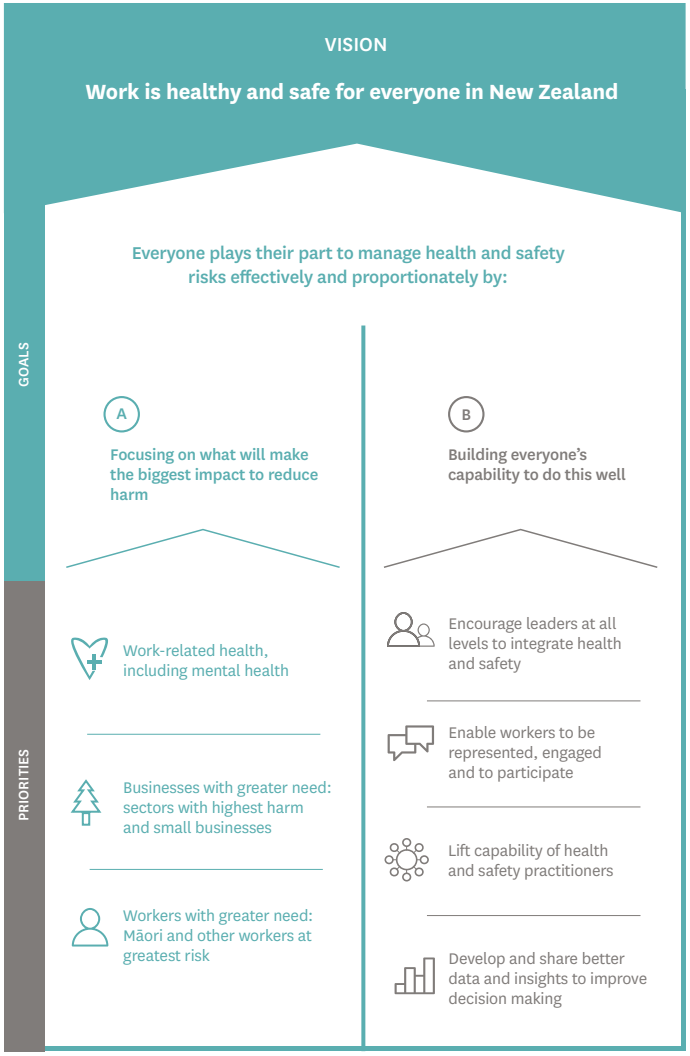
New Zealand Health and Safety at Work Strategy

Outcomes dashboard

DECEMBER 2019

The Health and Safety at Work Strategy

The Strategy sets the direction for improving health and safety at work in New Zealand

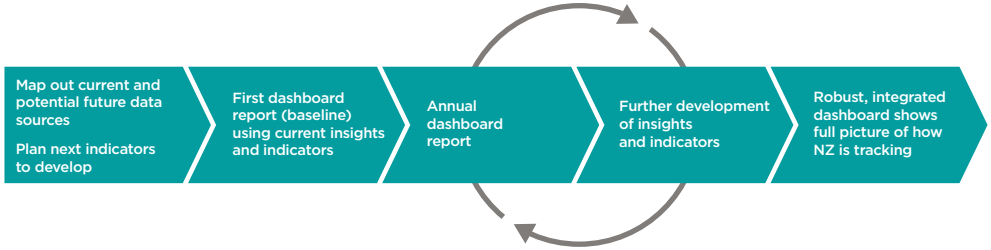


www.mbie.govt.nz/health-and-safety-strategy

Using the Strategy to build a better picture of New Zealand's overall health and safety

- The Strategy notes that data and insights are spread across multiple agencies and sectors and that these have not previously been pulled together to develop a full picture of how New Zealand is tracking on health and safety at work.
- Measuring how well we are doing is a key part of the Strategy. There is a need to **develop a measurement framework to track progress in reducing work-related harm**. To do this, we need to improve our ability to measure what matters, with a commitment to produce the first dashboard report by the end of 2019.
- The dashboard is designed to **focus on the priorities in the Health and Safety at Work Strategy**.
- The dashboard aims to develop an **integrated set of indicators and insights** that track the key things New Zealand needs to understand how we are making progress and where we need to focus our efforts.
- The dashboard uses **readily available data** to December 2018 where available, to report on progress towards the Strategy outcomes.
- This is the first annual dashboard, which will evolve over time. It will be **updated annually** and **improved as new data becomes available** to continue to build a more accurate picture of how well we are progressing towards the Strategy's vision, goals and priorities.

Key steps for developing the dashboard

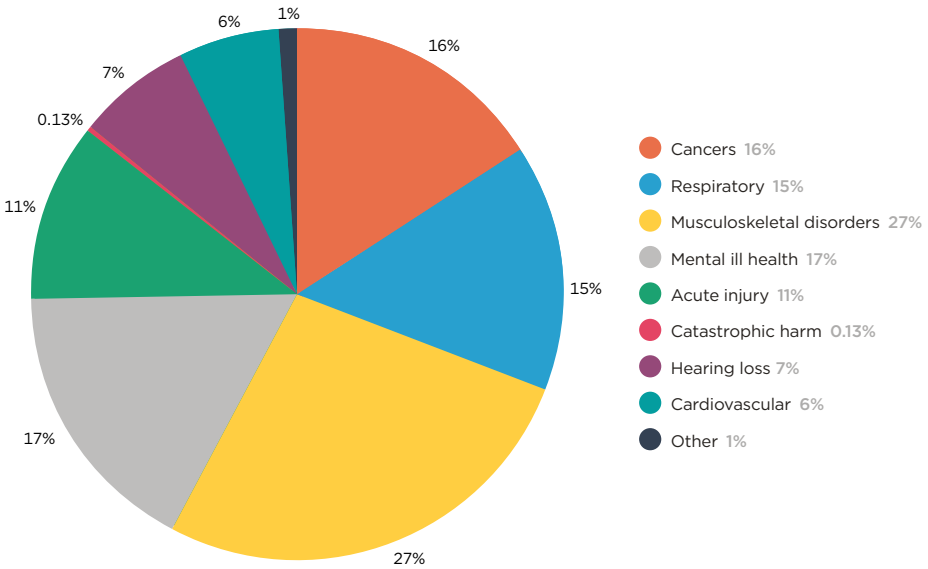


Burden of harm estimates

These estimates are used to compare the relative contributions of different types of work-related harm

Every year, there are hundreds of deaths and many thousands of hospitalisations and ACC claims caused by long-term exposure to health risks at work. In fact, the burden on workers, their families and the wider economy from work-related ill health far outweighs the burden from work-related acute injuries. The Strategy priorities include a focus on work-related health.

50,000 WORK-RELATED DISABILITY-ADJUSTED LIFE YEARS (DALYS) ARE LOST ANNUALLY



Source: Work-related health estimates (2019)

What is included in the burden of harm estimates?

The types of harm included in the burden of harm estimates are narrower than the ones used in the rest of the dashboard. This is because there are gaps in the epidemiological research used for these estimates. For example, the DALY estimate for mental ill health includes depression, anxiety and alcohol and drug use disorders, but does not include all forms of psychological harm that could arise from exposure to health risks at work.

CATEGORY	INCLUDED IN THE BURDEN OF HARM ESTIMATES
Cancers	Cancer of the bladder, breast, liver, lung and stomach, mesothelioma, melanoma of the skin, non-melanoma skin cancer, laryngeal cancer, nasopharyngeal cancer, ocular melanoma, leukaemia, ovarian cancer, pharyngeal cancer, multiple myeloma.
Respiratory	Asthma, chronic obstructive pulmonary disease (COPD), pneumoconiosis.
Musculoskeletal disorders	Low back pain, osteoarthritis, neck pain and other disorders including carpal tunnel syndrome, occupational overuse syndrome, repetitive strain injury, rheumatoid arthritis and gout. This excludes acute injuries.
Mental ill health	Depression, anxiety and alcohol and drug use disorders attributable to work.
Acute injury	Vehicular etc., other unintentional, homicide.
Catastrophic harm	Single incidents resulting in more than five fatalities (excludes natural disasters).
Hearing loss	Noise-induced hearing loss.
Cardiovascular	Ischaemic heart disease, ischaemic stroke.
Other	Chronic renal failure and nephritic syndrome, motor neurone disease.

One disability adjusted life year (DALY) lost can be thought of as one lost year of 'healthy' life.

A DALY is a statistical measure of the quality and length of life lost to injuries and illness. It was derived by using work-related health estimates and burden of harm estimates.

This measure is used to determine which diseases account for the most ill health. It also enables comparison between work-related acute injuries and work-related ill health.

Work-related ill health

Physical or mental ill health caused by work

45,000

disability adjusted life years (DALYs) are lost annually to work-related ill health.

Source: Work-related health estimates (2019)

750–900

estimated number of deaths each year from work-related ill health.

5,000–6,000

estimated number of hospitalisations each year from work-related ill health.

