criminology (AIC) homicide data and other police data

The National Homicide Monitoring Program (NHMP) project is funded by the Australian Government. The data (and tabulations) used in this publication were made available through the Australian Institute of Criminology (AIC). These data were originally collected by the AIC by an independent data collector with the assistance of the NSW, NT, Queensland, SA, Victoria and WA Police. Neither the collectors, the police, nor the AIC bear any responsibility for the analyses or interpretations presented in this report.

NHMP 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 other jurisdictions, Indigenous status is determined by police administering a standard question, but not all Indigenous people may choose to identify when asked by police.

In addition to NHMP data, police data from individual states and territories are included in sections 4.11 (Family and community violence) and 10.5 (Juvenile diversions).

Collection of data in remote locations

Locational addresses are widely used in administrative data collections to compare and analyse multiple sources of statistics. However, many remote Indigenous

communities have little or no geographic location identifiers such as street names or house numbers, which may affect the accuracy of some data collections.

References

ABS (Australian Bureau of Statistics) 2008a, *Information Paper: Census Data Enhancement — Indigenous Mortality Quality Study, Australia*, Cat. no. 4723.0, Canberra.

— 2008b, *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.

— 2010, *Indigenous Identification in Hospital Separations Data — Quality Report*, Cat. no. HSE 85. 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; Indigenous/other or Indigenous/total population)
- reported by State and Territory and at a national (Australian total) level.

Indigenous and non-Indigenous population data are used throughout this report as denominators for calculating rates and percentages. This report generally uses ABS ‘series B’ experimental projections of the Indigenous population to create rates (ABS 2009). These projections are based on adjusted 2006 Census data and a set of assumptions about likely trends in Indigenous population growth (box 3.1.1). The ABS only publishes official non-Indigenous population data for Census years. For other years, non-Indigenous population data must be derived by subtracting Indigenous population data from total population data.

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</i>
	Age specific death rates, 2005–2009, by sex, (NSW, Qld, WA, SA, NT)	ABS (2010) <i>Deaths Australia</i>
	Median age at death, 2000–2009, by sex, (NSW, Qld, WA, SA, NT)	ABS (2010) <i>Deaths Australia</i>
	Age standardised mortality rates, 1991–2009 (WA, SA and NT) and all causes mortality 2005–2009 (NSW, Qld, WA, SA, NT)	ABS (2010) <i>Deaths Australia</i>
	Age standardised mortality rates 2005–2009, rate ratios and rate differences, by selected causes of death (NSW, Qld, WA, SA, NT) and single year (2009)	ABS (unpublished) <i>Causes of Death Australia</i>
4.2 Young child mortality	All causes perinatal mortality, 2005–2009 (NSW, Qld, WA, SA, NT) and by remoteness	ABS (unpublished) <i>Perinatal Deaths Australia</i>
	All causes perinatal, infant and child (0–4 years) mortality, 2009, 2008 and 2007, NSW, Qld, WA, SA, NT)	ABS (unpublished) <i>Perinatal Deaths Australia</i> ; ABS (unpublished) <i>Deaths Australia</i>

Indicator	Measure	Data source
4.2 Young child mortality (cont.)	Infant (less than 1 year) and child (0–4 and 1–4 years) mortality rates, 1997–99 to 2007–09, (NSW, Qld, WA, SA, NT) and infant and child (0–4 years) mortality rates, 1991–2009 (WA, SA, NT)	ABS (unpublished) <i>Deaths Australia</i>
	Leading cause of infant (less than 1 year) and child (0–4 years) death, 2007, 2008 and 2009	ABS (unpublished) <i>Causes of Death Australia</i>
	Mortality rates for selected causes of infant (less than 1 year) and child (0–4 and 1–4 years) death, 2005–2009	ABS (unpublished) <i>Causes of Death Australia</i>
4.3 Early childhood education	Preschool enrolment rates for children in the year before commencing full time schooling, 2009	DEEWR (unpublished) <i>National Preschool Census 2009</i>
	Preschool enrolment rates for children aged 3, 4 and 5 years, calculated as a proportion of children aged 3, 4 and 5 years in the population, 2008	ABS (unpublished) NATSISS 2008 and ABS (unpublished) CEaCS 2008
	Attendance at preschool, measured by absentee rates, with a low absentee rate indicating a higher rate of attendance.	DEEWR (unpublished) <i>National Preschool Census 2009</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 (2011) <i>Report on Government Services 2011</i>

