

4 Intentional injury

Intentional injuries include those that are classed as self-inflicted (self-harm) and those that are caused, on purpose, by another person (assault). This report also groups injuries of undetermined intent as 'intentional' injuries. Fewer than one in seven community injury cases separating from hospital in 2004–05 were due to intentional external causes (13.6%, $n = 48,305$). The age-standardised rate of intentional injury cases was 241.0 per 100,000 population. A slightly higher proportion of intentional injury cases involved males (53.8%, $n = 26,001$) and, accordingly, males had a higher rate of hospitalised intentional injuries (258.6 per 100,000) than females (223.6 per 100,000, a M:F rate ratio of 1.2 to 1).

4.1 Intentional self-harm cases

ICD-10-AM inclusion criteria:

- Principal diagnosis [S00–T75](#) or [T79](#), and
- First external cause [X60–X84](#) or [Y87.0](#), and
- Mode of admission other than 'transfer from another acute hospital'.

Table 4.1: Key indicators for hospitalised intentional self-harm injury: males, females and persons, Australia 2004–05

Key indicators	Males	Females	Persons
Total number of hospital separations due to intentional self-harm injury	9,548	15,535	25,083
Intentional self-harm separations as proportion of all community injury separations	4.3%	9.7%	6.5%
Estimated number of intentional self-harm injury cases ^(a)	9,017	14,866	23,883
Cases per 100,000 population	89.7	146.3	118.2
Cases per 100,000 population—age-standardised ^(b)	89.9	148.9	118.9
Total patient-days due to intentional self-harm injury ^(c)	28,748	37,848	66,596
Mean patient-days per case	3.2	2.5	2.8

(a) Excludes records with a mode of admission of 'transfer from another acute hospital'.

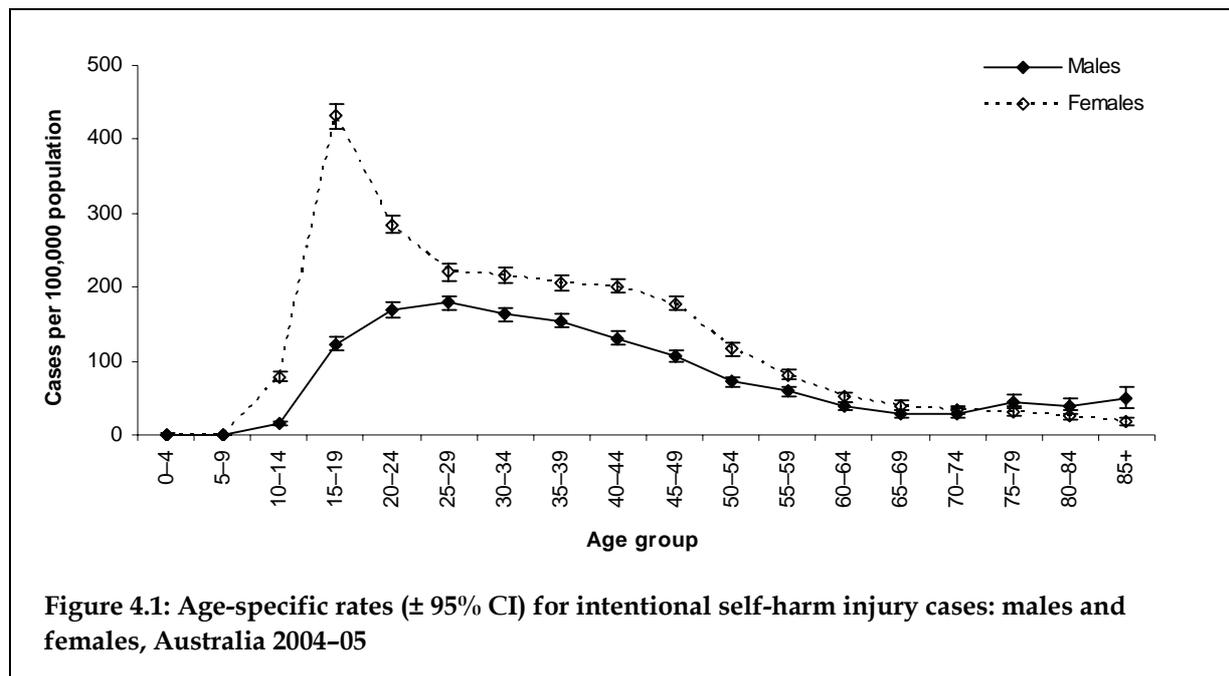
(b) Standardised to the Australian estimated resident population 30th June 2001.

(c) Includes records with a mode of admission of 'transfer from another acute hospital' as contributing to hospital burden due to injury.

An estimated 23,883 hospitalised injury cases were due to intentional self-harm in 2004–05 (Table 4.1). The age-standardised rate of hospitalised self-harm cases was 118.9 per 100,000 population.

Self-harm—age and sex

Unlike most other types of hospitalised community injury, a higher proportion of intentional self-harm cases involved females (62.2%, $n = 14,866$). Accordingly, females had a higher age-standardised rate of self-harm injuries (148.9 per 100,000 population) than males (89.9 per 100,000). The highest age-specific rate for cases of hospitalised self-harm was 431.1 per 100,000 population for females aged 15–19 years and this was a much higher rate than observed for either females 10–14 years or 20–24 years (Figure 4.1). On the other hand, rates of hospitalised self-harm were highest for males aged 25–29 years (178.7 per 100,000), but this rate was not that much higher than observed for males a little younger or a little older. Rates of hospitalised self-harm for females were significantly higher than those for males between the ages of 10–59 years.



Self-harm—external cause

Three specific external cause codes, X60, X61 and X78, accounted for three-quarters of all hospitalised self-harm cases in 2004–05 (77.9%, $n = 18,613$). Nearly half of all hospitalised self-harm cases (45.8%, $n = 10,931$) were due to self-poisoning by antiepileptic, sedative-hypnotic, anti-parkinsonism or psychotropic drugs (X61, e.g. antidepressants, barbiturates and tranquilisers). The group of drugs (external cause X41) was also the leading cause of cases of hospitalised accidental poisoning by pharmaceuticals (see previous section). A slightly higher proportion of female self-harm cases involved antiepileptic, sedative-hypnotic, anti-parkinsonism or psychotropic drugs (47.6%) than male cases (42.7%, Table 4.2). X61 was the most frequent external cause code assigned to self-harm cases for all age groups other than for children aged 0–14 years.

Self-poisoning by non-opioid analgesics, antipyretics and anti-rheumatics (X60, 19.2%) was the second most common cause attributed to hospitalised self-harm cases. Self-harm due to these drugs was far more common for females than for males (23.5% of cases vs. 12.3%, respectively) and this was the leading cause of cases involving children aged 0–14 years.

The third most common first external cause for self-harm cases was self-harm by sharp object (X78), accounting for 12.9% of all self-harm cases requiring hospitalisation. For cases of this type, however, cases involving males were proportionately more common than cases involving females (16.4% of male self-harm cases vs. 10.8% for females). Markedly higher proportions of self-harm cases for males were also attributed to self-poisoning by other gases and vapours (e.g. vehicle exhaust) and hanging than for cases involving females.

Table 4.2: First external cause for intentional self-harm cases: males, females and persons, Australia 2004–05

External cause	Males	Females	Persons
Self-poisoning: non-opioid analgesics, antipyretics & anti-rheumatics (X60)	1,105 (12.3%)	3,490 (23.5%)	4,595 (19.2%)
Self-poisoning: antiepileptic, sedative-hypnotic, anti-parkinsonism & psychotropic drugs, not elsewhere classified (X61)	3,854 (42.7%)	7,077 (47.6%)	10,931 (45.8%)
Self-poisoning: narcotics & psychodysleptics [hallucinogens], not elsewhere classified (X62)	534 (5.9%)	641 (4.3%)	1,175 (4.9%)
Self-poisoning: other drugs acting on the autonomic nervous system (X63)	105 (1.2%)	133 (0.9%)	238 (1.0%)
Self-poisoning: other & unspecified drugs, medicaments & biological substances (X64)	596 (6.6%)	1,033 (6.9%)	1,629 (6.8%)
Self-poisoning: alcohol (X65)	130 (1.4%)	182 (1.2%)	312 (1.3%)
Self-poisoning: organic solvents & halogenated hydrocarbons & their vapours (X66)	30 (0.3%)	27 (0.2%)	57 (0.2%)
Self-poisoning: other gases & vapours (X67)	287 (3.2%)	106 (0.7%)	393 (1.6%)
Self-poisoning: pesticides (X68)	81 (0.9%)	43 (0.3%)	124 (0.5%)
Self-poisoning: other & unspecified chemicals & noxious substances (X69)	120 (1.3%)	161 (1.1%)	281 (1.2%)
Self-harm by hanging, strangulation & suffocation (X70)	306 (3.4%)	128 (0.9%)	434 (1.8%)
Self-harm by drowning & submersion (X71)	9 (0.1%)	13 (0.1%)	22 (0.1%)
Self-harm by smoke, fire & flames (X76)	35 (0.4%)	25 (0.2%)	60 (0.3%)
Self-harm by sharp object (X78)	1,480 (16.4%)	1,607 (10.8%)	3,087 (12.9%)
Self-harm by blunt object (X79)	32 (0.4%)	7 (0.0%)	39 (0.2%)
Self-harm by jumping from a high place (X80)	56 (0.6%)	41 (0.3%)	97 (0.4%)
Self-harm by jumping or lying before moving object (X81)	37 (0.4%)	23 (0.2%)	60 (0.3%)
Self-harm by crashing of motor vehicle (X82)	32 (0.4%)	22 (0.1%)	54 (0.2%)
Self-harm by other specified means (X83)	107 (1.2%)	57 (0.4%)	164 (0.7%)
Self-harm by unspecified mean (X84)	27 (0.3%)	37 (0.2%)	64 (0.3%)
Other self-harm (X72–X75, X77 & Y87)	54 (0.6%)	13 (0.1%)	67 (0.3%)
Total	9,017	14,866	23,883

Self-harm—place and activity

Sixty per cent of all hospitalised intentional self-harm cases in 2004–05 occurred in the home (59.5%, $n = 14,214$). A further 31.4% of cases had ‘unspecified’ recorded as the place of occurrence. Together, these place categories accounted for more than nine in ten hospitalised cases.

A slightly higher proportion of intentional self-harm cases involving females (62.3%) were reported to have occurred in the home than for cases involving males (55.0%, Table 4.3).

Conversely, a higher proportion of cases involving males had an unspecified place of occurrence reported (34.1%) than for cases involving females (29.8%). Only small proportions of cases for both males and females were reported to have occurred in other specified places.

Similarly, nearly three-quarters of hospitalised intentional self-harm cases in 2004–05 were reported to have occurred while engaged in ‘other specified activities’, for which no further detail is available (72.6%, Table 4.4). A further 26.7% of cases ($n = 6,385$) had ‘unspecified activity’ recorded for the incident or did not have any activity code recorded. This pattern of activity coding was similar for both males and females and was not entirely surprising given the type of injury.

