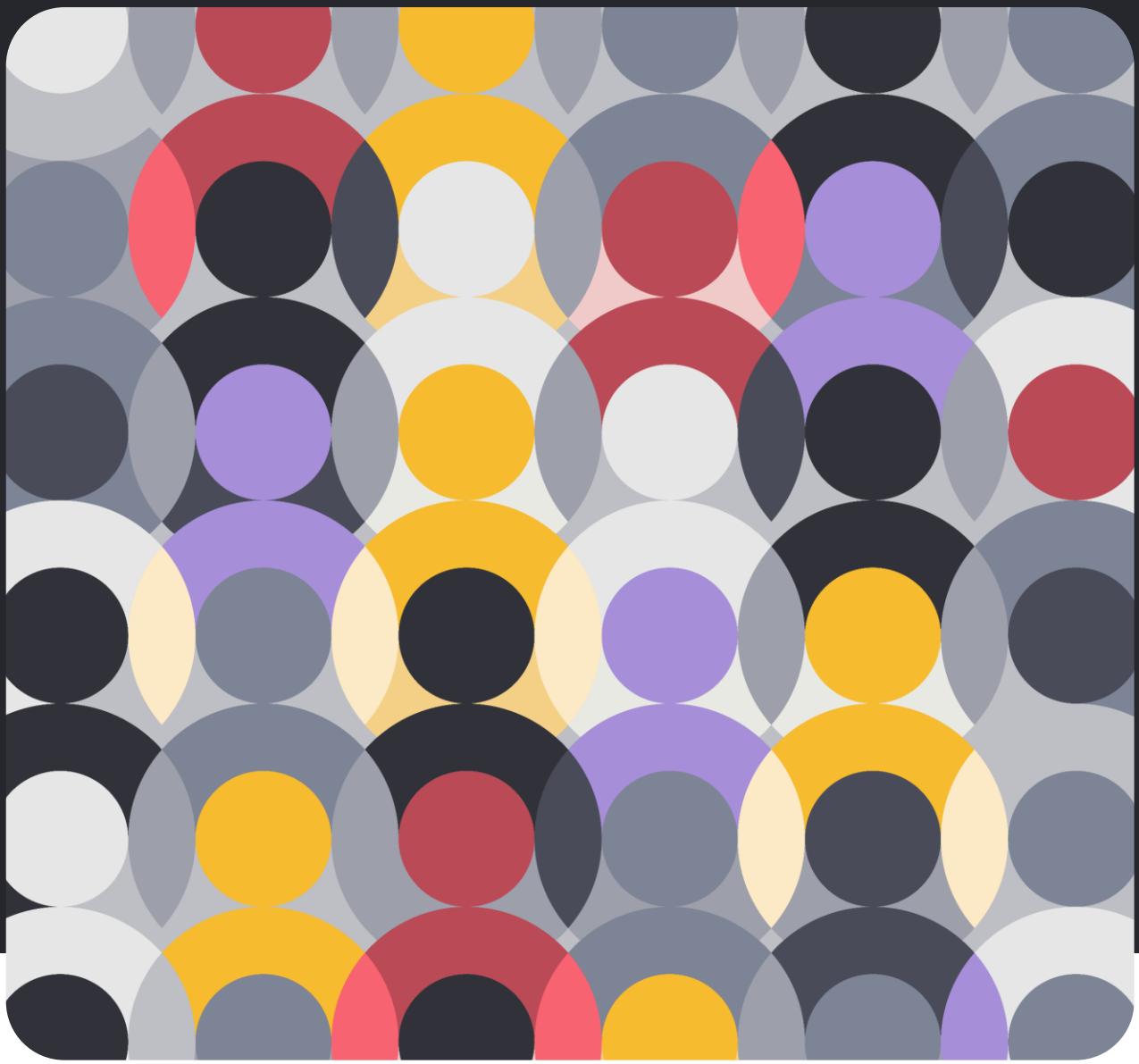


Safe Work Australia – Data insights

Mechanisms of incidents: Overview

Understanding the causes of work-related injuries, illnesses and fatalities.

November 2026

Our Data.
Your Stories.

Mechanisms at a glance

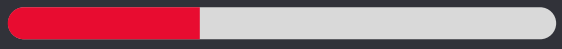
What is a ‘Mechanism of incident’?

The ‘Mechanism of incident’ (which will be referred to as ‘mechanism’) describes the overall action, exposure or event that most directly led to a serious work-related injury, disease, or fatality. It captures how the incident occurred, rather than the specific hazard involved.

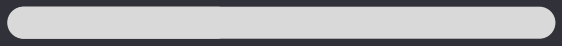
This analysis was undertaken in 2025-26, with the latest data available at the time 2023-24p for serious claims and 2024 for worker fatalities. To find the latest data, please go to the data dashboards on our interactive data website or read the Key Work Health and Safety Statistics 2026 report.

Body stressing: the **most widespread** mechanism for serious claims

Share of serious claims: **35%**



Share of fatal injuries: **0%**



Body stressing is the most common mechanism, for serious workers’ compensation claims, across all major occupation groups.

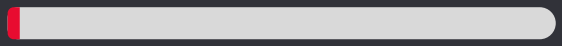
Injury patterns for body stressing serious claims show that workers are most frequently injured to the:

- back (36%)
- shoulder (19%), and
- knee (9%).

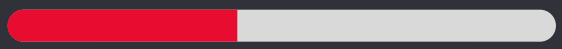
The incidence of body stressing increases with age. While rates of serious body stressing claims have increased slightly when compared to 5 years ago, they remain notably lower than levels 15 years ago.

Vehicle incidents: greatest share of fatal injuries

Share of serious claims: **2%**



Share of fatal injuries: **42%**



Vehicle incidents accounted for 79 worker fatalities in 2024, representing 42% of all worker fatalities – the highest of any mechanism.

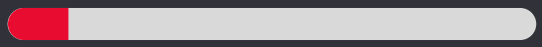
Workers aged 55-64 years recorded the highest number of vehicle incident fatalities of any age group. Trucks, semi-trailers and lorries were the most commonly involved vehicles, accounting for 48% of vehicle incident worker fatalities.

Over the past 5 years:

- 54% of vehicle incident fatalities occurred in the Transport, postal and warehousing industry
- 16% occurred in Agriculture, forestry and fishing, and
- 9% occurred in Construction.

Mental stress: the **fastest growing** mechanism

Share of serious claims: **11%**



Over the past decade, the rate of serious claims due to mental stress has increased by 123%, far exceeding the 13% growth for all serious claims.

Three industries account for 65% of all mental stress serious claims, despite employing only 31% of the workforce:

- Health Care and Social Assistance
- Public Administration and Safety, and
- Education and Training.

The most common types of mental stress serious claims include:

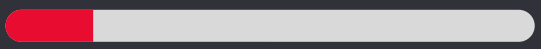
- harassment / workplace bullying (33%)
- work pressure (24%), and
- exposure to occupational violence (16%).

Mental stress is the most common serious claim type for police officers, and accounts for a high proportion of serious claims among secondary school teachers and prison officers.

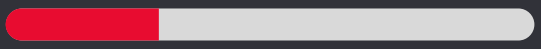
Across all age groups, females have higher rates of mental stress than males.

Being hit by moving objects: a contributor to both fatalities and claims

Share of serious claims: **16%**



Share of fatal injuries: **28%**



In 2024, 53 workers died from being hit by moving objects, accounting for 28% of all fatalities. In these incidents, workers are most likely to be hit by mobile plant and transport, including trucks, cars, utes and tractors.

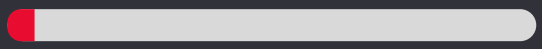
For serious claims, workers were most likely to be hit by:

- animal, human and biological agencies (predominantly 'other people')
- non-powered handtools, appliances and equipment, and
- materials and substances.

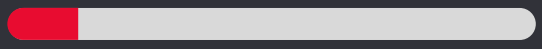
Amongst all occupations[1], carpenters and joiners had the highest number of serious claims from this mechanism over the past 3 years.

Falls from a height: an often-fatal mechanism

Share of serious claims: **5%**



Share of fatal injuries: **13%**



In 2024, 24 workers died after falling from a height, representing 13% of all fatalities.

The Construction industry is the most commonly represented industry for this mechanism, accounting for:

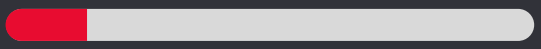
- 46% of fatalities, and
- 26% of serious claims.

Fatal incidents often involve falls from:

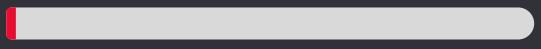
- roofs
- holes in floors or ceilings
- ladders, and
- animals such as horses.

Falls on the same level: **older female workers** are most at risk

Share of serious claims: **15%**



Share of fatal injuries: **1%**



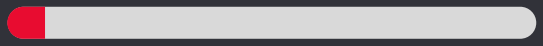
For the sub-mechanism 'Falls on the same level', the rate for females aged 50 years and over is 71% higher than the rate for males, with key industries including:

- Health care and social assistance (female serious claim rate 2.3 times higher than that for males)
- Education and training (female serious claim rate 2.5 times higher than that for males), and
- Accommodation and food services (female serious claim rate 2.3 times higher than that for males).

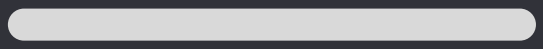
[1] Excluding other miscellaneous labourers.

Hitting objects with a part of the body: resulted in mostly **hand** injuries in young men

Share of serious claims: **7%**



Share of fatal injuries: **0%**

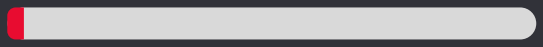


Nearly a third (31%) of serious claims for hitting objects with a part of the body are for young men aged under 30.

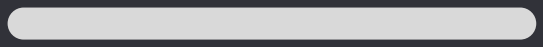
The majority of injuries for this mechanism (57%) were to the Hand, fingers or thumb.

Biological factors: recent increases driven by **COVID-19 claims in NSW**

Share of serious claims: **3%**



Share of fatal injuries: **0%**



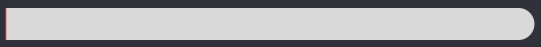
For the 3 years prior to 2024, serious claims involving biological factors increased sharply due to COVID-19 infections.

Nearly all claims (93%) came from New South Wales, reflecting both the outbreaks in this state and the impact of its presumptive rights legislation.

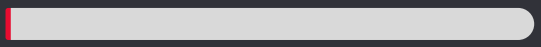
In 2023-24p, 66% of these serious claims were for females.

Sound and pressure: claims largely relate to deafness

Share of serious claims: **0.1%**



Share of fatal injuries: **1%**



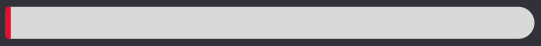
The vast majority (94%) of sound and pressure claims are for Deafness, with 86% of claims for people aged 55 years and over.

Although only 201 of these claims meet the serious claims threshold, there were 8,283 *total* claims reflecting the long-term impact of hearing loss despite limited time off work.

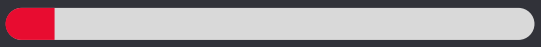
This mechanism also includes explosions, which result in around 1-3 fatalities per year.

Heat, electricity and other environmental factors

Share of serious claims: **1%**



Share of fatal injuries: **9%**



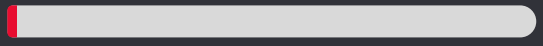
Over the past 5 years, 'Contact with electricity' accounted for the majority (54%) of fatalities associated with this mechanism equating to around 7-9 fatalities per year. Serious claims within this category were mainly for burn injuries (83%).

Chemicals and other substances

Share of serious claims: **1%**



Share of fatal injuries: **1%**



The most common injury/illness types that result from exposure to 'Chemicals and other substances' were:

- chemical burns (28%)
- poisoning and toxic effects of substances (13%), and
- contact dermatitis (9%).

Injuries from this mechanism most commonly occurred to the eyes (18% of serious claims).

