



# **Hospital separations due to injury and poisoning, Australia 1999–00**

*Yvonne Helps, Raymond Cripps  
James Harrison*

**AIHW**

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injury and poisoning, Australia  
1999–00**

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Raymond Cripps  
James Harrison**

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Australian Institute of Health and Welfare  
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# Abbreviations

ABS	Australian Bureau of Statistics
AIHW	Australian Institute of Health and Welfare
ALOS	Average length of stay
DHA	Department of Health and Ageing
DRG	Diagnosis-related groups
ICD-9	9 <sup>th</sup> Revision of the International Classification of Diseases
ICD-9-CM	9 <sup>th</sup> Revision of the International Classification of Diseases, Clinical Modification
ICD-10	10 <sup>th</sup> Revision of the International Classification of Diseases
ICD-10-AM	10 <sup>th</sup> Revision of the International Classification of Diseases, Australian Modification
LOS	Length of stay
NHDD	<i>National Health Data Dictionary</i>
NHMD	National Hospital Morbidity Database
NHPA	National Health Priority Area
NIPP	National Injury Prevention Plan
NISU	National Injury Surveillance Unit
RCIS	Research Centre for Injury Studies
SIPP	Strategic Injury Prevention Plan





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# Executive summary

This is the second overview report by the National Injury Surveillance Unit, on national hospital separations due to injury and poisoning, for the data year 1999–00.

The term ‘separations’ refers to the number of cases separating from hospital, and is not equivalent to newly incident cases. There may be more than one separation per incident case. This is the first report in the series to be based entirely on data coded according to ICD-10-AM (first edition).

## Main findings

In 1999–00, 413,647 hospital separations due to injury and poisoning were reported. This accounted for 7% of total hospital separations for that time period.

Females accounted for 42.4% of injury separations (n=175,256), the male to female rate ratio (based on age-standardised separation rates) was 1.4:1.

Age-specific hospitalisation rates increased from birth to the 20–24 year age group for both sexes. Thereafter, the rate was relatively constant for females, increasing at the 50–54 year age group. Male rates were higher than female rates from birth to the 70–74 year age group. Female rates overtook male rates at that point, with both sexes reaching maximum rates in the 85+ year age group.

*Falls* were the most commonly reported external cause of injury, accounting for 29% of all injury separations, followed by *Other unintentional* (26.7%) and *Complications of medical and surgical care* (16.5%).

*Falls* were most common for both sexes at ages 0–14 years (38% of all injury separations at these ages) and at 65 years and older (55% of injury separations). The rate of separations due to *Falls* was 2,143 per 100,000 population at ages 65 and older, and 7,894 per 100,000 at ages 85+ years.

Separations attributed to *Complications of medical and surgical care* increased with age, from 9% in the 20–34 year age group to 27% in those aged 65 years and above.

*Intentional self-harm* accounted for 5% of separations, with rates per 100,000 population highest in the female 15–19 year (288.3), and male 25–29 year (191.5) age groups.

Overall, male rates exceeded female rates for all external causes except for *Poisoning, pharmaceutical* (X40–X44), *Falls* (W00–W19) and *Intentional, self-inflicted* (X60–X84 and Y87.0).

Of the cases for which a Place of Occurrence code was required (i.e. cases with an external cause code in the range W00–Y34, excluding Y06 and Y07), *Home* was the place specified most commonly, especially for females, children and older persons. *Residential institutions* were the next most commonly specified place for older persons, but were uncommon for younger groups. The second most commonly specified place for children and younger adults (especially males), was *Sports and athletics areas*.

Of the 121,616 injury cases for which a *Place of occurrence* code was not required, 56% (n=68,193) were attributed to *Complications of medical and surgical care*, and 42% (n=51,486) to *Transportation*.

Of the 344,704 injury separations during 1999–00 for which an *Activity* code was required, about half had an uninformative value (i.e. Unspecified Place). 7.2% of injury separations (9.7% of male cases) were recorded as occurring during sport, and 7.0% of injury separations (10.5% of male cases) occurred while working for income (i.e. occupational injuries).

*Shoulders and upper limbs* was the most commonly injured body region among hospitalised injuries for persons, comprising 24.9% (n=103,187) of total cases. Injuries to these areas of the body accounted for a larger proportion of male than of female separations (ratio of nearly 2:1). *Wrist and hand* injury rates were much higher for males than females, except in early childhood and old age. Much of the highest rates were seen for males from 15 years to mid-adult ages. Rates for females did not vary very much with age.

*Hip and lower limb* injuries accounted for 23.3% of female cases and 18.2% of male cases. Rates are high for older age groups.

*Head injuries* were the third most frequent injury diagnosis overall (n=62,237). The number of male head injury separations (n= 42,375) was about twice the female count (n=19,862). *Head injury* rates for males were high in the 0–4 year age group (638 separations per 100,000 population), and the 15–19 year age group (877 separations per 100,000 population). Both male and female head injury rates were highest in the 85+ year age group (1,038 and 1,060 respectively). The all ages rate for males was over twice as high as the rate for females.

The average length of stay (ALOS) in 1999–00 for injury and poisoning was 4 days (1,737,236 bed days over 413,647 separations). Discharge occurred on the day of admission for 29% (n=120,156) of these separations. Removing same day cases (except deaths and transfers to acute care hospitals), the total number of bed days was 1,617,080 over 293,491 separations, resulting in an average of 5.5 bed days per separation. About 33% of injury separations were after a stay of three days or more (n=136,081).

*Complications of surgical & medical care, not elsewhere classified* was the Principal Diagnosis accounting for the largest number of bed days (just over 400,000).

*Injuries to the hip and thigh* ranked second highest in terms of total bed days (n=321,864). Females were over represented in this injury category at a M:F ratio of just over 1:2. *Hip and thigh* injury hospitalisations had the longest ALOS per separation among the groups considered (n=11 days), the next longest being for *Injuries to the abdomen, lower back, lumbar spine and pelvis* (n=7 days).

Nearly 84% of all injury cases were discharged to their usual residence. The proportion was highest for children (93% at ages 0–14 years) and lower for older people (68% at 65+ years).

## Priority topics

Four priority topics for 2001–2003 are specified in the National Injury Prevention Plan:

### *Falls in older people (65+ years)*

In 1999–00, 55,539 separations were reported for *Unintentional falls* (W00–W19). This category accounted for 55% of total injuries (n=100,849) reported in the elderly group, with one-third of total falls occurring in the 85+ year age group (n=19,163).

Female rates exceeded male rates in each age group in the elderly range, and rates increased exponentially with age in both males and females.

### *Falls among children 0–14 years*

Of all reported injuries to children (n=68,133), just over 38% (n=26,194) were *Falls*.

Male rates were higher than female rates in each five-year bracket of this range, the highest male rate being in the 10–14 year age group (M:F rate ratio of 2.5:1).

### *Near-drowning 0–4 years, 15–34 years, all ages*

Across all ages, 563 cases were reported in this category, representing less than 1% of total injury separations in 1999–00.

The 0–4 year age group reported 54% of all *Near drowning* separations, with male rates exceeding female rates (M:F ratio of 1.6:1).

The male to female rate ratio for the 15–34 year age group was 3:1.

### *Poisoning among children aged 0–4 years*

*Poisoning* accounted for 13.5% (n=3,186) of total injury separations (n=23,556) in the 0–4 year age group.



# 1 Introduction

## 1.1 Hospital separations data

This is the second in a series of annual reports by the Research Centre for Injury Studies on national hospital separations due to injury and poisoning. This report includes data for episodes of inpatient hospital care which finished during 1999–00. This was the first year in which ICD-10-AM was used to code data in all states and territories. The previous 1998–99 report addressed the data issues of differing coding between states, some of which used ICD-9-CM up to the end of June 1999, while some jurisdictions coded to ICD-10-AM from the beginning of July 1998 (Table 1.1).

**Table 1.1: Australian ICD Usage 1993 to current**

ICD-9-CM North American edition	ICD-9-CM Australian first edition	ICD-9-CM Australian second edition	ICD-10-AM First edition	ICD-10-AM First edition	ICD-10-AM Second edition
1993–1/07/95  national	1/07/95–30/06/96  national	1/07/96–30/06/98/  national	<b>1/07/98–30/06/99</b>  ACT, VIC, NT, NSW	1/07/99–30/06/00  national	1/07/00–30/06/02  national
		<b>1/07/98–30/06/99</b>  TAS, WA, SA,QLD			

In addition, this report will address the issue of estimating population incidence of injury occurrence, which is important for trend analysis in morbidity reporting (Section 2.6.2).

This report uses the following data definition for hospital separations, which is drawn from the *National Health Data Dictionary* (Australian Institute of Health and Welfare 2001). Separation is the term used to denote the cessation of an episode of care for an admitted patient, whether by means of a formal administrative process, or a statistical one. The hospital separations are drawn from the AIHW National Hospital Morbidity Database (NHMD).



## 1.2 Selecting injury and poisoning cases

Cases that met the following criteria were selected for inclusion in this report:

Australian hospital separations occurring from July 1st, 1999 to June 30th, 2000;

Principal Diagnosis in the ICD-10-AM range S00–T98 (i.e. Chapter XIX ‘Injury, poisoning and certain other consequences of external causes’ codes); and

External causes of morbidity V01–Y89 of ICD-10-AM (i.e. Chapter XX ‘External causes of morbidity and mortality’).

Except where otherwise specified, the results presented in this report are based on numbers of hospital separations meeting these selection criteria. These values do not represent the population incidence of injury (Harrison and Steenkamp 2002). These criteria exclude separations that satisfy the designated Principal Diagnosis range, but do not have an external cause code. The effect of this exclusion is small (n=1,058, or 0.26% of the subset), but should be noted.

## 2 Results

### 2.1 Age and sex distribution

In the financial year 1999–00 there was a total of 5,897,860 hospital separations from public, private and psychiatric hospitals in Australia (Australian Institute of Health and Welfare 2001). Seven per cent (n=413,647) of separations were due to injury and poisoning from external causes (Table 2.1). All hospital separations rose by nearly 163,000 over the previous year's total of 5,735,049.

**Table 2.1: Key indicators for separations due to injury and poisoning; Australia 1999–00**

Indicator	Males	Females	Persons
All hospital separations	2,729,915	3,167,882	5,897,860 <sup>(a)</sup>
Hospital separations due to injury and poisoning	238,390	175,256	413,647 <sup>(b)</sup>
Hospital separations due to injury and poisoning as % of all separations	8.8	5.5	7.0
Crude rate per 100,000 population	2,513.9	1,831.6	2,171.2
Age-standardised rate per 100,000 population	2,558.8	1,684.1	2,136.0
Change in age-standardised rate since 1998–99 (%)	1.6	0.3	1.0

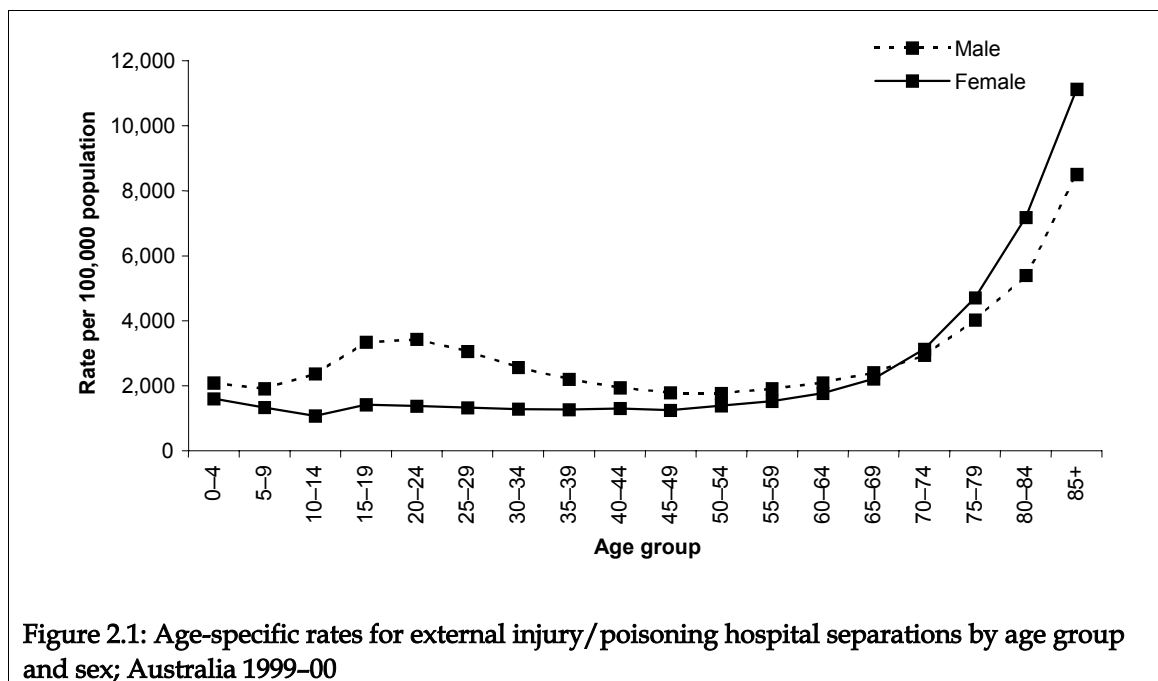
<sup>(a)</sup> Includes 63 separations for which sex was not reported.

<sup>(b)</sup> Includes one separation for which sex was not reported.

The male to female rate ratio (M:F rate ratio), based on age-standardised rates for injury and poisoning from external causes, was 1.4:1, indicating a higher incidence of male than female injury-related hospitalisation rates.

Since 1998–99, there has been a rise in the rate of injury separations of about 1%, the increase being proportionally higher in males than in females.

As seen in Figure 2.1, age-specific hospitalisation rates for females were much the same for all age groups from 15–19 years to 50–54 years. Hospitalisation rates were higher for males aged in their teens and twenties than for boys or middle-aged men, levelling out at the 50–54 year age group point. In the elderly, (65+ years), rates in both genders increased exponentially, reaching maximum rates in the very old (age 85+ years; M:F rate ratio 0.8:1). For the age groups 70 years and above, female rates were higher than male rates (age-specific rate data for Figure 2.1 are tabulated in Table A5.1).



