



Australian Government

Department of Employment

Office of the Federal Safety Commissioner



Biannual Report Data Analysis January to June -2016

**Analysis of Biannual Data from Accredited
Contractors**

**January to June 2016
Reporting Period**

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1 Introduction

This report is produced by the Office of the Federal Safety Commissioner (OFSC). The report provides an overview and analysis of data collected from companies accredited under the Australian Government Building and Construction WHS Accreditation Scheme (the Scheme) for the period January to June 2016. Comparisons are also made with data collected from previous biannual periods where appropriate.

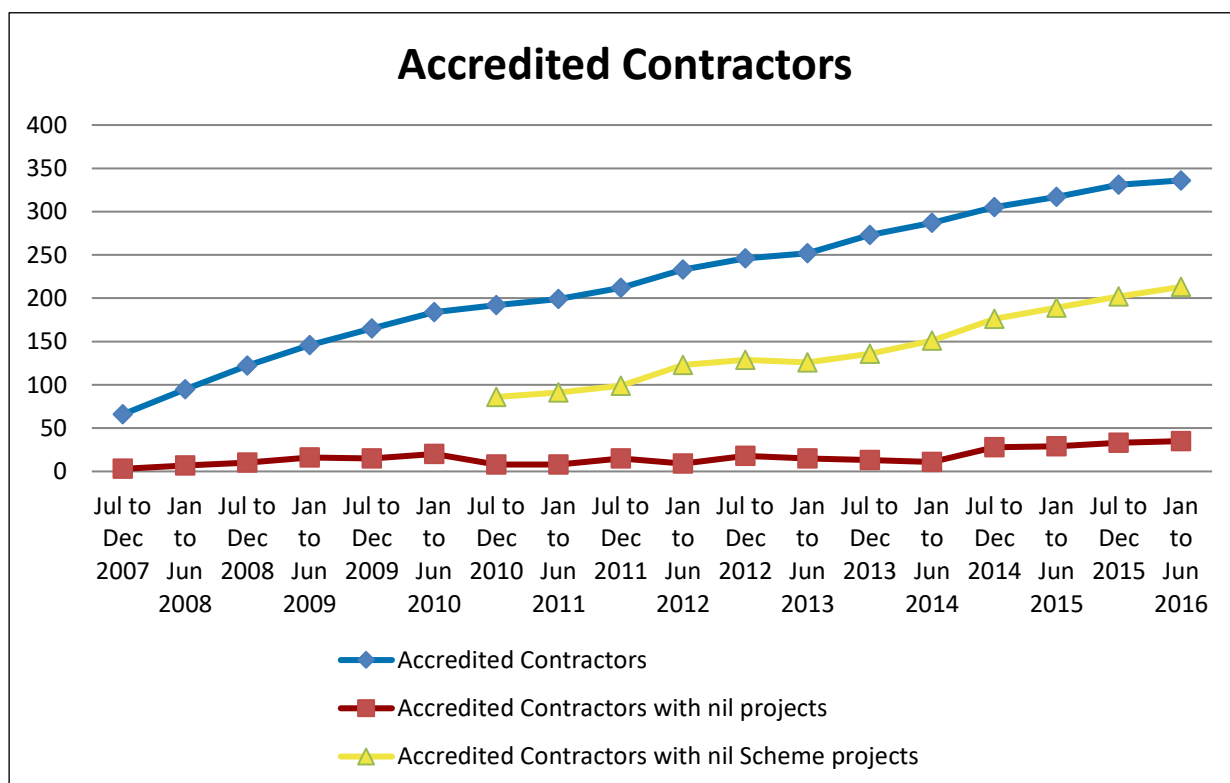
Under their conditions of accreditation, accredited contractors are required to submit biannual reports twice a year, in addition to incident reports, Scheme project reports and end of project reports. The data used in this report has been collected from a combination of biannual, incident and Scheme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

Key terms and performance measures used throughout this report are defined in the Glossary commencing on page 29.

2 Overview

2.1 Number of Accredited Contractors

The number of accredited contractors continues to grow, with 336¹ contractors submitting biannual reports for the January to June 2016 reporting period. This is a 1.51 per cent increase on the previous period. The number of accredited contractors has increased every year since the Scheme commenced in 2006. Of the 336 accredited contractors, 213 (63.39 per cent) did not undertake Scheme projects during the period, with 35 (10.42 per cent) undertaking no projects as the head contractor during the period.



¹ 336 accreditations representing 396 companies.

2.2 Applications and Accreditations

The OFSC continues to receive new applications from companies seeking accreditation under the Scheme with 37 applications for initial accreditation received during the January to June 2016 reporting period.

Forty-seven reaccreditation applications were received during the period, bringing the total number of applications to 84, which is an increase compared to the previous corresponding period (59 total for January to June 2015). Nine contractors gained accreditation for the first time during the period, while 43 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
Jul to Dec 2012	27	37	64
Jan to Jun 2013	41	36	77
Jul to Dec 2013	48	32	80
Jan to Jun 2014	45	36	81
Jul to Dec 2014	46	33	79
Jan to Jun 2015	35	24	59
Jul to Dec 2015	39	47	86
Jan to Jun 2016	37	47	84
Total	808	437	1,245

2.3 Number of Projects and Hours Worked

The OFSC has been notified of a total of 1500 directly and indirectly funded contracts for building work, with a combined value of \$90.35 billion that had been covered by the Scheme (as at 30 June 2016). Of the 1500 notified contracts, 296 were active and 1204 were completed at the end of this reporting period.

The data gathered for this current reporting period includes non-Scheme projects valued at less than \$4 million. The data prior to the July 2010 reporting period only includes projects with a value of \$3 million or more.

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 where accredited contractor was the head contractor
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
Jul 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
Jul to Dec 2012	117	347	228	7,235
Jan to Jun 2013	126	339	237	11,568
Jul to Dec 2013	137	362	254	13,016
Jan to Jun 2014	136	335	269	13,700
Jul to Dec 2014	129	306	277	13,328
Jan to Jun 2015	128	295	288	13,772
Jul to Dec 2015	129	289	298	9,164
Jan to Jun 2016	124	296	301	14,352

Hours worked on Scheme and Non-Scheme projects

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
Jul to Dec 2012	43.80	131.05	174.85
Jan to Jun 2013	33.66	135.78	169.45
Jul to Dec 2013	31.86	152.89	184.75
Jan to Jun 2014	30.57	137.86	168.44
Jul to Dec 2014	30.06	151.78	181.84
Jan to Jun 2015	27.41	149.31	176.71
Jul to Dec 2015	26.14	146.37	172.51
Jan to Jun 2016	25.45	147.75	173.20

3 Analysis/Findings

3.1 Fatalities

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
Jul to Dec 2012	2	4.57	3	2.29	5	2.86
Jan to Jun 2013	2	5.94	3	2.21	5	2.95
Jul to Dec 2013	0	0.00	1	0.66	1	0.54
Jan to Jun 2014	0	0.00	0	0.00	0	0.00
Jul to Dec 2014	0	0.00	2	1.32	2	1.10
Jan to Jun 2015	0	0.00	1	0.67	1	0.57
Jul to Dec 2015	0	0.00	2	1.37	2	1.16
Jan to Jun 2016	1	3.96	1	0.68	2	1.16

3.2 Lost Time Injury Frequency Rate (LTIFR)

The Winsorised mean LTIFR for Scheme (1.24) and non-Scheme (1.86) projects was the lowest recorded since the OFSC began monitoring the LTIFR in the July to December 2007 reporting period.

There has been an 85.78 per cent decrease in the Scheme project Winsorised mean LTIFR when comparing the current period to the corresponding period in 2008. Individual company data shows that the LTIFR decreases significantly the longer a company retains accreditation under the scheme. After 6 years of accreditation, 72 per cent of companies have reduced their LTIFR by an average of 77 per cent.

Period	Scheme project median	Scheme project Arithmetic mean	Scheme project Winsorised mean	Non-Scheme project median	Non-Scheme project Arithmetic mean	Non-Scheme Project Winsorised 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
Jul to Dec 2012	0.00	13.54	1.88	0.00	6.15	2.71
Jan to Jun 2013	0.00	6.10	1.69	0.00	21.60	3.87
Jul to Dec 2013	0.00	8.88	3.93	0.00	7.69	3.13
Jan to Jun 2014	0.00	11.03	1.40	0.00	7.42	3.88
Jul to Dec 2014	0.00	4.61	2.56	0.00	5.47	2.78
Jan to Jun 2015	0.00	3.37	1.64	0.00	4.64	2.69
Jul to Dec 2015	0.00	7.30	1.35	0.00	5.49	2.60
Jan to Jun 2016	0.00	5.49	1.24	0.00	4.23	1.86

Scheme LTIFR by construction type

When separated by industry sector, Scheme work carried out by accredited contractors on Commercial projects recorded the highest Winsorised Mean LTIFR (1.30), followed by Civil projects (0.35) and Residential projects (0.27).