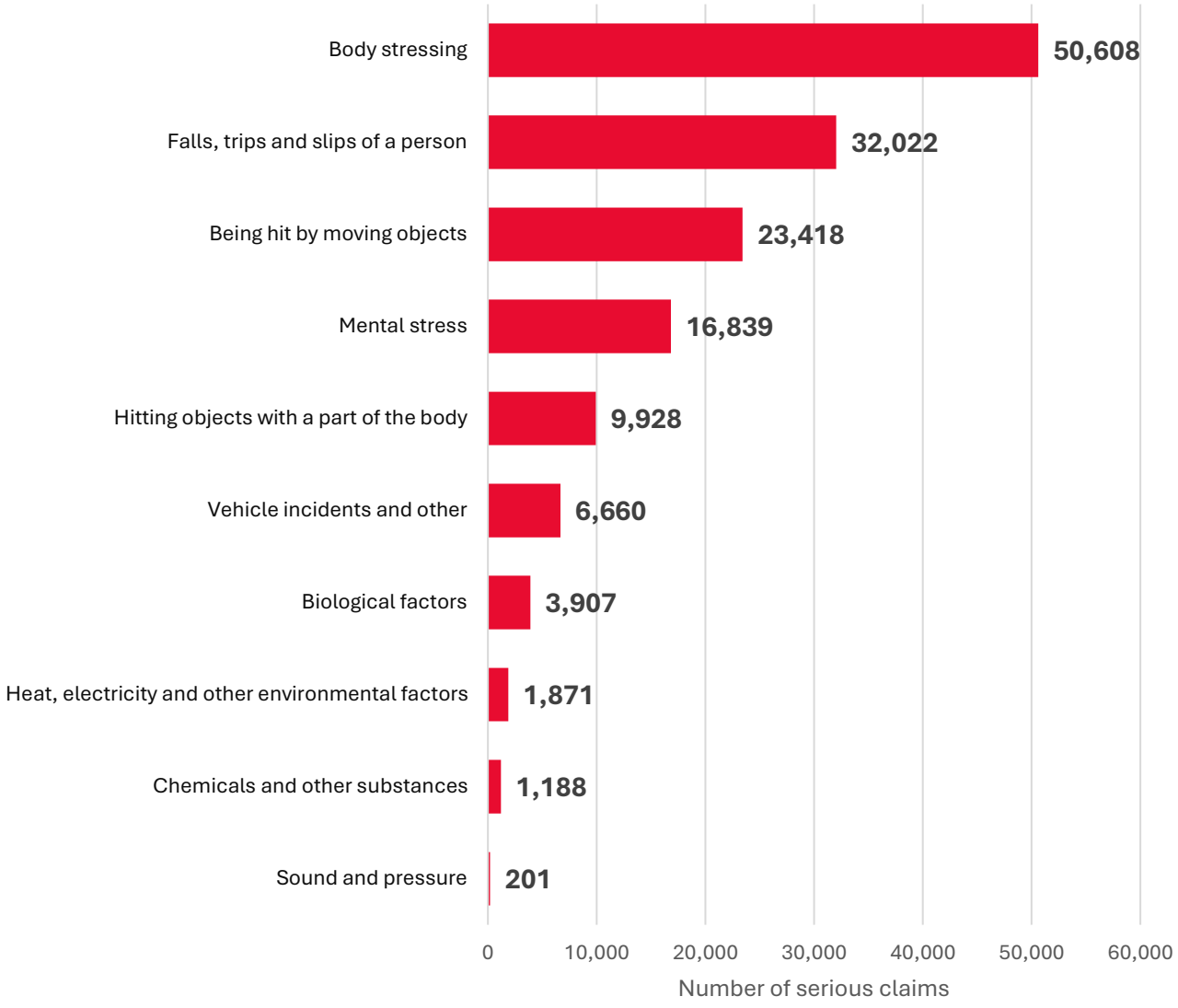
‘Serious’ claims by mechanism

In 2023–24p, body stressing accounted for 50,608 serious claims (35%), making it the most common mechanism for the tenth consecutive year, despite a gradual decline in its share over time.

The next most common mechanisms were:

- falls, trips and slips of a person (22%)
- being hit by moving objects (16%)
- mental stress (11%)
- hitting objects with a part of the body (7%), and
- vehicle incidents and other mechanisms (5%).

Figure 1: Number of serious workers’ compensation claims by mechanism (2023-24p)[2]



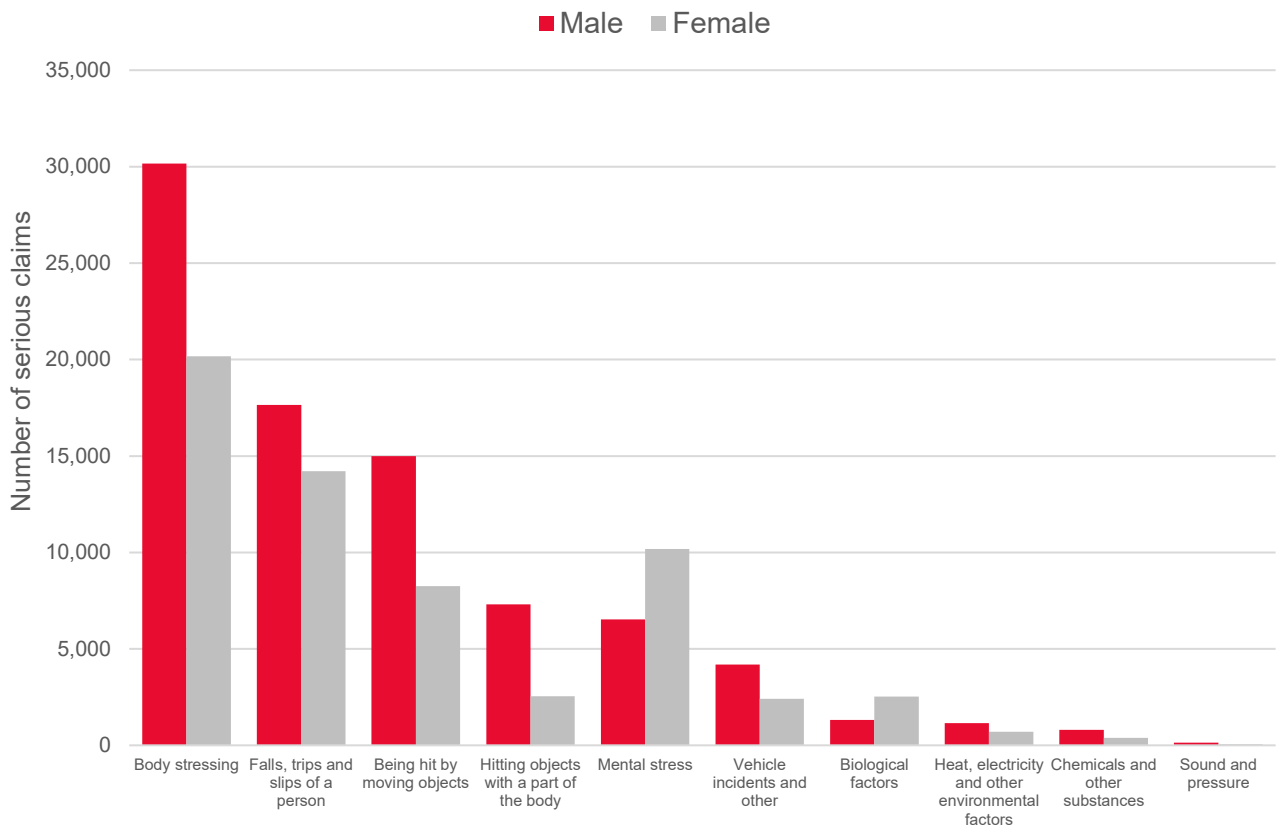
[2] Data for the most recent financial year (2023-24) are preliminary, denoted by a ‘p’.

Mechanism of serious claims by sex

The figure below shows the number of serious claims for each mechanism, by sex. Across most mechanisms there are more serious claims for males than for females, with the 2 exceptions being 'Mental stress' and 'Biological factors'.

For both males and females, the 2 most common mechanisms are 'Body stressing', and 'Falls, trips and slips of a person'. For males, the third most common mechanism is 'Being hit by moving objects', while for females, it is 'Mental stress'.

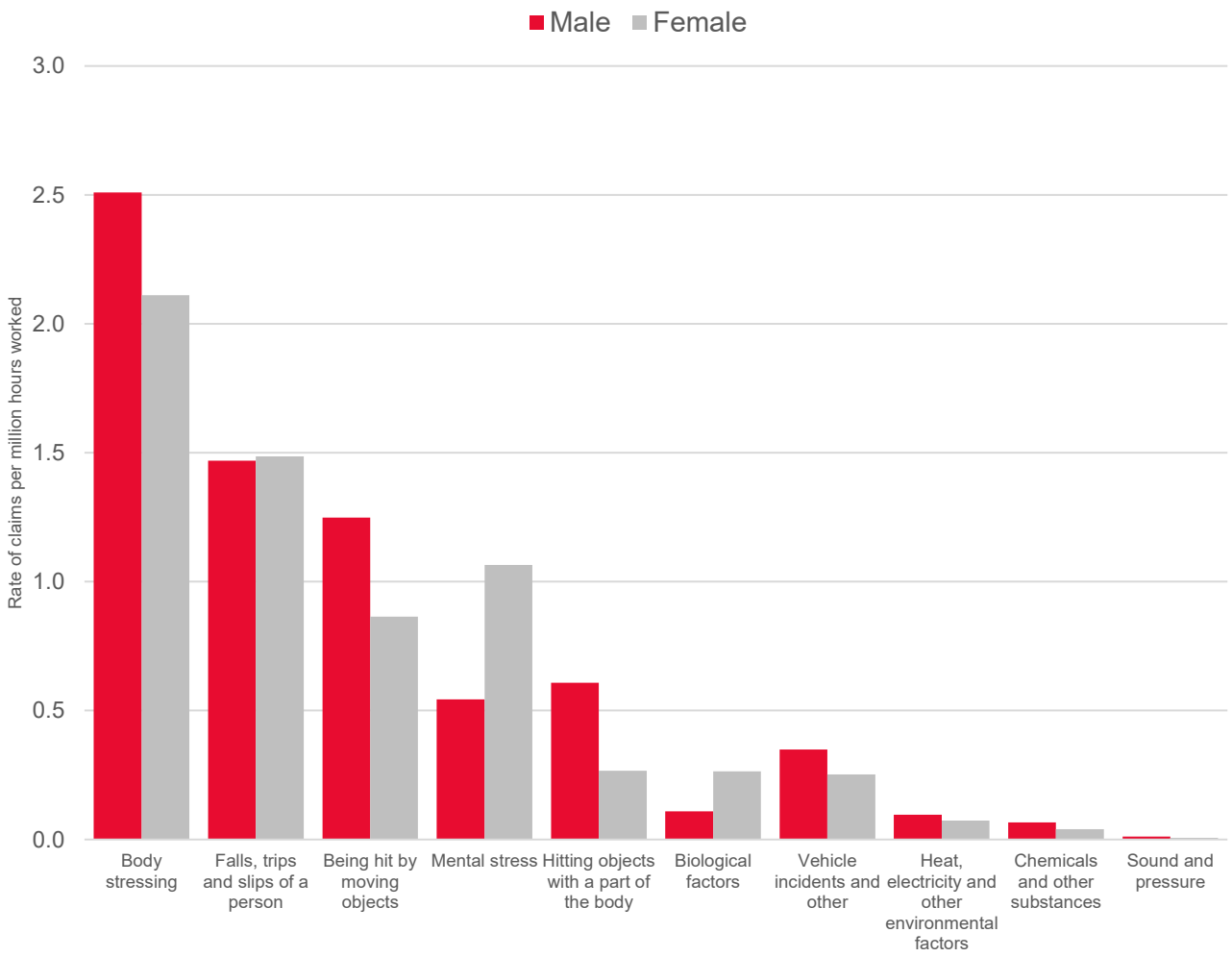
Figure 2: Number of serious claims by mechanism and sex, 2023-24p



Females work fewer paid hours overall than men[3], so it's important to consider the 'frequency rate' – the rate of serious claims per million hours worked. This allows for more meaningful comparisons of the incidence of serious claims between the sexes. Some of the disparities between the sexes shown in Figure 2 are diminished in Figure 3, once we take hours worked into account. For example, while males have more serious claims for 'Falls, trips and slips of a person', the rate of serious claims (shown in Figure 3) is equal to that of females.

[3] ABS, *Labour Force, Australia*, October 2025, based on data in Table 19.

Figure 3: Mechanism frequency rate by sex, 2023-24p

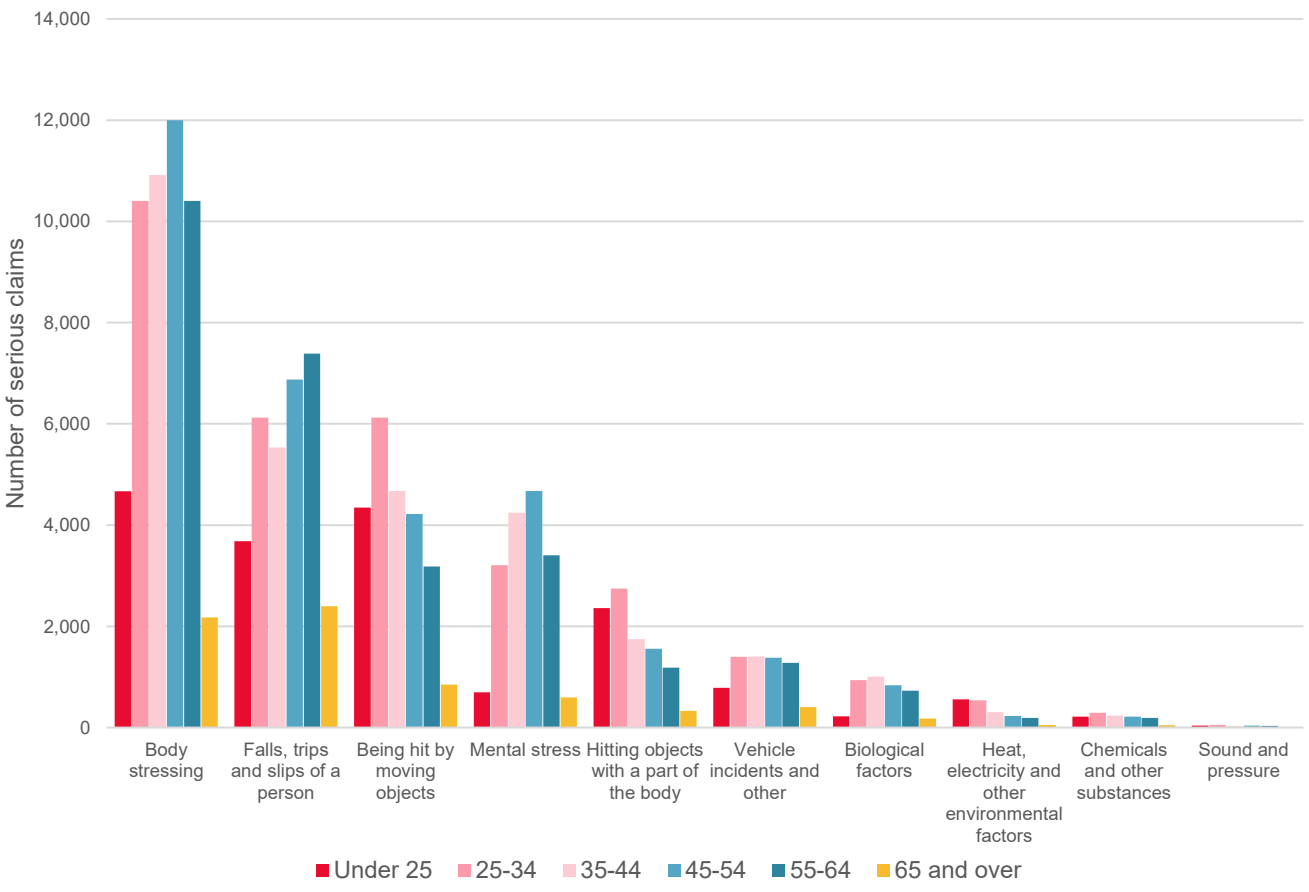


Mechanism of serious claims by age group

The chart below shows the number of serious claims for each mechanism, by age group. The bulk of serious claims occur amongst workers aged 25 to 64. There are very few serious claims for workers aged 65 years and over, as there are fewer workers in this age group.