Table 4.3: Place of occurrence for intentional self-harm cases: males, females and persons, Australia 2004–05

Place of occurrence	Males	Females	Persons
Home	4,955 (55.0%)	9,259 (62.3%)	14,214 (59.5%)
Residential institution	155 (1.7%)	138 (0.9%)	293 (1.2%)
School	20 (0.2%)	90 (0.6%)	110 (0.5%)
Health service area	181 (2.0%)	375 (2.5%)	556 (2.3%)
Other specified institution & public administrative area	24 (0.3%)	36 (0.2%)	60 (0.3%)
Sports & athletics area	8 (0.1%)	7 (0.0%)	15 (0.1%)
Street & highway	191 (2.1%)	105 (0.7%)	296 (1.2%)
Trade & service area	154 (1.7%)	158 (1.1%)	312 (1.3%)
Industrial & construction area	7 (0.1%)	8 (0.1%)	15 (0.1%)
Other specified place of occurrence	225 (2.5%)	238 (1.6%)	463 (1.9%)
Unspecified place of occurrence	3,079 (34.1%)	4,423 (29.8%)	7,502 (31.4%)
Place not reported/not applicable	18 (0.2%)	29 (0.2%)	47 (0.2%)
Total	9,017	14,866	23,883

Table 4.4: Activity at time of occurrence for intentional self-harm cases: males, females and persons, Australia 2004–05

Activity	Males	Females	Persons
While engaged in sport	* (0.1%)	* (0.0%)	9 (0.0%)
While engaged in leisure	24 (0.3%)	20 (0.1%)	44 (0.2%)
While working for income	17 (0.2%)	14 (0.1%)	31 (0.1%)
While engaged in other types of work	* (0.0%)	* (0.1%)	15 (0.1%)
While resting, sleeping, eating, etc.	17 (0.2%)	39 (0.3%)	56 (0.2%)
Other specified activity	6,578 (73.0%)	10,765 (72.4%)	17,343 (72.6%)
Unspecified activity	2,342 (26.0%)	3,940 (26.5%)	6,282 (26.3%)
Activity not reported/not applicable	30 (0.3%)	73 (0.5%)	103 (0.4%)
Total	9,017	14,866	23,883

* Small cell counts have been suppressed.

Self-harm—principal diagnosis

Nearly eight in ten hospitalised self-harm cases in 2004–05 were assigned principal diagnosis codes for poisoning by drugs, medicaments and biological substances (78.0%, $n = 18,636$). This is congruent with the previous analysis of external cause for self-harm cases, which found that 82.6% of cases were due to some form of self-poisoning. A substantially higher proportion of cases involving females had principal diagnoses of this type (83.6%) than cases involving males (68.9%, Table 4.5). Poisoning by drugs, medicaments and biological substances was also the most common principal diagnosis for self-harm cases for every age group.

Similarly, the majority of injuries resulting from intentional self-harm cases were described as being poisoning/toxic effects in nature (82.5%, Table 4.6). One in ten hospitalised intentional self-harm cases were open wounds (10.2%) and unlike most other types of community injuries, fractures accounted for less than one per cent of self-harm cases (0.9%). Injuries of a specific physical nature (e.g. open wounds, fractures, muscle or tendon damage) were proportionately more common for males.

Given the predominance of poisoning as the first external cause and/or principal diagnosis for hospitalised intentional self harm, it is not surprising that the majority of cases were described as being 'other injuries not specified by body region' (84.9%, $n = 20,281$). A further ten per cent of cases were described as injuries to the shoulder and upper limb (10.0%, $n = 2,400$).

Table 4.5: Principal diagnosis for intentional self-harm cases: males, females and persons, Australia 2004–05

Principal diagnosis	Males	Females	Persons
Injuries to the head	171 (1.9%)	71 (0.5%)	242 (1.0%)
Injuries to the neck	179 (2.0%)	90 (0.6%)	269 (1.1%)
Injuries to the thorax	91 (1.0%)	41 (0.3%)	132 (0.6%)
Injuries to the abdomen, lower back, lumbar spine & pelvis	186 (2.1%)	127 (0.9%)	313 (1.3%)
Injuries to the shoulder & upper arm	44 (0.5%)	29 (0.2%)	73 (0.3%)
Injuries to the elbow & forearm	399 (4.4%)	512 (3.4%)	911 (3.8%)
Injuries to the wrist & hand	669 (7.4%)	747 (5.0%)	1,416 (5.9%)
Injuries to the hip & thigh	36 (0.4%)	66 (0.4%)	102 (0.4%)
Injuries to the knee & lower leg	58 (0.6%)	51 (0.3%)	109 (0.5%)
Injuries to the ankle & foot	25 (0.3%)	10 (0.1%)	35 (0.1%)
Injuries involving multiple body regions	13 (0.1%)	21 (0.1%)	34 (0.1%)
Injuries to unspecified parts of trunk, limb or body region	38 (0.4%)	49 (0.3%)	87 (0.4%)
Burns	56 (0.6%)	50 (0.3%)	106 (0.4%)
Poisoning by drugs, medicaments & biological substances	6,210 (68.9%)	12,426 (83.6%)	18,636 (78.0%)
Toxic effects of non-medical substances	622 (6.9%)	456 (3.1%)	1,078 (4.5%)
Other & unspecified effects of ext causes	201 (2.2%)	109 (0.7%)	310 (1.3%)
Certain early complications of trauma	10 (0.1%)	8 (0.1%)	18 (0.1%)
Total *	9,017	14,866	23,883

* Totals include 12 cases from categories too small to publish.

Table 4.6: Nature of injury diagnosis for intentional self-harm cases: males, females and persons, Australia 2004–05

Nature of injury	Males	Females	Persons
Superficial (excluding eye)	135 (1.5%)	131 (0.9%)	266 (1.1%)
Open wound (excluding eye)	1,108 (12.3%)	1,340 (9.0%)	2,448 (10.2%)
Fracture (excluding tooth)	145 (1.6%)	61 (0.4%)	206 (0.9%)
Dislocation	* (0.0%)	* (0.0%)	7 (0.0%)
Nerve (including spinal cord; excluding brain)	52 (0.6%)	33 (0.2%)	85 (0.4%)
Blood vessel	89 (1.0%)	26 (0.2%)	115 (0.5%)
Muscle/tendon	147 (1.6%)	99 (0.7%)	246 (1.0%)
Amputation (including partial)	* (0.1%)	* (0.0%)	15 (0.1%)
Internal organ	89 (1.0%)	31 (0.2%)	120 (0.5%)
Burn/corrosion (excluding eye)	56 (0.6%)	50 (0.3%)	106 (0.4%)
Eye injury (excluding foreign body in external eye)	* (0.0%)	* (0.0%)	5 (0.0%)
Foreign body: aliment tract	* (0.1%)	* (0.0%)	12 (0.1%)
Intracranial (including concussion)	50 (0.6%)	23 (0.2%)	73 (0.3%)
Drowning, immersion	5 (0.1%)	14 (0.1%)	19 (0.1%)
Asphyxia/threat to breathing	181 (2.0%)	89 (0.6%)	270 (1.1%)
Poison/toxic effect (excluding bite)	6,832 (75.8%)	12,882 (86.7%)	19,714 (82.5%)
Other specified nature of injury	35 (0.4%)	21 (0.1%)	56 (0.2%)
Unspecified nature of injury	60 (0.7%)	47 (0.3%)	107 (0.4%)
Injuries of more than one nature	* (0.0%)	* (0.0%)	5 (0.0%)
Total †	9,017	14,866	23,883

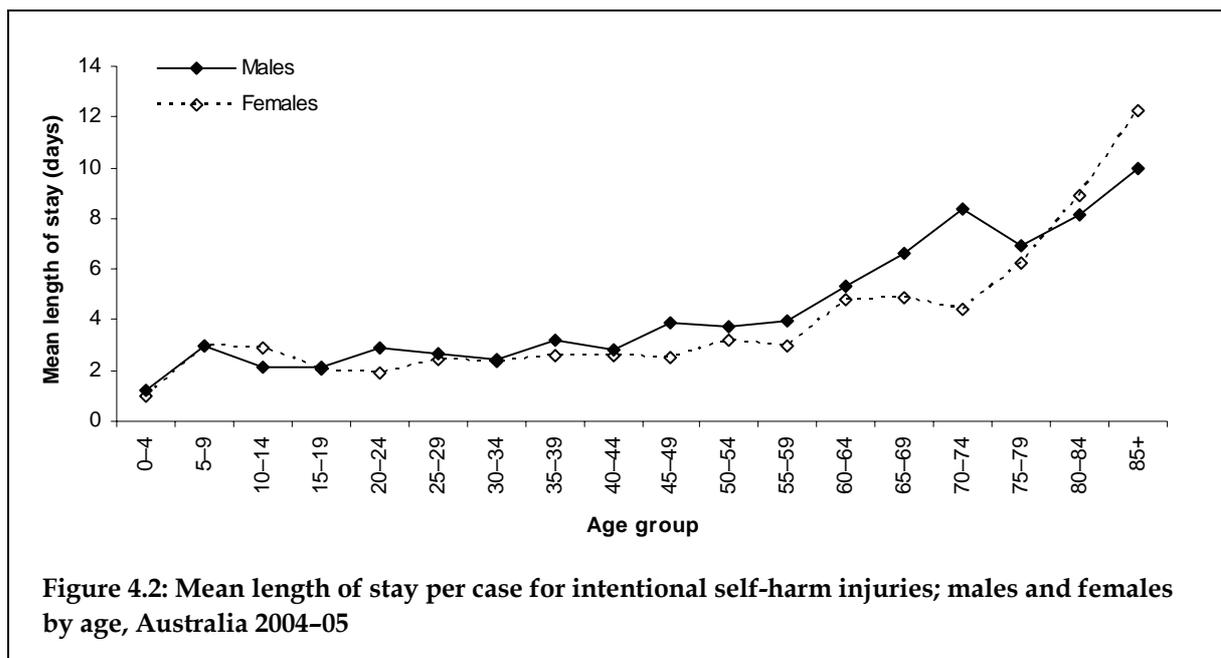
* Small cell counts have been suppressed.

† Totals include 8 cases from categories too small to publish.

Self-harm—length of stay

The total number of patient-days attributed to hospitalised cases of intentional self-harm in 2004–05 was 66,596 (4.7% of all patient-days due to community injuries in this year). Three in ten intentional self-harm hospital separations in 2004–05 were discharged on the same day as admitted (30.3%, $n = 7,611$) and, including these same-day separations, most separations for self-harm injuries (69.2%, $n = 17,363$) had a length of stay of only one day. The longest lengths of stay for intentional self-harm separations were in excess of 100 days ($n = 22$, 0.1%).

