
12 Other hazards and activities

Key points

- Measures required within occupational health and safety (OHS) regulation to minimise the risk of falls when working at heights vary across the jurisdictions:
 - a combination of the ACT's regulatory framework (comprising two overlapping Acts) and its use of the imperial measurement system makes it the most burdensome jurisdiction for businesses seeking to understand their obligations.
 - New South Wales, with a more complex code of practice (which sets out additional actions to those in the regulations), may also place greater compliance burdens on businesses compared with other jurisdictions.
- The inclusion of non-government standards within falls regulation creates a cost to businesses that need to obtain those standards to be informed of minimum compliance requirements.
 - The Northern Territory has the highest minimum regulatory compliance cost (\$1477) while Queensland has the lowest (\$nil).
- Queensland is the only jurisdiction not to specifically cover manual handling in either its Act or regulations. Instead it is covered by general obligations in the duty of care and codes of practice.
- The Australian Safety and Compensation Council introduced a revised best practice National Standard for Manual Tasks in 2007.
 - The Commonwealth and Tasmania are the only jurisdictions to adopt the new standard in their OHS regulations.
- All jurisdictions require licences for high risk work.
 - All jurisdictions have effectively adopted the 29 national standard licence classes for high risk work. These 29 licences are also mutually recognised.
 - New South Wales, Queensland, South Australia, the Northern Territory and the ACT, however, require some additional high risk work licences which may impose further costs on businesses and employers.
 - The ACT has the shortest processing time for licence applications (2 days) and Western Australia has the longest (42 days).
- Despite consistency in licensing, workplace accidents related to forklifts vary significantly across the jurisdictions with Victoria obtaining the lowest rates of injury.

This chapter explores other OHS hazards and activities that have been identified by the Commission, and through consultation, as being useful areas to benchmark, and where differences across the jurisdictions could impose additional burdens on business. These include:

- falls
- manual handling
- required licensing for high risk work.

The benchmarking of these issues indicates that, despite broad consistency across the jurisdictions in addressing these areas, differences remain, such as additional regulatory requirements to, or inconsistent adoption of, national standards. These may impose additional compliance costs for businesses.

12.1 Prevention of falls

Differences in the regulations

All Australian jurisdictions have implemented some form of regulation to address the risks to OHS posed by falls. In most jurisdictions, the relevant legislation is their primary OHS act and the regulations issued under those acts. The sole exception to this arrangement is the ACT where, in 2008-09, the *Scaffolding and Lifts Act 1912* (ACT) and the *Occupational Health and Safety Act 1989* (ACT), and their associated regulations, comprise the relevant legislation.¹

All jurisdictions, except the Northern Territory, provide further guidance on their regulatory requirements for falls by issuing codes of practice or, in the case of South Australia and Western Australia, by designating certain Australian Standards as

¹ The *Work Safety Act 2008* (ACT) has come into effect (from 1 October 2009), replacing the *Occupational Health and Safety Act 1989* (ACT). While, the provisions of the *Work Safety Act 2008* (ACT) take legal precedence over those of the *Scaffolding and Lifts Act 1912* (ACT), both pieces of legislation remain in effect in the ACT as at December 2009 (ACT Government, pers. comm., 17 December 2009).

codes of practice.² A National Code of Practice for Housing Construction Falls is presently being developed by Safe Work Australia (SWA) (SWAC 2009b).

Some jurisdictions (Commonwealth and Victoria; South Australia and the Northern Territory) have similar legislative provisions directed at the prevention of falls. Other jurisdictions' regulations vary in matters such as the heights at which obligations arise, the level of prescription in the obligations and the nature of the obligations (table 12.1).

In addition to those requirements listed for the ACT in table 12.1, the *Scaffolding and Lifts Regulation 1950* (ACT) also contains a number of prescriptive requirements related to fall prevention, for example:

- A ladder used as a place from which a person has to work shall rise to a height of at least 3 feet 6 inches above the highest rung to be reached by the feet of the person working on the ladder or if that is impracticable then to the greatest practicable height ...
- Every ladder or run of ladders rising a vertical distance of 20 feet or over shall be provided with an intermediate landing place or places so that the vertical distance between any 2 successive landing places shall not exceed 20 feet.

In some jurisdictions, the codes of practice provide further height thresholds at which businesses should take action. For example, New South Wales' 'Formwork' code of practice indicates (at section 4.1) that:

The construction safety regulations require that:

- safeguards or accident prevention measures be taken where necessary or advisable; and
- where persons are exposed to a risk of falling 1.8m or more, fencing or other safe guards are to be provided.

A combination of the ACT's regulatory framework (two acts and two regulations) and the use of the imperial measurement system (feet and inches) in the *Scaffolding and Lifts Regulation 1950* (ACT) makes it one of the more burdensome

² The following are designated codes of practice in South Australia: AS/NZS 1576 (Scaffolding — parts 1–4; AS/NZS 1891 (Industrial fall-arrest systems and devices); AS/NZS 1892 (Portable ladders — Selection, safe use and care); AS 2626 (Selection, use and care of industrial safety harnesses); AS 1418 (Cranes, hoists and winches) and AS 1657 (Fixed platforms, walkways, stairways and ladders). AS1577 (Scaffolding planks) is also noted as an Approved Code of Practice under the *Occupational Health, Safety and Welfare Regulations 1995* (SA), however it is so noted in relation to Division 3.4 (Registration of plant designs and items of plant), rather than directed at the prevention of falls.

In Western Australia, AS 4576 (Guidelines for scaffolding) has been designated a code of practice.

jurisdictions for a business seeking to understand its obligations in regard to preventing falls. Jurisdictions, such as New South Wales, which suggest additional actions within their codes of practice, and especially those with actions related to differing heights to those in the regulations, may also be burdensome for businesses seeking to understand (and comply with) their obligations.

Table 12.1 Obligations for preventing of falls in OHS Acts and regulations

2008-09

	<i>Event / circumstance</i>	<i>Obligation(s)</i>
Cwth & Vic	Where an individual would be injured by a fall of 2 metres or more	The employer is to complete a hazard analysis and either eliminate or minimise the risk according to a hierarchy of controls (ranging from performing the work on a 'solid construction' ^a to the use of fixed ladders)
	Where there is a horizontal gap of more than 300 millimetres from the edge of a surface and there is no barrier to prevent a fall	A hazard analysis is to be undertaken
NSW	Where a person could fall 4 metres or more from a scaffold	The scaffold is subject to inspection, signage, erection and disassembly requirements
	Where the provision of fencing work platforms (such as scaffolding) and handrails (or other physical barriers) is not reasonably practicable	The employer is to provide physical restraints capable of arresting the fall of anyone falling from a height of more than 2 metres
Qld	Where there is a risk of falling less than 3 metres in housing construction work or less than 2 metres in other construction work (or on a roof with slope of 26° or less) ^b	The relevant person is to ensure hazards have been identified and controlled
	Where there is a risk of falling more than 3 metres in housing construction work or more than 2 metres in other construction work (or on a roof with slope over 26°) ^b	The relevant person must use control measures to prevent a fall of any distance and, if prevention is not practicable, to arrest the fall
SA & NT	Where a person is working in an elevated workplace from which they could fall, in the vicinity of an opening through which they could fall or in any other place from which they could fall, and it is reasonably foreseeable that the person would be injured in such a fall due to the distance of the fall	The relevant person must provide reasonable protection against a fall by the provision of a safe means of access to the workplace and the provision of secure fences, covers or other forms of safeguarding or, if that is not reasonably practicable, by the provision and maintenance of safe systems of work
WA	Where there is a risk that a person could fall 2 or more metres from an edge	Compliant edge protection is to be installed
	Where there is a risk that a person could fall 3 or more metres from an edge	Compliant edge protection or a fall injury prevention system is to be installed
	Where a hole or opening of more than 200 millimetres x 200 millimetres (or 200 millimetres diameter) but less than 2 metres x 2 metres (or 2 metres diameter) exists	The hole is to be 'blocked' or mesh installed to prevent persons (or things) falling through the opening. The opening should be signed 'DANGER — HOLE BENEATH'
Tas ^c	—	—