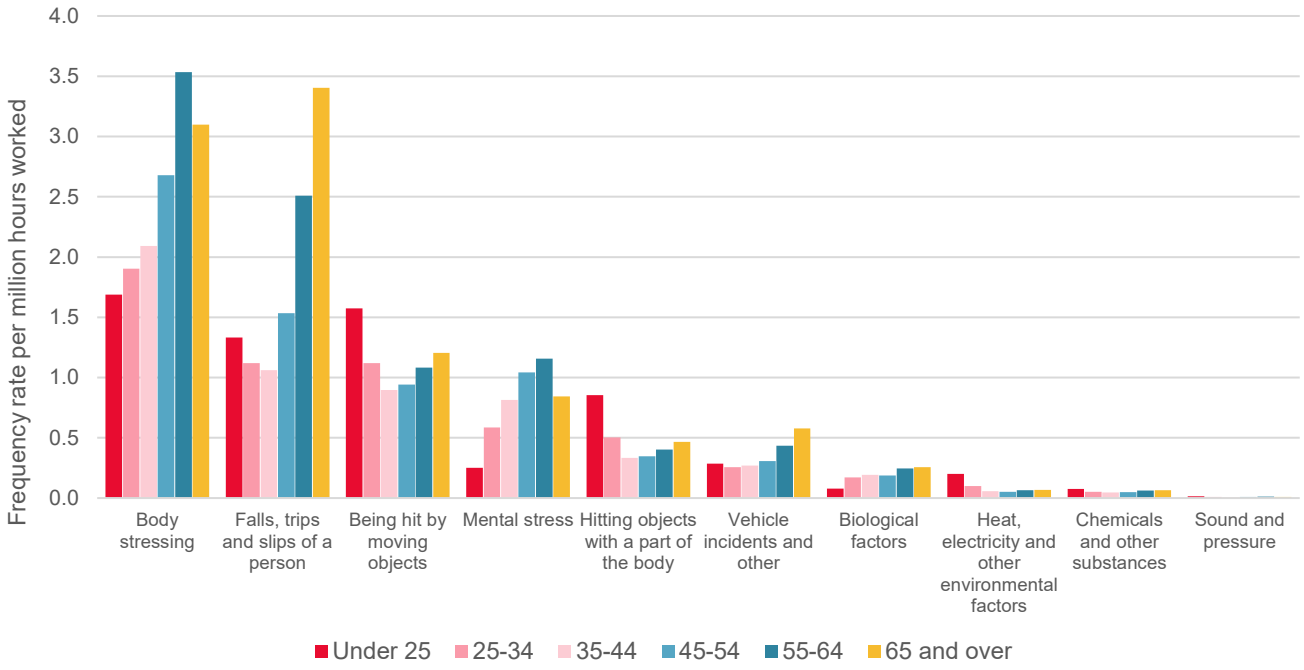
Serious claims frequency rates are higher for ‘Body stressing’, ‘Falls, trips and slips of a person’ and ‘Mental stress’ in middle or older age groups, while ‘Being hit by moving objects’ and ‘Hitting objects with a part of the body’ rates are higher in younger age groups.

Figure 4: Number of serious claims by mechanism by age group, 2023-24p



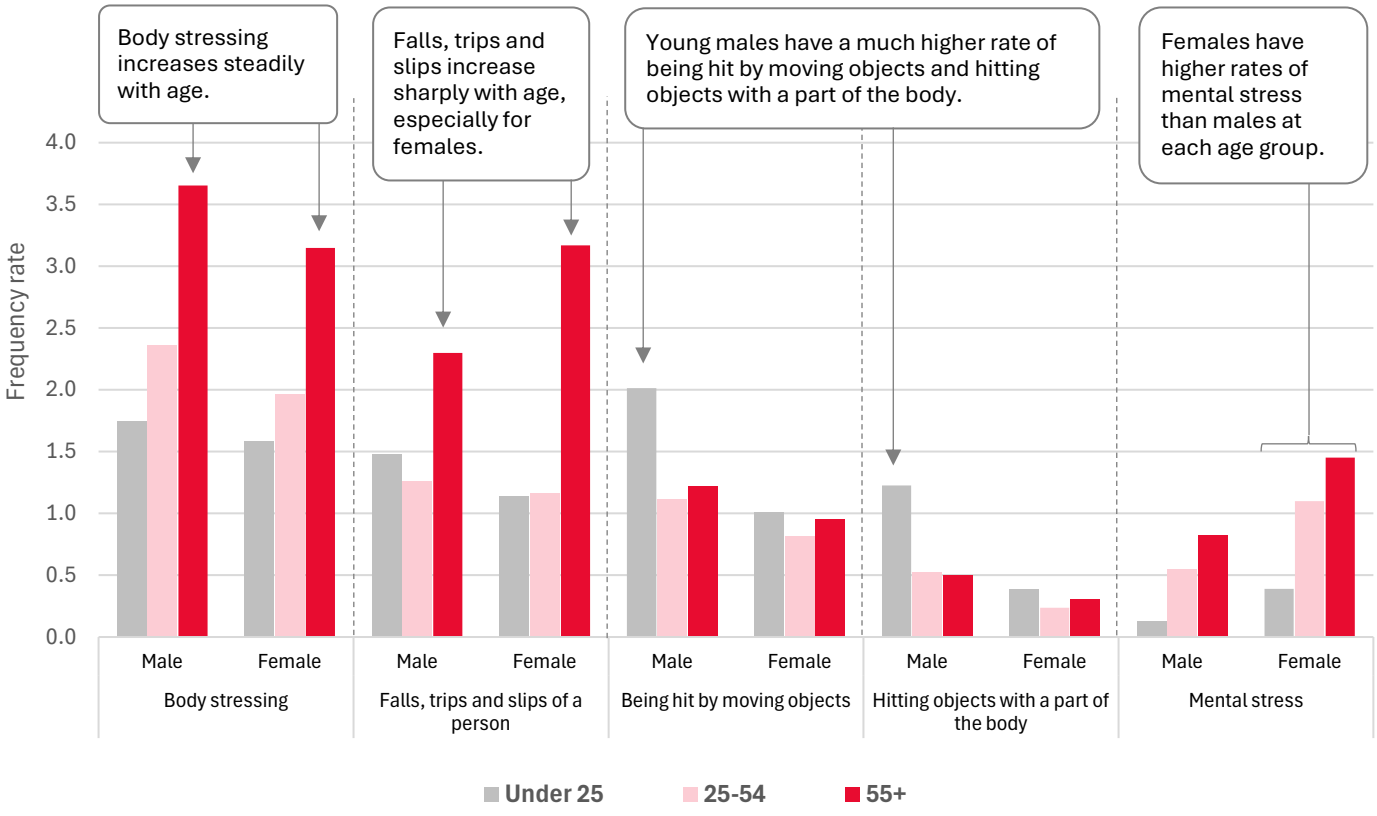
When compared with the count of serious claims, the frequency rates (claims per million hours worked) show that older workers have far higher rates of ‘Body stressing’ and ‘Falls, trips and slips’. Younger workers have far higher rates of ‘Being hit by moving objects’ or ‘Hitting objects with a part of the body’.

Figure 5: Mechanism frequency rate by age group, 2023-24p



The chart below includes both age and sex in the same chart. Key trends are highlighted on the chart.

Figure 6: Serious claim frequency rate by age and sex, selected mechanisms, 2023-24p



The table below gives an overview of the data on each type of mechanism.

Table 1: Summary of mechanisms of serious workers' compensation claims (2023-24p)

Mechanism	Number of serious claims in 2023-24p	Percentage of serious claims	5-year change in rate*	Median time lost^ (working weeks)	Median age of claimant	% female claimants
Body stressing	50,608	35%	0.20	9.2	44	40%
Falls, trips and slips of a person	32,022	22%	0.16	8.6	46	45%
Being hit by moving objects	23,418	16%	0.17	5.2	37	36%
Mental stress	16,839	11%	0.27	36.8	45	61%
Hitting objects with a part of the body	9,928	7%	0.07	3.6	34	26%
Vehicle incidents and other	6,660	5%	-0.11	8.0	43	37%
Biological factors	3,907	3%	0.16	1.2	42	66%
Heat, electricity and other environmental factors	1,871	1%	0.01	2.4	31	38%
Chemicals and other substances	1,188	1%	0.00	3.4	39	32%
Sound and pressure	201	0%	0.00	11.0	37	32%
All mechanisms#	***146,700***	***100%***	***+0.9***	***7.4***	***42***	***42%***

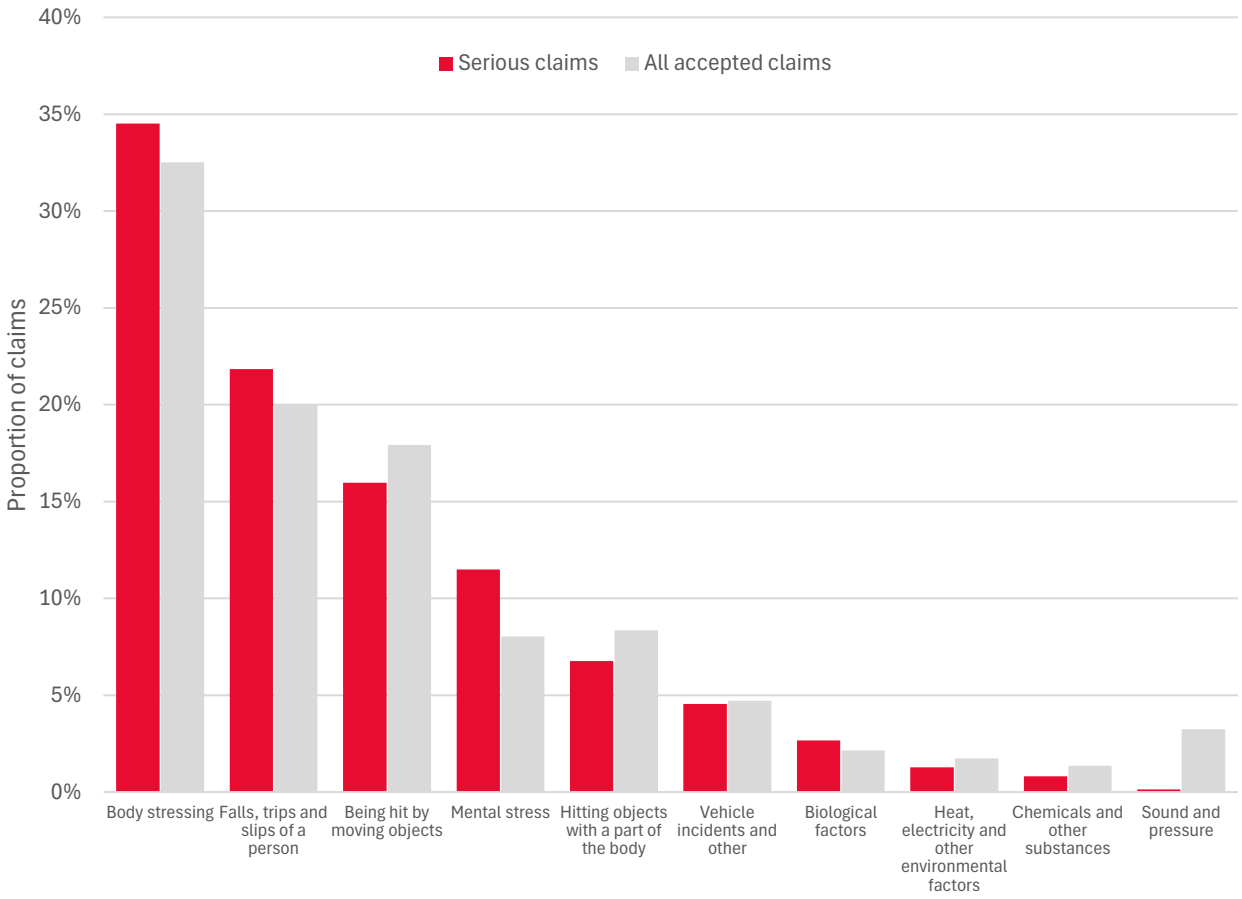
^data for compensation paid and median time lost is for 2022-23.
*rate increases are coloured red, while rate decreases are coloured green.
#includes a small number of records with no recorded mechanism.