Indicator	Measure	Data source
4.4 Reading, writing and numeracy	<p>Proportion of years 3, 5, 7 and 9 students who achieved the national minimum standard by learning domain, by parental education and parental occupation, 2008–2010</p> <p>Proportion of years 3, 5, 7 and 9 students who achieved the national minimum standard by learning domain, by geolocation, 2008–2010</p> <p>Years 3, 5, 7 and 9 student participation rates in national assessments, by learning domain, by jurisdiction, by geolocation, 2008–2010</p>	<p>ACARA (2010 and unpublished) <i>2010 National Assessment Program — Literacy and Numeracy: Full Report</i></p> <p>ACARA (2010 and unpublished) <i>2010 National Assessment Program — Literacy and Numeracy: Full Report</i></p> <p>ACARA (2010 and unpublished) and MCEECDYA (various years) <i>National Assessment Program – Literacy and Numeracy: Full Report</i></p>
4.5 Year 12 attainment	<p>Proportion of the 20–24 year old population having attained at least a year 12 or equivalent or AQF Certificate II or above, by remoteness and by jurisdiction, 2008</p> <p>Number of year 12 students achieving ATARs, by ATAR range, 2006–2010</p>	<p>ABS (unpublished) NATSISS 2008, NHS (unpublished) 2008</p> <p>ACT Board of Senior Secondary Studies (unpublished); Queensland Tertiary Admissions Centre (unpublished); South Australian Tertiary Admissions Centre (unpublished); Tasmanian Qualifications Authority (unpublished); Tertiary Institutions Service Centre (unpublished); Universities Admissions Centre (unpublished); Victorian Tertiary Admissions Centre (unpublished); ABS (unpublished) <i>Experimental</i></p>

Indicator	Measure	Data source
4.5 Year 12 attainment (cont.)	Number of year 12 students achieving ATARs, by ATAR range, 2006–2010 (cont.)	<i>Projections, Aboriginal and Torres Strait Islander Australians</i> ; ABS (2010) <i>Population by Age and Sex, Australian States and Territories</i> .
	Apparent retention rates for students in years 7/8 to year 12, by Indigenous status, 1998–2010	ABS (unpublished) <i>Schools Australia</i>
4.6 Employment	Employment to population ratio, 2004-05 and 2008, by jurisdiction	ABS (unpublished) NATSIHS 2004-05; ABS (unpublished) NHS 2004-05; ABS (unpublished) NATSISS 2008 and ABS (unpublished) NHS 2007-08.
	Labour force participation and unemployment, 2004-05 and 2008, by sex, remoteness, age group and jurisdiction	ABS (unpublished) NATSIHS 2004-05; ABS (unpublished) NHS 2004-05; ABS (unpublished) NATSISS 2008; ABS (unpublished) NHS 2007-08
	Long term unemployment, 1994, 2002, 2004-05 and 2008, by sex, age groups and jurisdiction	ABS (unpublished) NATSIS 1994; ABS (unpublished) NATSISS 2002; ABS (unpublished) NATSIHS 2004-05; ABS (unpublished) NHS 2004-05; ABS (unpublished) NATSISS 2008; ABS (unpublished) NHS 2007-08
	CDEP participation, 1994, 2002 by sex; 2004-05 and 2008, by sex, remoteness, age group and jurisdiction	ABS (unpublished) NATSIS 1994; ABS (unpublished) NATSISS 2002; ABS (unpublished) NATSIHS 2004-05; ABS (unpublished) NATSISS 2008.

Indicator	Measure	Data source
4.6 Employment (cont.)	Three month employment outcomes for job seekers who have participated in a DEEWR funded employment assistance program, by Indigenous status, 2009	DEEWR (unpublished) Post Program Monitoring Survey and administrative data.
<i>Headline indicators</i>		
4.7 Post secondary education — participation and attainment	20–64 year olds with a non-school qualification of Certificate III or above or currently studying, 2002 and 2008	ABS (unpublished) NATSISS 2002 and 2008; ABS (unpublished) GSS 2002 and ABS (unpublished) NHS 2007-08
	Participation in higher education, by course level, by jurisdiction, 2002–2009	DEEWR (unpublished) Higher Education Statistics Collection
	VET national load pass rate, by course level, remoteness and jurisdiction, 2004–2009,	NCVER (unpublished) National 2005–2009 VET provider collections
	Success rate for higher education, by sex and jurisdiction, 2001–2009	DEEWR (unpublished) Higher Education Statistics Collection
4.8 Disability and chronic disease	Rates of disability, by remoteness, by disability status, by types of stressors, 2002 and 2008	ABS (unpublished) NATSISS 2002 and 2008; ABS (unpublished) NHS 2007-08; ABS (unpublished) GSS 2002
	Prevalence of different types of disability: intellectual, psychological, sight, hearing and speech, and physical, 2008	ABS (unpublished) NATSISS 2008
	Hospitalisation rates by chronic disease, 2004-05 to 2008-09, (NSW, Vic, Qld, WA, SA and public hospitals in NT)	AIHW (unpublished) National Hospital Morbidity Database