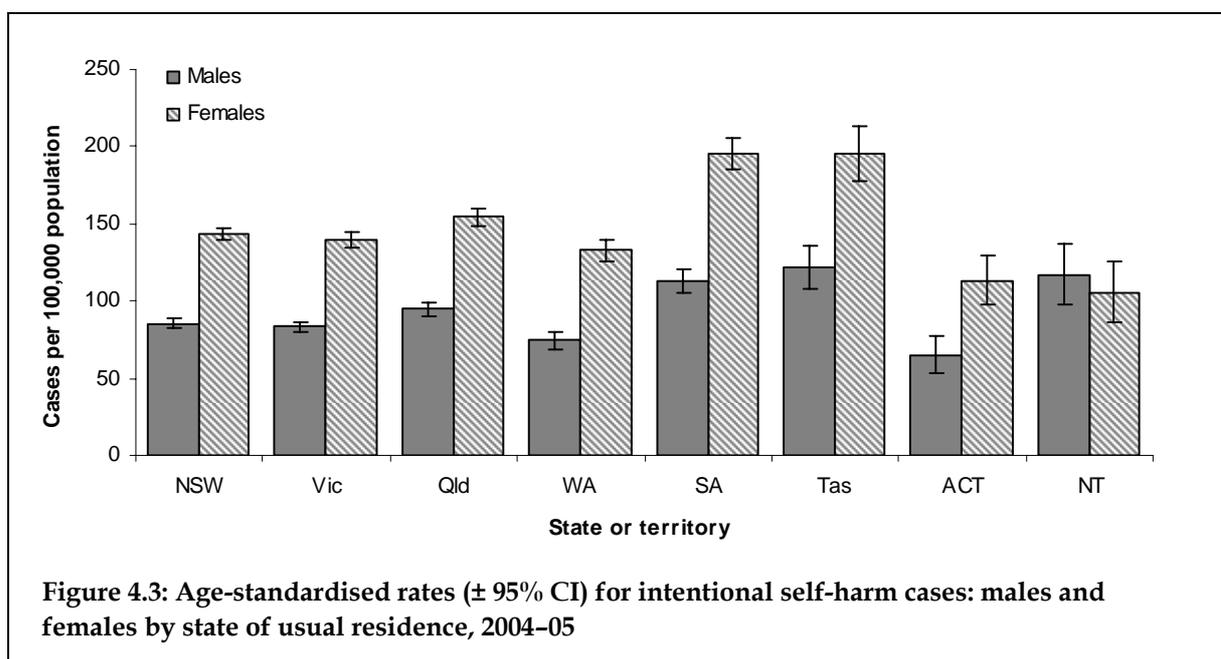
The mean length of stay per self-harm case was 2.8 days. Cases involving males had a slightly longer mean length of stay (3.2 days) than cases involving females (2.5 days). This is most likely related to the higher proportions of non-poisoning cases for males; the mean length of stay for all self-poisoning cases was 2.5 days while the mean length of stay for other forms of self-harm was 4.0 days. As for most other types of injuries, mean lengths of stay for intentional self-harm cases increased with age (Figure 4.2).



Self-harm—state of usual residence

Age-standardised rates of hospitalised intentional self-harm in 2004-05 varied considerably according to the person's state of usual residence. The highest rates of self-harm were observed for residents of Tasmania (158.6 per 100,000 persons) and South Australia (153.3 per 100,000). The rates were statistically similar to each other, but significantly higher than those for other jurisdictions. Unlike many other types of hospitalised community injury cases, age-standardised rates of intentional self-harm involving residents of the Northern Territory were not significantly higher than either those of other jurisdictions or the overall national rate.

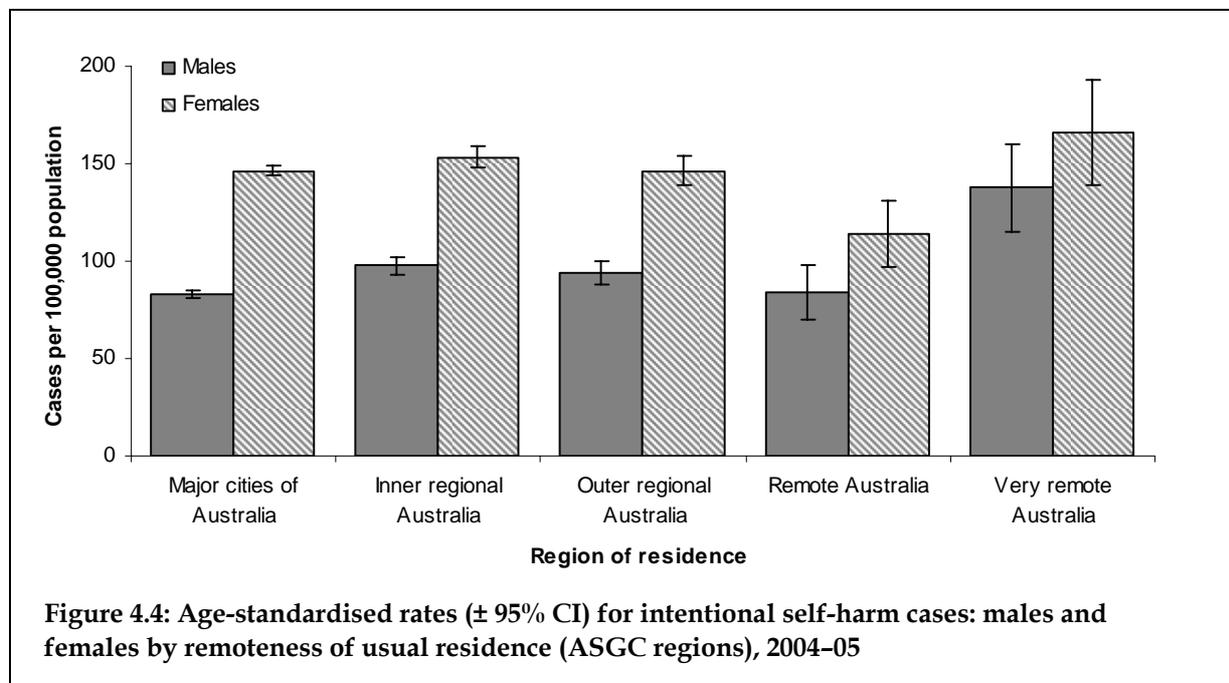
Rates of self harm for males and females showed a similar distribution (Figure 4.3) and for all but residents of the Northern Territory, rates for females were significantly higher than those for males.



Self-harm—remoteness of usual residence

Age-standardised rates of intentional self-harm according to the remoteness of the person's place of usual residence did not present the pattern common to many other types of community injury cases (i.e. lowest for residents of Australia's Major cities and highest for residents of Australia's most remote areas). Instead, the lowest rates of hospitalised self-harm cases in 2004–05 were observed for Remote Australia (98.2 per 100,000 population) and this was so for both males and females resident in this region (Figure 4.4). The highest rate of self-harm cases was reported for residents of Australia's Very remote areas, however (150.8 per 100,000). The difference in rates between Remote and Very remote Australia was significant for both males and females, despite the wide confidence intervals provoked by relatively small case numbers.

Rates of cases involving females were substantially higher than those for males in Major cities and both Inner and Outer regional Australia. Rates of hospitalised self-harm did not significantly differ between males and females for residents of Remote and Very remote Australia, however.



4.2 Assault injury cases

ICD-10-AM inclusion criteria:

- Principal diagnosis S00–T75 or T79, and
- First external cause X85–Y09, Y35–Y36, Y87.1, Y89.0 or Y89.1, and
- Mode of admission other than ‘transfer from another acute hospital’.

Table 4.7: Key indicators for hospitalised assault injury: males, females and persons, Australia 2004–05

Key indicators	Males	Females	Persons
Total number of hospital separations due to assault injury	16,163	5,531	21,694
Assault separations as proportion of all community injury separations	7.2%	3.4%	5.6%
Estimated number of assault injury cases ^(a)	15,152	5,266	20,418
Cases per 100,000 population	150.8	51.8	101.0
Cases per 100,000 population—age-standardised ^(b)	150.4	53.0	102.2
Total patient-days due to assault injury ^(c)	34,906	12,467	47,373
Mean patient-days per case	2.3	2.4	2.3

(a) Excludes records with a mode of admission of ‘transfer from another acute hospital’.

(b) Standardised to the Australian estimated resident population 30th June 2001.

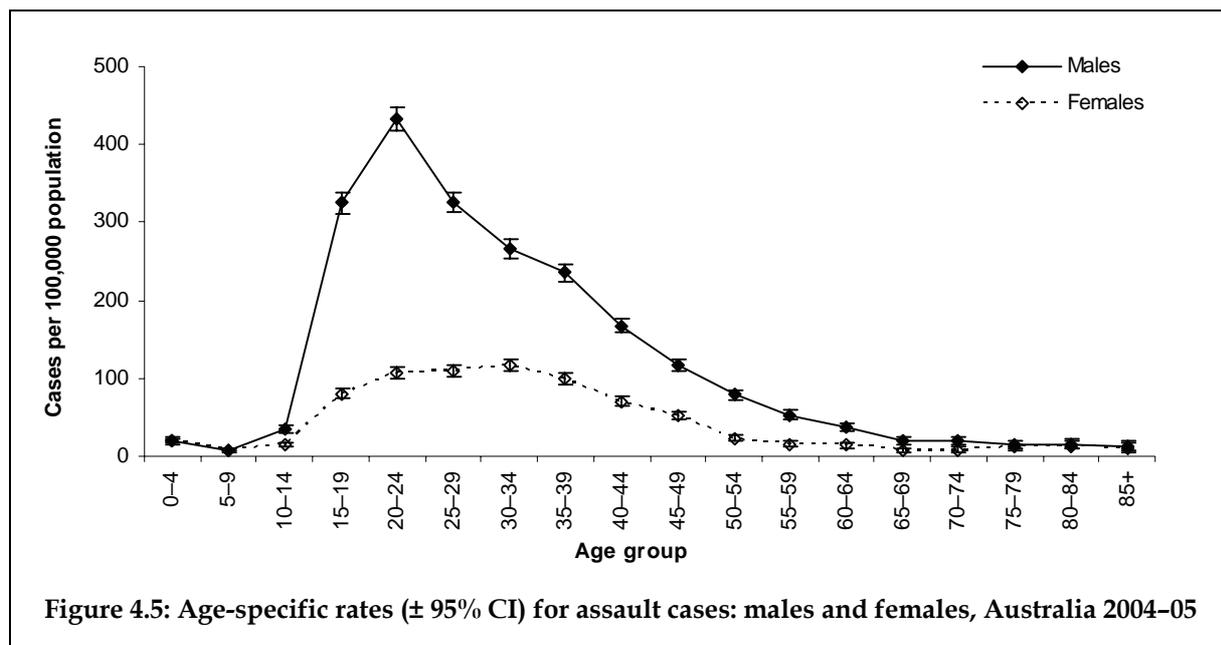
(c) Includes records with a mode of admission of ‘transfer from another acute hospital’ as contributing to hospital burden due to injury.