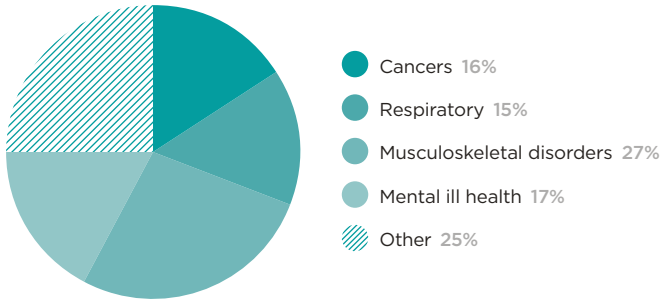
Source: Work-related health estimates (2019)

15x

more likely that a worker will die from a work-related disease than from a work-related acute injury.

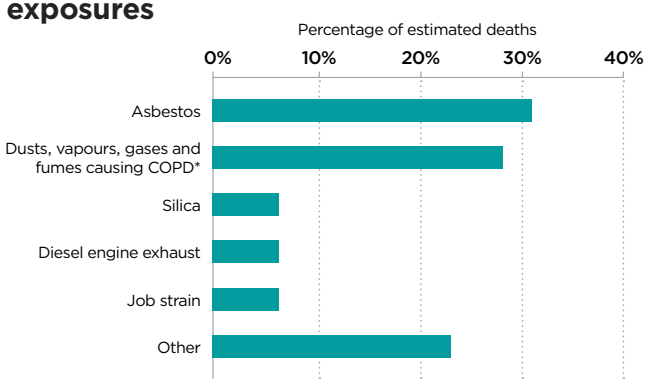
Source: Work-related health estimates (2019)

Burden of harm of work-related ill health (DALYs)



Source: Work-related health estimates (2019)

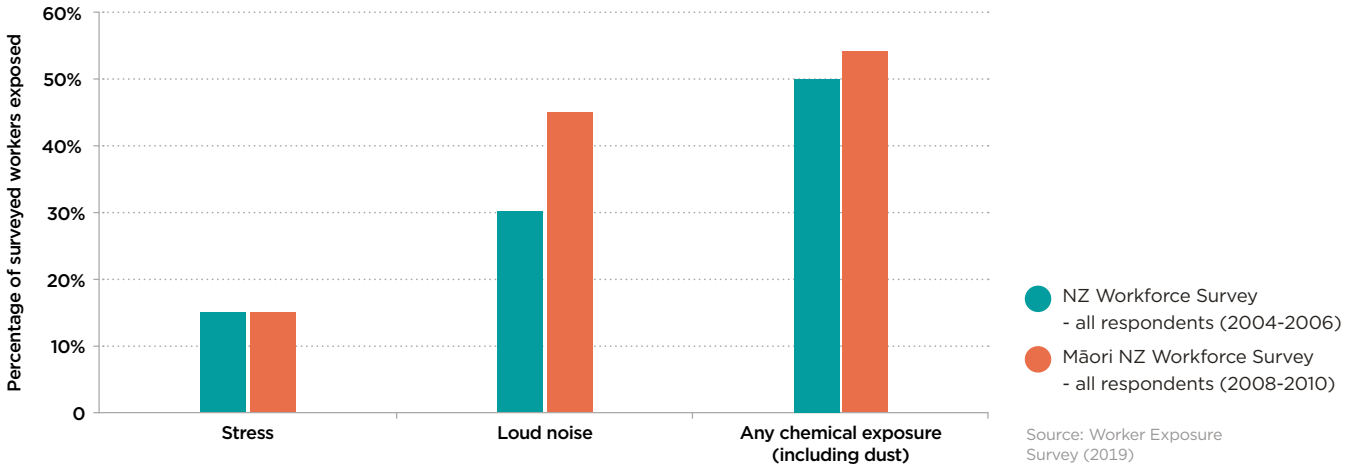
Proportion of estimated deaths from work-related ill health attributable to specific exposures



* Dust includes all organic and inorganic dust.

Source: Work-related exposure estimates (2019, unpublished) based on lower estimates of 750 annual deaths

Prevalence of self-reported exposure to workplace hazards



Source: Worker Exposure Survey (2019)

INSIGHTS

Work-related respiratory diseases and cancers caused by airborne exposures (such as lung cancer, mesothelioma and most bladder cancer) together account for slightly more DALY losses than musculoskeletal disorders.

Past exposure to asbestos (usually decades ago) accounts for the greatest number of current estimated deaths, followed by the dusts, vapours, gases and fumes that cause chronic obstructive pulmonary disease.

Most of these exposures are preventable by using appropriate controls (e.g. use of on-tool extraction to remove dust).

4,000

hearing loss claims in 2018 with an estimated cost to ACC of $12.9 million.

Source: Gradual process claims (2019)

DATA GAPS

Compared to work-related acute injuries, we know less about work-related ill health.

Workplace exposure data, including the use of hazard controls, is important for work-related ill health analysis, but we have limited New Zealand data.

Psychological harm from work

Exposures to work-related hazards and factors that can lead to psychological harm

Mental ill health (17%)

8,500

disability adjusted life years (DALYs) are lost annually to work-related mental ill health (depression, anxiety and alcohol and drug use disorders attributable to work).

Source: Work-related health estimates (2019)

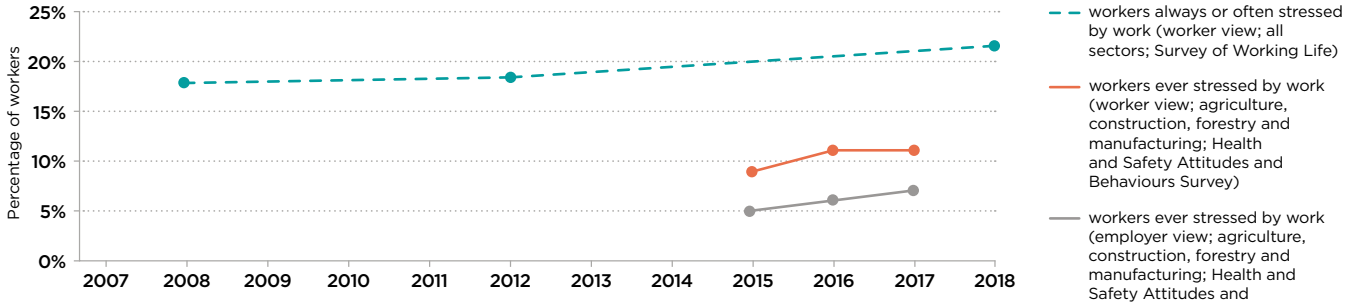
Psychological harm can arise from psychosocial hazards and factors. These are aspects of the design and management of work that increase the risk of work-related stress. Psychosocial hazards and factors include:

- high and low job demands
- low job control
- poor support
- poor workplace relationships (includes work-related bullying)
- low role clarity
- poor organisational change management
- low reward and recognition
- poor organisational justice
- poor environmental conditions
- remote and isolated work
- violent or traumatic events.

Psychosocial hazards and factors can also contribute to the risk of acute injury, musculoskeletal disorders and cardiovascular diseases, increase rates of absenteeism and staff turnover and reduce work performance.

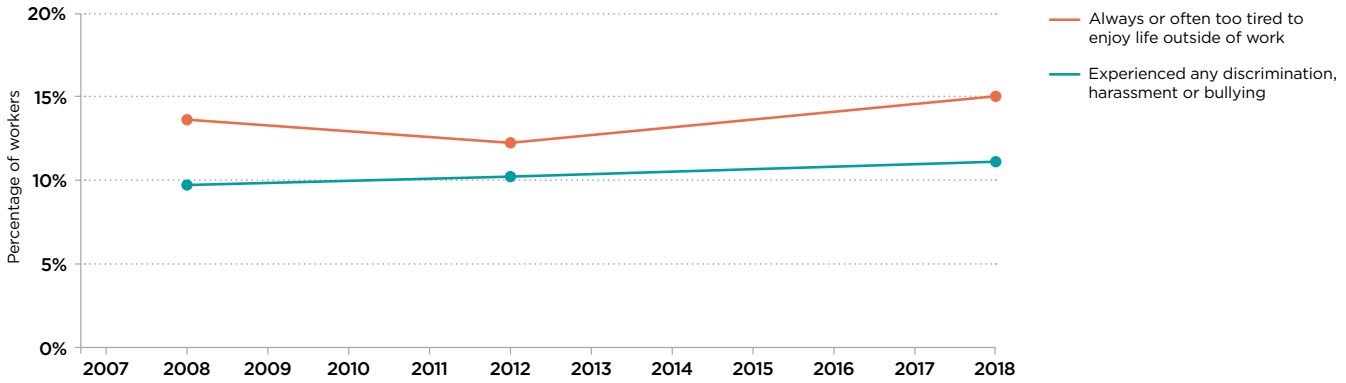
Source: WorkSafe psychosocial hazards (2019)

Proportion of workers experiencing work-related stress (previous 12 months)



Source: Survey of Working Life (2019); Health and Safety Attitudes and Behaviours Survey (2018)

Proportion of workers who reported discrimination, harassment, bullying or impacts to their enjoyment of life outside of work



Source: Survey of Working Life (2019)

INSIGHTS

Data about mental ill health is not regularly collected in large population surveys. This makes it difficult to to observe trends.

The New Zealand Workplace Barometer (NZWB) is designed to inform national approaches to psychosocial psychological hazards and factors prevention at work. Over time, it expects to provide leading indicators of mental health and stress-related ill health. The 2018 survey pilot found one in four respondents felt depressed much of the time, and one in two had their work and non-work lives impacted to some extent by depression.