	Residential	Civil	Commercial	All
Mean	2.55	5.29	4.97	5.49
Median	0.00	0.00	0.00	0.00
Winsorised Mean	0.27	0.35	1.30	1.24

Non-Scheme LTIFR by construction type

Non-Scheme work carried out by accredited contractors on Residential projects recorded the highest Winsorised Mean LTIFR (2.78), followed by Commercial projects (2.56) and Civil projects (0.55).

	Residential	Civil	Commercial	All
Mean	5.26	3.64	5.01	4.23
Median	0.00	0.00	0.00	0.00
Winsorised Mean	2.78	0.55	2.56	1.86

3.3 Medically Treated Injury Frequency Rate (MTIFR)

There has been a 32.28 per cent increase in the Scheme project Winsorised mean MTIFR and a 29.49 per cent decrease in the non-Scheme project Winsorised mean MTIFR when compared to the corresponding period in 2015.

The Scheme project Winsorised mean MTIFR is consistently significantly lower than for non-Scheme projects; the average difference since July 2007 is 78.60 per cent.

Period	Scheme project median	Scheme project Arithmetic mean	Scheme project Winsorised mean	Non-Scheme project median	Non-Scheme project Arithmetic mean	Non-Scheme Project Winsorised 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
Jul to Dec 2012	0.00	14.77	5.00	9.08	40.91	17.16
Jan to Jun 2013	0.00	7.52	3.78	8.28	29.95	16.89
Jul to Dec 2013	0.00	11.96	5.52	8.36	52.12	16.90
Jan to Jun 2014	0.00	6.58	4.47	7.22	22.02	14.44
Jul to Dec 2014	0.00	7.95	3.95	5.60	34.36	15.32
Jan to Jun 2015	0.00	7.47	3.81	5.27	22.43	14.48
Jul to Dec 2015	0.00	10.44	3.83	4.11	24.55	14.10
Jan to Jun 2016	0.00	9.92	5.04	2.81	22.01	10.21

Scheme MTIFR by construction type

Scheme Residential projects recorded the highest Winsorised Mean MTIFR (9.41), followed by Commercial projects (7.76) and Civil projects (1.96). The winsorised mean MTIFR for all construction types were significantly lower than their arithmetic mean; the result of a number of high outliers.

	Residential	Civil	Commercial	All
Mean	21.36	5.37	12.28	9.92
Median	0.00	0.00	0.00	0.00
Winsorised Mean	9.41	1.96	7.76	5.04

Non-Scheme MTIFR by construction type

Non-Scheme Commercial projects recorded the highest Winsorised Mean MTIFR (11.71), followed by Residential projects (8.04) and Civil projects (7.61). The winsorised mean MTIFR for Commercial and Civil construction were significantly lower than their arithmetic means; the result of a number of high outliers.

	Residential	Civil	Commercial	All
Mean	9.40	19.82	25.77	22.01
Median	0.00	0.00	4.37	2.81
Winsorised Mean	8.04	7.61	11.71	10.21

3.4 Total Recorded Injury Frequency Rate (TRIFR)

In response to industry feedback the OFSC has included a Total Recorded Injury Frequency Rate (TRIFR) calculation to the biannual data analysis report, commencing from the January to June 2014 biannual period onwards.

Note: TRIFR does not include hours worked on projects less than \$3 million, or fatalities on projects less than \$3 million.

Period	Scheme project median	Scheme project Arithmetic mean	Scheme project Winsorised mean	Non-Scheme project median	Non-Scheme project Arithmetic mean	Non-Scheme Project Winsorised mean
Jan to Jun 2014	0.00	17.61	8.04	12.05	29.44	20.65
Jul to Dec 2014	0.00	12.56	7.40	10.07	39.83	20.44
Jan to Jun 2015	0.00	10.84	6.89	8.23	27.09	18.58
Jul to Dec 2015	0.00	17.74	8.25	7.18	30.05	18.32
Jan to Jun 2016	0.00	15.42	10.04	4.70	26.24	13.72

Scheme TRIFR by construction type

Scheme Commercial construction projects recorded the highest Winsorised Mean TRIFR (13.64), followed by Residential projects (11.96) and Civil projects (4.35). As with LTIFR, the arithmetic mean TRIFR for Residential was significantly higher than other construction types due to a smaller sample size and one outlier. The Winsorised mean is a more accurate reflection of the TRIFR for the period.

	Residential	Civil	Commercial	All
Mean	23.91	10.68	17.25	15.42
Median	0.00	0.00	0.00	0.00
Winsorised Mean	11.96	4.35	13.64	10.04

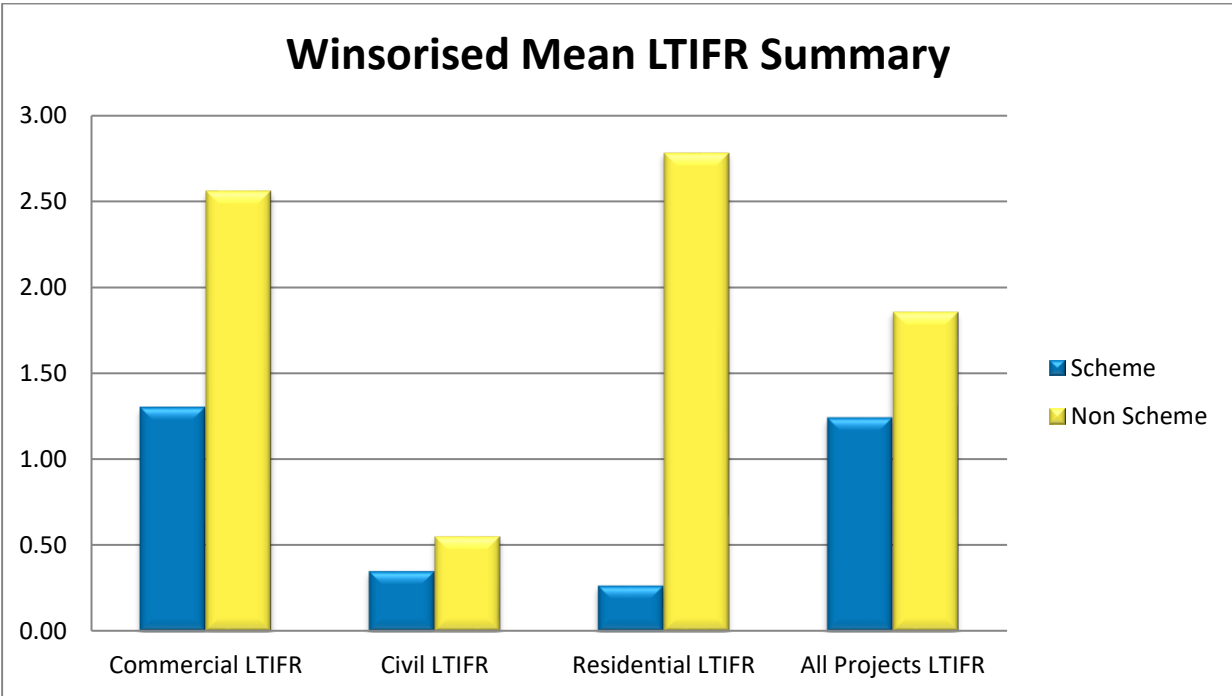
Non-Scheme TRIFR by construction type

Non-Scheme Commercial projects recorded the highest Winsorised Mean TRIFR (16.05), followed by Residential projects (11.46) and Civil projects (11.06).

