



Department of Energy, Mines,
Industry Regulation and Safety



Worst hazards in Western Australian workplaces **2012–13 to 2021–22**



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Reference

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Foreword

WorkSafe has identified the worst hazards in Western Australia's workplaces by examining work-related traumatic injury fatalities and workers' compensation claims with shared mechanisms of injury and breakdown agency of injury. The mechanism of injury identifies the action, exposure or event that resulted in injury or disease. The breakdown agency of injury identifies the object, substance or circumstance that led to the injury or disease.

Examining fatality data and workers' compensation claims according to shared mechanisms and breakdown agencies of injury helps to identify patterns of activities or tasks being undertaken at the time of the workplace injury or fatality.

The degree of harm caused by a hazard can be measured in a variety of ways, including:

- total number of workers' compensation claims and fatalities
- total time lost as a result of injury or fatality
- total cost of rehabilitation following injury.

The most common workplace hazards identified in this report are likely to be present in most workplaces. Each person conducting a business or undertaking (PCBU) has a duty to identify hazards that give risk to work health and safety and put controls in place to eliminate or minimise those risks so far as is reasonably practicable.

Explanatory notes

This report uses the WorkSafe WA Notified Fatalities Database of work-related traumatic injury fatalities and the WorkCover WA workers' compensation claims database as primary data sources. Successful workers' compensation claims are used as a proxy for work-related injuries.

Claims means all claims, and includes claims with no time lost and claims with time lost.

No time lost claims are recorded when a claim requires only treatment outside of work hours, or when any time away from work as a result of the claim is taken as ordinary leave of any type. Severity levels are assigned according to recorded days lost only, and may be misleading, for example where a mental health claim records no time lost but requires ongoing psychological treatment.

Time lost

For claims, time lost means the count of days or shifts lost. For fatalities, years lost is time lost divided by 250 standard working days per year. For fatalities, time lost is calculated to be the retirement age of 67 years, minus the age of the fatally injured person. As a result, young workers (or other persons) lose more time to fatal workplace injuries than older workers or other persons.

Some workers' compensation claims occur when a person is fatally injured at work. In these instances, some lost time may be reflected against the claim, especially where the injury did not immediately result in death. As a result, where a fatality is recorded in both the WorkCover WA claims database and the WorkSafe Notified Fatalities Database, a small amount of double counting of time lost may occur.

Cost

Costs figures represent an estimate of costs for unfinalised claims, and total cost of finalised claims, attributed to the year in which a claim was lodged. Due to the evolving nature of claims, data is subject to change particularly the most recent year. Claim costs are not adjusted for inflation.

Injury and disease compensation claim data

The data in this report is gathered from workers' compensation claims lodged with WorkCover WA 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 people, 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.

The following claim types are excluded from lost time claim data, unless otherwise specified: journey claims between home and work; asbestos-related diseases, including mesothelioma and pneumoconiosis; duplicated or disallowed claims; injuries and diseases that are treated in the health system (i.e. invalid pensions and sickness and unemployed benefits).

Classification systems

The industry classification codes are in accordance with the Australian and New Zealand Standard Industrial Classification (ANZSIC) published by the Australian Bureau of Statistics.

The injury and disease classification groupings and descriptions are standard terms taken from the National Occupational Health and Safety Commission publication, *Type of Occurrence Classification System* (TOOCS) Third Edition.

A guide to the infographics

The circles used in the infographics on the following pages of this report represent different hazards. The size of the circles represent the time lost to injuries and fatalities caused by that hazard.

The circle size scale is consistent within each group of circles but are not to scale across different infographics. The applicable values for the top three hazards in each group are to provide a sense of scale across all hazards in that group.

Key to hazard circle colour groups:

- | | |
|-----------------------------------|-----------------------------|
| ● Psychosocial | ● Trips |
| ● Moving objects/crash | ● Falls and falling objects |
| ● Manual handling | ● Other |
| ● Environmental factors/chemicals | |

Breakdown of the twenty worst workplace hazards

Twenty worst workplace hazards by years lost, claims and costs

These workplace hazards caused 25,000 years of lost time.

This information has been rounded for readability.

Table 1 Twenty worst hazards by years lost, number of claims, and costs

Hazard	Years lost	Claims	Cost
Trip on clear ground	4,300 years	17,800	\$700 million
Muscular stress with no objects	2,200 years	10,800	\$400 million
Trip on cluttered ground	2,000 years	8,400	\$300 million
Handling other person	1,900 years	5,800	\$300 million
Lifting box	1,800 years	8,300	\$300 million
Trip on slick ground	1,600 years	5,700	\$200 million
Assault	1,500 years	8,200	\$300 million
Light vehicle crash	1,100 years	3,700	\$90 million
Fall from ladder	980 years	2,700	\$200 million
Work pressure	920 years	2,700	\$200 million
Fall from truck	870 years	2,600	\$100 million
Truck crash	730 years	1,000	\$90 million
Lifting metal	730 years	2,900	\$100 million
Handling truck	680 years	2,200	\$100 million
Fall from stairs	660 years	2,900	\$100 million
Exposure to traumatic event	650 years	1,200	\$100 million
Harassment or bullying	600 years	2,200	\$200 million
Lifting bag	570 years	2,100	\$90 million
Exposure to violence	560 years	1,300	\$90 million
Handling equipment	510 years	1,900	\$80 million
Total	25,000 years	94,100	\$4,000 million

Coverage of workers' compensation claims

Workers' compensation claims data is not a perfect representation for work-related injuries, as many work-related injuries do not result in a claim being made.

Low claims numbers do not necessarily mean there are few injuries. It may mean claims are not made when injuries occur, whether because injured people are not covered by workers' compensation, or for other reasons.

Not all workers are eligible for workers' compensation.



Note: From the Australian Bureau of Statistics Work-related injuries survey (2021-22), for the whole of Australia. Some groups are excluded from workers' compensation coverage in Western Australia, including: self-employed workers; bystanders and most volunteers; owner managers of unincorporated entities and contributing family; and the Western Australia Police Force.

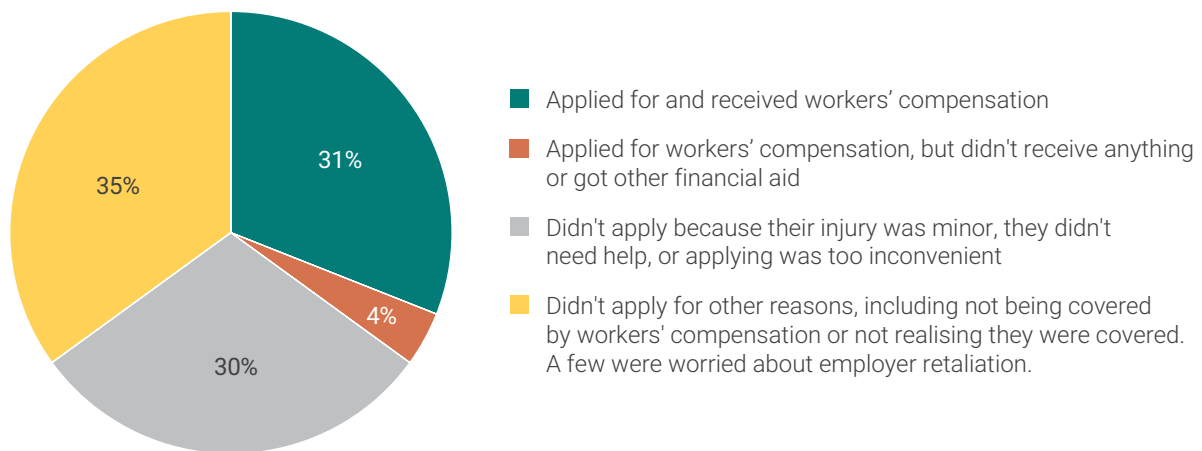


Figure 1 Workers who experienced work-related injuries or illnesses ('000; %), by workers' compensation claim status, 2021-22. Source: ABS Work-related injuries, 2021-22

Further, of the 323,700 (65.1%) workers who experienced a work-related injury or illness and did not make a claim for workers' compensation, the primary reason given was 'Minor injury only/not considered necessary', which accounted for 39.5% of all such instances.

