



Government of **Western Australia**  
Department of **Mines, Industry Regulation and Safety**  
**WorkSafe**

# Transport, Postal and Warehousing Industry Profile (ANZSIC 2006)

Work-related lost time injuries and diseases in Western  
Australia

2012–13 to 2016–17p

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A number of issues affect the data quality of statistical information based on claims data, as provided by the Department of Mines, Industry Regulation and Safety (DMIRS). It is important to be aware of these issues when interpreting claims statistics, to ensure that the conclusions drawn from the information take into account known inconsistencies and omissions.

More information about the data can be found in the Explanatory notes section at the end of this report.

## 2018 Data Note

Due to re-benchmarking of Labour Force estimates based on revisions to the Estimated Resident Population following the 2016 census; denominator data (total number of employees covered by workers' compensation and total number of hours worked) provided by the Australian Bureau of Statistics (ABS) in 2018 include data revisions for 2014–15 and 2015–16.

Workers' compensation claims data has been revised back to 2000–01.

The revisions have affected rate calculations and caution is advised for all reported rates. As such, incidence and frequency rates may differ from previous publications in respect to these years and should not be used. Revised data is denoted by 'r'.

## Disclaimer

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## Overview

**Table 1: Industry division breakdown: Claims, LTI/Ds and fatalities**

Year	Total injury/disease claims (a)	LTI/Ds 1+ days/shifts lost	LTI/Ds 5+ days/shifts lost (b)	LTI/Ds 60+ days/shifts lost	Work-related traumatic injury fatalities (c)
2012-13r	2,247	1,195	986	359	2
2013-14r	2,143	1,167	948	366	1
2014-15r	2,120	1,136	934	356	7
2015-16r	1,855	1,051	872	344	2
2016-17p	1,733	1,006	840	414	0
<b>Average</b>	<b>2,020</b>	<b>1,111</b>	<b>916</b>	<b>368</b>	<b>2</b>

a) Includes all time lost and no time lost claims. Excludes journey, asbestos related and deleted/disallowed claims

b) Consistent with national injury and disease statistics.

c) Fatalities also include self-employed workers, students, unpaid volunteers and bystanders.

In 2012–13, one LTI/D was recorded per 41 employees in this division improving to one LTI/D for every 51 employees during 2016–17p. LTI/Ds have been below the five year average since 2014–15 except for severe cases (LTI/Ds 60+ days/shifts lost).

The total estimated cost per LTI/D during 2012–13 was \$50,854 and has risen to an estimated \$58,028 per LTI/D in 2015–16. Preliminary data for 2016–17 currently indicate an increase on the previous year.

**Table 2: Industry division breakdown: Estimated days lost and cost**

Year	Total injury/disease claims (a)		LTI/Ds			
	Total estimated cost	Total est. cost per claim	Total est. days lost	Average duration	Total estimated cost	Total est. cost per LTI/D
2012-13r	\$67,821,755	\$30,183	103,491	86.6	\$60,770,334	\$50,854
2013-14r	\$66,581,431	\$31,069	108,909	93.3	\$60,707,017	\$52,020
2014-15r	\$66,770,481	\$31,496	101,138	89.0	\$61,360,011	\$54,014
2015-16r	\$64,660,360	\$34,857	103,276	98.3	\$60,987,713	\$58,028
2016-17p	\$65,186,194	\$37,615	115,770	115.1	\$61,744,200	\$61,376
<b>Average</b>	<b>\$66,204,044</b>	<b>\$32,781</b>	<b>106,517</b>	<b>95.9</b>	<b>\$61,113,855</b>	<b>\$55,008</b>

a) Includes all time lost and no time lost claims. Excludes journey, asbestos related and deleted/disallowed claims

Preliminary data show the Transport, Postal and Warehousing division recorded the fourth highest incidence rate of all WA industries during 2016–17. However, this industry ranked outside the top five divisions in terms of frequency rate in the same period.

All categories recorded reductions in rate over the five year reporting period (table three), except severe LTI/Ds. Overall, LTI/D frequency and incidence rates decreased by 16.4 and 19.9 per cent respectively during the five year reporting period. The frequency and incidence of severe LTI/Ds (60+ days/shifts lost) increased by a respective 14.5 and 9.8 per cent.

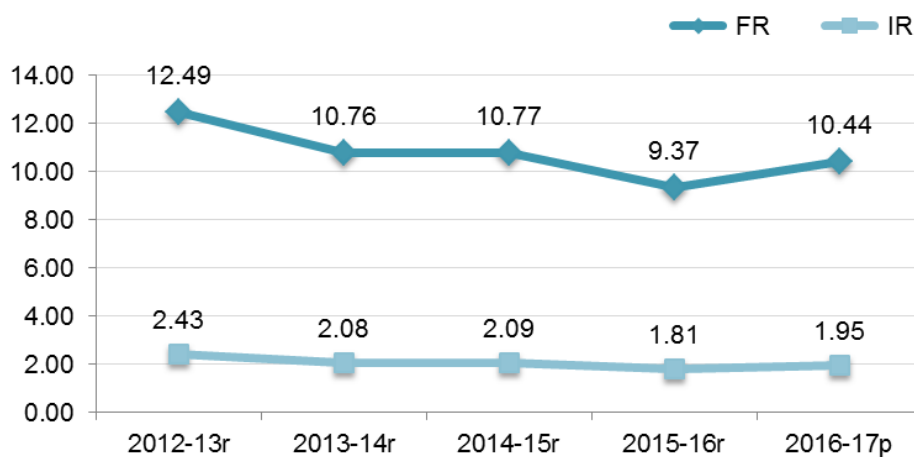
The total number of employees who are covered by workers' compensation increased five per cent to 51,593 during 2016–17p compared to 2012–13. The total number of hours worked increased by 0.7 per cent.