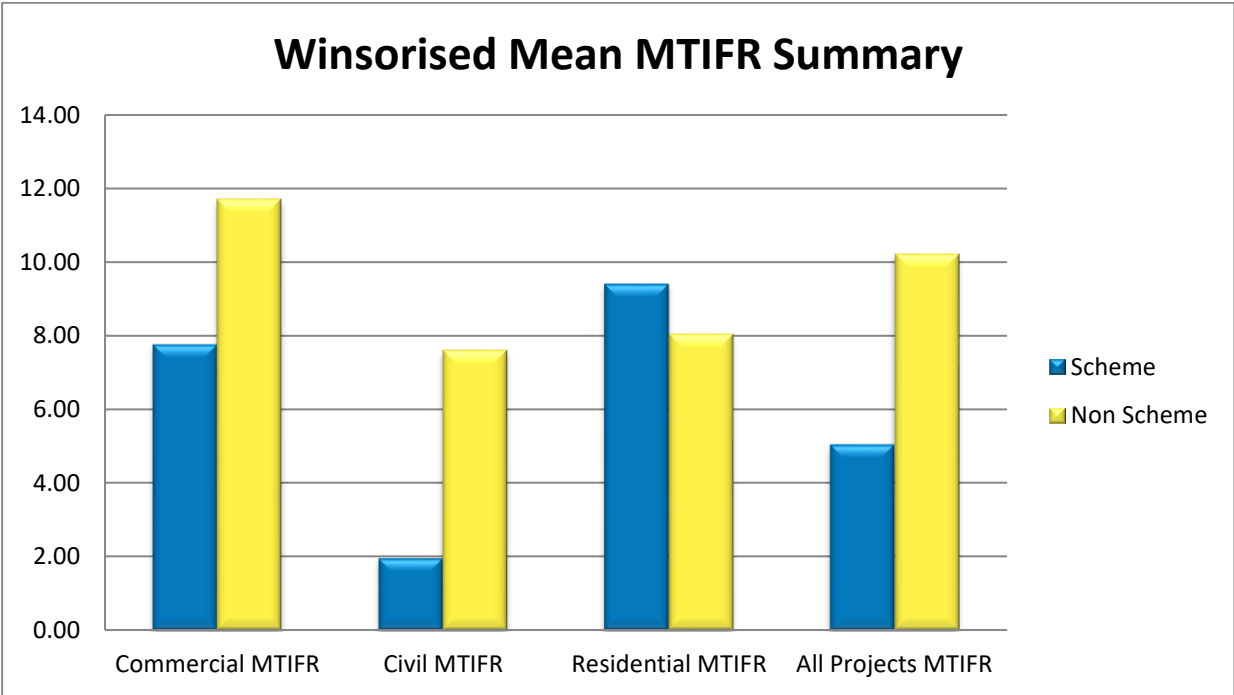
	Residential	Civil	Commercial	All
Mean	14.66	23.46	30.79	26.24
Median	5.54	1.53	9.57	4.70
Winsorised Mean	11.46	11.06	16.05	13.72

3.5 LTIFR/MTIFR/TRIFR Summary

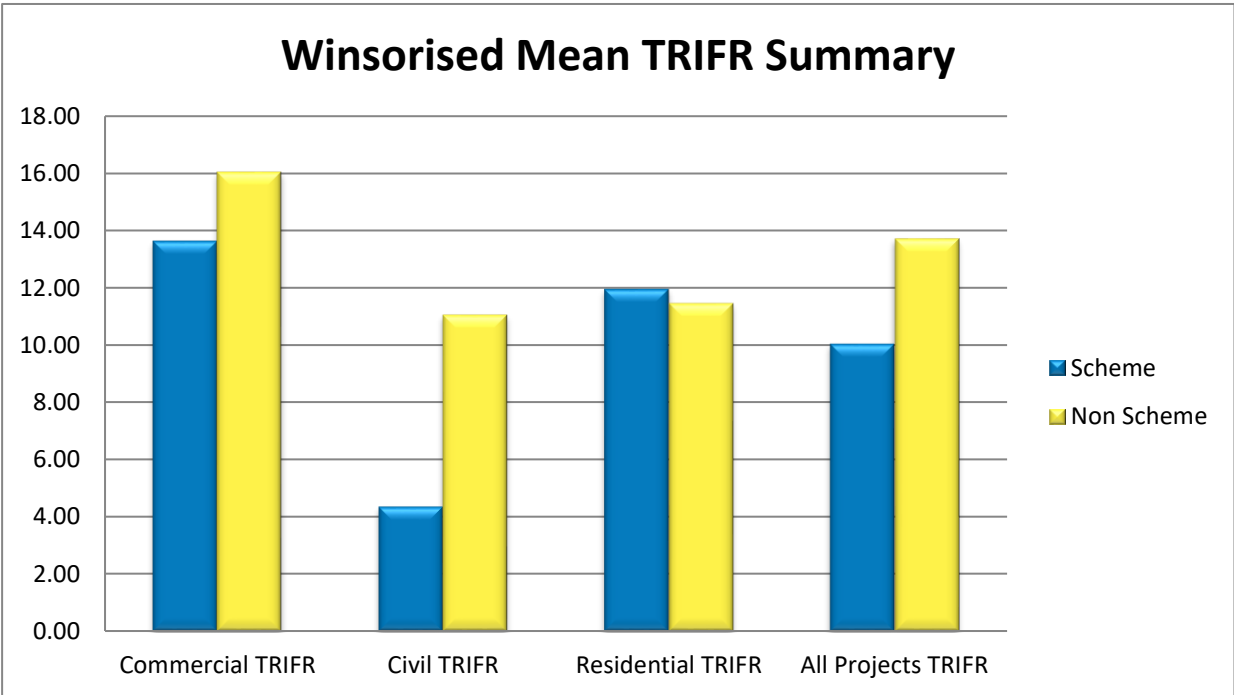
The graph below summarises the Winsorised Mean LTIFR figures across construction types and Scheme and non-Scheme projects. The non-Scheme LTIFR exceeds the Scheme LTIFR on all construction types.



The following graph summarises the Winsorised Mean MTIFR figures across construction types and Scheme and non-Scheme projects. The non-Scheme MTIFR exceeds the Scheme MTIFR on Commercial, Civil and All projects whereas the Scheme MTIFR exceeds the non-Scheme MTIFR on Residential projects.



The following graph summarises the Winsorised Mean TRIFR figures across construction types and Scheme and non-Scheme projects. The non-Scheme TRIFR exceeds the Scheme TRIFR on Commercial, Civil and All projects whereas the Scheme TRIFR exceeds the non-Scheme TRIFR on Residential projects.



3.6 Number of Notices Issued

Part E of the Biannual Report records the outcomes of work cover assessments or court actions issued by the relevant WHS authority of the jurisdiction in which the project is being undertaken. Accredited contractors report the number of notices issued to them as the head contractor or subcontractor, and notices issued to their subcontractors working on site during the period. The types of notices are:

Infringement

WHS regulations may allow for infringement notices to be issued as an alternative to prosecution for an offence that is not indictable.

Prohibition

Prohibition notices are issued for any work that involves or will involve an immediate risk to the health, safety and welfare of any person.

Improvement

Issued if the WHS authority believes someone has contravened the Act or regulations of the jurisdiction, or that a contravention may continue to be repeated. An improvement notice may also include directions about how to remedy a breach.

Other – (e.g. enforceable undertakings)

A WHS related notice (other than an infringement, prohibition or improvement notice) issued by the relevant WHS authority in the jurisdiction in which the project is being undertaken.

Period	Infringement Notices	Prohibition Notices	Improvement Notices	Other Notices (e.g. enforceable undertakings)	Total Notices
Jan to Jun 2011	10	63	140	7	220
Jul to Dec 2011	2	51	137	1	191
Jan to Jun 2012	4	52	136	5	197
Jul to Dec 2012	46	46	143	5	240
Jan to Jun 2013	8	41	112	5	166
Jul to Dec 2013	1	43	104	7	155
Jan to Jun 2014	5	39	126	3	173
Jul to Dec 2014	0	35	114	4	153
Jan to Jun 2015	0	24	43	7	74
Jul to Dec 2015	0	10	52	11	73
Jan to Jun 2016	3	21	54	4	82