(Continued next page)

Table 12.1 (continued)

	<i>Event / circumstance</i>	<i>Obligation(s)</i>
ACT	Where employees are working at a height from which they could fall and if they fell it is likely they would be injured	The employer must provide reasonable protection against the employee falling
	Where a person is working where they may be liable to fall a distance of more than 6 feet^d	The relevant person is to provide for the safety of that person, so far as practicable, by means of fencing or otherwise
	Where there are fall risks such as openings in floors, roofs and platforms into which a person could accidentally walk and excavations and holes more than 5 feet deep^d	The relevant person is to provide fencing in the manner prescribed in the regulation

^a A 'solid construction': is an even surface that is structurally capable of supporting people the loads applied to it; has barriers around its perimeter to prevent falls; has a safe means of access and egress. ^b Does not apply if the person could fall from a ladder, a platform supported by trestle ladders, scaffolding that the person is erecting or dismantling or an area near a ladder that the person needs to use to get on or off the ladder. ^c Tasmania has no height-specific or fall-specific requirement in its OHS acts and regulations. ^d Contained in the *Scaffolding and Lifts Regulation 1950 (ACT)*.

Source: OHS Acts and regulations.

Cost of compliance and comparative effectiveness

SWA is preparing a regulation impact statement (RIS) for the proposed National Code of Practice for Housing Construction Falls. This RIS will contain business cost data based on a set of questions from the draft RIS on which SWA sought responses. The Commission has not sought further cost data from business on falls regulations in light of the work SWA has in progress in this area.

Pending the finalisation of the RIS by SWA, the submissions made to SWA regarding the draft National Code of Practice for Housing Construction Falls provide some indication of the differences in costs between jurisdictions. For example, the Master Builders Australia (MBA) submission indicates the implementation of the two metre threshold in New South Wales added '\$10 000 to \$20 000' to the cost of constructing a house (MBA 2009). As Queensland, South Australia, Tasmania and the Northern Territory do not apply a two metre threshold to housing construction (table 12.1) it could be inferred that their costs are less than those experienced in New South Wales — possibly in the order of \$10 000 to \$20 000.

The MBA submission also highlights how different building approaches and preferences for certain types of construction in different jurisdictions affect compliance costs. For example, as many houses in Western Australia are double brick, it is said that certain fall prevention mechanisms (such as 'framers' working internally) cannot be implemented. Accordingly, the differences in costs across

jurisdictions may be caused as much by different building practices and consumer demand for certain types of houses as by different regulation.

The Australian Safety and Compensation Council (ASCC 2008) sought to compare the effectiveness of falls regulation using data on the incidence of falls in the construction industry for the period 1999-2000 to 2003-2004.³ The data showed Queensland had the lowest incidence of falls (on average) over the period. However, the Queensland regulations during that period provided for a ‘fall threshold’ of 2.4 metres rather than the current Queensland fall thresholds of three metres for housing construction and two metres for other construction which came into effect in 2006.

Since 2003-2004, Queensland has experienced a sustained rise in its incidence of falls in the construction industry (figure 12.1) — a trend that is apparent both before and after the introduction new falls thresholds in 2006 (albeit on a limited number of observations and to a lesser extent from 2006-07 to 2007-08). Part of the reason for the increased incidence of falls in Queensland could be the growth in construction activity (figure 12.2) — between 2000-01 and 2006-07, the volume of Queensland construction grew by 98 per cent (compared to 26 per cent in New South Wales and 47 per cent in Victoria). Such growth may have reduced the ‘compliance focus’ of existing businesses due to work pressures, attracted new and less experienced operators to the industry (who possibly experience a higher rate of falls due to their inexperience) and stretched the resources of regulators — all of which could contribute to a higher rate of falls.

Access Economics (2009) found that, following a two metre ‘fall threshold’ coming into effect in New South Wales (2001) and Victoria (2004), there was a reduction in the rate of injuries from falls in those two jurisdictions compared to all other Australian jurisdictions (the incidence rate in Victoria was also improving prior to the two metre threshold coming into effect). Notwithstanding the improvement in both jurisdictions, Victoria has consistently maintained an incidence rate around 1 claim per 1000 employees less than New South Wales since 2004-05 (figure 12.1). Further, in 2006-07 (and in the 2007-08 provisional data), South Australia (which has no fall thresholds within its regulations) recorded a marginally better incidence rate than New South Wales.

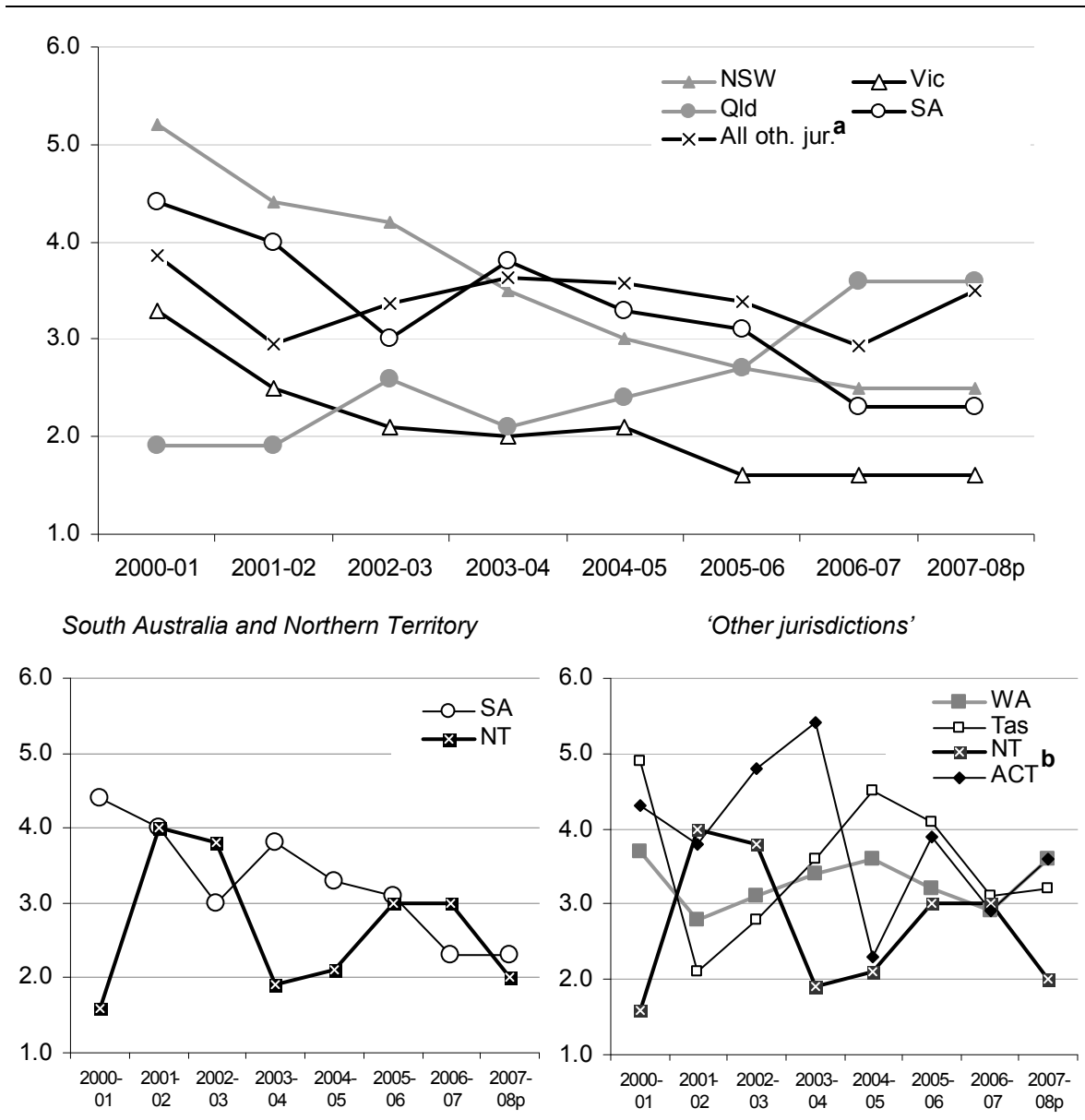
Although South Australia and the Northern Territory have similar legislative requirements in relation to falls (table 12.1), they had differing incidences of falls over the period 2000-2008 (figure 12.1). The volatility in the Northern Territory’s

³ As outlined in chapter 3, the level of aggregation in the data does not make it possible to analyse the data below the level of industry — for example, a comparison of the incidence of falls in housing construction with that in other areas of construction is not possible.

incidence rate can be partially explained by the small population of incidents — typically 10–20 falls per year that result in claims.

