

**ANALYSIS OF BIENNIAL DATA FROM
ACCREDITED CONTRACTORS FOR THE
JANUARY TO JUNE 2012
REPORTING PERIOD**

Australian Government Building and Construction OHS
Accreditation Scheme

January - June 2012

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1 Executive Summary

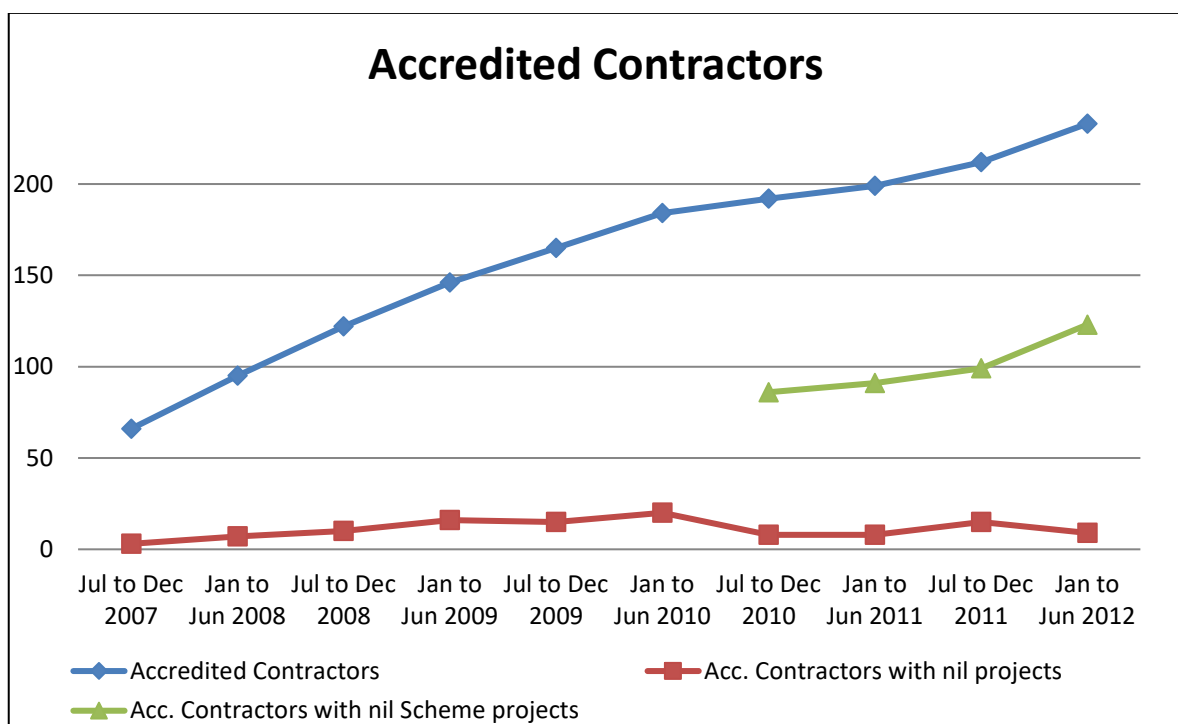
This report provides an overview and analysis of data collected from companies accredited under the Australian Government Building and Construction OHS Accreditation Scheme (the Scheme) for the period January to June 2012. Comparisons are also made with data collected from previous biannual periods where appropriate.

Under their conditions of accreditation accredited companies are required to submit biannual reports twice a year, in addition to incident reports, Scheme project reports and end of project reports. The data used in this report has been collected from a combination of biannual, incident, and Scheme project reports.

2 Overview

2.1 Number of Accredited contractors

The number of accredited contractors continues to grow, with 233 contractors submitting bi-annual reports for the January to June 2012 reporting period. This is a 9.9% increase on the previous period. Of the 233 accredited contractors, 123 did not undertake Scheme projects during the period, with nine undertaking no projects during the period whatsoever.



2.2 Applications

The OFSC received 52 applications for accreditation or reaccreditation during the January to June 2012 reporting period, which is consistent with the corresponding period in 2011. Of these 52 applications, 33 were first time applications, and 19 were applications for reaccreditation.

Twenty seven contractors gained accreditation for the first time during the period, while 25 contractors achieved reaccreditation.

Period	Applications for First Accreditation	Applications for Reaccreditation	Total Applications
2006	24	0	24
Jan to Jun 2007	61	0	61
Jul to Dec 2007	50	0	50
Jan to Jun 2008	35	0	35
Jul to Dec 2008	41	0	41
Jan to Jun 2009	58	0	58
Jul to Dec 2009	48	17	65
Jan to Jun 2010	29	34	63
July to Dec 2010	39	30	69
Jan to Jun 2011	34	19	53
Jul to Dec 2011	38	26	64
Jan to Jun 2012	33	19	52
Total	490	145	635

2.3 Number of Projects

The OFSC has been notified of a total of 752 directly and indirectly funded contracts for building work with a combined value of \$38.53 billion that had been covered by the Scheme. Of the 752 notified contracts, 293 were active and 459 were completed as at 2 July 2012.

The data gathered for this current reporting period includes non-Scheme projects valued at less than \$3 million. The data prior to the July 2010 reporting period only includes projects with a value in excess of \$3 million.

Period	Number of Accredited contractors reporting active Scheme projects	Number of active Scheme projects	Number of Accredited contractors Reporting 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
July to Dec 2010	102	293	177	6,943
Jan to Jun 2011	108	329	185	7,861
Jul to Dec 2011	113	343	197	11,081
Jan to Jun 2012	110	357	218	8,824

Period	Scheme projects (million hours)	Non-Scheme projects any value (million hours)	All projects (million hours)
Jul to Dec 2010	41.97	147.44	189.40
Jan to Jun 2011	26.29	135.95	162.24
Jul to Dec 2011	31.92	135.29	167.20
Jan to Jun 2012	29.94	139.57	169.51

3 Analysis/Findings

3.1 Fatalities

There were no fatalities on Scheme projects in the January to June 2012 period, which resulted in a drop in the Scheme project fatality frequency rate (0.00). The high number of fatalities reported by accredited contractors on non-Scheme projects is consistent with the previous period. However, a reduction in the number of hours worked on non-Scheme projects has resulted in a rise of the non-Scheme projects fatality frequency rate (4.85). These figures do not include deaths from heart attacks or other natural causes. The fatality frequency rate for non-Scheme projects includes hours worked on projects valued at less than \$3 million, while the Scheme fatality frequency rate does not (there are no Scheme projects valued under \$3 million). The result is a relative inflation of the fatality frequency rate on Scheme projects when compared to the rate on non-Scheme projects.