**Table 3: Industry division breakdown: Frequency and incidence rates**

Year	Total injury/disease claims (a)		LTI/Ds 1+ days/shifts lost		LTI/Ds 5+ days/shifts lost		LTI/Ds 60+ days/shifts lost	
	FR	IR	FR	IR	FR	IR	FR	IR
2012-13r	23.48	4.58	12.49	2.43	10.30	2.01	3.75	0.73
2013-14r	19.76	3.82	10.76	2.08	8.74	1.69	3.38	0.65
2014-15r	20.10	3.89	10.77	2.09	8.86	1.71	3.38	0.65
2015-16r	16.53	3.19	9.37	1.81	7.77	1.50	3.07	0.59
2016-17p	17.98	3.36	10.44	1.95	8.72	1.63	4.30	0.80
<b>Average</b>	<b>19.49</b>	<b>3.75</b>	<b>10.72</b>	<b>2.06</b>	<b>8.84</b>	<b>1.70</b>	<b>3.55</b>	<b>0.68</b>

a) Includes all time lost and no time lost claims. Excludes journey, asbestos related and deleted/disallowed claims

**Chart 1: Incidence and frequency rates (LTI/Ds of one or more days/shifts lost)**



**Table 4: Subdivisions within industry division**

Subdivision	Year	Total injury/disease claims (a)			LTI/Ds 1+ days/shifts lost						
		Claims	Frequency rate	Incidence rate	LTI/Ds	Frequency rate	Incidence rate	Total est. days lost	Average duration	Total estimated cost LTI/Ds	LTI/Ds 60+ days/shifts lost
Road Transport	2012-13r	1,074	25.64	5.55	635	15.16	3.28	65,647	103.4	\$37,530,746	211
	2013-14r	962	19.92	4.18	570	11.81	2.47	57,235	100.4	\$32,325,836	196
	2014-15r	964	20.55	4.29	576	12.28	2.56	63,986	111.1	\$37,520,389	213
	2015-16r	853	16.68	3.82	565	11.05	2.53	67,032	118.6	\$38,421,463	220
	2016-17p	818	17.34	3.58	506	10.73	2.22	72,024	142.3	\$36,058,631	224
	<b>Average</b>	<b>934</b>	<b>19.84</b>	<b>4.25</b>	<b>570</b>	<b>12.12</b>	<b>2.59</b>	<b>65,185</b>	<b>114.3</b>	<b>\$36,371,413</b>	<b>213</b>
Rail Transport	2012-13r	158	23.24	4.38	91	13.38	2.52	5,168	56.8	\$3,433,704	25
	2013-14r	176	19.15	4.17	111	12.08	2.63	8,511	76.7	\$4,520,173	37
	2014-15r	171	24.43	5.13	78	11.14	2.34	5,651	72.4	\$3,408,146	25
	2015-16r	177	34.04	6.53	87	16.73	3.21	5,961	68.5	\$3,937,507	23
	2016-17p	175	32.92	6.44	88	16.55	3.24	6,344	72.1	\$4,244,127	32
	<b>Average</b>	<b>171</b>	<b>25.58</b>	<b>5.16</b>	<b>91</b>	<b>13.58</b>	<b>2.74</b>	<b>6,327</b>	<b>69.5</b>	<b>\$3,908,731</b>	<b>28</b>
Water Transport	2012-13r	15	27.61	4.19	9	16.57	2.51	859	95.4	\$589,186	<5
	2013-14r	26	8.39	1.61	14	4.52	0.87	415	29.6	\$222,314	<5
	2014-15r	11	4.20	0.88	5	1.91	0.40	572	114.4	\$634,723	<5
	2015-16r	15	8.42	1.54	10	5.61	1.03	1,053	105.3	\$396,508	<5
	2016-17p	18	14.99	1.83	12	10.00	1.22	2,108	175.7	\$1,106,201	5
	<b>Average</b>	<b>17</b>	<b>9.20</b>	<b>1.64</b>	<b>10</b>	<b>5.41</b>	<b>0.96</b>	<b>1,001</b>	<b>100.1</b>	<b>\$589,787</b>	<b>&lt;5</b>
Air and Space Transport	2012-13r	122	10.77	1.95	74	6.53	1.18	4,203	56.8	\$2,445,830	15
	2013-14r	142	17.32	2.76	90	10.98	1.75	6,403	71.1	\$3,072,691	17
	2014-15r	185	21.10	3.83	126	14.37	2.61	7,983	63.4	\$5,280,222	32
	2015-16r	148	12.80	2.11	100	8.65	1.42	4,616	46.2	\$2,721,131	18
	2016-17p	103	13.19	2.39	70	8.97	1.63	7,061	100.9	\$3,810,710	25
	<b>Average</b>	<b>140</b>	<b>14.68</b>	<b>2.54</b>	<b>92</b>	<b>9.65</b>	<b>1.67</b>	<b>6,053</b>	<b>65.8</b>	<b>\$3,466,116</b>	<b>21</b>

Subdivision	Year	Total injury/disease claims (a)			LTI/Ds 1+ days/shifts lost						LTI/Ds 60+ days/shifts lost
		Claims	Frequency rate	Incidence rate	LTI/Ds	Frequency rate	Incidence rate	Total est. days lost	Average duration	Total estimated cost LTI/Ds	
Other Transport	2012-13r	39	33.69	9.09	23	19.87	5.36	2,075	90.2	\$684,900	6
	2013-14r	28	126.64	6.70	9	40.71	2.15	1,163	129.2	\$608,582	<5
	2014-15r	37	25.27	4.63	15	10.25	1.88	1,659	110.6	\$1,288,501	<5
	2015-16r	23	7.59	1.45	14	4.62	0.88	767	54.8	\$539,710	<5
	2016-17p	27	16.40	2.78	15	9.11	1.54	1,202	80.1	\$663,236	7
	<b>Average</b>	<b>31</b>	<b>20.48</b>	<b>3.66</b>	<b>15</b>	<b>10.11</b>	<b>1.81</b>	<b>1,373</b>	<b>90.3</b>	<b>\$756,986</b>	<b>5</b>
Postal and Courier Pick-up and Delivery Services	2012-13r	40	4.68	0.69	23	2.69	0.40	2,435	105.9	\$678,422	9
	2013-14r	42	3.61	0.59	25	2.15	0.35	3,060	122.4	\$1,375,820	10
	2014-15r	47	3.94	0.60	32	2.68		3,641	113.8	\$1,452,339	9
	2015-16r	27	2.08	0.30	15	1.16	0.17	1,868	124.5	\$1,517,134	7
	2016-17p	46	4.42	0.68	28	2.69	0.41	2,459	87.8	\$983,071	10
	<b>Average</b>	<b>40</b>	<b>3.64</b>	<b>0.55</b>	<b>25</b>	<b>2.22</b>	<b>0.34</b>	<b>2,693</b>	<b>109.5</b>	<b>\$1,201,357</b>	<b>9</b>
Transport Support Services	2012-13r	555	44.19	8.35	245	19.51	3.68	18,521	75.6	\$12,494,944	72
	2013-14r	514	36.18	7.18	237	16.68	3.31	23,428	98.9	\$14,154,955	78
	2014-15r	399	27.08	4.89	158	10.72	1.94	12,100	76.6	\$9,212,396	57
	2015-16r	336	24.43	4.42	142	10.33	1.87	13,892	97.8	\$10,215,430	47
	2016-17p	<b>336</b>	<b>24.02</b>	<b>3.82</b>	<b>173</b>	<b>12.37</b>	<b>1.97</b>	<b>18,401</b>	<b>106.4</b>	<b>\$11,581,676</b>	<b>81</b>
	<b>Average</b>	<b>428</b>	<b>30.91</b>	<b>5.58</b>	<b>191</b>	<b>13.79</b>	<b>2.49</b>	<b>17,268</b>	<b>90.4</b>	<b>\$11,531,880</b>	<b>67</b>
Warehousing and Storage Services	2012-13r	244	18.97	3.68	95	7.39	1.43	4,583	48.2	\$2,912,603	17
	2013-14r	253	18.60	3.47	111	8.16	1.52	8,694	78.3	\$4,426,647	24
	2014-15r	306	25.44	5.34	146	12.14	2.55	5,546	38.0	\$2,563,295	14
	2015-16r	276	21.59	4.02	118	9.23	1.72	8,087	68.5	\$3,238,830	22
	2016-17p	210	23.79	4.94	114	12.92	2.68	6,171	54.1	\$3,296,550	30
	<b>Average</b>	<b>258</b>	<b>21.45</b>	<b>4.19</b>	<b>117</b>	<b>9.72</b>	<b>1.90</b>	<b>6,616</b>	<b>56.6</b>	<b>\$3,287,585</b>	<b>21</b>