4 Incidents

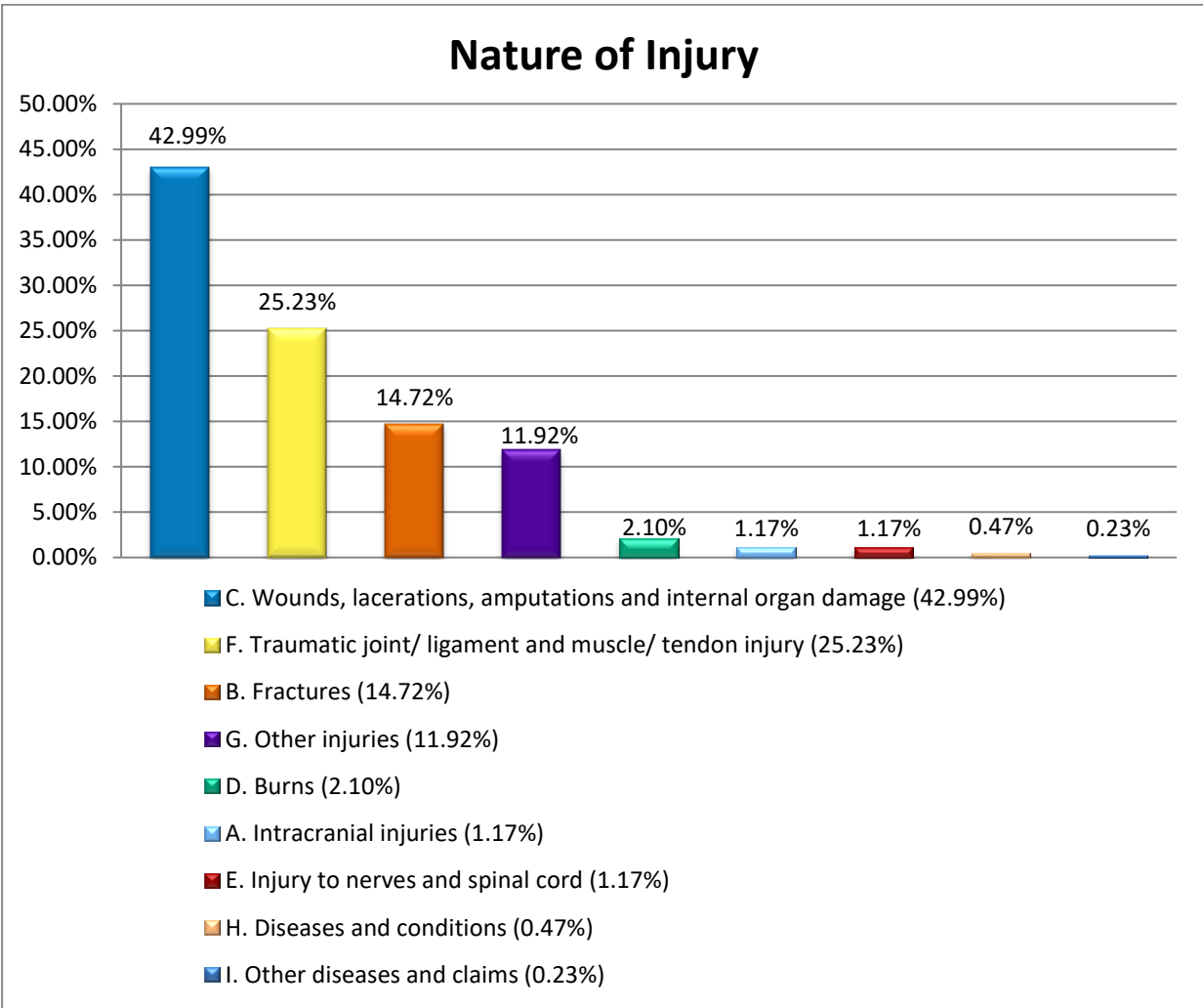
Accredited contractors are required to provide incident reports for lost time injuries, medically treated injuries and notifiable dangerous occurrences that occur on Scheme projects, as well as lost time injuries that occur on non-Scheme projects valued at greater than \$4 million. Incident reports for all fatalities—regardless of project value—must also be submitted.

4.1 Nature of Injury

Wounds, lacerations, amputations and internal organ damage injuries have increased (10.34 per cent) when compared to the corresponding period in 2015, but still remain the highest occurring injuries, while 25.23 per cent of injuries relate to Traumatic joint/ligament and muscle/tendons. These two categories make up over two thirds of the total injuries reported.

Since the January to June 2012 reporting period, Wounds, lacerations, amputations and internal organ damage injuries and Traumatic joint/ligament and muscle/tendons have been the first and second most reported injury category respectively and on average these two categories make up over 65 per cent of the total.

The Other diseases and claims category has been included this reporting period to collect data pertaining to mental illnesses and all other injuries not previously captured.

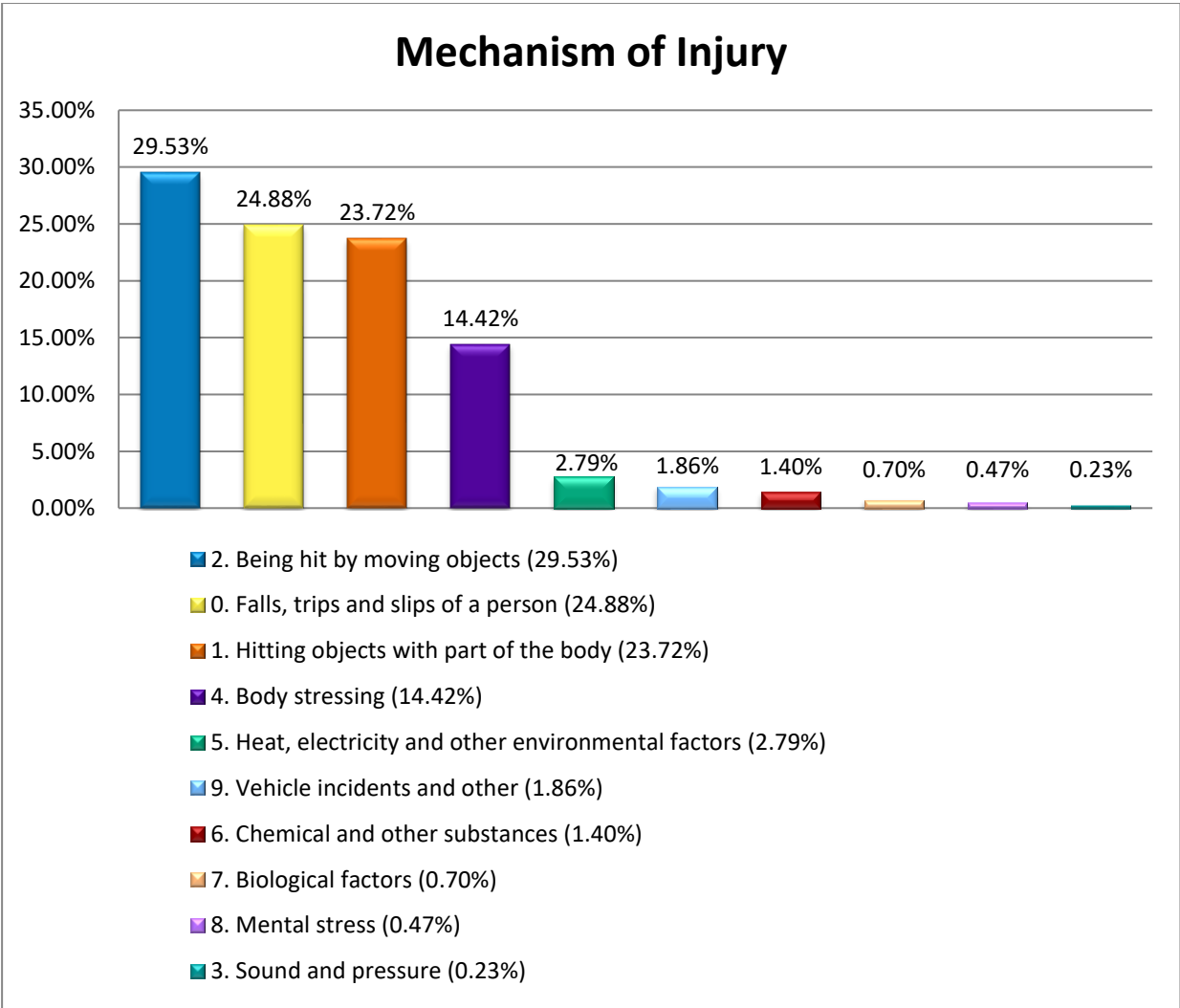


Nature of Injury

Period	Injury A	Injury B	Injury C	Injury D	Injury E	Injury F	Injury G	Injury H	Injury I
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%	-
Jul to Dec 2012	0.81%	12.53%	37.06%	2.02%	1.62%	26.95%	17.65%	1.35%	-
Jan to Jun 2013	0.16%	12.28%	43.22%	2.71%	0.48%	21.69%	19.14%	0.32%	-
Jul to Dec 2013	0.78%	13.40%	36.92%	2.49%	0.93%	28.97%	14.95%	1.56%	-
Jan to Jun 2014	0.18%	15.64%	39.54%	0.70%	1.05%	26.89%	15.29%	0.70%	-
Jul to Dec 2014	0.74%	13.84%	36.72%	0.55%	0.37%	31.18%	16.24%	0.37%	-
Jan to Jun 2015	0.21%	15.00%	38.96%	2.29%	0.63%	29.58%	13.33%	0.00%	-
Jul to Dec 2015	0.48%	14.80%	39.62%	1.19%	0.48%	29.83%	13.60%	0.00%	-
Jan to Jun 2016	1.17%	14.72%	42.99%	2.10%	1.17%	25.23%	11.92%	0.47%	0.23%

4.2 Mechanism of Injury

The top four mechanisms of injury reported to the OFSC were *Being hit by moving objects* (29.53 per cent), *Falls, trips and slips of a person* (24.88 per cent), *Hitting objects with part of the body* (23.72 per cent) and *Body Stressing* (14.42 per cent). These mechanisms account for 92.56 per cent of all injuries reported during the period. These are the same four categories that were identified in the corresponding period in 2015.

