

**ANALYSIS OF BIENNIAL DATA FROM
ACCREDITED CONTRACTORS FOR THE
JANUARY TO JUNE 2010
REPORTING PERIOD**

Australian Government Building and Construction
OHS Accreditation Scheme

January – June 2010

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1 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.

1.1 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.

1.2 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.

1.3 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.

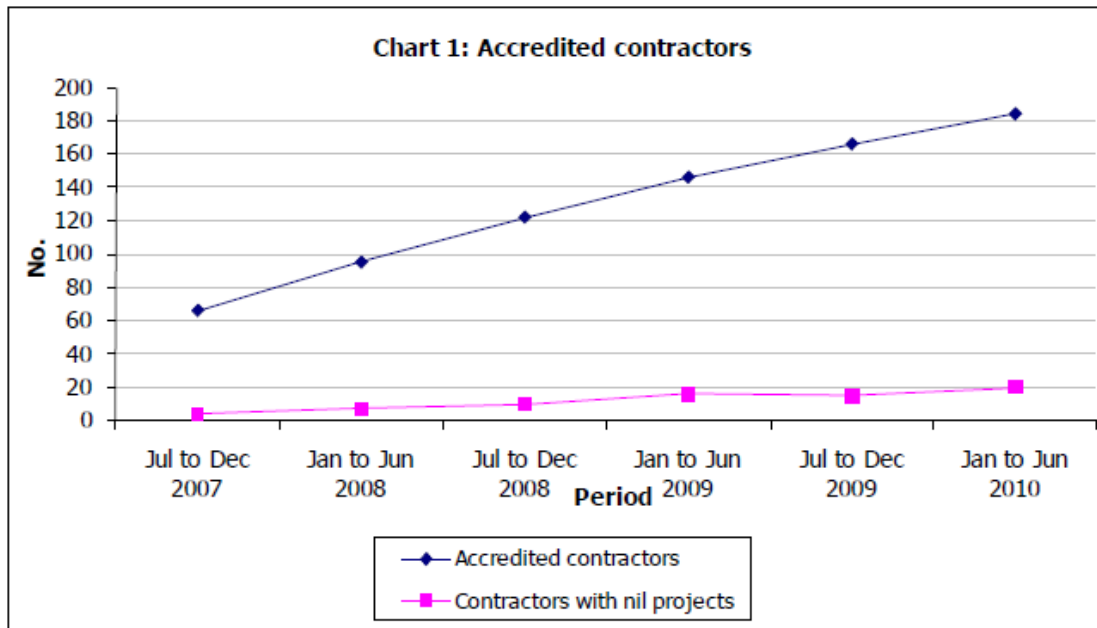
1.4 Room for Improvement

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).

2 Background

2.1 Number of Accredited Contractors



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 period¹. Of the 184 accredited contractors reporting in the June 2010 period, 20 reported nil projects² compared to 16 in the June 2009 period.

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.

² Nil projects with a contract value of \$3 million or more.

2.2 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.

2.3 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

3 Analysis

3.1 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)	NA	1 (1 ³)	NA
Jan to Jun 2008	0	NA	6	NA	6	NA
Jul to Dec 2008	0	NA	4 (2 ³)	NA	4 (2 ³)	NA
Jan to Jun 2009	1	NA	4 (2 ³)	NA	5 (2 ³)	NA
Jul to Dec 2009	0	0.00	1(2 ³)	1.07	1(2 ³)	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.

3.2 Injury Frequency Rate

3.2.1 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.