## 2.2 External causes

### 2.2.1 Major groups of injury and poisoning

In 1999-00, injury and poisoning due to external causes accounted for 413,647 hospital separations (Table 2.2).

The most commonly reported identifiable cause of injury for males was *Falls* (22.9%). *Transportation* (14.6%), and *Complications of medical and surgical care* (14.4%), were the second and third most commonly occurring external causes of hospitalisations for males.

Females were most commonly hospitalised for injuries from *Falls* (37.7%), followed by *Complications of medical and surgical care* (19.3%), and *Transportation* (9.5%).

Males were proportionally more affected by *Intentional injuries inflicted by another* than females, by nearly 3:1. *Other unintentional injuries* were 2.5 times more likely to occur in males than females, and *Transportation* and *Drowning* were reported twice as often for males than females. The rate of separations due to *Intentional self-inflicted* injury was significantly higher for females than for males.

Proportions of injury separations by external cause group were very similar to those seen in 1998-99, and the rank order of the top five categories was unchanged.

**Table 2.2: External causes of hospital separations: case counts and proportions by sex; Australia 1999–00**

Major groups	Males		Females		Persons		M:F ratio of counts
	Count	Per cent	Count	Per cent	Count	Per cent	
Transportation (V01–V99)	34,864	14.6	16,623	9.5	51,488 <sup>(a)</sup>	12.4	2.1
Motor vehicle traffic accidents	18,362	7.7	10,386	5.9	28,749	7.0	1.8
Other transportation	16,502	6.9	6,237	3.6	22,739	5.5	2.6
Near drowning (W65–W74)	375	0.2	188	0.1	563	0.1	2.0
Swimming pool	132	0.1	79	0.0	211	0.1	1.7
Other near drowning	243	0.1	109	0.1	352	0.1	2.2
Poisoning, pharmaceutical (X40–X44)	4,924	2.1	4,909	2.8	9,833	2.4	1.0
Poisoning, other substances (X45–X49)	1,951	0.8	1,265	0.7	3,216	0.8	1.5
Falls (W00–W19)	54,632	22.9	66,028	37.7	120,660	29.2	0.8
Slip, trip or stumble	11,290	4.7	23,142	13.2	34,432	8.3	0.5
Stairs and steps	2,841	1.2	4,383	2.5	7,224	1.7	0.6
Falls from playground equipment	3,121	1.3	2,857	1.6	5,978	1.4	1.1
Other falls	37,380	15.7	35,646	20.3	73,026	17.7	1.0
Fires/burns/scalds (X00–X19)	4,019	1.7	1,857	1.1	5,876	1.4	2.2
Scalds	1,568	0.7	1,064	0.6	2,632	0.6	1.5
Other fires/burns	2,451	1.0	793	0.5	3,244	0.8	3.1
Other unintentional injuries (W20–W64, W75–W99, X20–X39, X50–X59, Y85, Y86, Y89.9)	78,527	32.9	31,811	18.2	110,338	26.7	2.5
Intentional, self-harm (X60–X84, Y87.0)	8,678	3.6	12,341	7.0	21,019	5.1	0.7
Self harm, poisoning	6,907	2.9	11,114	6.3	18,021	4.4	0.6
Self harm, other	1,771	0.7	1,227	0.7	2,998	0.7	1.4
Intentional, inflicted by another (X85–Y09, Y35–Y36, Y87.1, Y89.0, Y89.1)	14,512	6.1	5,077	2.9	19,589	4.7	2.9
Undetermined intent (Y10–Y34, Y87.2)	1,488	0.6	1,372	0.8	2,860	0.7	1.1
Complications of medical and surgical care (Y40–Y84, Y88.0–Y88.3)	34,420	14.4	33,785	19.3	68,205	16.5	1.0
<b>All major groups</b>	<b>238,390</b>	<b>100.0</b>	<b>175,256</b>	<b>100.0</b>	<b>413,647<sup>(a)</sup></b>	<b>100.0</b>	<b>1.4</b>

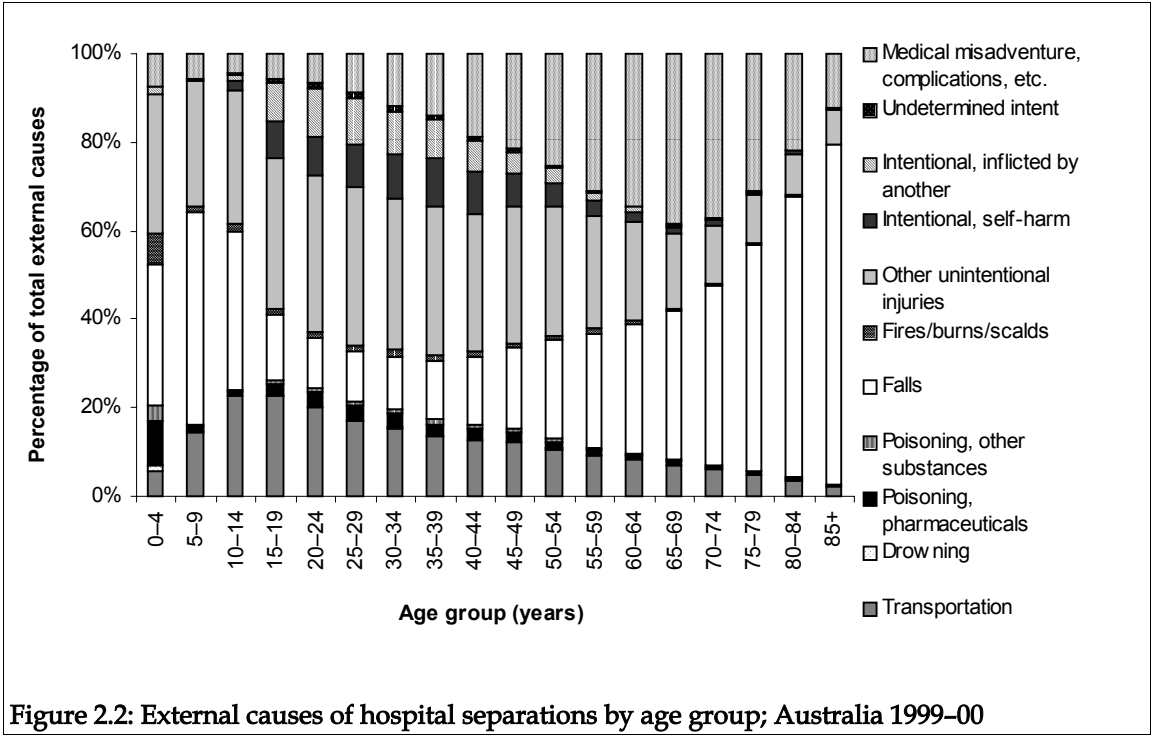
<sup>(a)</sup> Sex for one 'Transportation' case not reported.

Shaded areas indicate three most commonly identified external causes.

Figure 2.2 shows proportions of hospital separations by external causes for total persons, in 18 five-year age groups. A table showing rates for the same external causes and age groups is provided in Table A5.2.

Fall-related hospitalisations were particularly common in the young (0–14 years) and the elderly (65+ years), representing just over 38% (n=26,194) and 55% (n=55,539) of the injuries in these two groups, respectively. Note that these proportions are probably a little lower than would have been obtained if ICD-9-CM was used to code the data. This is because the ICD-9-CM code for *Fracture, cause unknown* (E887) has no equivalent in ICD-10-AM and such cases are lost from the ICD-10-AM *Falls* category. This issue was discussed in more detail in Section 3.7 of our previous report on hospital separations due to injury and poisoning (Cripps, Steenkamp et al. 2002).

Hospitalisations due to *Intentional self-harm* made up 5% of injury separations. *Complications of medical and surgical care* was proportionally more common in older age groups, rising from 9% in the 20–34 year age group to about 23% of the hospitalisations in the 35–64 year age group and 27% in those aged 65+ years.



Tables A5.2 and A5.3 show age-specific and age standardised rates for external causes of hospital separations for males and females. Male rates (age standardised) exceeded female rates for all external causes except for *Intentional, self-inflicted* (X60–X84 and Y87.0). The female rate (2,585.1 separations per 100,000 population) was approaching twice that of males (1,483.4) in the 65+ age group in the *Falls* category. Rates of *Intentional self harm* were highest in the female 15–19 year age group (288.3) and the male 25–29 year age group (191.5), indicating especially high risk for young female teenagers.

## 2.2.2 Profiles of priority injury areas

Injury prevention and control has been recognised as a National Health Priority Area (NHPA) since 1986. Four priority areas were identified by the Strategic Injury Prevention Partnership<sup>1</sup> (SIPP) in 2001 (Commonwealth Department of Health and Aged Care 2001). Through to 2003, the National Injury Prevention Plan (NIPP) priority areas are:

- falls in older people (65+ years);
- falls in children (0–14 years);
- drowning and near-drowning (0–4 years, 15–34 years and all ages); and
- poisoning among children (0–4 years).

Table 2.3 presents data for subgroups within each priority topic, as well as for the total priority groups.

**Table 2.3: Injury priority topics: case counts, proportions, hospital separation rates by sex, including male to female count ratios; Australia 1999–00**

Priority area	Males			Females			Persons			M:F ratio <sup>(b)</sup>
	Count	Per cent	Rate <sup>(a)</sup>	Count	Per cent	Rate <sup>(a)</sup>	Count	Per cent	Rate <sup>(a)</sup>	
<b>Falls in older people aged 65+ years<sup>(c)</sup> (W00–W19)</b>										
65–69 years	2,025	13.6	610.4	3,225	7.9	932.0	5,250	9.5	774.6	0.6
70–74 years	2,534	16.9	867.6	5,138	12.7	1,556.8	7,672	13.8	1,233.2	0.5
75–79 years	3,244	21.7	1,509.9	7,962	19.6	2,803.2	11,206	20.2	2,246.3	0.4
80–84 years	3,029	20.2	2,648.4	9,219	22.7	5,063.4	12,248	22.0	4,131.7	0.3
85+ years	4,128	27.6	5,520.0	15,035	37.1	8,951.0	19,163	34.5	7,894.1	0.3
All 65+ years	14,960	100	1,483.4	40,579	100	2,585.1	55,539	100	2,143.2	0.4
<b>Falls in children aged 0–14 years<sup>(c)</sup> (W00–W19)</b>										
0–4 years	4,204	26.3	645.1	3,332	32.7	538.2	7,536	28.8	593.0	1.3
5–9 years	5,894	36.8	862.7	4,516	44.3	696.4	10,410	39.7	781.8	1.3
10–14 years	5,897	36.9	871.2	2,351	23.0	364.8	8,248	31.5	624.2	2.5
0–14 years	15,995	100	792.4	10,199	100	534.5	26,194	100	666.7	1.6
<b>Near drowning (W65–W74)</b>										
0–4 years	188	50.1	28.8	118	62.8	19.1	306	54.4	24.1	1.6
15–34 years	71	18.9	3.7	24	12.8	1.3	95	16.9	2.5	3.0
All ages	375	100	4.1	188	100	2.2	563	100	3.2	2.0
<b>Poisoning among children 0–4 years (X40–X49)</b>										
0–4 years	1,752	100	268.8	1,434	100	231.6	3,186	100	250.7	1.2

<sup>(a)</sup> Age-specific rates per 100,000 population are provided for five-year age groups.

<sup>(b)</sup> Ratio is based on age-specific rates.

<sup>(c)</sup> Please note—ICD-10-AM range for falls (W00–W19) does not include Fracture, cause unspecified (ICD-9-CM E887).

<sup>1</sup> SIPP is responsible for the implementation of the NIPP and Priorities between 2001 and 2003, as arrived at in conjunction with Commonwealth, State and Territory government health agencies and other key participants in the injury prevention and control sector.

#### *Falls among persons aged 65+ years*

- In 1999–00, 55,539 separations were reported for *Unintentional falls* (W00–W19). This category accounted for 55% of total injuries (n=100,849) reported in this age group.
- The 85+ year age group reported the highest count (n=19,163), representing a little under one-third of total *Falls* in the elderly group, a rate of 7,894.1 per 100,000.
- Female rates exceeded male rates in each age group in the elderly range, and rates increased exponentially with age in both males and females.

NISU has previously reported on this injury topic (Cripps and Carman 2001).

#### *Falls among children aged 0–14 years*

- Of all reported injuries to children (n=68,133), just over 38% (n=26,194) were *Falls*.
- Male rates were higher than female rates in each five-year age bracket of this range, the highest male rate being in the 10–14 year age group (M:F rate of 2.5:1).
- Female rates were highest in the 5–9 year age group, but still lower than male rates (M:F ratio of 1.3:1).

NISU has previously reported on this injury topic (Steenkamp and Cripps 2001).

#### *Near-drowning 0–4 years, 15–34 years, all ages*

- Across all ages, 563 cases were reported in this category, representing less than 1% of total injury separations in 1999–00.
- The 0–4 year age group reported 54% of all *Near drowning* separations, with male rates exceeding female rates (M:F ratio of 1.6:1).
- In the 15–34 year age group, male rates exceeded female rates at a ratio of 3:1, but with much lower counts than the smaller 0–4 year age group.

NISU has previously reported on this injury topic (Steenkamp 2002).

#### *Poisoning among children aged 0–4 years*

- *Poisoning* accounted for 13.5% (n=3,186) of total reported injury (n=23,556) in the 0–4 year age group.
- *Poisoning* was the third highest reported injury category after *Falls* (n=7,536) and *Other unintentional* (n=7,351) in this age group.
- Rates were slightly higher for males than females in this age bracket (M:F ratio of 1.2:1). For *Poisoning* across all ages, ALOS at a hospital was low (two days).

NISU has previously reported on this injury topic (O'Connor 2000; O'Connor 2001).

## 2.3 Place and Activity

The transition from ICD-9-CM to ICD-10-AM coding affected the reporting of *Place of occurrence* and *Activity* during 1998-99. The current report is the first to be able to report a data set coded solely to ICD-10-AM.

### 2.3.1 Place of occurrence

Tables 2.4 and Table 2.5 summarise the *Place of occurrence* reported at hospital separation for treatment of injury from external causes during 1999-00.

Over 29% (n=121,616) of the injury separations in 1999-00 do not have a *Type of place* code. This is almost entirely due to the fact that the version of ICD-10-AM used during this year only required a 'Place' code for some cases.