Period	Number of Fatalities on Scheme projects	Scheme project Fatalities frequency rate	Number of Fatalities on non-Scheme projects	Non-Scheme projects Fatalities frequency rate	Number of Fatalities all projects	All projects Fatalities frequency rate
Jul to Dec 2007	1	NA	0	NA	1	NA
Jan to Jun 2008	0	NA	6	NA	6	NA
Jul to Dec 2008	0	NA	4	NA	4	NA
Jan to Jun 2009	1	NA	4	NA	5	NA
Jul to Dec 2009	0	0.00	1	1.07	1	0.92
Jan to Jun 2010	1	4.36	0	0.00	1	0.66
Jul to Dec 2010	2	4.77	2	1.35	4	2.39
Jan to Jun 2011	0	0.00	1	0.70	1	0.60
Jul to Dec 2011	3	9.40	3	2.22	6	3.59
Jan to Jun 2012	0	0.00	6	4.85	6	3.90

3.2 Lost Time Injury Frequency Rate (LTIFR)

For the first time since the July to December 2010 reporting period the Scheme project arithmetic mean LTIFR was lower than its non-Scheme equivalent (4.14 and 7.38 respectively). Both the Scheme and non-Scheme mean LTIFR are down from the corresponding period in 2011. The Scheme project mean LTIFR in particular decreased by almost 60 per cent.

Period	Scheme project Median	Scheme project Arithmetic mean	Scheme project Winsorized mean	Non-Scheme project Median	Non-Scheme project Arithmetic mean	Non-Scheme project Winsorized mean
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
Jul to Dec 2010	0.00	5.54	3.43	0.00	13.83	4.76
Jan to Jun 2011	0.00	10.17	3.98	0.00	8.97	3.97
Jul to Dec 2011	0.00	20.60	6.82	0.60	8.01	5.45
Jan to Jun 2012	0.00	4.14	2.04	0.00	7.38	4.30

Scheme LTIFR by construction type

When separated by industry sector, Scheme work carried out by accredited contractors on Commercial projects recorded the highest mean LTIFR (5.86), followed by Residential projects (3.05) and Civil projects (1.28).

	Residential	Civil	Commercial	All
Mean	3.05	1.28	5.86	4.14
Median	0.00	0.00	0.00	0.00
Windsorised Mean	1.60	0.68	3.52	2.04

Non-Scheme LTIFR by construction type

Non-Scheme work carried out by accredited contractors on Residential projects recorded the highest mean LTIFR (10.86), followed by Commercial projects (8.95) and Civil projects (5.55).

	Residential	Civil	Commercial	All
Mean	10.86	5.55	8.95	7.38
Median	0.00	0.00	0.00	0.60
Windsorised Mean	6.33	1.05	4.96	4.30

3.3 Medically Treated Injury Frequency Rate (MTIFR)

The mean MTIFR for both Scheme and non-Scheme projects decreased for the second consecutive period.

Period	Scheme project Median	Scheme project Arithmetic mean	Scheme project Winsorized mean	Non-Scheme project Median	Non-Scheme project Arithmetic mean	Non-Scheme project Winsorized mean
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
Jul to Dec 2010	0.00	11.30	6.44	12.71	63.91	21.07
Jan to Jun 2011	0.00	19.93	8.12	11.02	36.31	20.00
Jul to Dec 2011	0.00	16.30	7.23	10.83	34.12	18.10
Jan to Jun 2012	0.00	13.13	9.65	10.24	32.21	18.69

Scheme MTIFR by construction type

Scheme Residential construction projects recorded the highest mean MTIFR (22.30), followed by Commercial projects (12.71) and Civil projects (9.89).

The windsorised mean MTIFR for Residential Scheme projects was, however, lower than the Commercial Scheme project windsorised mean MTIFR, demonstrating a number of high outliers for the Residential Scheme project MTIFR figures.

	Residential	Civil	Commercial	All
Mean	22.30	9.89	12.71	13.13
Median	0.00	0.00	0.00	0.00
Windsorised Mean	8.86	8.66	9.68	9.65

