ANALYSIS OF BIANNUAL DATA FROM

ACCREDITED CONTRACTORS FOR THE

JANUARY TO JUNE 2010

REPORTING PERIOD

Australian Government Building and Construction OHS Accreditation Scheme

January – June 2010

Contents

[1 Executive Summary 3](#_Toc294789902)

[1.1 OFSC Objectives 3](#_Toc294789903)

[1.2 Limitations 3](#_Toc294789904)

[1.3 Significant Achievements 3](#_Toc294789905)

[1.4 Room for Improvement 4](#_Toc294789906)

[2 Background 4](#_Toc294789907)

[2.1 Number of Accredited Contractors 4](#_Toc294789908)

[2.2 Number of Projects 5](#_Toc294789909)

[2.3 Number Employed/Hours Worked 5](#_Toc294789910)

[3 Analysis 6](#_Toc294789911)

[3.1 Fatalities 6](#_Toc294789912)

[3.2 Injury Frequency Rate 6](#_Toc294789913)

[3.2.1 Lost Time Injury Frequency Rate (LTIFR) 6](#_Toc294789914)

[3.2.2 Medically Treated Injury Frequency Rate (MTIFR) 8](#_Toc294789915)

[3.3 Profile of Injuries 8](#_Toc294789916)

[3.4 High risk Construction Work 9](#_Toc294789917)

[4 Workers’ Compensation 11](#_Toc294789918)

[5 Positive Performance Indicators 11](#_Toc294789919)

[6 Glossary 13](#_Toc294789920)

# Executive Summary

This report provides an overview and analysis of data collected from companies accredited under the Australian Government Building and Construction OHS Accreditation Scheme (the Scheme) for the period January to June 2010. Comparisons are also made with data collected in previous biannual periods where appropriate.

## OFSC Objectives

Established in 2005, the Federal Safety Commissioner works with industry and government stakeholders towards achieving the highest possible occupational health and safety standards on Australian building and construction projects.

The key functions of the FSC (and the office) include:

* promoting sustainable OHS cultural change in the building and construction industry;
* developing and administering the Australian Government Building and Construction OHS Accreditation Scheme; and
* identifying and progressing initiatives to improve OHS performance.

The Office of the Federal Safety Commissioner (OFSC) is part of the Department of Education, Employment and Workplace Relations. The OFSC aims to promote and improve OHS in the Australian building and construction industry, by providing administrative support to the functions of the Federal Safety Commissioner.

## Limitations

Prior to the introduction of biannual reporting in the December 2007 reporting period, data was not split by type of project (Scheme / non-Scheme). As a consequence, direct comparisons between biannual data and annual data are not practicable.

Where possible comparisons with industry-wide data are provided, however, the availability of this data is limited and is often not available until much later than the data reported by the Office of the Federal Safety Commissioner (OFSC).

Not all accredited companies provided biannual data for this report.

## Significant Achievements

There was one Scheme project fatality and zero non-Scheme project fatalities in this biannual reporting period. It should be noted that the frequency rates for accredited companies are inflated as hours for projects less than $3 million are not included even though all fatalities for these companies are.

For the January – June 2010 period, around 68 per cent of all accredited contractors undertaking **Scheme projects** reported no LTI’s, while around 88 per cent were below the mean LTIFR for Scheme projects.

For the same period, around 38 per cent of all accredited contractors undertaking **non-Scheme projects** reported no LTI’s, while around 68 per cent were below the mean LTIFR for non-Scheme projects.

## Room for Improvement

The top three mechanism of incident groups accounted for 74.8 per cent of all incidents for the January – June 2010 reporting period. The breakdown for these three groups is:

26.7 per cent – Group 4 (body stressing);

26.0 per cent – Group 0 (falls, trips and slips of a person);

22.1 per cent – Group 2 (being hit by moving objects).

# Background

## Number of Accredited Contractors

Line Graph showing the number of accredited contractors. The X-axis represents the period the Y-axis the number of accredited contractors.

- Number of accredited contractors (blue line) steadily increasing from approximately 67 to 184 
- Number of contractors with nil projects (pink line) rising from approximately 3 to 20. 

These figures have been collected from periods July to December 2007 to January to June 2010.