Non-‘serious’ claims by mechanism

This report mainly focuses on serious claims because they tend to indicate the work-related injuries and illnesses that have the largest impact on a worker (resulted in at least one week off work). However, it is also important to consider accepted claims more broadly – which include injuries and illnesses that resulted in less than a week off work, or no time off at all.

The chart below shows that the distribution of mechanisms for serious claims is similar to the distribution of all accepted claims. The order from highest proportion to lowest is the same with the exception of claims for ‘Sound and pressure’.

Figure 7: Share of serious claims and all accepted claims by mechanism (2023-24p)

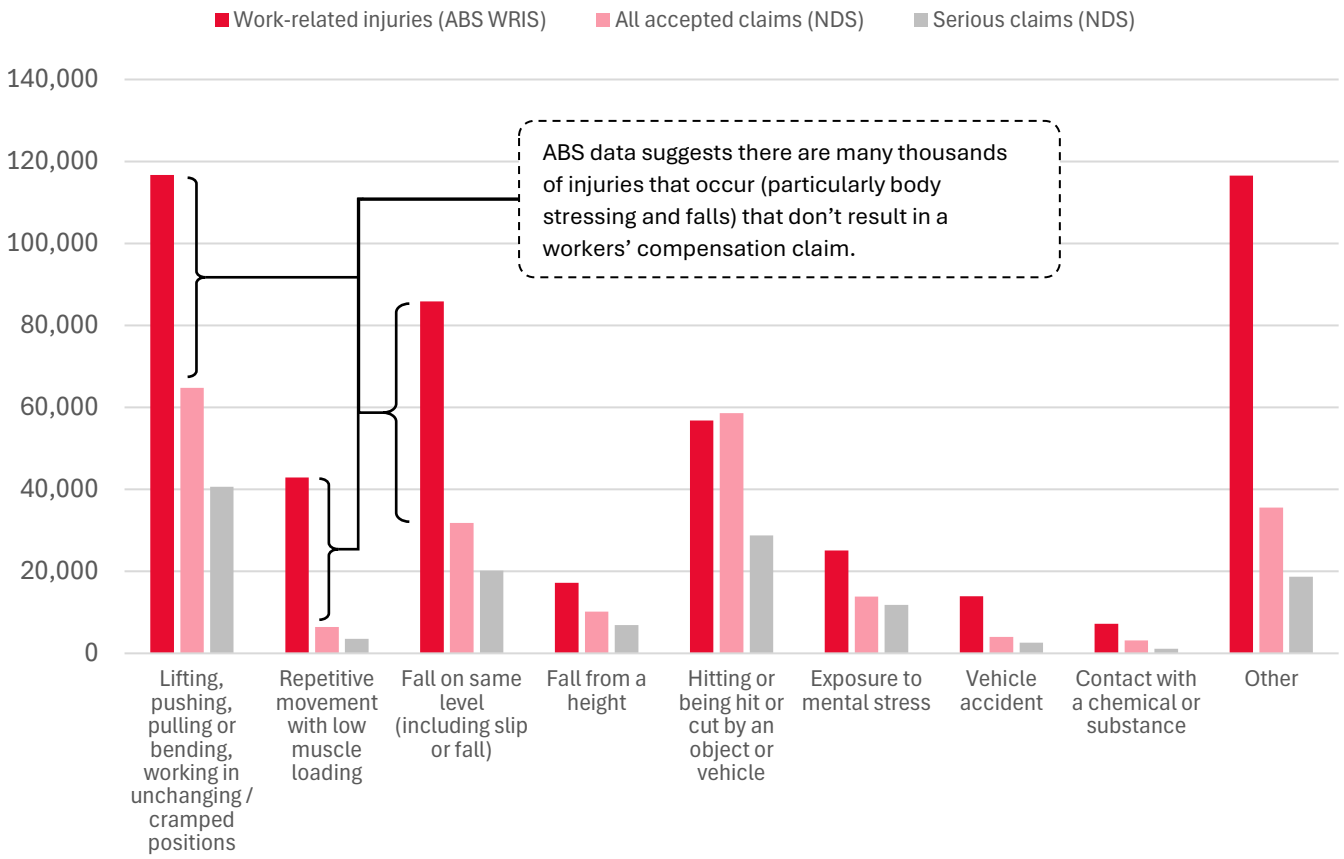


The Australian Bureau of Statistics Work-related injuries survey (ABS WRIS) asks people if they had a work-related injury or illness in the last 12 months. The survey is conducted every 4 years, with the latest survey conducted in 2021-22.

This survey is useful for indicating the extent of injuries that occur that don't result in a workers' compensation claim. Overall, only around a third of work-related injuries result in a workers' compensation claim. The data suggest that there are many thousands of 'Body stressing' and 'Falls on the same level' injuries that don't result in a workers' compensation claim. The ABS WRIS also tells us that people don't report their injury or illness for a variety of reasons, including that the injury or illness was minor and compensation was not necessary, they did not think they were eligible for workers' compensation and that they were not covered by or not aware of workers' compensation.

There is a high proportion of 'Other' mechanisms in the ABS WRIS data, which includes an unspecified number of 'unknown' mechanisms. Therefore, the data below should be treated with caution as it's not known how many of the 'Other' mechanisms would be included in the reported categories if the mechanism type was known.

Figure 8: Comparison of number of injuries by mechanism, ABS WRIS data (2021-22) and NDS claims data (2021-22)



Worker fatalities by mechanism

Overall, 'Vehicle incidents and other' made up almost half of all worker fatalities in 2024 (48%). This was followed by 'Being hit by moving objects' (28%) and 'Falls, trips and slips of a person' (13%).

Unlike workers' compensation claims, worker fatalities are generally limited to a small subset of mechanisms.

Table 2: Summary of mechanisms (major group) of worker fatalities (2024)

Mechanism	Number of fatalities	Percent of fatalities
Vehicle incidents and other	90	48%
Being hit by moving objects	53	28%
Falls, trips and slips of a person	25	13%
Heat, electricity and other environmental factors	17	9%
Chemicals and other substances	2	1%
Sound and pressure	1	1%

Worker fatalities are generally examined by looking at the sub-mechanism (mechanism sub-major group) because there are uneven distributions of fatalities within the major mechanism groups. For example, the majority of worker fatalities in the mechanism group 'Vehicle incidents and other' are within the 'Vehicle incident' sub-mechanism, as shown in Figure 9. However, for this analysis, mechanisms for worker fatalities will be reported by major categories, in line with the claims data, unless otherwise noted.

The most common type of sub-mechanism that results in a worker fatality is 'Vehicle incidents'. In 2024, this accounted for 79 (42%) of all worker fatalities and 88% of the fatalities under the 'Vehicle incident and other' mechanism. It has been the most common sub-mechanism resulting in a worker fatality for the past 10 years, and the proportion of worker fatalities it accounts for overall has increased over this period.

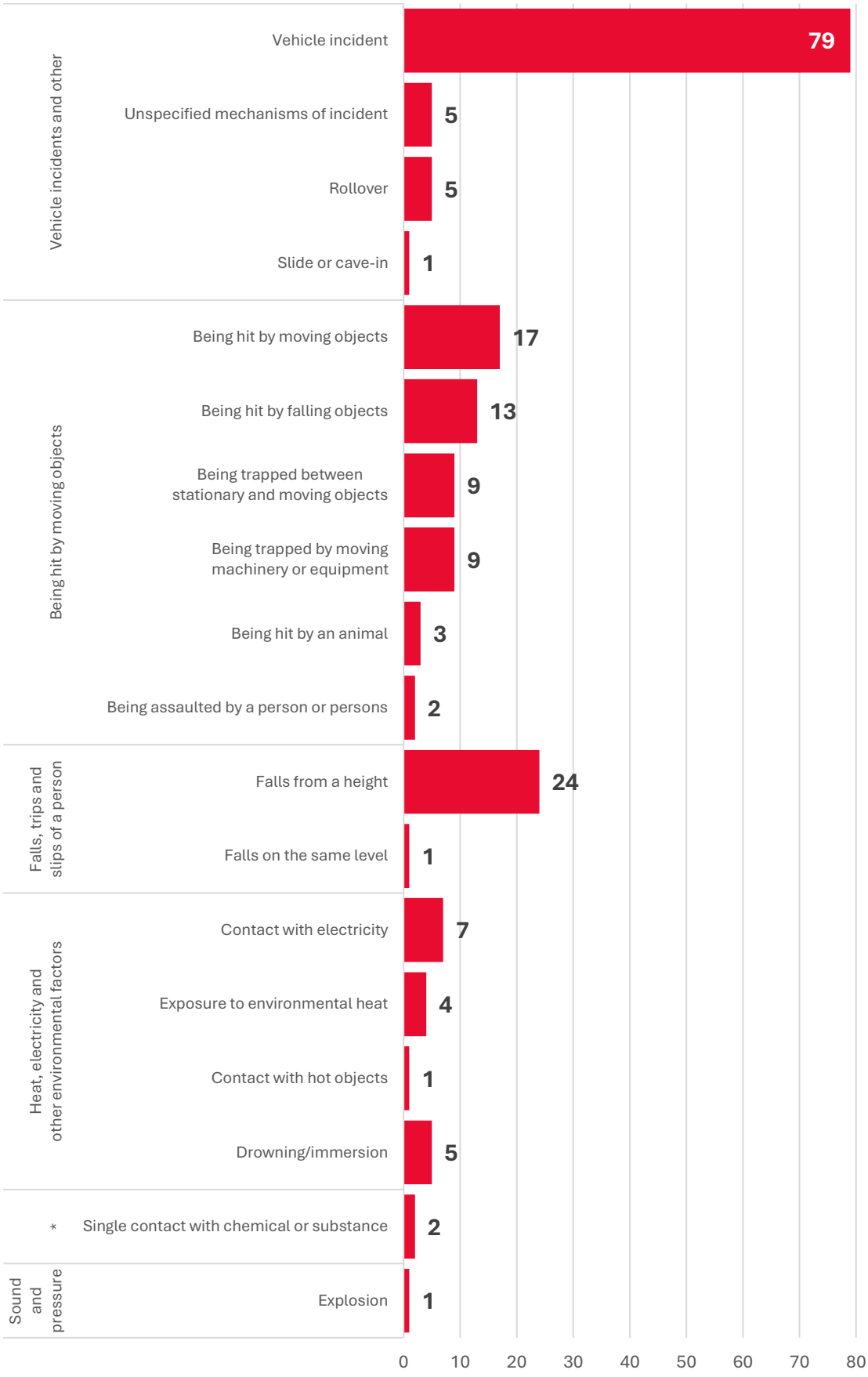
The second most common type of sub-mechanism resulting in a worker fatality in 2024 was 'Falls from a height', accounting for 13% of fatalities. Over the past 10 years this has been either the second or third most common sub-mechanism.

The third most common type of sub-mechanism resulting in a fatality in 2024 was 'Being hit by moving objects'[4], accounting for 9% of worker fatalities. In more than half of these cases, workers were hit by Mobile plant and transport.

See Figure 9 for a breakdown of the number of worker fatalities in 2024 by sub-mechanism.

[4] Note that this sub-mechanism sits under an overarching category of the same name.

Figure 9: Number of worker fatalities by sub-mechanism (2024)

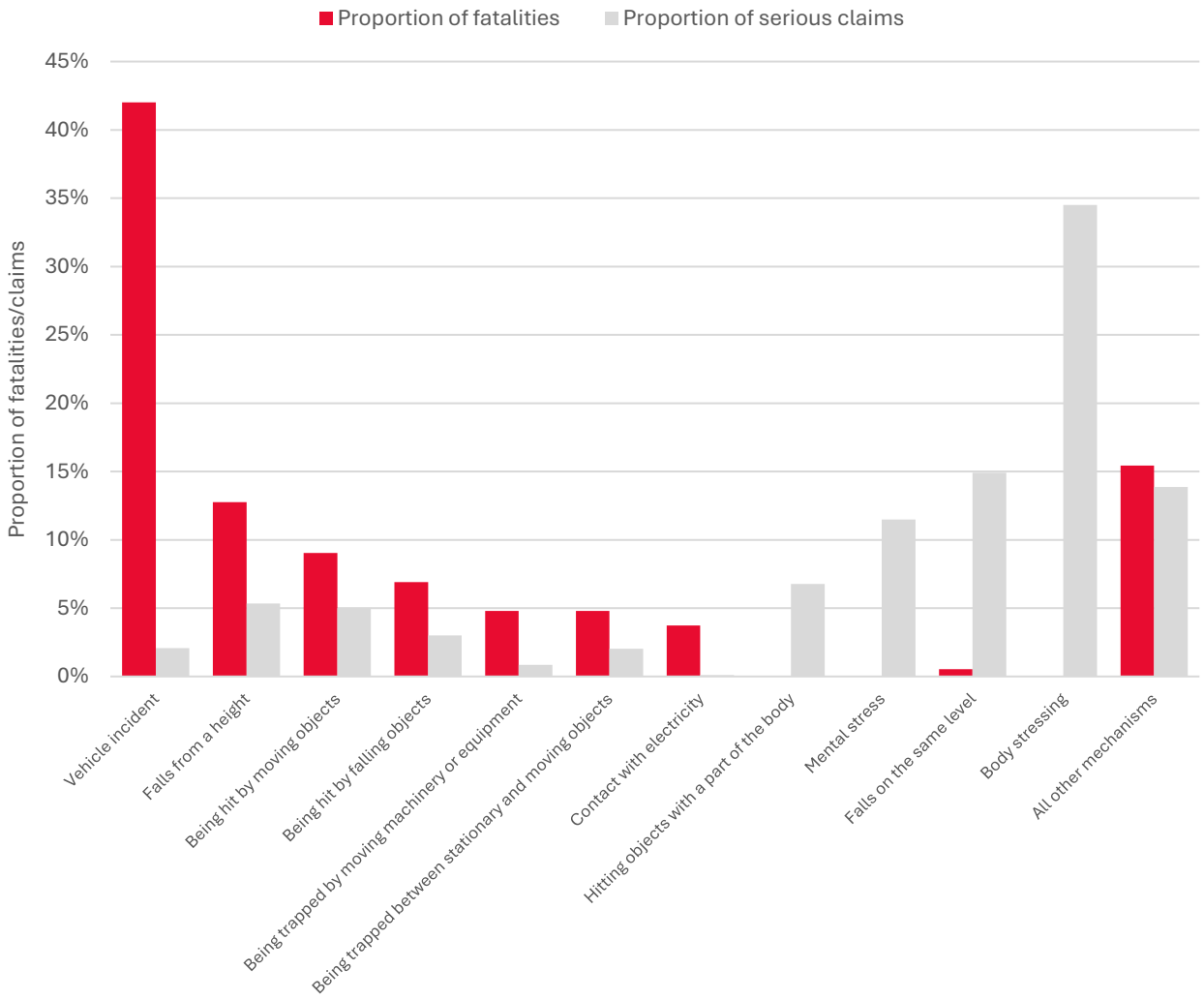


*Chemicals and other substances

Mechanisms: Serious claims vs fatalities

In 2023-24p there were 146,700 serious claims and in 2024 there were 188 traumatic injury fatalities. The chart below shows the distribution of serious claims and fatalities across the mechanisms. By far the single most common mechanism for fatalities is 'Vehicle incidents' (accounting for 42% of fatalities), while for serious claims, it's 'Body stressing' (accounting for just over a third).