An estimated 20,418 hospitalised injury cases were due to assault in 2004–05 (Table 4.7) and these occurred at an age-standardised rate of 102.2 cases per 100,000 population.

Assault—age and sex

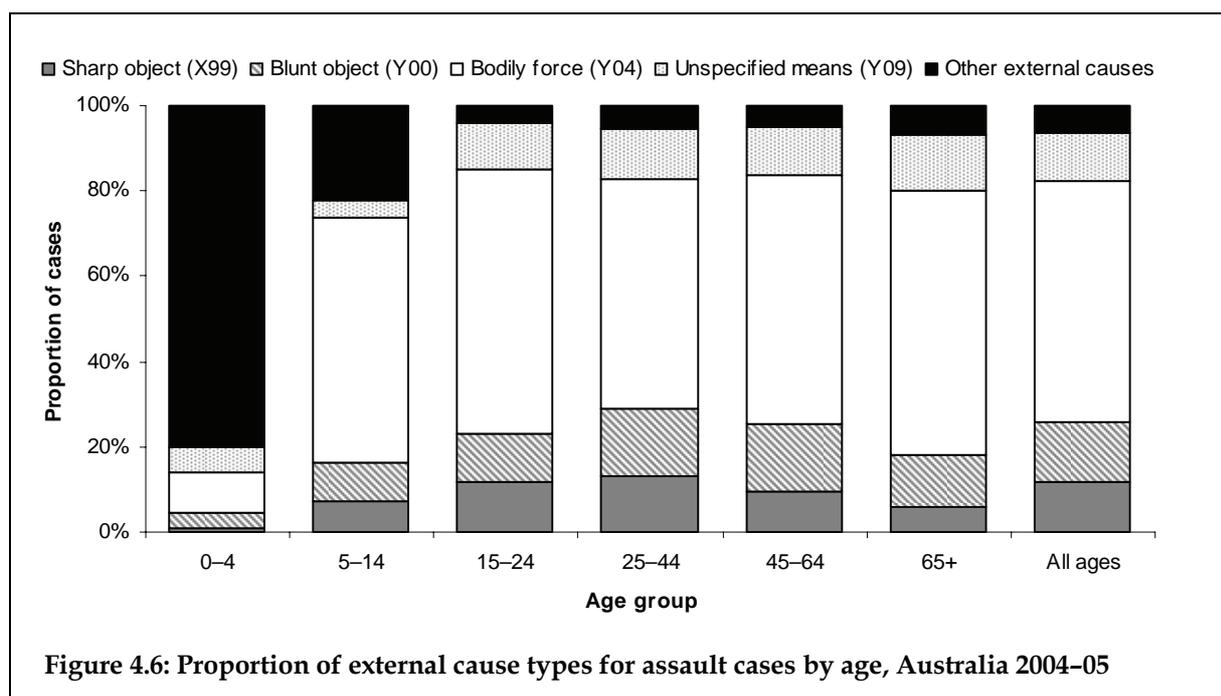
Three-quarters of all hospitalised cases of assault involved males (74.2%, $n = 15,152$), giving a much higher age-standardised rate for males (150.4 per 100,000 population) than for females (53.0 per 100,000).

It is not surprising, then, that age-specific rates for males were significantly higher than those for females for most age groups (Figure 4.5). The lowest age-specific rate of hospitalised assault cases for males was observed for the 5–9 years age group while the highest rate was observed for the 20–24 years age group. At this age, the rate of cases involving males was 4.1 times that for females. The lowest rate of hospitalised assault cases for females was also observed for the 5–9 years age group. While rates of hospitalised assault for females were highest for young adults, unlike cases involving males, there was no distinct peak for those in their early 20s. The highest rate of hospitalised assault for females was 116.8 per 100,000 for those aged 30–34 years, but this was not significantly different to the rate for females aged 20–29 years.



Assault—external cause

The most common external cause assigned to hospitalised assault injury cases in 2004–05 was Y04, assault by bodily force (56.7%, $n = 11,572$). The types of external causes attributed to hospitalised assault cases in 2004–05 did not differ greatly according to the person’s age (Figure 4.6). Only for very young children 0–4 years of age did the pattern differ markedly, with a much larger proportion of cases attributed to external causes other than the four (Y04, Y00, X99 and Y09) most commonly associated with adult cases. For children aged 0–4 years, nearly half (48.4%, $n = 122$) of all hospitalised assault cases were attributed to Y07, other maltreatment syndromes, with a further 22.2% ($n = 56$) attributed to Y06, neglect and abandonment.



Some differences in the external causes for assault cases were noted for males and females (Table 4.8). A higher proportion of cases involving males were attributed to assault by bodily force (58.2%) than for cases involving females (52.3%) while higher proportion of cases involving females were attributed to assault by blunt object (15.8%) than for cases involving males (13.4%). X99, assault by sharp object, and Y09, assault by unspecified means, both accounted for approximately 11% of hospitalised assault injury cases. Higher proportions of male assault cases were attributed to these external causes than observed for female cases.

Table 4.8: First external cause for assault cases: males, females and persons, Australia 2004–05

External cause	Males	Females	Persons
Assault by drugs, medicaments & biological substances (X85)	24 (0.2%)	40 (0.8%)	64 (0.3%)
Assault by other specified chemicals & noxious substances (X89)	* (0.0%)	* (0.1%)	9 (0.0%)
Assault by unspecified chemical or noxious substance (X90)	* (0.0%)	* (0.2%)	10 (0.0%)
Assault by hanging, strangulation & suffocation (X91)	8 (0.1%)	15 (0.3%)	23 (0.1%)
Assault by handgun discharge (X93)	* (0.2%)	* (0.0%)	25 (0.1%)
Assault by other & unspecified firearm discharge (X95)	65 (0.4%)	6 (0.1%)	71 (0.3%)
Assault by smoke, fire & flames (X97)	19 (0.1%)	12 (0.2%)	31 (0.2%)
Assault by steam, hot vapours & hot objects (X98)	15 (0.1%)	10 (0.2%)	25 (0.1%)
Assault by sharp object (X99)	1,864 (12.3%)	546 (10.4%)	2,410 (11.8%)
Assault by blunt object (Y00)	2,035 (13.4%)	830 (15.8%)	2,865 (14.0%)
Assault by pushing from high place (Y01)	8 (0.1%)	9 (0.2%)	17 (0.1%)
Assault by pushing or placing victim before moving object (Y02)	* (0.0%)	* (0.1%)	10 (0.0%)
Assault by crashing of motor vehicle (Y03)	20 (0.1%)	5 (0.1%)	25 (0.1%)
Assault by bodily force (Y04)	8,817 (58.2%)	2,755 (52.3%)	11,572 (56.7%)
Sexual assault by bodily force (Y05)	20 (0.1%)	134 (2.5%)	154 (0.8%)
Neglect & abandonment (Y06)	37 (0.2%)	35 (0.7%)	72 (0.4%)
Other maltreatment syndromes (Y07)	95 (0.6%)	209 (4.0%)	304 (1.5%)
Assault by other specified means (Y08)	251 (1.7%)	123 (2.3%)	374 (1.8%)
Assault by unspecified means (Y09)	1,783 (11.8%)	510 (9.7%)	2,293 (11.2%)
Legal intervention (Y35)	* (0.2%)	* (0.1%)	38 (0.2%)
Sequelae of assault (Y87)	15 (0.1%)	5 (0.1%)	20 (0.1%)
Other assault external causes (X88, X92, X96, Y36)	* (0.0%)	* (0.1%)	6 (0.0%)
Total	15,152	5,266	20,418

* Small cell counts have been suppressed.

Assault—place and activity

Compared to most other types of hospitalised community injury cases, a relatively small proportion of assault injuries were reported to have occurred in the home (17.0%, $n = 3,475$). Regrettably, ‘unspecified place of occurrence’ was reported for more than half of all hospitalised assault cases in 2004–05 (55.4%, $n = 11,316$).

A markedly higher proportion of cases involving females were reported to have taken place in the home (33.3%) than cases involving males (11.4%, Table 4.9). Conversely, the proportion of male cases reported to have occurred in sports and athletics areas was 4.5 times that for cases involving females (0.9% vs. 0.2%, respectively). Similarly, the proportion of cases involving males reported to have occurred in cafes, restaurants or hotels was 4.0 times that for cases involving females (12.8% vs. 3.2%, respectively) and a much higher proportion of cases involving males were also reported to have occurred in trade and services areas overall.

The place of occurrence for hospitalised assault cases also differed by age as well as gender. The home was the specified place of occurrence for higher proportions of cases involving both children 0–14 years and adults 65 years and older and lower proportions of cases involving these age groups had an unspecified place of occurrence than people aged 15–64 years.

Table 4.9: Place of occurrence for assault cases: males, females and persons, Australia 2004–05

Place of occurrence	Males	Females	Persons
Home	1,724 (11.4%)	1,751 (33.3%)	3,475 (17.0%)
Residential institution	230 (1.5%)	41 (0.8%)	271 (1.3%)
School	140 (0.9%)	24 (0.5%)	164 (0.8%)
Health service area	31 (0.2%)	23 (0.4%)	54 (0.3%)
Other specified institution & public administrative area	88 (0.6%)	12 (0.2%)	100 (0.5%)
Sports & athletics area	142 (0.9%)	11 (0.2%)	153 (0.7%)
Roadway	502 (3.3%)	80 (1.5%)	582 (2.9%)
Sidewalk	710 (4.7%)	92 (1.7%)	802 (3.9%)
Other & unspecified public highway, street or road	74 (0.5%)	9 (0.2%)	83 (0.4%)
<i>Total street & highway</i>	<i>1,286 (8.5%)</i>	<i>181 (3.4%)</i>	<i>1,467 (7.2%)</i>
Shop & store	169 (1.1%)	33 (0.6%)	202 (1.0%)
Commercial garage	42 (0.3%)	7 (0.1%)	49 (0.2%)
Cafe, hotel & restaurant	1,946 (12.8%)	171 (3.2%)	2,117 (10.4%)
Other & unspecified trade & service areas	210 (1.4%)	30 (0.6%)	240 (1.2%)
<i>Total trade & service area</i>	<i>2,367 (15.6%)</i>	<i>241 (4.6%)</i>	<i>2,608 (12.8%)</i>
Industrial & construction area	23 (0.2%)	5 (0.1%)	28 (0.1%)
Other specified place of occurrence	587 (3.9%)	165 (3.1%)	752 (3.7%)
Unspecified place of occurrence	8,514 (56.2%)	2,802 (53.2%)	11,316 (55.4%)
Place not reported/not applicable	20 (0.1%)	10 (0.2%)	30 (0.1%)
Total	15,152	5,266	20,418

Little can be understood of the activities people were engaged in when seriously assaulted; three-quarters of assault cases had an unspecified activity code recorded (75.1%, $n = 15,324$) and a further 16.8% of cases had 'other specified activity' recorded ($n = 3,424$, Table 4.10). Slightly higher proportions of cases involving males were reported to have occurred while engaged in sports or leisure activities than for cases involving females, but with such high proportions of cases with an unspecified activity code, such small differences are not compelling.