a) Includes all time lost and no time lost claims. Excludes journey, asbestos related and deleted/disallowed claims

Three industry subdivisions in this division recorded increases in frequency rate. The highest increase was recorded in Warehousing and Storage Services (74.9 per cent) followed by Air and Space Transport (37.2 per cent) and Rail Transport (23.7 per cent). The same three subdivisions also recorded increases in incidence rate during the reporting period (87.2, 37.3 and 28.4 per cent respectively). A fourth subdivision recorded an increase incidence rate. The Postal and Courier Pick-up and Delivery Services subdivision recorded an increase of 4.9 per cent from 0.40 LTI/Ds per one hundred employees in 2012–13 to 0.41 in 2016–17p.

The remaining subdivisions in this industry division recorded reductions in frequency and incidence rates during 2016–17p compared to 2012–13 (except the Postal and Courier Pick-up and Delivery Services subdivision where frequency rates remained static). The greatest reductions in frequency rate were recorded in Other Transport and Water Transport at -54.2 and -39.7 per cent respectively. The same two subdivisions recorded the greatest reduction in incidence rate (-71.2 and -51.4 per cent respectively).

Three subdivisions recorded a reduction in the total number of employees and hours worked during 2016–17 compared to 2012–13. These were Warehousing and Storage Services (-36 per cent to 4,255 employees and -31 per cent in hours worked), Air and Space Transport -31 per cent in both hours worked and employees (to 4,304 employees), and Rail Transport (-25 per cent to 2,718 employees and -22 per cent in hours worked). These were the same subdivisions to record the highest increases in rates. All other subdivisions (except Other Transport which remained static) recorded increases in the total number of employees and hours worked.

The greatest increases were recorded in the Water Transport subdivision (up 175 per cent to 983 employees and up 121 per cent in total hours worked) and the Other Transport subdivision (up 126 per cent to 971 employees and up 42 per cent in total hours worked). Such fluctuations may, in part, have had an effect on the variances in rates.

In terms of severe cases (LTI/DS where 60 or more days/shifts were lost), above average figures were recorded all subdivisions during 2016–17p.

Road Transport is one of seven industries identified as a national priority for prevention activities for the duration of the Australian Work Health and Safety Strategy 2012-2022.

## Sex

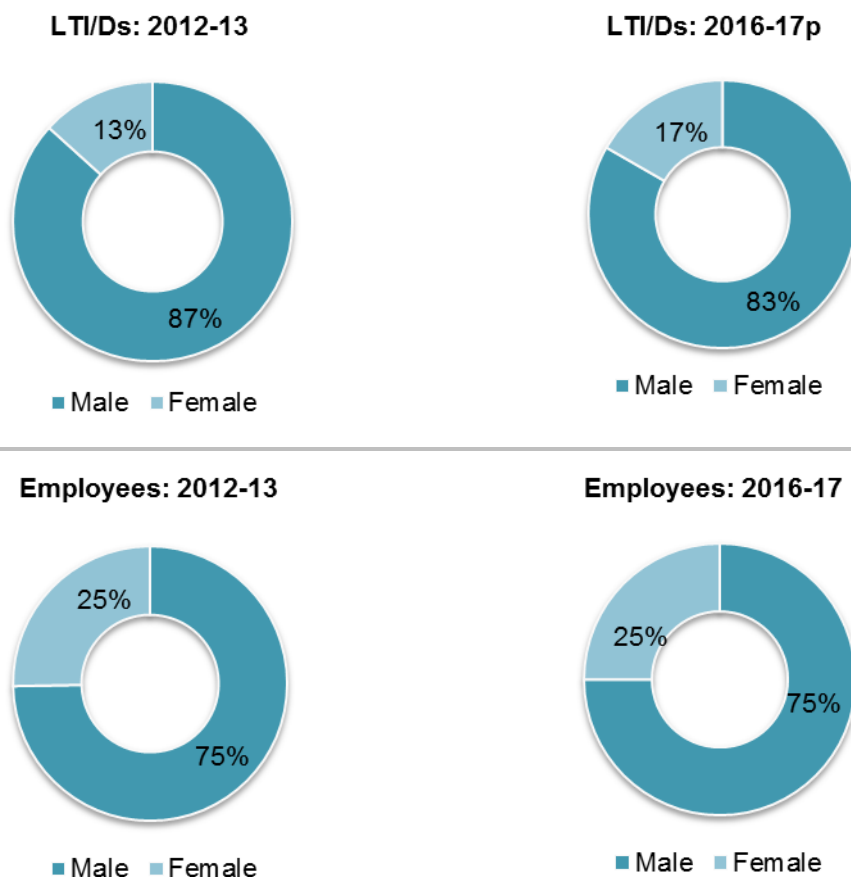
The distribution of LTI/Ds (1+ days/shifts lost) between male and female in this industry division has increase by four percentage points between 2012–13 and 2016–17, with the proportion of female LTI/Ds increasing in this time.

The distribution of employees between male and female remains constant over the two comparative periods and continues to show a dominance of male employees in this industry division.

A higher proportion of male LTI/Ds versus the proportion of male employees are evident in both time periods, however the gap has narrowed in 2016–17. This may suggest multiple LTI/Ds incurred by the same individual(s). The inverse is true in respect to females where the proportion of LTI/Ds is lower than the employee proportion; however unlike males, the gap in 2016–17 has negatively narrowed.