Figure 10: Mechanism of incident: Serious claims (2023-24p) vs fatalities (2024)[5]



[5] This chart uses a combination of mechanism major group and sub-mechanism to provide detail while not overcrowding the chart.

Median compensation paid and time lost (2022-23)[6]

The charts below plot median compensation paid and median time lost against the number of serious claims for each mechanism.

Why do we report the median?

For compensation paid and time lost statistics, we report the *median* instead of the *average*. The median tends to be a more accurate reflection of the midpoint of the data, as it is less affected by extreme values, providing a stronger basis for comparing changes over time and differences between workforce or labour market characteristics.

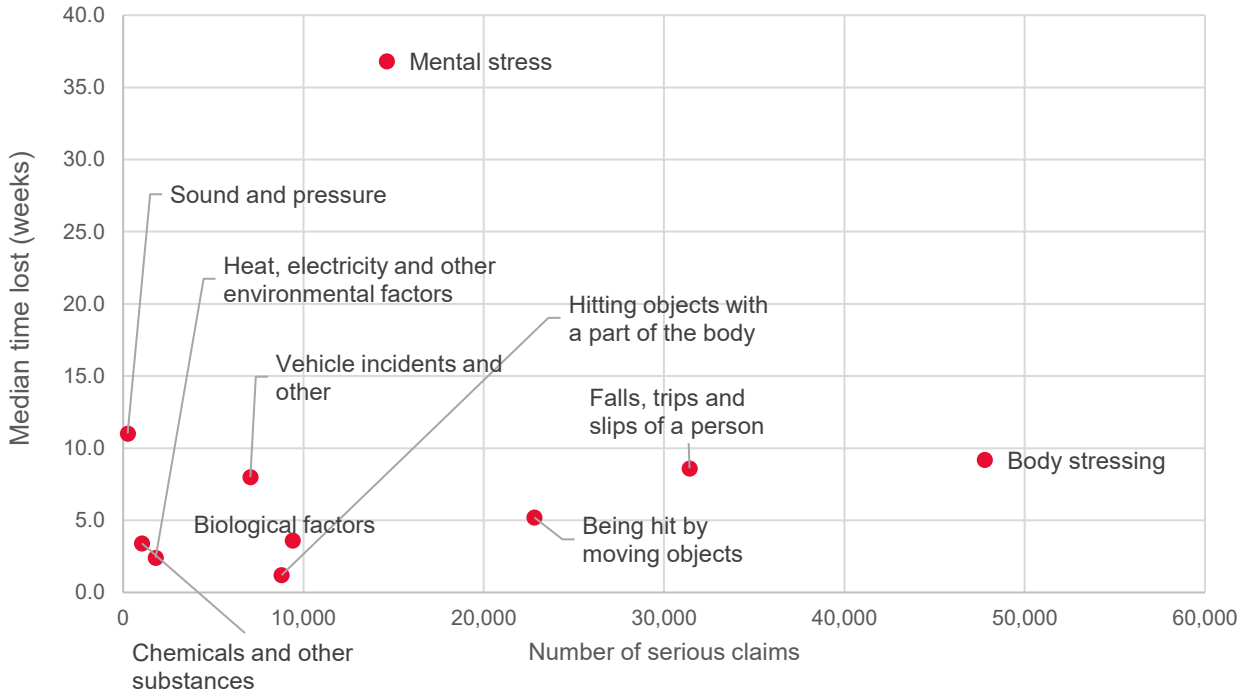
The results across both charts are very similar. The number of weeks an injured worker was away from work is strongly related to the amount of compensation paid.

Body stressing is the clear outlier when looking at the number of serious claims (horizontal axis) – this is the most prevalent mechanism by a significant margin.

Mental stress, which accounted for around 14,600 serious claims in 2022-23, is the clear outlier in terms of median compensation paid and median time lost (vertical axis), with median figures far above that of any other mechanism.

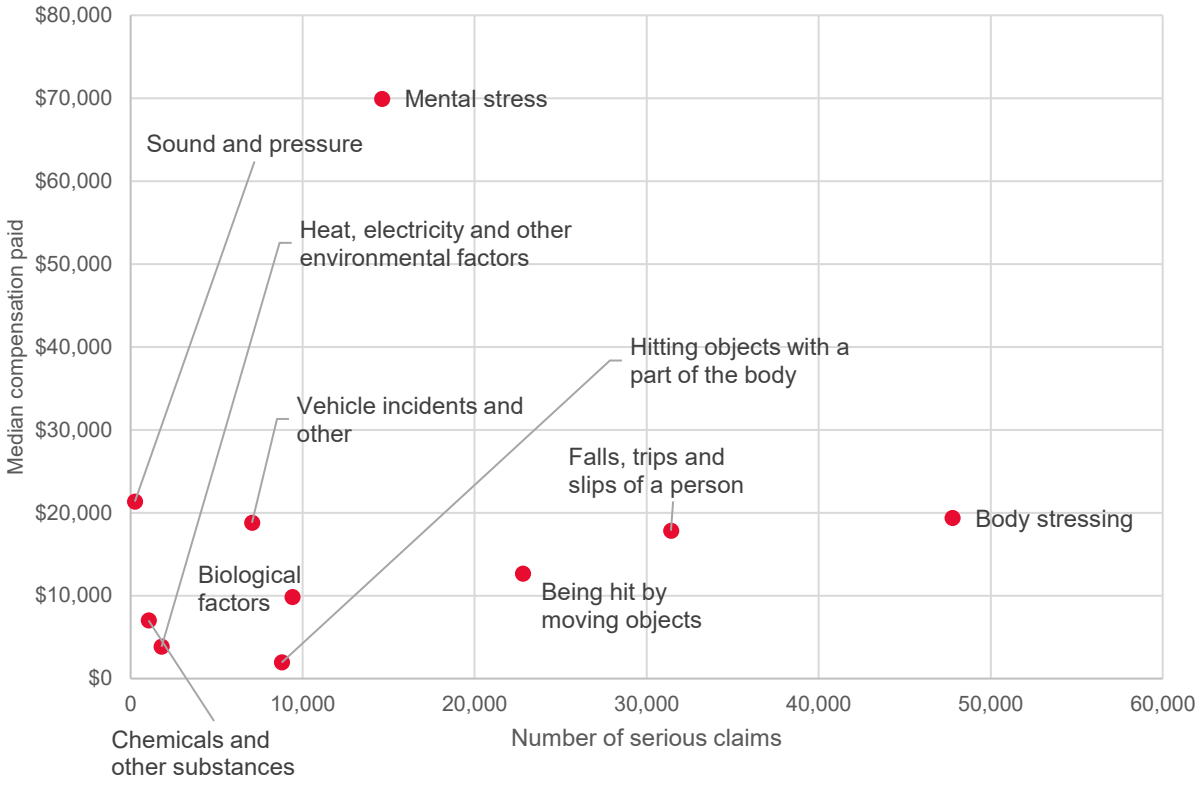
These charts highlight the disproportionate impact of Mental stress claims. On a per-claim basis, they are the most costly to the workers' compensation system, resulting in long absences from work, lost productivity for businesses, and negative impacts on the wellbeing of affected workers.

Figure 11A: Number of serious claims and median time lost for each mechanism (2022-23)



[6] 2022-23 is the latest data available for these statistics because a high proportion of claims remain open in the preliminary year, with compensation paid and time lost being significantly revised in subsequent years.

Figure 11B: Number of serious claims and median compensation paid for each mechanism (2022-23)



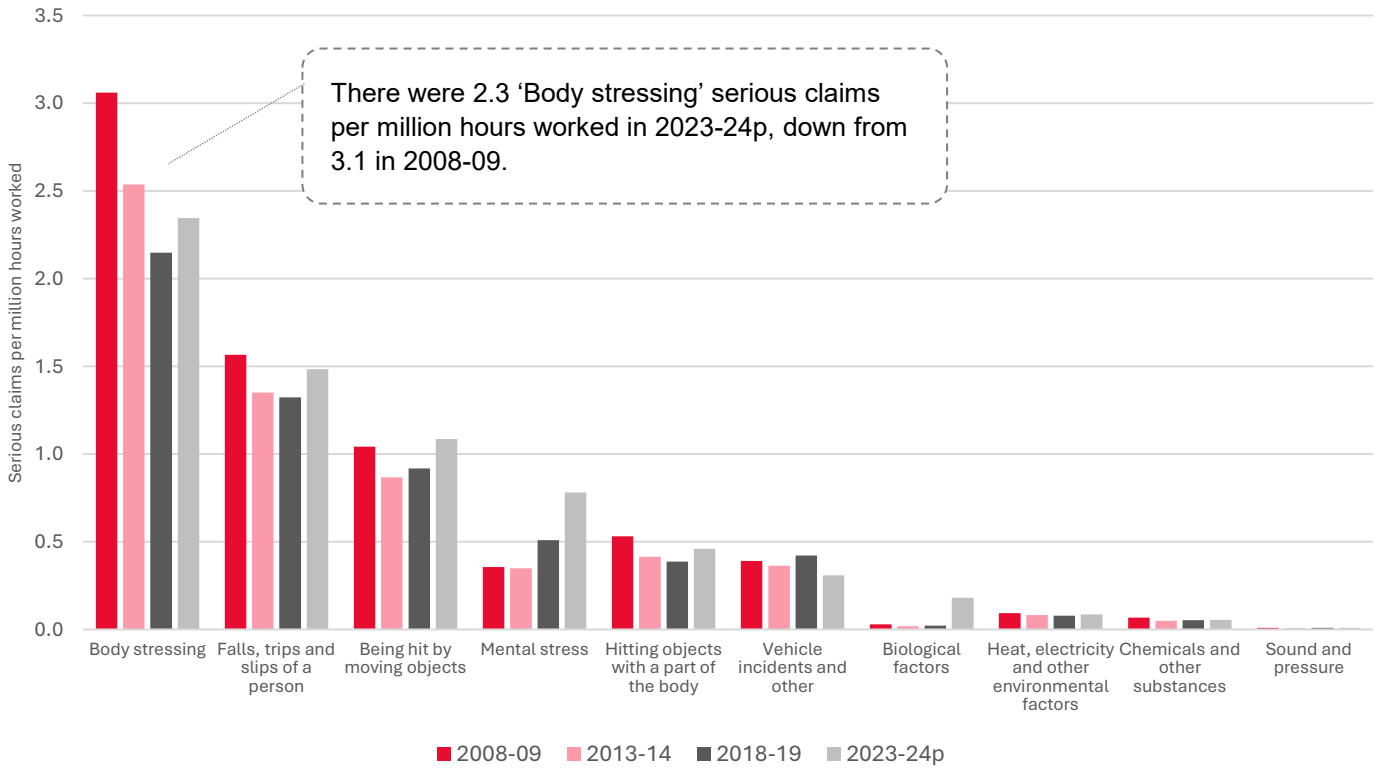
Changes over time in rates of serious claims

Expressing serious claims using frequency rates (per million hours worked) accounts for increasing population levels and hours worked over time. This allows for a more meaningful interpretation of the incidence of injuries over time.

For most mechanisms in 2023-24p, rates of serious claims have increased slightly when compared to 5 years ago.

- The rate of 'Body stressing' serious claims has increased slightly compared with 5 years ago but is notably lower compared with 15 years ago.
- The 'Mental stress' serious claim rate has had a more pronounced increase over the past 10 years, increasing from 0.3 to 0.8.
- The rate of 'Biological factors' serious claims has also increased from a low base, a result of COVID-19 serious claims from NSW.