Worst hazards by mechanism

Worst hazards by mechanism group

The worst hazard group is **manual handling**. These injuries account for 40 per cent of all lost time.

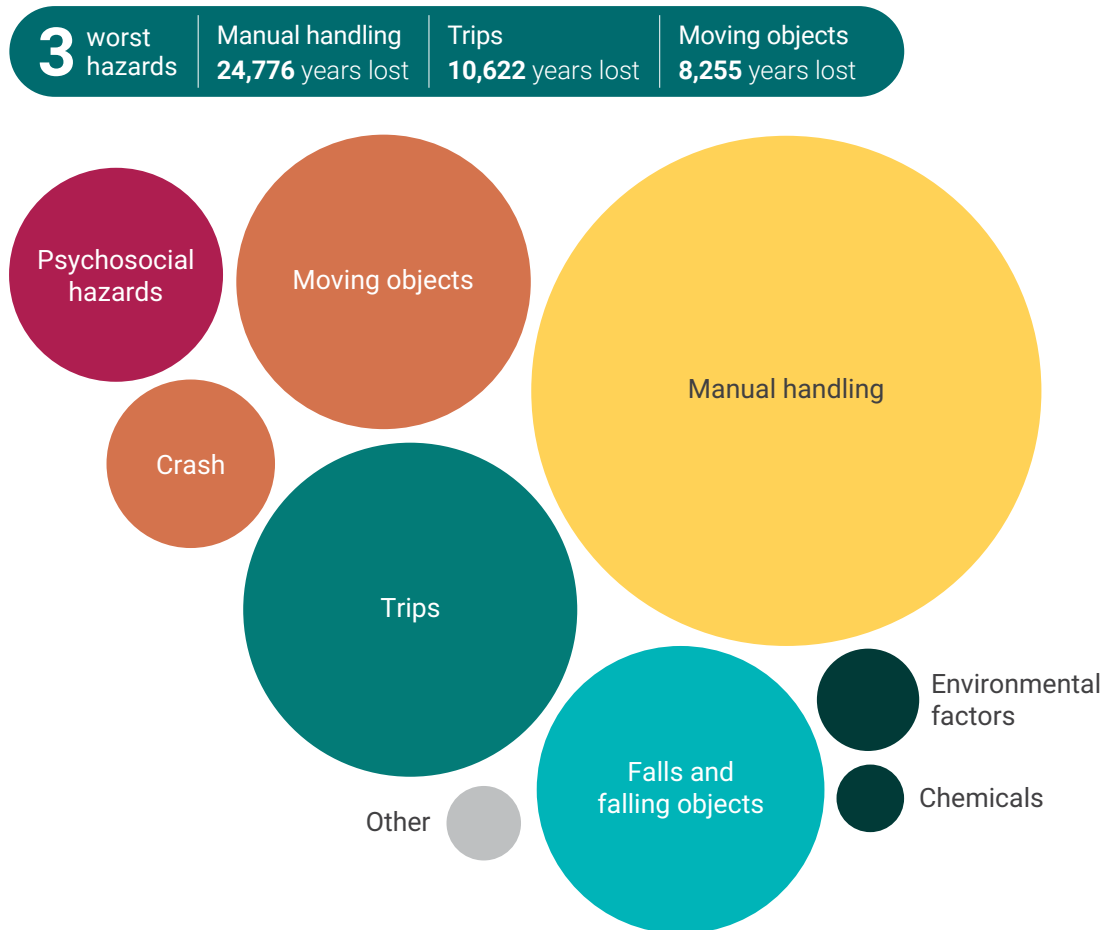


Figure 2 Worst hazard groups by years lost

Table 2 Worst hazards, by % years lost, fatalities, claims and cost

Hazard	% years lost	% fatalities	% claims	% cost
Manual handling	41%	0%	33%	41%
Trips	17%	1%	15%	18%
Moving objects	14%	32%	27%	14%
Falls and falling objects	13%	30%	9%	12%
Psychosocial hazards	7%	1%	5%	9%
Crash	4%	24%	2%	3%
Environmental factors	2%	10%	2%	1%
Other	1%	1%	3%	1%
Chemicals	1%	2%	2%	1%

Worst hazards by specific mechanism

The worst specific hazards are **trips** and **manual handling**.