**Chart 2: Comparison of LTI/D and employee distribution by sex between 2012–13 and 2016–17p**



## Occupation

The three most common sub-major occupation groups (in order of magnitude) in Western Australia that experienced a workplace injury or disease of one or more days/shifts lost during the five year period from 2011-12 to 2016–17p are the *Road and Rail Drivers* group with 2,546 LTI/Ds, predominantly the occupation of *Truck Driver (General)* with 1,848 LTI/Ds (-21.2 per cent from 415 in 2012–13 to 327 in 2016–17p) and *Delivery Driver* with 185 LTI/Ds (up 31 per cent from 29 to 38 LTI/Ds); *Mobile Plant Operators* with 594 LTI/Ds, largely *Aircraft baggage Handler and Airline Ground Crew* with 217 LTI/Ds (no change, recording 47 LTI/Ds in each comparative period) and *Forklift Driver* with 217 LTI/Ds (-44.8 per cent from 58 to 32 LTI/Ds); and *Other Labourers* group with 459 LTI/Ds, largely *Waterside Worker* with 206 LTI/Ds (-70.8 per cent from 672 to 21) and *Labourers nec<sup>1</sup>* with 76 LTI/Ds (-79.3 from 29 to six).

The chart below represents the number of work-related incidents recorded in the reporting period by major occupation group in relation to the Transport, Postal and Warehousing industry division. Some groups in the chart recorded comparatively low data and therefore may not show clearly in the chart.

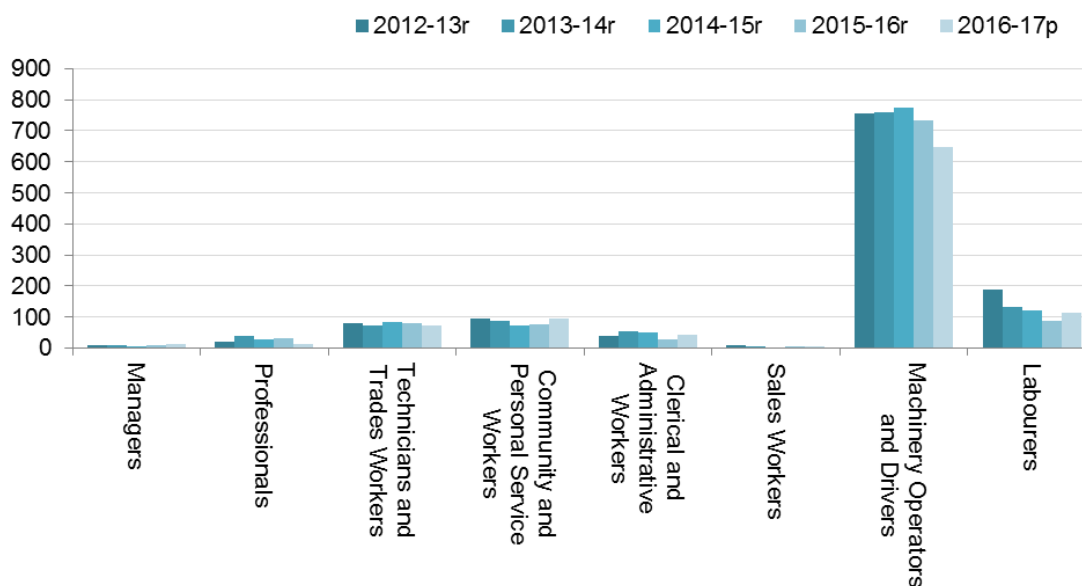
In relation to major occupation groups, *Machinery Operators and Drivers* account for the majority of LTI/Ds in this industry division (66 per cent or two thirds). LTI/Ds recorded in 2016–17p were 14.2 per cent lower than in 2012–13 (from 756 to 649 LTI/Ds).

<sup>1</sup> Nec not elsewhere classified

Four further groups recorded reductions in the reporting period. The greatest fall was recorded in the *Labourers* group at -40.2 per cent (from 189 to 113 LTI/Ds) followed by the *Professionals* group at -25 per cent (from 20 to 15 LTI/Ds). The *Community and Personal Service Workers* group remained steady over the five year period recording 95 LTI/Ds in each comparative period.

Two groups recorded an increase during the reporting period. LTI/Ds increased 20 per cent in the *Managers* group from 10 LTI/Ds in 2012–13 to 12 in 2016–17p and increased 13.2 per cent in the *Clerical and Administrative Workers* (from 38 to 43 LTI/Ds).

**Chart 3: LTI/Ds by occupation group**



In terms of severe LTI/Ds (LTI/Ds where 60+ days/shifts are lost from work), table 5 shows the highest recording occupations during the combined five year period from 2012–13 to 2016–17p. These occupations collectively account for more than half (59 per cent) of total severe cases in this industry division.

Severe *Truck Driver (General)* LTI/Ds singly account for 40 per cent of cases in this industry division.

**Table 5: Severe LTI/Ds: Highest recording occupations**

Occupations	5yr total	% of 5yr industry total
Truck Driver (General)	744	40%
Bus Driver	92	5%
Aircraft Baggage Handler and Airline Ground Crew	90	5%
Waterside Worker	78	4%
Storeperson	74	4%
<b>Total</b>	<b>1,078</b>	<b>59%</b>

## Nature of injury

The nature of injury/disease is intended to identify the most serious injury or disease sustained by the worker.

The three most common natures of injury and disease (in order of magnitude) in relation to workplace injuries or diseases of one or more days/shifts lost during the five year period from 2012–13 to 2016–17p continue to be *Soft tissue injuries due to trauma or unknown mechanism* with 2,219 LTI/Ds (-26.6 per cent from 463 in 2012–13 to 340 in 2016–17p), *Trauma to muscles and tendons, unspecified* with 871 LTI/Ds (-0.5 per cent from 191 to 190), and *Other fractures, not elsewhere classified* with 568 LTI/Ds (-13.2 per cent from 121 to 105).

Notable increases were evident in the subgroups of *Anxiety/stress disorder* (from <5 LTI/Ds in 2012–13 to 17 in 2016–17p), *Bursitis* (from <5 to 13 LTI/Ds), *Hot burn* (from <5 to eight), *Traumatic amputation* (from <5 LTI/Ds to six), *Dislocation* (up 64.3 per cent from 14 LTI/Ds to 23), and *Fracture of vertebral column without mention of spinal cord* (up 60 per cent from five LTI/Ds to eight).

