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# **Injury deaths, Australia 2004–05**

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# Abbreviations used

ABS	Australian Bureau of Statistics
AIC	Australian Institute of Criminology
AIHW	Australian Institute of Health and Welfare
DITRDLG	Department of Infrastructure, Transport, Regional Development and Local Government
E-code	ICD External Cause code
ICD	International Classification of Diseases
ICD-9	International Classification of Diseases, 9th Revision
ICD-10	International Classification of Diseases, 10th Revision
MCoD	Multiple Cause of Death
nec	Not elsewhere classified
NCIS	National Coroners Information System
NISU	National Injury Surveillance Unit
RCIS	Research Centre for Injury Studies
STIPDA	State and Territory Injury Prevention Directors Association (US)
UCoD	Underlying Cause of Death

# Summary

A total of 9,775 community injury deaths occurred in Australia in 2004–05, 62% of which were males. The age-adjusted rate of 63.9 deaths per 100,000 population for males was more than double the rate for females (30.3). Age-specific rates were relatively steady for both males and females from early adulthood through to the late sixties, rising rapidly from age 70 years onwards.

A slight downward trend in injury deaths, evident over the past few years, continued in 2004–05. This trend was more marked for males than females. Under-ascertainment of injury deaths in the source data file may have contributed to this.

Just over a quarter of all injury deaths involved some type of fracture, with just on two-thirds of these deaths having incurred a hip fracture. Injuries to the head were also common with just over 17% of all deaths sustaining this type of injury. Of these, 40% sustained some form of intracranial injury.

The most common cause of injury death was *Unintentional falls*, which accounted for 29% of all community injury deaths that occurred in 2004–05. Persons aged 70 years and over accounted for almost 90% of all deaths in this group.

Other common causes of injury deaths included *Suicide* and *Transport* which accounted for 24% and 18% of all injury deaths respectively. Males were close to four times more likely than females to commit suicide, while males aged 20–54 years accounted for over 57% of all deaths in this group.

Similarly for *Transport* deaths, males were close to three times more likely than females to die as a result of a transport accident, while males aged 15–34 years accounted for almost 33% of all deaths in this group. Almost 87% of all transport-related deaths were as a result of a motor vehicle traffic accident, while for 65% of these deaths, the victim was an occupant of a motor vehicle.

The age-adjusted rate of 97.2 deaths per 100,000 population for the Northern Territory was the highest of all the jurisdictions, with Tasmania having the next highest rate (60.0). The Australian Capital Territory had the lowest age-adjusted rate (43.7), which was only marginally lower than the national rate (46.7).

Age-adjusted rates of injury mortality increased according to the remoteness of the deceased's zone of residence. The rate was almost 2.5 times greater in the Very remote zone than it was in Major cities.

When using ABS data, there was strong evidence of undercounting of cases in some external cause categories on 2004–05 and similar over enumeration of cases in other categories. This was particularly evident in the sections related to transport, suicide and homicide where the reported totals were significantly less than those estimated using the National Coroners Information System, and in the case of transport and homicide, less than those reported by other agencies. The ABS has revised the concepts and processes which underlie injury mortality data, which will improve data reliability for deaths registered in 2007 and subsequently.

The trend in death rate for total community injury cases remained relatively unchanged, the undercounting in the external cause categories mentioned above largely being compensated for by over-counting in other external cause categories. This was evident for the sections on *Poisoning* and *Other unintentional* deaths.



# 1 Introduction

Every year, the Australian Bureau of Statistics (ABS), compiles data on all deaths registered in Australia. Since 1992, the National Injury Surveillance Unit (NISU) has used these data as the basis for reports on injury deaths. These reports have the aim of describing and monitoring the pattern of injury mortality in Australia.

As in the previous report in the series (2003–04), we have implemented a method of reporting injury mortality in which:

1. Deaths for inclusion in the report were selected according to a published *Operational definition of injury* (Kreisfeld & Harrison 2006).
2. Deaths are reported according to when they occurred rather than when they were registered.
3. Financial year (i.e. July to June), rather than calendar years are used as the reporting period.

A detailed explanation of this approach is included in the report *Injury deaths, Australia 2003–04* (Henley et al. 2007).

This report, more than previous ones in the series, makes use of data from sources additional to the ABS mortality collection. In the main, these sources have been used to compare case counts with those based on the ABS mortality collection (see Section 1.2). Three sources have been used: the National Coroners Information System (NCIS), road death data from the road safety statistics section of the Department of Infrastructure, Transport, Regional Development and Local Government (DITRDLG) and homicide statistics from the Australian Institute of Criminology (AIC).

## 1.1 Major causes of injury

For most chapters in this report, ICD-10 external cause codes continue to be used for the purpose of assigning deaths according to major cause groups, which are the same as those used in previous reports. However, whereas reports before 2002–03 focused only on the external cause code that appears as the UCoD, this report classifies cases on the basis of ICD-10 Chapter XX codes anywhere in the record. In some cases, this results in individual deaths appearing in more than one section of the report because they have been assigned more than one external cause code. However, each death is only counted once in overall counts (e.g. Section 2.1)

This report differs from the approach used for the 2003–04 report for chapters where misclassification of ICD-10 external cause codes is a major concern (see Section 1.2). Hence, for chapters describing transport deaths (Section 2.2), suicide deaths (Section 2.8) and homicide deaths (Section 2.9), assignment of cases to a particular external cause group is based primarily upon data contained within selected variables in NCIS, rather than upon ICD-10 codes within the ABS mortality data. ABS data are provided for comparative purposes.