3 worst hazards	Trip on clear ground 4,338 years lost	Muscular stress with no objects 2,155 years lost	Trip on cluttered ground 1,972 years lost
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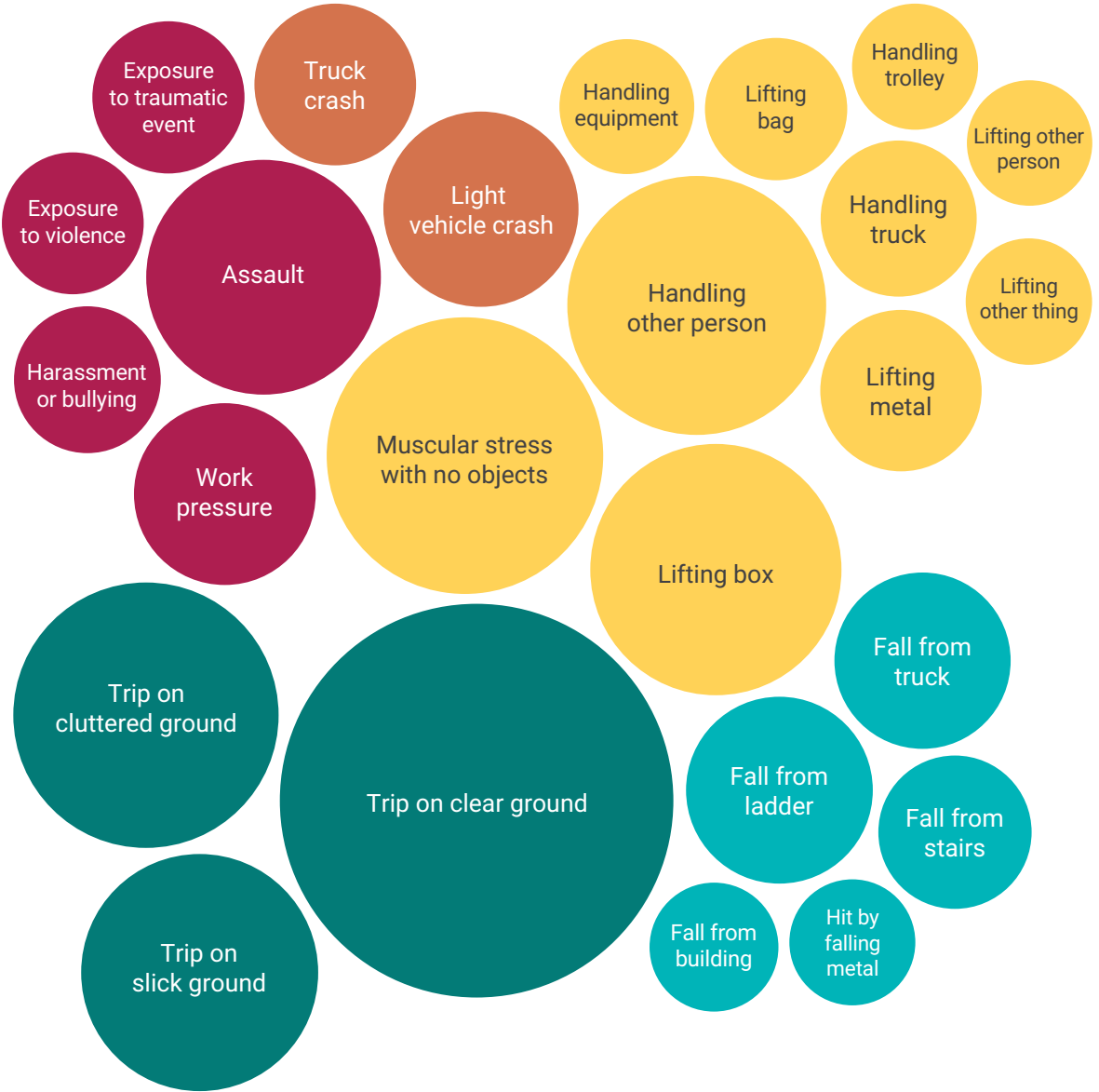


Figure 3 Worst specific hazards, by years lost

Road transport

The worst hazards for road transport industry subdivision mostly involve **trucks**.

3 worst hazards	Truck crash 299 years lost	Fall from truck 256 years lost	Handling truck 158 years lost
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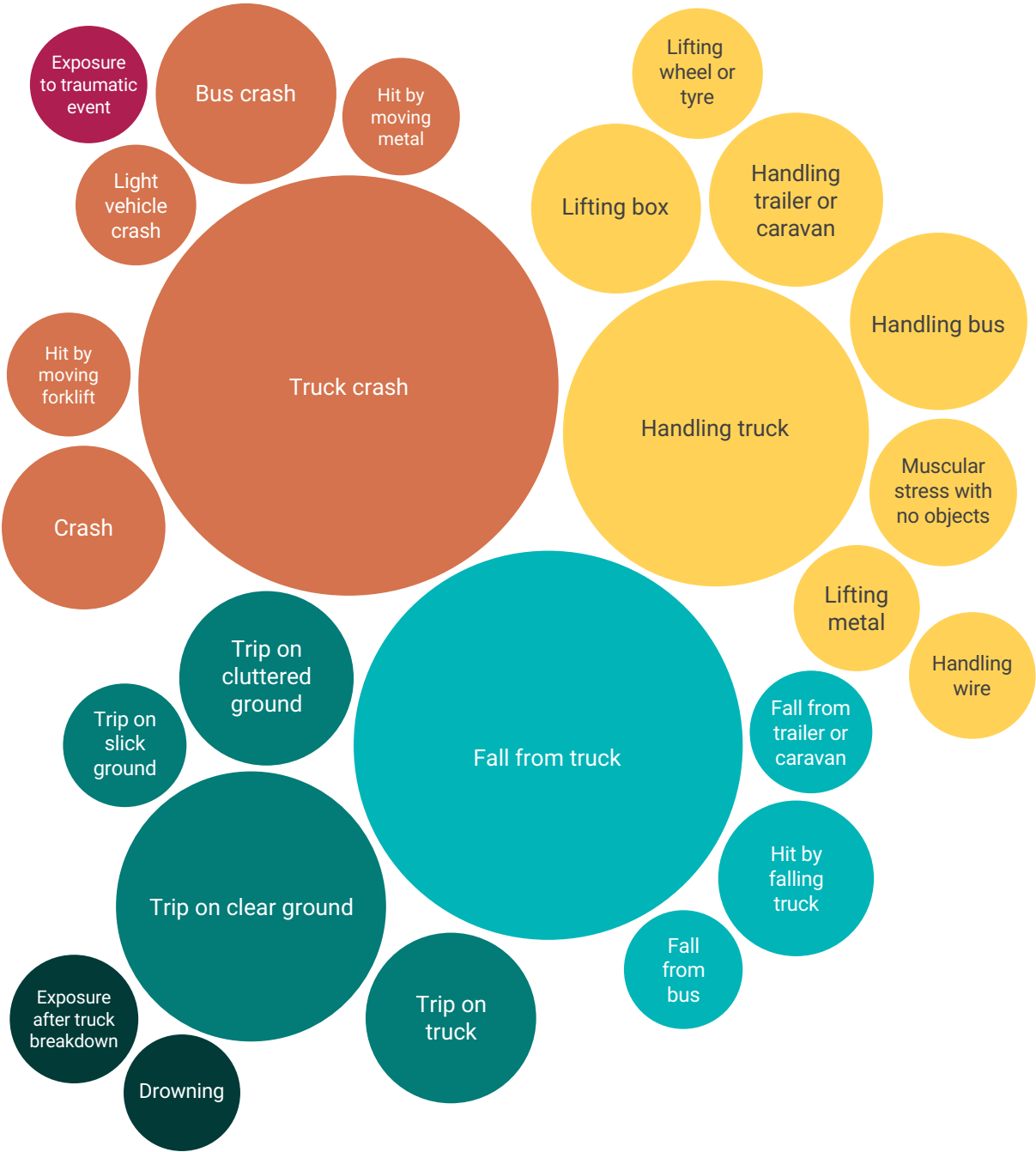


Figure 5 Worst hazards in road transport, by years lost

Construction

The worst hazards in construction industry division are **falls, trips** and **handling**.