Indicator	Measure	Data source
4.8 Disability and chronic disease (cont.)	Education, employment and household income for Indigenous people with a disability	ABS (2010) <i>The Health and Welfare of Australia's Aboriginal and Torres Strait Islander People</i> ; ABS (unpublished) Census of Population and Housing 2006
	Hospitalisations, by principal diagnosis, by gender, by chronic disease and all conditions, by remoteness, 2004-05 to 2008-09 (NSW, WA, SA and public hospitals in the NT)	AIHW (unpublished) <i>National Hospital Morbidity Database</i>
	Carers of people with disability, long term illness or problems related to old age	ABS (unpublished) Census of Population and Housing 2006
4.9 Household and individual income	Median and mean real gross weekly equivalised household income, 1994, 2002, 2004-05 and 2008, by remoteness, jurisdiction and quintile	ABS (unpublished) NATSIS 1994; ABS (unpublished) 2002 NATSISS; ABS (unpublished) GSS 2002; ABS (unpublished) NATSIHS 2004-05; ABS (unpublished) NHS 2004-05, ABS (unpublished) NATSISS 2008; ABS (unpublished) NHS 2007-08.
	Median gross weekly individual income, 2004-05 and 2008, by sex, age, quintile, remoteness and jurisdiction	ABS (unpublished) NATSIHS 2004-05; ABS (unpublished) NHS 2004-05; ABS (unpublished) NATSISS 2008 and ABS (unpublished) NHS 2007-08

Indicator	Measure	Data source
4.10 Substantiated child abuse and neglect	Child protection substantiations, 1999-2000 to 2009-10, by jurisdiction.	AIHW (unpublished) <i>Child Protection Notifications, Investigations and Substantiations</i>
	Child protection substantiations, 2001-2002 to 2009-2010, by type of abuse or neglect.	AIHW (unpublished) <i>Child Protection Notifications, Investigations and Substantiations</i>
	Children on care and protection orders 2010, by jurisdiction.	AIHW (unpublished) <i>Children on Care and Protection Orders</i>
	Placement in accordance with the Aboriginal Child Placement Principle, 2010.	AIHW (unpublished) <i>Children in Out-of-Home Care</i>
	Number of diagnoses of chlamydia, gonorrhoea and syphilis in children 2005-2009, by age group.	NCHECR (2010) Australian National Notifiable Diseases Surveillance System; ABS (2008) <i>Experimental Estimates of Aboriginal and Torres Strait Islander Australians</i>

Indicator	Measure	Data source
4.11 Family and community violence	People who had been a victim of physical or threatened violence, by state territory, 1994, 2002 and 2006/2008	ABS (unpublished) NATSIS 1994; ABS (unpublished) NATSIS 2002; ABS (unpublished) GSS 2002; ABS (unpublished) NATSIS 2008; ABS (unpublished) GSS 2006.
	Hospitalisation rates for family violence related assaults and other assaults (2004-05 to 2008-09) and by remoteness (2008-09)	AIHW (unpublished) National Hospital Morbidity Database
	Homicide death rates by state and territory, 2005–2009	ABS (unpublished) <i>Deaths Australia</i>
	Homicide victims by state and territory (2004-05 to 2008-09) and by remoteness (1999-2000 to 2008-09)	Australian Institute of Criminology (unpublished) National Homicide Monitoring Program
	Indigenous adults and children with a valid unmet request for immediate SAAP accommodation, by state and territory and by remoteness	AIHW (unpublished) SAAP Demand for Accommodation Collection
	SAAP support periods: main reason clients sought support, by state and territory and by remoteness	AIHW (unpublished) Supported Accommodation Assistance Program (SAAP) National Data Collection Agency (NDCA)
	Victims of assault, sexual assault and robbery, including relationship of offender to victim, NSW, SA and the NT (2008 and 2009) and Qld (2009)	ABS (2009 and 2010) Recorded Crime - Victims