Between the June 2009 and June 2010 reporting periods there was a 26 per cent increase in the number of accredited contractors providing biannual data, with 146 accredited contractors reporting in the June 2009 period and 184 reporting in the June 2010 period[[1]](#footnote-1). Of the 184 accredited contractors reporting in the June 2010 period, 20 reported nil projects[[2]](#footnote-2) compared to 16 in the June 2009 period.

## Number of Projects

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Period** | **Number of Accredited contractors**  **with Scheme projects** | **Number of Scheme projects** | **Number of Accredited contractors with Non-Scheme projects** | **Number of Non-Scheme projects** |
| Jul to Dec 2007 | 25 | 42 | 58 | 1,019 |
| Jan to Jun 2008 | 32 | 71 | 85 | 1,212 |
| Jul to Dec 2008 | 44 | 103 | 107 | 1,416 |
| Jan to Jun 2009 | 61 | 128 | 124 | 1,730 |
| Jul to Dec 2009 | 75 | 183 | 145 | 2,170 |
| Jan to Jun 2010 | 94 | 249 | 153 | 2,255 |

Between the June 2009 and June 2010 reporting periods the number of Scheme projects increased 95 per cent, while the number of accredited contractors undertaking these projects increased 54 per cent.

Over the same time, the number of non-Scheme projects increased 30 per cent, while the number of accredited contractors undertaking these projects increased 23 per cent.

## Number Employed/Hours Worked

From mid 2009, accredited contractors were asked to report head contractor employees [overall] and the number of hours worked on both Scheme projects and non-Scheme projects valued at $3 million or more.

In previous periods, accredited contractors reported the number of head contractor employees and subcontractors for both Scheme and non-Scheme projects. Collection of this data by accredited companies was problematic and was discontinued in favour of the collection of hours worked data to provide more consistently accurate Lost Time Injury Frequency Rate (LTIFR) and Medically Treated Injury Frequency Rate (MTIFR) estimates. Hours worked data also had the additional benefit of providing a better indication of the size and level of activity on projects.

Total hours reported covers projects valued at $3 million or more and therefore does not provide a comprehensive picture of accredited company activity.

|  |  |  |  |
| --- | --- | --- | --- |
| **Period** | **Scheme projects**  **(million hours)** | **Non-Scheme projects**  **valued at $3 million or more**  **(million hours)** | **All projects**  **(million hours)** |
| Jul to Dec 2009 | 14.57 | 93.56 | 108.13 |
| Jan to Jun 2010 | 22.92 | 127.58 | 150.50 |

# Analysis

## Fatalities

In line with the change to record hours worked rather than employees, the fatalities figures have been adjusted to show the fatalities frequency rate instead of the incident rate.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Period** | **Number of Fatalities on Scheme projects** | **Fatalities**  **frequency**  **rate on Scheme projects** | **Number of Fatalities on Non-Scheme projects** | **Fatalities**  **frequency**  **rate on Non-Scheme projects** | **Number of Fatalities on all projects** | **Fatalities**  **frequency**  **rate on all projects** |
| Jul to Dec 2007 | 1 | NA | 0 (1[[3]](#footnote-3)) | NA | 1 (13) | NA |
| Jan to Jun 2008 | 0 | NA | 6 | NA | 6 | NA |
| Jul to Dec 2008 | 0 | NA | 4 (23) | NA | 4 (23) | NA |
| Jan to Jun 2009 | 1 | NA | 4 (23) | NA | 5 (23) | NA |
| Jul to Dec 2009 | 0 | 0.00 | 1(23) | 1.07 | 1(23) | 0.92 |
| Jan to Jun 2010 | 1 | 4.36 | 0 | 0.00 | 1 | 0.66 |

There was one Scheme project fatality and zero non-Scheme project fatalities in the latest biannual reporting period.

It should be noted that the frequency rates for accredited companies are significantly inflated as hours for projects less than $3 million are not included even though all fatalities for these companies are included.