Table 4.10: Activity at time of occurrence for assault cases: males, females and persons, Australia 2004–05

Activity	Males	Females	Persons
While engaged in sports	97 (0.6%)	7 (0.1%)	104 (0.5%)
While engaged in leisure	701 (4.6%)	77 (1.5%)	778 (3.8%)
While working for income	370 (2.4%)	52 (1.0%)	422 (2.1%)
While engaged in other types of work	29 (0.2%)	15 (0.3%)	44 (0.2%)
While resting, sleeping, eating, etc.	157 (1.0%)	76 (1.4%)	233 (1.1%)
Other specified activity	2,612 (17.2%)	812 (15.4%)	3,424 (16.8%)
Unspecified activity	11,127 (73.4%)	4,197 (79.7%)	15,324 (75.1%)
Activity not reported/not applicable	59 (0.4%)	30 (0.6%)	89 (0.4%)
Total	15,152	5,266	20,418

Assault—principal diagnosis

Nearly two-thirds of all assault injury cases in 2004–05 were assigned a principal diagnosis indicating head injuries (65.2%, $n = 13,319$). A substantially higher proportion of cases involving males were attributed to head injuries (69.1%) than for females (54.1%, Table 4.11). Head injuries were also the most common principal diagnosis assigned to assault cases for all age groups other than very young children 0–4 years of age. The second most common type of principal diagnosis assigned to hospitalised assault cases in 2004–05 were injuries to the wrist and hand (7.9%, $n = 1,613$).

Table 4.11: Principal diagnosis for assault cases: males, females and persons, Australia 2004–05

Principal diagnosis	Males	Females	Persons
Injuries to the head	10,470 (69.1%)	2,849 (54.1%)	13,319 (65.2%)
Injuries to the neck	270 (1.8%)	143 (2.7%)	413 (2.0%)
Injuries to the thorax	753 (5.0%)	317 (6.0%)	1,070 (5.2%)
Injuries to the abdomen, lower back, lumbar spine & pelvis	613 (4.0%)	337 (6.4%)	950 (4.7%)
Injuries to the shoulder & upper arm	400 (2.6%)	197 (3.7%)	597 (2.9%)
Injuries to the elbow & forearm	483 (3.2%)	307 (5.8%)	790 (3.9%)
Injuries to the wrist & hand	1,273 (8.4%)	340 (6.5%)	1,613 (7.9%)
Injuries to the hip & thigh	151 (1.0%)	97 (1.8%)	248 (1.2%)
Injuries to the knee & lower leg	429 (2.8%)	199 (3.8%)	628 (3.1%)
Injuries to the ankle & foot	49 (0.3%)	65 (1.2%)	114 (0.6%)
Injuries involving multiple body regions	21 (0.1%)	29 (0.6%)	50 (0.2%)
Injuries to unspecified parts of trunk, limb or body region	54 (0.4%)	90 (1.7%)	144 (0.7%)
Burns	39 (0.3%)	21 (0.4%)	60 (0.3%)
Poisoning by drugs, medicaments & biological substances	20 (0.1%)	35 (0.7%)	55 (0.3%)
Toxic effects of non-medical substances	7 (0.0%)	13 (0.2%)	20 (0.1%)
Other & unspecified effects of external causes	77 (0.5%)	212 (4.0%)	289 (1.4%)
Certain early complications of trauma	40 (0.3%)	10 (0.2%)	50 (0.2%)
Total *	15,152	5,266	20,418

* Totals include 8 cases from categories too small to publish.

A third of hospitalised assault cases had principal diagnoses describing a fracture (33.7%, $n = 6,866$). Fractures were a more common result of an assault injury for males (37.8%, Table 4.12) than for females (21.8%), with a higher proportion of cases involving females attributed to an open wound (23.2%).

Like external cause and principal diagnosis group coding for assault cases, the nature of the injury resulting from the assault did not differ markedly with age for people aged five years and over. Differences in the types of injury resulting from an assault for children 0–4 years and older people were substantial however. Australians aged five years and older most commonly sustained fractures or open wounds as the result of an assault. For children aged 0–4 years, however, fractures accounted for only 9.5% of cases (vs. 34.0% of cases involving older people) and open wounds accounted for only 4.4% (compared to 23.3%). Assault injuries involving children aged 0–4 years more commonly resulted in injuries described as ‘other specified nature of injury’ (48.4%, vs. 2.1% of cases involving older people) or superficial in nature (20.2%, vs. 10.2%).

Similarly, grouping assault cases by the region of the body injured presents very high proportions of cases with head injuries for both people of all ages and people over the age of five years (65–66% vs. 31.3% for children 0–4 years). Conversely, for young children 0–4 years, most hospitalised assault cases were grouped to ‘injuries not specified by body region’ (53.6% vs. 2.7% for people aged five years and older).

These findings are most likely related to the higher proportions of cases for children aged 0–4 years coded to principal diagnoses describing ‘other maltreatment syndromes’ (T74: 48.4% of cases 0–4 years vs. 0.8% of cases 5 years and older).

Table 4.12: Nature of injury for assault cases: males, females and persons, Australia 2004–05

Nature of injury	Males	Females	Persons
Superficial (excluding eye)	1,153 (7.6%)	957 (18.2%)	2,110 (10.3%)
Open wound (excluding eye)	3,488 (23.0%)	1,222 (23.2%)	4,710 (23.1%)
Fracture (excluding tooth)	5,721 (37.8%)	1,145 (21.8%)	6,866 (33.7%)
Dislocation	184 (1.2%)	37 (0.7%)	221 (1.1%)
Sprain/strain	52 (0.3%)	35 (0.7%)	87 (0.4%)
Nerve (including spinal cord; excluding brain)	164 (1.1%)	35 (0.7%)	199 (1.0%)
Blood vessel	112 (0.7%)	36 (0.7%)	148 (0.7%)
Muscle/tendon	294 (1.9%)	76 (1.4%)	370 (1.8%)
Amputation (including partial)	34 (0.2%)	7 (0.1%)	41 (0.2%)
Internal organ	503 (3.3%)	129 (2.5%)	632 (3.1%)
Burn/corrosion (excluding eye)	36 (0.2%)	20 (0.4%)	56 (0.3%)
Eye injury (excluding foreign body in external eye)	262 (1.7%)	109 (2.1%)	371 (1.8%)
Intracranial (including concussion)	1,711 (11.3%)	334 (6.4%)	2,045 (10.0%)
Dental (including fractured tooth)	39 (0.3%)	12 (0.2%)	51 (0.2%)
Asphyxia/threat to breathing	6 (0.0%)	5 (0.1%)	11 (0.1%)
Poison/toxic effect (excluding bite)	27 (0.2%)	48 (0.9%)	75 (0.4%)
Other specified nature of injury	245 (1.6%)	303 (5.8%)	548 (2.7%)
Unspecified nature of injury	1,095 (7.2%)	732 (13.9%)	1,827 (9.0%)
Injuries of more than one nature	15 (0.1%)	7 (0.1%)	22 (0.1%)
Total *	15,145	5,256	20,401

* Totals include 11 cases from categories too small to publish.

Assault—relationship of perpetrator to victim

The patterns of the relationship between the hospitalised victim and the assault's perpetrator were markedly different for males and females (Table 4.13). Four in ten cases involving females were recorded as being due to assault by the victim's spouse or domestic partner (39.2%, $n = 2,063$), compared to only 2.8% of cases involving males. Conversely, a much higher proportion of cases involving males were attributed to an unspecified person (65.6%, $n = 9,947$) than cases involving females (35.3%).

Not surprisingly, the reported relationship with perpetrator of the assault was also strongly associated with the age of the hospitalised victim. Parents were the most frequently specified perpetrators of cases of assault involving children 0–4 years of age (61.9%, $n = 156$) while for all people aged five years and older 'unspecified person' was the most frequent class of perpetrator (58.2% of cases for people of this age).

It is important to remember that 'unspecified person' as perpetrator on an assault is not equivalent to 'person unknown to the victim' and the large proportion of cases coded to an unspecified perpetrator clouds our understanding of these cases.

Table 4.13: Relationship of perpetrator to victim for assault cases: males, females and persons, Australia 2004–05

Reported perpetrator	Males	Females	Persons
Spouse or domestic partner	420 (2.8%)	2,063 (39.2%)	2,483 (12.2%)
Parent	188 (1.2%)	178 (3.4%)	366 (1.8%)
Other family member	588 (3.9%)	395 (7.5%)	983 (4.8%)
Carer	11 (0.1%)	8 (0.2%)	19 (0.1%)
Acquaintance or friend	898 (5.9%)	307 (5.8%)	1,205 (5.9%)
Official authorities	137 (0.9%)	16 (0.3%)	153 (0.7%)
Person unknown to the victim	1,239 (8.2%)	170 (3.2%)	1,409 (6.9%)
Multiple persons unknown to the victim	1,001 (6.6%)	79 (1.5%)	1,080 (5.3%)
Other specified person	671 (4.4%)	185 (3.5%)	856 (4.2%)
Unspecified person	9,947 (65.6%)	1,857 (35.3%)	11,804 (57.8%)
Not violence-related	52 (0.3%)	8 (0.2%)	60 (0.3%)
Total	15,152	5,266	20,418

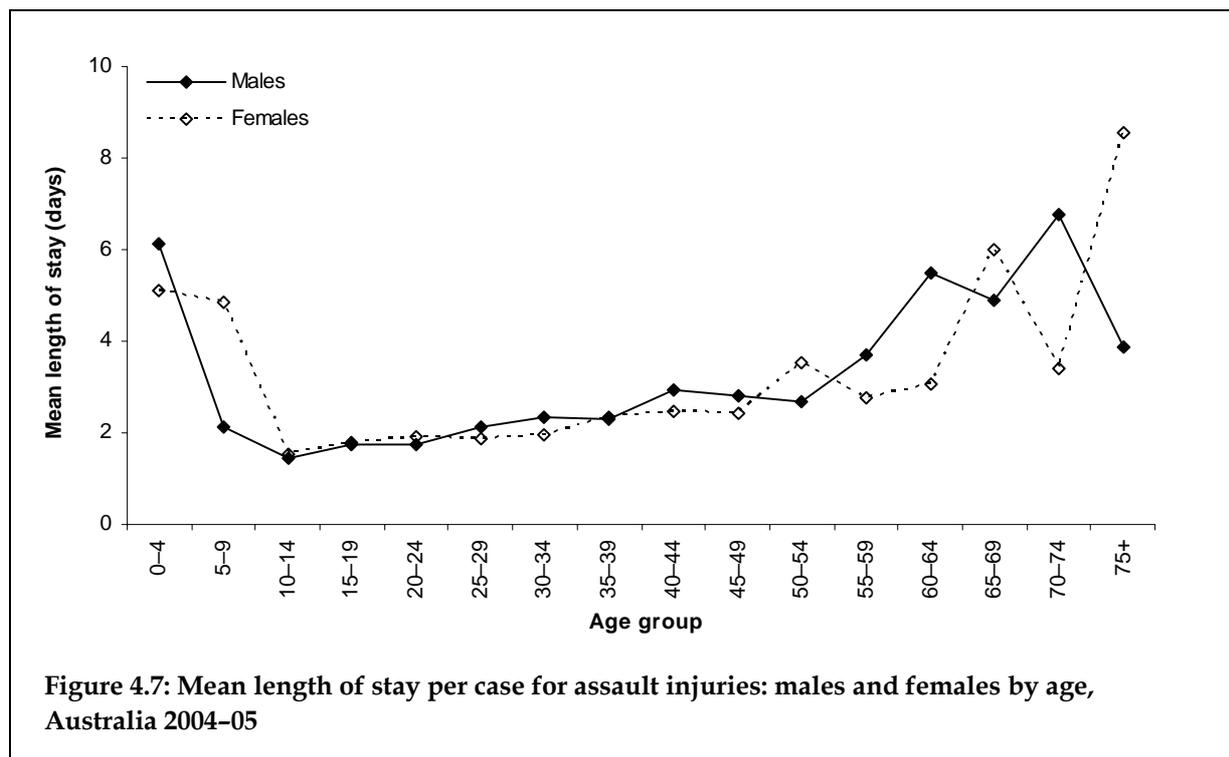
Assault—length of stay

The total number of patient-days attributed to hospitalised cases of assault-related injuries in 2004–05 was 47,373, 3.3% of all patient-days due to community injuries in this year.