Figure 12.1 Falls from a height in the construction industry (2000-01 to 2007-08p)

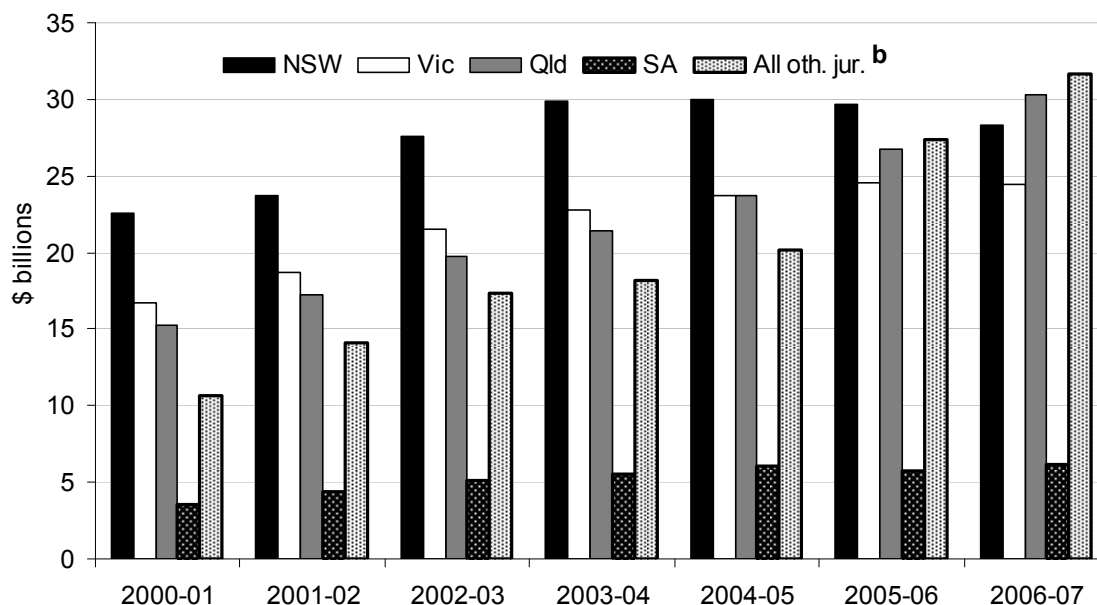
Incidence rate (claims per 1000 employees)



p preliminary data. **a** All other jurisdictions (Western Australia, Tasmania, Northern Territory and ACT) weighted by number of incidents (see inset figure for detail of the incidence rates for these jurisdictions). **b** ACT data relates to incidents in the 'private sector' only.

Data source: Data provided by Safe Work Australia with permission from state and territory governments.

Figure 12.2 Value of construction work completed (2000-01 to 2006-07)
Chain volume measures^a — original data



^a Chain volume estimates measure changes in value after the direct effects of price changes have been eliminated and therefore only reflect volume changes. ^b All other jurisdictions (Western Australia, Tasmania, Northern Territory and ACT).

Data source: ABS (*Construction Work Done, Australia (Preliminary, Jun 2009)*, Cat. no. 8755.0).

Overall, while figure 12.1 suggests that lower height thresholds contribute to a lower incidence of falls, the influence of other factors (such as growth rates, workloads and regulatory approaches) means that those jurisdictions with lower falls thresholds do not necessarily outperform those with higher thresholds or no thresholds.

Business compliance with falls prevention regulation

In 2008, the Heads of Workplace Safety Authorities (HWSA) released their final report into falls in the construction industry (2008) which summarised the key outcomes of over 1000 site inspections completed by OHS regulators during 2006-07. The report found that only 35 per cent of worksites were compliant with falls prevention requirements. In response to the instances of non-compliance, the regulators issued a combined total of:

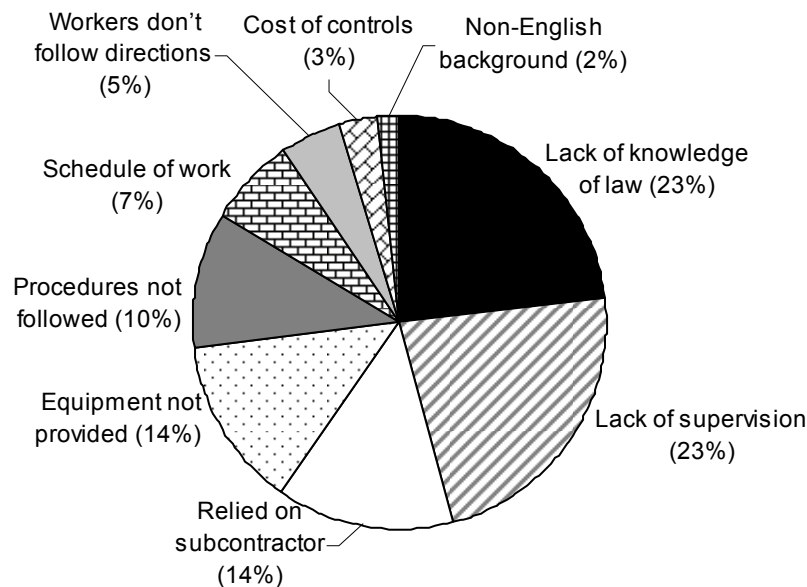
- 230 prohibition notices (19 per cent of total enforcement actions)
- 350 improvement notices (28 per cent)
- 605 verbal directions (or voluntary compliance) (49 per cent)

- 46 penalty notices (4 per cent).

A notable finding of the report was that while only 3 per cent of businesses cited the ‘costs of controls’ as being the main reason for their non-compliance, 23 per cent cited ‘lack of knowledge of the law’ as the main reason (figure 12.3). This should not be interpreted to mean that the cost of compliance is trivial or not an issue for business as, had more businesses understood their obligations, the cost of compliance may have rated higher as an impediment to compliance.

Figure 12.3 Primary reason for non-compliance with falls prevention requirements

HWSA campaign — falls prevention in construction 2008

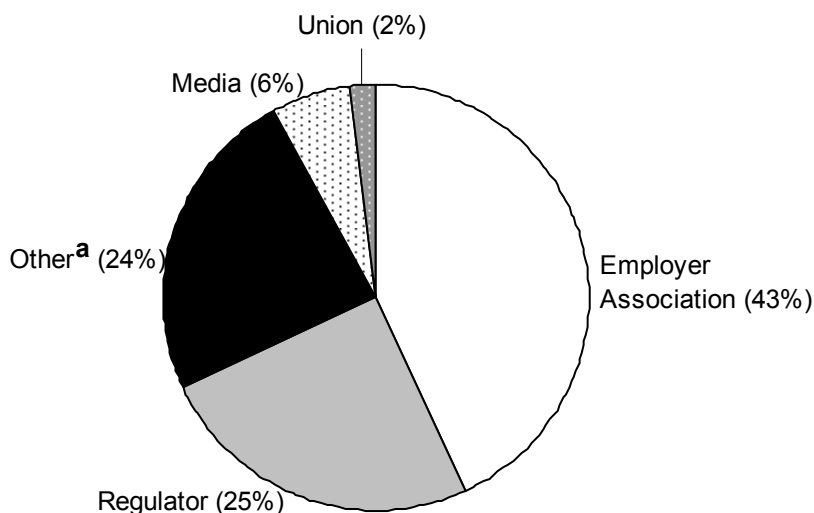


Data source: HWSA (2008).