Source: New Zealand Workplace Barometer (2019)

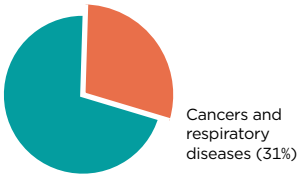
DATA GAPS

Data is limited:

- on the range of psychological harm that can be attributed to (or exacerbated by) work factors
- due to various definitions of harms (especially the definition of bullying)
- on the profile of psychological harm by business size and type to support where best to focus efforts to improve outcomes.

Cancers and respiratory disease

Work-related cancers and respiratory diseases such as asthma and chronic obstructive pulmonary disease



15,000

disability adjusted life years (DALYs) are lost annually from work-related cancers and respiratory diseases.

Source: Work-related health estimates (2019)

650

of the estimated 750 work-related deaths each year are from work-related cancers and respiratory diseases, including including approximately 250 lung cancer deaths and 200 deaths from chronic obstructive pulmonary disease.

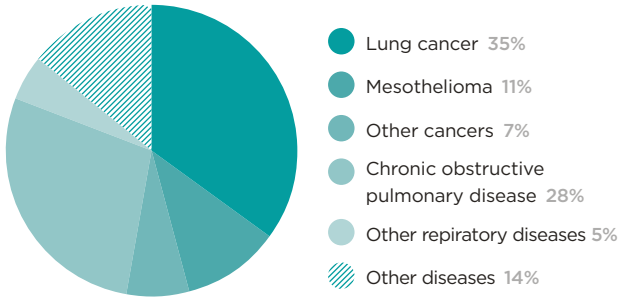
Source: Work-related health estimates (2019)

3,900

of the estimated 5,000 work-related hospitalisations each year are from work-related cancers and respiratory diseases.

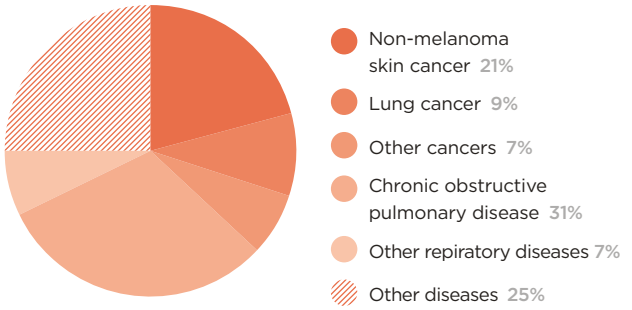
Source: Work-related health estimates (2019)

Estimated deaths attributed to work-related ill health



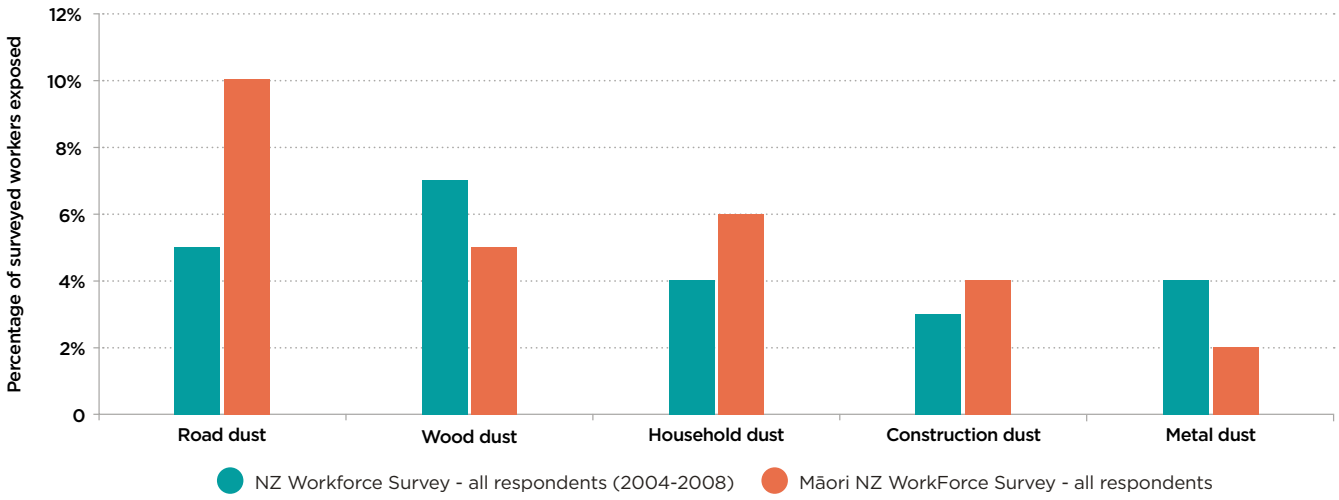
Source: Work-related health estimates (2019), based on lower estimate

Estimated hospitalisations attributed to work-related ill health



Work-related health estimates (2019), based on lower estimate

Prevalence of specific self-reported exposures to dust



Source: Worker Exposure Survey (2019)

INSIGHTS

Cancers and respiratory diseases account for about 7 in 8 work-related deaths and 31% of DALY losses.

Source: Work-related health estimates (2019)

DATA GAPS

We do not have detailed data on exposures to work-related carcinogens and airborne exposures or how well these risks are controlled in workplaces.

While we have estimates of the overall burden of harm from these illnesses, we know little about the distribution of harm across sectors or population groups.

Musculoskeletal disorders

Musculoskeletal disorders are conditions affecting the muscles, joints and nerves

Musculoskeletal disorders (27%)

13,500

disability adjusted life years (DALYs) are lost annually from work-related musculoskeletal disorders.

Source: Work-related health estimates (2019)

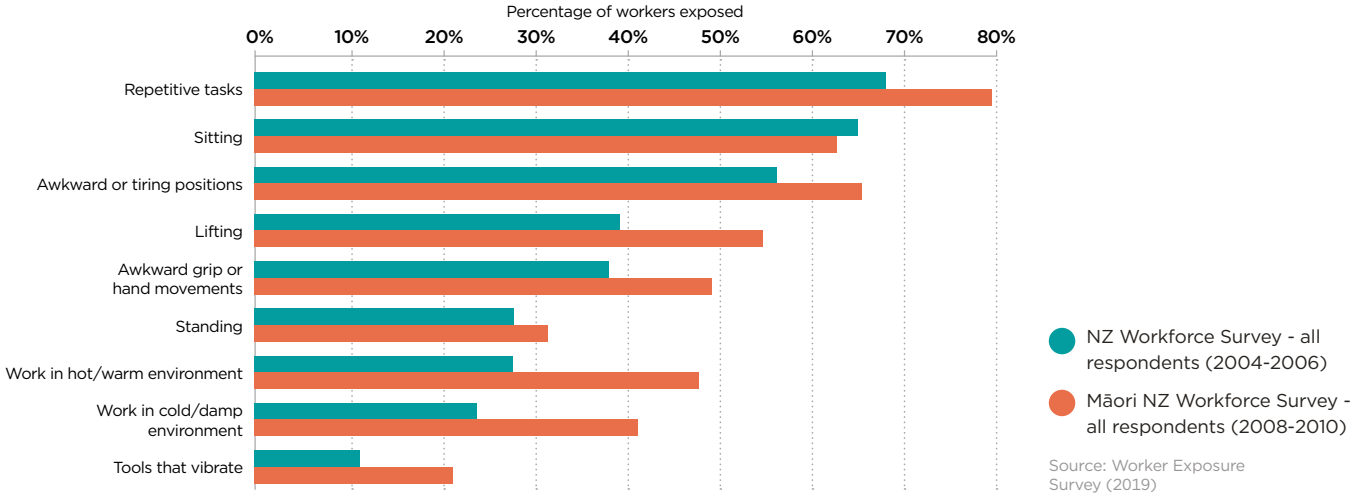
Musculoskeletal disorders make up more than a quarter of the estimated burden of work-related harm.

Many factors contribute to the risk of musculoskeletal disorders including physical, environmental, psychosocial and work organisation factors.

Construction; agriculture; manufacturing; and transport, postal and warehousing sectors have comparably high incidence of musculoskeletal disorder claims by the rate per 1,000 workers in 2016-2018.