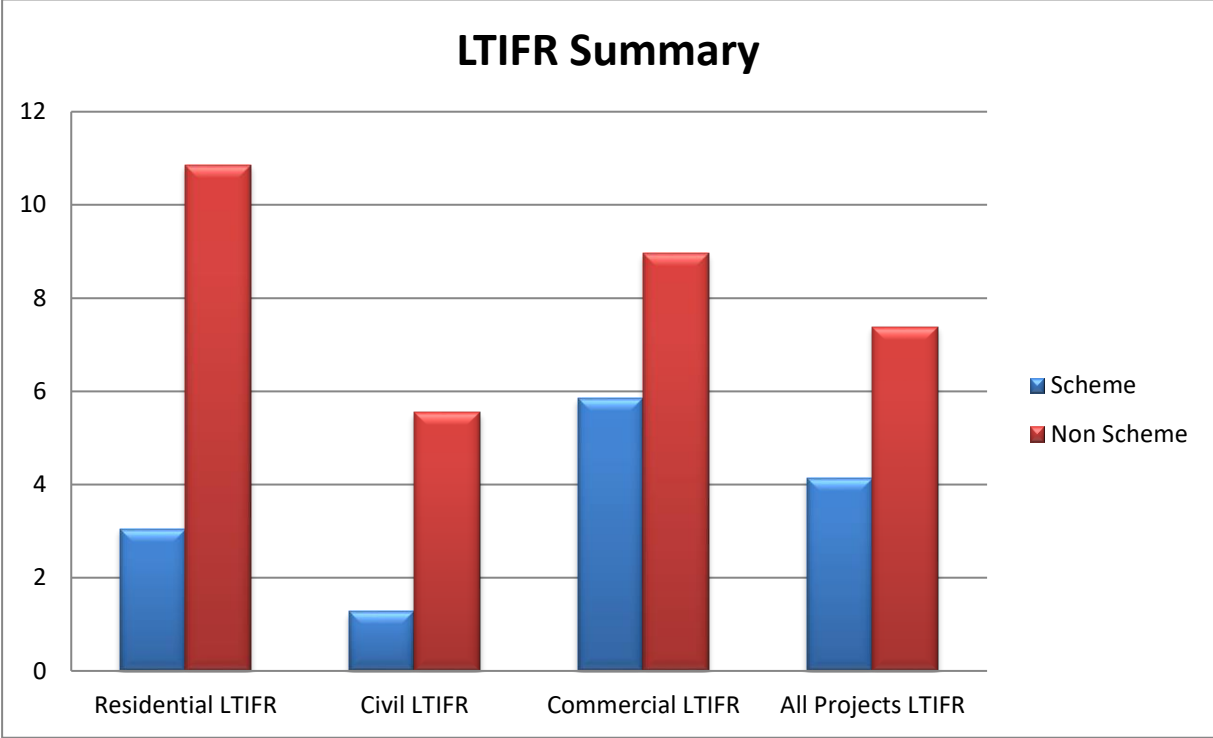
Non-Scheme MTIFR by construction type

The mean MTIFR recorded by contractors working on non-Scheme Commercial projects (38.49) far exceeded those recorded by accredited contractors working on Residential (19.96) and Civil (19.28) projects.

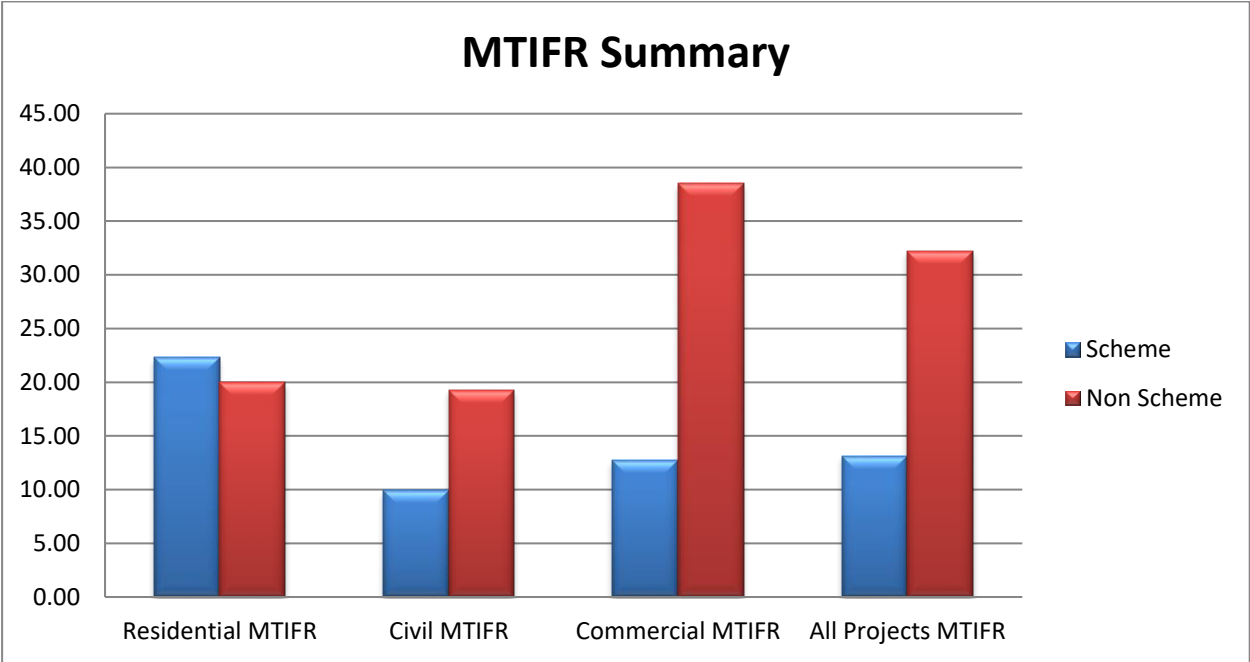
	Residential	Civil	Commercial	All
Mean	19.96	19.28	38.49	32.21
Median	7.70	3.08	13.09	10.24
Windsorised Mean	14.38	11.16	20.94	18.69

3.4 LTIFR/MTIFR Summary

The graph below summarises the LTIFR figures across construction types and Scheme and non-Scheme projects. The non-Scheme LTIFR exceeds the Scheme LTIFR across each construction type.



The following graph summarises the MTIFR figures across construction types and Scheme and non-Scheme projects. The Scheme MTIFR exceeds the non-Scheme MTIFR only on Residential projects.



3.5 Number of Notices Issued

There has been a reduction in the number of notices issued to accredited contractors when compared to the corresponding period in 2011.