Indicator	Measure	Data source
4.12 Imprisonment and juvenile detention	Imprisonment rates, age standardised, by jurisdiction, 2000–2010	ABS (2010 and various years) <i>Prisoners in Australia</i>
	Crude imprisonment rates, by sex and jurisdiction, 2000–2010	ABS (2010 and various years) <i>Prisoners in Australia</i>
	Sentenced prisoners by most serious offence and expected time to serve, 2007–2010	ABS (2010 and various years) <i>Prisoners in Australia</i>
	Imprisonment rates, by age group, 2007–2010	ABS (2010 and various years) <i>Prisoners in Australia</i>
	Prisoners by legal status, 2007–2010	ABS (2010 and various years) <i>Prisoners in Australia</i>
	Juvenile detention rates, people aged 10–17 years, by sex, by age group, and jurisdiction, 2001–2009	Richards and Lyneham (2010); AIC (unpublished) Juveniles in detention
	Juvenile detention rates by legal status, 2004–2009	Richards and Lyneham (2010); AIC (unpublished) Juveniles in detention
5	<i>Early child development</i>	
5.1 Maternal health	Antenatal care: women attending their first antenatal visit during the first trimester; attending at least five antenatal visits, 2008	ABS (unpublished) NATSISS 2008
	Use of antenatal services, by Indigenous status, by remoteness, 2006, 2007, 2008, (NSW, Qld, SA, NT)	AIHW (unpublished) National Perinatal Data Collection; AIHW (unpublished) analysis of State/Territory perinatal collections

Indicator	Measure	Data source
5.1 Maternal health (cont.)	Tobacco, alcohol and illicit drug use during pregnancy, by Indigenous status, by remoteness, 2008	ABS (unpublished) NATSISS 2008; AIHW (unpublished) National Perinatal Data Collection
	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 less than 20 years), by Indigenous status of mother, age of mother, by state/territory, by remoteness, 2004–2007	ABS (unpublished) <i>Births Australia</i>
	Births, by Indigenous status of baby and mother, age of mother, age of father, and state/territory, 1998–2009	ABS (unpublished) <i>Births Australia</i>
	Teenage birth rate (where both the mother and father were aged less than 20 years), by Indigenous status of mother, age of mother, age of father, by state/territory, by remoteness, 2004–2007	ABS (unpublished) <i>Births Australia</i>
5.3 Birthweight	Birthweight, by live births and fetal deaths, 1998–2000 to 2006–2008	AIHW (unpublished) <i>National Perinatal Data Collection</i>
5.4 Early childhood hospitalisations	Hospitalisations per 1000 children aged 0–4 years, 2004-05 to 2008-09, by principal diagnosis, (NSW, Vic, Qld, WA, SA and public hospitals in the NT), by remoteness	AIHW (unpublished) National Hospital Morbidity Database

Indicator	Measure	Data source
5.5 Injury and preventable disease	Hospitalisations for injury and potentially preventable disease for children aged less than 5 years, 2004-05 to 2008-09, (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, 2005–2009	ABS (unpublished) <i>Causes of Death Australia</i>
5.6 Basic skills for life and learning	Australian Early Development Index of five year old children	Centre for Community Child Health, Royal Children's Hospital and Telethon Institute for Child Health Research (unpublished)
	Indigenous children 0–14 years who received a health check or assessment	DoHA (unpublished) Medicare data collection
5.7 Hearing impairment	Prevalence of hearing conditions in children aged 0–14 years, by type of hearing condition, 2001, 2004-05 and 2008	ABS (unpublished) NHS 2001; ABS (unpublished) NHS and NATSIHS 2004-05; ABS (unpublished) NATSISS 2008; ABS (unpublished) NHS 2007-08
	Prevalence of otitis media, by age group, 2008	ABS (unpublished) NATSISS 2008; ABS (unpublished) NHS 2007-08
	Hospitalisations where the principal diagnosis was diseases of the ear and mastoid process, children aged 0–3 years and 4–14 years, (NSW, Vic, Qld, WA, SA and public hospitals in the NT combined), 2004-05 to 2008-09	AIHW (unpublished), National Hospital Morbidity Database