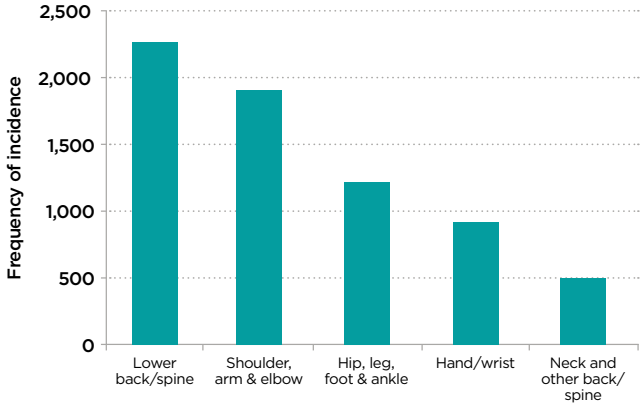
Source: WorkSafe SWIFT (2019), Gradual process claims (2019)

Prevalence of physical or environmental risk factors for musculoskeletal disorders



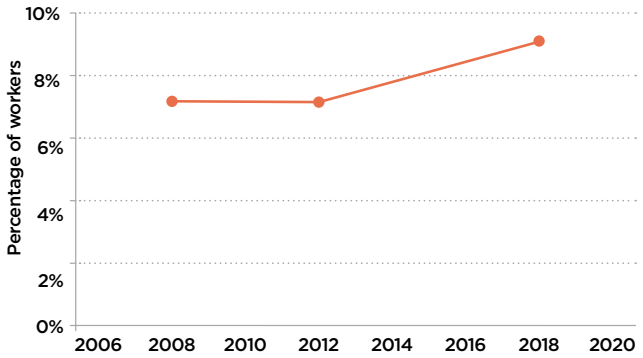
Source: Worker Exposure Survey (2019)

Incidence of musculoskeletal disorder claims by primary injury site in 2018



Source: WorkSafe SWIFT (2019), Gradual process claims (2019)

Percentage of workers who report always or often having physical problems/pain because of work



Source: Survey of Working Life (2019)

INSIGHTS

A large proportion of the working population is exposed to physical and environmental risk factors for musculoskeletal disorders.

Māori workers are more likely to be exposed to certain physical risk factors, e.g. lifting, awkward or tiring positions, awkward grip or hand movements, standing and vibrating tools.

Source: Worker Exposure Survey (2019)

Research suggests that higher exposures for Māori workers relate not only to the occupational distribution but also to differences in tasks carried out by Māori and non-Māori workers in the same occupation.

Source: Ethnic differences (2011)

DATA GAPS

ACC claims data does not capture the full incidence of work-related musculoskeletal disorders as only a limited subset of them are eligible for compensation and their work-related status can be difficult to establish.

Work-related acute injury

Reduce harm caused by external force associated with work activity

4,550

disability adjusted life years (DALYs) are lost annually due towork-related acute injury.

Source: Work-related health estimates (2019)

63

work-related fatal acute injuries in 2018, including 53 workers and 10 members of the public.

Source: WorkSafe Data Centre (2019)

OFFICIAL STATISTICS

2.1 PER 100,000 FTEs

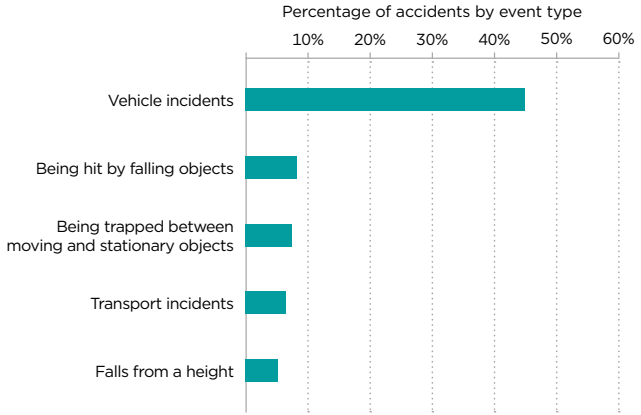
rate of fatal acute injuries, 2016–2018.

17.3 PER 100,000 FTEs

rate of potentially fatal acute injuries, 2018.

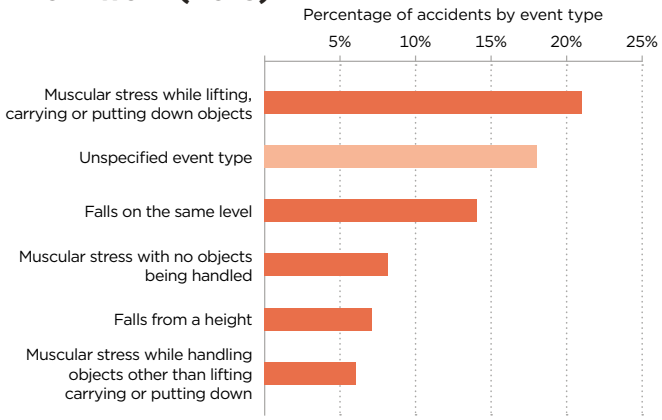
Source: Potentially fatal injuries (2019)

Five most frequent event types that led to work-related deaths (2014–2018)

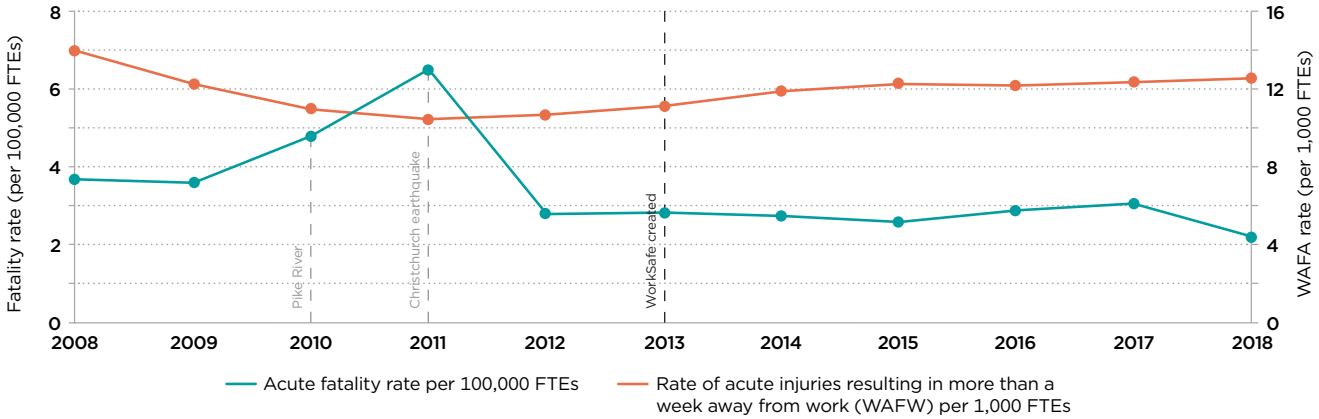


Source: WorkSafe SWIFT (2019)

Six most frequent event types that led to workers spending more than a week away from work (2018)



Work-related fatal and non-fatal acute injury rates



WorkSafe SWIFT (2019)

INSIGHTS

Almost half (45%) of work-related acute fatalities are related to vehicle incidents (2014–2018).

A third of acute injuries with more than a week away from work are related to muscular stress (2018).

In 2018, there were nearly 30,000 ACC claims for work-related acute injuries with more than a week away from work.

Source: WorkSafe SWIFT (2019)

Over the last decade, the New Zealand workforce has increased by 22% (2.4m FTEs in 2018). During the same period, the fatal acute injury rate has trended downwards. The rate of acute injuries with more than a week away from work The rate of acute injuries with more than a week away from work decreased over the 2008-2011 period but has increased slightly over the 2012-2018 period.

Source: WorkSafe SWIFT (2019)

DATA GAPS

Event type is unknown for almost a fifth of work-related acute injury claims with more than a week away from work.

Māori workers

Workers with greater need

13.5

Māori workers per 1,000 FTEs had an acute injury with more than a week away from work compared to 9.6 for non-Māori in 2018 (industry-standardised).

1,500

fewer acute injuries with more than a week away from work for Māori if the injury rate per 1,000 FTEs was the same as that for non-Māori in 2018.

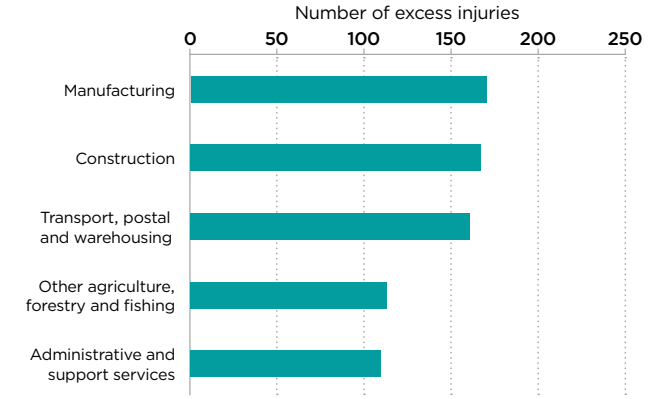
$33m

in estimated lifetime savings to ACC if there were 1,500 fewer acute injuries with more than a week away from work.