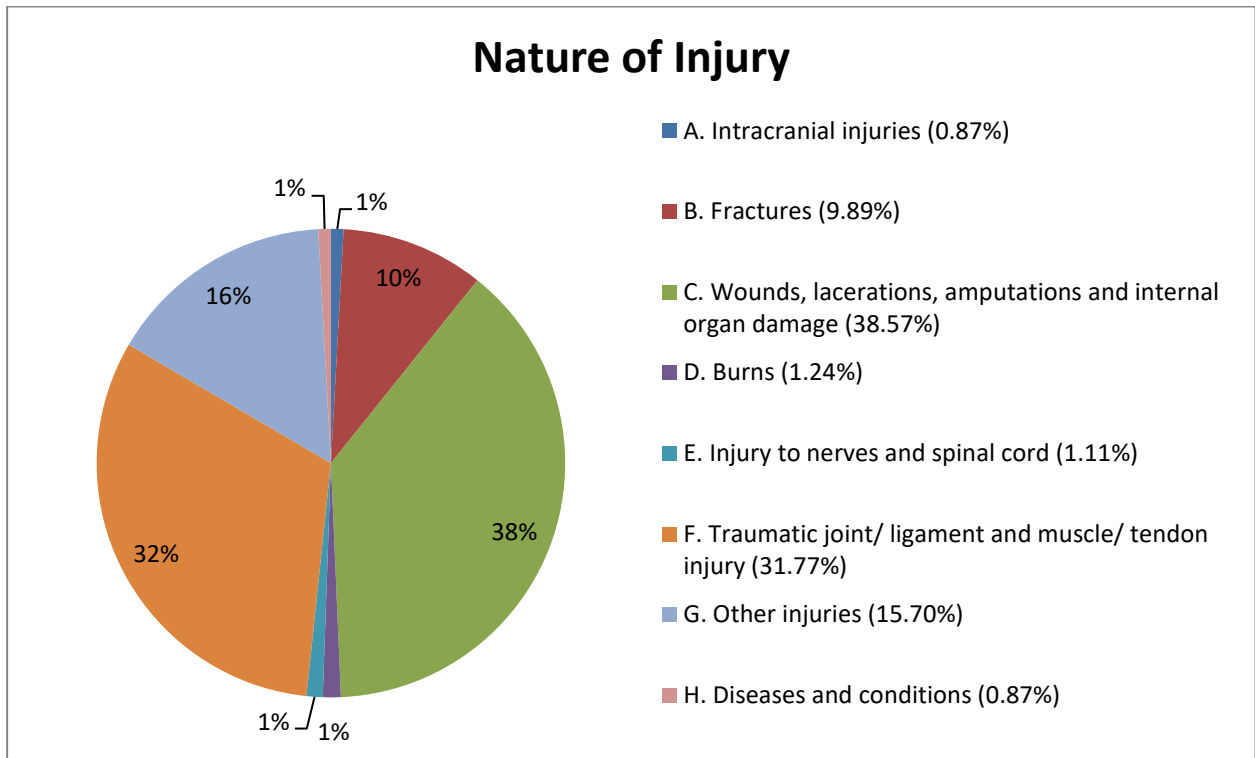
Period	Infringement Notices	Prohibition Notices	Improvement Notices	Other Notices (eg enforceable undertakings)
Jan–Jun 2011	10	63	140	7
Jul–Dec 2011	2	51	137	1
Jan–Jun 2012	4	52	136	5

4 Incidents

Accredited contractors are required to provide incident reports for lost time injuries, medically treated injuries and notifiable dangerous occurrences that occur on Scheme projects, as well as lost time injuries that occur on non-Scheme projects valued at greater than \$3 million. Incident reports for all fatalities—regardless of project value—must also be submitted.

4.1 Nature of injury

Consistent with the previous reporting period, two thirds of injuries reported to the OFSC relate to wounds, lacerations, amputations and internal organ damage (38.57%) and traumatic joint/ligament and muscle/tendons (31.77%).

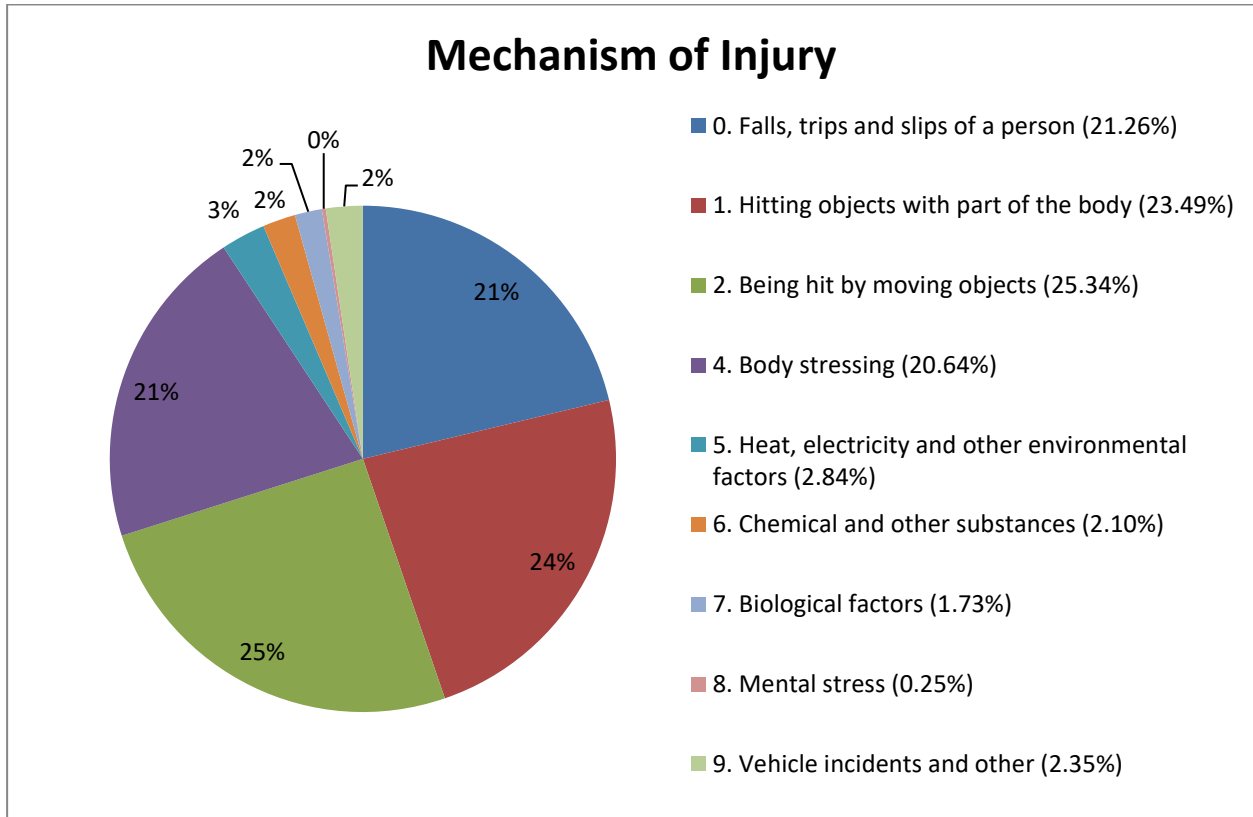


Nature of Injury

Period	Injury A	Injury B	Injury C	Injury D	Injury E	Injury F	Injury G	Injury H
Jul to Dec 2011	0.76	10.51	32.57	1.43	1.24	33.81	19.20	0.48
Jan to Jun 2012	0.87	9.89	38.57	1.24	1.11	31.77	15.70	0.87

4.2 Mechanism of Injury

The top four mechanisms of injury reported to the OFSC; Being hit by moving objects (25.34%), Hitting objects with part of the body (23.49%), Falls trips and slips of a person (21.26%), and Body Stressing (20.64%) account for over 90% of all injuries reported during the period.