With around a quarter of non-compliant businesses citing a ‘lack of knowledge’ as the reason for the non-compliance, the source of business’ knowledge on OHS matters becomes an important consideration. Improving the quality of information provided and the availability of that information to duty holders should, in light of figure 12.3, contribute to improving business compliance. HWSA found that the majority of construction businesses obtain their OHS information from employer associations and around a quarter of businesses obtain their information from the regulator (figure 12.4).

Figure 12.4 Source of OHS information for OHS duty holders

HWSA campaign — falls prevention in construction 2008



^a The HWSA survey limited respondents to the five options in the figure — no provision was made to collect information on the nature of the 'other' responses.

Data source: HWSA (2008).

Non-government standards in falls prevention regulation

Non-government standards, such as those issued by Standards Australia, are incorporated into regulatory frameworks for the prevention of falls in all jurisdictions. In some cases (South Australia and Western Australia) they are formally designated codes of practice, while in other cases (all jurisdictions except Queensland) they are referred to in the OHS regulations as either the compliance standard to be met or guidance on such a standard. In Queensland, they are referred to in codes of practice.

Table 12.2 details the prevalence of non-government standards in the regulatory frameworks for the prevention of falls of the jurisdictions (with table 12.3 providing descriptions of the standards). Table 12.2 only includes those non-government standards relevant to falls prevention — for example, although some codes of practice refer to AS 1337 (Eye protectors for industrial applications), AS 1337 is not included in table 12.2 as it does not relate directly to the prevention of falls.

Table 12.2 Non-government standards in falls prevention regulations

As at September 2009

<i>Non-government standard^a</i>	<i>Cwth</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>SA</i>	<i>WA</i>	<i>Tas</i>	<i>NT</i>	<i>ACT</i>
AS 1577		C						R	
AS 1639		C							C
AS 1657		C	RC		C*	C			C
AS 2001.2.4				C					
AS 2317						C			
AS 2319						C			
AS 2424		C			R				C
AS 2626		C			C*				C
AS 3569						C			
AS 4142.3						C			
AS/NZS 1170.2				C					
AS/NZS 1576	R	RC		C	C*	RC	C	R	C
AS/NZS 1891		C	C		RC*	C		R	RC
AS/NZS 1892		C	C		C*	RC	R		RC
AS/NZS 4040.4		C							
AS/NZS 4389		C	C			C			
AS/NZS 4488			C			C			
AS/NZS 4576		C	C	C		C*			C
AS/NZS 4994(Int)		C	C						
BS 3913		C							C
BS 5845								R	
CP93		C							C

R Referred to in a Regulation. **C*** Designated a Code of Practice. **C** Referred to in a Code of Practice. ^a See table 12.3 for a description of the subject matter of the standard.

Source: OHS Acts and regulations.

Table 12.4 provides estimates of the costs incurred by business to obtain those non-government standards referred to in the OHS regulations and codes of practice. They do not reflect the cost to business of complying with any of the requirements set down in those non-government standards. The table contains three cost estimates:

- *minimum regulatory compliance cost* — the cost to obtain only those standards referred to in the OHS regulations (or OHS regulations and *Scaffolding and Lifts Regulation 1950* (ACT) in the case of the ACT)
- *synthetic cost* — the cost for a business to obtain all the standards relevant to them (including those listed in the codes of practice), assuming the business only uses metal ladders and does not use suspended scaffolding
- *maximum potential cost* — the cost to obtain all the standards referred to in the regulations and codes of practice.

Table 12.3 Description of non-government standards

As at September 2009

<i>Standard</i>	<i>Standard description (subject matter from the title of the standard)</i>
AS 1577	Scaffold planks
AS 1639 ^a	Design and installation of corrugated fibre
AS 1657	Fixed platforms, walkways, stairways and ladders — Design, construction and installation
AS 2001.2.4	Methods of test for textiles — Physical tests — Determination of bursting pressure of textile fabrics — Hydraulic diaphragm method
AS 2317	Collared eyebolts
AS 2319	Rigging screws and turnbuckles
AS 2424 ^a	Plastics building sheets
AS 2626 ^b	Selection, use and care of industrial safety harnesses
AS 3569	Steel wire ropes
AS 4142.3	Fibre ropes — Man-made fibre rope for static life rescue lines
AS/NZS 1170.2	Structural design actions - Wind actions
AS/NZS 1576	Scaffolding
AS/NZS 1891	Industrial fall-arrest systems and devices
AS/NZS 1892	Portable ladders — Selection, safe use and care
AS/NZS 4040.4	Methods of testing sheet roof and wall cladding — Resistance to impact (sandbag) — Sheet roof material
AS/NZS 4389	Safety Mesh
AS/NZS 4488	Industrial rope access systems
AS/NZS 4576	Guidelines for scaffolding
AS/NZS 4994(Int)	Temporary roof edge protection for housing and residential buildings
BS 3913 ^c	British standard specification for safety nets
BS 5845 ^d	Specification for permanent anchors for industrial safety belts and harnesses
CP93 ^e	British standard institution code of practice for the use of safety nets on constructional work

^a Superseded by **AS 4040.4** (Methods of testing sheet roof and wall cladding — Resistance to impact (sandbag) — Sheet roof materials), **AS/NZS 4040.5** (Methods of testing sheet roof and wall cladding — Resistance to impact (sandbag) for wall boards), **AS/NZS 1562.3** (Design and installation of sheet roof and wall cladding — Plastic) and **AS/NZS 4389** (Safety mesh). ^b Superseded by **AS/NZS 1891.4** (Industrial fall-arrest systems and devices — Selection, use and maintenance). ^c Superseded by **BS EN 1263** (Safety nets — safety requirements, test methods). ^d Superseded by **BS EN 795** (Protection against falls from a height. Anchor devices — requirements and testing) and **BS 7883** (Code of practice for the design, selection, installation, use and maintenance of anchor devices conforming to BS EN 795). ^e Superseded at least 3 times. Current standards are **BS EN 1263-1** (Safety nets. Safety requirements, test methods) and **BS EN 1263-2** (Safety nets. Safety requirements for the positioning limits).

Source: SAI Global (2009).

Table 12.4 shows that the Northern Territory has the highest minimum regulatory compliance cost (\$1477) while Queensland has the lowest (\$nil). However, to assist businesses in avoiding these costs, the Northern Territory does provide information on its website about how the standards ‘can be viewed (but not printed or saved) online by visiting the Northern Territory Library, Parliament House’.

Table 12.4 Cost to obtain the non-government standards in falls prevention regulations^a

Derived from 19-26 May 2009 prices

	<i>Cw/th</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>SA</i>	<i>WA</i>	<i>Tas</i>	<i>NT</i>	<i>ACT</i>
	\$	\$	\$	\$	\$	\$	\$	\$	\$
Minimum regulatory compliance cost	391	391	79	Nil	579	761	371	1 477	782
Synthetic cost	351	2 183	1 100	609	1 189	1 652	532	1 437	1 612
Maximum potential cost	391	2 412	1 290	648	1 418	1 881	761	1 477	1 841

^a The cost estimates are derived from the prices for hard copies of the standards as quoted at SAI Global's Webshop (www.saiglobal.com/shop/Script/search.asp) for non-members. The quoted prices were obtained over the period 19–26 May 2009.

Source: SAI Global (2009).

