

Explanatory notes: National Data Set for Compensation-Based Statistics for Safe Work Australia

Safe Work Australia compiles information on work-related injuries, diseases and fatalities in two primary datasets: the National Data Set for Compensation-Based Statistics and the Traumatic Injury Fatalities database. This document provides explanatory notes for the National Data Set for Compensation-Based Statistics.

National Data Set for Compensation-Based Statistics

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.

Scope and coverage

The NDS is comprised of accepted workers' compensation claims, which are presented by the financial year of lodgement. A financial year begins on 1 July and ends on 30 June.

The NDS does not cover all cases of work-related injuries and diseases for the reasons below:

- While state, territory and Commonwealth Government workers' compensation legislations provide coverage for the majority of employees, some specific groups of workers are covered under separate legislations. Claims lodged by police in Western Australia and military personnel of the Australian Defence Forces are not included.
- Work-related injuries and diseases of self-employed workers are under-represented because workers' compensation schemes do not generally cover self-employed workers. Around 10% of Australian workers are self-employed. Denominators used to calculate rates only include the jobs and hours of employees who are eligible for workers' compensation.
- Mesothelioma claims are under-represented because many mesothelioma cases, which are commonly linked to work-related exposure to asbestos, are compensated through mechanisms other than workers' compensation.
- Diseases are under-represented because many diseases result from long-term exposure to agents or have long latency periods, which makes the link between the work-related disease and the workplace difficult to establish.

Serious claims

A serious claim is an accepted workers' compensation claim that involves one or more weeks away from work and excludes all fatalities, and all injuries experienced while travelling to or from work or while on a break away from the workplace.

Age of employee

The age of an employee is derived from their date of birth and the date on which the injury occurred or the disease was first reported to the employer. Data related to the open-ended age group of 65 years and above should be used with caution as claims can be made by people who are no longer in the workforce, particularly for work-related diseases that arise after

employees retire. The employee estimates only count people who are currently working. It is possible that rates for this age group overstate the actual rates.

Time lost from work

Time lost from work is measured in working weeks and excludes estimates of future absences. Time lost from work comprises the total period of time for which compensation was paid. The time lost is not necessarily continuous and may occur over a number of separate periods. Where an employee returns to work on a part-time basis, they may continue to receive pro-rata payments and the total number of hours for which compensation has been paid is included in calculating the time lost.

The median is used as the measure of central tendency because long-term claims that involve lengthy periods of time lost from work would significantly skew an arithmetic mean.

Data from the preliminary year are excluded when reporting time lost from work because claims from the preliminary year are likely to be open and claimants may accrue more time off work in subsequent years.

Compensation paid

The median is used as the measure of central tendency because long-term claims that involve lengthy periods of time lost from work would significantly skew an arithmetic mean. The calculation of median compensation payments includes payments for all serious claims for each financial year. Amounts of compensation paid are rounded to the nearest \$100.

Data from the preliminary year are excluded when reporting compensation paid because claims from the preliminary year are likely to be open and claimants may accrue more compensation payments in subsequent years.

Industry classification

Information about the industry of the claimant is coded using the Australian and New Zealand Standard Industrial Classification, 2006.

The industry of the claimant is based on the industry of the business that employs the claimant. As industry is defined using the industry of the employer, a claim made by a person employed under labour hire arrangements is coded to the labour supply services industry class, which is in the administrative and support services industry. Industry of employer will be different to industry of workplace for some workers.

Occupation classification

Information about the occupation of the claimant is coded using the Australian and New Zealand Standard Classification of Occupations, First Edition.

Details of injuries and diseases

Information about injuries and diseases of claimants is coded using the Type of Occurrence Classification System, Third Edition, Revision 1. The classification system is used to code the:

- nature of injury or disease
- bodily location of injury or disease
- mechanism of injury or disease
- breakdown agency of injury or disease, and
- agency of injury or disease.

Insufficiently coded data

Some claims are not fully coded due to insufficient information being provided at the time of the claim. Where there is a significant number of incompletely coded claims, they may be separately identified in residual categories like 'other and unspecified' or 'not elsewhere classified'. These claims are included when totals are calculated.

Confidentiality

Claim numbers are rounded to the nearest 5 to help protect confidential information about employers and employees. Due to rounding, differences may appear between the reported totals and the sums of rows or columns. Rates and percentages are calculated using unrounded numbers.

Time-series analyses

Comparison of preliminary and non-preliminary data should be done with caution. Non-preliminary data are more likely to have been finalised and are generally more accurate than preliminary data.

When analysing trends over time, consideration needs to be given to legislative changes that may influence trends in workers' compensation data. Information on workers' compensation arrangements can be found in Safe Work Australia's Comparison of Workers' Compensation Arrangements in Australia and New Zealand.

Denominators used to calculate rates

Estimates of the number of employees and hours worked for each Australian workers' compensation jurisdiction are supplied annually by the ABS. The data are primarily derived from the Labour Force Survey, which are adjusted to account for differences in scope between the Labour Force Survey and workers' compensation coverage.