## Injury Frequency Rate

### Lost Time Injury Frequency Rate (LTIFR)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Period** | **LTIFR Median on Scheme projects** | **LTIFR Arithmetic**  **Mean on Scheme projects** | **LTIFR Winsorized**  **Mean on Scheme projects** | **LTIFR Median on Non-Scheme projects** | **LTIFR Arithmetic**  **Mean on Non-Scheme projects** | **LTIFR Winsorized**  **Mean on Non-Scheme projects** |
| Jul to Dec 2007 | 0.00 | 6.94 | 4.04 | 4.65 | 10.06 | 7.52 |
| Jan to Jun 2008 | 0.00 | 9.24 | 8.72 | 4.95 | 10.41 | 9.05 |
| Jul to Dec 2008 | 0.00 | 7.44 | 6.21 | 4.65 | 12.22 | 7.36 |
| Jan to Jun 2009 | 0.00 | 12.86 | 10.35 | 3.50 | 11.54 | 6.10 |
| Jul to Dec 2009 | 0.00 | 9.36 | 7.68 | 3.00 | 11.61 | 8.28 |
| Jan to Jun 2010 | 0.00 | 21.99 | 3.21 | 3.73 | 11.34 | 8.61 |

The mean LTIFR for Scheme projects for the June 2010 biannual reporting period increased significantly compared with the corresponding period for the previous year, while the mean LTIFR for non-Scheme projects remained stable.

The median LTIFR for Scheme projects has remained at zero for all biannual reporting periods, while the median LTIFR for non-Scheme projects increased in the June 2010 period compared to the June 2009 period.

As both Scheme and non-Scheme projects may have a few very high LTIFR values (outliers)[[4]](#footnote-4), the Winsorized mean (see Glossary) is also calculated as it is regarded as a more robust estimator of the central tendency because it is less sensitive to outliers. The Winsorized mean for Scheme projects for the current period was the lowest yet recorded (3.21), while for non-Scheme projects the Winsorized mean increased compared to the June 2009 period.

For the June 2010 period, around 68 per cent of all accredited contractors undertaking Scheme projects reported no LTI’s, while around 88 per cent were below the mean LTIFR for Scheme projects (Chart 2).

For the same period, around 38 per cent of all accredited contractors undertaking non-Scheme projects reported no LTI’s, while around 68 per cent were below the mean LTIFR for non-Scheme projects (Chart 3).

Line Graph showing the LTIFR of Scheme projects for the June 2010 period. The X-axis represents the percentile, the Y-Axis the LTIFR.

The mean LTIFR is represented by a straight horizontal line at approximately 23 on the y axis. The Percentile line begins on the y axis at over 100 and intersects the mean at approximately 10. This line reaches zero at approximately the 32nd percentile.
Line Graph showing the LTIFR of non-Scheme projects for the June 2010 period. The X-axis represents the percentile, the Y-Axis the LTIFR.

The mean LTIFR is represented by a straight horizontal line at approximately 12 on the y axis. The Percentile line begins on the y axis at approximately 90 and intersects the mean at approximately 33. This line reaches zero at approximately the 62nd percentile.

### Medically Treated Injury Frequency Rate (MTIFR)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Period** | **MTIFR Median on Scheme projects** | **MTIFR Arithmetic**  **Mean on Scheme projects** | **MTIFR Winsorized**  **Mean on Scheme projects** | **MTIFR Median on Non-Scheme projects** | **MTIFR Arithmetic**  **Mean on Non-Scheme projects** | **MTIFR Winsorized**  **Mean on Non-Scheme projects** |
| Jul to Dec 2007 | 0.00 | 12.06 | 9.53 | 19.90 | 26.23 | 23.32 |
| Jan to Jun 2008 | 0.00 | 18.06 | 16.29 | 19.00 | 29.39 | 24.36 |
| Jul to Dec 2008 | 2.78 | 21.79 | 14.50 | 13.18 | 21.10 | 16.67 |
| Jan to Jun 2009 | 8.58 | 33.93 | 22.78 | 14.32 | 26.82 | 17.21 |
| Jul to Dec 2009 | 13.04 | 21.84 | 16.62 | 18.17 | 38.51 | 28.73 |
| Jan to Jun 2010 | 0.00 | 34.67 | 16.95 | 21.03 | 40.15 | 28.45 |

Between the June 2009 and June 2010 reporting periods, Scheme median MTIFR decreased significantly although the mean remained relatively constant, while all non-Scheme project MTIFR averages increased significantly due to some very high MTIFR values.