Indicator	Measure	Data source
6 Education and training		
6.1 School enrolment and attendance	Student attendance rates for years 1–10, across all school sectors, 2007–2009 School enrolment by age, sex and jurisdiction, 2006–2010	ACARA (unpublished) school attendance collection ABS (unpublished) <i>Schools Australia</i> ; ABS (unpublished) <i>Population by Age and Sex, Australian States and Territories</i> ; ABS (unpublished) <i>Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians 1991–2021</i>
6.2 Teacher quality	No data were available for this report.	
6.3 Indigenous cultural studies	Teaching of Indigenous culture to Indigenous people in school or further studies by age, 2008 Indigenous employment in schools, 2001–2008, by school sector	ABS (unpublished) NATSISS 2008 DEEWR National Report to Parliament on Indigenous Education and Training 2008; DEST (unpublished) IESIP performance reports 2003–2004; DEEWR (unpublished) IEP performance reports 2005–2008
6.4 Year 9 attainment	Apparent retention rates of full time secondary students from years 7 or 8 to year 9, all schools, by sex and jurisdiction, 1998–2010 Student attendance rates for year 9 across all school sectors, 2007–2009	ABS (various years) <i>Schools Australia</i> ACARA (unpublished) school attendance collection

Indicator	Measure	Data source
6.4 Year 9 attainment (cont.)	Year 9 or below as highest level of schooling by persons aged 15 years and over (excluding persons still attending secondary school), by age group, sex, remoteness and jurisdiction, 1994, 2002, 2004-05, 2008 OECD Program for International Student Assessment (PISA) 15 year old learning outcomes, 2000, 2003, 2006 and 2009	ABS (unpublished) NATSIS 1994; ABS (unpublished) NATSISS 2002; ABS (unpublished) NATSIHS 2004-05; ABS (unpublished) NHS 2004-05; ABS (unpublished) NATSISS 2008; ABS (unpublished) NHS 2007-08 ACER (unpublished)
6.5 Year 10 attainment	Apparent retention rates of full time secondary students from years 7 or 8 to year 10, all schools, by sex and jurisdiction, 1998-2010 Student attendance rates for year 10 across all school sectors, 2007-2009	ABS (various years) <i>Schools Australia</i> ACARA (unpublished), school attendance collection
6.6 Transition from school to work	Year 10 or below as highest level of schooling by persons aged 15 years and over (excluding persons still attending secondary school), by age group, sex, remoteness and jurisdiction, 2008 Indigenous people aged 18 to 24 years who are neither participating in education and training nor employed, by remoteness, 2002, 2004-05, 2008	ABS (unpublished) NATSIS 1994; ABS (unpublished) NATSISS 2002; ABS (unpublished) NATSIHS 2004-05; ABS (unpublished) NHS 2004-05; ABS (unpublished) NATSISS 2008; ABS (unpublished) NHS 2007-08 ABS (unpublished) NATSISS 2002 and 2008; ABS (unpublished) GSS 2002; ABS (unpublished) NATSIHS 2004-05; ABS (unpublished) NHS 2004-05 and 2007-08

Indicator	Measure	Data source
6.6 Transition from school to work (cont.)	Labour force status of people, aged 18 to 64 years, who have achieved a qualification of certificate level III or higher, by remoteness, 2002, 2004-05, 2008	ABS (unpublished) NATSISS 2002 and 2008; ABS (unpublished) GSS 2002; ABS (unpublished) NATSIHS 2004-05; ABS (unpublished) NHS 2004-05 and 2007-08
7 Healthy lives		
7.1 Access to primary health care	Self-assessed health status, Indigenous children (aged 0–14 years) and people aged 15 years and over, by sex, by state and territory and by remoteness, 2004-05 and 2008	ABS (unpublished) NATSIHS 2004-05; ABS (unpublished) NHS 2004-05; ABS (unpublished) NHS 2007-08; ABS (unpublished) NATSISS 2008 AIHW (2009) <i>Aboriginal and Torres Strait Island Health Performance Framework: Detailed Analyses</i>
	Health services usually used by Indigenous children aged 0–14 years, by state and territory and by remoteness	ABS (unpublished) NATSISS 2008
	Total expenditure on health services, by type of health good or service, 2006-07	AIHW (2010) <i>Expenditures on Health for Aboriginal and Torres Strait Islander Peoples 2006-07</i>
	Expenditure on primary and secondary/tertiary health services, by type of health good or service, 2004 05	AIHW (2010) <i>Expenditures on Health for Aboriginal and Torres Strait Islander Peoples 2006-07</i>
	Vaccination coverage estimates for children (NSW, Victoria, WA, SA and the NT combined) 31 December 2009	AIHW (2011) <i>Aboriginal and Torres Strait Islander Health Performance Framework, 2010 Report: Detailed Analyses</i> , derived from ACIR Medicare Australia data