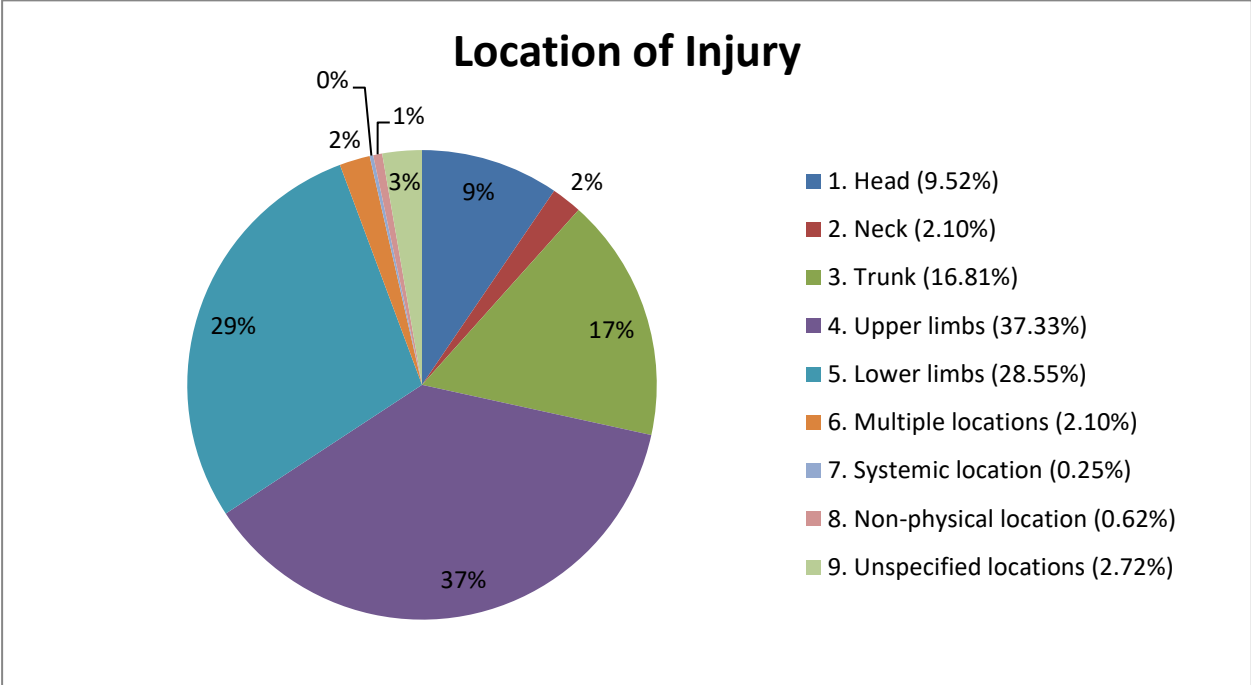


Mechanism of Injury

Period	Mech. 0	Mech. 1	Mech. 2	Mech. 3	Mech. 4	Mech. 5	Mech. 6	Mech. 7	Mech. 8	Mech. 9
Jul to Dec 2011	20.92	21.78	23.78	0.29	24.74	2.10	1.91	0.67	0.00	3.82
Jan to Jun 2012	21.26	23.49	25.34	0.00	20.64	2.84	2.10	1.73	0.25	2.35

4.3 Location of Injury

Over 60% of injuries sustained occurred on the upper (37.33%) and lower (28.55%) limbs, a slight increase from the previous reporting period.