In practice, the costs listed in table 12.4 are not ‘one-off’ costs. Between 14 to 20 per cent of the standards change each year, prompting SAI-Global to note that ‘managing your ever-changing library of local and international standards can be a complex administrative and compliance headache’ (SAI Global 2007a). A business would initially pay the costs in table 12.4 to obtain the standards and, assuming a 20 per cent turn-over in standards, the business would potentially progressively pay those same costs again over the next five years to ensure the standards remained current. While SAI-Global (and others) provide packages by which business can be kept up-to-date regarding the changes to the standards, this comes at a cost. For example, a leading Australian retailer estimates its costs in this regard to be \$50 000 per annum (which includes a LawLex subscription as well as a subscription to SAI-Global).

These costs are not the only burdens arising for business due to the inclusion of non-government standards in regulation. Some non-government standards reference other non-government standards. For example: Australian Standard AS/NZS 1576.1 (Scaffolding) references, among other standards, AS 1170 (Minimum design loads on structures), AS 1170.1 (Dead and live loads and load combinations), AS 1170.2 (Wind loads) and AS 1170.3 (Snow loads) — the combined cost of which are \$553.86 (costs which would be additional to those detailed in table 12.4).

A number of the non-government standards referred to in regulations and codes of practice have been superseded (table 12.5). In some cases the jurisdictions require (or recommend) compliance with the superseded version and, in other instances, the requirements are not so clear. For example, BS 5845 has been superseded by BS EN 795 and BS 7883 (table 12.3) and it may not be clear to business which of the new standards, if not both, they should comply with.

Table 12.5 Changes to non-government standards in falls prevention regulation

As at September 2009

	<i>Cwth</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>SA</i>	<i>WA</i>	<i>Tas</i>	<i>NT</i>	<i>ACT</i>
Number of standards (including sub-standards) likely to change over a 12 month period ^a	1	5	3	2	3	5	2	2	4
Number of standards (including sub-standards) listed in regulations/codes of practice that have been superseded	0	5 ^b	0	0	2 ^c	0	0	1 ^d	4 ^e

^a Based on SAI Global's assertion that 'on average up to 20%' of their range of standards are revised in some way every year (SAI Global 2007b). ^b Includes one standard that has been replaced by four others (although only one of the replacement standards would apply in the context the original standard was referred to) and one standard that has been replaced by two other standards. ^c Includes one standard that has been replaced by four other standards. ^d Includes one standard that has been replaced by two others. ^e Includes two standards that have each been replaced by two other standards and one standard that has been replaced by four others (although only one of the replacement standards would apply in the context original standard was referred to).

Sources: OHS Acts and regulations; SAI Global (2007b).

12.2 Manual Handling

Dealing with an inconsistent approach to the prevention of workplace injuries related to manual handling was raised by some participants as an unnecessary cost related to complying with OHS regulation.

Manual handling is defined under the National Standard on Manual Tasks as:

A task comprised wholly or partly by an activity requiring a person to use his or her musculoskeletal system in performing his or her work and can include the use of force for lifting, lowering, pushing, pulling, carrying or otherwise moving, holding or restraining any person, animal or item. (ASCC 2007a, p. 5)

Given the prevalence of such tasks in virtually all workplaces, albeit to varying degrees, poor manual handling practices in Australia have led to significant costs to workers and the economy.

According to the Australian Bureau of Statistics (ABS), around 31.7 per cent of work injuries in Australia in 2005-06 were caused by lifting, pulling or pushing an object (ABS 2006). In terms of workers' compensation claims, manual tasks in the workplace resulted in 437 852 claims in Australia between July 1997 and June 2003 — equivalent to 41.6 per cent of all claims for that period. The direct cost to the economy of these injuries was estimated to be close to \$12 billion and includes the long-term impacts on the quality of life of the injured worker (ASCC 2006b). It was

also found that the risk of injury from manual tasks was greatest in sectors such as Manufacturing, Health and community services, and Construction (ASCC 2006b).

The costs of manual handling related injuries and illnesses on some jurisdictions have also been examined. For example, according to WorkCover NSW, approximately 17 000 people are seriously injured or suffer from illness related to manual handling each year in New South Wales (WorkCover NSW 2009c). This represents just over a third (37 per cent) of all injuries and costs workplaces around \$373 million (estimated to be around \$1.5 billion when hidden costs, such as the impact on a worker's family and friends or reduced morale in the workplace are included) (WorkCover NSW 2009c). In Victoria, while the number of claims for manual handling had been falling, they still represented 46 per cent of all workers' compensation claims in 2004-05. The cost of these claims were \$580 million (estimated to be around \$2.9 billion when hidden costs are included) (Allen Consulting Group 2007a).

Manual handling regulation across the jurisdictions

All Australian jurisdictions have implemented some form of regulation to address the OHS risks related to manual handling. In most jurisdictions, OHS regulations specifically define manual handling and include requirements to manage the associated risks. The only exception is Queensland, where the legal requirements to manage manual handling are covered in the OHS Act's overarching duty of care (with two codes of practice directed at manual handling).

Regardless, the requirements for addressing manual handling across the jurisdictions are broadly consistent in coverage and scope. According to the RIS prepared for the national standard on manual handling, duplication and burdens on businesses operating across jurisdictions were perceived to only be minimal (ASCC 2006b).

National Standard for Manual Tasks

The Australian Safety and Compensation Council (ASCC) introduced the *National Standard for Manual Tasks* in 2007. The national standard sets out the principles for the effective management of hazardous manual tasks to avert musculoskeletal disorders (MSDs) arising from manual tasks in the workplace (box 12.1).

Revisions were intended to bring the national standard closer to those operating in Victoria, Queensland and Western Australia — identified as exceeding the pre-

existing national approach in terms of scope; content; precision and clarity; responsibilities; and risk identification, assessment and control (ASCC 2006b).

Box 12.1 Features of the National Standard for Manual Tasks

Duty Holders

The duty-holders under this standard are:

- persons who design plant and buildings or structures used as a place of work;
- persons who manufacture plant and substances;
- persons who supply plant and substances; and
- persons with control (of the work or workplace, such as an employer, owner, or principal contractor).

General duty of person with control

A person with control must, as far as reasonably practicable:

- identify hazardous manual tasks that may give rise to MSDs in workers handling a person or an animal, or using an item, a system of work, or a workplace;
- assess the risks posed by hazardous manual tasks; and
- eliminate the risks.

If this is not reasonably practicable, a person with control must minimise the risks of MSDs that may arise from hazardous manual tasks so far as is reasonably practicable.

Workers' duty to take care

Workers who perform manual tasks must, as far as they are able and with respect to manual tasks:

- take reasonable care of their own health and safety and the health and safety of others in the workplace;
- co-operate with all persons with control in complying with this standard;
- comply with all lawful instructions, information and training provided in relation to health and safety by persons with control;
- comply with risk control measures as instructed and trained; and
- notify persons with control about any matter known to them that affects or might affect the ability of the persons with control to comply with this Standard.

Source: ASCC (2007a).

Practical guidance on how to meet the national standard was included in a *National Code of Practice for the Prevention of Musculoskeletal Disorders due to Manual Handling* (ASCC 2007b) which was introduced in August 2007. This code provides

assistance to employers and persons involved in performing tasks to manage risks, as well as information to health and safety representatives and OHS professionals.

Estimated costs and benefits associated with adopting the new national standard

A RIS was prepared by the ASCC prior to the revised national standard for manual handling being introduced, and a number of costs and benefits were identified based on take-up of the standard by the jurisdictions. Broadly, the costs involved were expected to be from familiarisation with new processes and obligations, while the benefits would result from greater consistency across the jurisdictions, reduced manual handling claims and enhanced quality of life for workers.

Under the revised national standard, those businesses which previously had obligations which were not clearly defined were expected to face some significant costs, for example:

- designers/manufacturers/suppliers would pay \$34.9 million per annum due to requirements to consult extensively with users, and remedying design flaws
- persons with control of workplaces were expected to incur \$9.9 million per annum for identifying and remedying hazards and \$12.9 million per annum for record keeping requirements
- training and familiarisation of the new standard was estimated to be a transitional cost of \$18.1 million (ASCC 2006b).