Source: WorkSafe SWIFT (2019)

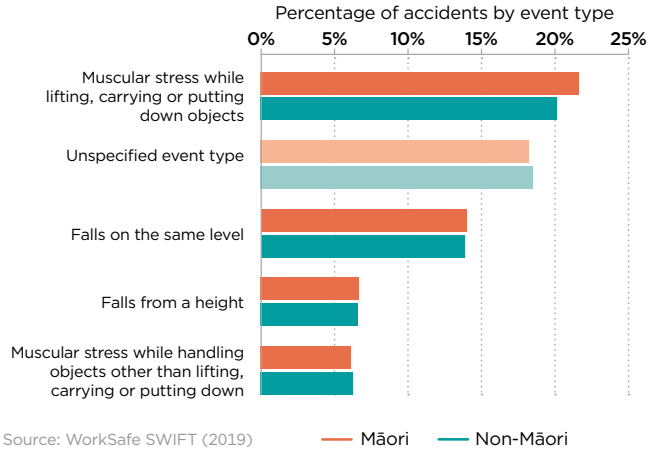
Acute injuries with more than a week away from work

SECTORS WITH THE HIGHEST NUMBER OF EXCESS INJURIES FOR MĀORI IN 2018



Source: WorkSafe SWIFT (2019)

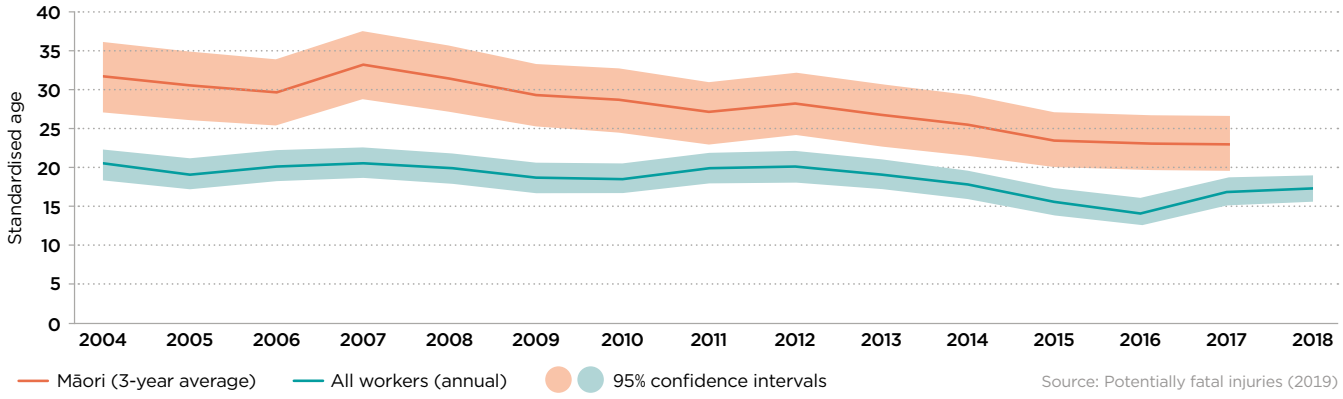
FIVE HIGHEST ACCIDENT TYPES IN 2018



Source: WorkSafe SWIFT (2019)

Potentially fatal acute injuries

ACUTE INJURIES PER 100,000 WORKER FTES (AGE-STANDARDISED)



Source: Potentially fatal injuries (2019)

NOTE: There is a break in the time series for Māori from 2016 onwards – 2016–2018 values should not be directly compared to previous years.

INSIGHTS

Māori are at higher risk of acute injury than non-Māori. The difference in injury risk has been decreasing over time.

Source: Potentially fatal injuries (2019)

Excess injuries are the number of acute injuries for Māori that would have been prevented if Māori had the same injury rate as non-Māori.

The sectors with the highest number of excess injuries for Māori are manufacturing; construction; and transport, postal and warehousing.

Source: WorkSafe SWIFT (2019)

The distribution of harm for the highest five event types is similar for Māori and non-Māori (2018).

Source: WorkSafe SWIFT (2019)

DATA GAPS

In general, ethnicity data is not well collected and is missing for 20% of 2018 acute injury claims with more than a week away from work and 55% of 2018 work-related acute fatalities.

Younger and older workers

Workers with greater need

YOUNG PEOPLE

3

children under the age of 15 died in 2018 as a result of work activities.

Source: WorkSafe Data Centre (2019)

Young workers (under the age of 25) are at higher risk of a work-related acute injury. The lower injury rate per worker shown in the graphs on this page is a result of young workers being more likely to work part-time.

For young workers, the work-related acute injury rate that leads to more than a week away from work (per amount of time spent at work) is 14.6 per 1,000 FTEs in 2018. This is above the New Zealand average of 12.7.

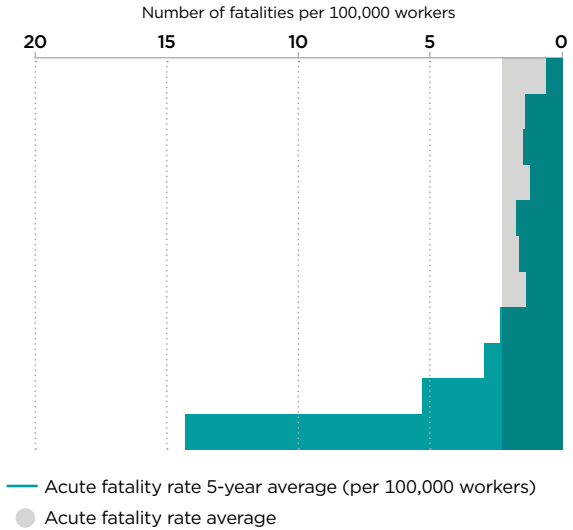
Source: WorkSafe SWIFT (2019)

FUTURE DEVELOPMENTS

Future updates of this dashboard will aim to include data on additional groups of workers at greater risk of work-related harm, e.g.migrant workers, precarious employment workers and other minority ethnic groups.

Acute injury rates by age group

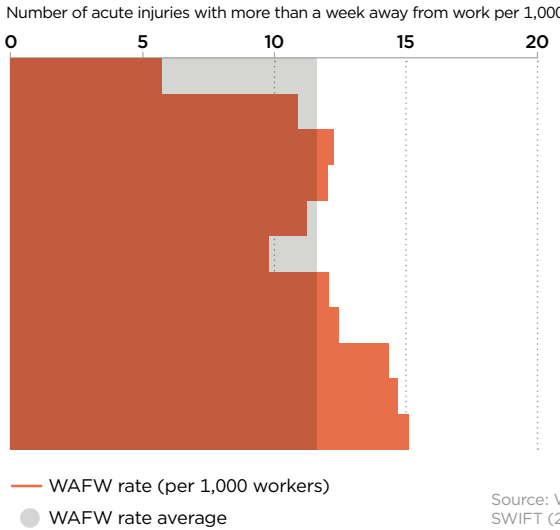
ACUTE FATALITY RATE BY AGE GROUP, 2014-2018 AVERAGE



Acute fatality rate 5-year average (per 100,000 workers)

Acute fatality rate average

RATE OF ACUTE INJURY WITH MORE THAN A WEEK AWAY FROM WORK (WAFW) BY AGE GROUP, 2018

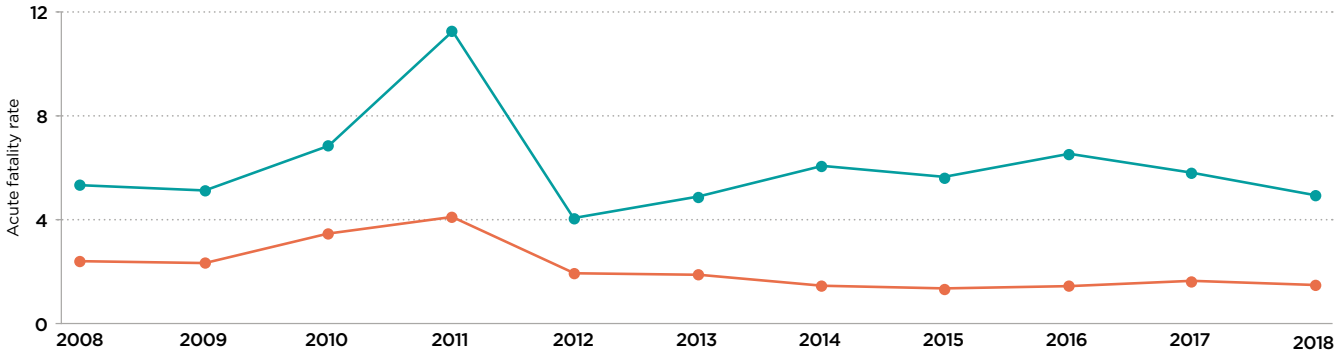


WAFW rate (per 1,000 workers)

WAFW rate average

Source: WorkSafe SWIFT (2019)

Acute fatality rates for workers aged 55+ compared to other age groups



Workers ages 55+ years (per 100,000 workers)

Average for workers aged 15-54 years (per 100,000 workers)

Source: WorkSafe SWIFT (2019)

OLDER WORKERS

3.8x

Workers aged 55+ years are about four times more likely to die from work-related acute injuries than other age groups (2014–2018).

Source: WorkSafe SWIFT (2019)

20%

of all acute fatalities were workers aged 65 years and over (2014–2018). Of these, almost half (45%) worked in agriculture.

Source: WorkSafe SWIFT (2019)

DATA GAPS

We have use mainly administrative data for this section on workers with greater need. Administrative data is a more reliable source of the number of people in work. FTEs are the preferred measure of exposure to work but FTE data is collected in surveys which have sample error.