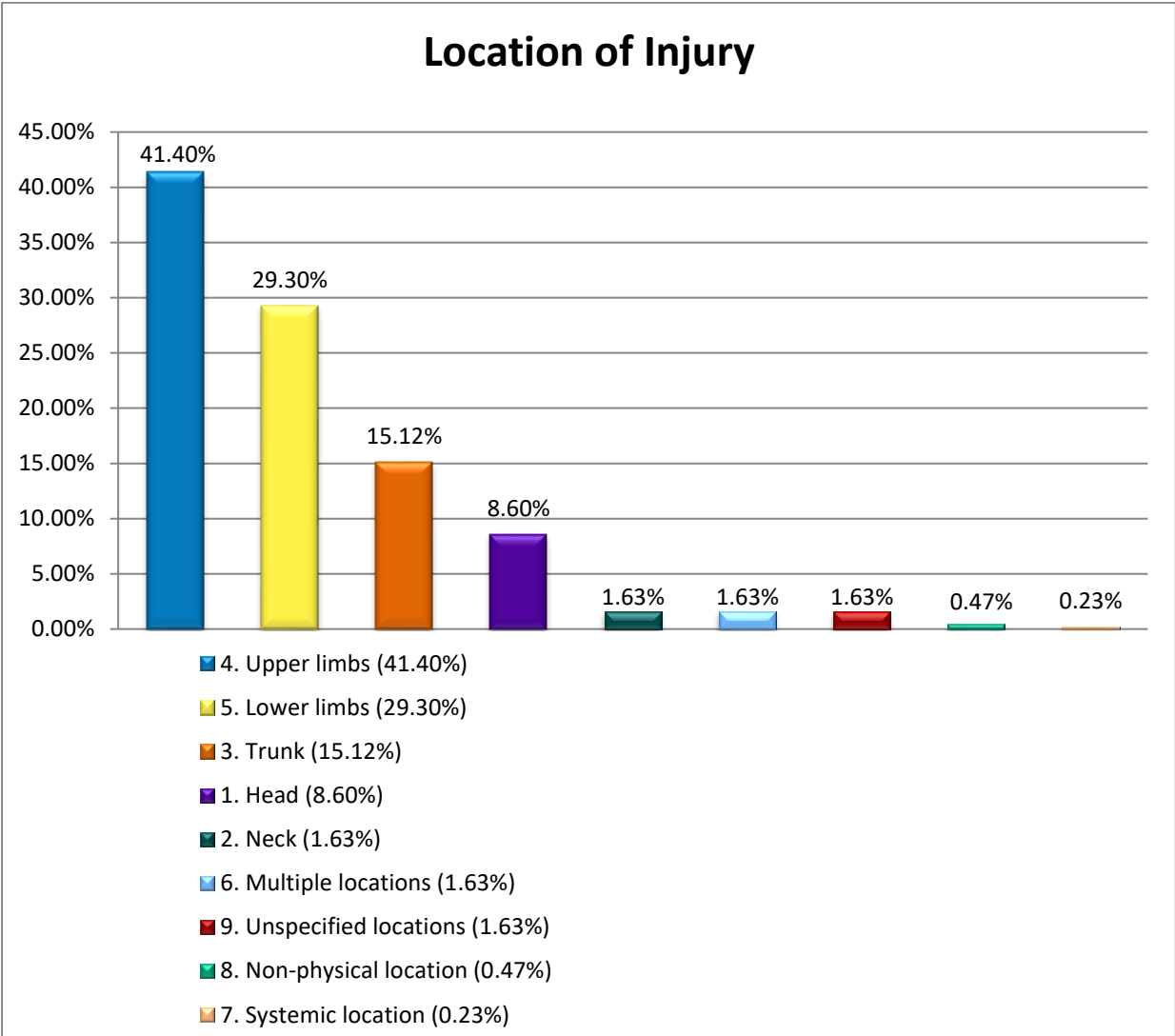


Mechanism of Injury

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%
Jul to Dec 2012	21.83%	20.89%	28.57%	0.13%	19.54%	3.91%	1.62%	0.94%	0.27%	2.29%
Jan to Jun 2013	15.31%	24.40%	31.74%	1.12%	17.38%	4.15%	2.71%	0.32%	0.16%	2.71%
Jul to Dec 2013	19.00%	19.78%	28.97%	0.62%	22.90%	2.65%	2.02%	0.62%	0.00%	3.43%
Jan to Jun 2014	23.20%	25.31%	26.36%	0.18%	18.45%	1.41%	0.88%	0.88%	0.00%	3.34%
Jul to Dec 2014	26.94%	18.82%	30.26%	0.18%	16.61%	1.66%	2.21%	0.92%	0.00%	2.40%
Jan to Jun 2015	25.36%	22.45%	28.07%	0.21%	16.01%	2.49%	1.46%	1.04%	0.42%	2.49%
Jul to Dec 2015	27.45%	23.63%	25.78%	0.00%	15.75%	1.67%	2.15%	0.24%	0.24%	3.10%
Jan to Jun 2016	24.88%	23.72%	29.53%	0.23%	14.42%	2.79%	1.40%	0.70%	0.47%	1.86%

4.3 Location of Injury

Over seventy per cent of injuries reported were sustained to *upper limbs* (41.40 per cent) and *lower limbs* (29.30 per cent).



Location of Injury

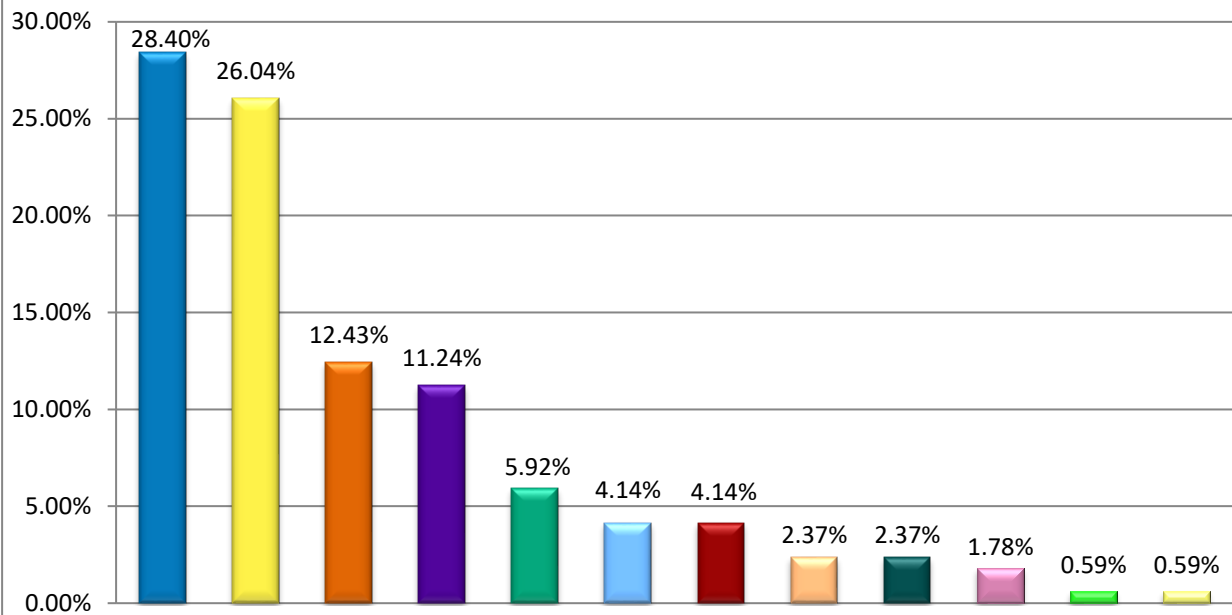
Period	Loc. 1	Loc. 2	Loc. 3	Loc. 4	Loc. 5	Loc. 6	Loc. 7	Loc. 8	Loc. 9
Jul to Dec 2011	10.51%	1.81%	20.92%	34.48%	27.22%	2.29%	0.29%	0.19%	2.29%
Jan to Jun 2012	9.52%	2.10%	16.81%	37.33%	28.55%	2.10%	0.25%	0.62%	2.72%
Jul to Dec 2012	11.19%	1.21%	17.12%	34.91%	27.49%	3.50%	0.27%	0.27%	4.04%
Jan to Jun 2013	12.12%	1.12%	14.83%	36.84%	28.71%	2.55%	0.32%	0.64%	2.87%
Jul to Dec 2013	10.44%	1.25%	13.86%	40.65%	28.19%	3.58%	0.47%	0.31%	1.25%
Jan to Jun 2014	8.44%	2.64%	15.11%	38.84%	30.58%	1.76%	0.88%	0.18%	1.58%
Jul to Dec 2014	8.49%	2.03%	16.61%	38.56%	29.52%	1.66%	0.92%	0.00%	2.21%
Jan to Jun 2015	8.73%	1.87%	13.51%	40.75%	30.98%	2.29%	0.00%	0.62%	1.25%
Jul to Dec 2015	9.79%	1.67%	14.56%	41.29%	28.64%	3.10%	0.24%	0.24%	0.48%
Jan to Jun 2016	8.60%	1.63%	15.12%	41.40%	29.30%	1.63%	0.23%	0.47%	1.63%