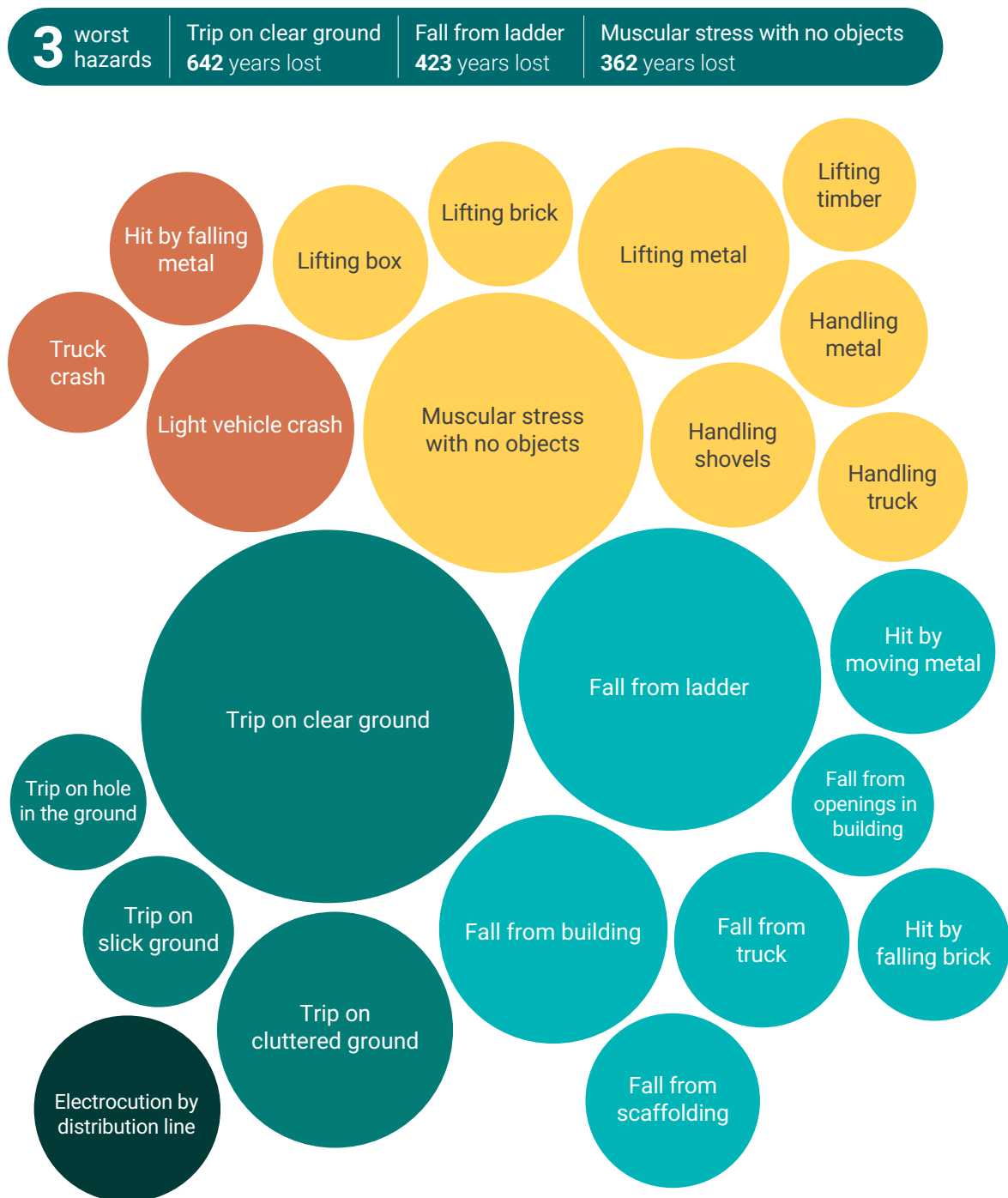


Figure 6 Worst hazards in construction, by years lost

Hospitals

The worst hazards in hospitals industry subdivision involve **handling other people**.

Psychosocial hazards, assault and violence are common hazards in hospitals.

3 worst hazards	Handling other person 665 years lost	Trip on clear ground 261 years lost	Assault 214 years lost
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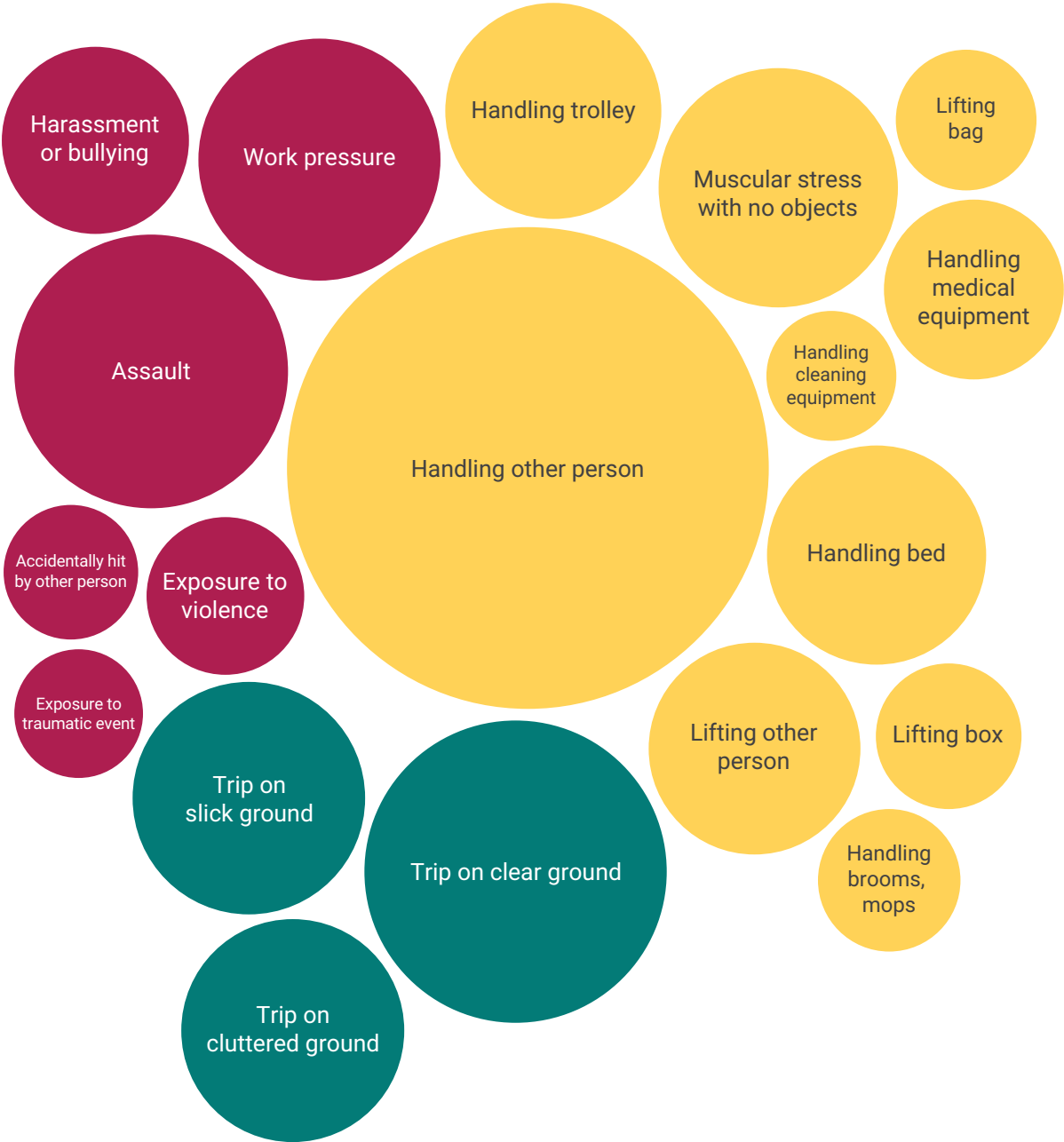


Figure 7 Worst hazards in hospitals, by years lost

Schools

The worst hazards in the school industry subdivision include **trips**, **psychosocial** and **handling**.