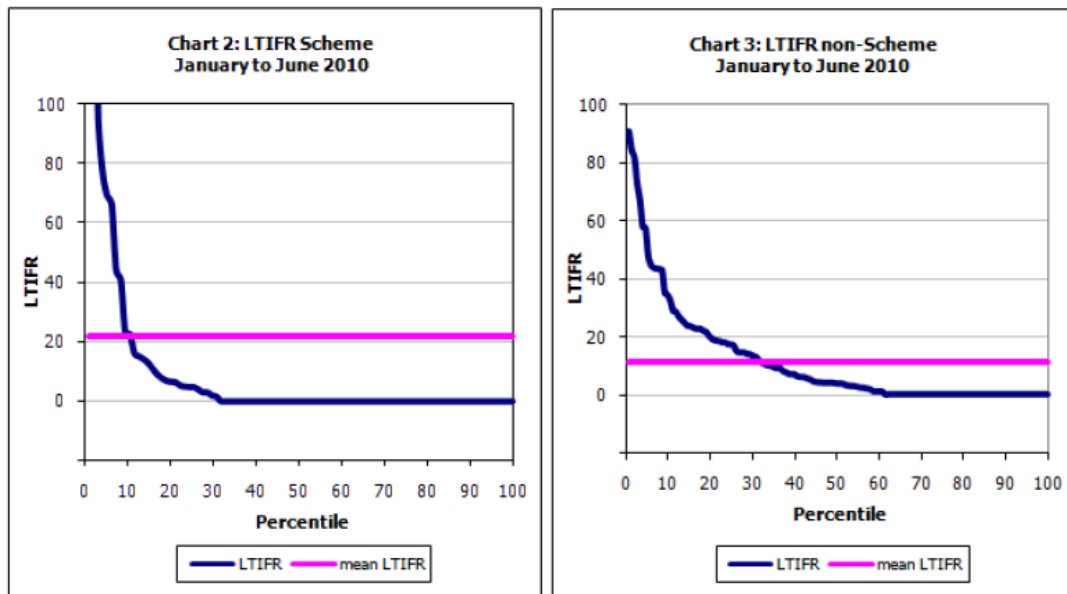
³ Fatalities due to heart attack or other natural causes.

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, 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).



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.

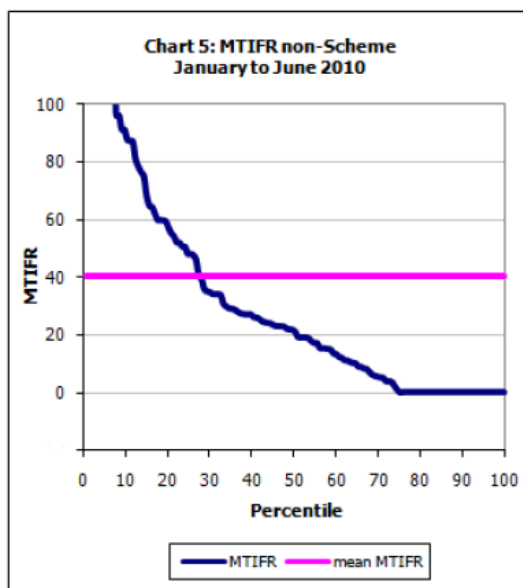
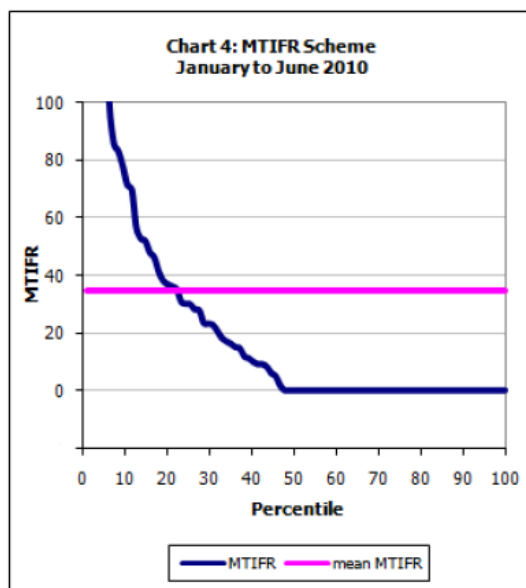
3.2.2 Medically Treated Injury Frequency Rate (MTIFR)

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).



3.3 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.