For the June 2010 period, around 52 per cent of all accredited contractors undertaking Scheme projects reported no MTI’s, while around 77 per cent were below the mean MTIFR for Scheme projects (Chart 4).

For the same period, around 25 per cent of all accredited contractors undertaking non-Scheme projects reported no MTI’s, while around 72 per cent were below the mean MTIFR for non-Scheme projects (Chart 5).

Line Graph showing the MTIFR of Scheme projects for the June 2010 period. The X-axis represents the percentile, the Y-Axis the MTIFR.

The mean MTIFR is represented by a straight horizontal line at approximately 35 on the y axis. The Percentile line begins on the y axis at over 100 and intersects the mean at approximately 23. This line reaches zero at approximately the 48th percentile.Line Graph showing the MTIFR of non-Scheme projects for the June 2010 period. The X-axis represents the percentile, the Y-Axis the MTIFR.

The mean MTIFR is represented by a straight horizontal line at approximately 40 on the y axis. The Percentile line begins on the y axis at over 100 and intersects the mean at approximately 28. This line reaches zero at approximately the 75th percentile.

## Profile of Injuries

Accredited contractors are required to report lost time incidents based on the mechanism of incident classification groups contained in the Type of Occurrence Classification System, Version 3.1 (TOOCS3.1) published by Safe Work Australia.

The mechanism of incident classification is intended to identify the overall action, exposure or event that best describes the circumstances that resulted in the most serious injury or disease. Accredited contractors report at the major group classification level (see Glossary).

For the June 2010 reporting period, 592 incidents were reported by 97 accredited contractors compared to 624 incidents by 92 accredited contractors in the June 2009 reporting period, a decrease of 5 per cent in the number of incidents.

The top three mechanism of incident groups accounted for 74.8 per cent of all incidents for the January – June 2010 reporting period. The breakdown for these three groups is:

26.7 per cent – Group 4 (body stressing);

26.0 per cent – Group 0 (falls, trips and slips of a person);

22.1 per cent – Group 2 (being hit by moving objects).

Group 9 – Vehicle incidents and other had the largest variation in incidents with a decrease of 34.7 per cent compared to the June 2009 period, while Group 2 – Being hit by moving objects increased 22.4 per cent.

Pie Chart demonstrating the mechanism of incident for the June 2010 period.
Group 0 - Falls, trips and slips of a person  26%
Group 1 - Hitting objects with a part of the body  15.4%
Group 2 - Being hit by moving objects  21.1%
Group 4 - Body stressing  26.7%
Group 9 - Vehicle incidents and other  5.4%
Group 3, 5, 6, 7 and 8  4.4%


## High risk Construction Work

Accredited contractors are required to report if they performed any ‘high-risk construction work’ as described in the National Standard For Construction Work [NOHSC:1016 (2005)] published by Safe Work Australia and indicate whether any such work resulted in an injury or near miss event that required the accredited contractor to notify the relevant OHS authority (under the OHS legislation covering notifiable incidents) in the jurisdiction in which the project was undertaken.

The objective of this national standard is to protect persons from the hazards associated with construction work. It assigns responsibilities to individuals to identify these hazards and either eliminate them, or where this is not reasonably practicable, minimise the risks they pose. There are 19 hazards that have been identified as high-risk construction work (see Glossary).

Pie Chart demonstrating High risk construction work notifiable incidents for the June 2010 period
Category 1 - construction work where there is a risk of a person falling two metres or more  21.7%
Category 3 - construction work involving demolition  1.9%
Category 10 - construction work on or near pressurised gas distribution mains and consumer piping  2.4%
Category 12 - construction work on or near energised electrical installations and services  19.8%
Category 15 - construction work on or adjacent to roadways or railways used by road or rail traffic  4.8%
Category 16 - work on construction sites where there is any movement of powered mobile plant  34.3%
Categories 2, 4 - 9, 11, 13 - 14 and 17 – 19  15.0%


* There were 207 notifiable incidents reported by 51 accredited contractors to the relevant jurisdiction OHS authority for the June 2010 reporting period, compared to 240 notifiable incidents by 49 accredited contractors in the June 2009 period. It should be noted that with the number of accredited contractors reporting increasing from 146 in the June 2009 period to 184 in the June 2010 period, **the number of notifiable incidents has fallen significantly in relative terms.**
* The top three notifiable incidents accounted for 75.8 per cent of all incidents for the June 2010 period compared to 61.3 per cent in the June 2009 period.
* Work on construction sites where there is any movement of powered mobile plant was the most common incident (34.3 per cent) an increase of 8.5 percentage points compared to June 2009; followed by construction work where there is a risk of a person falling two metres or more (21.7 per cent) an increase of 8.8 percentage points compared to June 2009.

