

**ANALYSIS OF BIANNUAL DATA FROM
ACCREDITED CONTRACTORS FOR THE
JANUARY TO JUNE 2009
REPORTING PERIOD**

Australian Government Building and Construction
OHS Accreditation Scheme

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1 INTRODUCTION

The role of the Federal Safety Commissioner (FSC) is to promote and foster improved occupational health and safety in the Australian building and construction industry, so that work is performed safely, as well as on time and on budget. The powers and functions of the FSC are outlined in the *Building and Construction Industry Improvement Act 2005* (BCII Act). The FSC is supported by the Office of the Federal Safety Commissioner (OFSC).

A key function of the OFSC has been to develop, implement and administer the Australian Government Building and Construction OHS Accreditation Scheme (the Scheme). Through the Scheme, the OFSC is using the power and influence of the Australian Government as a major client and provider of capital in the building and construction industry, to promote and improve positive health and safety outcomes.

2 SCHEME THRESHOLDS

Scheme thresholds apply to directly funded Australian Government projects with a value of \$3 million or more and include indirectly funded Australian Government building projects where:

- The value of the Australian Government contribution to a 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.

Building work is considered directly funded where the Australian Government or a Commonwealth authority enters into a contract with persons who will carry out the building work, or who may arrange for the building work to be carried out.

Building work is considered indirectly funded where it is funded by the Australian Government or a Commonwealth authority through grants or other programs. This includes building projects where the Australian Government provides funding through a funding agreement or grants to a body that may then contract with persons who will undertake the building work or arrange for the building work to be carried out.

3 REPORTING

Under Regulation 14 of the *Building and Construction Industry Improvement (Accreditation Scheme) Regulations 2005* (the Regulations), it is a condition of accreditation under the Scheme that accredited contractors comply with the reporting requirements of the OFSC.

Each accredited contractor is required to lodge biannual activity reports to document the operation of their OHS management systems, even when no Scheme projects are currently being undertaken. The biannual report collects updated figures on a defined set of measures and is used to help the OFSC to assess the current OHS status of all accredited contractors, and to determine trends in accredited contractor OHS performance.

This report provides an overview and analysis of data collected from biannual activity reports for the period January to June 2009. Comparisons are also made with data collected in previous biannual periods.

Data provided by accredited companies that is used in this report, apart from workers compensation data, generally excludes reports of injury from disease. Workers compensation data industry rates indicate that around a quarter of claims are disease-related.¹

Please note that data provided to the OFSC by accredited contractors has not been the subject of independent audit or verification but is checked for consistency. Some historical data has been subject to revision and may differ from previously published data.

4 ANALYSIS

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 these data are limited and are often not available until much later than the data reported by the OFSC.

4.1 Contractors accredited

- Between the June 2008 and June 2009 reporting periods there has been a 53 per cent increase in the number of accredited contractors providing biannual data, with 95 accredited contractors reporting in the June 2008 period and 145 reporting in the June 2009 period².
- Of the 145 accredited contractors reporting in the June 2009 period, 16 (11 per cent) reported nil projects compared to seven (7 per cent) in the June 2008 period.

4.2 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	123	1,714

¹ Compendium of Worker's Compensation Statistics Australia 2006-07 release by Safe Work Australia March 2009.

² For the January to June 2009 biannual reporting period there were 146 accredited contractors of which 145 submitted biannual activity reports. In previous biannual periods, all accredited contractors submitted their biannual activity reports.

- Between the June 2008 and June 2009 reporting periods the number of Scheme projects increased 80 per cent, while the number of accredited contractors undertaking these projects increased 91 per cent.
- Over the same time, the number of non-Scheme projects increased 41 per cent, while the number of accredited contractors undertaking these projects increased 45 per cent.

4.3 Number employed

For the June 2009 reporting period, accredited contractors were asked to report head contractor employees [overall] and the number of hours worked on both Scheme projects and non-Scheme projects³.

In previous periods, accredited contractors reported the number of head contractor employees and sub-contractors for both Scheme and non-Scheme projects. As a consequence of this change, employment data for the June 2009 reporting period are modelled estimates⁴.

Period	Number of Head contractor employees on Scheme Projects	Number of Sub-contractors on Scheme Projects	Number of Head contractor employees On Non-Scheme projects	Number of Sub-contractors on Non-Scheme projects	Number of workers on All projects
Jul to Dec 2007	1,562	20,492	37,736	200,587	260,377
Jan to Jun 2008	769	13,652	54,921	228,764	298,106
Jul to Dec 2008	6,053	20,338	77,194	230,752	334,337
Jan to Jun 2009	7,286	24,406	65,649	274,225	371,566

- The total number of workers employed or contracted for Scheme projects increased nearly 120 per cent between the June 2008 and June 2009 reporting periods (from 14,421 to 31,692 workers).
- The total number of workers employed or contracted for non-Scheme projects increased from 283,685 to 339,874 over the same period, an increase of 20 per cent.
- The total number of workers employed or contracted by accredited head contractors for the June 2009 reporting period accounted for approximately 53 per cent of all construction industry workers (the total number of construction industry employees was estimated as 701,223⁵) compared to around 43 per cent for the June 2008 reporting period.