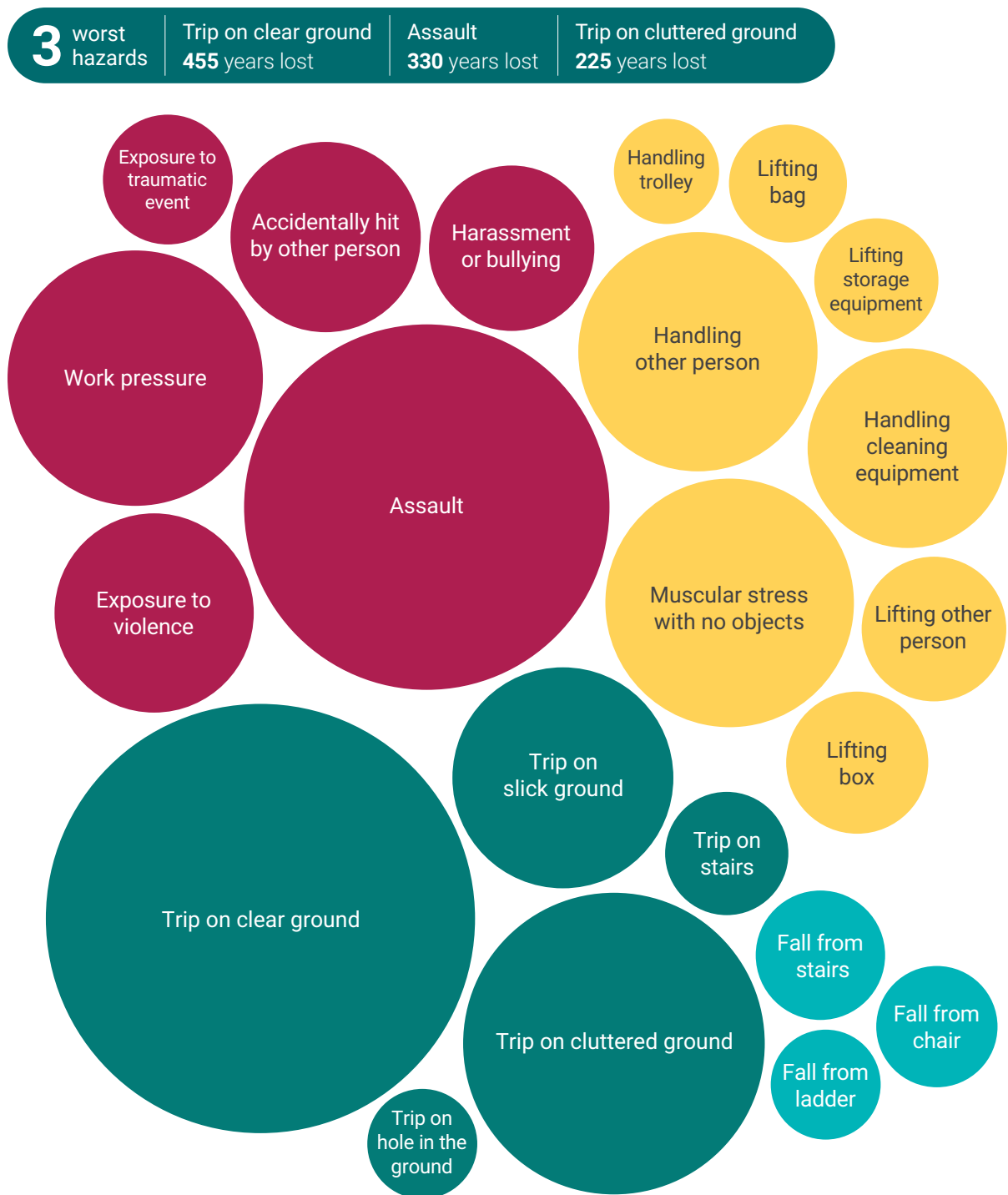


Figure 8 Worst hazards for preschool and school education industry subdivision, by years lost

Public order, safety and regulatory services

The worst hazards within the public order, safety and regulatory services industry subdivision are largely **manual handling, trips** and **psychosocial**.

3 worst hazards	Trip on clear ground 4,338 years lost	Muscular stress with no objects 2,155 years lost	Trip on cluttered ground 1,972 years lost
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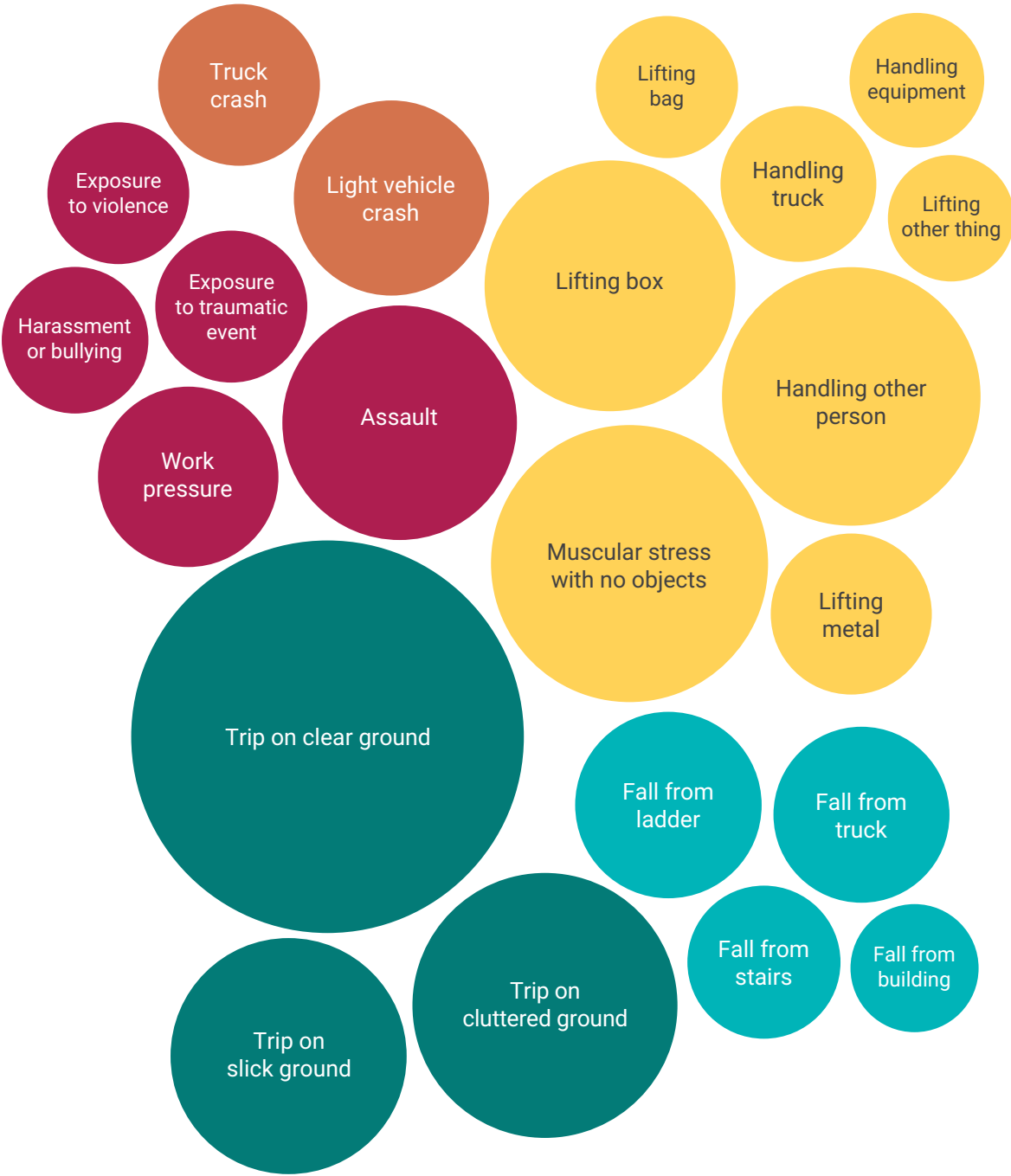