The data reported here were coded according to the first edition of the Australian clinical modification of ICD-10 (National Centre for Classification in Health 1998). This edition required a 'Place' code for cases given an external cause code in the range W00-Y34 (excluding Y06 and Y07). This range omits two parts of the external causes code range to which large numbers of injury cases are coded. These are the codes for *Transport Accidents* (V01-V99), and those for *Complications of medical and surgical care* (Y40-Y84).

Consequently, although the 'Place' classification has categories for the types of place at which most *Transport Accident* cases and *Complications of medical and surgical care* would be likely to occur (i.e. roads and hospitals, respectively) the cases were not given a 'Place' code and cannot be tabulated here. Hence, the tables in this section, and particularly the rows for 'Place' categories *School, other institutions & public administration area, including hospitals* and *Street and highway*, must be interpreted with caution. This problem was resolved in the second edition of ICD-10-AM.

#### Cases in-range for a Place code

*Home* was the place specified most commonly, especially for females, children and older persons. *Residential institutions* were the next most commonly specified place for older persons, but were uncommon for younger groups. The second most commonly specified place for children and younger adults (especially males), was *Sports and athletics areas*. This was followed, for children, by the category including *Schools* and, for persons from age 20-64 years, by *Industrial and construction areas*. Of total hospital injury separations, 45% (n=137,082) were reported as *Other specified place* and *Unspecified place*.

Age related patterns were evident in the distribution of 'Place' of injury occurrence. Home was the most commonly specified place for children and for persons aged 65 years and older (Table 2.5). Adolescents aged 15-19 years were most often injured in *Sport and athletics areas* (17.3%), followed by the *Home* (16.5%). Injuries within the *Home* increase with age, with proportionally highest levels in the elderly (46%). *Industrial and construction areas* were common places of injury occurrence in age groups 20-34 and 35-64 (6.7% and 6.3% respectively).



Of the 292,031 cases within the range W00–Y34 (excluding Y06 and Y07), 1% (n=2,971) were not coded to ‘Place’. The three most common external cause categories to which these cases had been coded were *Other Unintentional* (n=1,106), *Falls* (n=652) and *Intentional, inflicted by another* (n=638).

### Cases out-of-range for a Place code

Of the 121,616 cases within the scope of this report and for which a *Place of occurrence* code was not required, 56% (n=68,193) were attributed to *Complications of medical and surgical care*, and a little over 42% (n=51,486) to *Transportation*. This illustrates the point made in the introductory note to this section.

Thus, the place category *Street and highway* does not reflect the actual number of injuries incurred in that specific location, although *Transportation* cases would most commonly occur on a *Street and highway*. The majority of *Street and highway* cases in Table 2.4 and Table 2.5 are assaults and falls.

A similar caution applies to the row likely to include the places of occurrence of most *Complications of medical and surgical care* (i.e. *School*, other institutions and public administration area, including hospitals).

**Table 2.4: Place of occurrence of injury hospitalisations from external causes: case counts and proportions by sex; Australia 1999–00**

Place of occurrence	Males		Females		Persons	
	Count	Per cent	Count	Per cent	Count	Per cent
Home (includes farmhouse)	40,018	23.8	51,037	41.3	91,055	31.2
Residential institution	3,626	2.2	8,443	6.8	12,069	4.1
School, other institutions & public administration area (including hospitals)	4,225	2.5	3,311	2.7	7,536	2.6
Sport and athletics area	15,880	9.4	4,269	3.5	20,149	6.9
Street and highway	4,123	2.4	3,006	2.4	7,129	2.4
Trade and service area	6,231	3.7	3,577	2.8	9,808	3.4
Industrial and construction area	10,156	6.0	850	0.7	11,006	3.8
Farm (excludes farmhouse)	2,001	1.2	463	0.4	2,464	0.8
Other specified places	8,423	5.0	4,190	3.4	12,613	4.3
Unspecified place	71,800	42.7	43,431	35.1	115,231	39.5
No place code	1,838	1.1	1,133	0.9	2,971	1.0
<b>All places</b>	<b>168,321</b>	<b>100.0</b>	<b>123,710</b>	<b>100.0</b>	<b>292,031</b>	<b>100.0</b>

Note: Range W00–Y34, excluding Y06, Y07.

**Table 2.5: Place of occurrence of injury hospitalisations from external causes: case counts and proportions by age group; Australia 1999–00**

Place of occurrence	0–14 years		15–19 years		20–34 years		35–64 years		65+ years	
	Count	Per cent	Count	Per cent	Count	Per cent	Count	Per cent	Count	Per cent
Home (includes farmhouse)	17,605	32.5	3,889	16.9	13,795	20.5	22,908	29.3	32,858	47.5
Residential institution	201	0.4	196	0.9	739	1.1	859	1.1	10,074	14.6
School, other institutions & public administration area (including hospitals)	4,246	7.8	651	2.8	508	0.8	822	1.0	1,309	1.9
Sport and athletics area	5,030	9.3	4,083	17.7	7,623	11.3	3,001	3.8	412	0.6
Street and highway	418	0.8	573	2.5	1,674	2.5	2,033	2.6	2,431	3.5
Trade and service area	668	1.2	863	3.8	3,296	4.9	2,994	3.8	1,987	2.9
Industrial and construction area	125	0.2	870	3.8	4,595	6.8	5,199	6.6	217	0.3
Farm (excludes farmhouse)	150	0.3	142	0.6	612	0.9	1,209	1.5	351	0.5
Other specified places	2,208	4.1	1,250	5.4	3,757	5.6	3,999	5.1	1,399	2.0
Unspecified place	23,108	42.7	10,240	44.5	29,736	44.1	34,307	43.9	17,840	25.7
No place code	352	0.7	250	1.1	1,042	1.5	1,005	1.3	322	0.5
<b>All places</b>	<b>54,111</b>	<b>100.0</b>	<b>23,007</b>	<b>100.0</b>	<b>67,377</b>	<b>100.0</b>	<b>78,336</b>	<b>100.0</b>	<b>69,200</b>	<b>100.0</b>

Note: Range W00–Y34, excluding Y06, Y07.

### 2.3.2 Activity when injured

*Activity when injured* was required to be coded (according to the first edition of ICD-10-AM) for cases given an external cause code in the range V01–Y34. Some cases outside this range (n=4,635) had also been allocated an 'Activity' code, but those are not included in this summary.

Of the 1999–00 injury separations within the specified range (n=344,704), 1.1% (n=3,899) did not report 'Activity'. Where this occurred, the most common external cause codes were *Other unintentional* (n=1,106), *Transportation* (n=837) and *Intentional, inflicted by another* (n=729).

Reported activity at the time of injury is shown in Table 2.6. In cases where an activity during injury occurrence was specified, some gender differences were apparent. Males sustained relatively more injuries *While engaged in sports activity* or *While working for income*. These activities were reported much more often, proportionately, for males than for females: 2.6 times more often for 'Sports activity' and 5.5 times more often for 'While working'.

**Table 2.6: Activity reported for injury hospitalisations from external causes: case counts and proportions by sex; Australia 1999–00**

Activity	Males		Females		Persons	
	Count	Per cent	Count	Per cent	Count	Per cent
While engaged in sports activity	19,685	9.7	5,227	3.7	24,912	7.2
While engaged in leisure activity	14,211	7.0	7,532	5.3	21,743	6.3
While working for income	21,274	10.5	2,739	1.9	24,013	7.0
While engaged in other types of work	6,571	3.2	4,549	3.2	11,120	3.2
While resting, sleeping, eating, etc.	6,760	3.3	9,692	6.9	16,452	4.8
While engaged in other specified activities	35,157	17.3	29,236	20.8	64,393	18.7
During unspecified activity	97,411	47.8	80,761	57.2	178,172	51.7
No activity code	2,428	1.2	1,470	1.0	3,899 <sup>(a)</sup>	1.1
<b>All activities</b>	<b>203,497</b>	<b>100.0</b>	<b>141,206</b>	<b>100.0</b>	<b>344,704<sup>(a)</sup></b>	<b>100.0</b>

<sup>(a)</sup> One male case missing from No activity code.

Note: Includes cases having external cause codes in the range V01–Y34.

Table 2.7 presents age-specific cases of injury by Activity. Amongst specified activities, *Leisure* injuries had the highest proportion for the 0–14 year age group (12.9%). Injury during *sports activity* peaked in the 15–19 year age group and was also the prime activity for that group (16.6%). Injuries while *working for income* were the most common risk areas for the 20–34 (11.6%) and 35–64 (12.9%) year age groups. The 65+ age group were most commonly injured during vital activities such as *resting, sleeping, eating* (12.0%), perhaps reflecting a reduction in the range of activities undertaken by the elderly.

**Table 2.7: Activity reported for injury hospitalisations from external causes: case counts and proportions by age group; Australia 1999–00**

Activity	0–14 years		15–19 years		20–34 years		35–64 years		65+ years	
	Count	Per cent	Count	Per cent	Count	Per cent	Count	Per cent	Count	Per cent
While engaged in sports activity	5,983	9.3	5,041	16.6	9,414	11.2	4,006	4.3	468	0.6
While engaged in leisure activity	8,272	12.9	2,416	8.0	4,997	6.0	4,078	4.4	1,980	2.7
While working for income	99	0.2	1,828	6.0	9,735	11.6	11,872	12.9	479	0.7
While engaged in other types of work	641	1.0	482	1.6	1,822	2.2	4,575	5.0	3,600	4.9
While resting, sleeping, eating, etc.	2,111	3.3	504	1.7	1,602	1.9	3,370	3.6	8,865	12.0
While engaged in other specified activities	14,374	22.4	5,925	19.4	16,496	19.4	17,117	18.5	10,481	14.2
During unspecified activity	32,232	50.2	13,831	45.5	38,604	46.0	46,044	49.9	47,461	64.4
No activity code	480	0.7	378	1.2	1,395	1.7	1,279	1.4	366	0.5
<b>All activities</b>	<b>64,192</b>	<b>100.0</b>	<b>30,405</b>	<b>100.0</b>	<b>84,065</b>	<b>100.0</b>	<b>92,341</b>	<b>100.0</b>	<b>73,700</b>	<b>100.0</b>

Note: Includes cases having external cause codes in the range V01–Y34.

## 2.4 Diagnoses

Principal Diagnosis is the main diagnosis arrived at as being the basis of that episode of inpatient care. It may be accompanied by up to 30 additional diagnoses, and must be a valid ICD-10-AM code. Descriptive and morphology codes are not permissible; Principal Diagnoses must be phenomena which affect the health standing of the individual (e.g. disease, injury, poisoning).

### 2.4.1 Body region

As in the previous report (Cripps, Steenkamp et al. 2002), this section examines hospital separations with a Principal Diagnosis which falls within the range of Chapter XIX (S00–T98). Four body regions which have been distinguished and are shown in Table 2.9:

- head (S00–S09);
- trunk (S10–S39);
- shoulder and upper limb (S40–S69); and
- hip and lower limb (S70–S99).

Where body region has not been coded (most of the T range), cases have been included in the data as *Other injuries not specified by body region*. The most commonly reported conditions within the body region groups, were Fractures 39.6% (n=163,660), and Open wounds 18.1% (n=74,918, Table 2.8).

**Table 2.8. Principal Diagnosis of injury from external causes: case counts and proportions by injury type, in rank order**

Chapter XIX Principal Diagnosis by injury type	Frequency	Per cent	Cumulative Per cent
Fracture	163,660	39.6	39.6
Open wound	74,918	18.1	57.7
Dislocation, sprain, strain	35,227	8.5	66.2
Injury to muscle and tendon	34,398	8.3	74.5
Other and unspecified injury	24,639	6.0	80.5
Superficial injury	24,008	5.8	86.3
Injury to nerves and spinal cord	20,293	4.9	91.2
Injury to blood vessels	15,521	3.8	95
Traumatic amputation	13,845	3.3	98.3
Crushing injury	7,138	1.7	100
<b>Total</b>	<b>413,647</b>	<b>100</b>	

*Shoulder and upper limb* was the most commonly injured body region among hospitalised injuries for persons, comprising 24.9% (n=103,187) of total cases. This injury diagnosis was particularly common among male cases (28.1%).

*Hip and lower limb* injuries were the next most commonly reported injuries for persons, accounting for 23.3% of female cases and 18.2% of male cases.

*Head injuries* were the third most frequent injury diagnosis for all persons (n=62,237). Injuries to the head were more prominent among males cases (17.8%) than among female cases (11.3%).

**Table 2.9: Principal diagnoses reported for injury hospitalisations from external causes: case counts and proportions by body region and sex; Australia 1999–00**

Principal diagnosis by body region	Males		Females		Persons	
	Count	Per cent	Count	Per cent	Count	Per cent
Head	42,375	17.8	19,862	11.3	62,237	15.0
Trunk (neck, thorax, abdomen, lower back, lumbar spine and pelvis)	21,258	8.9	17,061	9.7	38,320 <sup>(a)</sup>	9.3
Shoulder and upper limb	66,990	28.1	36,197	20.7	103,187	24.9
Hip and lower limb	43,326	18.2	40,907	23.3	84,233	20.4
Other injuries not specified by body region	64,441	27.0	61,229	34.9	125,670	30.4
<b>All body regions</b>	<b>238,390</b>	<b>100.0</b>	<b>175,256</b>	<b>100.0</b>	<b>413,647<sup>(a)</sup></b>	<b>100.0</b>

<sup>(a)</sup> One male case missing from Trunk.

Note: Shaded areas indicate three most commonly identified external causes.

## 2.4.2 Principal diagnosis

This section and Table A5.5 reports injury separations according to more specific groups of diagnostic codes than the previous section. We have used the 22 groups specified by sub-headings in Chapter XIX of ICD-10-AM. All of these groups are reported in Table A5.5. The 12 most numerous are reported in Table 2.10 in order of decreasing frequency.

The most common single category of diagnosis was *Complications of surgical and medical care, not elsewhere classified* (15.8% of separations). This group can be distinguished from the great majority of cases in Table 2.10, which are injuries and poisoning that arose in the community. Of the latter, the most common were injuries to the head (15.8%), and to the wrist and hand (10.6%). Injury of the hip and thigh was common for women (11.0%).