Four in ten hospital separations attributed to assault in 2004–05 were discharged on the same day as admitted (44.2 %, $n = 9,595$) and, including these same-day separations, most separations for assault injuries (72.0%, $n = 15,613$) had a length of stay of only one day.

Only four assault separations had a length of stay in excess of 100 days. Accordingly, the mean length of stay per case was quite short; 2.3 days. Mean lengths of stay per assault injury case for males (2.3 days) was very similar to that for females (2.4 days).

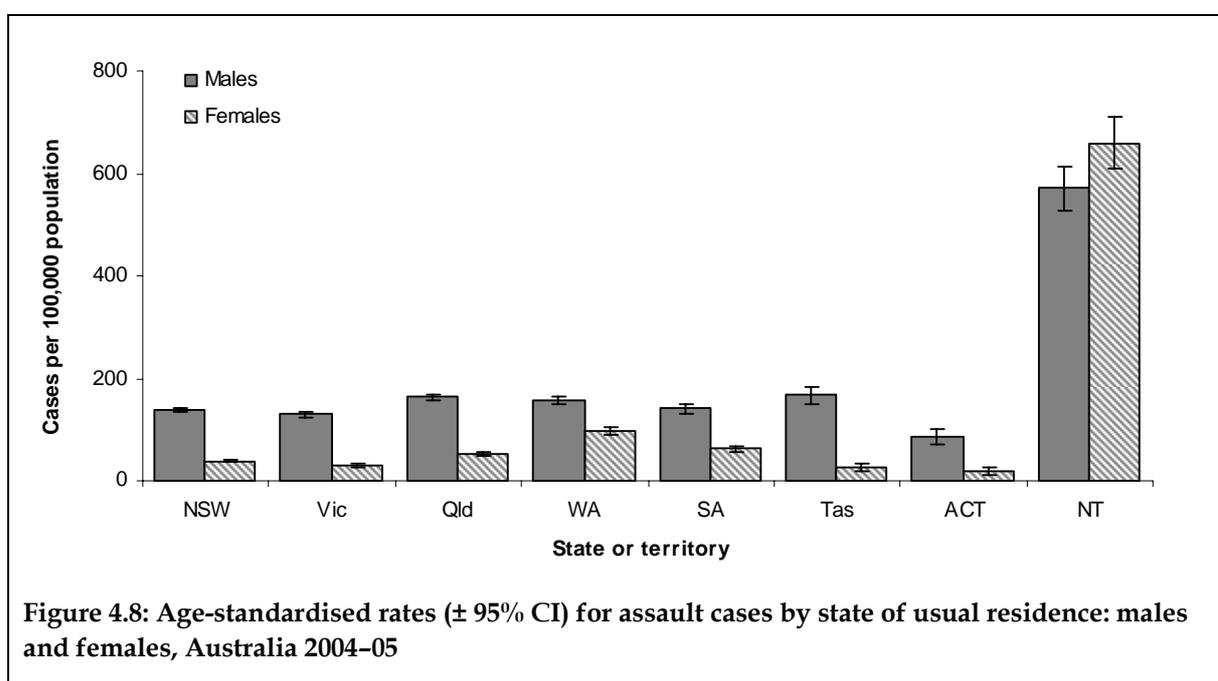
The pattern of mean length of stay per case by age was different for assault injuries than for most other types of community injury; the longest mean lengths of stay per assault injury case were observed for children aged 0–9 years and adults aged 70 years and older. From late childhood through to late middle age, the ages at which the bulk of such injuries were sustained, mean lengths of stay for assault cases were quite short. Mean lengths of stay for males and females by age were very similar except for the 5–9 years age group, when the length of stay for cases involving females was more than twice that for males (Figure 4.7). Wide fluctuations in mean lengths of stay per case for assault injuries from the age of 60 years is most likely due to the relatively small number of cases involving people of this age (hospitalised assault injuries in people 60 years and older: $n = 586$, 2.9% of all such cases).



Assault—state of usual residence

Residents of the Northern Territory had a substantially higher rate of hospitalised assault injury cases than residents of all other jurisdictions in 2004–05 (Figure 4.8). The rate of assault cases for males resident in the Northern Territory (571.1 per 100,000 population) was 3–7 times higher than for residents of other jurisdictions while the rate for females resident in the Northern Territory (659.8 per 100,000) was 7–37 times higher.

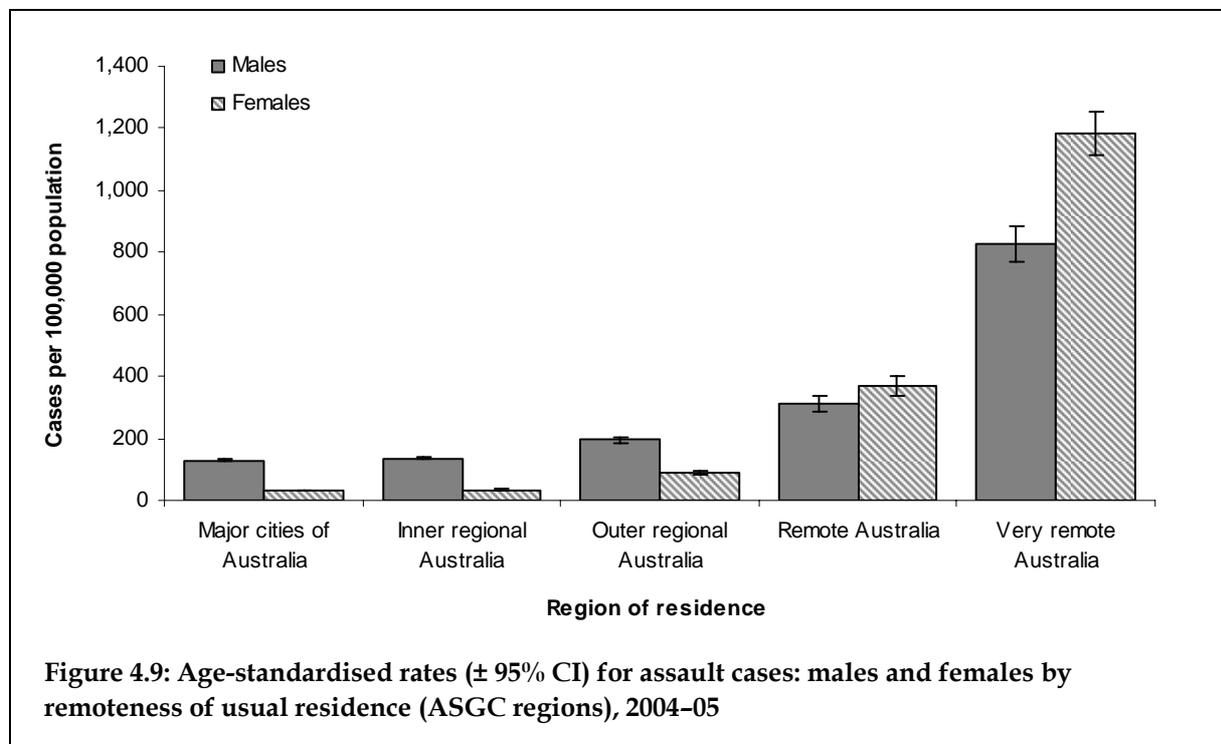
Of the remaining states and territories, rates for cases of assault involving males were highest for residents of Tasmania (166.5 per 100,000 population) and lowest for residents of the Australian Capital Territory (85.5 per 100,000). While the rate of cases of assault involving females resident in the ACT were similarly low (17.9 per 100,000), the highest rate for cases of hospitalised assault (other than for residents of the NT) was observed for female residents of Western Australia; 96.9 per 100,000 population.



Assault—remoteness of usual residence

Substantial increase in the rate of hospitalised assault injuries was observed with the increasing in remoteness of the person's usual residence (Figure 4.9). The lowest rate of hospitalised assaults for both males and females was that for residents of Australia's Major cities). Significant increases in the rate of assault cases involving males were noted for each increase in remoteness of usual residence. The rate of assault cases for male residents of Very remote regions in 2004–05 (828.9 per 100,000) was six times that of males resident in Major cities. This difference was even more substantial for rates of assault injuries involving females; rate of cases for female residents of Very remote regions in 2004–05 (1,182.7 per 100,000) was 39 times that of females resident in Major cities. Rates of cases involving females resident in both Remote and Very remote regions of Australia were significantly higher than that for males. In more urban areas, males had considerably higher rates of assault injuries than females.

The high rates of hospitalised assault injury cases for residents of the Northern Territory and of Remote regions reflect the high rates of hospitalised assault for Indigenous Australians, who comprise a large proportion of the population in these areas (see Jamieson et al. 2008).



4.3 Undetermined intent injury cases

ICD-10-AM inclusion criteria:

- Principal diagnosis [S00–T75](#) or [T79](#), and
- First external cause [Y10–Y34](#) or [Y87.2](#), and
- Mode of admission other than ‘transfer from another acute hospital’.

Table 4.14: Key indicators for hospitalised undetermined intent injury: males, females and persons, Australia 2004–05

Key indicators	Males	Females	Persons
Total number of hospital separations due to undetermined intent injury	1,906	2,247	4,153
Undetermined intent separations as proportion of all community injury separations	0.9%	1.4%	1.1%
Estimated number of undetermined intent injury cases ^(a)	1,832	2,172	4,004
Cases per 100,000 population	18.2	21.4	19.8
Cases per 100,000 population—age-standardised ^(b)	18.3	21.7	20.0
Total patient-days due to undetermined intent injury ^(c)	4,880	4,437	9,317
Mean patient-days per case	2.7	2.0	2.3

(a) Excludes records with a mode of admission of ‘transfer from another acute hospital’.