4.4 High-risk Construction Work

When submitting incident reports, accredited contractors are required to disclose – where applicable – what was the most significant high-risk construction work taking place at the time of the incident. Of the incident reports submitted, 54 per cent nominated high-risk construction work as having been undertaken at the time of the incident. The three most common categories of high-risk work taking place at the time of an incident were:

- construction work on construction sites where there is any movement of powered mobile plant (28.40 per cent)
- construction work with risk of a person falling two metres or more (26.04 per cent)
- construction work on or adjacent to roadways or railways used by road or rail traffic (12.43 per cent)

High Risk Construction Work



- 16. Construction work on construction-sites where there is any movement of powered mobile plant (28.40%)
- 1. Construction work with risk of a person falling two metres or more (26.04%)
- 15. Construction work on or adjacent to roadways or railways used by road or rail traffic (12.43%)
- 12. Construction work on or near energised electrical installations and services (11.24%)
- 3. Construction work involving demolition (5.92%)
- 5. Construction work involving structural alterations that require temporary support to prevent collapse (4.14%)
- 7. Construction work involving excavation to a depth greater than 1.5 m (4.14%)
- 2. Construction work on telecommunications towers (2.37%)
- 10. Construction work on or near pressurised gas distribution mains and consumer piping (2.37%)
- 18. Construction work in, over or adjacent to water or other liquids where there is a risk of drowning (1.78%)
- 14. Tilt-up and precast concrete construction work (0.59%)
- 17. Construction work in an area where there are artificial extremes of temperature (0.59%)

*See glossary for high-risk construction work details.

High-risk Construction Work

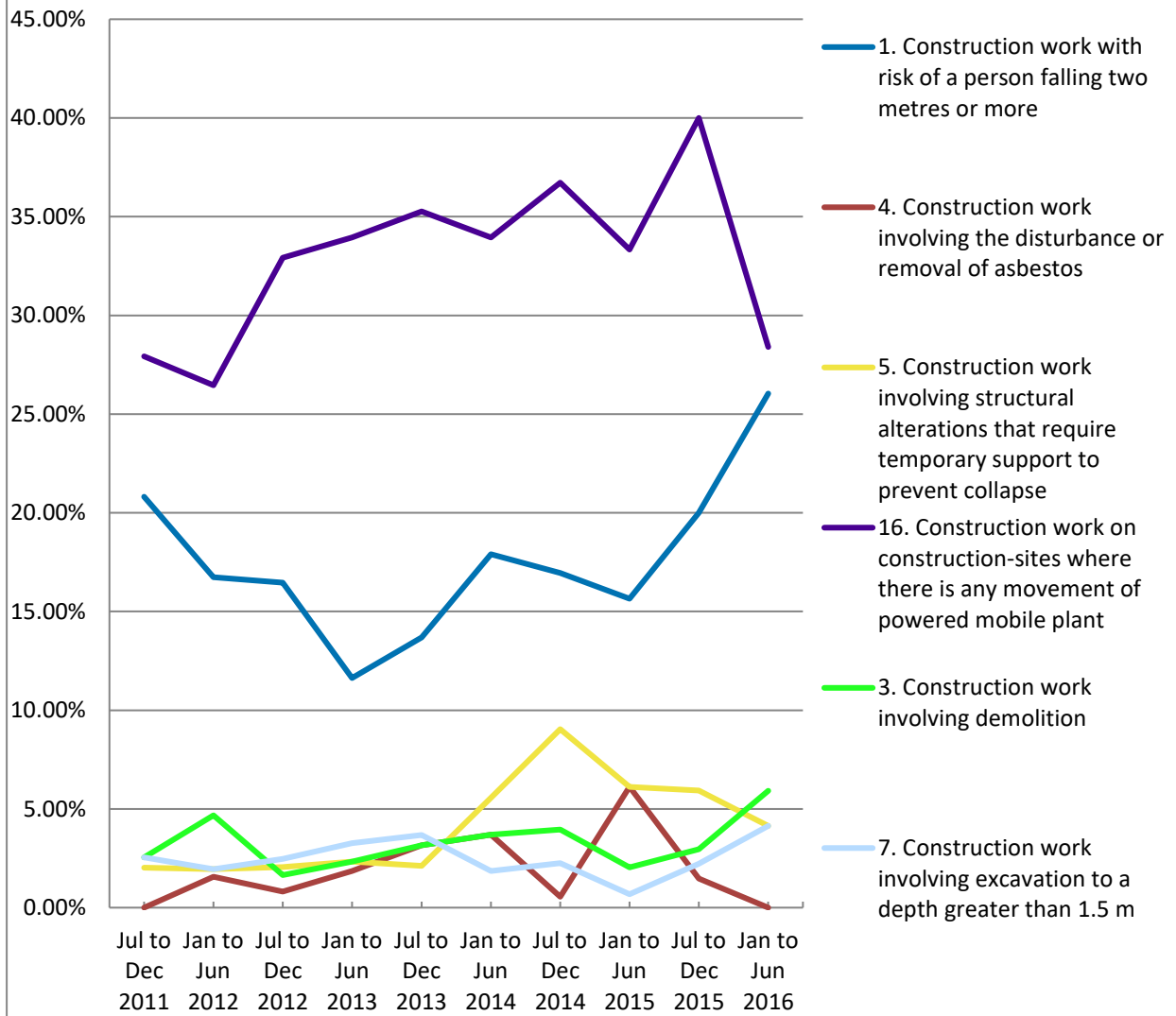
Period	Jul to Dec 2011	Jan to Jun 2012	Jul to Dec 2012	Jan to Jun 2013	Jul to Dec 2013	Jan to Jun 2014	Jul to Dec 2014	Jan to Jun 2015	Jul to Dec 2015	Jan to Jun 2016
Risk 1	20.81%	16.73%	16.46%	11.63%	13.68%	17.90%	16.95%	15.65%	20.00%	26.04%
Risk 2	0.00%	0.00%	0.41%	0.00%	0.00%	1.23%	0.56%	0.68%	2.96%	2.37%
Risk 3	2.54%	4.67%	1.65%	2.33%	3.16%	3.70%	3.95%	2.04%	2.96%	5.92%
Risk 4	0.00%	1.56%	0.82%	1.86%	3.16%	3.70%	0.56%	6.12%	1.48%	0.00%
Risk 5	2.03%	1.95%	2.06%	2.33%	2.11%	5.56%	9.04%	6.12%	5.93%	4.14%
Risk 6	0.00%	1.17%	0.82%	0.00%	0.53%	0.62%	0.00%	0.00%	0.00%	0.00%
Risk 7	2.54%	1.95%	2.47%	3.26%	3.68%	1.85%	2.26%	0.68%	2.22%	4.14%
Risk 8	0.51%	1.95%	7.00%	5.58%	3.16%	6.79%	3.95%	5.44%	0.74%	0.00%
Risk 9	0.00%	0.39%	0.41%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Risk 10	0.00%	1.56%	0.00%	3.72%	2.63%	4.94%	0.56%	3.40%	1.48%	2.37%
Risk 11	0.51%	1.56%	0.00%	0.00%	0.00%	0.00%	0.00%	1.36%	0.74%	0.00%
Risk 12	2.54%	8.56%	8.23%	13.02%	10.00%	4.32%	9.04%	10.20%	14.07%	11.24%
Risk 13	0.00%	1.17%	1.23%	0.47%	0.53%	0.00%	0.00%	0.68%	0.00%	0.00%
Risk 14	7.11%	8.17%	4.12%	2.79%	3.16%	3.09%	1.69%	2.04%	0.00%	0.59%
Risk 15	30.46%	19.46%	20.58%	18.14%	15.79%	11.11%	13.56%	12.24%	5.93%	12.43%
Risk 16	27.92%	26.46%	32.92%	33.95%	35.26%	33.95%	36.72%	33.33%	40.00%	28.40%
Risk 17	1.02%	0.00%	0.00%	0.47%	0.53%	0.00%	0.56%	0.00%	0.74%	0.59%
Risk 18	2.03%	2.33%	0.82%	0.00%	2.63%	1.23%	0.56%	0.00%	0.74%	1.78%
Risk 19	0.00%	0.39%	0.00%	0.47%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Since January 2012 the top high risk construction category has been 16 - *Construction work on construction-sites where there is any movement of powered mobile plant*. The increased occurrence of incidents in this category could be attributed to the prevalence of mobile plant on most construction sites. Mobile Plant continues to be one of the main hazards reviewed at audit.