**Table 2.10: Ranked principal diagnoses reported for injury hospitalisations from external causes: case counts and proportions by sex; Australia 1999–00**

Chapter XIX groups	ICD-10-AM code	Males		Females		Persons	
		Count	Per cent	Count	Per cent	Count	Per cent
Complications of surgical and medical care, not elsewhere classified	T89	33,116	13.9	32,117	18.3	65,233	15.8
Injuries to the head	S00–S09	42,375	17.8	19,862	11.3	62,237	15.0
Injuries to the wrist and hand	S60–S69	34,154	14.3	9,659	5.5	43,813	10.6
Injuries to the knee and lower leg	S80–S89	25,093	10.5	17,301	9.9	42,394	10.2
Injuries to the elbow and forearm	S50–S59	21,732	9.1	17,496	10.0	39,228	9.5
Injuries to the hip & thigh	S70–S79	10,774	4.5	19,349	11.0	30,123	7.3
Poisoning by drugs, medicaments and biological substances	T36–T50	12,278	5.2	17,181	9.8	29,459	7.1
Injuries to the shoulder & upper arm	S40–S49	11,104	4.7	9,042	5.2	20,146	4.9
Injuries to the abdomen, lower back, lumbar spine & pelvis	S30–S39	9,614	4.0	9,145	5.2	18,759	4.5
Injuries to the thorax	S20–S29	8,129	3.4	5,631	3.2	13,761 <sup>(b)</sup>	3.3
Injuries to the ankle & foot	S90–S99	7,459	3.1	4,257	2.4	11,716	2.8
Toxic effects of substances chiefly non-medicinal as to source	T51–T65	4,502	1.9	2,851	1.6	7,353	1.8
Other principal diagnoses <sup>(a)</sup>		18,060	7.6	11,365	6.5	29,425	7.1
<b>All principal diagnoses</b>	<b>S00–T98</b>	<b>238,390</b>	<b>100.0</b>	<b>175,256</b>	<b>100.0</b>	<b>413,647<sup>(b)</sup></b>	<b>100.0</b>

<sup>(a)</sup> 'Other principal diagnoses' includes S10–S19, T00–T35, T66–T79, T89–T98 (Table A5.5).

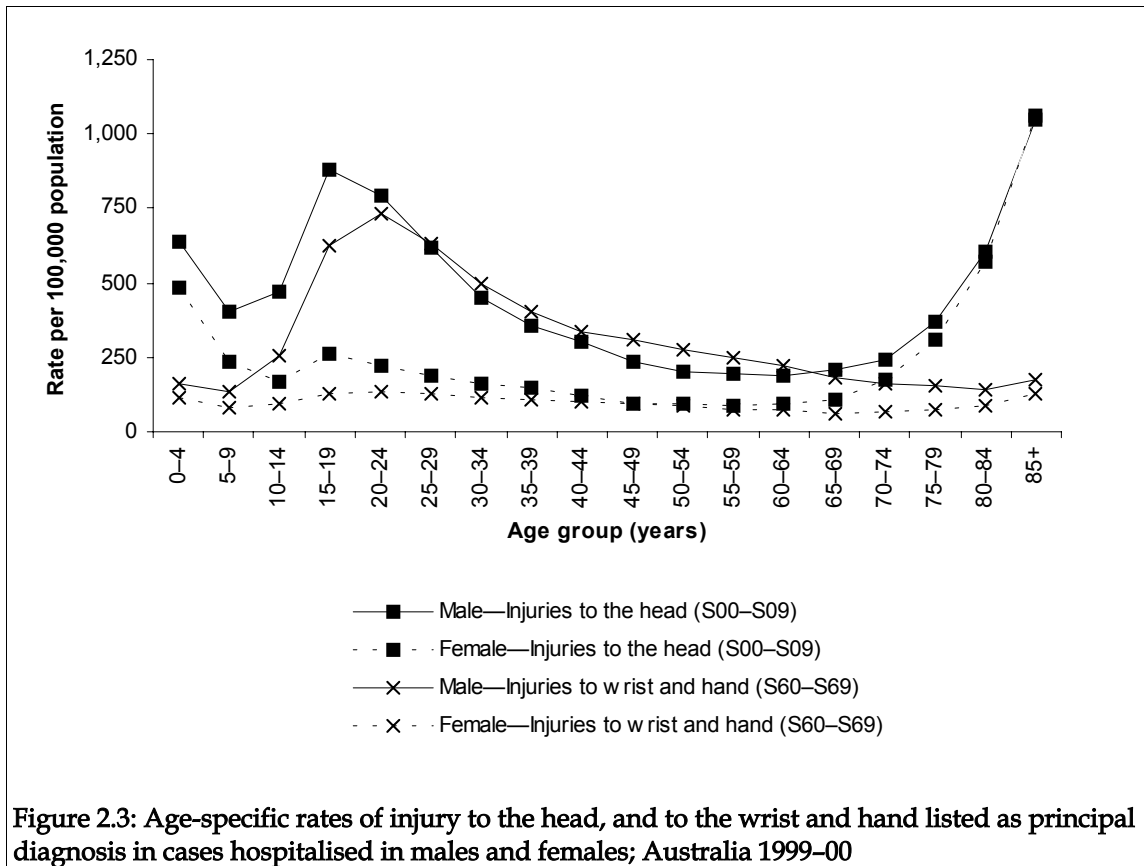
<sup>(b)</sup> One male case missing from Injuries to the thorax.

Note: Shaded areas indicate three most common categories.

Age-specific rates for *head injuries* (S00–S09) and *injuries to the wrist and hand* (S60–S69) are presented in Figure 2.3. These are the most common specific injuries reported in Table 2.10. Complete tabulations of rates of all injuries and poisoning reported as principal diagnoses in males, females and persons are summarised in Appendix A, Tables A5.6–A5.8.

*Head injury* rates for males were high in the 0–4 year age group (638.1), and the 15–19 year age group (877.1), and a little lower at the 20–24 year age group (794.3) (Figure 2.3). Both male and female head injury rates were highest in the 85+ year age groups (1,047.0 and 1,064.5 respectively). The female pattern of head injury showed a decline between the 0–4 year age group (481.7) and the 15–19 year age group (260.4), remaining relatively low at older ages, until increasing in old age to the 80–84 year age group (573.4), and the 85+ year age group (1,064.5). Overall, male rates were over twice as high as rates for females.

*Wrist and hand* injury rates were also high in males. Figure 2.3 shows much higher rates for males than females, except in early childhood and old age. Most of the highest rates were seen for males from 15 years to mid-adult ages. Rates for females did not vary very much with age.



*Hip and thigh* injury rates are illustrated in Figure 2.4. The scale of the vertical axis (which differs from that in Figure 2.3) has been chosen to show the very high rates for this group of diagnoses at ages older than about 70 years. At these ages, rates for women were up to twice as high as rates for men. The vertical scale obscures the proportionately greater excess of male rates in early adult years. For example, at ages 20–24 years, the rate for men was more than four times the rate for women.

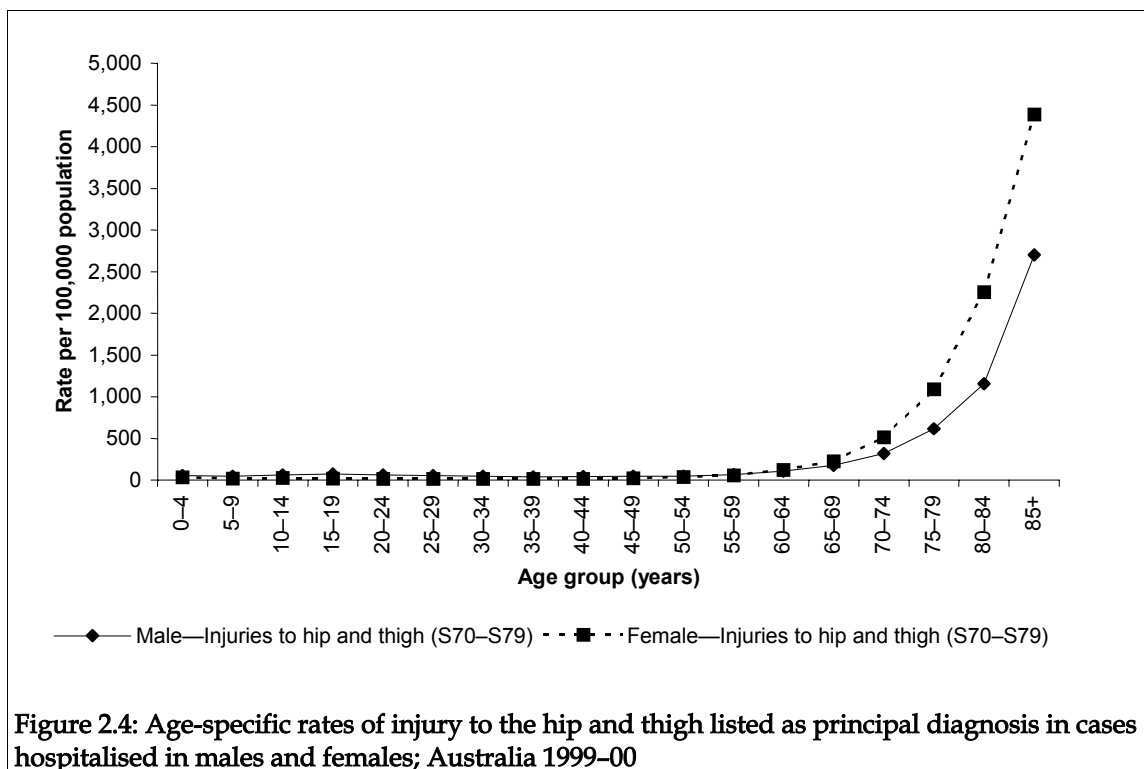


Figure 2.4: Age-specific rates of injury to the hip and thigh listed as principal diagnosis in cases hospitalised in males and females; Australia 1999–00

## 2.5 Length of stay

Length of stay (LOS) provides an approximate indication of case severity; that is, severe injuries are more likely to result in longer episodes of care than minor injuries. Analysing and reporting LOS requires care, particularly because some cases result in more than one episode of care, and these are not linked together in the available data. This is closely linked to the difficulty in identifying incident cases (see section 2.6.2).

Table 2.11 presents an aggregated estimate of LOS, calculated from the sum of LOS for all separations meeting the selection criteria for this report (Chapter XIX Diagnosis codes and related Chapter XX External cause codes). Re-admissions and transfers are included, as well as newly admitted cases.

The ALOS in 1999–00 for injury and poisoning was four days (1,737,236 bed days over 413,647 separations). Discharge occurred on the day of admission for 29% (n=120,156) of these separations. Removing same day cases (except deaths and transfers to acute care hospitals), the total number of bed days was 1,617,080 over 293,491 separations, resulting in an average of 5.5 bed days per separation. About 33% of admitted patients had a stay of three days or more (n=136,081 see Table 2.11).



**Table 2.11: Length of stay for all separations and separations where same day discharges were excluded; Australia 1999–00**

Length of stay (days)	All separations		Excluding 'same day' separations	
	Frequency	Per cent	Frequency	Per cent
Up to 1	233,756	56.5	113,600	38.7
2	43,810	10.6	43,810	14.9
3–4	44,041	10.6	44,041	15.0
5–7	33,548	8.1	33,548	11.4
8–14	33,451	8.1	33,451	11.4
15–21	11,985	2.9	11,985	4.1
22–28	5,185	1.3	5,185	1.8
29–35	3,020	0.7	3,020	1.0
36–49	2,552	0.6	2,552	0.9
More than 7 weeks	2,299	0.6	2,299	0.8
<b>Total</b>	<b>413,647</b>	<b>100.0</b>	<b>293,491</b>	<b>100.0</b>

Injury diagnoses and their associated health burden and case severity for treatment (using LOS and ALOS as proxies) are summarised in Table 2.12. In terms of health burden, injury and poisoning accounted for 1,737,236 bed days for 413,647 separations, an average of four days in hospital for each episode.

*Complications of surgical & medical care, not elsewhere classified* was the most common Principal Diagnosis (shown in Table 2.10). This group accounted for just over 400,000 bed days (ALOS=6 days, Table 2.12). Just over 99% (n=64,745) of *Complications of surgical & medical care* diagnoses also had an external cause code for *Complications of medical and surgical care*. Around 40% of these cases were in the 35–64 year age groups, and just over 39% in the 65+ year age group.

*Injuries to the hip and thigh* ranked second highest in terms of total LOS (total persons n=321,864 bed days). Females were over represented in this injury category, accounting for a little over twice as many bed days as males. As a whole, *hip and thigh* injury hospitalisations had the highest ALOS per separation (n=11 days), with the next highest category being *Injuries to the abdomen, lower back, lumbar spine and pelvis* (n=7 days). As seen in Table 2.12, although ALOS was high for this category, more bed days were recorded for injuries *to knee and lower leg* (n=184,026 days) and *to the head* (n=161,580 days). Hospitalisations for *Burns, Injuries to the neck, Injuries to the thorax* and *Certain early complications of trauma* each recorded an ALOS of about six days.