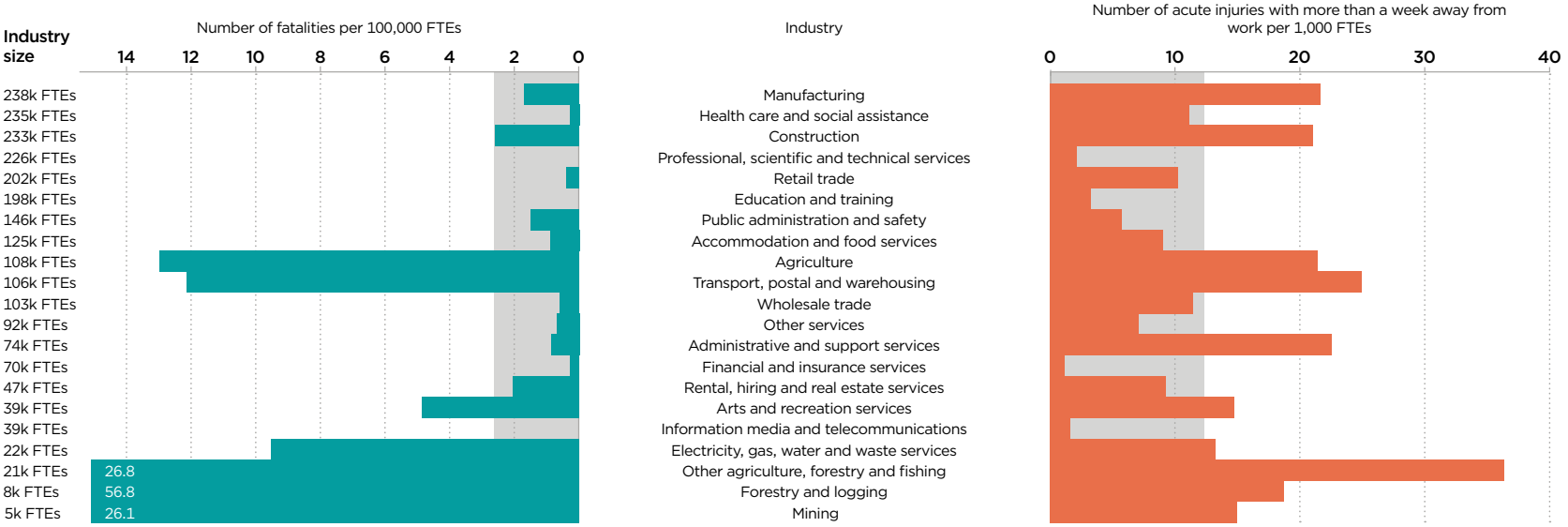
We have limited data on other types of workers at greatest risk, e.g. migrant workers and those in precarious employment.

Businesses with greater need

Sectors with highest harm

Acute fatalities and injuries with more than a week away from work by industry

RANKED BY SECTOR SIZE – HIGHEST TO LOWEST NUMBER OF FTEs



Source: WorkSafe SWIFT (2019)

Transport sector

ACUTE FATALITY AND INJURY RATE BY TRANSPORT SECTOR WITHIN THE TRANSPORT, POSTAL AND WAREHOUSING INDUSTRY

Source: WorkSafe SWIFT (2019)

INSIGHTS

Agriculture, and transport, postal and warehousing are the two largest sectors with comparatively high acute fatality rates – more than four times the average across all sectors (2018).

Mining; forestry and logging; and other agriculture, forestry and fishing are three sectors that accounted for 18% of acute fatalities (2014–2018) while representing only 1.4% of all FTEs.

Source: WorkSafe SWIFT (2019)

CATASTROPHIC HARM

0

catastrophic harm events in 2018.

320

precursor events in 2018/19 for extractives; major hazard facilities; and petroleum and geothermal.

It is important to identify all precursor events so that businesses can remedy potential failures. An increase in this value may be due in part to better awareness.

Source: WorkSafe catastrophic harm (2019, unpublished)

DATA GAPS

Business size data and work-related health data by industry is limited.

Industry is unknown for 5% of acute fatalities (2014–2018) and 3% of acute injury claims with more than a week away from work (2018).

Leadership

Encourage leaders at all levels to integrate health and safety

Both employers and workers in higher-risk sectors considered health and safety as one of the three most important things at work. The percentage of perceived importance of health and safety was statistically higher in employers compared to workers.

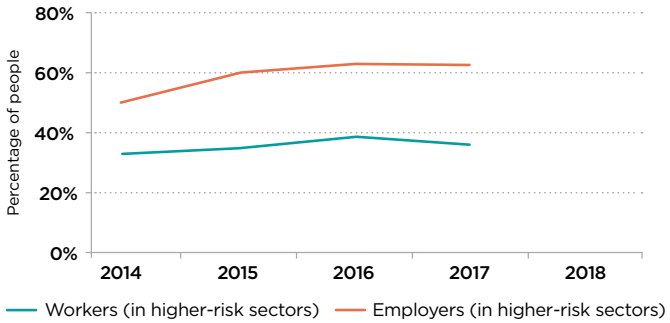
Leadership has a strong impact on businesses' health and safety practices in the higher-risk sectors. The reported importance of health and safety increased between 2013 and 2016, after which it appears to have plateaued.

Source: Health and Safety Attitudes and Behaviours Survey (2018)

Key groups providing health and safety leadership include the Forest Industry Safety Council (FISC), Agricultural Leaders' Health and Safety Action Group (ALHSAG) and Construction Health and Safety New Zealand (CHASNZ), along with specialist associations such as the Health and Safety Association of New Zealand (HASANZ).

Perceived importance of health and safety

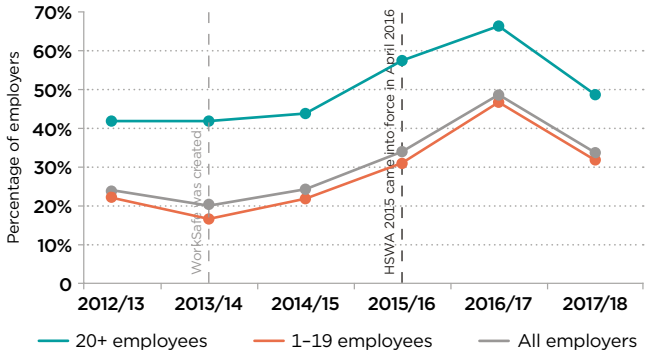
PROPORTION REPORTING HEALTH AND SAFETY WAS IN THE TOP THREE MOST IMPORTANT CONSIDERATIONS AT WORK



Source: Health and Safety Attitudes and Behaviours (2018)

Changes to health and safety

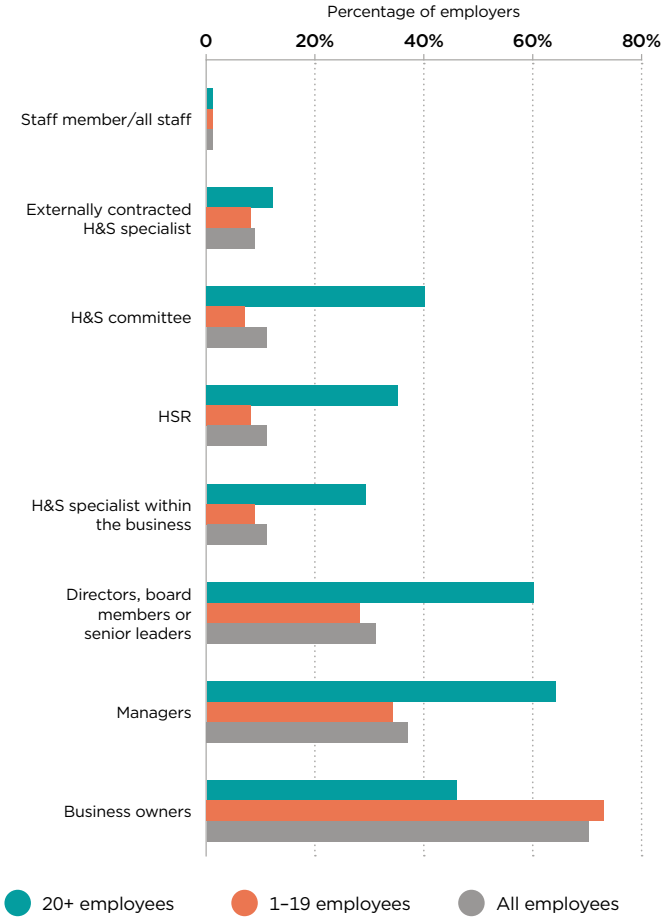
PROPORTION OF EMPLOYERS THAT MADE SIGNIFICANT CHANGES TO THE BUSINESS'S HEALTH AND SAFETY SYSTEMS AND PRACTICES



Source: National Survey of Employers (2019)

Responsibility for health and safety in businesses

PROPORTION OF EMPLOYERS REPORTING WHO WAS MAINLY RESPONSIBLE FOR PROVIDING HEALTH AND SAFETY LEADERSHIP FOR THE BUSINESS



Source: National Survey of Employers (2019)

INSIGHTS

The majority of employers reported that their business owners were mainly responsible for providing health and safety leadership for the business. Other main sources for health and safety leadership included managers and directors, board members or senior leaders.

Small businesses (fewer than 20 employees) were more likely than large businesses (more than 20 employees) to rely on business owners to provide health and safety leadership. Large businesses tend to have people in other positions responsible for providing health and safety leadership.

Source: National Survey of Employers (2019)

DATA GAPS

Information on the leadership story is fragmented among industry groups. Collation of this information would be helpful to track progress.