³ The rationale behind this change was to provide more consistently accurate Lost Time Injury Frequency Rate and Medically Treated Injury Frequency Rate estimates. Also, feedback from accredited contractors indicated that provision of hours worked data rather than employee numbers data was less problematic.

⁴ Head contractor employees reported were prorated across Scheme and non-Scheme projects based on a predicted value for Scheme project employees using existing data. Sub-contractor estimates are adjusted forecast values based on an overall employment forecast using existing data, less head contractor employees.

⁵ Source: ABS publication no. 6291.0.55.003 – Labour Force, Australia, Detailed, Quarterly, Table 04: Employed persons by Industry. Construction industry stock, original. Calculated as 71 per cent of the

4.4 Fatalities

Period	Number of Fatalities on Scheme projects	Fatalities incidence rate on Scheme projects	Number of Fatalities on Non-Scheme projects	Fatalities incidence rate on Non-Scheme projects	Number of Fatalities on all projects	Fatalities incidence rate on all projects	Number of Fatalities from construction industry data ⁶	Fatalities incidence rate from construction industry data ⁶
Jul to Dec 2007	1	4.53	0 (1 ⁷)	0.00	1 (1 ⁷)	0.38	20	2.98
Jan to Jun 2008	0	0.00	6	2.12	6	2.01	15	2.14
Jul to Dec 2008	0	0.00	4 (2 ⁷)	1.30	4 (2 ⁷)	1.20	19	2.71
Jan to Jun 2009	1	3.16 ⁸	4 (2 ⁷)	1.18 ⁸	5 (2 ⁷)	1.35 ⁸	12	1.71

- There was one Scheme project fatality in the latest biannual reporting period leading to one Scheme project fatality for the 2008-09 financial year.
- Non-Scheme project fatalities decreased by one third between the June 2008 and June 2009 reporting periods. The incidence rate also decreased significantly and was well below the incidence rate of the construction industry overall.
- The fatalities incidence rates for all projects undertaken by accredited contractors are generally well below those of the construction industry for all biannual periods.

4.5 Injury frequency rates

4.5.1 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	3.58	11.64	6.15

- The mean LTIFR for Scheme projects was higher than the mean LTIFR for non-Scheme projects for the first time in the June 2009 period (due in part to a significant increase in the number of Scheme projects and the number of

average population for that biannual period. The estimated populations for the construction Industry overall were: July to December 2007 – 670,118 employees; January to June 2008 - 699,888 employees; July to December 2008 - 701,663 employees and January to June 2009 – 701,223 employees.

⁶ Excludes fatalities due to heart attack. *Source:* Safe Work Australia industry of workplace fatalities data extracted from their published Notified Fatalities Reports. See Footnote 5 for details on the denominator for the calculation of the fatalities incidence rate.

⁷ Fatalities due to heart attack.

⁸ Fatalities incidence rates for the January to June 2009 biannual period were calculated using estimated populations for both total Scheme project workers and total non-Scheme project workers as the denominators. Consequently, these data are at best indicative and should be treated with some caution. Refer to section 4.3 – Number employed.

accredited contractors undertaking Scheme projects); however the median LTIFR at zero for Scheme projects was well below that for non-Scheme projects. This indicates a high proportion of Scheme projects are reporting nil lost time injuries (LTI's).

- The median LTIFR for Scheme projects has remained at zero over the last four biannual reporting periods, while the median LTIFR for non-Scheme projects decreased in the June 2009 period to an all-time low of 3.58.
- As both Scheme and non-Scheme projects had extreme LTIFR values, the Winsorized mean was also calculated as it is regarded as a more robust estimator of the central tendency because it is less sensitive to outliers (see Glossary). Between the June 2008 and June 2009 reporting periods, the 90 per cent Winsorized mean for LTIFR increased for Scheme projects and decreased for non-Scheme projects.
- For the June 2009 period, around 54 per cent of all accredited contractors undertaking Scheme projects reported no LTI's, while around 69 per cent were below the mean LTIFR for Scheme projects (Chart 2); compared to 59 per cent and 72 per cent respectively for the June 2008 period.
- For the same period, around 34 per cent of all accredited contractors undertaking non-Scheme projects reported no LTI's, while around 75 per cent were below the mean LTIFR for non-Scheme projects (Chart 3); compared to 25 per cent and 65 per cent respectively for the June 2008 period.