Figure 9 Worst hazards for public order, safety and regulatory services, by years lost

Breakdown of worst hazards

Lost time

The worst hazards that caused the most lost time include **psychosocial hazards** and **falls**.

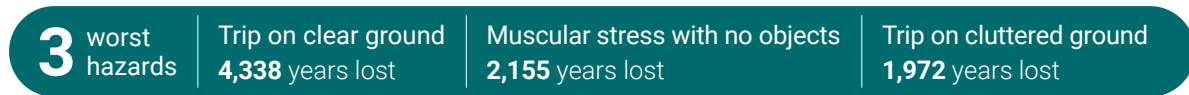


Figure 10a Worst hazards by years lost

Hazard differences between time lost and total claims

Hazards rank differently and cause different size harms when measured in different ways. Ranking hazards by years lost is the approach taken for most of this report. It is a useful way of incorporating both fatal injuries and non-fatal injuries into a single measure. In general, it is a good way of showing representative hazards and reflecting the harm caused by hazards. However, there are some instances where this approach misses very common causes of workplace harms.

The clearest example of this is with the hazard deafening sounds. This does not appear in any other list of top hazards shown in this report – and yet when hazards are ranked by total number of claims rather than by time lost, it is a substantial cause of workplace harms. It does not appear in ranks of top hazards by years lost because the many workers who are harmed by deafening sounds lose very little time. This does not mean their lives are not significantly impacted.

Total claims

The worst hazards that caused the most total claims include **moving objects** and **hazardous noise**, which cause many injuries, but only count for a small amount of lost time.

Trips and **manual handling** are the most common hazards by both time lost and total claims.

3 worst hazards	Trip on clear ground 17,805 total claims	Muscular stress with no objects 10,762 total claims	Trip on cluttered ground 8,375 total claims
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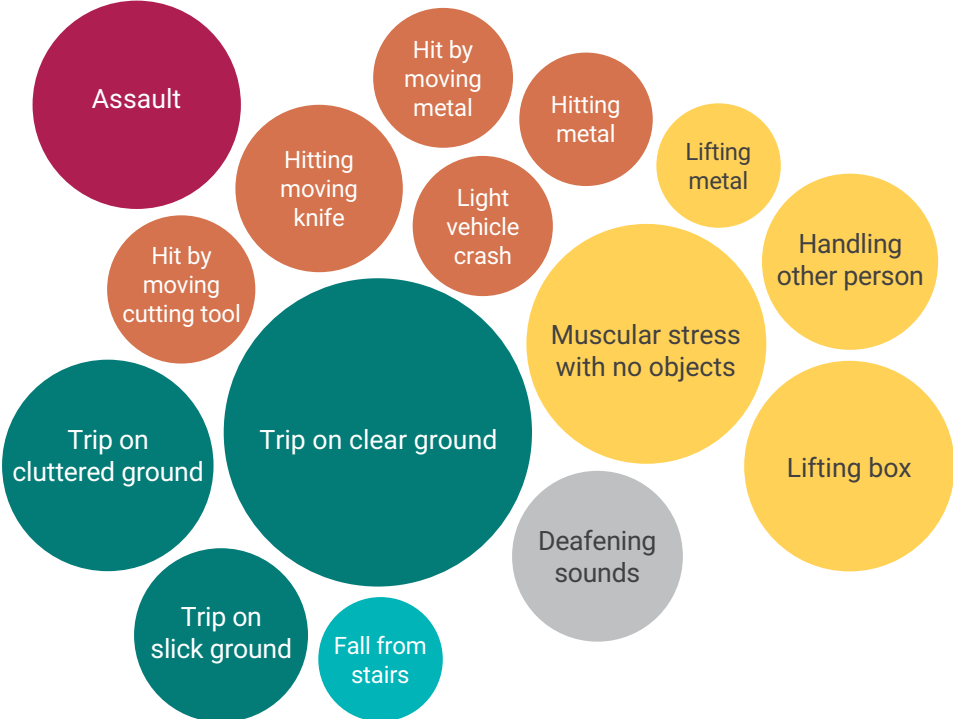


Figure 10b Worst hazards by total claims

Worst hazards by gender

Gender: female

The worst hazards by gender and years lost show that female workers are more likely than male workers to be harmed by **psychosocial hazards** and **handling other people**. Workplace **assault** also causes female workers to lose twice as much lost time than male workers.



Figure 11a Worst hazards by gender and years lost: female workers

Hazard differences between female and male

Hazards affect different groups of people in different ways. This is often, but not always, a result of the different types of work performed by different groups of people. Hazards for female workers include more **psychosocial hazards**, including a significantly higher likelihood of **assault**. Male and female workers are equally likely to be harmed by **trips** and **manual handling** hazards.

Gender: male

The worst hazards by gender and years lost show that male workers are more likely to be harmed by **falls** and **vehicle crashes** than female workers.

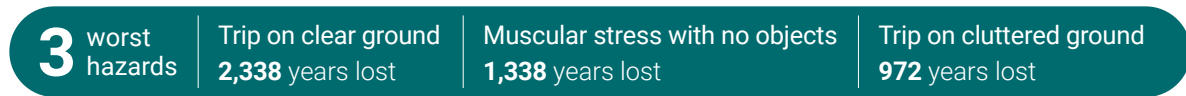


Figure 11b Worst hazards by gender and years lost: male workers

Worst hazards by age

Age: young workers under 25

Young workers under 25 are more likely to lose time due to **electrocution, gravity hazards, and moving objects**.