Worker engagement, participation and representation

Enable workers to be represented, engaged and to participate

Attitudes of workers and employers

Employers and employees differ quite markedly on this aspect of worker participation.

75% **EMPLOYEES** **96%** **EMPLOYERS**

75% of employees in higher -risk sectors say that they are encouraged to speak up if they feel something is unsafe, versus 96% of employers who say this about their employees.

53% **EMPLOYEES** **81%** **EMPLOYERS**

53% of employees in higher-risk sectors say that they are always told how their views have been considered in reaching health and safety decisions, versus 81% of employers who say this about their decisions.

Source: Health and Safety Attitudes and Behaviours Survey (2018)

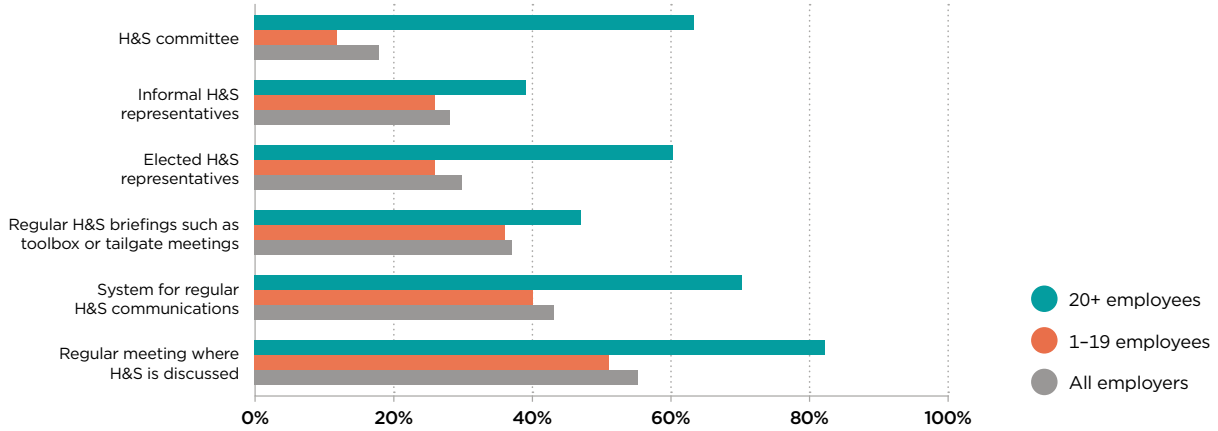
Employers in higher-risk sectors consistently have a more positive view than employees about worker engagement and participation.

Open discussion of health and safety risks in higher-risk sectors: 76% of employees say this happens most or all of the time, compared with 88% of employers.

Source: Health and Safety Attitudes and Behaviours Survey (2018)

Types of worker participation used

BUSINESS PRACTICES FOR INVOLVING WORKERS IN HEALTH AND SAFETY BY BUSINESS SIZE



Source: National Survey of Employers (2019)

Sectors

Proportion of workers who agree

	AGRICULTURE	CONSTRUCTION	FORESTRY	MANUFACTURING
I always have a say in decisions affecting health and safety	83%	82%	88%	65%

Proportion of employers who agree

	AGRICULTURE	CONSTRUCTION	FORESTRY	MANUFACTURING
Workers are always involved in decisions affecting their health and safety	81%	87%	90%	87%

Source: Health and Safety Attitudes and Behaviours Survey (2018)

INSIGHTS

A high proportion of workers say they have input to decisions about health and safety, **but far fewer say they get feedback from employers about how their views are taken into account.**

Source: Health and Safety Attitudes and Behaviours Survey (2018)

FORMAL HEALTH AND SAFETY TRAINING IN HIGHER-RISK SECTORS

51% of employees received some formal health and safety training in 2017–2018, down on the previous year's figure of 58%.

The proportion of employees who had never had any formal health and safety training was 21%, more or less unchanged since 2014.

Construction and forestry lead the way in formal health and safety training, with, with 66% of construction workers and 58% of forestry workers having had some training in the previous 12 months. Agriculture trails with only 28% of employees reporting formal health and safety training in the previous 12 months.

Source: Health and Safety Attitudes and Behaviours Survey (2018)

DATA GAPS

We have limited information about health and safety representatives and their work.

Health and safety workforce

Lift capability of the health and safety workforce

In this dashboard, we have used the following definitions:

- The health and safety workforce encompasses all those whose occupation or role has a significant focus on work-related health and/or safety.
- Health and safety professionals or practitioners are those who belong to a health and safety discipline or profession. They are usually members of a professional association, have qualifications related to health and safety and undertake continuing professional development.

GROWING NEED

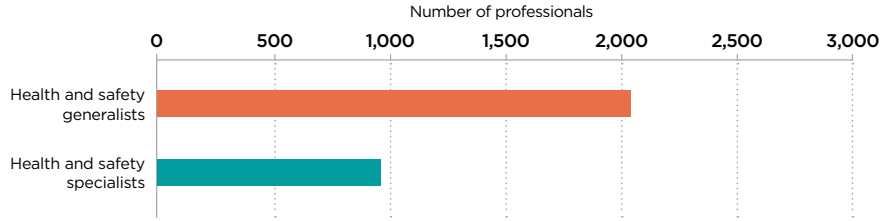
The need for health and safety professionals is expected to grow in the next decade due to a combination of industry growth and increased demand for health and safety professional services.

Source: Building the professions (2019)

AGEING WORKFORCE

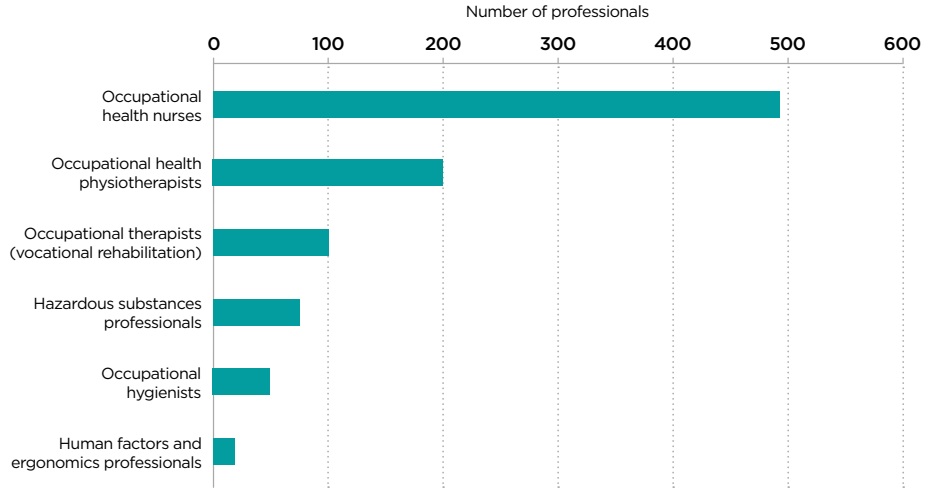
Hazardous substances professionals and occupational health nurses are two workforce groups facing pressure from demographic ageing. Two-thirds of occupational health nurses are aged over 50 years, and two- thirds of hazardous substances professionals are aged over 55 years. Demand for both workforce groups is expected to increase.

Health and safety professional workforce



Source: Building the professions (2019)

Health and safety professional workforce by speciality



Source: Building the professions (2019)

NOTE: Health and safety professionals are currently defined by participation in one of the professional associations that are full members of the Health and Safety Association of New Zealand (HASANZ).

INSIGHTS

Benchmarking with international jurisdictions indicates that New Zealand faces challenges both with workforce capacity (overall numbers of professionals) and skill mix (the proportion of the workforce operating at the highest professional levels).

This corresponds with reports from health and safety professionals that demand for their services has increased and from businesses that they face challenges engaging experienced professionals.

Future workforce growth needs to meet not only existing demand but also the latent demand as businesses become increasingly aware of their duties to manage risks to both health and safety.

DATA GAPS

Information has not been systematically collected on professional workforce groups that are not full members of HASANZ (e.g. occupational medicine specialists). We have limited information on those who work in health and safety but are not part of a professional association.

Data and insights

Develop and share better data and insights to improve decision making

Overview

Data, research and evaluation is helpful for informing decisions about national priorities and allocating resources for interventions in the broader health and safety at work system.

Data, research and evaluation seeks to provide robust evidence to support targeted workplace health and safety activities by identifying the gaps in current knowledge about the work-related harm landscape in New Zealand and addressing these gaps through a range of study designs and appropriate research methods.

Both primary and secondary research on workplace health and safety are conducted. Primary research involves addressing an issue or specific hypothesis in order to understand the issue better, test a hypothesis or prove or disprove a theory and ultimately to generate new knowledge. Secondary research involves the collation, synthesis and summarising of existing research (published research, published government agency reports and data collected for other means).