(b) Standardised to the Australian estimated resident population 30th June 2001.

(c) Includes records with a mode of admission of ‘transfer from another acute hospital’ as contributing to hospital burden due to injury.

This chapter includes cases where intent was unspecified, not stated or could not be otherwise determined. Most such cases are uncertain self-harm or uncertain assault.

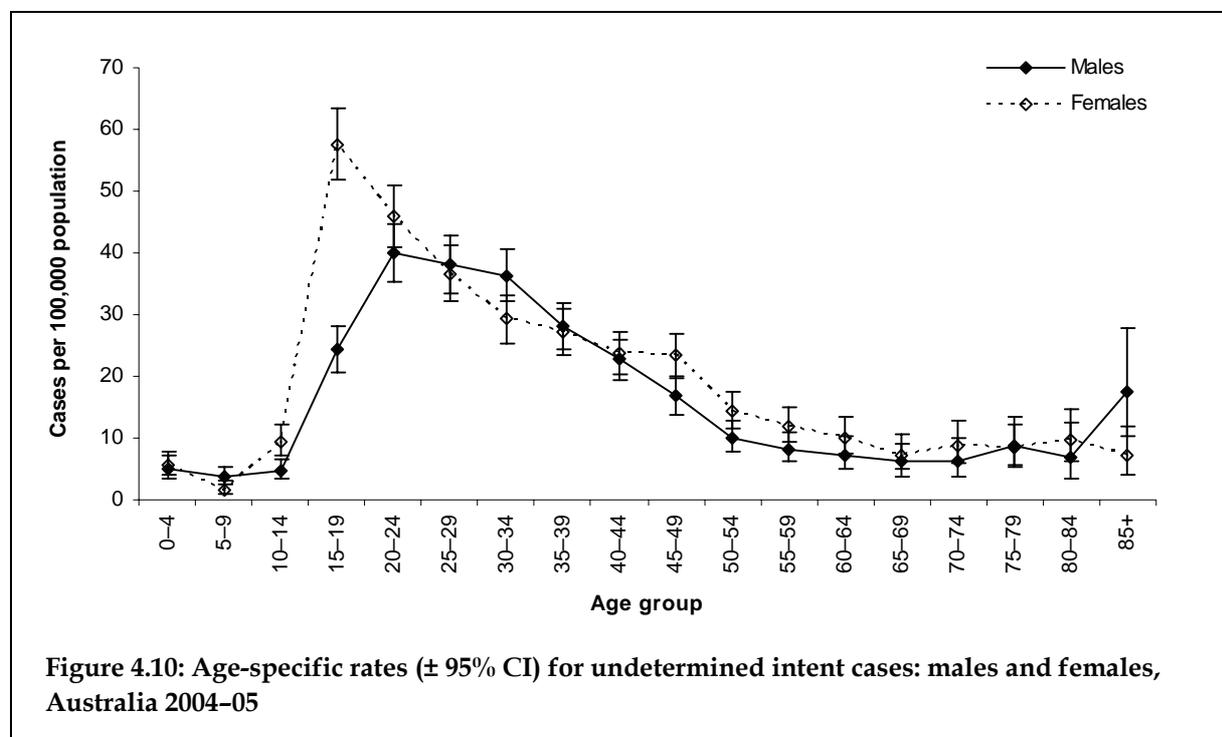
Undetermined intent external cause codes (Y10–Y34) ‘are designed for use when the intent is unspecified, unstated or cannot be determined. That is, the injuries are not specified as accidental (unintentional), self-inflicted with intent to self-harm, or assault’ (NCCH 2004). The use of undetermined intent codes in hospital records therefore differs from the way that analogous undetermined intent codes are applied for injury death records (normally, such codes are only used in death records if intent has been explicitly stated to be undetermined after formal investigation).

An estimated 4,004 hospitalised injury cases were due to events of undetermined intent in 2004–05 (Table 4.14) and the age-standardised rate of hospitalised undetermined intent cases was 20.0 per 100,000 population.

Undetermined intent—age and sex

Unlike many types of community injury, males accounted for only 45.8% ($n = 1,832$) of injury cases of undetermined intent, and accordingly, had a slightly lower age-standardised rate of such injuries (18.3 per 100,000 population) than females (21.7 per 100,000). Age-specific rates for both males and females were lowest for younger children 0–14 years (Figure 4.10). Rates then increased markedly for both males and

females, being highest for females aged 15–19 years (57.6 per 100,000) and males aged 20–24 years (40.1 per 100,000). After these peaks, rates for both males and females declined with increasing age, with a slight upturn in the rate of injury cases of undetermined intent noted for males aged 85 years and older.



Undetermined intent—external cause

The most frequent external cause assigned to hospitalised injury cases of undetermined intent in 2004–05 was Y11, poisoning of undetermined intent by antiepileptic, sedative-hypnotic, anti-parkinsonism and psychotropic drugs (40.4%, $n = 1,616$). This class of drugs was also the most common cause of hospitalisation for both accidental poisonings involving pharmaceuticals and intentional self-poisoning injury cases in 2004–05.

Y11, poisoning of undetermined intent by antiepileptic, sedative-hypnotic, anti-parkinsonism and psychotropic drugs, was the most common specific external cause code assigned to injuries of undetermined intent for both males and females (Table 4.15). This external cause was also the most common for injuries of undetermined intent for every age group.

A higher proportion of cases involving females were assigned Y11 as the first external cause (44.8%) than cases involving males (35.1%, Table 4.15). Similarly, a much higher proportion of cases involving females were coded as Y10, poisoning of undetermined intent by non-opioid analgesics, antipyretics and anti-rheumatics (16.8%) than cases involving males (7.3%). Conversely, a higher proportion of cases involving males were coded as Y12, poisoning of undetermined intent by narcotics and psychodysleptics (15.8%) than cases involving females (10.0%). Similarly, cases due to alcohol poisoning (undetermined intent) and contact with sharp object (undetermined intent) were more numerous for males than for females.

Table 4.15: First external cause for undetermined intent cases: males, females and persons, Australia 2004–05

External cause	Males	Females	Persons
Poisoning: non-opioid analgesics, antipyretics & anti-rheumatics, undetermined intent (Y10)	134 (7.3%)	364 (16.8%)	498 (12.4%)
Poisoning: antiepileptic, sedative-hypnotic, anti-parkinsonism & psychotropic drugs, not elsewhere classified, undetermined intent (Y11)	643 (35.1%)	973 (44.8%)	1,616 (40.4%)
Poisoning: narcotics & psychodysleptics [hallucinogens], not elsewhere classified, undetermined intent (Y12)	290 (15.8%)	217 (10.0%)	507 (12.7%)
Poisoning: other drugs acting on the autonomic nervous system, undetermined intent (Y13)	18 (1.0%)	17 (0.8%)	35 (0.9%)
Poisoning: other & unspecified drugs, medicaments & biological substances, undetermined intent (Y14)	145 (7.9%)	250 (11.5%)	395 (9.9%)
Poisoning: alcohol, undetermined intent (Y15)	99 (5.4%)	79 (3.6%)	178 (4.4%)
Poisoning: organic solvents & halogenated hydrocarbons & their vapours, undetermined intent (Y16)	40 (2.2%)	26 (1.2%)	66 (1.6%)
Poisoning: other gases & vapours, undetermined intent (Y17)	14 (0.8%)	9 (0.4%)	23 (0.6%)
Poisoning: pesticides, undetermined intent (Y18)	61 (3.3%)	9 (0.4%)	70 (1.7%)
Poisoning: other & unspecified chemicals & noxious substances, undetermined intent (Y19)	31 (1.7%)	34 (1.6%)	65 (1.6%)
Hanging, strangulation & suffocation, undetermined intent (Y20)	* (1.3%)	* (0.2%)	28 (0.7%)
Other & unspecified firearm discharge, undetermined intent (Y24)	* (1.2%)	* (0.1%)	24 (0.6%)
Exposure to smoke, fire & flames, undetermined intent (Y26)	44 (2.4%)	23 (1.1%)	67 (1.7%)
Contact with sharp object, undetermined intent (Y28)	143 (7.8%)	84 (3.9%)	227 (5.7%)
Contact with blunt object, undetermined intent (Y29)	* (0.9%)	* (0.2%)	21 (0.5%)
Falling, jumping or pushed from a high place, undetermined intent (Y30)	* (0.8%)	* (0.2%)	19 (0.5%)
Other specified events, undetermined intent (Y33)	9 (0.5%)	10 (0.5%)	19 (0.5%)
Unspecified event, undetermined intent (Y34)	60 (3.3%)	36 (1.7%)	96 (2.4%)
Sequelae of events of undetermined intent (Y87)	10 (0.5%)	10 (0.5%)	20 (0.5%)
Other undetermined intent (Y21, Y22, Y27, Y31 & Y32)	13 (0.7%)	17 (0.8%)	30 (0.7%)
Total	1,832	2,172	4,004

* Small cell counts have been suppressed.

Undetermined intent—place and activity

Nearly half of all hospitalised injury cases of undetermined intent in 2004–05 were coded with an unspecified place of occurrence (48.7%, $n = 1,950$). A higher proportion of cases involving males were given an unspecified place of occurrence code (53.9%) than cases involving females (44.3%, Table 4.16). Most of the remaining cases were reported to have occurred in the home (38.4%, $n = 1,539$) and a higher proportion of cases for females were reported to have occurred in the home (44.1%) than cases involving males (31.8%).

Nearly all injury cases of undetermined intent in 2004–05 were reported to have occurred while the person was involved in other and unspecified activities (95.2%, Table 4.17).

Table 4.16: Place of occurrence for undetermined intent cases: males, females and persons, Australia 2004–05

Place of occurrence	Males	Females	Persons
Home	582 (31.8%)	957 (44.1%)	1,539 (38.4%)
Residential institution	18 (1.0%)	15 (0.7%)	33 (0.8%)
School	9 (0.5%)	14 (0.6%)	23 (0.6%)
Health service area	50 (2.7%)	75 (3.5%)	125 (3.1%)
Other specified institution & public administrative area	* (0.4%)	* (0.1%)	10 (0.2%)
Sports & athletics area	* (0.5%)	* (0.2%)	13 (0.3%)
Street & highway	44 (2.4%)	15 (0.7%)	59 (1.5%)
Trade & service area	68 (3.7%)	81 (3.7%)	149 (3.7%)
Other specified place of occurrence (including industrial & construction areas & farms)	46 (2.5%)	32 (1.5%)	78 (1.9%)
Unspecified place of occurrence	987 (53.9%)	963 (44.3%)	1,950 (48.7%)
Place not reported/not applicable	12 (0.7%)	13 (0.6%)	25 (0.6%)
Total	1,832	2,172	4,004

* Small cell counts have been suppressed.