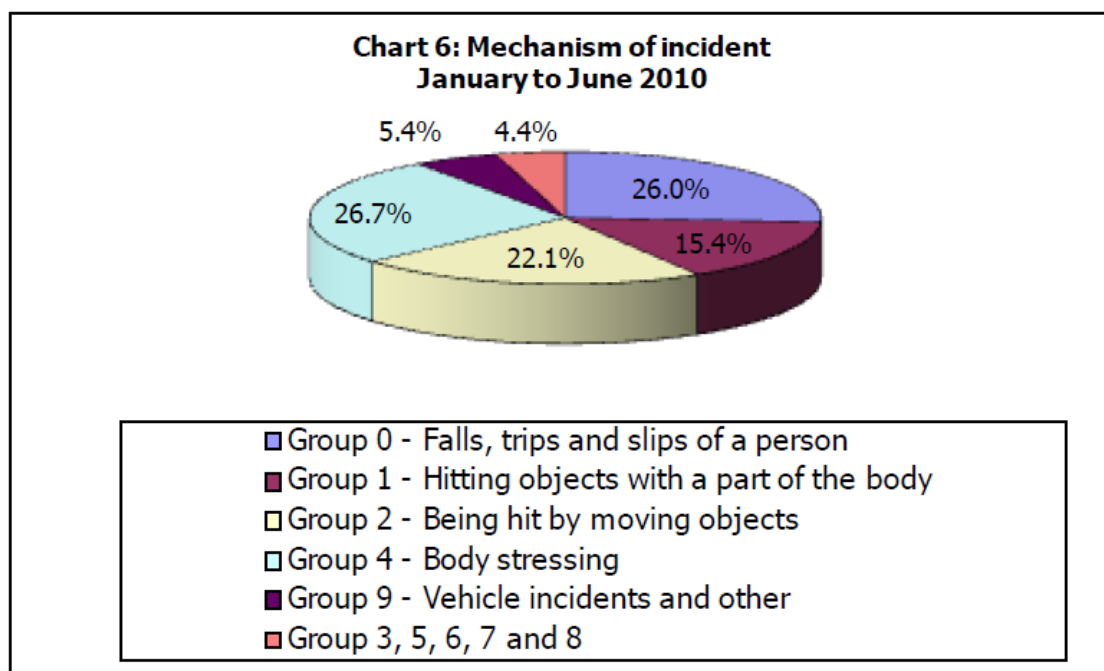
The *mechanism of incident* classification is intended to identify the overall action, exposure or event that best describes the circumstances that resulted in the most serious injury or disease. Accredited contractors report at the major group classification level (see Glossary).

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.

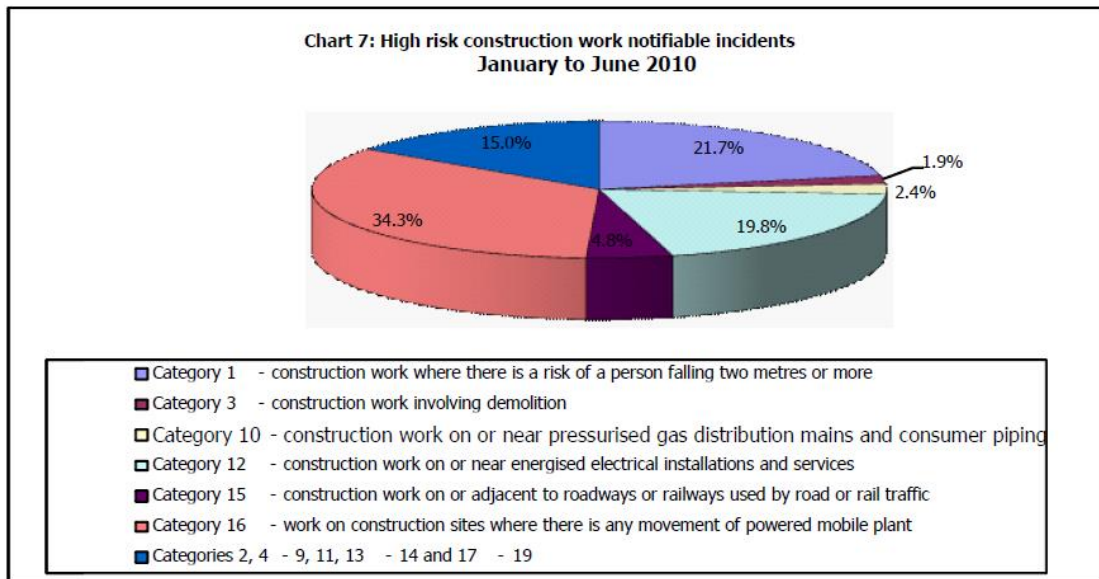


3.4 High risk Construction Work

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).



- 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.

4 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	NA	5.169	NA	2.333	3.3	3.52	1.945	1.17
	Non-residential construction June 2009 ⁵	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.

5 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

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.

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.

6 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:

$$\frac{\text{Number of incidences}}{\text{Number of hours worked}} \times 1,000,000 \text{ (hours)}$$

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

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