**Table 2.12: Principal Diagnosis group of external cause hospital separations: case counts, length of stay, and average length of stay by sex and ranked by length of stay; Australia 1999–00**

Chapter XIX groups	Males			Females			Persons		
	Count	LOS	ALOS	Count	LOS	ALOS	Count	LOS	ALOS
Complications of surgical & medical care, nec	33,116	201,094	6.1	32,117	202,274	6.3	65,233	403,368	6.2
Injuries to the hip & thigh	10,774	106,484	9.9	19,349	215,380	11.1	30,123	321,864	10.7
Injuries to the knee & lower leg	25,093	87,420	3.5	17,301	96,606	5.6	42,394	184,026	4.3
Injuries to the head	42,375	105,844	2.5	19,862	55,736	2.8	62,237	161,580	2.6
Injuries to the abdomen, lower back, lumbar spine & pelvis	9,614	59,027	6.1	9,145	78,526	8.6	18,759	137,553	7.3
Injuries to the shoulder & upper arm	11,104	30,998	2.8	9,042	47,614	5.3	20,146	78,612	3.9
Injuries to the thorax	8,130	43,793 <sup>(a)</sup>	5.4	5,631	34,723	6.2	13,761	78,517 <sup>(a)</sup>	5.7
Injuries to the elbow & forearm	21,732	37,528	1.7	17,496	40,486	2.3	39,228	78,014	2.0
Injuries to the wrist & hand	34,154	50,436	1.5	9,659	16,214	1.7	43,813	66,650	1.5
Poisoning by drugs, medicaments & biological substances	12,278	26,600	2.2	17,181	37,571	2.2	29,459	64,171	2.2
Burns	4,883	29,820	6.1	2,099	13,517	6.4	6,982	43,337	6.2
Injuries to the ankle & foot	7,459	21,656	2.9	4,257	13,358	3.1	11,716	35,014	3.0
Injuries to the neck	3,515	23,538	6.7	2,285	10,158	4.4	5,800	33,696	5.8
Toxic effects of substances chiefly non-medicinal as to source	4,502	7,830	1.7	2,851	5,250	1.8	7,353	13,080	1.8
Other and unspecified effects of external causes	3,325	6,924	2.1	2,796	5,739	2.1	6,121	12,663	2.1
Effects of foreign body entering through natural orifice	3,888	5,880	1.5	2,563	3,629	1.4	6,451	9,509	1.5
Injuries to unspecified parts of trunk, limb or body region	1,301	3,114	2.4	961	3,781	3.9	2,262	6,895	3.0
Certain early comps of trauma	659	3,674	5.6	323	2,096	6.5	982	5,770	5.9
Injuries involving multiple body regions	283	749	2.6	237	890	3.8	520	1,639	3.2
Other complications of trauma, nec	167	629	3.8	71	281	4.0	238	910	3.8
Sequelae of injuries, poisoning & other consequences of external causes	34	155	4.6	30	201	6.7	64	356	5.6
Frostbite	5	12	2.4	-	-	0.0	5	12	2.4
<b>All principal diagnoses</b>	<b>238,390</b>	<b>853,205</b>	<b>3.6</b>	<b>175,256</b>	<b>884,030</b>	<b>5.0</b>	<b>413,647</b>	<b>1,737,236<sup>(a)</sup></b>	<b>4.2</b>

<sup>(a)</sup> LOS was missing for one case.

Note: Shaded areas indicate three highest figures for each column.

## 2.6 Mode of separation

### 2.6.1 All separations

*Mode of separation* defines the status of the patient at discharge, describing how the person exited from the institution (statistical discharge, discharge or transfer to other institution, discharge own risk, death), and where the person went (a type of residence other than health institution – normally the person’s usual residence). The data is used for outcome analysis, for classifying the episode of care, and for maintaining continuity of care. *Mode of separation* has also been used to estimate incident cases, by facilitating the removal of statistical and transfer type separations, each of which may result in more than one separation record for a single injury case.

Table 2.13 summarises mode of separation by sex, and Table 2.14 summarises mode of separation by age group for the 1999–00 data.

Nearly 84% of all injury cases were discharged to their usual residence (Table 2.13). The proportion was highest for children (93.3%) and nearly as high for the other age groups shown in Table 2.14, except the oldest (68% for persons aged 65 years and older). Of elderly cases, 5,678 were discharged to nursing homes (Table 2.13). This may be an artificially low figure because it might exclude some instances in which a nursing home was the person’s usual residence (the use of the data item ‘*Type of usual accommodation*’ is an existing data item which could clarify this issue, but is currently only mandatory for patients admitted to psychiatric hospitals).

About 0.9% of episodes in hospital due to injury ended with death (Table 2.13). The proportion was a little higher for females (1.0%) than for males (0.8%), largely as a consequence of the older age distribution of the female cases. Most deaths involved the elderly (n=2,608 males and females n=2,389 respectively, Table 2.14). We note that these values exclude cases where death occurred after arrival at a hospital, and before admission.

Over 40,000 cases (9.7%) were discharged to another acute hospital facility (Table 2.13). Of these, 44% were in the elderly age group (Table 2.14).

**Table 2.13: Mode of separation of patients admitted for injury and poisoning: case counts and percentages by sex; Australia 1999–00**

Mode of separation	Males		Females		Persons	
	Count	Per cent	Count	Per cent	Count	Per cent
Discharge/transfer to an(other) acute hospital	20,271	8.5	19,849	11.3	40,120	9.7
Discharge/transfer to a nursing home	1,589	0.7	4,391	2.5	5,980	1.4
Discharge/transfer to an(other) psychiatric hospital	523	0.2	607	0.3	1,130	0.3
Discharge/transfer to other health care accommodation	1,561	0.7	2,148	1.2	3,709	0.9
Statistical discharge—type change	2,470	1.0	4,882	2.8	7,352	1.8
Left against medical advice/discharge at own risk	3,417	1.4	1,895	1.1	5,312	1.3
Statistical discharge from leave	113	0.0	108	0.1	221	0.1
Died	1,946	0.8	1,677	1.0	3,623	0.9
Other <sup>(a)</sup>	206,459	86.6	139,677	79.7	346,136	83.7
Not reported	42	0.0	22	0.0	64	0.0
<b>All modes of separation</b>	<b>238,390</b>	<b>100.0</b>	<b>175,256</b>	<b>100.0</b>	<b>413,647</b>	<b>100.0</b>

<sup>(a)</sup> Includes discharge to usual residence/own accommodation/welfare institution.

Note: Shaded areas indicate three highest proportions.

**Table 2.14: Mode of separation of patients admitted for injury and poisoning: case counts and percentages by age group, Australia 1999–00**

Mode of separation	0–14 years		15–19 years		20–34 years		35–64 years		65+ years		All ages %	
	Count	Per cent	Count	Per cent	Count	Per cent	Count	Per cent	Count	Per cent	Count	Per cent
Discharge/transfer to an(other) acute hospital	3,994	5.9	2,235	6.9	6,636	7.2	9,520	7.9	17,734	17.6	40,120 <sup>(b)</sup>	9.7
Discharge/transfer to a nursing home	10	0.0	13	0.0	48	0.1	231	0.2	5,678	5.6	5,980	1.4
Discharge/transfer to an(other) psychiatric hospital	14	0.0	104	0.3	482	0.5	436	0.4	94	0.1	1,130	0.3
Discharge/transfer to other health care accommodation	152	0.2	167	0.5	643	0.7	851	0.7	1,896	1.9	3,709	0.9
Statistical discharge—type change	44	0.1	121	0.4	478	0.5	1,059	0.9	5,650	5.6	7,352	1.8
Left against medical advice/discharge at own risk	175	0.3	516	1.6	2,575	2.8	1,844	1.5	202	0.2	5,312	1.3
Statistical discharge from leave	44	0.1	13	0.0	42	0.0	45	0.0	77	0.1	221	0.1
Died	106	0.2	102	0.3	278	0.3	529	0.4	2,608	2.6	3,623	0.9
Other <sup>(a)</sup>	63,587	93.3	28,949	89.8	81,332	87.9	105,373	87.9	66,895	66.3	346,136	83.7
Not reported	7	0.0	7	0.0	17	0.0	18	0.0	15	0.0	64	0.0
<b>All modes of separation</b>	<b>68,133</b>	<b>100.0</b>	<b>32,227</b>	<b>100.0</b>	<b>92,531</b>	<b>100.0</b>	<b>119,906</b>	<b>100.0</b>	<b>100,849</b>	<b>100.0</b>	<b>413,647<sup>(b)</sup></b>	<b>100.0</b>

<sup>(a)</sup> Includes discharge to usual residence/own accommodation/welfare institution.

<sup>(b)</sup> Age missing for one case for Discharge/transfer to an(other) acute hospital.

Note: Shaded areas indicate three highest proportions.

## 2.6.2 Estimated incidence

Hospital separations should not be confused with newly incident cases of injury. An incident case of injury may result in more than one admission to hospital and, hence, to more than one hospital separation record.

The absence of a unique personal identifier in the hospital separations file prevents direct distinction between the number of individual persons treated and the number of episodes of care (represented by separations).

Some items in the hospital separations file provide a basis for estimating the extent of multiple counting of incident cases of injury represented by separation events. In particular, *Mode of admission* and *Mode of separation* can be used for this purpose. This is because some categories in these items imply that the cases will have generated more than one separation record. For example, a person whose *Mode of admission* is *Transferred from another hospital* will normally be represented by a separation record from the referring hospital and one from the destination hospital. A similar argument applies where *Mode of separation* is *Transferred to an(other) acute hospital* and to *Statistical* separations.

This approach to estimating incident cases among separations is an approximation. For example, it does not allow for cases where a subsequent episode of hospital care due to an injury followed discharge to home. Also, the methods depend on the assumption that the additional separation records (e.g. at the referring hospital) included data that would result in them being 'in-scope' for the case definition used for this report. This issue is discussed further elsewhere (Harrison and Steenkamp 2002).

Table 2.15 and Table 2.16 summarise injury separations in 1999–00 by *Mode of admission* and *Mode of separation*. Nearly 6% (n=23,795) of the Admissions, and nearly 12% (n=48,887) of the separations were by modes which could lead to multiple separations for a single case of injury.

**Table 2.15: Estimation of incidence by mode of admission of patients admitted for injury and poisoning: case counts and percentages by sex; Australia 1999–00**

Mode of admission	Males		Females		Persons	
	Count	Per cent	Count	Percent	Count	Per cent
Patient transferred from an(other) acute hospital	12,436	5.2	9,541	5.4	21,977	5.3
Statistical admission—type change	554	0.2	970	0.6	1,524	0.3
Other	225,235	94.5	164,616	94.0	389,852 <sup>(a)</sup>	94.3
Not reported	130	0.1	82	0.0	212	0.1
System missing	N/A		N/A		82	0.0
<b>All modes of admission</b>	<b>238,355<sup>(b)</sup></b>	<b>100</b>	<b>175,209<sup>(b)</sup></b>	<b>100</b>	<b>413,647<sup>(a)</sup></b>	<b>100</b>

<sup>(a)</sup> 'Other' person count includes one case where sex was not reported.

<sup>(b)</sup> Does not include gender count for 'System missing'.

Note: Shaded areas indicate possible double count items.

**Table 2.16: Mode of separation of patients admitted for injury and poisoning: case counts and percentages by sex; Australia 1999–00**

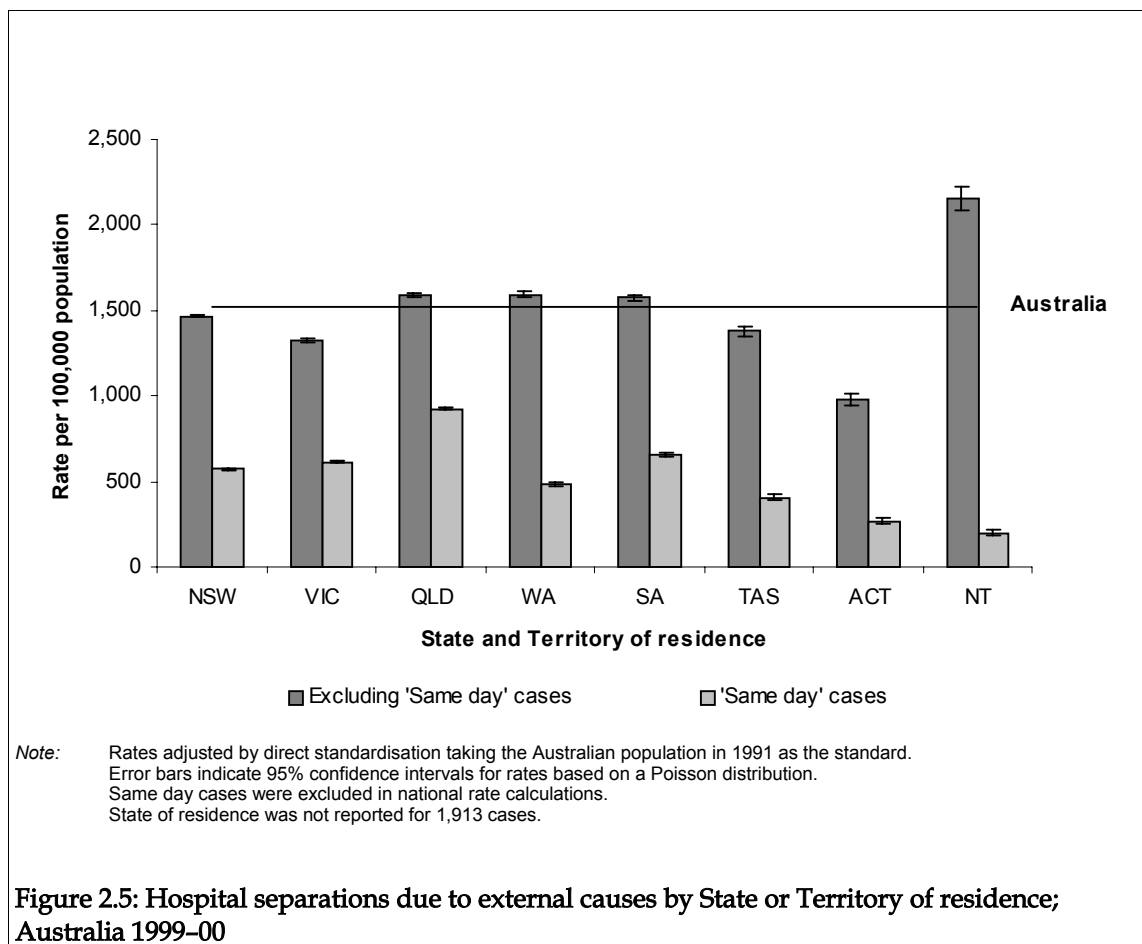
Mode of separation	Males		Females		Persons	
	Count	Per cent	Count	Per cent	Count	Per cent
Discharge/transfer to an(other) acute hospital	20,271	8.5	19,849	11.3	40,120	9.7
Discharge/transfer to a nursing home	1,589	0.7	4,391	2.5	5,980	1.4
Discharge/transfer to an(other) psychiatric hospital	523	0.2	607	0.3	1,130	0.3
Discharge/transfer to other health care accommodation	1,561	0.7	2,148	1.2	3,709	0.9
Statistical discharge—type change	2,470	1.0	4,882	2.8	7,352	1.8
Left against medical advice/discharge at own risk	3,417	1.4	1,895	1.1	5,312	1.3
Statistical discharge from leave	113	0.0	108	0.1	221	0.1
Died	1,946	0.8	1,677	1.0	3,623	0.9
Other usual residence <sup>(a)</sup>	206,459	86.6	139,677	79.7	346,136	83.7
Not reported	42	0.0	22	0.0	64	0.0
<b>All modes of separation</b>	<b>238,391</b>	<b>100.0</b>	<b>175,256</b>	<b>100.0</b>	<b>413,647</b>	<b>100.0</b>

<sup>(a)</sup> Includes discharge to usual residence/own accommodation/welfare institution.