# Workers’ Compensation

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Period** | **Mean premium rate ACT %** | **Mean premium rate NSW %** | **Mean premium rate NT %** | **Mean premium rate QLD %** | **Mean premium rate SA %** | **Mean premium rate TAS %** | **Mean premium rate VIC %** | **Mean premium rate WA %** |
| Accredited companies | Jul to Dec 2007 | 5.589 | 3.069 | 2.675 | 1.346 | 2.940 | . | 3.098 | 2.496 |
| Jan to Jun 2008 | 4.962 | 3.508 | 2.355 | 1.438 | 3.037 | . | 2.054 | 3.348 |
| Jul to Dec 2008 | 4.274 | 3.106 | 2.261 | 1.568 | 3.750 | 1.087 | 2.297 | 2.066 |
| Jan to Jun 2009 | 3.742 | 2.811 | 1.973 | 1.117 | 3.832 | 1.155 | 2.289 | 2.342 |
| Jul to Dec 2009 | 3.849 | 3.351 | 2.376 | 1.424 | 3.695 | 1.302 | 2.202 | 1.948 |
| Jan to Jun 2010 | 3.521 | 2.975 | 2.372 | 1.316 | 3.560 | 1.475 | 2.270 | 1.731 |
|  | House construction June 2009[[5]](#footnote-5) | NA | 5.169 | NA | 2.333 | 3.3 | 3.52 | 1.945 | 1.17 |
|  | Non-residential construction June 20095 | NA | 4.028 | NA | 2.333 | 3.4 | 3.52 | 2.651 | 2.32 |

* Between the June 2009 and the June 2010 reporting periods, the mean premium rates for accredited contractors increased for New South Wales, Northern Territory, Queensland and Tasmania; and decreased for the Australian Capital Territory, South Australia, Victoria and Western Australia.
* For comparative purposes, the latest available premium rates for house construction and non-residential construction across most jurisdictions have been included. At 30 June 2009, the mean premium rates for accredited contractors were below those for the non-residential construction industry, except South Australia and Western Australia; and also below those for house construction except South Australia, Victoria and Western Australia.

# Positive Performance Indicators

Positive performance indicators (PPIs) are measures of actions or initiatives introduced to prevent workplace injury and disease. Accredited contractors report details of PPIs, as well as details of any peer or industry recognition for OHS performance, and details of any key OHS initiatives implemented during the reporting period.

Examples of these indicators, recognition and initiatives for the June 2009 reporting period are provided below. It is important to note that information on PPIs is provided as free text so the response percentage is likely to understate the number of contractors that implement these PPIs.

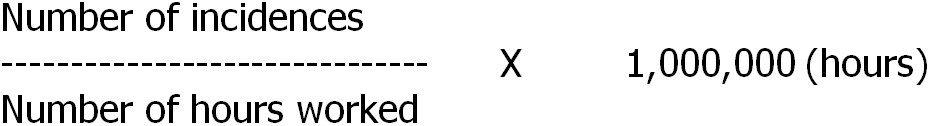
|  |  |
| --- | --- |
| **Positive performance indicators** | **Frequency of response** |
| Audit programs conducted | 39% |
| Toolbox meetings | 26% |
| Government / Building Association nominations / awards | 14% |
| OHS training to a Certificate III or better by employees | 3% |
| Emergency Drills / Evacuation Plans | 0% |
| Implementation of drug and alcohol programs | 3% |

* Results for the June 2010 period were generally fewer when compared to the last biannual period for most PPIs. Toolbox meetings increased 4 percentage points and OHS training to Certificate III or better by employees decreased 5 percentage points.
* Many companies did however; indicate the implementation of new or upgraded OHS / risk management systems and or training courses during the reporting period, which should see a positive flow-on effect in subsequent periods.
* It should be noted that these responses are via free test and some companies see different initiatives as positive indicators.