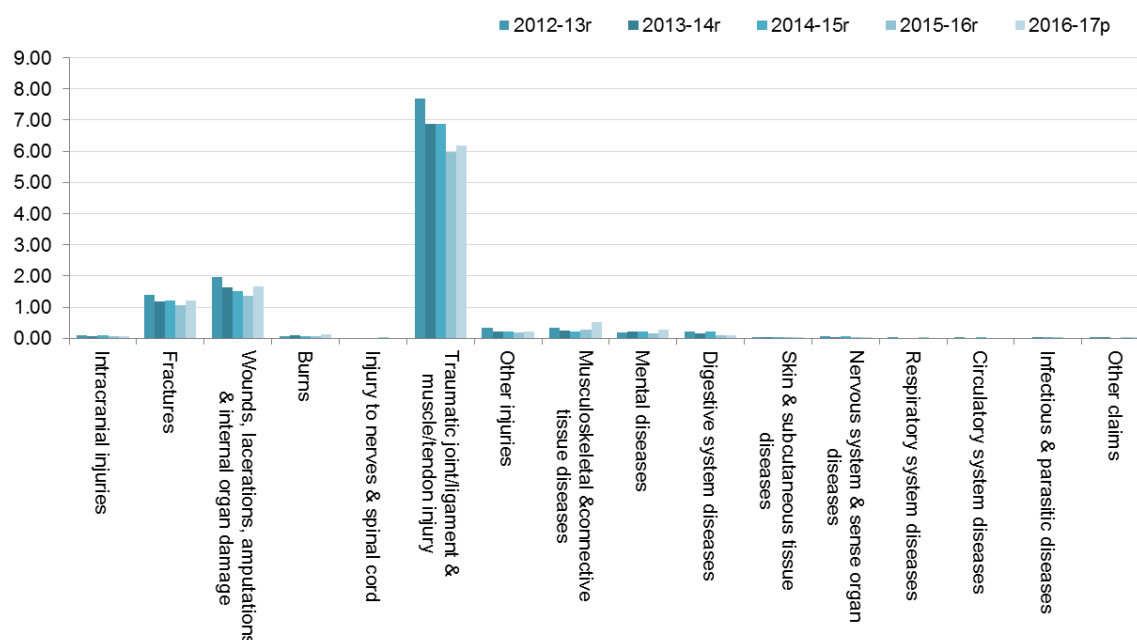
The chart below represents frequency rates by nature of injury groups in relation to the Transport, Postal and Warehousing industry division. Groups that recorded very low or zero data in the period have been excluded from the chart. Some groups shown also recorded comparatively low data and therefore may not show clearly in the chart.

Five groups recorded an increase in frequency rate during the five year period. The frequency rate in the *Other claims* group increased 197.9 per cent from 0.01 LTI/Ds per million hours worked in 2012–13 to 0.03 in 2016–17p, increased *Burns* 98.6 per cent from 0.06 to 0.12 LTI/Ds per million hours worked, and *Skin and subcutaneous tissue diseases* also increased 98.6 per cent to a frequency rate of 0.02 during 2016–17p.

The two remaining groups to record an increase in frequency rate were *Musculoskeletal and connective tissue diseases* at 55.2 per cent (from a rate of 0.33 to 0.52) and *Mental diseases* at 43.4 per cent (from 0.19 in 2012-13 to 0.27 in 2016–17p).

The *Traumatic joint/ligament and muscle/tendon injury* is the most prominent group associated with LTI/Ds in this industry division. LTI/Ds decreased by 19.8 per cent during the period from 7.70 LTI/Ds per million hours worked to 6.17. Eight further groups recorded reductions in frequency rate during the reporting period, including *Digestive system diseases* (-54.9 per cent from 0.23 in 2012–13 to 0.10 in 2016–17p), *Intracranial injuries* (-36.8 per cent from 0.11 to 0.07), *Fractures* (-12.6 per cent to a rate of 1.22 in 2016–17p), and *Nervous system and sense organ diseases* (-62.8 per cent from a frequency rate of 0.08 to 0.03).

**Chart 4: Frequency rates by nature of injury**



In terms of severe LTI/Ds (LTI/Ds 60+ days/shifts lost from work), table 6 shows the highest recording nature of injury subgroups during the combined five year period from 2012–13 to 2016–17p. These subgroups collectively account for 82 per cent of total severe cases in this industry division.

Severe cases of *Soft tissue injuries due to trauma or unknown mechanisms* alone account for 43 per cent of the total severe cases and 14 per cent of all LTI/Ds recorded in this industry division during the reporting period.

**Table 6: Severe LTI/Ds: Highest recording subgroups**

Subgroup	5yr total	% of 5yr industry total
Soft tissue injuries due to trauma or unknown mechanisms	788	43%
Trauma to muscles and tendons, unspecified	302	16%
Other fractures, not elsewhere classified	230	13%
Trauma to joints and ligaments, unspecified	107	6%
Contusion, bruising and superficial crushing	82	4%
<b>Total</b>	<b>1,509</b>	<b>82%</b>

## Mechanism of incident

The mechanism of incident is intended to identify the overall action, exposure or event that best describes the circumstances that resulted in the most serious injury/disease.

The three most common mechanisms of incident (in order of magnitude) in relation to workplace injuries or diseases of one or more days/shifts lost during the five year period from 2012–13 to 2016–17p continue to be *Muscular stress while handling objects other than lifting, carrying or putting down* with 1,338 LTI/Ds (-12.2 per cent from 296 in 2012–13 to 260 in 2016–17p), *Muscular stress while lifting, carrying, or putting down objects* with 841 (-5.1 per cent from 156 LTI/Ds to 148), and *Falls on the same level* with 789 (-24.9 per cent from 177 to 133).

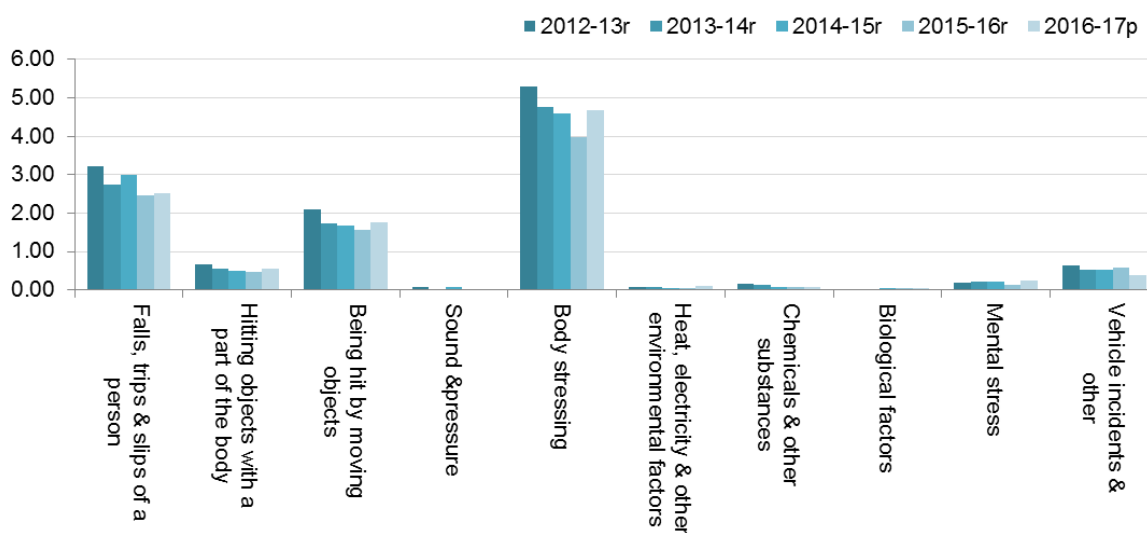
During the reporting period, notable increases occurred in the classifications of *Work pressure* (from <5 to eight LTI/Ds), *Contact with hot objects* (from <5 to eight LTI/Ds). The subgroups of *Exposure to workplace or occupational violence*, *Rollover*, and *Work related harassment and/or workplace bullying* recorded increases of less than five LTI/Ds in each comparative period, however, the circumstance of the incidents warrant mention.