3 worst hazards	Trip on clear ground 227 years lost	Light vehicle crash 151 years lost	Electrocution by distribution line 148 years lost
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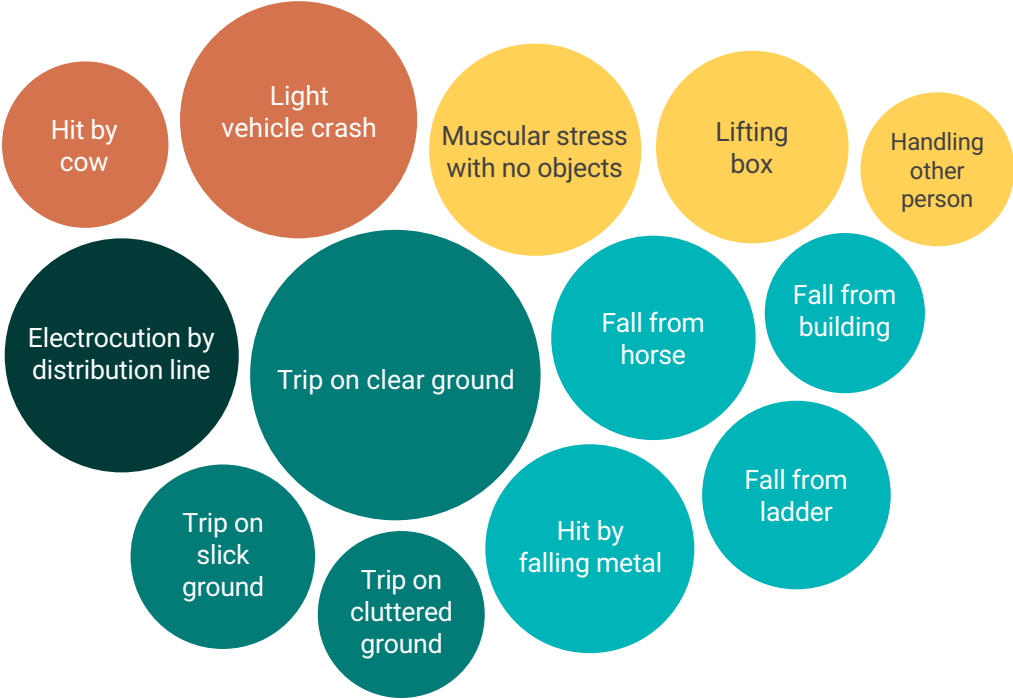


Figure 12a Worst hazards by age and years lost: young workers under 25

Hazard differences between young and old

Fatal injuries to young workers result in decades of lost time per incident. As a result, the most common hazards by years lost for young workers tend to be those hazards that cause fatalities. On the other hand, the measure used in this report to measure lost time, does not count most time lost by fatalities to workers over 65, meaning that the hazards shown here are mostly those which cause time lost due to injury.

Age: over 65

The worst hazard data shows workers over 65 lose more time to **trips, handling** and **assault**.

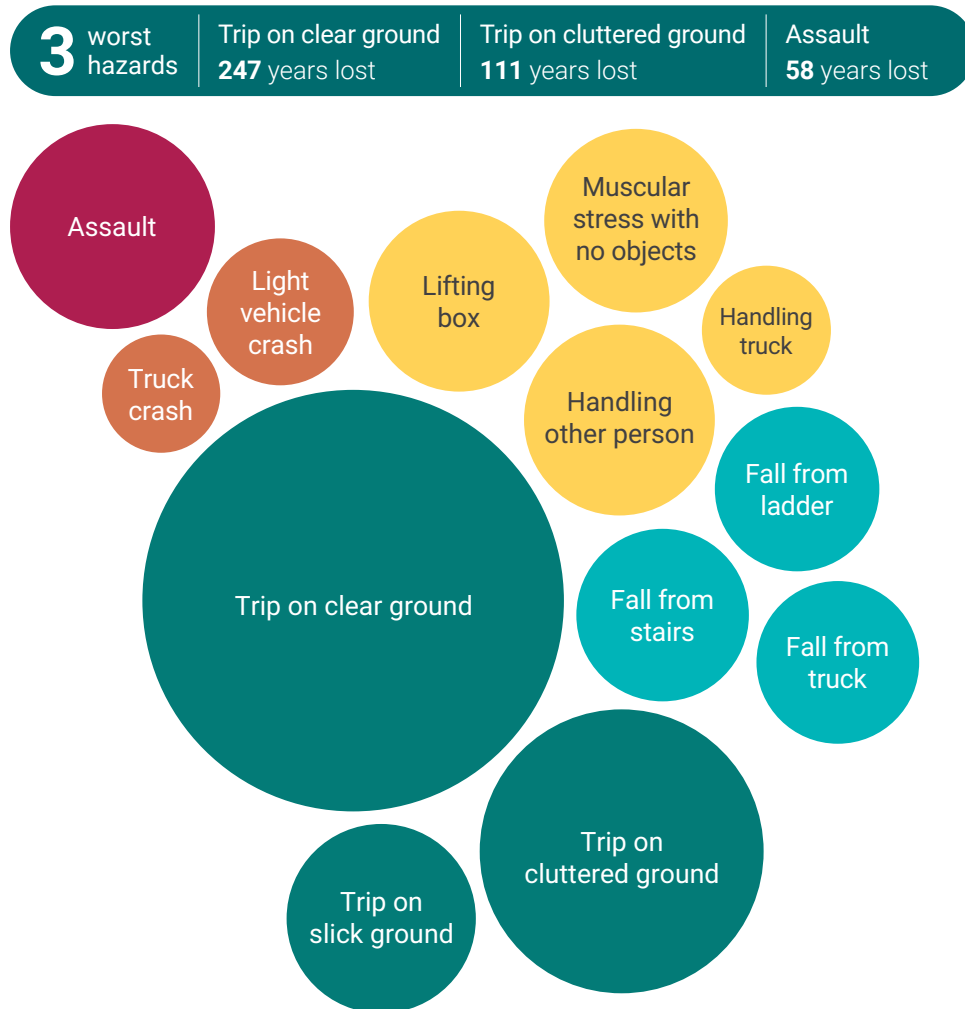


Figure 12b Worst hazards by age and years lost: workers over 65

Worst hazards resulting in injury or fatality

Worst hazards by years lost: injury

The worst causes of years lost to injuries are **trips**, **manual handling**, and **psychosocial hazards**.

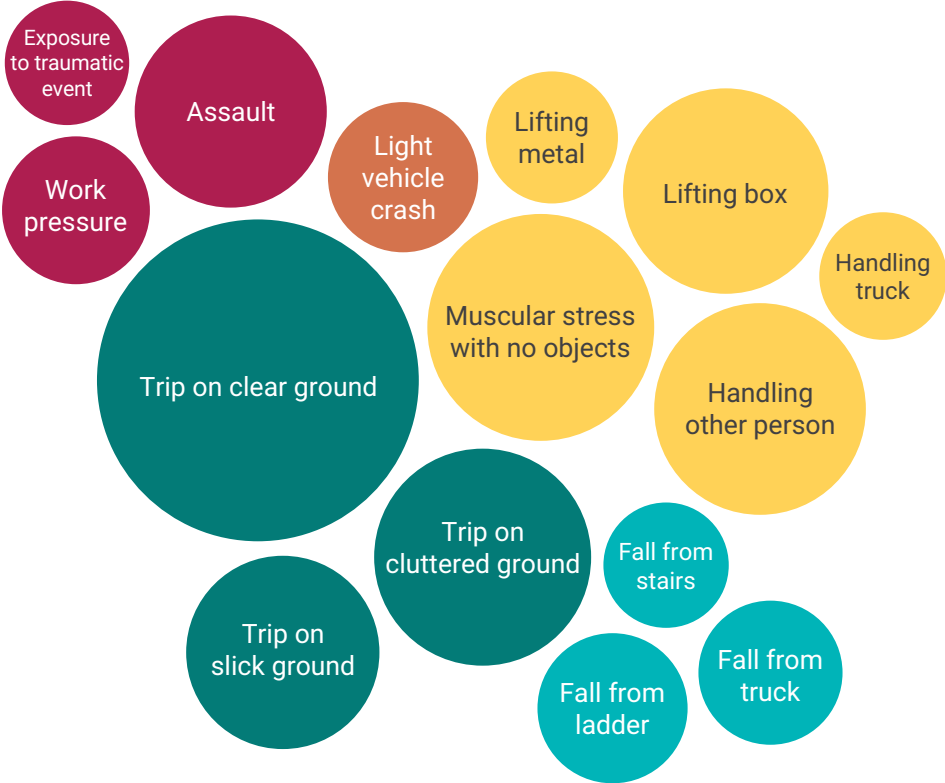
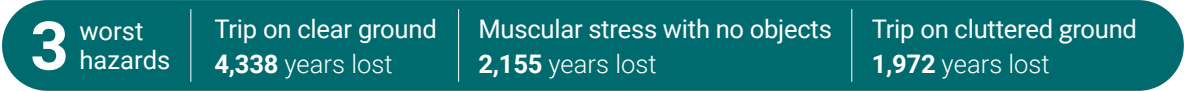