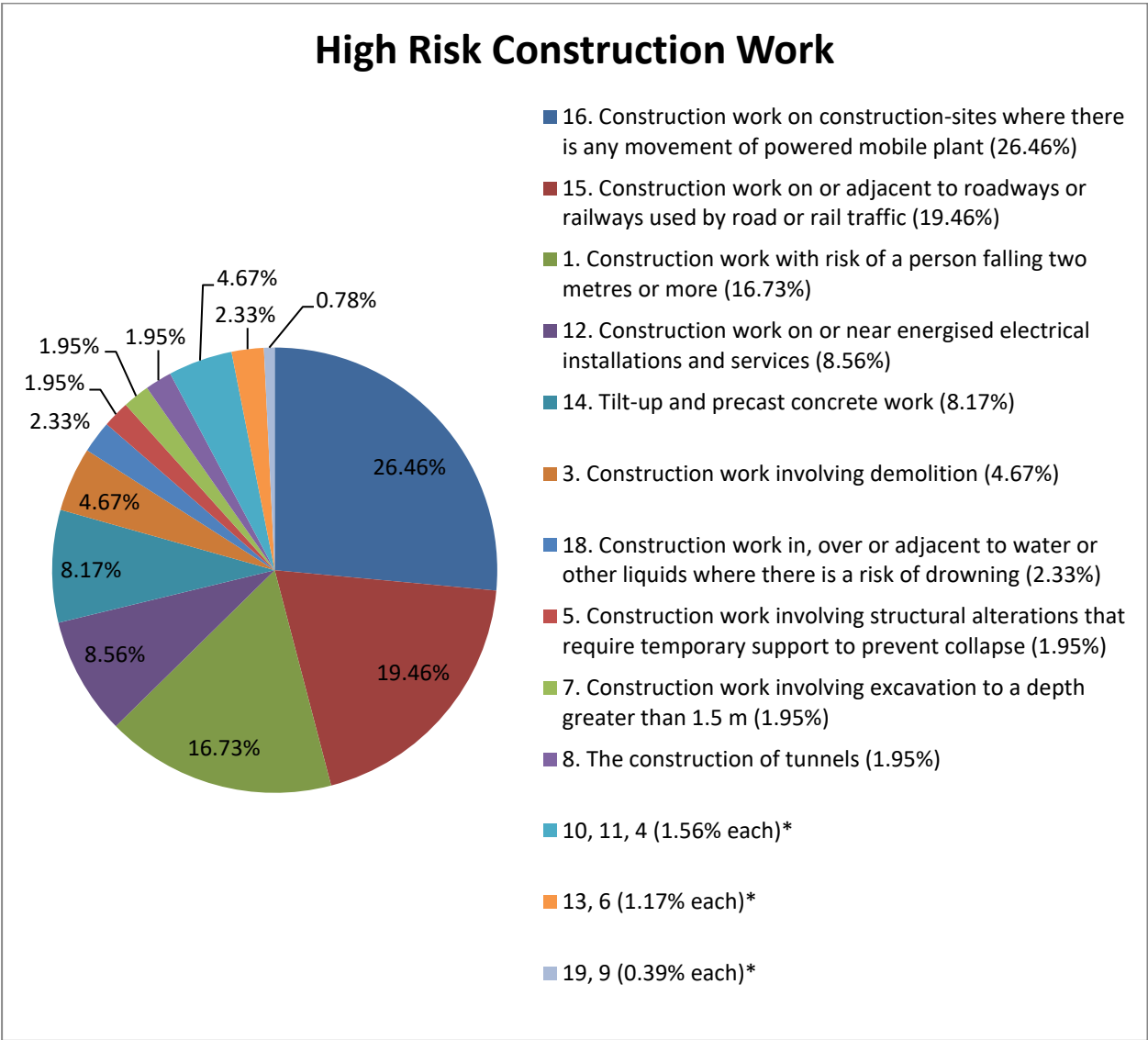
Location of Injury

Period	Loc. 1	Loc. 2	Loc. 3	Loc. 4	Loc. 5	Loc. 6	Loc. 7	Loc. 8	Loc. 9
Jul to Dec 2011	10.51	1.81	20.92	34.48	27.22	2.29	0.29	0.19	2.29
Jan to Jun 2012	9.52	2.10	16.81	37.33	28.55	2.10	0.25	0.62	2.72

4.4 High Risk Construction Work

When submitting incident reports, accredited contractors are asked to disclose – where applicable – if any high risk construction work was taking place at the time of the incident. Just 28.43% of incident reports submitted nominated high risk construction work as having been undertaken at the time of the incident. This represents a 57.94% increase on the previous period. The three most common categories of high risk work taking place at the time of an incident were:

- construction work on or adjacent to roadways or railways used by road or rail traffic (19.46%)
- construction work on construction-sites where there is any movement of powered mobile plant (26.46%)
- construction work with risk of a person falling two metres or more (16.73%).



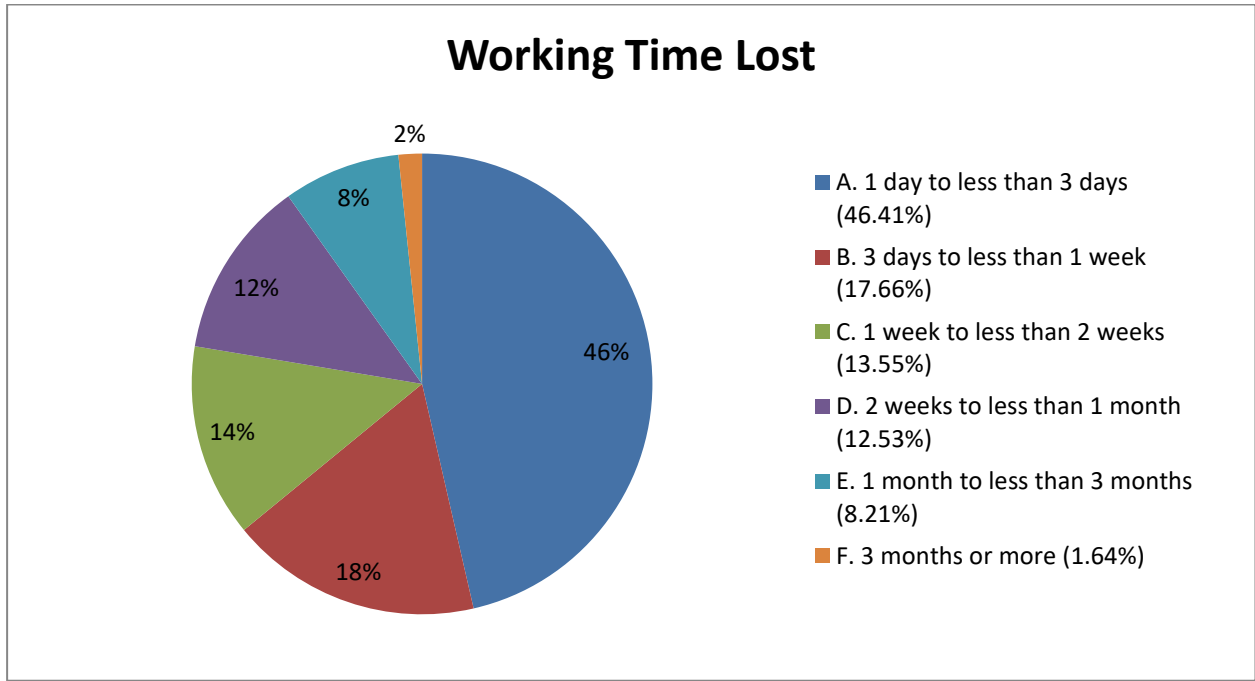
*See glossary for high risk construction work details

High Risk Construction Work

Period	Jul to Dec 2011	Jan to Jun 2012
Risk 1	20.81%	16.73%
Risk 2	0.00%	0.00%
Risk 3	2.54%	4.67%
Risk 4	0.00%	1.56%
Risk 5	2.03%	1.95%
Risk 6	0.00%	1.17%
Risk 7	2.54%	1.95%
Risk 8	0.51%	1.95%
Risk 9	0.00%	0.39%
Risk 10	0.00%	1.56%
Risk 11	0.51%	1.56%
Risk 12	2.54%	8.56%
Risk 13	0.00%	1.17%
Risk 14	7.11%	8.17%
Risk 15	30.46%	19.46%
Risk 16	27.92%	26.46%
Risk 17	1.02%	0.00%
Risk 18	2.03%	2.33%
Risk 19	0.00%	0.39%

4.5 Working Time Lost

The most common length of time an injured worker was absent from work was between one and three days (46.41%), with almost 80% of workers who suffered a lost time injury returning to work in less than two weeks.