The chart below represents frequency rates of work-related lost time injuries and diseases recorded by mechanism of incident in relation to the Transport, Postal and Warehousing industry division. Some groups recorded comparatively low data and therefore may not show clearly in the chart.

The greatest proportion of LTI/Ds in this industry division is attributable to the mechanism group of *Body stressing*. Frequency rates have reduced by 11.5 per cent during the five year reporting period from 5.30 LTI/Ds per million hours worked in 2012–13 to 4.69 in 2016–17p.

Frequency rate reductions were also recorded in six other major groups. The greatest rate reductions were in *Sound and pressure* (-75.2 per cent from 0.08 in 2012–13 to a high of 0.09 in 2014-15, decreasing to 0.02 in 2016–17p), *Chemicals and other substances* (-50.4 per cent from 0.17 to 0.08), and *Vehicle incidents and other* (-39.8 per cent from a frequency rate of 0.64 to 0.38).

**Chart 5: Frequency rates by mechanism of incident**



In terms of severe LTI/Ds (LTI/Ds 60+ days/shifts lost from work), table 7 shows the highest recording mechanism of incident subgroups during the combined five year period from 2012–13 to 2016–17p. These subgroups collectively account for 78 per cent of total severe cases in this industry division.

Severe cases of *Muscular stress while handling objects other than lifting, carrying or putting down* alone account for more than a quarter of the total severe cases recorded during 2012–13 to 2016–17p.

**Table 7: Severe LTI/Ds: Highest recording subgroups**

Subgroup	5yr total	% of 5yr industry total
Muscular stress while handling objects other than lifting, carrying or putting down	508	28%
Falls on the same level	287	16%
Muscular stress while lifting carrying putting down objects	271	15%
Falls from a height	252	14%
Vehicle accident	123	7%
<b>Total</b>	<b>1,441</b>	<b>78%</b>

## Breakdown agency of injury

The breakdown agency is intended to identify the object, substance or circumstance that was principally involved in, or most closely associated with, the point at which things started to go wrong and which ultimately led to the most serious injury/disease.

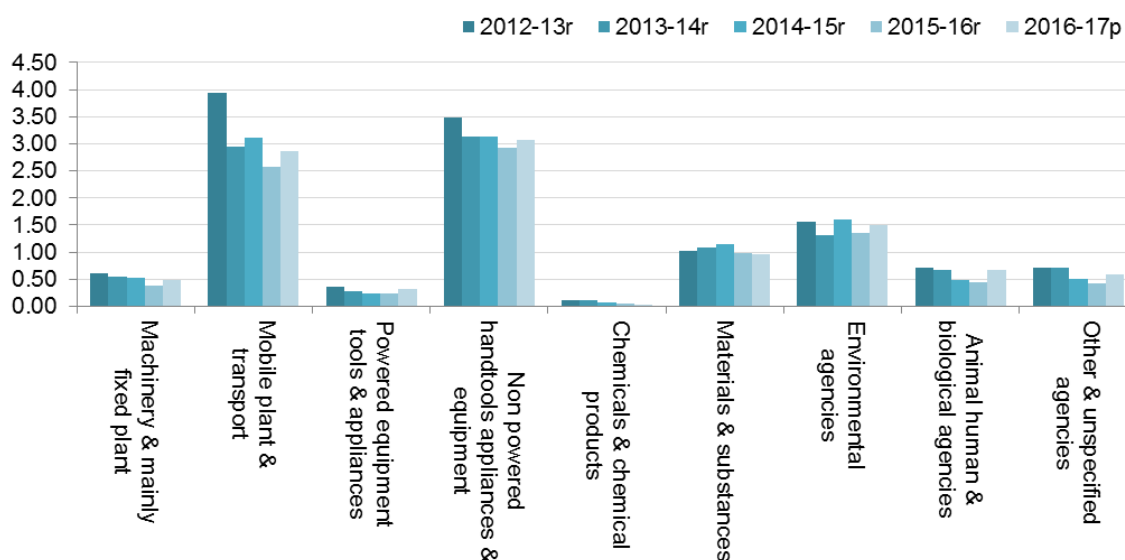
The three most common breakdown agency of injury groups (in order of magnitude) in relation to workplace injuries or diseases of one or more days/shifts lost during the five year period from 2012–13 to 2016–17p are the *Non powered handtools, appliances and equipment* group with 1,627 LTI/Ds, particularly the subgroups of *Crates, cartons, boxes, cases, drums, kegs, barrels* with 355 LTI/Ds (-23.5 per cent from 68 in 2012-13 to 52 in 2016-17p) and *Bags, bundles and bales* with 147 LTI/Ds (-26.9 per cent from 26 to 19); *Mobile plant and transport* group with 1,589 LTI/Ds, primarily *Trucks, semi-trailers, lorries* with 846 LTI/Ds (-36 per cent from 211 to 135) and *Buses, trolleybuses, minibuses* with 125 LTI/Ds (-34.5 per cent from 29 to 19); and *Environmental agencies* group with 755 LTI/Ds, mainly subgroups of *Traffic and ground surfaces other* with 247 LTI/Ds (-13 per cent from 54 to 47) and *Traffic and ground surfaces with hazardous objects* with 82 LTI/Ds (up 36.4 per cent from 11 to 15).

The chart below represents frequency rates of work-related lost time injuries and diseases by breakdown agency of injury in relation to the Transport, Postal and Warehousing industry division. Some groups recorded comparatively low data and therefore may not show clearly in the chart.

During 2012–13 to 2016–17p, all breakdown agency groups in this industry division recorded reductions in the frequency rate of LTI/Ds ranging from -4.0 to -80.1 per cent. The greatest decrease was recorded in *Chemicals and chemical products* with -80.1 per cent (from 0.10 LTI/Ds per million hours worked in 2012–13 to 0.02 in 2016–17p) followed by *Mobile plant and transport* with -27.8 per cent (from a frequency rate of 3.95 to 2.85) and *Machinery and mainly fixed plant* with -22.6 per cent (from 0.62 to 0.48).

The *Non powered handtools, appliances and equipment* group is associated with the majority of LTI/Ds in this industry division. Frequency rates declined 11.7 per cent over the five year period (from 3.48 to 3.07).