However, there were estimated savings expected from enhanced consistency across the jurisdictions — employers were expected to save \$0.18 million per annum, from the reduced need to train staff to familiarise them with differing processes and systems operating in individual jurisdictions (ASCC 2006b).

The significant benefit from adopting the national standard was expected to be its positive impact on the community from the reduction in manual handling incident claims — expected to peak at \$118 million in 2006-07. Of this figure, benefits in the order of \$3.5 million would go to employers, \$48.4 million to workers, and the rest of society would benefit by \$66.1 million. Reductions in: production disturbance costs (short-term losses of production and staff turnover); human capital costs (long-run loss of productive capacity of workers); and medical costs were among the expected savings (ASCC 2006b).

In addition, benefits from the improvement in living standards of workers due to avoidance of fatal and non-fatal incidents (ASCC 2006b) was estimated to be around \$495 million in 2006-07.

Overall, the net benefit to the community of changing the national standard for manual handling in net present value terms are potentially significant at \$630 million over ten years, while the improvement in quality of life is estimated at around \$400 million per annum for the next ten years (ASCC 2006b).

Uptake of the national standard and national code of practice for manual handling across jurisdictions

Once the national standard and code of practice was introduced, individual jurisdictions had the responsibility of reviewing their own legislation and deciding whether to adopt, or incorporate elements of, the national standard. As the national standard for manual handling represents a ‘best practice’ approach to minimising these types of workplace risks, comparing the adoption of the standard to current practice will provide some insight into likely business compliance costs.

Based on evidence presented in the RIS, jurisdictions that have not adopted the standard should place marginally higher costs on businesses and achieve worse outcomes compared to those that have. Further, by not adopting the standard, differences remain across the jurisdictions which potentially increase the compliance burden for multi-state firms.

At the time of writing only two jurisdictions have adopted the national standard for manual handling in their OHS regulations — the Commonwealth and Tasmania (table 12.6). For example, under section 65 of the Tasmanian *Workplace Health and Safety Regulations 1998*, in addition to the responsibilities to undertake hazard identification, risk assessment and control of risk, ‘an accountable person in a workplace’ must take all reasonable steps to ensure that the national standard is complied with in the workplace’ (part 4, division 1). The remaining jurisdictions adopt their own state regulation or code of practice relating to manual handling.

While the Commonwealth, New South Wales, Queensland, South Australia, and the Northern Territory have approved or referenced the national code of practice (or its superseded code) in some form, the codes of practice operating in other jurisdictions vary. In some cases, these were developed prior to the release of the National Standard and National Code of Practice in 2007. For example, Victoria has its own code of practice, *Code of Practice for Manual Handling 2000*, that provides practical guidance on how duty holders can comply with relevant OHS regulations on manual handling. Tasmania is the only jurisdiction that does not have a code of practice for manual handling, instead providing guidance material for employers, managers and workers.

Table 12.6 Uptake of national standards and code of practice
2008-09

	<i>Cwth</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>SA</i>	<i>WA</i>	<i>Tas</i>	<i>NT</i>	<i>ACT</i>
National Standard for Manual Tasks (2007)	AL	Ref		Ref	Ref		AL	Ref	a
National Code of Practice for the Prevention of Musculoskeletal Disorders from Performing Manual Tasks at Work (2007)	COP	COP		Ref	Ref			b	

AL The national standard has been adopted via legislation. **COP** The National code of practice has been approved. **Ref** Referenced on regulator's website and/or guidance material on the subject. **a** ACT has adopted the national standard as a code of practice. As of October 1, the ACT has implemented the National Standard for Manual Tasks (2007) and associated Code of Practice. **b** The Northern Territory approves the superseded National Code of Practice for Manual Handling [NOHSC: 2005 (1990) 1].

Source: Regulations and websites of regulators.

The variation in the adoption of the national standard and code of practice on manual handling indicates differing burdens across the jurisdictions. The costs of the uptake, however, may not have been captured by the RIS for certain industries. For example, Master Builders Australia views the RIS as underestimating the costs of applying the standard on the building and construction industry, and cites the impractical duties of the standards as a possible reason for its lack of universal adoption:

Chief among these concerns are the onerous training and consultation requirements, in particular the requirement in the Standard for training to be provided *when any aspect of the work changes*. Work in the building and construction industry is by its very nature constantly changing: it is neither feasible nor practical to meet this aspect of the Standard.(sub. DR20, p. 12).

Therefore on one hand, those jurisdictions that have not adopted the standard — New South Wales, Victoria, Queensland, South Australia, Western Australia, the Northern Territory and the ACT — may not be gaining the potential benefits derived from the national standard. On the other hand, lack of adoption may be driven by jurisdictional considerations and costs of compliance not captured by the RIS.

12.3 Licensing for high risk work

There are numerous occupational licences required under each jurisdiction's OHS regulations. During consultations, the Commission was informed by participants that, in some instances, licences for high risk work were either not transferable or inconsistently required across the jurisdictions. This section investigates these claims and details those licences or certificates of competency required for what is generally described as 'high risk work'. Thus it excludes licences or certificates that are required under other areas of OHS regulation such as handling hazardous

materials, demolition work or working with explosives unless explicitly included in high risk work schedules.

The ASCC developed a national standard for the licensing of persons conducting high risk work — *National Standard for Licensing Persons Performing High Risk Work* (ASCC 2006c). The RIS prepared when the standard was introduced estimated that the benefits in terms of reduced costs from differences were in the order of \$5 million over a 10 year time frame (ASCC 2006d). These benefits were made up of \$1.1 million in reduced OHS administration costs, \$3.8 million in reduced workplace costs and \$0.1 million in reduced costs due to movements between jurisdictions and the resulting need to apply for a new licence.

The national standard details 29 individual licence classes for those undertaking high risk work. In general, all state and territory regulation has adopted these standard classes, with only a few exceptions:

- Queensland has split the bridge and gantry crane licence into two categories (remote control and other)
- South Australia and the Northern Territory do not have separate self erecting tower crane licences or certificates of competency
- the Northern Territory does not have a separate ‘order-picking’ forklift truck licence.

Further, all governments mutually recognise licences/certificates of competency obtained in other jurisdictions if they comply with the national standard. In particular, while the Commonwealth requires licences for high risk work, it does not issue any licences and instead recognises those obtained in individual states or territories. In the Northern Territory, while other licences are recognised, holders must still apply to NT WorkSafe to obtain a reciprocal licence.

Licences required in addition to the national standard

Along with the national standard licences for high risk work, some state and territory governments also have licences/certificates of competency for other types of high risk work (table 12.7). For the load-shifting licences/certificates, those states and territories which issue these also recognise those issued in other jurisdictions. It should be noted that in South Australia, operators of load-shifting equipment are not required to hold a licence per se, but they are instead required to hold a ‘Notice of Assessment’ as proof of competency. As they effectively represent proof that a person is qualified to use this equipment (the purpose of a licence also), they have been included as licences in table 12.7.

In total, Queensland has the largest number of required licences/certificates for high risk work with 38, followed by New South Wales with 36 (figure 12.5). The Northern Territory has the least with 28.