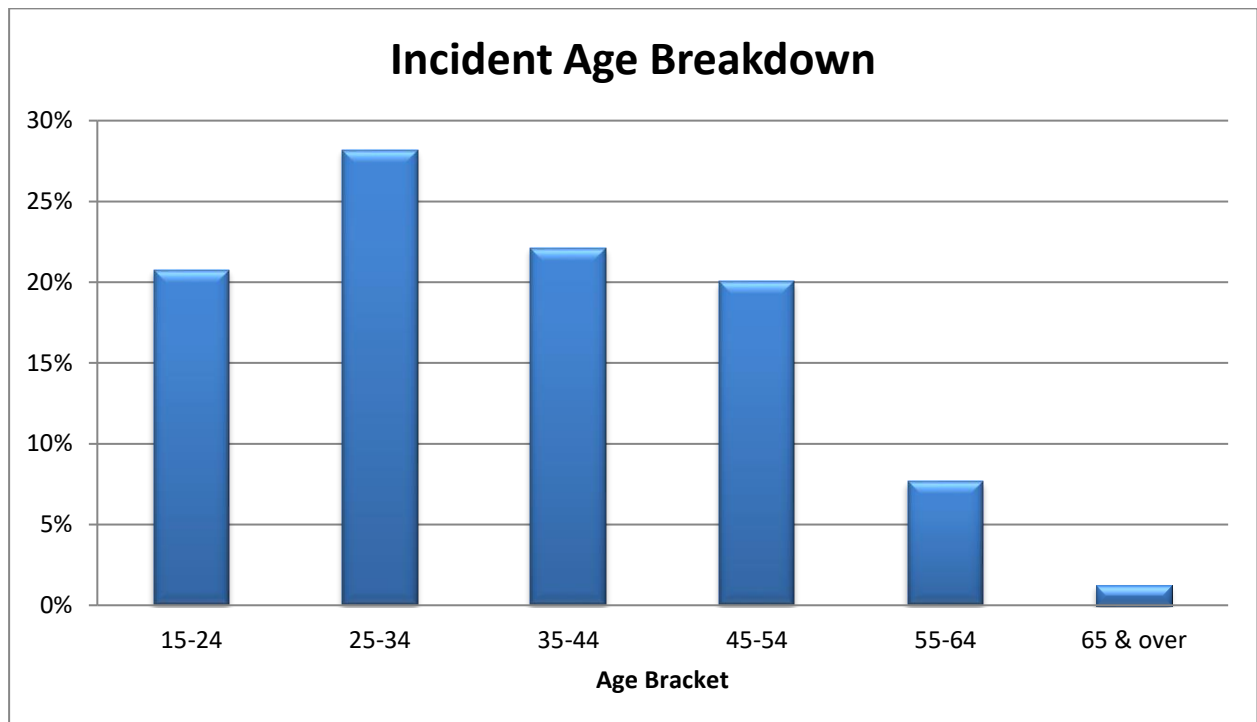


Working Time Lost

Period	A	B	C	D	E	F
Jul to Dec 2011	45.26	22.40	13.98	9.47	7.22	1.65
Jan to Jun 2012	46.41	17.66	13.55	12.53	8.21	1.64

4.6 Age Breakdown

Over 70% of injured workers were below the age of 45. The 25-34 age bracket accounted for the highest number of reported incidents (28%).