Figure 12: Rate of serious workers' compensation claims by mechanism (2008-09, 2013-14, 2018-19 and 2023-24p)



Changes over time for fatalities

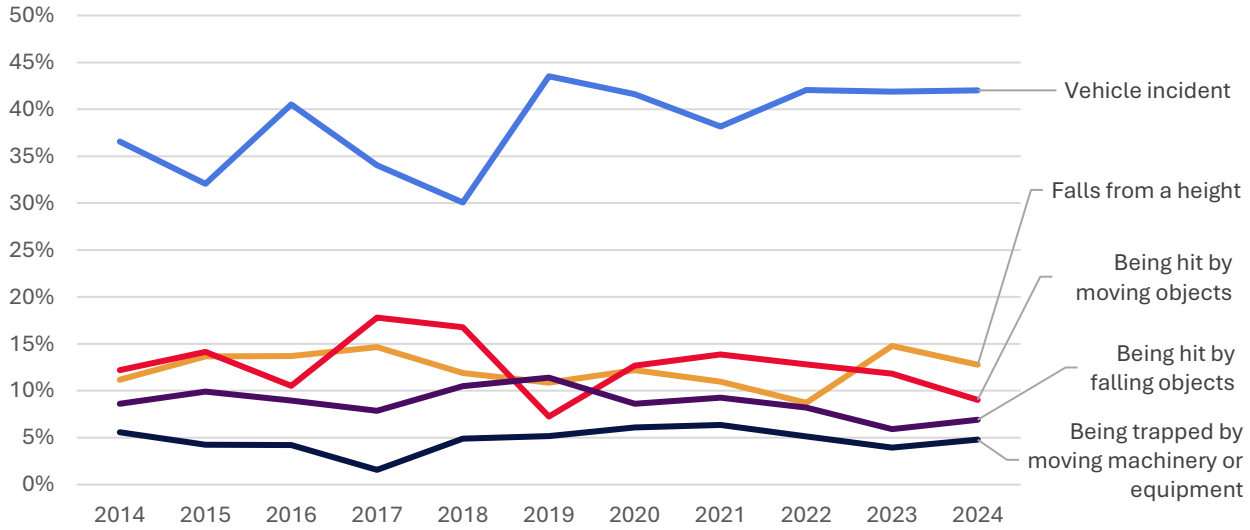
The chart below shows the proportion of worker fatalities from 2014 to 2024 for some of the most common types of sub-mechanisms that resulted in a fatality.

Figure 13 shows that:

- The proportion of worker fatalities due to 'Vehicle incidents' has been much higher than the other sub-mechanisms over the past 10 years.
  - While there has been some variation over the past decade, deaths due to 'Vehicle incidents' have been trending higher.
  - In 2024, 'Vehicle incidents' made up 42% of worker fatalities, higher than the 10-year average of 39%.
- 'Falls from a height' made up 13% of worker fatalities in 2024, slightly higher than the 10-year average of 12%.
- In 2024, 'Being hit by moving objects' made up a slightly lower proportion (9%) of fatalities compared to the 10-year average (13%).
- Fatalities caused by 'Being hit by *falling* objects' made up 7% of fatalities in 2024, lower than the 10-year average of 9%.
- Fatalities caused by 'Being trapped by moving machinery or equipment' made up 5% of fatalities in 2024 (the same as the 10-year average).

Safe Work Australia advises caution when drawing conclusions based on small numbers of worker fatalities, as these can experience significant year-on-year variation.

Figure 13: Proportion of worker fatalities by most common sub-mechanism, change from 2014 to 2024



The table below gives an overview of the sub-mechanisms of incident for worker fatalities.

Table 3: Summary of worker fatalities by sub-mechanisms

	Number of worker fatalities			Percentage of fatalities		
Sub-mechanism	**2024**	**10-year average**	**% difference**	**2024**	**10-year average**	**% pt difference**
Vehicle incident	79	73.1	8.1%	42.0%	38.8%	3.2% pts
Falls from a height	24	23.5	2.1%	12.8%	12.5%	0.3% pts
Being hit by moving objects	17	23.7	-28.3%	9.0%	12.6%	-3.5% pts
Being hit by falling objects	13	16.4	-20.7%	6.9%	8.7%	-1.8% pts
Being trapped by moving machinery or equipment	9	8.7	3.4%	4.8%	4.6%	0.2% pts
Being trapped between stationary and moving objects	9	8.8	Not calculated*	4.8%	4.7%	Not calculated*
Contact with electricity	7	7.0		3.7%	3.7%	
Drowning/immersion	5	4.6		2.7%	2.4%	
Unspecified mechanisms of incident	5	0.6		2.7%	0.3%	
Rollover	5	5.3		2.7%	2.8%	
Exposure to environmental heat	4	1.5		2.1%	0.8%	
Being hit by an animal	3	1.8		1.6%	1.0%	
Single contact with chemical or substance	2	0.9		1.1%	0.5%	
Being assaulted by a person or persons	2	2.6		1.1%	1.4%	
Falls on the same level	1	0.9		0.5%	0.5%	
Slide or cave-in	1	1.4		0.5%	0.7%	
Explosion	1	2.0		0.5%	1.1%	
Contact with hot objects	1	2.3		0.5%	1.2%	

*% difference figures were not calculated for some sub-mechanisms due to low counts of worker fatalities.

Mechanisms by occupation for serious claims

The chart below shows the distribution of serious claims amongst occupations. Labourers account for the largest share, comprising 24% of all serious claims. This is followed by Community and personal service workers, at 22%, and Technicians and trades workers at 17%.

Figure 14: Proportion of serious claims by occupation group (2023-24p)

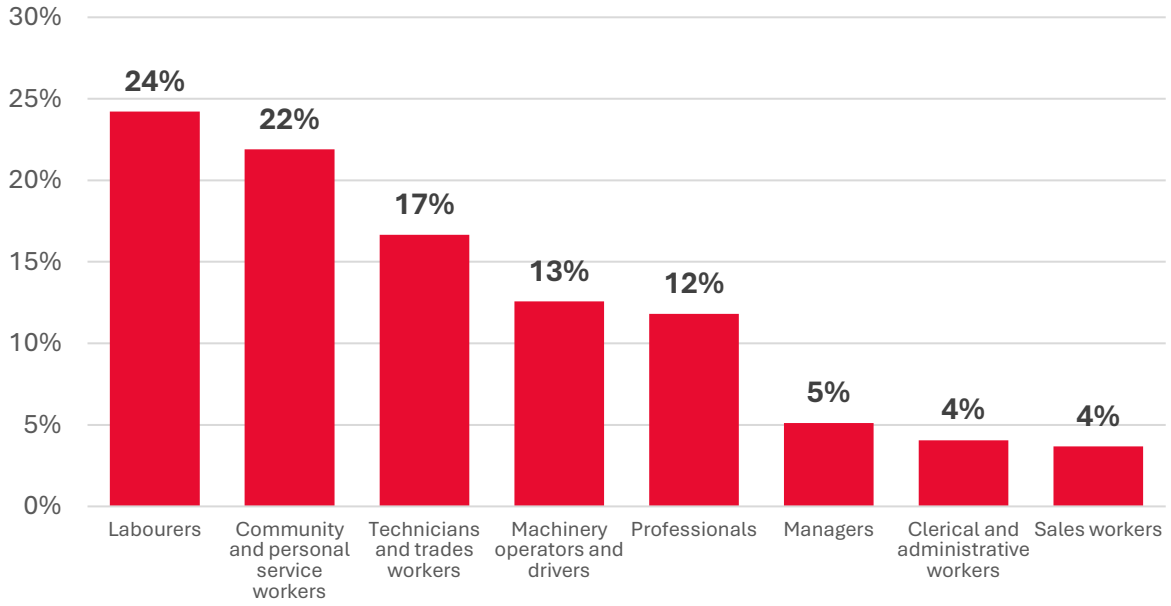
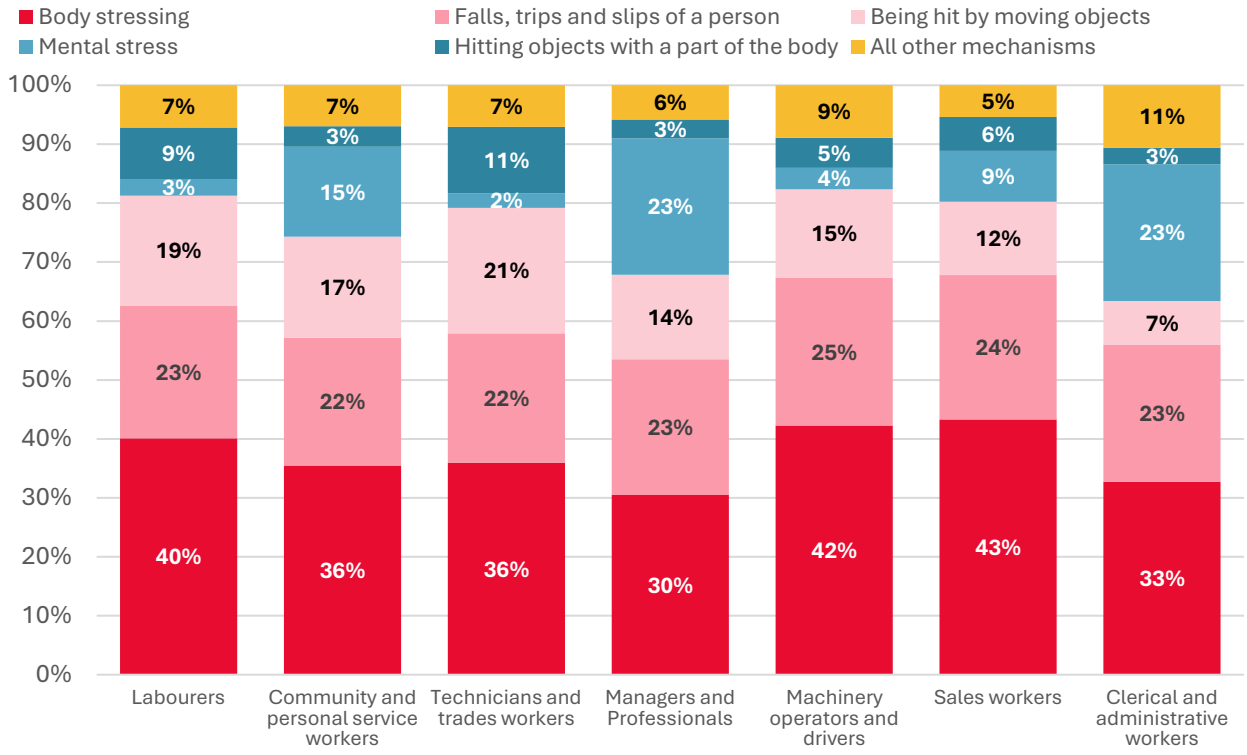


Figure 15 shows the proportional composition of serious claims by mechanism, for each occupation group.

- For every occupation group, 'Body stressing' is the most common mechanism.
  - For Sales workers and Machinery operators and drivers, 'Body stressing' is a particularly significant mechanism, comprising 43% and 42% of the serious claims in these occupation groups respectively.
- 'Falls, trips and slips of a person' make up a similar proportion of serious claims, regardless of occupation group (22-25%).
- For Technicians and trades workers, a third (33%) of serious claims are for either 'Being hit by moving objects' or 'Hitting objects with a part of the body'.
- Managers and Professionals (both 23%), Clerical and administrative workers (23%), and Community and personal service workers (15%) all have high proportions of 'Mental stress' serious claims.

Figure 15: Proportions of serious claims by occupation group and mechanism (2023-24p)



Note: this chart excludes NSW data due to issues with occupation coding. See the NDS explanatory notes for further information.

Mechanisms of the 10 occupations with the most serious claims

The following analysis looks at mechanisms of work-related injury or disease for the top 10 occupations with the most serious claims. Together, these 10 occupations account for one quarter of all serious claims. In addition, 9 out of the 10 occupations have above-average frequency rates of serious claims per million hours worked (in some cases 5 times the overall rate or more).

Table 4: Top 10 occupations[7] with the most serious claims from 2019-20 to 2023-24p

Occupation	Number of serious claims (5 years to 2023-24p)	Frequency rate
Truck drivers	24,637	13.3
Nursing support and personal care workers	20,720	31.9
Registered nurses	20,141	8.8
Aged and disabled carers	17,694	10.6
Storepersons	17,677	14.0
Police	17,636	33.4
Sales assistants (general)	14,097	4.8
Carpenters and joiners	13,859	14.9
Prison officers	11,950	60.9
Secondary school teachers	10,302	7.7
All occupations*	**678,894***	**6.7**

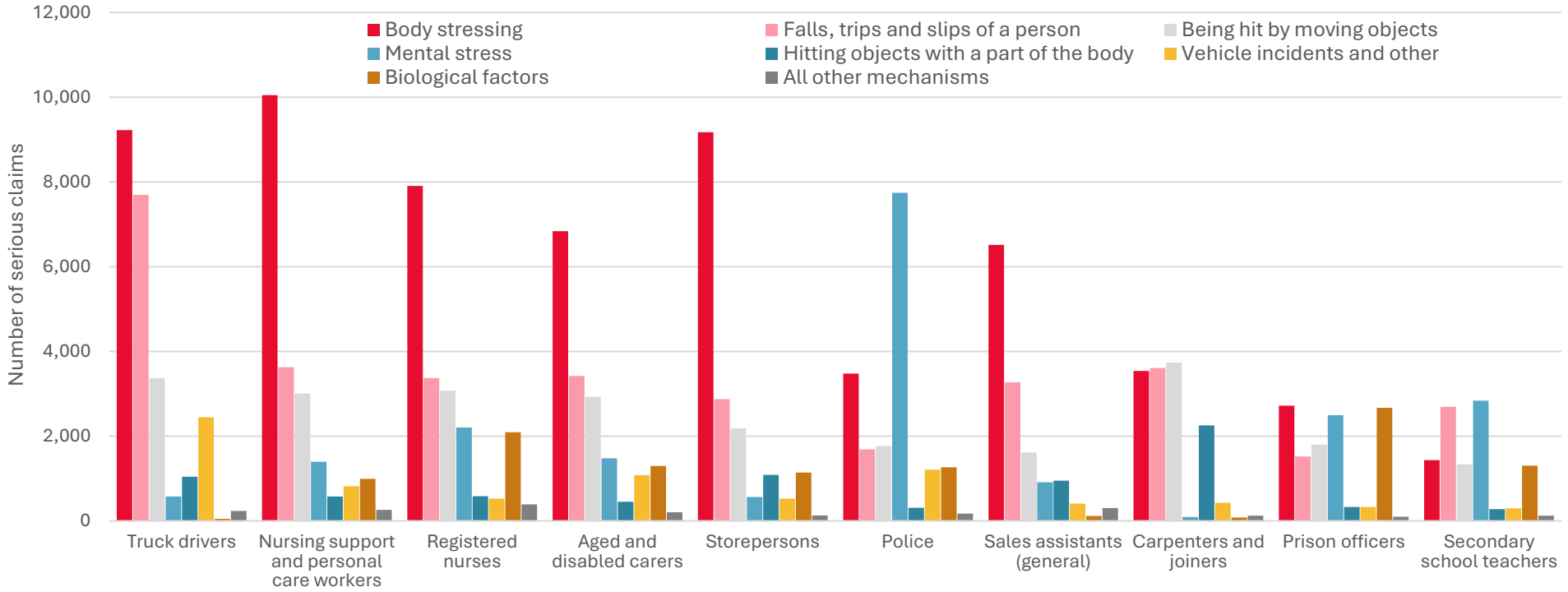
*includes occupations not listed in this table

[7] Excludes Other miscellaneous labourers.