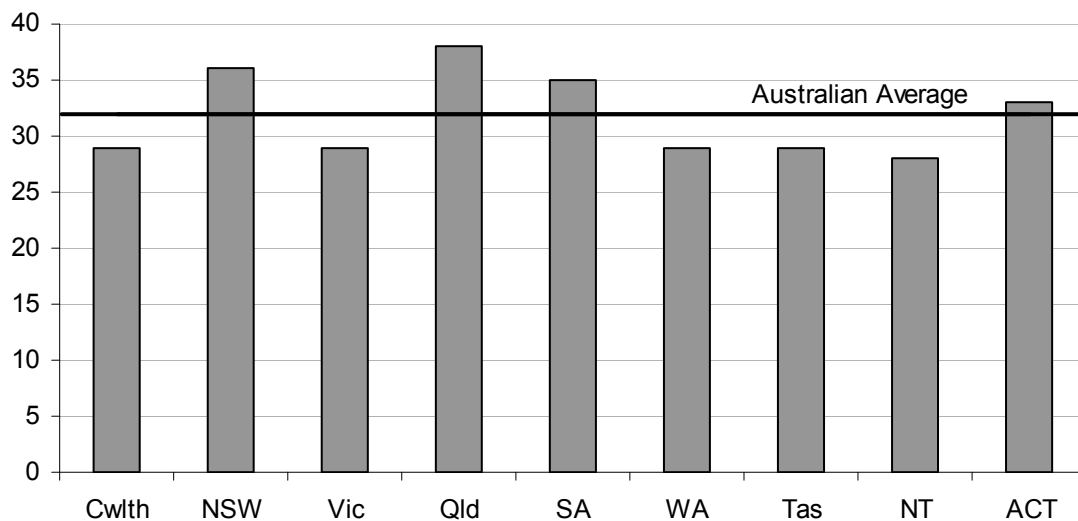
Table 12.7 Jurisdiction-specific licences for other high risk work
2008-09

Licence	Cwlth	NSW	Vic	Qld	SA	WA	Tas	NT	ACT
Asbestos removalist ^a	x	x	x	x	x	x	x	✓	x
Application of pesticides	x	✓	x	x	x	x	x	x	x
Use of fumigants	x	✓	x	x	x	x	x	x	x
Cableway/flying foxes	x	x	x	x	✓	x	x	x	x
Dozer	x	x	x	✓	✓	x	x	x	x
Dragline	x	✓	x	x	✓	x	x	x	✓
Excavator	x	✓	x	✓	✓	x	x	x	✓
Front-end loader	x	✓	x	✓	✓	x	x	x	✓
Front-end loader (skid steer type)	x	✓	x	✓	✓	x	x	x	✓
Front-end loader/backhoe	x	✓	x	✓	✓	x	x	x	✓
Grader	x	x	x	✓	x	x	x	x	x
Road roller	x	x	x	✓	x	x	x	x	x
Scraper	x	x	x	✓	x	x	x	x	x
Total	0	7	0	8^b	7	0	0	1	5

^a Asbestos removalist licences are not categorised under 'high risk work' for most jurisdictions (see chapter 10). ^b The additional licences in Queensland relate to earthmoving and crane operations — an area jointly addressed with high risk work in part 3 of the *Workplace Health and Safety Regulation 2008* (Qld).

Source: OHS regulations.

Figure 12.5 Quantity of licences/certificates for high risk work
2008-09



Data source: OHS regulations.

Additional licence costs

Following the cost estimates used in the RIS (ASCC 2006d) that was prepared for the *National Standard for Licensing Persons Performing High Risk Work* (ASCC 2006c), indicative additional costs imposed on businesses that operate in those jurisdictions which have required licences additional to those in the national standard can be estimated. These costs represent:

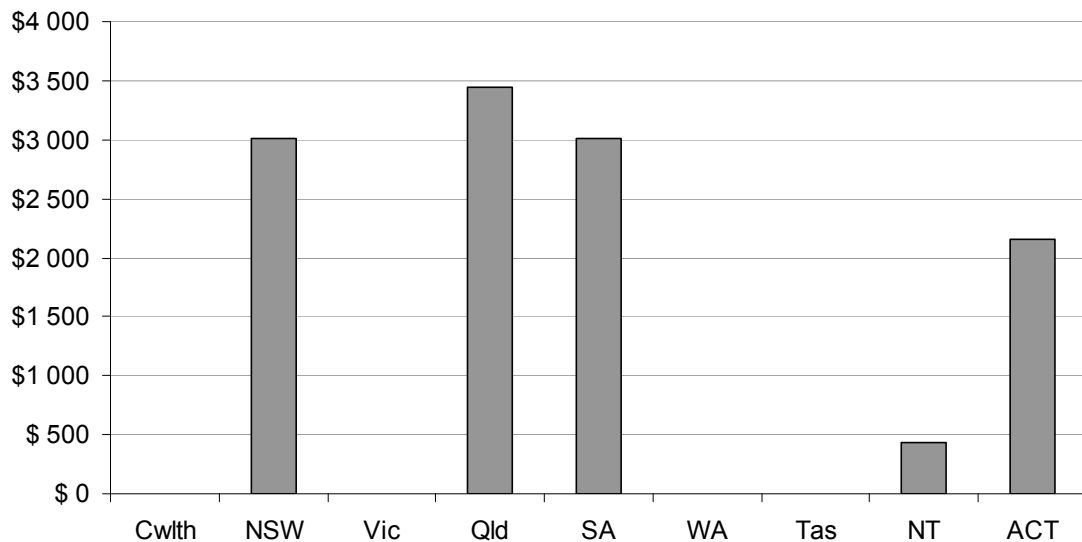
- movement of labour costs — the cost of obtaining a licence in one jurisdiction which is not required in another; assuming the applicant has the necessary skills to perform that work and has been doing so in a jurisdiction that does not require a licence
- costs of obtaining those extra licences.

The ASCC (2006d) used an indicative cost of \$208 per employee that moves between jurisdictions (assumed to be 0.5 per cent of licensed operators) to estimate the movement cost (made up of 6 hours of labour costs at \$28 per hour due to the need to apply for a licence and a \$40 licence cost). Using these estimates, a per licence cost can be obtained, which can then be summed over the number of additional licences. For example, in New South Wales there were 7 additional licence classes, and applying the 0.5 per cent movement rate, and the \$208 cost yields an additional costs to New South Wales businesses and employers of \$7 ($7 \times 0.5\% \times \208).

The ASCC (2006d) also estimated that per licence, businesses would face a cost of \$28 per hour from lost production due to increased required training (taken as 1 additional day, or 8 hours, based on the average additional training requirements identified). Applying this cost estimate, the time cost in applying for the licence (6 hours at \$28 per hours) plus an average figure of \$40 for the cost of the licence and assuming that the remaining 99.5 per cent of licences within the additional licences classes represent new holders from within that jurisdiction, a per licence indicative cost can be obtained. Using New South Wales again as the example, the indicative cost estimate is obtained by multiplying the cost estimate ($99.5\% \times 8 \times \$28 + 6 \times \$28 + \$40 = \430) by the 7 additional licence classes ($7 \times \$430 = \3008). The results are shown in figure 12.6. For those jurisdictions with no additional licences (the Commonwealth, Victoria, Western Australia and Tasmania), there are no additional costs.

The cost estimates in figure 12.6 should be treated with caution as the additional licence requirements may generate additional benefits in the form of reduced workplace accidents. However, if the national standard is viewed as best practice, any such additional benefits should be negligible.

Figure 12.6 Indicative additional costs on individual businesses and/or employees from all additional licence classes^a
2008-09



^a Above calculations assume that all additional licence classes are held in equal proportions.

Data source: PC estimates.

Processing and costs of acquiring licences

Despite licences for high risk work generally being transferable between jurisdictions, the process used to apply for, lodge, and the cost to acquire them varies (table 12.8). For example, not all regulators directly provide application forms. In New South Wales, assessors provide forms for applications while in Queensland and Victoria, forms can be collected at Australia Post Offices.

The fees charged by each jurisdiction also vary considerably. The Northern Territory and the ACT have the lowest fees at \$50, compared with South Australia where the fee exceeds \$90. The means of payment for all jurisdictions is, however, consistent.

Processing times for licensing vary considerably from 2 days in the ACT to 42 days in Western Australia. There also does not appear to be a correlation between increased fees and faster processing times.