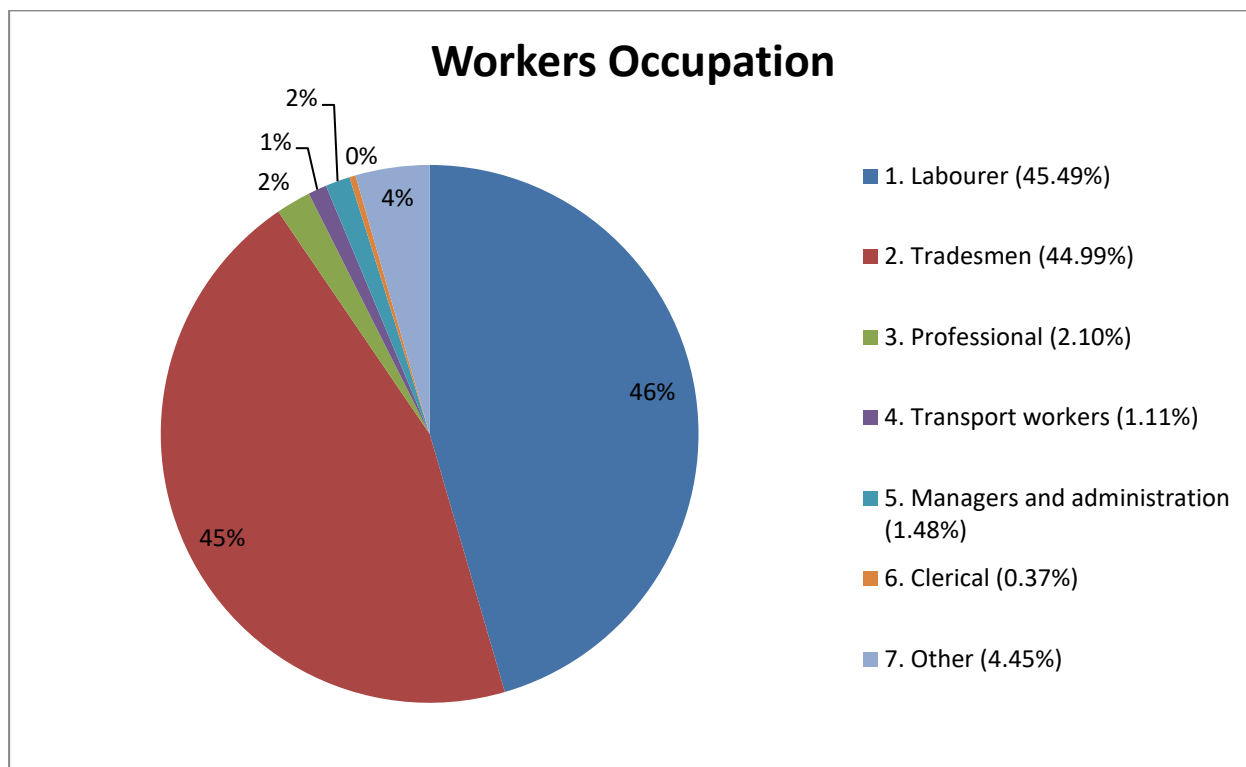


Incident Age Breakdown

Period	15-24	25-34	35-44	45-54	55-64	65 & Over
Jul to Dec 2011	19.77%	28.65%	21.97%	19.96%	8.69%	0.96%
Jan to Jun 2012	20.77%	28.18%	22.13%	20.02%	7.66%	1.24%

4.7 Injured Person's Occupation

Over 90% of people injured in reports submitted to the OFSC were Labourers (45.49%) or Tradesmen (44.99%).



Workers Occupation

Period	1	2	3	4	5	6	7
Jul to Dec 2011	42.22	47.47	1.15	1.43	1.72	0.19	5.83
Jan to Jun 2012	45.49	44.99	2.10	1.11	1.48	0.37	4.45

4.8 Dangerous Occurrences

The OFSC encourages companies to accurately report Dangerous Occurrences both internally and to external bodies such as the OFSC. A Dangerous Occurrence (or 'near miss') can be as revealing of WHS system inadequacies as an incident that *does* result in an injury or fatality.

Eighty-nine Scheme Dangerous Occurrences were reported to the OFSC in the January to June 2012 reporting period; a slight increase on the previous period.

Consistent with the previous period there was some correlation between the circumstances of the Dangerous Occurrences reported to the OFSC, and those of the incidents resulting in injury. For example the most common high risk work nominated in Dangerous Occurrence incident reports was also the most common nominated in LTI/MTI/Fatality reports (work on construction sites where there is any movement of powered mobile plant).

Dangerous Occurrences

Period	Dangerous Occurrences
Jul to Dec 2011	79
Jan to Jun 2012	89

4.9 Workers' Compensation

Accredited Companies

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	3.069	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
Jul to Dec 2010	3.025	3.051	2.389	1.548	3.845	1.015	1.980	1.896
Jan to Jun 2011	3.699	3.014	2.310	1.449	3.668	1.701	1.905	1.767
Jul to Dec 2011	3.534	3.019	2.028	1.735	2.913	2.277	1.746	1.518
Jan to Jun 2012	3.712	3.102	3.508	1.717	3.204	2.014	1.680	3.048

Industry

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 %
House construction September 2011 ¹	NA	5.040	NA	2.793	2.80	4.00	1.908	1.13
Non-residential construction September 2011 ¹	NA	3.928	NA	2.905	2.90	3.39	2.185	2.13

¹ Source: Safe Work Australia publication Comparison of Workers' Compensation Arrangements in Australia and New Zealand April 2012, Table 7.6 Selected Industry Premium Rates as at 30 September 2011, page 213.

5 Awards and Recognition

During this reporting period accredited contractors have been the recipients of many prestigious safety awards, including the following:

- Blackett Homes (Aust) Pty Ltd – ACT – 2012 Master Builders & Boral Excellence in Building Awards Winner Excellence in Work Health & Safety - Residential
- Grocon Constructors (NSW) Pty Ltd, Grocon Constructors (QLD) Pty Ltd, Grocon Constructors (SA) Pty Ltd, Grocon Constructors (VIC) Pty Ltd, Grocon Constructors Pty Ltd – won the award from Safe Work Australia for Best workplace health and safety management system—Private sector
- John Holland Pty Ltd, John Holland Queensland Pty Ltd – Australian Engineering Excellence Award for work in Construction Industry Safety
- John Holland Pty Ltd, John Holland Queensland Pty Ltd – Health and Safety Representative of Year Finalist (Comcare Work Health and Safety Awards)
- John Holland Pty Ltd, John Holland Queensland Pty Ltd – Vic Roads Major Projects Safety Excellence Award - M1 West Gate Bridge Strengthening Project and Anthonys Cutting Realignment Project (Both Scheme Projects)
- Lend Lease Project Management & Construction (Australia) Pty Limited – ACT – 2012 Master Builders & Boral Excellence in Building Awards Winner Excellence in Work Health & Safety - Commercial Systems
- Manteena Pty Ltd – WINNER Master Builders Association of the ACT Excellence in Building Awards - Excellence in Workhealth and Safety Commercial Practices - Gungahlin Community Health Centre, Gungahlin ACT
- Seymour Whyte Constructions Pty Ltd, Abigroup Contractors Pty Ltd, Fulton Hogan Industries Pty Ltd – Winner of the Queensland Major Contractors Association Queensland Project Safety Excellence Award - Origin Alliance for the Ipswich Motorway Upgrade (Dinmore to Goodna).

6 Initiatives

Accredited contractors submit details of interesting safety initiatives developed by their company during the reporting period. Many of these initiatives will form the basis of case studies and fact sheets to be published on fsc.gov.au over the coming months.

Glossary

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

Dangerous occurrence - An incident where no person is injured, but could have been injured, resulting in Serious Personal Injury, Incapacity or Death. Also commonly called a “near miss”.

Fatality Frequency Rate – Fatality Frequency rates are calculated as follows:

$$\frac{\text{Number of incidences}}{\text{Number of hours worked}} \times 100,000,000 \text{ (hours)}$$

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.

Nature of injury classification

- A. Intracranial injuries
- B. Fractures
- C. Wounds, lacerations, amputations and internal organ damage
- D. Burns
- E. Injury to nerves and spinal cord
- F. Traumatic joint/ligament and muscle/tendon injury
- G. Other injuries
- H. Diseases and conditions

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 10 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.