There is consistently a significant difference between the first and second highest rated risk, with an average difference of 13.30 per cent. For the last 5 consecutive reporting periods, the second highest rated category has been 1 - *Construction work with risk of a person falling two metres or more* with this category recording the highest number of incidents since the OFSC began collecting this information in the July 2011, accounting for 26.04 per cent of total incidents where high risk activities were taking place at the time of incident.

Risk 16 - *Construction work on construction-sites where there is any movement of powered mobile plant* recorded a sizeable decrease (29.00 per cent) from 40.00 per cent in the July to December 2015 period to 28.40 per cent in the current period.

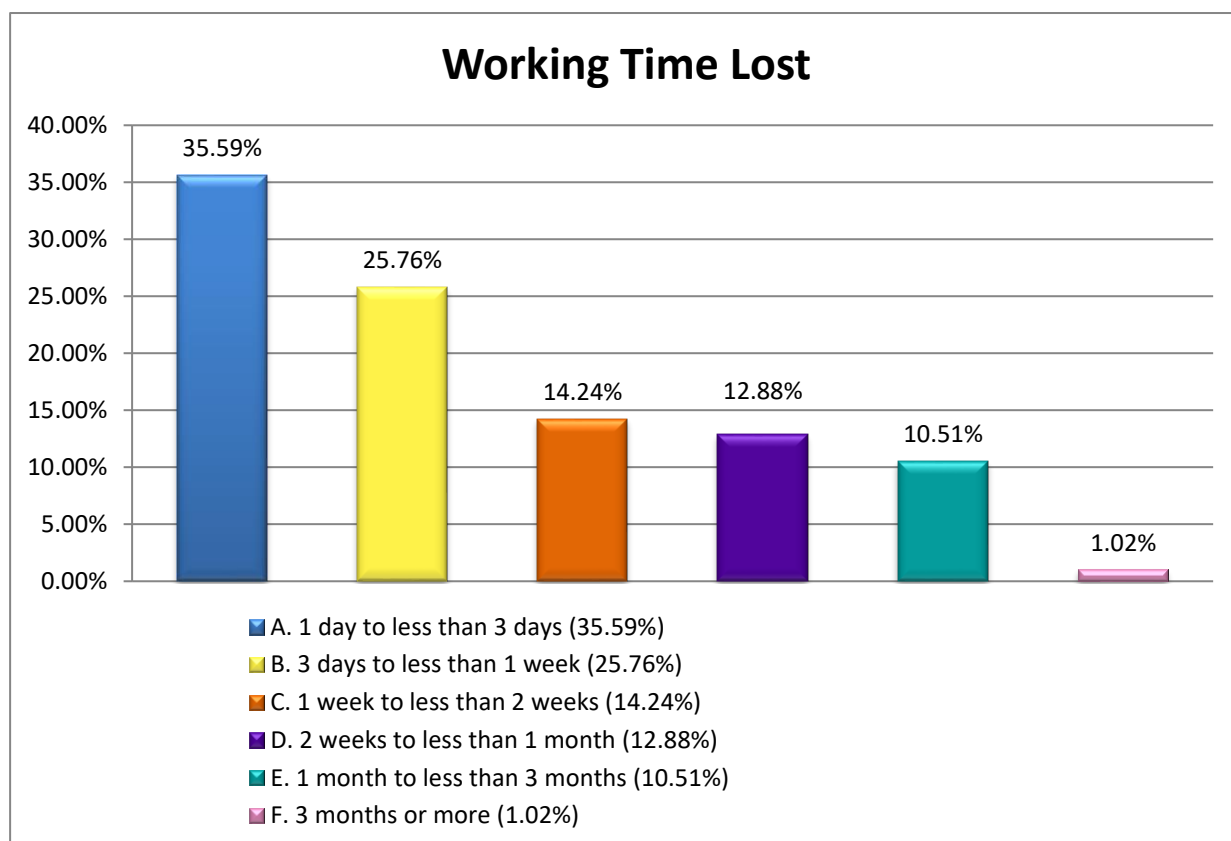
High Risk Hazards - Percentage Over Time



4.5 Working Time Lost

There has been no change in the most common length of working time lost since the OFSC began collecting this information in July to December 2011. *Between one and three days* remains the highest ranking category, followed by *three days to less than one week*. There is consistently a significant percentage difference between the first and second highest categories (average 20 per cent).

Over 75 per cent of workers who suffered a lost time injury returned to work in less than two weeks.

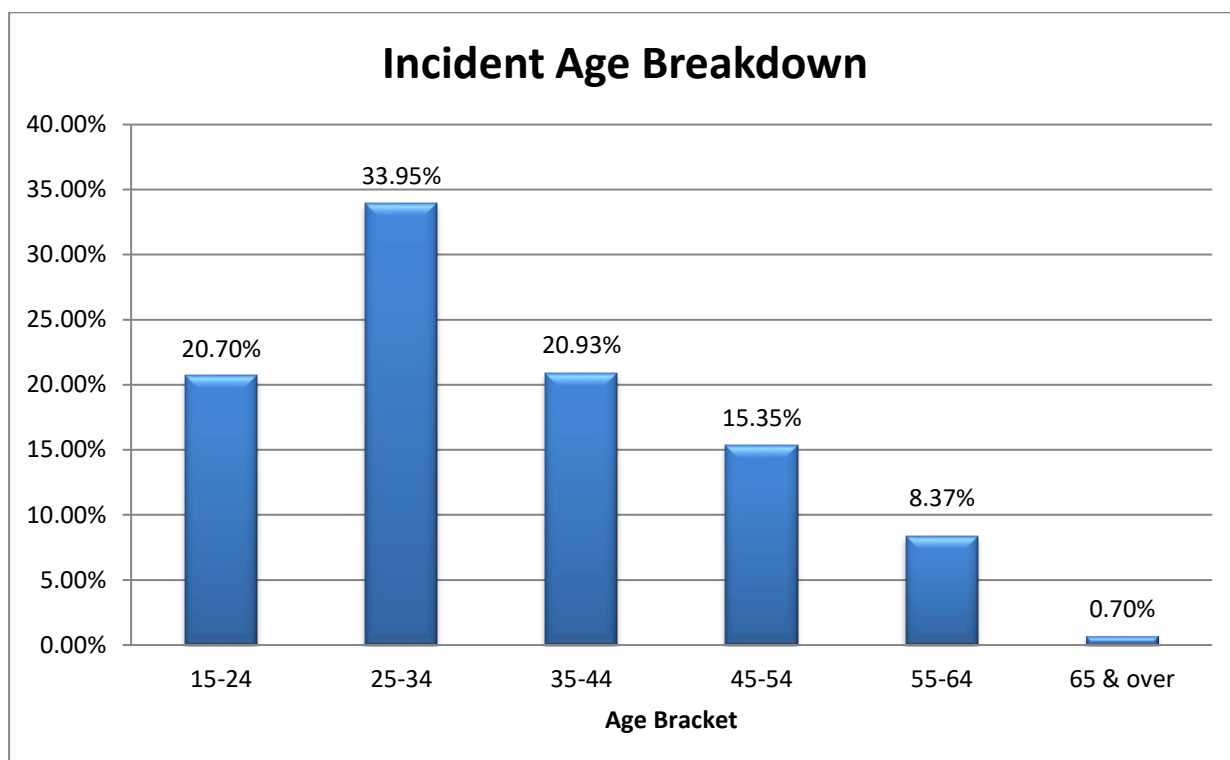


Working Time Lost

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%
Jul to Dec 2012	34.79%	25.00%	13.75%	13.33%	9.58%	3.54%
Jan to Jun 2013	46.67%	23.20%	12.27%	8.80%	6.67%	2.40%
Jul to Dec 2013	38.67%	20.82%	17.85%	13.73%	7.09%	1.83%
Jan to Jun 2014	41.71%	22.61%	15.83%	11.31%	7.79%	0.75%
Jul to Dec 2014	42.75%	21.75%	12.25%	13.75%	7.00%	2.50%
Jan to Jun 2015	41.71%	21.14%	16.29%	12.29%	6.57%	2.00%
Jul to Dec 2015	40.57%	14.15%	18.55%	14.78%	7.86%	4.09%
Jan to Jun 2016	35.59%	25.76%	14.24%	12.88%	10.51%	1.02%

4.6 Age Breakdown

Over 75 per cent of injured workers were below the age of 45. The 25-34 age bracket continues to account for the highest number of reported incidents (33.95 per cent).