**Chart 6: Frequency rates by breakdown agency of injury**



In terms of severe LTI/Ds (LTI/Ds 60+ days/shifts lost from work), table 8 shows the highest recording breakdown agency subgroups during the combined five year period from 2012–13 to 2016–17p. These subgroups collectively account for 37 per cent of total severe cases in this industry division.

The classification of *Trucks, semi-trailers, lorries* singly accounts for 20 per cent of all severe LTI/Ds in the Transport, Postal and Warehousing industry division.

**Table 8: Severe LTI/Ds: Highest recording subgroups**

Subgroup	5yr total	% of 5yr industry total
Trucks, semi-trailers, lorries	361	20%
Crates, cartons, boxes, cases, drums, kegs, barrels	93	5%
Traffic and ground surfaces other	87	5%
Other person	76	4%
Buses, trolleybuses, minibuses	71	4%
<b>Total</b>	<b>688</b>	<b>37%</b>

## Bodily location

The bodily location is intended to identify the part of the body affected by the most serious injury/disease sustained by the worker.

The three parts of the body most affected (in order of magnitude) in relation to workplace injuries or diseases of one or more days/shifts lost during the five year period from 2012–13 to 2016–17p continue to be the *Lower back* with 768 LTI/Ds (-20.6 per cent from 175 in 2012–13 to 139 in 2016–17p), *Shoulder* with 673 LTI/Ds (up 22.4 per cent from 116 to 142) and *Knee* with 588 LTI/Ds (-28.7 per cent from 129 to 92).

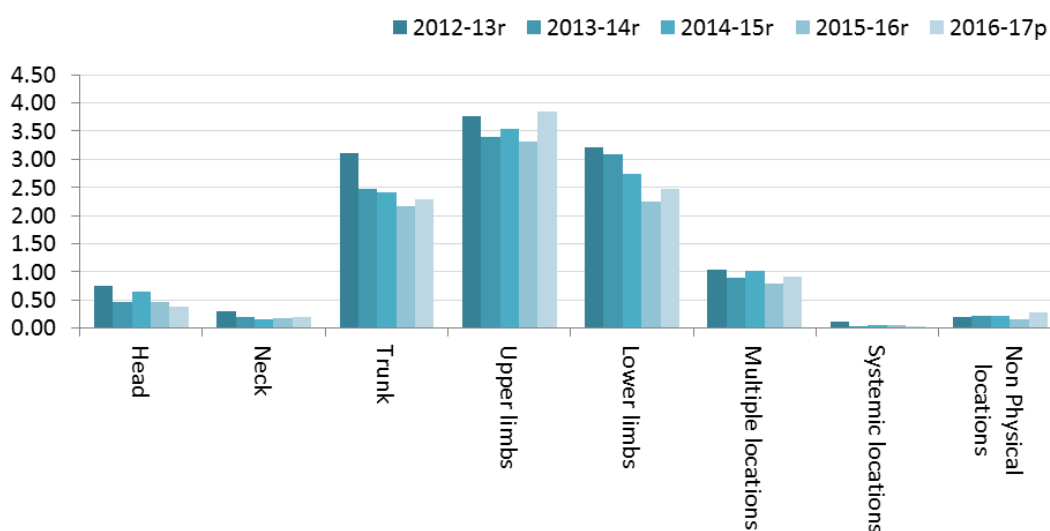
Other notable increases include the *Chest muscles* (from <5 to six LTI/Ds), *Lower limb multiple locations* (up 54.5 per cent from 11 to 17), *Lower leg* (up 47.8 per cent from 23 to 34), *Psychological system in general* (up 44.4 per cent from 18 to 26 LTI/Ds), *Upper limb multiple locations* (up 43.5 per cent from 23 to 33 LTI/Ds), and *Hand* (up 42.1 per cent from 19 to 27).

The chart below represents incidence rates by bodily location in relation to the Transport, Postal and Warehousing industry division. The *Unspecified locations* group has been excluded from the chart due to very low data. Some groups recorded comparatively low data and therefore may not show clearly in the chart.

Three groups recorded an increase in frequency rate during 2016–17p compared to 2012–13. The highest increase was recorded in the *Non Physical locations* group at 43.4 per cent (from 0.19 LTI/Ds per million hours worked to 0.27) followed by *Upper limbs*, the most affected area of the body in relation to LTI/Ds in this industry division (up two per cent from 3.77 to 3.85), and *Unspecified locations* (from 0.00 to 0.02).

The largest reduction in frequency rate over the five year period was recorded by the *Systemic locations* group (-63.9 per cent from 0.11 in 2012–13 to 0.04 in 2016–17) followed by *Head* at -49 per cent (from 0.75 to 0.38), and *Neck* (-36.2 per cent from a frequency rate of 0.29 to 0.19).

**Chart 7: Frequency rates by bodily location**



In terms of severe LTI/Ds (LTI/Ds 60+ days/shifts lost from work), table 9 shows the highest recording bodily location subgroups during the combined five year period from 2012–13 to 2016–17p. These subgroups collectively account for more than half (59 per cent) of total severe cases in this industry division.



**Table 9: Severe LTI/Ds: Highest recording subgroups**

Subgroup	5yr total	% of 5yr industry total
Shoulder	360	20%
Knee	236	13%
Lower back	225	12%
Ankle	93	5%
Wrist	83	5%
Trunk and limbs	83	5%
<b>Total</b>	<b>1,080</b>	<b>59%</b>

## Age group

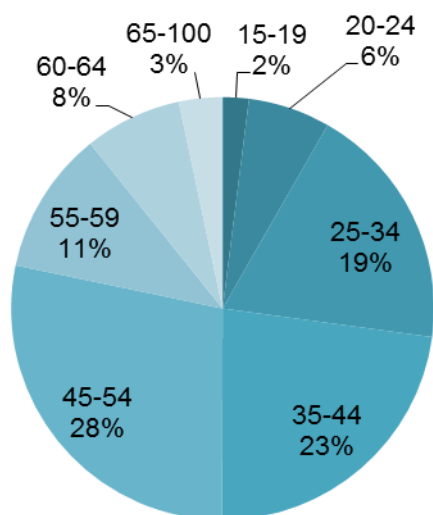
The chart below represents the proportion of work-related incidents recorded by age group in relation to the Transport, Postal and Warehousing industry division for the total five year period.

The 45-54 age group accounted for the largest proportion of LTI/Ds in this industry division over the five year period (28 per cent). LTI/Ds for this age group increased 8.8 per cent during 2016–17p compared to 2012–13 (from 297 to 323 LTI/Ds).

Two further age groups recorded increases in LTI/Ds: the 55-59 age group (up 13.4 per cent from 112 to 127 LTI/Ds) and the 65-100 age group (up five per cent from 40 to 42).