Note: Shaded areas indicate possible double count items.

## 2.7 States and Territories

Figure 2.5 shows age-adjusted rates of hospital separations due to external causes, by State and Territory of the patient's usual residence. The population data used to calculate the rates is also grouped by usual residence. State or Territory of usual residence is usually the same as the State or Territory of the hospital to which a person is admitted, but not always. Disparities may be larger where the hospital catchment areas cross borders (e.g. some injuries sustained by residents of the Australian Capital Territory may routinely be treated in a facility in New South Wales because of proximity or the availability of specialist services).



As seen in Figure 2.5, no State or Territory rates exactly reflected the national average rate of 1,524 injury separations per 100,000 of the population (95% CI=1,518 to 1,529) (data for Figure 2.5 is summarised in the Appendix, Table A5.9). In comparison to the previous year, *State of residence not reported* dropped by nearly 46% to n=1,913 (previously n=3,519).

In the current data set, private facilities in the following jurisdictions did not report separations; Victoria (16), South Australia (3 + 3 partial reporters), Tasmania (2 + 4 partial reporters), Australian Capital Territory (7) and the Northern Territory (1) (AIHW 2001a). Accordingly, caution is advised when interpreting differences between the separation rates for States and Territories.

## 3 Data issues

### 3.1 Data source

The data on hospital separations were provided by the AIHW (Australian Institute of Health and Welfare 2001). NISU processed, checked and combined the relevant data years to facilitate analysis.

Population data were obtained from the Australian Institute of Health and Welfare and are similar to data presented in the Demographic Statistics Catalogue No. 3101.0 (ABS). Rates were calculated using final population estimates as at 31 December 1999.

### 3.2 Confidence intervals

Less than 1% of injury/poisoning separations are thought to be missing from the data reported, representing minimal risk of sampling error. Data are based on the financial year of separation, but could equally be based on calendar year, in which case rates would differ slightly. Confidence intervals for rates indicate the size of such differences (95%; based on Poisson distribution).

### 3.3 Selection criteria

The selection criteria are as stated in Section 1.2. That is, that the Principal Diagnosis was within Chapter XIX ('Injury and Poisoning', S00-T98), and the first appearing external code was in the Chapter XX range (V01-Y89). This criterion excludes cases not recording a Principal Diagnosis from Chapter XIX, and those recording Principal Diagnosis as 'missing', even though an external cause code is present.

The coding system allows for a number of external causes to be recorded. For consistency between reporting locations, the 'first appearing', rather than the 'main' external cause code has been used uniformly.



### 3.4 Hospitalised cases versus other cases

Not all injuries result in hospital admission. It has been estimated that one admission occurs for every seven injury cases presenting to Emergency Departments, and that at least as many injury cases again consult a GP rather than present to a hospital (Harrison and Steenkamp 2002). In addition, an unknown number of injuries occur that resolve without professional treatment. Similarly, severe injury cases resulting rapidly in death go unrecorded in terms of hospital separations, but are captured as mortality data.

### 3.5 Errors, inconsistencies and uncertainties

This report uses data collected from State and Territory hospitals. After coding and collection from the States and Territories, the data is further processed by the AIHW and NISU. The geographical spread of the data and the large number of people involved in its processing increases the risk of inconsistencies across time and place in the data. Variations in reporting and coding continue to exist across jurisdictions, although National Minimum Data Sets have been in place for some considerable amount of time.

The following data issues are relevant to this project:

- The absence from ICD-10-AM of an equivalent code for *Fracture, cause unspecified* (E887) in ICD-9-CM prevents accurate comparison of *Falls* injury rates between years.
- Incidence is not equivalent to number of hospital separations. Methods to estimate incident cases are of uncertain reliability.
- The Mode of separation data element has been found to have coding inconsistencies between jurisdictions. During the 1999–00 data collection period, there was difference in the distinction between patients discharging as (2) Transfers to nursing homes, and (9) Other usual residence, which may also have been a nursing home. In Victoria, Western Australia and the Northern Territory, either code may have been used. In South Australia and Tasmania the expectation was that new transfers to nursing homes would be coded (2), and returns to usual residence, including nursing homes (9), but this was found to be inconsistent across the data (personal communication with Lucianne Lewin, AIHW, February 2002). It has also been found that for South Australia in the 1999–00 time period, the supplied Mode of separation codes were revised on inclusion into the national dataset. This resulted mainly in increases in (1) Transfer other acute and (3) Transfer psychologist, and a decrease in (4) Transfer other health. It has been confirmed that this is confined only to 1999–00 data.

## 3.6 Calculation of rates

For relevant comparisons across ages and years, rates have been adjusted by direct standardisation to correct proportional differences in age, using the Australian population in 1991 as the standard. Age groups are presented in five-year bands up to an 85+ year age group. Rates not specified to be age standardised are crude rates or age-specific rates.

## 3.7 ICD-10-AM

This report is based on data coded according to the first edition of the Australian clinical modification of ICD-10, ICD-10-AM (National Centre for Classification in Health 1998).

The second and third editions of ICD-10-AM include changes that will improve the value of the data for injury surveillance. The second edition applies to separations from July 2000–June 2002, and the third edition applies from July 2002.

## 3.8 Trends

Valid reporting of trends over time in hospitalised injury is not easy to achieve. This is true of trends in hospitalised injury cases in general, and more so if interest is in trends in population incidence of injury. The change from ICD-9-CM to ICD-10-AM as the basis for classifying diagnoses and external causes of injury has been a further complication. These issues are discussed elsewhere (Cripps, Steenkamp et al. 2002; Harrison and Steenkamp 2002). A report now in preparation will present time series data in a way that is designed to maximise the validity of trend estimates.

## 4 References

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# 5 Appendices

**Table A5.1: Age-specific rates of injury separations from external causes by sex and M:F rate ratio; Australia 1999–00**

Age groups	Male	Female	Persons	M:F
	Rate	Rate	Rate	
0–4	2,089.5	1,605.5	1,853.7	1.3
5–9	1,906.7	1,331.5	1,626.6	1.4
10–14	2,361.2	1,075.9	1,734.3	2.2
15–19	3,344.5	1,423.9	2,408.2	2.3
20–24	3,427.6	1,371.8	2,420.5	2.5
25–29	3,056.8	1,321.0	2,193.4	2.3
30–34	2,572.6	1,282.9	1,926.5	2.0
35–39	2,204.0	1,261.8	1,732.2	1.7
40–44	1,941.4	1,306.8	1,623.6	1.5
45–49	1,789.2	1,246.3	1,517.8	1.4
50–54	1,762.0	1,394.5	1,581.1	1.3
55–59	1,909.7	1,520.5	1,718.3	1.3
60–64	2,097.2	1,770.8	1,934.4	1.2
65–69	2,405.0	2,209.1	2,305.0	1.1
70–74	2,935.6	3,131.2	3,039.4	0.9
75–79	4,023.4	4,706.8	4,412.5	0.9
80–84	5,398.2	7,186.8	6,496.7	0.8
85+	8,502.0	11,125.8	10,317.5	0.8
<b>All ages</b>	<b>2,513.8</b>	<b>1,831.5</b>	<b>2,171.1</b>	<b>1.4</b>

**Table A5.2: Age-specific rates and age-standardised rates of separations due to external causes in males, Australia 1999–00**

ICD-10-AM E-code	Age group																		All ages (crude)																		
	0–4		5–9		10–14		15–19		20–24		25–29		30–34		35–39		40–44		45–49		50–54		55–59		60–64		65–69		70–74		75–79		80–84		85+		
	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate			
Transportation	123.1	293.8	550.3	765.4	693.7	546.4	439.2	331.3	282.6	243.9	209.0	185.0	179.3	182.7	189.0	205.3	236.9	324.9	367.6	377.2																	
Near drowning	28.8	5.6	2.2	3.1	2.2	3.0	1.8	2.4	2.0	1.2	1.4	0.4	1.3	0.6	0.7	0.5	0.9	1.3	4.0	4.1																	
Poisoning, pharmaceutical	197.6	15.7	9.6	49.9	93.7	84.2	69.7	45.2	37.8	29.3	20.6	17.6	16.3	20.2	21.2	29.3	35.8	57.5	51.9	54.0																	
Poisoning, other substances	71.2	7.9	9.9	20.7	24.1	27.5	23.0	21.9	17.5	14.7	16.1	12.0	9.9	9.3	8.9	10.7	14.9	14.7	20.6	21.0																	
Falls	645.1	862.7	871.2	549.9	407.0	350.4	308.4	296.4	295.9	313.4	345.2	402.6	469.8	610.4	867.6	1,509.9	2,648.4	5,520.0	576.1	588.5																	
Fires/burns/scalds	153.6	33.1	39.1	50.7	57.4	39.7	42.3	31.2	29.8	24.0	22.4	24.5	21.0	18.1	20.5	29.8	31.5	32.1	42.4	43.7																	
Other unintentional	657.2	567.7	735.7	1,296.7	1,361.0	1,251.0	1,027.8	876.0	747.5	677.6	643.0	589.7	566.3	488.0	450.2	501.3	542.1	615.1	828.0	841.6																	
Intentional, self inflicted	0.5	0.4	14.3	109.1	179.6	191.5	180.8	164.2	117.3	94.5	67.9	59.2	37.1	28.0	31.8	34.0	36.7	46.8	91.5	92.8																	
Intentional, inflicted by another	33.9	10.0	41.4	337.8	406.8	341.0	255.4	205.9	156.8	100.9	75.3	54.5	43.6	25.6	26.0	18.2	13.1	33.4	153.0	158.5																	
Undetermined intent	7.1	4.8	7.7	22.6	33.4	30.3	25.3	20.5	17.8	15.3	11.4	7.3	5.2	5.1	5.1	6.1	2.6	13.4	15.7	16.0																	
Complications of medical and surgical care	171.4	105.1	79.8	138.7	168.9	191.8	198.8	208.9	236.5	274.6	349.7	556.8	747.4	1,016.8	1,314.4	1,678.4	1,835.3	1,842.7	363.0	361.6																	
<b>All external causes</b>	<b>2,089.5</b>	<b>1,906.7</b>	<b>2,361.2</b>	<b>3,344.5</b>	<b>3,427.6</b>	<b>3,056.8</b>	<b>2,572.6</b>	<b>2,204.0</b>	<b>1,941.4</b>	<b>1,789.2</b>	<b>1,762.0</b>	<b>1,909.7</b>	<b>2,097.2</b>	<b>2,405.0</b>	<b>2,935.6</b>	<b>4,023.4</b>	<b>5,398.2</b>	<b>8,502.0</b>	<b>2,513.8</b>	<b>2,559.0</b>																	

Note: Age not reported for one male case in the external cause group 'Transportation'.  
Rates per 100,000 population.

**Table A5.3: Age-specific rates and age-standardised rates of separations due to external causes in females, Australia 1999–00**

ICD-10-AM E-code	Age group																		All ages (crude)																		
	0–4		5–9		10–14		15–19		20–24		25–29		30–34		35–39		40–44		45–49		50–54		55–59		60–64		65–69		70–74		75–79		80–84		85+		
	Rate	Std	Rate	Std	Rate	Std	Rate	Std	Rate	Std	Rate	Std	Rate	Std	Rate	Std	Rate	Std	Rate	Std	Rate	Std	Rate	Std	Rate	Std	Rate	Std	Rate	Std	Rate	Std	Rate	Std			
Transportation	87.2	176.3	225.9	319.3	260.9	195.5	158.0	136.1	130.3	129.6	127.8	129.0	140.9	140.4	172.7	221.8	209.3	185.7	173.7	176.3																	
Near drowning	19.1	2.2	1.4	1.1	0.9	0.8	0.7	0.3	0.4	0.6	0.7	0.9	0.5	0.6	0.3	0.0	0.0	0.6	2.0	2.2																	
Poisoning, pharmaceutical	169.0	10.8	14.6	80.9	82.8	65.7	57.5	52.3	50.3	30.0	29.0	26.2	21.4	18.8	25.1	33.8	43.4	44.7	51.3	53.6																	
Poisoning, other substances	62.7	4.9	5.6	17.8	12.9	10.2	11.4	10.4	9.5	10.9	10.3	6.3	9.1	7.5	9.7	6.0	12.1	5.4	13.2	13.8																	
Falls	538.2	696.4	364.8	139.3	138.8	157.6	148.9	165.8	196.0	244.1	355.1	487.3	659.3	931.9	1,556.8	2,803.2	5,063.4	8,951.0	690.0	564.0																	
Fires/burns/scalds	107.1	19.0	13.0	13.3	15.7	12.5	11.0	11.7	11.6	9.4	10.4	7.6	12.5	6.9	15.8	19.7	30.2	35.1	19.4	20.0																	
Other unintentional	495.6	341.3	305.8	328.2	326.5	312.9	293.4	292.8	264.8	254.0	272.7	279.9	284.5	297.1	353.9	451.0	619.5	854.3	332.4	328.0																	
Intentional, self inflicted	0.6	0.2	55.2	288.3	246.4	224.8	203.5	211.1	190.4	138.2	100.8	59.2	45.8	31.5	28.2	35.9	40.1	32.7	129.0	133.5																	
Intentional, inflicted by another	26.0	5.9	12.4	76.9	111.4	116.1	119.7	92.0	65.2	39.4	27.5	13.2	11.5	9.2	10.9	9.5	15.4	21.4	53.1	55.6																	
Undetermined intent	5.5	1.4	5.9	31.7	23.9	28.4	22.0	20.6	17.1	12.7	8.6	9.3	6.3	5.8	5.5	7.4	4.9	6.0	14.3	14.9																	
Complications of medical and surgical care	94.5	73.3	71.2	127.1	151.4	196.5	256.9	268.8	371.2	377.3	451.5	501.6	579.1	759.4	952.3	1,118.5	1,148.5	988.9	353.1	322.2																	
<b>All external causes</b>	<b>1,605.5</b>	<b>1,331.5</b>	<b>1,075.9</b>	<b>1,423.9</b>	<b>1,371.8</b>	<b>1,321.0</b>	<b>1,282.9</b>	<b>1,261.8</b>	<b>1,306.8</b>	<b>1,246.3</b>	<b>1,394.5</b>	<b>1,520.5</b>	<b>1,770.8</b>	<b>2,209.1</b>	<b>3,131.2</b>	<b>4,706.8</b>	<b>7,186.8</b>	<b>11,125.8</b>	<b>1,831.5</b>	<b>1,684.1</b>																	

Note: Age not reported for one male case in the external cause group 'Transportation'.  
Rates per 100,000 population.