The chart below shows the top 10 occupations with the most serious claims, split by mechanism.

- For 7 of the top 10 occupations, 'Body stressing' is the most prevalent mechanism. For 5 of these occupations, 'Body stressing' is *by far* the most common mechanism type – at least double the count of the second most common mechanism.
- Of the 10 occupations, Truck drivers have by far the highest number of 'Falls, trips and slips of a person' serious claims (7,694).
- 'Mental stress' is the most common claim type for Police, accounting for 7,743 (44%) serious claims.
  - 'Mental stress' serious claims also accounted for a high proportion of serious claims for Secondary school teachers (28%) and Prison officers (21%).
- 'Being hit by moving objects' is the most common mechanism for Carpenters and joiners.

Figure 16: Mechanism breakdown of the occupations[8] with the highest number of serious claims (2019-20 to 2023-24p)



[8] Excludes Other miscellaneous labourers.

Mechanisms by occupation for fatalities

Figure 17 shows the distribution of worker fatalities amongst occupations. Machinery operators and drivers account for the largest share of worker fatalities, comprising 32% of all fatalities. This is followed by Labourers (27%), Managers (15%) and Technicians and trades workers (15%).

Figure 17: Proportion of worker fatalities by occupation group, 2024

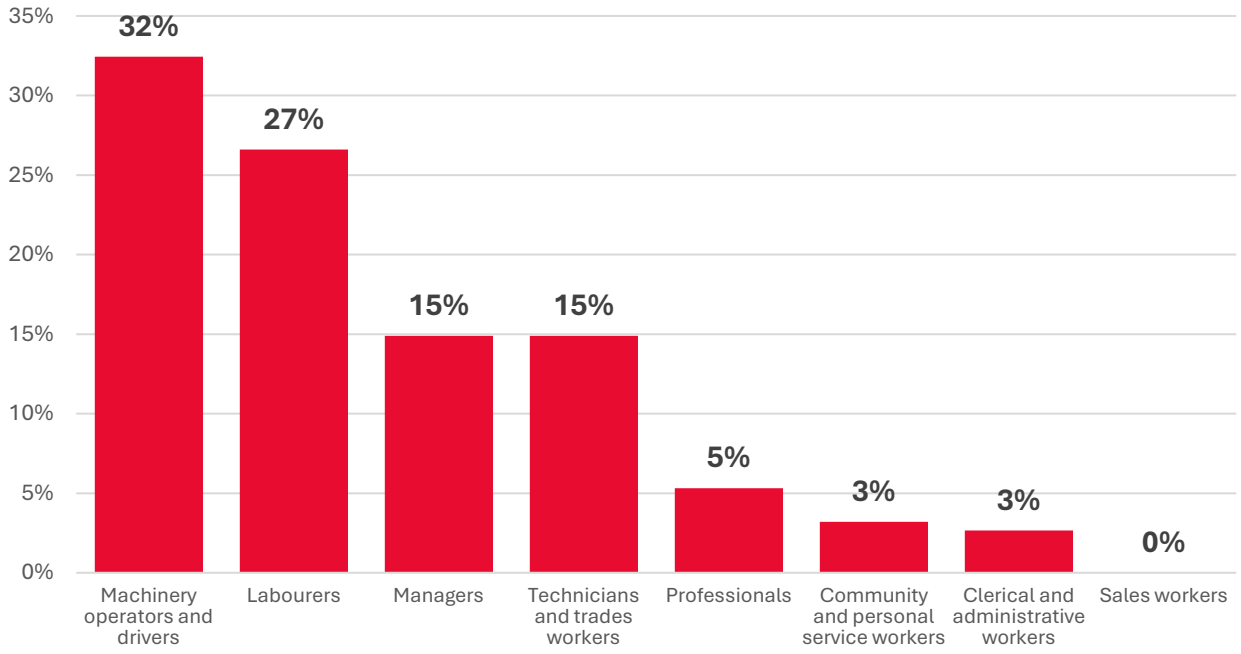
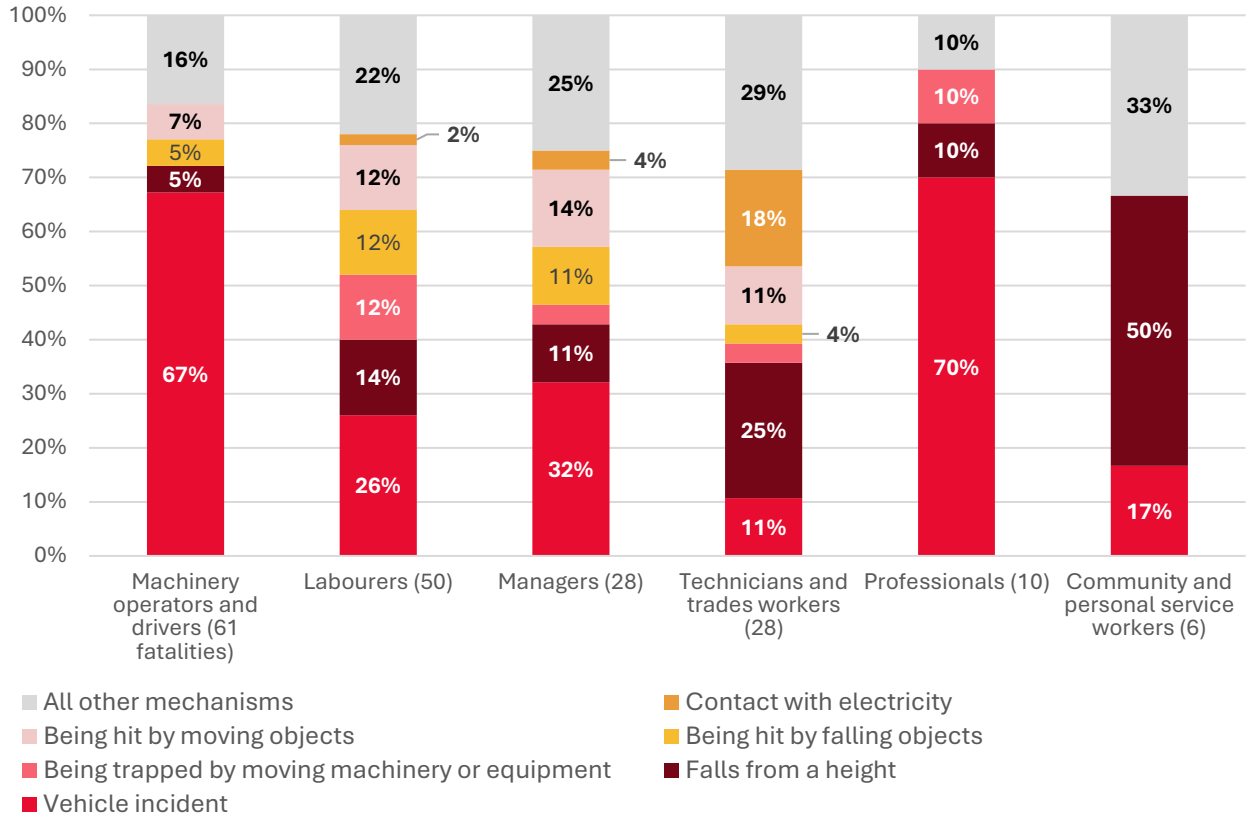


Figure 18 shows the proportional composition of fatalities by sub-mechanism, for selected occupation groups.

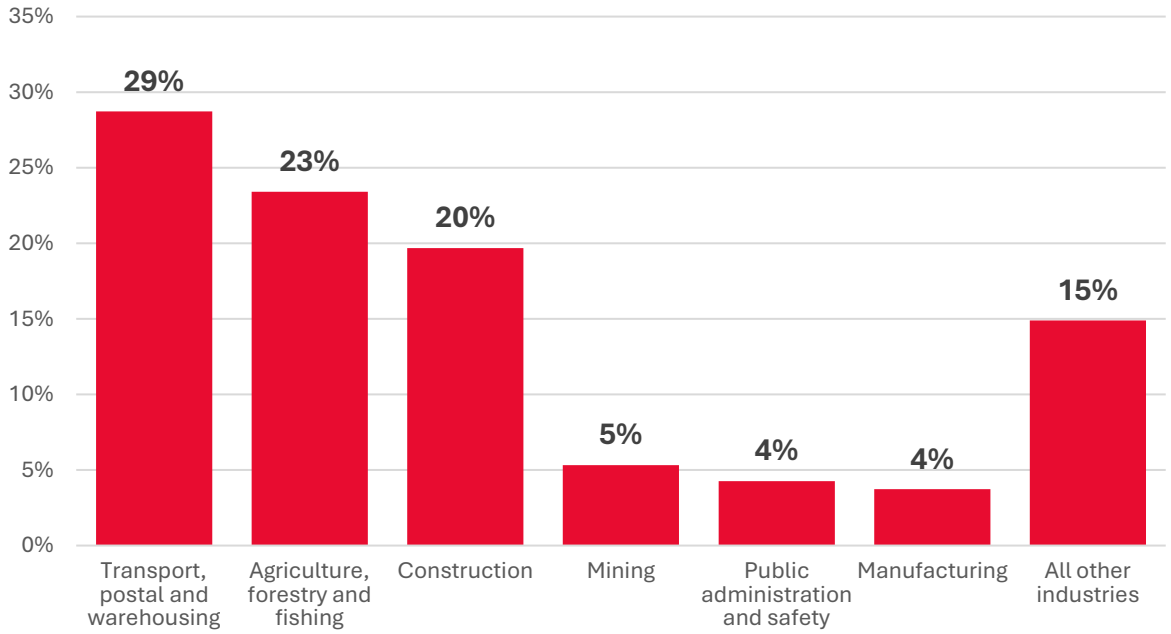
- A large share of the Professionals (e.g. Pilots), Machinery operators and drivers (e.g. Truck drivers) and Managers (e.g. Farm managers) who died at work in 2024 died due to 'Vehicle incidents'.
- Sub-mechanisms of incident for Labourers are quite evenly spread, with the most common mechanisms being 'Vehicle incident' (26%), 'Falls from a height' (14%), 'Being hit by moving objects' (12%), 'Being hit by falling objects' (12%) and 'Being trapped by moving machinery or equipment' (12%).
- Worker deaths due to 'Contact with electricity' was most common for Technicians and trades workers (71%) but was rare in other occupations.