Indicator	Measure	Data source
7.1 Access to primary health care (cont.)	Access to health services in discrete Indigenous communities, 2006	ABS (2007) Community Housing and Infrastructure Needs Survey
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, 2004-05 to 2008-09, NSW, Vic, Qld, WA, SA and public hospitals in the NT	AIHW (unpublished) National Hospital Morbidity Database
	Hospitalisations for injury and poisoning and other external causes, age standardised, by sex, 2005-06 to 2008-09, NSW, Vic, Qld, WA, SA, and NT	AIHW (unpublished) National Hospital Morbidity Database
7.3 Avoidable mortality	Avoidable mortality, people aged 0–74 years, age standardised, by age and sex, by cause of death, 2005–2009 and 1998–2009 by sex, NSW, Qld, WA, SA, and NT	ABS (unpublished) <i>Causes of Death Australia</i>
7.4 Tobacco consumption and harm	Current daily smokers aged 18 years or over, age standardised, by jurisdiction, 2001, 2004-05 and 2008	ABS (unpublished) NHS 2001; ABS (unpublished) NHS and NATSIHS 2004-05; ABS (unpublished) NATSISS 2008; ABS (unpublished) NHS 2007-08
	Hospitalisations related to tobacco use, age standardised, NSW, Vic, Qld, WA, SA and public hospitals in the NT, Tas and the ACT, 2004-05 to 2008-09	AIHW (unpublished) National Hospital Morbidity Database

Indicator	Measure	Data source
7.5 Obesity and nutrition	Body mass index groups for people aged 18 years and over in non-remote areas, by age group and age standardised, 2004-05	ABS (unpublished) NHS and NATSIHS 2004-05
	Compliance with fruit and vegetable NHMRC consumption guidelines for children aged 5–14 years, non-remote areas, 2008	ABS (unpublished) NATSISS 2008; ABS (unpublished) NHS 2007-08
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>
	Indigenous adult's dental health, by age, 2004–2006	Roberts-Thomson, K.F. and Do, L. (2007), <i>National Adult Oral Health Survey</i>
	Potentially preventable hospitalisations for dental conditions, 2004-05 to 2008-09	AIHW (unpublished) National Hospital Morbidity Database
7.7 Mental health	Psychological distress prevalence, 2004-05 and 2008	ABS (unpublished) NATSIHS and NHS 2004-05; ABS (unpublished) NATSISS 2008, ABS (unpublished) NHS 2007-08
	Selected indicators of positive wellbeing, people aged 18 years and over, by age groups, by remoteness, by jurisdiction, 2004-05 and 2008	ABS (unpublished) NATSIHS 2004-05; ABS (unpublished) NATSISS 2008
	Treatment rates in mental health related services, 2007-08 and 2008-09	AIHW (various years) <i>Mental Health Services in Australia</i> ; AIHW (2009) <i>Measuring the Social and Emotional Wellbeing of Aboriginal and Torres Strait Islander Peoples</i>

Indicator	Measure	Data source
7.7 Mental health (cont.)	Mental and behavioural disorders as cause of death, by remoteness, by jurisdiction, 2005–2009	ABS (unpublished) <i>Causes of Death Australia</i>
	Mental health of prisoners and juveniles in detention, 2009	AIHW (2010) <i>The Health of Australia's Prisoners 2009</i>
7.8 Suicide and self-harm	Average annual intentional self-harm (suicide) deaths by age group and indirectly age standardised, by sex, NSW, Qld, WA, SA, and public hospitals in the NT, 2005–2009	ABS (unpublished) <i>Causes of Death Australia</i>
	Non-fatal hospitalisations for intentional self harm, age standardised, by sex, NSW, Vic, Qld, WA, SA, and public hospitals in the NT combined, 2004-05 to 2008-09	AIHW (unpublished) National Hospital Morbidity Database
8 Economic participation		
8.1 Labour market participation	Working hours (full time or part time), by gender, by remoteness, 1994, 2002, 2004-05 and 2008	ABS (unpublished) NATSIS 1994, ABS (unpublished) NATSISS 2002, ABS (unpublished) NATSIHS 2004-05; ABS (unpublished) NHS 2004-05; ABS (unpublished) NATSISS 2008; ABS (unpublished) NHS 2007-08
	Sector of employment (public or private), by gender, by remoteness, 2001 and 2006	ABS (unpublished) Census 2001 and 2006