Figure 13a Worst hazards by years lost due to injury

Hazard differences between claims and fatalities

The hazards that result in fatalities are very different from the hazards that injure workers. When considering hazards, it is important to look at both categories of hazards to get a more complete picture.

Some hazards that have caused several fatalities have caused few injuries, such as electrocution by distribution line, or being bitten or stung by an insect. Other hazards that are very common causes of injuries, such as trips and manual handling, are extremely unlikely to cause fatalities.

With regards to psychosocial hazards, it is important to note that the criteria for work-related traumatic injury fatalities used by WorkSafe has in the past excluded several fatalities resulting from psychosocial hazards. As such, these are likely to be under-represented in the data set.

Worst hazards by years lost: fatalities

The worst causes of years lost to fatalities are **vehicle crashes** and **gravity hazards**.

Hazards that cause injuries tend to be very different to those that result in fatalities: **light vehicle crash** is the only mechanism of injury that falls in the top 15 most common hazards for both categories.

3 worst hazards	Truck crash 233 years lost	Electrocution by distribution line 167 years lost	Light vehicle crash 124 years lost
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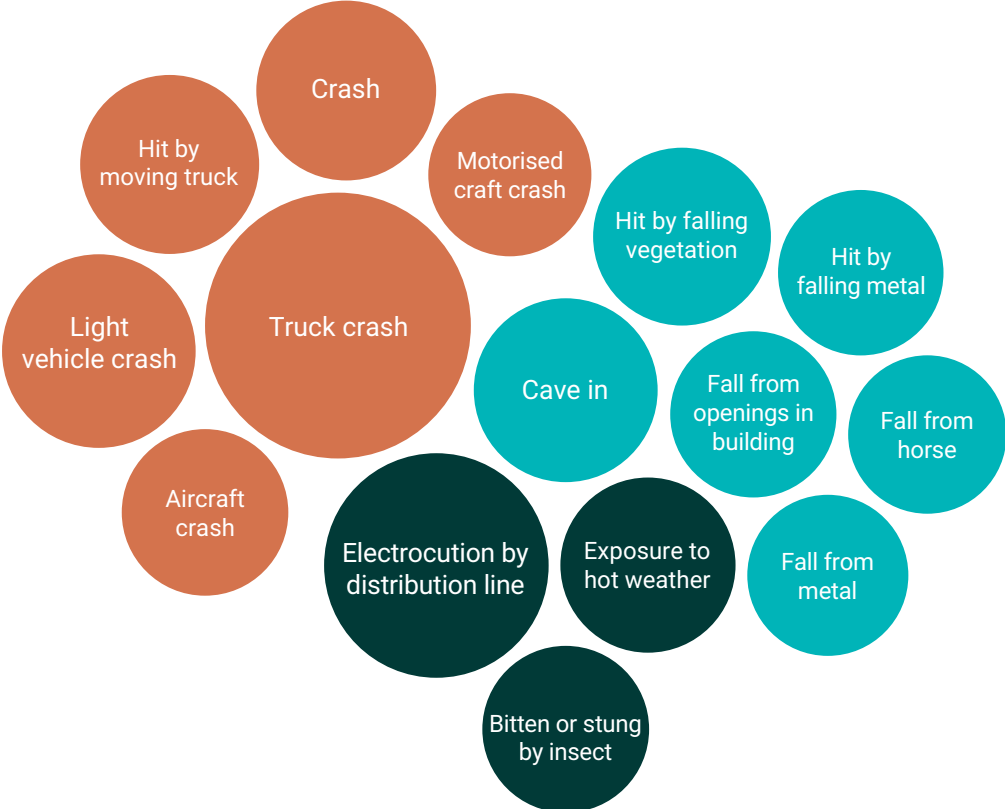


Figure 13b Worst hazards by years lost due to fatalities

Years lost through injury claims and fatalities

Table 3 Worst hazards by years lost for fatalities and injury claims

Hazard	Fatalities - years lost	Claims - years lost	All years lost
Trip on clear ground	0	4,338	4,338
Muscular stress with no objects	0	2,155	2,155
Trip on cluttered ground	0	1,972	1,972
Handling other person	0	1,876	1,876
Lifting box	0	1,767	1,767
Trip on slick ground	0	1,564	1,564
Assault	2	1,545	1,547
Light vehicle crash	124	945	1,069
Fall from ladder	32	944	976
Work pressure	0	915	915
Fall from truck	0	870	870
Truck crash	233	502	735
Lifting metal	0	730	730
Handling truck	0	682	682
Fall from stairs	0	658	658
Exposure to traumatic event	0	648	648
Harassment or bullying	0	603	603
Lifting bag	0	567	567
Exposure to violence	0	564	564
Handling equipment	0	509	509
Fall from building	58	407	465
Lifting other thing	0	448	448
Handling trolley	0	445	445
Lifting other person	0	445	445
Hit by falling metal	91	353	444
All hazards	3,912	56,702	60,614

Twenty worst workplace hazards by months lost and cost per claim

On average, claims due to exposure to a **traumatic event** result in six months lost time from work.

Table 4 Twenty worst hazards by average months lost per claim and average cost per claim

Hazard	Average months lost per claim	Average cost per claim
Exposure to traumatic event	7	\$92,572
Truck crash	6	\$83,402
Exposure to violence	5	\$71,450
Fall from ladder	4	\$58,169
Work pressure	4	\$80,487
Fall from truck	4	\$56,381
Handling other person	4	\$47,953
Handling truck	4	\$58,001
Trip on slick ground	3	\$40,965
Lifting bag	3	\$41,904
Harassment or bullying	3	\$77,944
Handling equipment	3	\$44,650
Light vehicle crash	3	\$24,434
Lifting metal	3	\$43,677
Trip on clear ground	3	\$38,443
Trip on cluttered ground	3	\$37,571
Fall from stairs	3	\$37,097
Lifting box	3	\$32,759
Muscular stress with no objects	3	\$34,178
Assault	2	\$30,664

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