**Table A5.4: Age-specific rates and age-standardised rates of separations due to external causes in persons; Australia 1999–00**

ICD-10-AM E-code	Age group																All ages (crude)			
	0–4	5–9	10–14	15–19	20–24	25–29	30–34	35–39	40–44	45–49	50–54	55–59	60–64	65–69	70–74	75–79	80–84	85+	Rate	Rate
Transportation	105.6	236.6	392.1	547.9	481.7	371.9	298.3	233.5	206.3	186.7	169.1	157.5	160.1	161.1	180.4	214.7	219.9	228.6	270.2	277.8
Near drowning	24.1	3.9	1.8	2.1	1.5	1.9	1.3	1.3	1.2	0.9	1.1	0.6	0.9	0.6	0.5	0.2	0.3	0.8	3.0	3.2
Poisoning, pharmaceutical	183.7	13.3	12.0	65.0	88.4	75.0	63.6	48.8	44.0	29.6	24.7	21.9	18.8	19.5	23.3	31.9	40.5	48.6	51.6	53.8
Poisoning, other substances	67.0	6.5	7.8	19.3	18.7	18.9	17.2	16.1	13.5	12.8	13.2	9.2	9.5	8.4	9.3	8.0	13.2	8.2	16.9	17.4
Falls	593.0	781.8	624.2	349.7	275.6	254.5	228.5	231.0	245.9	278.7	350.1	444.3	564.4	774.6	1,233.2	2,246.2	4,131.7	7,894.1	633.3	589.9
Fires/burns/scalds	130.9	26.2	26.4	32.5	36.9	26.2	26.6	21.4	20.7	16.7	16.5	16.2	16.8	12.4	18.0	24.1	30.7	34.2	30.8	32.0
Other unintentional	578.5	457.4	526.0	824.5	854.2	784.4	659.9	584.0	505.7	465.9	460.7	437.3	425.7	390.5	399.1	472.7	589.7	780.6	579.1	587.9
Intentional, self inflicted	0.6	0.3	34.3	196.5	212.3	208.1	192.2	187.7	153.9	116.4	84.1	59.2	41.5	29.8	29.9	35.1	38.8	37.1	110.3	112.8
Intentional, inflicted by another	30.1	8.0	27.2	210.7	262.1	229.1	187.4	148.9	110.9	70.2	51.8	34.2	27.6	17.3	18.0	13.2	14.5	25.1	102.8	107.6
Undetermined intent	6.3	3.2	6.8	27.1	28.8	29.4	23.6	20.6	17.5	14.0	10.0	8.3	5.7	5.5	5.3	6.8	4.0	8.2	15.0	15.4
Complications of medical and surgical care	133.9	89.6	75.6	133.0	160.3	194.1	227.9	238.9	303.9	325.9	399.8	529.7	663.4	885.4	1,122.3	1,359.7	1,413.4	1,251.9	358.0	338.3
<b>All external causes</b>	<b>1,853.7</b>	<b>1,626.6</b>	<b>1,734.3</b>	<b>2,408.2</b>	<b>2,420.5</b>	<b>2,193.4</b>	<b>1,926.5</b>	<b>1,732.2</b>	<b>1,623.6</b>	<b>1,517.8</b>	<b>1,581.1</b>	<b>1,718.3</b>	<b>1,934.4</b>	<b>2,305.0</b>	<b>3,039.4</b>	<b>4,412.5</b>	<b>6,496.7</b>	<b>10,317.5</b>	<b>2,171.1</b>	<b>2,136.1</b>

Note: Rates per 100,000 population.

**Table A5.5: Principal diagnoses reported for injury separations from external causes: case counts and proportions by sex; Australia 1999–00**

Chapter XIX groups	ICD-10 code	Males		Females		Persons	
		Count	%	Count	%	Count	%
Injuries to the head	S00–S09	42,375	17.8	19,862	11.3	62,237	15.0
Injuries to the neck	S10–S19	3,515	1.5	2,285	1.3	5,800	1.4
Injuries to the thorax	S20–S29	8,129	3.4	5,631	3.2	13,761	3.3
Injuries to the abdomen, lower back, lumbar spine & pelvis	S30–S39	9,614	4.0	9,145	5.2	18,759	4.5
Injuries to the shoulder & upper arm	S40–S49	11,104	4.7	9,042	5.2	20,146	4.9
Injuries to the elbow & forearm	S50–S59	21,732	9.1	17,496	10.0	39,228	9.5
Injuries to the wrist & hand	S60–S69	34,154	14.3	9,659	5.5	43,813	10.6
Injuries to the hip & thigh	S70–S79	10,774	4.5	19,349	11.0	30,123	7.3
Injuries to the knee & lower leg	S80–S89	25,093	10.5	17,301	9.9	42,394	10.2
Injuries to the ankle & foot	S90–S99	7,459	3.1	4,257	2.4	11,716	2.8
Injuries involving multiple body regions	T00–T07	283	0.1	237	0.1	520	0.1
Injuries to unspecified parts of trunk, limb or body region	T08–T14	1,301	0.5	961	0.5	2,262	0.5
Effects of foreign body entering through natural orifice	T15–T19	3,888	1.6	2,563	1.5	6,451	1.6
Burns	T20–T32	4,883	2.0	2,099	1.2	6,982	1.7
Frostbite	T33–T35	5	0.0	-	0.0	5	0.0
Poisoning by drugs, medicaments & biological substances	T36–T50	12,278	5.2	17,181	9.8	29,459	7.1
Toxic effects of substances chiefly non-medicinal as to source	T51–T65	4,502	1.9	2,851	1.6	7,353	1.8
Other and unspecified effects of external causes	T66–T78	3,325	1.4	2,796	1.6	6,121	1.5
Certain early complications of trauma	T79	659	0.3	323	0.2	982	0.2
Comps of surgical & medical care, not elsewhere classified	T80–T88	33,116	13.9	32,117	18.3	65,233	15.8
Other comps of trauma not elsewhere classified	T89	167	0.1	71	0.0	238	0.1
Sequelae of injuries, of poisoning & of other consequences of external causes	T90–T98	34	0.0	30	0.0	64	0.0
<b>All principal diagnoses</b>	<b>S00–T98</b>	<b>238,390</b>	<b>100.0</b>	<b>175,256</b>	<b>100.0</b>	<b>413,647</b>	<b>100.0</b>



**Table A5.6: Principal diagnoses reported for injury separations from external causes: age-specific and age adjusted rates in males; Australia 1999-00**

Chapter XIX groups	Age group																		All ages (crude)																			
	0-4		5-9		10-14		15-19		20-24		25-29		30-34		35-39		40-44		45-49		50-54		55-59		60-64		65-69		70-74		75-79		80-84		85+		Age Std	Rate
	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate				
Injuries to the head	638.1	404.7	468.9	877.1	794.3	620.6	452.2	354.1	299.8	232.7	204.2	197.0	190.9	206.8	245.1	367.2	604.2	1,047.0	446.8	462.1																		
Injuries to the neck	12.0	17.3	34.1	70.1	64.8	61.1	49.8	38.6	30.5	28.6	25.2	22.2	14.5	26.2	26.0	36.3	35.8	72.2	37.1	37.9																		
Injuries to the thorax	8.0	9.4	19.6	71.4	91.9	81.8	91.2	85.2	85.9	82.2	94.1	105.5	113.4	125.1	150.0	226.2	349.7	583.0	85.7	85.8																		
Injuries to the abdomen, lower back, lumbar spine & pelvis	24.2	57.4	77.0	144.2	138.4	129.6	115.0	98.2	82.2	80.2	74.1	66.5	79.4	85.3	113.3	181.5	325.3	671.3	101.4	103.4																		
Injuries to the shoulder & upper arm	89.6	161.5	104.0	149.9	152.1	122.4	106.2	88.3	90.1	85.6	96.0	94.0	103.5	107.6	118.1	184.8	223.8	395.8	117.1	118.7																		
Injuries to the elbow & forearm	176.9	608.1	716.9	335.8	223.9	204.2	162.2	137.7	114.1	103.0	103.1	91.7	95.5	83.2	83.5	99.1	132.0	255.4	229.2	234.0																		
Injuries to the wrist & hand	158.7	132.9	254.8	625.1	730.1	629.2	499.3	405.2	335.8	311.7	272.4	249.0	221.0	183.9	159.2	153.1	140.8	172.5	360.1	367.0																		
Injuries to the hip & thigh	54.2	44.4	61.2	71.0	60.4	54.3	46.9	40.2	40.6	44.6	45.3	64.0	106.9	175.1	316.4	616.7	1,158.5	2,702.5	113.6	118.0																		
Injuries to the knee & lower leg	56.6	103.0	287.6	423.4	439.2	409.7	341.8	288.4	253.0	228.3	212.1	203.1	180.0	167.3	184.9	212.2	277.2	337.0	264.6	268.1																		
Injuries to the ankle & foot	56.2	80.2	93.7	110.5	110.7	101.4	92.2	84.6	74.1	65.1	64.5	59.8	56.8	46.1	44.5	47.0	42.8	60.2	78.7	79.5																		
Injuries involving multiple body regions	2.1	1.0	2.2	4.2	5.1	4.0	3.7	2.9	3.2	3.1	2.6	0.8	2.1	0.6	2.4	3.3	3.5	17.4	3.0	3.0																		
Injuries to unspecified parts of trunk, limb or body region	7.5	5.3	11.1	16.8	18.4	18.9	13.6	14.7	11.7	12.6	12.1	12.2	13.2	13.0	11.6	26.1	35.0	37.4	13.7	13.8																		
Effects of foreign body entering through natural orifice	121.5	66.3	25.4	22.7	22.1	22.6	25.0	32.8	29.6	29.5	33.1	36.9	42.8	49.7	64.4	59.6	68.2	74.9	41.0	41.4																		

(continued)

**Table A5.6 (continued): Principal diagnoses reported for injury separations from external causes: age-specific and age adjusted rates in males; Australia 1999-00**

Chapter XIX groups	Age group																	All ages (crude)		
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+	Rate	Rate
	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate
Burns	160.2	38.2	45.4	61.8	71.4	52.5	58.1	45.0	40.7	30.7	32.2	32.3	27.5	21.7	22.9	29.8	33.2	24.1	51.5	52.8
Frostbite	0.2	0.0	0.0	0.0	0.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.1	0.1
Poisoning by drugs, medicaments & biological substances	201.3	17.0	22.8	140.6	236.5	238.2	213.7	180.0	136.6	111.2	81.8	66.5	54.0	51.2	58.2	79.1	89.2	135.1	129.5	132.5
Toxic effects of substances chiefly non-medicinal as to source	84.7	34.0	36.5	49.4	57.0	61.0	57.5	55.8	50.3	46.1	36.8	33.1	25.7	31.4	27.0	25.1	33.2	41.5	47.5	48.0
Other and unspecified effects of external causes	75.8	21.5	18.5	27.7	37.2	50.0	41.3	33.9	25.0	20.7	25.4	28.1	31.9	35.0	32.5	48.9	62.1	101.6	35.1	35.8
Certain early complications of trauma	2.0	2.2	4.0	9.0	11.4	9.7	9.2	7.2	8.0	8.2	3.9	4.8	9.1	6.0	5.5	7.9	11.4	16.0	6.9	7.1
Complications of surgical & medical care, not elsewhere classified	159.3	100.4	75.0	131.1	158.7	182.4	191.9	199.0	228.0	263.6	340.7	540.2	726.7	989.1	1,268.5	1,616.5	1,771.4	1,755.8	349.2	347.8
Other complications of trauma not elsewhere classified	0.5	2.0	2.2	2.2	2.9	2.4	1.7	1.7	2.0	0.9	2.3	1.5	1.6	0.3	0.7	2.3	0.9	1.3	1.8	1.8
Sequelae of injuries, of poisoning & of other consequences of external causes	0.0	0.0	0.3	0.3	1.0	0.5	0.3	0.5	0.1	0.4	0.2	0.4	0.8	0.0	0.7	0.5	0.0	0.0	0.4	0.4
<b>All principal diagnoses</b>	<b>2,089.5</b>	<b>1,906.7</b>	<b>2,361.2</b>	<b>3,344.5</b>	<b>3,427.6</b>	<b>3,056.8</b>	<b>2,572.6</b>	<b>2,204.0</b>	<b>1,941.4</b>	<b>1,789.2</b>	<b>1,762.0</b>	<b>1,909.7</b>	<b>2,097.2</b>	<b>2,405.0</b>	<b>2,935.6</b>	<b>4,023.4</b>	<b>5,398.2</b>	<b>8,502.0</b>	<b>2,513.8</b>	<b>2,559.0</b>

Note: Rates per 100,000 population.