Indicator	Measure	Data source
8.1 Labour market participation (cont.)	Employment by occupation, by gender by age groups, 2001 and 2006	ABS (unpublished) Census 2001 and 2006
8.2 Indigenous owned or controlled land and business	Employment by industry, sex and remoteness area, 2001 and 2006	ABS (unpublished) Census 2001 and 2006
8.2 Indigenous owned or controlled land and business	Indigenous owned or controlled land as a proportion of each state/territory and remoteness area, 2010	Indigenous Land Corporation (unpublished)
	Determinations that native title exists, by state/territory and remoteness, 2004–2010	National Native Title Tribunal (unpublished)
	Indigenous Land Use Agreements, cumulative number, by state/territory and remoteness, 2003–2010	National Native Title Tribunal (unpublished)
	Self employment as a proportion of total employed, people aged 18 to 64 years, non-remote areas, 1994, 2001, 2004–05 and 2008	ABS (unpublished) NATSIS 1994; ABS (unpublished) NHS 1995; ABS (unpublished) NHS 2001, including the Indigenous supplement (NHS); ABS (unpublished) NATSIHS 2004-05; ABS (unpublished) NHS 2004-05; ABS (unpublished) NATSISS 2008 and ABS (unpublished) NHS 2007-08

Indicator	Measure	Data source
8.3 Home ownership	Proportion of people aged 18 years and over living in home owner/purchaser households, by remoteness, 2008	ABS (unpublished) NATSISS 2008; ABS (unpublished) NHS 2007-08
	Proportion of Indigenous people aged 18 years and over living in home owner/purchaser households, 1994, 2002, 2004-05 and 2008	ABS (unpublished) NATSIS 1994; ABS (unpublished) NATSISS 2002; ABS (unpublished) NATSIHS 2004-05; ABS (unpublished) NATSISS 2008
	Proportion of people aged 18 years and over living in rented homes (public, community and private housing), 2008	ABS (unpublished) NATSISS 2008; ABS (unpublished); ABS (unpublished) NHS 2007-08
8.4 Income support	Main source of personal cash income, people aged 18-64 years, 2002, 2004-05, and 2008	ABS (unpublished) NATSIHS 2004-05; ABS (unpublished) NHS 2004-05; ABS (unpublished) NATSISS 2002 and 2008; ABS (unpublished) NHS 2007-08
	People aged 18-64 years on government cash pensions and allowances, by remoteness, by age groups, 2004-05 and 2008	ABS (unpublished) NATSISS 2002; ABS (unpublished) NATSIHS 2004-05; ABS (unpublished) NHS 2004-05; ABS (unpublished) NATSISS 2008; and ABS (unpublished) NHS 2007-08
	People aged 15-64 years receiving income support payments, by selected payment types, by sex, by remoteness, 2003 to 2010	Centrelink (unpublished); ABS (2010) ABS Australian Demographic Statistics; ABS (2009) <i>Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians</i>

Indicator	Measure	Data source
9 Home environment		
9.1 Overcrowding in housing	People living in overcrowded housing, by status, remoteness and state and territory, 2002, 2004-05, 2008	ABS (unpublished) NATSISS 2002; ABS NATSIHS 2004-05; ABS NATSISS 2008; ABS NHS 2007-08
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 2008-09: NSW, Vic, Qld, WA, SA, and public hospitals in the NT). Death rates from diseases associated with poor environmental health, 2005–2009, age standardised, by sex (NSW, Qld, WA, SA, and the NT).	AIHW (unpublished), National Hospital Morbidity Database ABS (unpublished) <i>Causes of Death</i>
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 Proportion of discrete Indigenous communities that experienced sewerage system overflows or leakages, by usual population, 2006 Electricity supply and interruptions in discrete Indigenous communities, by usual population, 2006	ABS (2007) <i>Community Housing and Infrastructure Needs Survey</i> ABS (2007) <i>Community Housing and Infrastructure Needs Survey</i> ABS (2007) <i>Community Housing and Infrastructure Needs Survey</i>