Table 12.8 Cost, payment and lodgement of licence applications

2008-09

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>SA</i>	<i>WA</i>	<i>Tas</i>	<i>NT</i>	<i>ACT</i>
Application forms								
Available online/from regulator	x	✓	x	✓	✓	✓	✓	✓
Available other source ^a	✓	✓	✓	x	x	x	x	x
Cost								
Licence fee	\$65.00	\$60.00	\$68.10	\$97.50	\$73.00	\$56.32	\$50.00	\$50.00
Fee basis ^b	CR	PCR	PCR	PCR/O	CR	PCR	PCR	O
Processing								
Average time taken (days)	31.7	11	4	5	42	14	3	2
Means of payment								
Cheque	✓	✓	✓	✓	✓	✓	✓	✓
Credit card	✓	✓	✓	✓	✓	✓	✓	✓
Cash	✓	✓	✓	✓	✓	✓	✓	✓
Other	x	x	x	x	x	x	x	x
Means of lodging application								
Mail	✓	x	x	✓	✓	x	x	✓
Fax	x	x	x	x	x	x	x	x
Email	x	x	x	x	x	x	x	x
In person	✓	x	x	✓	✓	x	x	✓
Other ^c	✓	✓	✓	x	x	✓	✓	x

CR cost recovery. **PCR** partial cost recovery. **O** other. ^a In New South Wales, licence application forms are provided by an assessor. In Victoria, application forms are available from the any Australia Post Office as the first point of contact but can also be obtained by calling WorkSafe Victoria's Advisory Service. In Queensland, forms must be collected from Australia Post Offices. ^b Other in South Australia refers to fee levels being set in regulations. ^c Other in New South Wales, Victoria and Queensland represents the option to pay at any Australia Post Office. In Tasmania, other refers to any Service Tasmania outlet. For the Northern Territory, other refers to the Territory Business Centre. In the ACT, the fees are set by the relevant Minister.

Sources: Regulator websites and/or information lines; Productivity Commission survey of OHS regulators (2009 unpublished).

Inconsistencies with national standard licences

Despite the existence of national standard licences, the Commission was informed that some differences remained. In particular, it was suggested that differences existed in the definition of equipment, and that licence requirements to operate the same equipment were not uniform in all jurisdictions. The case of forklifts was given as one example. It was also suggested that given the lack of consistency about the definition of a forklift, employers were encouraged to adopt and use machinery that fell short of the regulated definition to avoid having to license an employee, often making work practices less safe.

The definition of a forklift in each jurisdiction's regulation is given in table 12.9. Queensland is the only jurisdiction to not include a definition of a forklift in its

regulation. Except for the Commonwealth and Tasmania which have adopted the definition of the national standard (ASCC 2006c), all jurisdictions have defined forklifts slightly differently. Despite this, most definitions include the same core aspects — a **powered industrial truck** equipped with a **mast** and **elevating load carriage** to which a pair of **fork-arms** or **other attachments** are attached. Only Western Australia and the Northern Territory do not include all five bolded elements:

- the Western Australian definition does not include other attachments
- the Northern Territory’s definition does not include a mast.

Table 12.9 Definition of a forklift with regulations

In regulations — 2008-09

	<i>Definition</i>
Cwth ^a	... covers the operation of a powered industrial truck equipped with a mast and an elevating load carriage to which is attached a pair of forkarms or other attachment . (p. 24 ASCC 2006c)
NSW	... means a powered industrial truck equipped with a mast and elevating load carriage to which is attached a pair of fork arms or other loadholding attachment but does not include any pedestrian-operated fork-lift truck or a pallet truck capable of providing a maximum lift not exceeding 225 millimetres. (p. 150)
Vic	... means a powered industrial truck equipped with a mast and an elevating load carriage to which is attached a pair of fork arms or other loadholding attachment , including a truck on which the operator is raised with the attachment for order-picking, but does not include a pedestrian operated industrial truck ... (p. 471)
Qld	Undefined.
SA	... means a powered industrial truck equipped with a mast and an elevating load carriage to which is attached a pair of forkarms or another form of loadholding attachment , and includes a truck on which the operator is raised with an attachment for order picking, but does not include a pedestrian operated industrial truck ... (p. 7)
WA	... means a powered industrial truck equipped with lifting media made up of a mast and an elevating load carriage to which is attached a pair of forkarms ... (p. 363)
Tas ^b	... covers the operation of a powered industrial truck equipped with a mast and an elevating load carriage to which is attached a pair of forkarms or other attachment . (p. 24 ASCC 2006c)
NT ^c	... means an item of mobile plant equipped with an elevating load carriage to which is normally attached fork arms or other load-holding attachments . (p. 5)
ACT	... is a powered industrial truck with — (a) a mast ; and (b) an elevating load carriage with fork arms or other load-holding attachment . (p. 24)

^a The Commonwealth regulations do not define a forklift truck but state that the section on licensing arrangements for high risk work be read in conjunction with ASCC (2006c). ^b Tasmania’s regulation states that the definition for high risk work relating to forklifts can be found in ASCC (2006c). ^c The Northern Territory defines a forklift as an industrial truck.

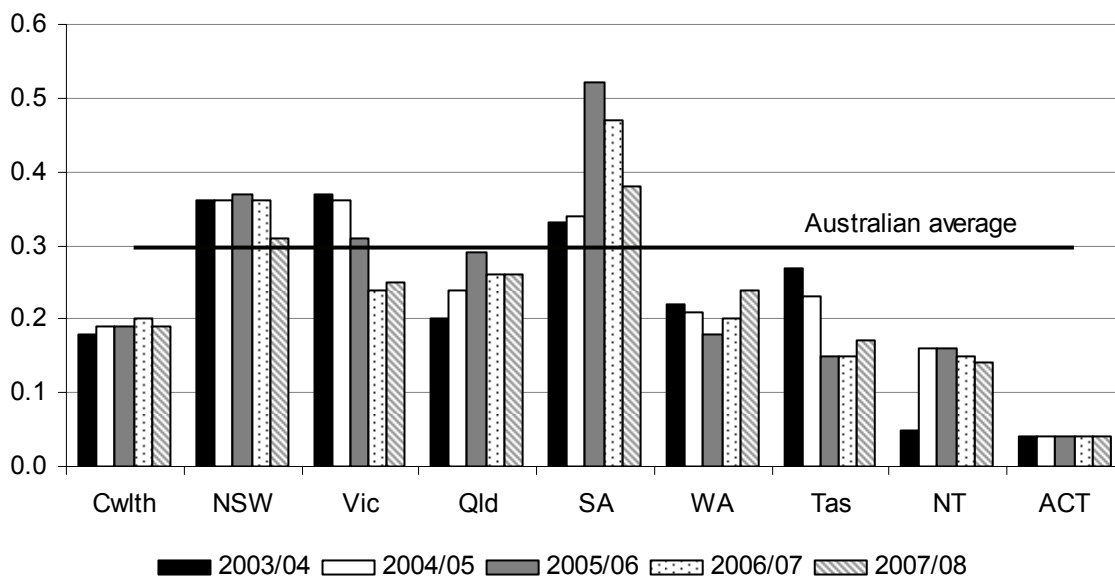
Source: OHS regulations.

Despite minimal differences in the definition, it is not clear whether these make a material difference to either business compliance costs or the outcomes sought from

the regulation (fewer forklift accidents). Indeed, it is difficult to obtain a comparable estimate of forklift related injuries in each jurisdiction. While data exists on forklift related injury claims (figure 12.7), incidence rates are expressed per 1000 workers and do not take into account total usage (that is, they are not per forklift hours) or industry structure (some industries make greater use of forklifts than others). Given this, it is unsurprising that vast differences exist between jurisdictions, with incidence rates relatively high in New South Wales and South Australia.

Figure 12.7 Incidence rates of compensated forklift related injury claims^a

Claims per 1000 workers: 2003-04 to 2007-08^p



^p preliminary data. ^a The numbers for the ACT excludes the ACT government as no data were recorded during this period.

Data source: Data provided by Safe Work Australia with permission from state and territory governments.