4.5.2 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	14.38	27.04	17.35

- Between the June 2008 and June 2009 reporting periods, Scheme MTIFR increased significantly (due in part to a significant increase in the number of Scheme projects and the number of accredited contractors undertaking Scheme projects) while non-Scheme MTIFR decreased.
- Both Scheme and non-Scheme projects had extreme MTIFR values which had an impact on all MTIFR averages.
- For the June 2009 period, around 46 per cent of all accredited contractors undertaking Scheme projects reported no MTI's, while around 72 per cent were below the mean MTIFR for Scheme projects (Chart 4); compared to 53 per cent and 66 per cent respectively for the June 2008 period.

- For the same period, around 25 per cent of all accredited contractors undertaking non-Scheme projects reported no MTI's, while around 75 per cent were below the mean MTIFR for non-Scheme projects (Chart 5); compared to 20 per cent and 62 per cent respectively for the June 2008 period.

4.6 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 2009 reporting period, 622 incidents were reported by 91 accredited contractors compared to 770 incidents by 69 accredited contractors in the June 2008 reporting period, a decrease of 19 per cent in the number of incidents.
- The top five mechanism of incident groups accounted for 96.0 per cent of all incidents for the June 2009 reporting period compared to 94.8 per cent for the June 2008 reporting period.
- *Falls, trips and slips of a person* was the most common incident in June 2009 (ranked 2nd in June 2008), whereas *Body stressing* was the most prevalent incident in June 2008 (ranked 2nd in June 2009).

4.7 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 239 notifiable incidents reported by 49 accredited contractors to the relevant jurisdiction OHS authority for the June 2009 reporting period, compared to 165 notifiable incidents by 36 accredited contractors in the June 2008 period, an increase of 45 per cent in the number of notifiable incidents.
- The top three notifiable incidents accounted for 61.5 per cent of all incidents for the June 2009 period compared to 67.9 per cent in the June 2008 period.

- Work on construction sites where there is any movement of powered mobile plant was the most common incident (25.9 per cent in June 2009 compared to 30.9 per cent in June 2008); followed by construction work on or near energised electrical installations and services (22.6 per cent and 24.2 per cent respectively); and construction work where there is a risk of a person falling two metres or more (13.0 per cent and 12.7 per cent respectively).
- Between the June 2008 and June 2009 biannual periods, notifiable incidents involving construction work on or adjacent to roadways or railways used by road or rail traffic increased significantly, from 6.1 per cent to 11.7 per cent.

4.8 Workers compensation premium rates

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 %
Jul to Dec 2007	5.589	3.761	2.675	1.508	2.940	.	2.338	2.496
Jan to Jun 2008	4.962	3.410	2.355	1.789	3.037	.	2.179	3.348
Jul to Dec 2008	4.274	3.158	2.261	1.712	3.750	1.087	2.210	2.066
Jan to Jun 2009	3.742	2.864	1.973	1.213	3.832	1.155	2.252	2.342
House construction June 2008 ⁹	NA	5.169	NA	2.391	3.2	3.73	1.945	1.52
Non-residential construction June 2008 ⁹	NA	4.028	NA	2.391	3.5	3.73	2.651	2.93

- Between the June 2008 and the June 2009 reporting periods, the mean premium rates for accredited contractors decreased for the Australian Capital Territory, New South Wales, Northern Territory, Queensland and Western Australia; and increased for South Australia and Victoria.
- For comparative purposes, the latest available premium rates for house construction and non-residential construction across most jurisdictions have been included. At June 2008, the mean premium rates for accredited contractors were below those for the non-residential construction industry, except Western Australia; and also below those for house construction except Victoria and Western Australia.

4.9 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

⁹ Source: Safe Work Australia publication Comparison of Workers' Compensation Arrangements in Australia and New Zealand April 2009, Table 4.4 Selected Industry Premium Rates as at 30 June 2008, pages 75-79.

provided as free text so the response percentage is likely to understate the number of contractors that implement these PPIs.

4.9.1 The response frequency of positive performance indicators during the January to June 2009 period

Positive performance indicators	Frequency of response
Audit programs conducted	55%
Toolbox meetings	30%
Government / Building Association Awards	13%
OHS training to a Certificate III or better by employees	4%
Emergency Drills / Evacuation Plans	3%
Implementation of drug and alcohol programs	1%

- Results for the June 2009 period were similar to the last biannual period for most PPIs except OHS training to Certificate III or better by employees and implementation of drug and alcohol programs, which both halved.

GLOSSARY

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.

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

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.

Incidence rate - Incidence rates are calculated as follows:

$$\frac{\text{Number of incidences}}{\text{Number employed}} \times 100,000 \text{ (employees)}$$

Frequency rate - Frequency rates are calculated as follows:

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

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.

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.

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.

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.

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.

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

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