The ABS provides two sets of estimates for each jurisdiction—one is split by sex, age and industry and the second is split by occupation. This restricts presentation of rates to the categories supported by the ABS data. Therefore, it is not possible to calculate rates for occupational groups within specific industries.

In 2008, the ABS conducted a review of the methodology used to calculate the number of employees in each industry and the number of hours worked by each employee. After the review, the ABS implemented a number of changes to their methodology, which increased their estimates. As the ABS could only supply new estimates from 2005–06 onwards, estimates for previous years were adjusted based on the movement between the old and new estimates for 2005–06 to avoid a break in the time series. Reports from 2007–08 use these new estimates. Therefore, comparison with previous reports should not be made.

Following the review, the major change to the estimates was in the industry coding of 'jobs other than the main job' of multiple job holders. Where previously the second job was combined into the industry of the first job, these have now been separated to be shown in the industry in which the employee works in each separate job. This resulted in changes to rates in some industries. In particular, a decrease in employee estimates occurred in public administration and safety, manufacturing, and health care and social assistance as these were the industries where a greater proportion held a second job. An increase occurred in arts and recreation services, and accommodation and food services as these were the industries where the second job was most commonly worked.

While the ABS is able to adjust the employee estimates to account for the industries where the second job was worked, it is unable to adjust the hours worked in a similar manner. All hours worked are allocated to the industry of the main job.

Because eligibility for workers' compensation varies from jurisdiction to jurisdiction, further adjustments are necessary. The most significant adjustments are outlined below:

- Police in Western Australia, who are covered by a separate scheme that does not report to Safe Work Australia, are excluded from the denominators.
- Under the Queensland legislation, owner-managers of incorporated enterprises (OMIEs), who are included in the standard definition of 'employee', have the option of purchasing workers' compensation insurance for themselves. Based on 2006 census data, 10% of employed people in Queensland were OMIEs, an unknown number of whom were covered by workers' compensation. This population has been excluded from the denominators and their claims have been excluded from the numerators.

Adjustment of Victorian data

Safe Work Australia uses one working week of time lost from work as the cut-off for the classification of accepted claims as serious claims. This cut-off was chosen because most jurisdictions have an employer excess of one week or less. Since claims with an absence of at least one week are generally processed by the workers' compensation authority, the use of a one-week cut-off ensures comparable data are compiled from all jurisdictions so that an accurate national estimate can be produced.

However, under the Victorian workers' compensation scheme, the employer can be liable for the first 10 working days lost by the injured or ill worker (for an employee working two days per week, for instance, that would amount to five weeks' pay), plus the first \$692 of medical services (for the year 2017/18—indexed annually), unless the employer elected the 'excess buy-out' option. Since information on claims paid solely by employers is not always provided to the workers' compensation authority, the national count of serious claims is affected.

To correct for this under-counting, Victorian claims of one to two weeks' duration are increased by a factor to represent the 'missing claims'. The factor is calculated by comparing the percentage of claims of one to two weeks' duration for Victoria with the percentage of claims of one to two weeks' duration for all other Australian jurisdictions at the industry division level and by nature of injury or disease. The factoring makes the percentage of claims in each industry and nature group in Victoria match the Australian average for claims of this duration. This factoring increases Victorian claims by around 13 per cent (from 19,170 to 21,716) in 2017–18 and the Australian count by less than 3 per cent.

Changes to South Australian data

Safe Work Australia conducted a review of the methodology used to calculate the South Australian claims data under 10-days excess factors. Following the review, it was found that the claim numbers after factoring did not accurately represent the South Australian claims. Hence, the excess factors for South Australian claims were not applied in this 2017–18 edition of the Australian Workers' Compensation Statistics report, which includes claims data from 2012 13 to 2017–18.

Reliability of data

Data are subject to two types of errors—non-sampling errors and sampling errors.

Non-sampling error

Non-sampling errors may occur in any statistical collection due to:

- incorrect inclusion or exclusion of respondents or cases.
- non-response of respondents.
- inaccurate information from respondents.
- inaccurate recording of information by data collectors.



- deficiencies in data collection materials and processes.
- errors that occur during the entry, coding and editing of data.

Non-sampling errors may affect the numerator and denominator data. It is difficult to quantify non-sampling error.

Sampling error

Sampling error is a measure of the variation that occurs when a sample, rather than an entire population, is surveyed. Standard error indicates the extent to which an estimate of a sample varies from the estimate of the population from which it is drawn. When a standard error is expressed as a percentage of the estimate to which it relates, it is known as a relative standard error (RSE).

The denominator data used to calculate rates of serious claims are subject to sampling error. Rates that are calculated using denominators with high RSEs are annotated with one asterisk (*) to indicate that the RSE of the denominator is 25% or higher and two asterisks (**) if the RSE is 50% or higher.