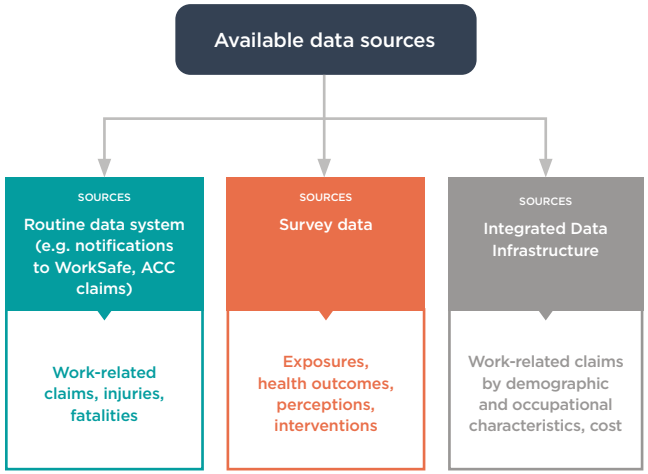
Focus areas

In support of the Health and Safety at Work Strategy 2018–2028, WorkSafe collaborates with other agencies on a work programme to provide evidence and insights across a number of different levels:

- Higher-risk sectors: agriculture; forestry; construction; manufacturing; health care and social assistance; and transport, postal and warehousing.
- Work-related ill health: particularly cancers, mental ill health, musculoskeletal disorders, respiratory diseases, cardiovascular diseases and noise-induced hearing loss.
- Workers at greater risk of poor health and safety outcomes: Māori, Pacific, migrant and seasonal workers, young and older workers, those in insecure work conditions, e.g. labour hire workers.
- Small and medium-sized enterprises.
- Emergent harms and risks: e.g. the changing nature of work and its implications for health and safety.
- Evaluations to inform future decision making about resource allocation investment to harm-prevention initiatives.

Available data sources

The following sources are used to provide evidence on a wide range of health and safety performance measures.



WorkSafe:
https://worksafe.govt.nz/research/

Accident Compensation Corporation:
https://www.acc.co.nz/about-us/research/

Maritime New Zealand:
https://www.maritimenz.govt.nz/commercial/safety/health-and-safety/industry-research.asp

Collaboration

Working together is needed to achieve the Strategy vision "Work is healthy and safe for everyone in New Zealand". Both interinstitutional and international collaboration are necessary. A number of significant research collaborations on occupational health and safety have recently been achieved.

- Dr Joanne Crawford, who has a strong academic profile on occupational health, was appointed WorkSafe New Zealand Chair in Health and Safety at Victoria University of Wellington.
- The Health Research Council of New Zealand and WorkSafe have a 3-year funding partnership to support high-quality research and advance the strategic objectives of both organisations on work-related psychosocial health problems.
- WorkSafe has established collaborations with the Evidence Reference Group, Safe Work Victoria (Australia), Health and Safety Executive (UK) and Canadian universities.
- Research collaborations with existing research and evaluation services suppliers have been enhanced.

More potential research collaboration opportunities on occupational health and safety will be identified and updated regularly.

Data gaps

Data collection and use is currently spread across multiple agencies and sectors and is not yet routinely pulled together to develop a full picture of how New Zealand is tracking on health and safety at work.

Sources

Building the professions

HASANZ (2019). Building the professions: HASANZ health and safety workforce pipeline report.

Ethnic differences

Eng A et al. (2011). Ethnic differences in patterns of occupational exposure in New Zealand. American Journal of Industrial Medicine, 54(5), 410–418.

Gradual process claims

ACC work-related gradual process claims data provided to WorkSafe. The year is based on the accident date field on the ACC claim form. Cost estimates are to date as at September 2019. Hearing loss claims are those with a primary diagnosis of 'deafness'.

Health and Safety Attitudes and Behaviours (HSAB) Survey

Nielsen (2018). Health and safety attitudes and behaviours in the New Zealand workforce: A survey of workers and employers. 2017 Cross-sector report.

https://worksafe.govt.nz/research/attitudes-and-behaviours-survey-2017/

National Survey of Employers

Ministry of Business, Innovation and Employment (2019). National Survey of Employers 2017/18: Summary findings.

https://www.mbie.govt.nz/business-and-employment/employment-and-skills/labour-market-reports-data-and-analysis/national-survey-of-employers/

New Zealand Workplace Barometer

Massey University (2019). The New Zealand Workplace Barometer: A report on findings from the 2018 survey of the New Zealand Workplace Barometer.

https://www.massey.ac.nz/massey/fms/school_of_management/HWG/The NZ Workplace Barometer_2018_final.pdf

Potentially fatal injuries

Stats NZ (2019). Serious injury outcome indicators: 2000–18.

https://www.stats.govt.nz/information-releases/serious-injury-outcome-indicators-200018

Survey of Working Life

Stats NZ (2019). Labour market statistics (working life): December 2018 quarter.

https://www.stats.govt.nz/information-releases/labour-market-statistics-working-life-december-2018-quarter

Worker Exposure Survey

Worker Exposure Survey Report Part 1: Results from two large New Zealand workforce surveys conducted in 2004–2006 and 2009–2010.

https://worksafe.govt.nz/research/worker-exposure-survey/

Work-related exposure estimates - unpublished

Work-related exposure estimates that breakdown health estimates to exposures.

https://worksafe.govt.nz/topic-and-industry/work-related-health/work-related-health-estimates-and-burden-of-harm/

WorkSafe catastrophic harm - unpublished

WorkSafe records on catastrophic events and precursor events.

WorkSafe Data Centre

http://data.worksafe.govt.nz

WorkSafe psychosocial hazards

WorkSafe New Zealand (2019). Psychosocial hazards in work environments and effective approaches for managing them.

https://worksafe.govt.nz/research/psychosocial-hazards-in-work-environments-and-effective-approaches-for-managing-them/

WorkSafe System for Work-related Injury Forecasting and Targeting (SWIFT)

Definitions of 'work-related' and 'injury' are aligned to the Stats NZ serious injury outcome indicators.

Worker acute fatalities: ACC work-related claims and fatality notifications to WorkSafe

https://data.worksafe.govt.nz/graph/summary/fatalities

Worker non-fatal acute injury: ACC work-related injury claims

https://data.worksafe.govt.nz/graph/summary/injuries_week_away

FTE estimates: Stats NZ Quarterly Household Labour Force Survey. Worker estimates: Stats NZ Annual Linked Employer-Employee Data.

FTEs are the preferred means to measure the number of people exposed to work. Where sampling error in FTE estimates is too high, worker estimates are used instead.

Definitions

ACC

Accident Compensation Corporation.

www.acc.co.nz

Administrative data

Data that is collected by organisations or government agencies to complete their operational purposes.

Carcinogen

A substance or agent that causes cancer.

Catastrophic harm event

A single incident resulting in more than five fatalities (excluding natural disasters).

COPD

Chronic obstructive pulmonary disease (COPD) is a group of diseases that affect the lungs and airways, causing breathing difficulties.

DALY

A disability-adjusted life year (DALY) is a statistical measure of the quality and length of life. One DALY loss can be thought of as one lost year of healthy life.

https://www.who.int/healthinfo/global_burden_disease/metrics_daly/en/

Event type

The type of acute injury event that occurred. This is based on text mining of ACC claim information. It uses the type of occurrence classification system (TOOCS).

Excess injuries (Māori workers)

Number of injuries that would have been prevented if Māori had the same injury rate as non-Māori.

FTE

Full-time equivalent. Employment numbers adjusted for part-time status.

H&S

Health and safety.

HSR

Health and safety representative – a worker who has been elected by members of their work group to represent them in health and safety matters. HSRs provide workers with a formal, visible way to have a say in work-related health and safety.

Ill health

Diseases caused by health risks associated with work. In general, ill healthrisks fall into one of five categories: physical, chemical, biological, ergonomic and psychosocial.

Ill health exposure

This represents the extent to which workers are being protected from a harmful health hazard. High levels of ill healthexposure mean that workers are potentially being exposed to a health hazard at harmful levels.

Incidence

The number of new cases in a given period of time (e.g. the incidence of injury in 2018 is the number of people who have a new injury event in 2018).

Industry

The industry breakdown on page 11 uses the Australia and New Zealand Standard Industry Classification 2006 (ANZSIC06) with a slight moderation: Other agriculture; forestry and fishing is all agriculture, forestry and fishing (A) industries other than agriculture (A01) and forestry and logging (A03), which are individually reported. The Transport Sector industries are based on ANZSIC06 industries I46–I49.

Integrated Data Infrastructure (IDI)

The IDI is a large research database curated by Stats NZ. It contains matched, de-identified data on people and households in New Zealand collected by government agencies, Stats NZ surveys and non-governmental organisations.

Potentially fatal injury

An injury to a patient who is admitted to hospital with a probability of death of 6.9% or more.

Precursor events

Dangerous precursor events are specified in the Health and Safety at Work Act 2015 and within regulations covering high hazard sectors. There is a regulatory requirement for operators to notify WorkSafe of these events.

Prevalence

The number of cases of a illness that are present in a particular population at a given time. E.g. the prevalence of injury in 2018 is the number of people who are recovering from an injury in 208, irrespective of when the injury occurred.

Standardisation (age/industry-standardised)

Adjustment of the employment distribution of a population group to be the same as a comparison group in order to compare harm difference between the two groups independently from the age/industry variations.

WAFW

Acute injury claims with more than a week away from work (WAFW). This is based on the number of ACC work-related injury claims where loss of earnings compensation has been paid.