Indicator	Measure	Data source
9.3 Access to clean water and functional sewerage and electricity services (cont.)	Access to household facilities and dwellings with major structural problems, by remoteness, 2008	ABS (unpublished) NATSISS 2002; ABS (unpublished) NATSISS 2008 and ABS (unpublished) Survey of Income and Housing 2007-08
	Proportion of Indigenous households living in houses of an acceptable standard, by location, by number of bedrooms, by household size, by income level, by jurisdiction, 2008	ABS (unpublished) NATSISS 2008
10 Safe and supportive communities		
10.1 Participation in organised sport, arts or community group activities	Participation in sport and recreational activities, by geographic location, 2002 to 2008	ABS (unpublished) NATSISS 2002 and NATSISS 2008; ABS (unpublished) Children's Participation in Cultural and Leisure Activities Survey 2009
	Participation in cultural activities, 2002 and 2008.	ABS (unpublished) NATSISS 2002 and 2008, DEECD (2010) <i>The State of Victoria's Children 2009: Aboriginal Children and Young People in Victoria</i>
10.2 Access to traditional lands	Indigenous people who recognise an area as their homelands, live on their homelands, or are allowed to visit their homelands, 2002 and 2008	ABS (unpublished) NATSISS 2002 and 2008
10.3 Alcohol consumption and harm	Alcohol consumption, Indigenous people aged 15 years or over by remoteness, sex, and risk levels, 2002 and 2008	ABS (unpublished) NATSISS 2002 and 2008

Indicator	Measure	Data source
10.3 Alcohol consumption and harm (cont.)	Hospitalisations related to alcohol use, NSW, Vic, Qld, WA, SA, and public hospitals in NT, 2004-05 to 2008-09	AIHW (unpublished), National Hospital Morbidity Database
	Alcohol related deaths, death rates, age standardised, by sex, NSW, Qld, WA, SA, NT, 2005-2009	ABS (unpublished) <i>Causes of Death Australia</i>
	Alcohol involvement in homicides by key characteristics, 1999-2000 to 2008-09	AIC (unpublished) National Homicide Monitoring Program
10.4 Drug and other substance use and harm	Illicit drug use, Indigenous people aged 18 years or over by remoteness, by sex, 2002 and 2008	ABS (unpublished) NATSISS 2002 and 2008
	Hospitalisations related to drug use, NSW, Vic, Qld, WA, SA, and public hospitals in NT, 2004-05 to 2008-09	AIHW (unpublished) National Hospital Morbidity Database
	Drug related deaths, death rates, age standardised, by sex, NSW, Qld, WA, SA, NT, 2005-2009	ABS (unpublished) <i>Causes of Death</i>
	Drug influenced Indigenous homicides by key characteristics, 1999-2000 to 2008-09	AIC (unpublished) National Homicide Monitoring Program

Indicator	Measure	Data source
10.5 Juvenile diversions	Juvenile diversions by Indigenous status, various years, NSW, Vic, Qld, WA, SA and the NT	NSW, WA and NT Governments (unpublished); Victorian Government (2010) <i>Victorian Government Indigenous Affairs Report 2009-10</i> ; Queensland Police Service (2010) <i>Annual Statistical Review 2009-10</i> ; OCSAR (2010) <i>Crime and Justice in SA – Juvenile Justice</i>
10.6 Repeat offending	Repeat adult imprisonment trends, 1994-2007	ABS (2010) <i>An Analysis of Repeat Imprisonment Trends in Australia using Prisoner Census Data from 1994 to 2007</i>
	Proportion of prisoners with known prior adult imprisonment under sentence 30 June 2010, by jurisdiction, by sex and by most serious offence/charge	ABS (2010) <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, by jurisdiction, sex, remoteness, 2004 to 2009	DEEWR (unpublished); NCVER (unpublished)
	Number of students in selected governance courses, 2003–2009	NCVER (unpublished)

Indicator	Measure	Data source
11.3 Engagement with service delivery	Barriers to service provision, by service type and type of barrier, by state/territory and remoteness, 2008	ABS (unpublished) NATSISS 2008
	Discrimination, in last 12 months, by situations and places felt discriminated at, by state/territory and remoteness 2008	ABS (unpublished) NATSISS 2008
	Communication with service providers, by sex and remoteness, by age groups, 2002 and 2008	ABS (unpublished) NATSISS 2002 and 2008
	Discharges from hospital against medical advice, by Indigenous status, by sex, by remoteness, 2004–05, to 2008-09 (NSW, Vic, Qld, WA, SA and public hospitals in the NT)	AIHW (unpublished) National Hospital Morbidity Database

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