Reductions in LTI/Ds ranged from -12.9 per cent in the 60-64 age group (from 85 to 74) to -60.2 per cent in the 20-24 age group (from 103 LTI/Ds in 2012–13 to 41 in 2016–17p).

**Chart 8: Proportion of LTI/Ds by age group: 2012–13 to 2016–17p**



## Explanatory notes

A number of issues affect the data quality of statistical information based on claims data, as provided by the Department of Mines, Industry Regulation and Safety (DMIRS). It is important to be aware of these issues when interpreting claims statistics, to ensure that the conclusions drawn from the information take into account known inconsistencies and omissions.

### Injury and disease claim data

The data used in this report is derived from workers' compensation claims lodged in accordance with the *Workers' Compensation and Injury Management Act 1981* (the Act). Claims may be lodged by any person who is a 'worker', as defined by section 5 of the Act. This includes working directors who are deemed 'workers' under the Act and have some ownership of the company, as well as employed family members and private household workers (for whom workers' compensation cover is optional). Self-employed persons, Commonwealth Government workers (including defence service personnel), workers covered by Comcare, police officers (except for work-related fatalities), unpaid volunteers and students on work experience are excluded from workers' compensation data.

In addition, the following claim types are excluded from lost time claim data:

- journey claims between home and work;
- asbestos-related diseases, including mesothelioma and pneumoconiosis;
- duplicated or disallowed claims;
- claims with less than one working day absence from work;
- claims with less than one whole shift absence from work; and
- injuries and diseases that are treated in the health system (i.e. invalid pensions and sickness and unemployed benefits).

Claim data represents information on claims by the financial year in which the claim was lodged with the insurer. This is in contrast to claim payments, which reflect actual payments during a financial year regardless of when the claim was lodged. A claim may typically take a number of months to be finalised (particularly in the case of occupational disease). As claims information is dynamic in nature, reports should be considered as a snapshot in time of the workers' compensation system in Western Australia. Data are subject to revision as claims information matures. A one year time lag exists in relation to workers' compensation claim data.

Due to the high percentage of un-finalised claims concerning payments and days lost, data is subject to revision and likely under reported. This is especially true in relation to the latest snapshot of preliminary data (denoted by "p") as it is extracted at a far earlier stage resulting in a higher proportion of immature claims. Consequently, when looking at changes over time particularly in respect to LTI/Ds 60+ days/shifts lost (severe cases), time lost from work and claim costs, the reader is advised to focus on the older more stable years and treat the preliminary data year as an indication.

Unless otherwise stated in this report, data refers to lost time injuries and diseases (LTI/Ds) in Western Australia where one or more days/shifts are lost from work. The latest snapshot of preliminary data is denoted by "p". To ensure confidentiality of workers' compensation claims information, incidences that total less than five are denoted by the data symbol '<5'.

Caution needs to be exercised when using workers' compensation payments data as a measure of the cost of workplace injury and disease. The costs data collected are only those paid by the workers' compensation authority and will not include payments made by the injured worker which are not reimbursed by the workers' compensation authority.

'Total estimated cost' takes into account estimated and actual claim payments made for un-finalised claims and actual claim payments made for finalised claims in relation to compensation (such as weekly payments, lump sum payments, treatments etc.) and non-compensation payments (such as legal costs, transport etc.).

Claim payment information represents aggregated expenses attributed to the financial year in which a payment is made, regardless of the year in which the relevant claim is lodged.

The total number of days lost takes into account estimated and actual days lost for un-finalised claims and actual days lost for finalised. Estimates of days lost for un-finalised claims are revised as claims progress, therefore, as claims mature, the estimates are more reflective of the finalised days lost.

Legislative amendments may also impact on statistical information. WorkCover WA provide information regarding relevant legislative amendments on their website, at [www.workcover.wa.gov.au](http://www.workcover.wa.gov.au)

Frequency and incidence rates require knowledge of the number of employees and the number of hours worked for the time frame being considered. The employment data used to calculate frequency and incidence rates in department statistical publications is derived from unpublished data estimates produced by the Australian Bureau of Statistics (ABS).

#### Classification systems

The industry classification codes used are in accordance with the *Australian and New Zealand Standard Industrial Classification (ANZSIC)* published by the Australian Bureau of Statistics. The classification codes are based on a hierarchical structure consisting of one digit codes (broadest level) down to four digit codes (finest level). For more information visit [www.abs.gov.au](http://www.abs.gov.au)

The occupation classifications used are in accordance with the *Australian Standard Classification of Occupations 2nd Edition (ASCO)*, for data reported up to and including the year 2008–09, and the *Australian and New Zealand Standard Classification of Occupations First Edition (ANZSCO)*, for data reported from the year 2009–10 onward. Both are published by the ABS. For more information visit [www.abs.gov.au](http://www.abs.gov.au)

The injury and disease classification groupings and descriptions are the standard terms taken from the National Occupational Health & Safety Commission publication: *Type of Occurrence Classification System (TOOCS)*. For more information visit [www.safeworkaustralia.gov.au](http://www.safeworkaustralia.gov.au)

Due to the differences in structure and definitions between each version/edition of the three coding classifications a break in time series has occurred. To ensure data integrity direct comparisons should not be made between classification versions.

### Work-related traumatic injury fatalities

Work-related traumatic injury fatality information used in this report is derived from information recorded and published by DMIRS and relates to fatalities that result from a physical trauma or poisoning in Western Australia in accordance with the *Occupational Safety and Health Act 1984*, *Energy Safety Act 2006*, *Electricity Act 1945*, *Gas Standards Act 1972*, *Mines Safety and Inspection Act 1994*, *Petroleum (Submerged Lands) Act 1982*, *Petroleum and Geothermal Energy Resources Act 1967* and the *Petroleum Pipelines Act 1969*. In scope are employees, self-employed workers, volunteers and bystanders. Diseases and most disorders that would be seen as 'diseases', such as cancers and heart attacks, are out of scope. Other exclusions include: road traffic accidents, unless there is a clear nexus with work; self-inflicted injuries, Commonwealth Government workers, workers covered by Comcare and defence personnel.

For completeness, DMIRS includes in its statistics those work-related fatalities covered by the *Civil Aviation Act 1988* and *Transport Safety Investigation Act 2003* under the respective jurisdictions of the Civil Aviation Safety Authority (CASA) and the Australian Transport Safety Bureau (ATSB); and where possible, those covered under the *Australian Maritime Safety Authority Act 1990* under the jurisdiction of the Australian Maritime Safety Authority (AMSA). The former named agencies are common examples of valid jurisdictional boundaries however, the list is not exhaustive. For more information see [Recording of traumatic work-related fatalities by WorkSafe](#).

Information on data definitions, rate calculations and terms used can be found on the [WA Data Definitions and Calculations](#) and [FAQs](#) pages on our website.