**Table A5.7: Principal diagnoses reported for injury separations from external causes: age-specific and age adjusted rates in females; Australia 1999-00**

Chapter XIX groups	Age group																		All ages (crude)																			
	0-4		5-9		10-14		15-19		20-24		25-29		30-34		35-39		40-44		45-49		50-54		55-59		60-64		65-69		70-74		75-79		80-84		85+		Rate	Rate
	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate				
Injuries to the head	481.7	236.6	167.7	260.4	220.7	185.0	161.7	147.0	118.9	96.8	96.0	86.7	91.7	108.9	171.8	310.2	573.4	1,064.5	207.6	203.2																		
Injuries to the neck	6.8	11.6	20.3	40.0	38.4	30.5	25.2	25.7	20.3	19.6	21.7	14.5	17.7	17.0	23.3	31.7	36.8	53.0	23.9	23.7																		
Injuries to the thorax	4.0	6.8	9.3	35.1	40.0	34.3	34.6	38.2	39.7	42.8	48.6	54.0	66.7	85.0	133.9	211.6	326.2	548.9	58.8	50.3																		
Injuries to the abdomen, lower back, lumbar spine & pelvis	28.4	41.8	42.2	76.0	72.4	65.4	57.2	47.3	48.1	43.7	50.1	52.5	49.0	76.6	173.0	316.9	627.2	1,166.3	95.6	80.5																		
Injuries to the shoulder & upper arm	95.3	153.6	46.4	34.2	38.2	32.8	27.5	30.3	28.6	36.8	49.1	74.1	88.3	152.9	213.9	340.1	587.1	784.7	94.5	82.9																		
Injuries to the elbow & forearm	138.1	487.5	297.9	66.4	64.1	76.5	73.8	68.4	69.7	87.0	124.5	168.4	212.8	256.0	343.3	490.1	575.1	724.5	182.8	173.2																		
Injuries to the wrist & hand	116.6	80.3	94.0	125.4	136.4	131.0	114.4	107.3	98.8	91.5	84.7	76.7	76.1	60.7	69.7	75.7	89.5	124.4	100.9	102.3																		
Injuries to the hip & thigh	34.1	18.0	25.3	20.7	14.9	14.8	13.5	14.2	16.6	22.9	37.1	59.2	124.5	227.1	515.1	1,093.2	2,256.3	4,385.3	202.2	141.6																		
Injuries to the knee & lower leg	38.4	60.9	112.3	140.2	137.3	141.2	137.9	133.9	144.5	148.4	181.1	214.6	253.2	282.9	337.2	470.4	626.7	858.5	180.8	166.4																		
Injuries to the ankle & foot	39.4	50.9	51.8	41.8	44.3	38.4	39.7	36.3	33.7	33.2	37.0	48.8	43.5	44.8	51.2	61.6	89.0	122.0	44.5	43.5																		
Injuries involving multiple body regions	1.0	0.9	1.9	2.8	3.3	3.4	2.8	2.0	1.5	0.9	1.5	1.1	1.6	2.0	1.8	6.7	6.6	19.1	2.5	2.3																		
Injuries to unspecified parts of trunk, limb or body region	5.0	4.9	4.7	8.7	8.0	8.0	8.0	10.9	7.1	8.1	9.0	8.5	9.1	6.1	14.5	24.3	40.6	68.5	10.0	9.1																		
Effects of foreign body entering through natural orifice	120.3	43.0	15.5	11.3	7.7	10.2	9.6	12.1	11.7	18.1	21.2	21.2	29.7	37.0	32.4	38.7	46.7	62.5	26.8	26.8																		

(continued)

**Table A5.7 (continued): Principal diagnoses reported for injury separations from external causes: age-specific and age adjusted rates in females; Australia 1999-00**

Chapter XIX groups	Age group																		All ages (crude)																			
	0-4		5-9		10-14		15-19		20-24		25-29		30-34		35-39		40-44		45-49		50-54		55-59		60-64		65-69		70-74		75-79		80-84		85+		Rate	Rate
	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate		
Burns	112.1	21.1	15.4	16.1	17.9	16.6	14.6	15.6	14.6	15.6	14.6	13.0	13.9	9.5	13.8	6.9	14.8	20.8	23.6	32.1	21.9	22.7																
Frostbite	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0																
Poisoning by drugs, medicaments & biological substances	172.5	11.9	64.1	356.8	316.7	282.6	248.2	260.0	236.7	166.4	129.2	92.8	74.5	62.1	67.0	92.6	112.6	113.7	179.5	185.3																		
Toxic effects of substances chiefly non-medicinal as to source	72.4	17.1	23.9	41.1	29.7	29.1	35.2	30.5	27.6	27.0	26.7	21.7	26.3	18.5	18.2	16.9	21.4	17.3	29.8	30.6																		
Other and unspecified effects of external causes	51.0	11.7	12.7	23.9	34.3	28.8	25.5	21.5	27.0	23.5	26.2	28.2	32.8	33.2	35.1	39.1	74.1	83.9	29.2	28.5																		
Certain early complications of trauma	1.9	2.0	1.2	3.2	4.4	3.8	4.2	2.0	2.0	2.7	2.3	4.1	2.6	3.8	3.9	8.4	12.1	11.9	3.4	3.2																		
Complications of surgical & medical care, not elsewhere classified	85.8	69.9	68.4	118.8	141.8	187.1	248.9	258.0	358.6	362.8	433.9	482.1	556.2	726.7	908.4	1,056.2	1,058.4	882.3	335.6	306.9																		
Other complications of trauma not elsewhere classified	0.3	0.9	0.8	0.5	1.1	1.4	0.3	0.3	0.6	0.6	0.2	0.4	0.5	0.9	2.1	1.1	2.2	2.4	0.7	0.7																		
Sequelae of injuries, of poisoning & of other consequences of external causes	0.2	0.0	0.0	0.5	0.2	0.0	0.1	0.4	0.4	0.3	0.7	1.3	0.3	0.0	0.3	0.7	1.1	0.0	0.3	0.3																		
<b>All principal diagnoses</b>	<b>1,605.5</b>	<b>1,331.5</b>	<b>1,075.9</b>	<b>1,423.9</b>	<b>1,371.8</b>	<b>1,321.0</b>	<b>1,282.9</b>	<b>1,261.8</b>	<b>1,306.8</b>	<b>1,246.3</b>	<b>1,394.5</b>	<b>1,520.5</b>	<b>1,770.8</b>	<b>2,209.1</b>	<b>3,131.2</b>	<b>4,706.8</b>	<b>7,186.8</b>	<b>11,125.8</b>	<b>1,831.5</b>	<b>1,684.1</b>																		

Note: Rates per 100,000 population.

**Table A5.8: Principal diagnoses reported for injury separations from external causes: age-specific and age adjusted rates in persons; Australia 1999–00**

Chapter XIX groups	Age group																		All ages (crude)																			
	0–4		5–9		10–14		15–19		20–24		25–29		30–34		35–39		40–44		45–49		50–54		55–59		60–64		65–69		70–74		75–79		80–84		85+		Rate	Rate
	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate				
Injuries to the head	561.9	322.8	322.0	576.4	513.3	403.9	306.7	250.4	209.2	164.7	150.9	142.8	141.4	156.8	206.2	334.8	585.3	1,059.1	326.7	334.2																		
Injuries to the neck	9.4	14.5	27.4	55.4	51.8	45.9	37.5	32.1	25.4	24.1	23.5	18.4	16.1	21.5	24.6	33.7	36.4	58.9	30.4	30.8																		
Injuries to the thorax	6.1	8.1	14.6	53.7	66.5	58.2	62.9	61.7	62.8	62.5	71.7	80.2	90.1	104.6	141.5	217.9	335.3	559.4	72.2	68.0																		
Injuries to the abdomen, lower back, lumbar spine & pelvis	26.3	49.8	60.0	111.0	106.1	97.7	86.0	72.7	65.1	62.0	62.3	59.6	64.2	80.9	145.0	258.6	510.7	1,013.8	98.5	93.7																		
Injuries to the shoulder & upper arm	92.4	157.6	75.9	93.5	96.3	77.8	66.7	59.3	59.3	61.2	72.9	84.2	95.9	130.7	168.9	273.2	447.0	664.9	105.7	102.7																		
Injuries to the elbow & forearm	158.0	549.3	512.6	204.4	145.7	140.6	117.9	103.0	91.9	95.0	113.6	129.4	154.0	171.4	221.3	321.7	404.1	580.0	205.9	206.8																		
Injuries to the wrist & hand	138.2	107.3	176.4	381.5	439.2	381.4	306.4	256.0	217.1	201.6	180.0	164.3	148.7	121.0	111.7	109.0	109.3	139.2	230.0	235.6																		
Injuries to the hip & thigh	44.4	31.5	43.7	46.5	38.1	34.7	30.2	27.2	28.6	33.8	41.3	61.6	115.7	201.7	421.8	888.0	1,832.7	3,866.9	158.1	135.5																		
Injuries to the knee & lower leg	47.8	82.5	202.1	285.4	291.3	276.2	239.6	216.1	198.7	188.4	196.8	208.7	216.5	226.3	265.7	359.2	491.8	697.8	222.5	220.0																		
Injuries to the ankle & foot	48.0	65.9	73.3	77.0	78.2	70.1	65.9	60.4	53.9	49.2	50.9	54.4	50.2	45.4	48.1	55.3	71.2	103.0	61.5	62.0																		
Injuries involving multiple body regions	1.6	1.0	2.0	3.5	4.2	3.7	3.2	2.5	2.4	2.0	2.0	1.0	1.8	1.3	2.1	5.2	5.4	18.5	2.7	2.7																		
Injuries to unspecified parts of trunk, limb or body region	6.3	5.1	7.9	12.9	13.3	13.5	10.8	12.8	9.4	10.3	10.5	10.3	11.2	9.4	13.2	25.1	38.5	58.9	11.9	11.6																		
Effects of foreign body entering through natural orifice	121.0	55.0	20.6	17.2	15.0	16.4	17.3	22.4	20.7	23.8	27.3	29.2	36.3	43.2	47.4	47.7	55.0	66.3	33.9	34.0																		

(continued)

Table A5.8 (continued): Principal diagnoses reported for injury separations from external causes: age-specific and age adjusted rates in persons; Australia 1999-00

Chapter XIX groups	Age group																		All ages (crude)		
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+	Rate	Rate	
	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate
Burns	136.8	29.9	30.7	39.5	45.2	34.7	36.3	30.2	27.6	21.9	23.2	21.1	20.7	14.2	18.6	24.7	27.3	29.7	29.7	36.6	37.9
Frostbite	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Poisoning by drugs, medicaments & biological substances	187.3	14.5	42.9	246.0	275.8	260.3	230.9	220.0	186.7	138.8	105.1	79.4	64.2	56.8	62.9	86.8	103.6	120.3	154.6	158.6	158.6
Toxic effects of substances chiefly non-medicinal as to source	78.7	25.8	30.3	45.4	43.6	45.1	46.4	43.1	39.0	36.5	31.8	27.5	26.0	24.8	22.3	20.4	26.0	24.7	38.6	39.3	39.3
Other and unspecified effects of external causes	63.7	16.7	15.7	25.9	35.8	39.5	33.4	27.7	26.0	22.1	25.8	28.1	32.4	34.1	33.9	43.3	69.5	89.4	32.1	32.1	32.2
Certain early complications of trauma	2.0	2.1	2.6	6.2	8.0	6.8	6.7	4.6	5.0	5.5	3.1	4.5	5.8	4.9	4.7	8.2	11.8	13.2	5.2	5.1	5.1
Comps of surgical & medical care, not elsewhere classified	123.5	85.5	71.8	125.1	150.4	184.7	220.4	228.6	293.4	313.2	386.6	511.6	641.6	855.1	1,077.5	1,297.5	1,333.5	1,151.4	342.4	323.6	323.6
Other comps of trauma not elsewhere classified	0.4	1.5	1.5	1.3	2.0	1.9	1.0	1.0	1.3	0.7	1.2	1.0	1.0	0.6	1.4	1.6	1.7	2.1	1.2	1.2	1.3
Sequelae of injuries, of poisoning & of other consequences of external causes	0.1	0.0	0.2	0.4	0.6	0.3	0.2	0.5	0.3	0.4	0.4	0.4	0.5	0.0	0.5	0.6	0.7	0.0	0.3	0.3	0.3
<b>All principal diagnoses</b>	<b>1,853.7</b>	<b>1,626.6</b>	<b>1,734.3</b>	<b>2,408.2</b>	<b>2,420.5</b>	<b>2,193.4</b>	<b>1,926.5</b>	<b>1,732.2</b>	<b>1,623.6</b>	<b>1,517.8</b>	<b>1,581.1</b>	<b>1,718.3</b>	<b>1,934.4</b>	<b>2,305.0</b>	<b>3,039.4</b>	<b>4,412.5</b>	<b>6,496.7</b>	<b>10,317.5</b>	<b>2,171.1</b>	<b>2,136.1</b>	<b>2,136.1</b>

Note: Rates per 100,000 population

**Table A5.9: Hospital separations due to external causes by State or Territory of residence; Australia 1999–00: case counts, age adjusted rates and 95% confidence intervals**

State or Territory of residence	'Same day' cases excluded				'Same day' cases			
	Count	Rate	95% CI range		Count	Rate	95% CI range	
New South Wales	98,235	1,468.2	1,459.0	1,477.4	36,462	575.2	569.3	581.1
Victoria	65,805	1,324.3	1,314.1	1,334.4	28,904	614.1	607.1	621.2
Queensland	56,786	1,585.6	1,572.6	1,598.7	32,215	926.5	916.4	936.6
Western Australia	25,036	1,591.6	1,574.2	1,609.0	8,896	657.1	471.4	490.8
South Australia	32,194	1,573.9	1,554.4	1,593.4	9,417	481.1	643.5	670.8
Tasmania	6,720	1,378.0	1,345.0	1,410.9	1,852	407.7	389.2	426.3
Australian Capital Territory	3,933	977.4	941.6	1,013.1	831	200.2	248.1	289.1
Northern Territory	2,869	2,158.3	2,090.9	2,225.8	661	268.6	186.6	213.8
State of residence not reported	1,852	##	##	##	##	##	##	##
<b>Australia</b>	<b>293,430</b>	<b>1,523.6</b>	<b>1,518.1</b>	<b>1,529.2</b>	<b>120,097</b>	<b>614.9</b>	<b>611.5</b>	<b>618.4</b>

Note: Data were missing for 120 separations.

## INJURY RESEARCH & STATISTICS

This statistical report on national hospital separations due to injury and poisoning focuses mainly on data for the financial year 1999-00. It includes information on external causes of injury and principal diagnoses of injuries treated during hospitalisation.

The report will be relevant to those interested in national hospitalisations due to injury and poisoning, including community practitioners, health planners and administrators, and the public. The data issues section will also be important for academic and health researchers who utilise hospital separations data.

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