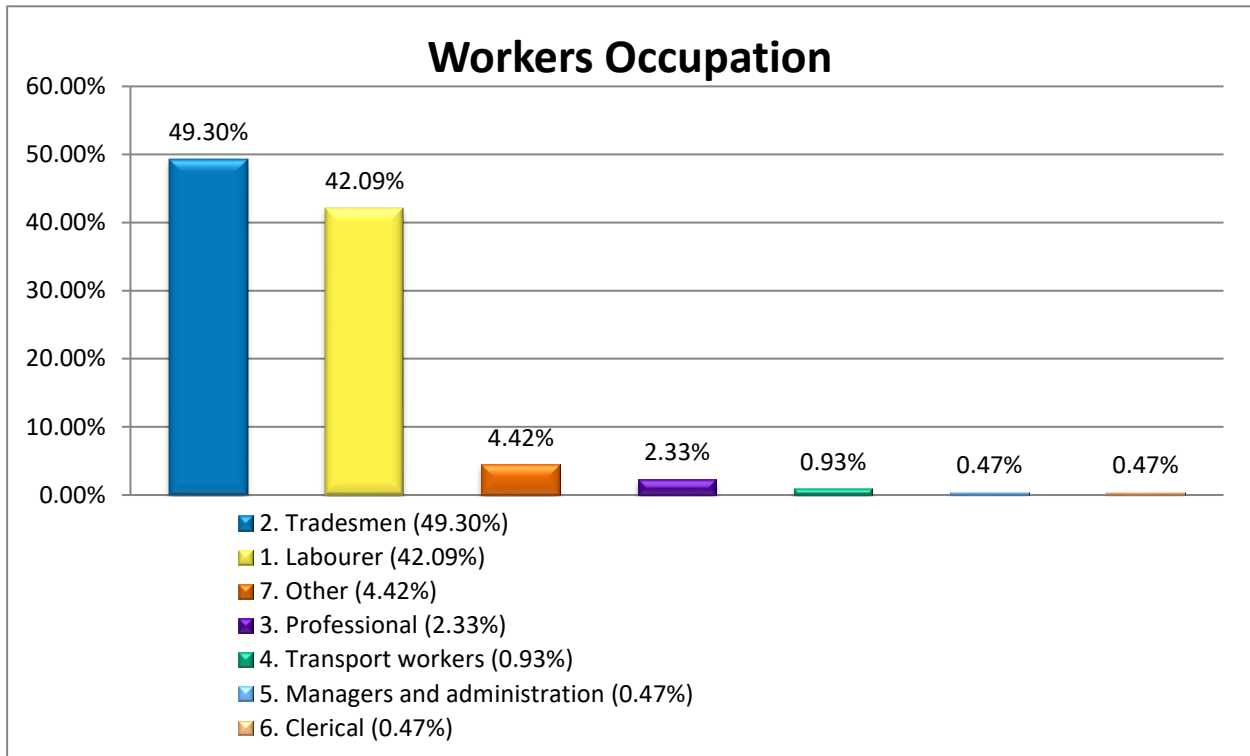


Incident Age Breakdown

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%
Jul to Dec 2012	17.84%	33.24%	25.00%	15.14%	7.43%	1.35%
Jan to Jun 2013	18.20%	33.33%	20.93%	16.59%	9.66%	1.29%
Jul to Dec 2013	19.55%	34.62%	23.24%	13.30%	8.65%	0.64%
Jan to Jun 2014	19.48%	31.84%	25.47%	16.48%	5.99%	0.75%
Jul to Dec 2014	19.05%	30.67%	20.38%	18.86%	9.14%	1.90%
Jan to Jun 2015	16.99%	35.46%	23.14%	15.50%	8.28%	0.64%
Jul to Dec 2015	12.50%	37.74%	21.88%	17.07%	10.58%	0.24%
Jan to Jun 2016	20.70%	33.95%	20.93%	15.35%	8.37%	0.70%

4.7 Injured Worker's Occupation

Over 91 per cent of people injured in reports submitted to the OFSC were Tradesmen (49.30 per cent) or Labourers (42.09 per cent).



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%
Jul to Dec 2012	41.37%	48.92%	2.02%	0.54%	2.16%	0.13%	4.85%
Jan to Jun 2013	42.58%	47.69%	1.91%	0.48%	1.91%	0.00%	5.42%
Jul to Dec 2013	37.85%	49.84%	2.34%	0.93%	2.18%	0.31%	6.54%
Jan to Jun 2014	41.65%	47.28%	1.05%	1.05%	2.11%	0.53%	6.33%
Jul to Dec 2014	40.59%	48.89%	1.48%	1.29%	1.48%	0.18%	6.09%
Jan to Jun 2015	47.40%	42.62%	0.83%	1.66%	1.87%	0.00%	5.61%
Jul to Dec 2015	38.19%	54.18%	1.43%	1.91%	1.91%	0.24%	2.15%
Jan to Jun 2016	42.09%	49.30%	2.33%	0.93%	0.47%	0.47%	4.42%

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.

There was again some correlation between the circumstances of the Dangerous Occurrences reported to the OFSC and those of the incidents resulting in injury. The most common high-risk work nominated in Dangerous Occurrence incident reports was also the fourth most commonly nominated in LTI/MTI/Fatality reports (*Construction work on or near energised electrical installations and services*).

Dangerous Occurrences

Period	Dangerous Occurrences
Jul to Dec 2011	79
Jan to Jun 2012	89
Jul to Dec 2012	83
Jan to Jun 2013	84
Jul to Dec 2013	76
Jan to Jun 2014	53
Jul to Dec 2014	49
Jan to Jun 2015	58
Jul to Dec 2015	46
Jan to Jun 2016	54

4.9 Workers' Compensation

Accredited contractors continue to be well below the industry average for Workers Compensation Premium Rates (approximately 35 per cent¹).

Accredited Contractors

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
Jul to Dec 2012	3.488	3.177	2.303	1.702	2.981	1.858	1.773	1.568
Jan to Jun 2013	3.442	3.217	2.324	1.769	2.801	1.935	1.584	1.627
Jul to Dec 2013	3.318	2.906	2.334	1.728	2.705	2.275	1.531	1.466
Jan to Jun 2014	3.750	2.851	2.125	1.713	2.805	2.234	1.524	1.533
Jul to Dec 2014	3.303	2.529	1.913	1.558	2.749	2.126	1.490	1.471
Jan to Jun 2015	3.020	2.461	2.046	1.423	2.517	1.938	1.461	1.359
Jul to Dec 2015	3.162	2.507	2.115	1.447	2.523	2.095	1.465	1.370
Jan to Jun 2016	2.790	2.397	2.149	1.519	2.516	2.043	1.565	1.331

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 2014 ¹	NA	3.666	NA	2.437	3.19	4.23	1.736	1.11
Non-residential construction September 2014 ¹	NA	2.858	NA	2.33	3.08	3.58	1.625	2.02

¹ Source: Safe Work Australia publication Comparison of Workers' Compensation Arrangements in Australia and New Zealand July 2015, Table 7.6 Selected Industry Premium Rates as at 30 September 2014, pages 199-202.

5 Awards and Recognition

During this reporting period accredited contractors have been the recipients of a number of prestigious safety awards, including—but not limited to—the following:

- Guideline (A.C.T.) Pty. Limited - won the 2016 Master Builders and CBUS award for Excellence in Building for Civil Work and Health and Safety
- Abergeldie Contractors Pty Ltd – won the 2016 Civil Contractors Federation NSW Earth Award for Work Health Safety Project of Distinction

6 Initiatives

Accredited contractors submit details of any 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 WHS 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 \$4 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 \$4 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.

TRIFR (Total Recorded Injury Frequency Rate) – The total number of Medically Treated Injuries, Lost Time Injuries and Fatalities in the defined period divided by the number of hours worked in the period, multiplied by one million.

Winsorised 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 winsorised 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.