Figure 18: Proportions of worker fatalities by most common occupation groups and sub-mechanisms, 2024



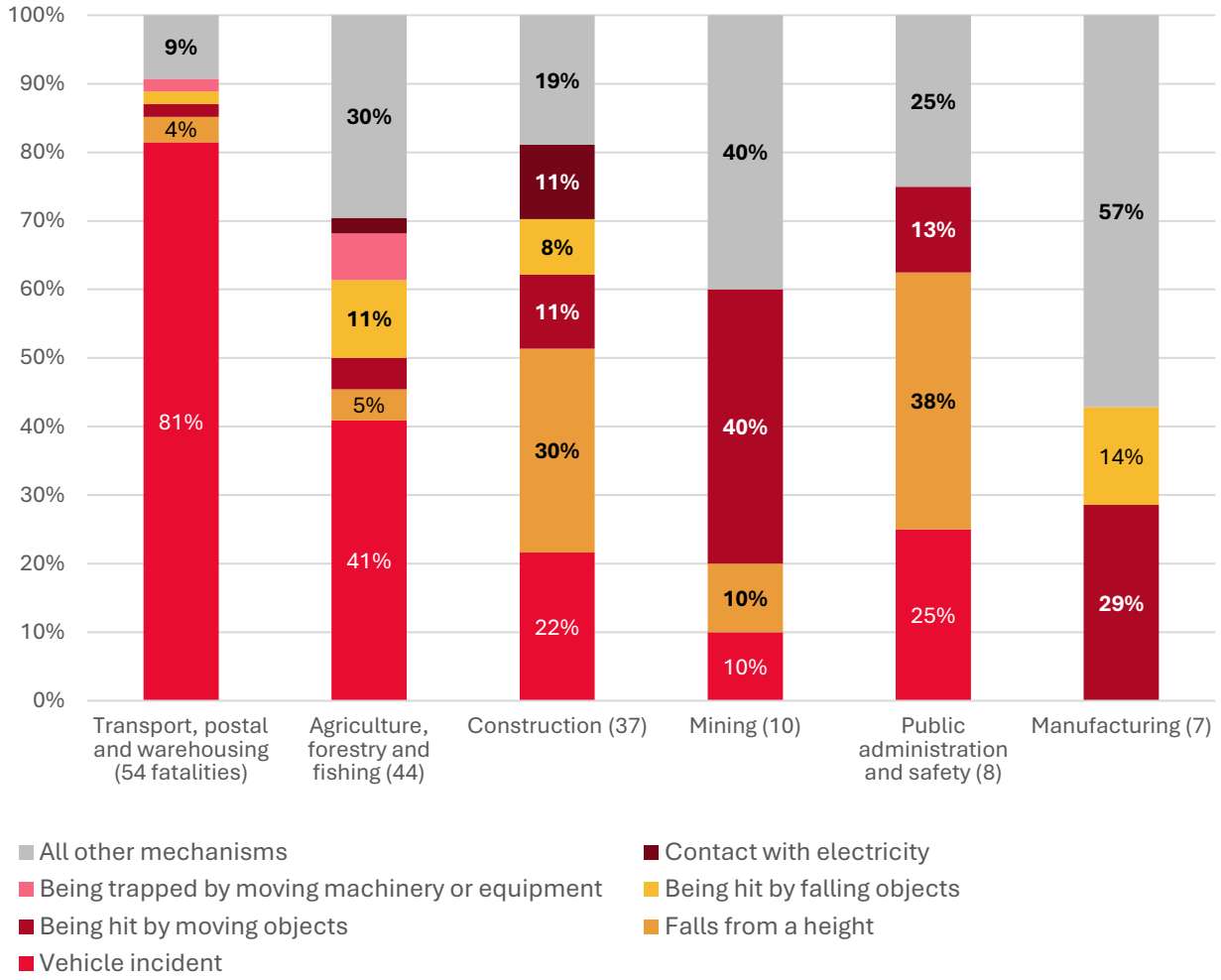
This is also reflected in the type of industries where worker fatalities occur. The highest proportion of worker fatalities is in the Transport, postal and warehousing industry (29%), Agriculture, forestry and fishing industry (23%), and Construction industry (20%) (these are industries in which many Machinery operators and drivers and Labourers work).

Figure 19: Proportion of worker fatalities by most common industry groups, 2024



‘Vehicle incidents’ are the leading cause of worker fatalities in the Transport, postal and warehousing industry (similar to Machinery operators and drivers) and the Agriculture, forestry and fishing industry (similar to Managers). Sub-mechanisms of incident are more evenly spread in Construction (similar to Labourers).

Figure 20: Proportions of worker fatalities by most common industry groups and sub-mechanisms, 2024



Appendix A: Supporting information

In October 2025, Safe Work Australia released its annual *Key Work Health and Safety Statistics* report, highlighting the latest trends in work-related injuries, illnesses and fatalities.

This report follows on from the *Key Work Health and Safety Statistics* report, to delve deeper into the data and provide a focused study of the 'mechanisms' of incidents which result in an injury, illness or fatality. Understanding the prevalence of these mechanisms can help to target preventative action, improve understanding of risks in the workplace, and sharpen WHS communications between employers, workers, and WHS professionals.

Data used in this report

To examine the mechanisms of incidents resulting in work-related injuries and fatalities, this report draws from 2 main sources of data:

- Workers' compensation claims data (to measure serious work-related injuries and diseases), and
- Work-related fatalities data (to measure work-related fatalities from traumatic injury).

Both these data sources are compiled and managed by Safe Work Australia. They are the most relevant and detailed data sources available for monitoring work-related injuries, diseases and deaths at a national level. More details on these datasets, including their scope and limitations, are outlined below.

This analysis was undertaken in 2025-26, with the latest data available at the time 2023-24p for serious claims and 2024 for worker fatalities. To find the latest data, please go to the data dashboards on our interactive data website or read the Key Work Health and Safety Statistics 2026 report.

About the workers' compensation data

Safe Work Australia compiles national workers' compensation statistics using data obtained from workers' compensation authorities in each state, territory and the Commonwealth government. These data are collated into the National Data Set for Compensation-based Statistics (NDS), which is Safe Work Australia's primary source of information on work-related injuries and diseases. Data is collected on the nature of the injury/disease, mechanism of the incident, breakdown agency of the incident, and bodily location of the injury.

Most data in this report is based on 'Serious claims': claims relating to work-related injury or disease that result in a total absence from work of one working week or more. This is the default reporting standard for Safe Work Australia.

Please note that workers' compensation data does have some limitations.

- Not all workplace injuries result in a claim: the latest Australian Bureau of Statistics *Work-related injuries* survey for 2021-22 found that around one-third of people who experienced a work-related injury or illness applied for workers' compensation.
- Work-related diseases are under-represented in claims data because their onset may result from long-term exposure to workplace agents or involve long latency periods, which makes the link between the work-related disease and the workplace difficult to establish and thus provide compensation for.
- Owners of unincorporated enterprises and independent contractors are generally not covered under workers' compensation schemes; these make up approximately 12% of Australian workers.[9]

The workers' compensation data presented in this report is based on the latest financial year of data (claims lodged in 2023-24). While this provides the most up-to-date information, this data is still considered 'preliminary', as some claims remain open; this will be denoted by a 'p' (i.e. 2023-24p).

About work-related fatalities data

Fatalities data are derived from the Work-related Traumatic Injury Fatalities database (TIF), which includes information on all work-related fatalities from traumatic injuries in Australia. This database collates information sourced from workers' compensation data, fatality notifications from Australia's various WHS authorities and information in the National Coronial Information System. Data is collected on the mechanism of the incident, agency and breakdown agency of the incident. See Work-related fatalities data catalogue page for detailed information.

The data in this report is based on worker fatalities (people who were killed while they were conducting a work activity). Note that it does not include fatalities from work-related *diseases* (e.g. silicosis).

What is a 'Mechanism of incident'?

The 'Mechanism of incident' (which has been referred to simply as 'mechanism' in the report) describes the overall action, exposure or event that best describes the circumstances that resulted in the most serious injury, disease, or fatality. The mechanism classification is part of the Type of occurrence classification system (TOOCS) 3rd Edition.

While the mechanism classification provides useful information about the type of incidents resulting in workplace injuries, diseases and deaths, it doesn't necessarily indicate the root *cause* of an incident. For example, the data tells us which injuries were caused by the mechanism 'Body stressing' but doesn't tell us what factors led to someone's body being stressed.

[9] ABS, *Characteristics of employment*, August 2022, custom data extracted through Tablebuilder.

About the TOOCS

The Type of Occurrence Classification System (TOOCS) is used to code workers' compensation claims and other injury or illness datasets.

Several coding structures used in Safe Work Australia's datasets are defined under the TOOCS, including:

- **Nature** of Injury or Disease Classification (Nature)
  - refers to the most serious injury or disease sustained or suffered by the worker.
- **Bodily Location** of Injury or Disease Classification (Bodily Location)
  - refers to the part of the body affected by the most serious injury or disease.
- **Mechanism** of Incident Classification (Mechanism):
  - As mentioned, identifies the overall action, exposure or event that best describes the circumstances that resulted in the most serious injury or disease.
  - There are 2 levels in which we categorise this information – the major group (which has been used as chapter headings) and the more detailed sub-major group (which has been referred to in this report as the sub-mechanism).
- Agency of Injury or Disease Classification (Agency) – used to code both the **Agency** and **Breakdown Agency** of injury or disease:
  - 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 or disease.
  - The Agency of injury or disease refers to the object, substance or circumstance *directly involved in* inflicting the injury or disease.

Interactive data dashboards – accessing mechanism data

If you would like to access or explore mechanism information, Safe Work Australia publishes interactive data dashboards for the Workers' compensation and Work-related fatalities data.

These dashboards allow users to filter the data based on their interests, such as Mechanism, Year/s, Industry, Jurisdiction, etc. This can be done by selecting the 'Apply Filters' button, which is in the top-left corner of the dashboards.

Additionally, the dashboards have multiple pages that focus on specific topics (such as mechanism). Users can navigate through these by selecting the ‘Pages’ button on the top left of the dashboard or by using the arrows at the bottom of the dashboard. Mechanism data is also available on the ‘chart customisation tool’ page.

A Help video and Dashboard user guide are available for new users or users that require any further assistance navigating the interactive data dashboards.

Appendix B: Data table

Table 18: Serious claims (2023-24p) and fatalities (2024) by mechanism

	Serious claims		Fatalities	
	No.	%	No.	%
Falls, trips and slips of a person	**32,022**	**21.8%**	**25**	**13.3%**
Falls from a height	7,817	5.3%	24	12.8%
Falls on the same level	21,868	14.9%	1	0.5%
Stepping, kneeling or sitting on objects	2,337	1.6%	0	0.0%
Hitting objects with a part of the body	**9,928**	**6.8%**	**0**	**0.0%**
Hitting stationary objects	5,051	3.4%	0	0.0%
Hitting moving objects	4,797	3.3%	0	0.0%
Rubbing and chafing	80	0.1%	0	0.0%
Being hit by moving objects	**23,418**	**16.0%**	**53**	**28.2%**
Being hit by falling objects	4,413	3.0%	13	6.9%
Being bitten by an animal	573	0.4%	0	0.0%
Being hit by an animal	816	0.6%	3	1.6%
Being hit by a person accidentally	1171	0.8%	0	0.0%
Being trapped by moving machinery or equipment	1,263	0.9%	9	4.8%
Being trapped between stationary and moving objects	2,982	2.0%	9	4.8%
Exposure to mechanical vibration	158	0.1%	0	0.0%
Being hit by moving objects	7,375	5.0%	17	9.0%
Being assaulted by a person or persons	4,667	3.2%	2	1.1%
Sound and pressure	**201**	**0.1%**	**1**	**0.5%**
Exposure to single, sudden sound	43	0.0%	0	0.0%
Long term exposure to sounds	16	0.0%	0	0.0%
Explosion	71	0.0%	1	0.5%
Other variations in pressure	71	0.0%	0	0.0%
Body stressing	**50,608**	**34.5%**	**0**	**0.0%**
Muscular stress while lifting, carrying, or putting down objects	19,396	13.2%	0	0.0%
Muscular stress while handling objects other than lifting, carrying or putting down	20,196	13.8%	0	0.0%
Muscular stress with no objects being handled	6,904	4.7%	0	0.0%
Repetitive movement, low muscle loading	4,112	2.8%	0	0.0%
Heat, electricity and other environmental factors	**1,871**	**1.3%**	**17**	**9.0%**
Contact with hot objects	1,510	1.0%	1	0.5%
Contact with cold objects	14	0.0%	0	0.0%
Exposure to environmental heat	70	0.0%	4	2.1%
Exposure to environmental cold	NP	NP	0	0.0%
Exposure to non-ionising radiation	49	0.0%	0	0.0%
Exposure to ionising radiation	NP	NP	0	0.0%
Contact with electricity	147	0.1%	7	3.7%
Drowning/immersion	NP	NP	5	2.7%
Exposure to other and unspecified environmental factors	71	0.0%	0	0.0%

	Serious claims		Fatalities	
	No.	%	No.	%
Chemicals and other substances	**1,188**	**0.8%**	**2**	**1.1%**
Single contact with chemical or substance	788	0.5%	2	1.1%
Long term contact with chemicals or substances	156	0.1%	0	0.0%
Insect and spider bites and stings	174	0.1%	0	0.0%
Contact with poisonous parts of plant or marine life	9	0.0%	0	0.0%
Other and unspecified contact with chemical or substance	61	0.0%	0	0.0%
Biological factors	**3,907**	**2.7%**	**0**	**0.0%**
Contact with, or exposure to, biological factors of non-human origin	276	0.2%	0	0.0%
Contact with, or exposure to, biological factors of human origin	3,527	2.4%	0	0.0%
Contact with, or exposure to, biological factors of unknown origin	104	0.1%	0	0.0%
Mental stress	**16,839**	**11.5%**	**0**	**0.0%**
Sexual harassment	281	0.2%	0	0.0%
Exposure to a traumatic event	1,902	1.3%	0	0.0%
Exposure to workplace or occupational violence	2,636	1.8%	0	0.0%
Other harassment not further defined	155	0.1%	0	0.0%
Work pressure	4,075	2.8%	0	0.0%
Suicide or attempted suicide	31	0.0%	N/A	N/A
Other mental stress factors	2,084	1.4%	0	0.0%
Work related harassment and/or workplace bullying	5,596	3.8%	0	0.0%
Racial harassment	15	0.0%	0	0.0%
Mental stress related to novel coronavirus (COVID-19)	64	0.0%	0	0.0%
Mental stress not further defined	NP	NP	0	0.0%
Vehicle incidents and other	**6,660**	**4.5%**	**90**	**47.9%**
Slide or cave-in	14	0.0%	1	0.5%
Vehicle incident	3,052	2.1%	79	42.0%
Rollover	56	0.0%	5	2.7%
Other and multiple mechanisms of incident	1,818	1.2%	0	0.0%
Unspecified mechanisms of incident	1,720	1.2%	5	2.7%
All serious claims / fatalities	**146,700***	**100.0%**	**188**	**100.0%**

*includes 58 records which did not have a mechanism assigned.