Table 4.17: Activity at time of occurrence for undetermined intent cases: males, females and persons, Australia 2004–05

Activity	Males	Females	Persons
While engaged in sports	* (0.4%)	* (0.2%)	11 (0.3%)
While engaged in leisure	18 (1.0%)	29 (1.3%)	47 (1.2%)
While working for income	* (1.1%)	* (0.2%)	25 (0.6%)
While engaged in other types of work	8 (0.4%)	5 (0.2%)	13 (0.3%)
While resting, sleeping, eating, etc.	21 (1.1%)	20 (0.9%)	41 (1.0%)
Other specified activity	657 (35.9%)	958 (44.1%)	1,615 (40.3%)
Unspecified activity	1,078 (58.8%)	1,118 (51.5%)	2,196 (54.8%)
Activity not reported/not applicable	22 (1.2%)	34 (1.6%)	56 (1.4%)
Total	1,832	2,172	4,004

* Small cell counts have been suppressed.

Undetermined intent—principal diagnosis

Three-quarters of all hospitalised injury cases of undetermined intent in 2004–05 were assigned a principal diagnosis describing poisoning by pharmaceutical substances (76.2%, $n = 3,050$). Poisoning by pharmaceutical substances was the leading cause of undetermined intent cases for both males and females and for every age group. A higher proportion of undetermined intent cases involving females were assigned such principal diagnoses (83.8%) than cases involving males (67.1%, Table 4.18). Conversely, notably higher proportions of cases involving males were assigned principal diagnoses describing toxic effects of non-pharmaceutical substances, burns, injuries to the wrist and hand and head injuries, than cases involving females.

Similarly, nearly nine in ten hospitalised injury cases of undetermined intent were described as being poisoning or toxic effects in nature (86.0%, $n = 3,445$) and again a higher proportion of cases involving females were described as such than cases involving males (90.8% vs. 80.3%, respectively). Not surprisingly, then, most injury cases of undetermined intent (89.5%, $n = 3,584$) were classed as 'other injuries not specified by body region'.

Table 4.18: Principal diagnosis for undetermined intent cases: males, females and persons, Australia 2004–05

Principal diagnosis	Males	Females	Persons
Injuries to the head	47 (2.6%)	25 (1.2%)	72 (1.8%)
Injuries to the neck	* (0.3%)	* (0.1%)	7 (0.2%)
Injuries to the thorax	13 (0.7%)	9 (0.4%)	22 (0.5%)
Injuries to the abdomen, lower back, lumbar spine & pelvis	16 (0.9%)	10 (0.5%)	26 (0.6%)
Injuries to the shoulder & upper arm	19 (1.0%)	8 (0.4%)	27 (0.7%)
Injuries to the elbow & forearm	31 (1.7%)	25 (1.2%)	56 (1.4%)
Injuries to the wrist & hand	94 (5.1%)	43 (2.0%)	137 (3.4%)
Injuries to the hip & thigh	12 (0.7%)	10 (0.5%)	22 (0.5%)
Injuries to the knee & lower leg	20 (1.1%)	7 (0.3%)	27 (0.7%)
Injuries to the ankle & foot	18 (1.0%)	6 (0.3%)	24 (0.6%)
Injuries to unspecified parts of trunk, limb or body region	* (0.2%)	* (0.2%)	7 (0.2%)
Burns	49 (2.7%)	31 (1.4%)	80 (2.0%)
Poisoning by drugs, medicaments & biological substances	1,229 (67.1%)	1,821 (83.8%)	3,050 (76.2%)
Toxic effects of non-medical substances	243 (13.3%)	157 (7.2%)	400 (10.0%)
Other & unspecified effects of external causes	24 (1.3%)	7 (0.3%)	31 (0.8%)
Certain early complications of trauma	6 (0.3%)	7 (0.3%)	13 (0.3%)
Total †	1,832	2,172	4,004

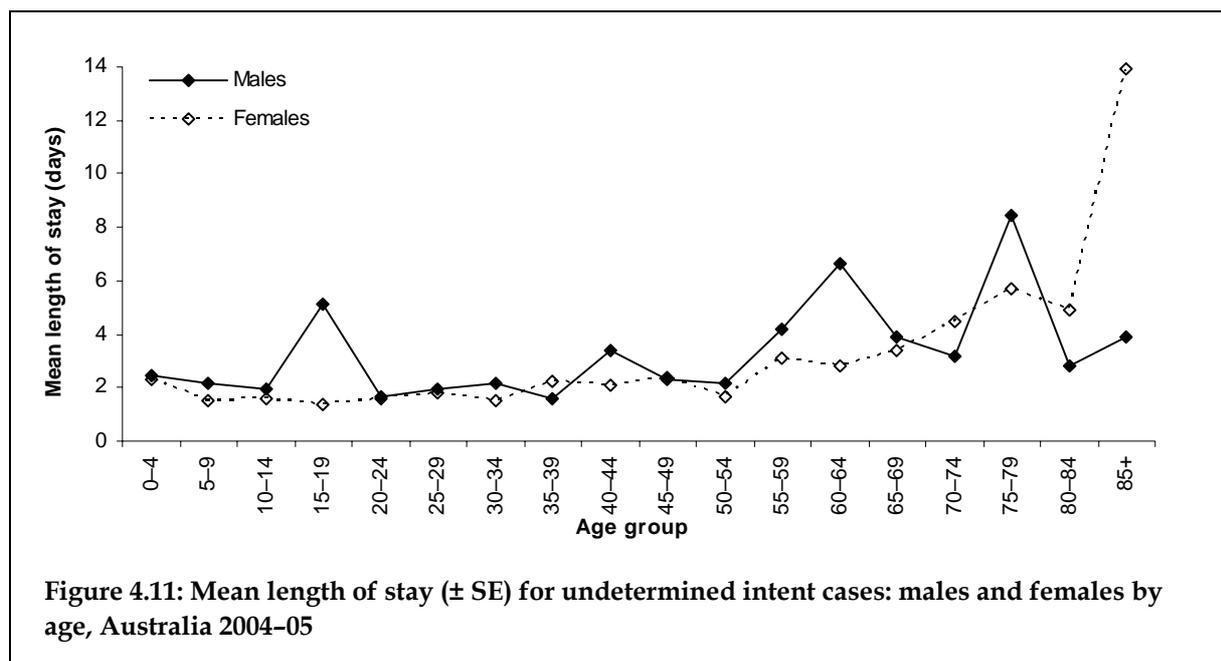
* Small cell counts have been suppressed.

† Totals include 3 cases from categories too small to publish.

Undetermined intent—length of stay

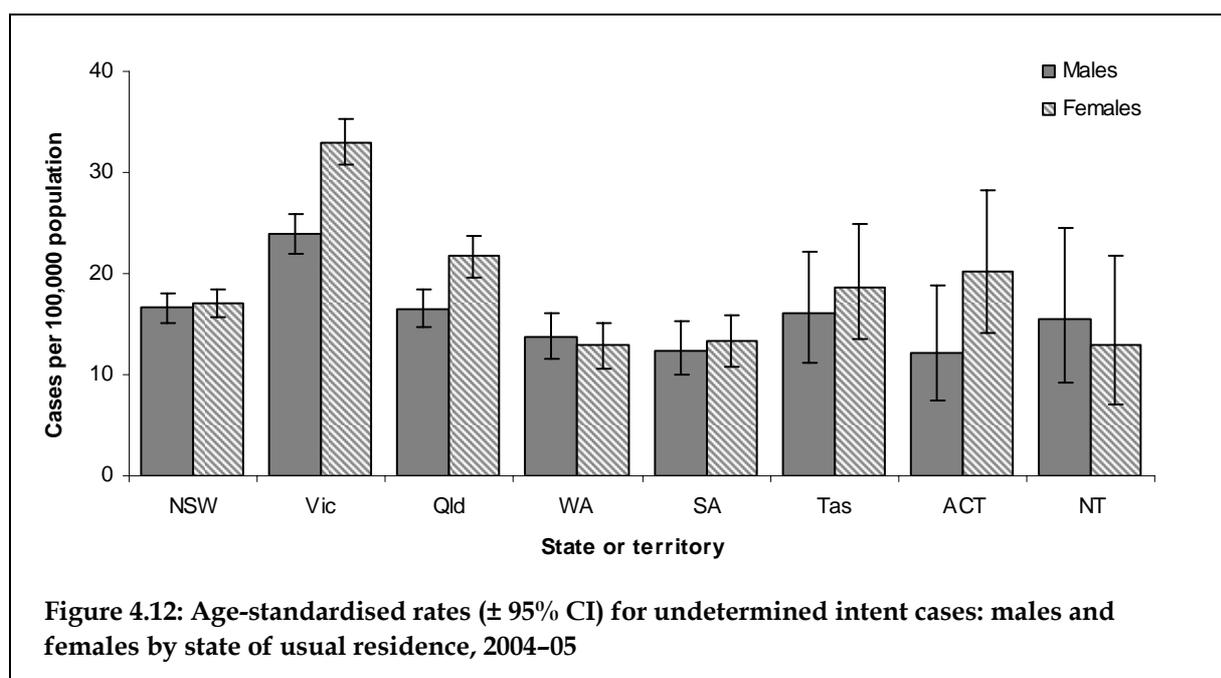
The total number of patient-days attributed to hospitalised cases of injuries of undetermined intent in 2004–05 was 9,317, 0.7% of all patient-days due to community injuries in this year. Two in five separations for injuries of undetermined intent were discharged on the same day as admitted to hospital (41.9%, $n = 1,742$). Including these separations, 78.4% of all separations for injuries of undetermined intent had a length of stay of only one day ($n = 3,254$). Some very long lengths of stay were observed for injuries of undetermined intent, however, in excess of 200 days ($n = 2$). Accordingly, the overall mean length of stay per case was twice as long as actually observed for most cases; 2.3 days.

Males had a longer mean length of stay for injuries of undetermined intent (2.7 days) than females (2.0 days), but the patterns of mean lengths of stay according to age were quite similar for both males and females (Figure 4.11). The large fluctuations in mean lengths of stay for different age groups are, in part, due to the quite small numbers of cases underpinning these means, particularly at older ages.



Undetermined intent—state of usual residence

Age-standardised rates of injury cases of undetermined intent for both males and females were highest for residents of Victoria and these rates were significantly higher than those observed for residents of most other states and territories (Figure 4.12). Further, the rate of injuries of undetermined intent for females resident in Victoria was significantly higher than that for Victorian males, while in most other states and territories, the rates of cases involving males and females were statistically similar.



Undetermined intent—remoteness of usual residence

While rates of hospitalised cases of injuries of undermined intent differed somewhat according to the remoteness of the person's usual residence (being lowest for both males and females in Inner regional areas and highest in Very remote regions), the width of the 95% confidence intervals suggest that these differences are not significant (Figure 4.13). The exception to this is the rate of cases involving males resident in Inner regional areas of Australia, which was significantly lower than that of both males resident in Major cities and males resident in Outer regional areas.