# Glossary

Arithmetic mean (average) - The mean is the sum of all the scores divided by the number of scores.

Frequency rate - Frequency rates are calculated as follows:



High risk construction work hazards –

1. Construction work where there is a risk of a person falling two metres or more
2. Construction work on telecommunications towers
3. Construction work involving demolition
4. Construction work involving the disturbance or removal of asbestos
5. Construction work involving structural alterations that require temporary support to prevent collapse
6. Construction work involving a confined space
7. Construction work involving excavation to a depth greater than 1.5 metres
8. The construction of tunnels
9. Construction work involving the use of explosives
10. Construction work on or near pressurised gas distribution mains and consumer piping
11. Construction work on or near chemical, fuel or refrigerant lines
12. Construction work on or near energised electrical installations and services
13. Construction work in an area that may have a contaminated or flammable atmosphere
14. Tilt-up and precast concrete construction work
15. Construction work on or adjacent to roadways or railways used by road or rail traffic
16. Work on construction sites where there is any movement of powered mobile plant
17. Construction work in an area where there are artificial extremes of temperature
18. Construction work in, over or adjacent to water or other liquids where there is a risk of drowning
19. Construction work involving diving

Incident - An incident resulting in an injury that is required to be notified by the OHS legislative requirement for notifiable incidents in the jurisdiction in which the project is being undertaken.

LTIFR (Lost Time Injury Frequency Rate) - The number of occurrences of lost time injury that result in a fatality, a permanent disability or time lost from work of one day shift or more in the period. The number of hours worked refers to the total number of hours worked by all workers in the period, including overtime and extra shifts.

Mechanism of incident classification–

Major Groups

1. Falls, trips and slips of a person
2. Hitting objects with a part of the body
3. Being hit by moving objects
4. Sound and pressure
5. Body stressing
6. Heat, electricity and other environmental factors
7. Chemicals and other substances
8. Biological factors
9. Mental stress
10. Vehicle incidents and other

Median - The median is the middle of a distribution; half the scores are above the median and half are below the median. If the number of values in the data set is even, then the median is the average of the two middle values. The median is less sensitive to extreme scores than the average.

MTIFR (Medically Treated Injury Frequency Rate) - The number of occurrences of treatment by, or under the order of, a qualified medical practitioner, or any injury that could be considered as being one that would normally be treated by a medical practitioner. The number of hours worked refers to the total number of hours worked by all workers in the period, including overtime and extra shifts.

Non-Scheme projects – Projects where the accredited contractor is the head contractor, the value of building work is $3 million or more, and the project is not a Scheme project.

Scheme projects - Projects that are directly funded by the Australian Government with a value of $3 million or more, plus, projects that are indirectly funded by the Australian Government where:

* the value of the Australian Government contribution to the project is at least $5 million and represents at least 50 per cent of the total construction project value; or
* the Australian Government contribution to a project is $10 million or more, irrespective of the proportion of Australian Government funding.

Winsorized mean - involves the calculation of the mean after replacing given parts of a distribution at the high and low end with the most extreme remaining values, typically replacing an equal amount of both ends. Often 5 per cent of the ends are replaced. The Winsorized mean is a useful estimator because it is less sensitive to outliers than the mean but will still give a reasonable estimate of central tendency.

1. For the January to June 2010 biannual reporting period there were 194 accredited contractors of which 184 submitted biannual activity reports. For the July to December 2009 biannual reporting period there were 177 accredited contractors of which 166 submitted biannual activity reports. In all other biannual periods, all accredited contractors submitted their biannual activity reports. [↑](#footnote-ref-1)
2. Nil projects with a contract value of $3 million or more. [↑](#footnote-ref-2)
3. Fatalities due to heart attack or other natural causes. [↑](#footnote-ref-3)
4. High frequency rates normally occur when an incident or incidents are recorded, but the number of hours worked are significantly less than one million. For example, if 5 incidents are recorded and 5,000 hours are worked in the period, the frequency rate would be 1,000. [↑](#footnote-ref-4)
5. *Source:* Safe Work Australia publication Comparison of Workers’ Compensation Arrangements in Australia and New Zealand February 2010, Table 4.4 Selected Industry Premium Rates as at 30 June 2009, page 60. [↑](#footnote-ref-5)