

2 Community injury, Australia

ICD-10-AM inclusion criteria:

- Principal diagnosis S00–T75 or T79.

Hospital separations with a principal diagnosis in the ICD-10-AM range S00–T75 or T79 are injuries most likely sustained in the community (as opposed to injuries resulting from complications of medical care or sequelae of trauma). Using this criterion, 384,102 community injury separations were identified for the period 2004–05 (Table 2.1). These separations represented 82.9% of all hospital separations due to injury and poisoning in 2004–05 and 5.5% of the 7,018,850 episodes of hospital care, for any cause, in Australia in this year.

Due to inter-hospital transfers and re-admissions, the total number of hospital separations attributed to injury and poisoning in the community does not equate to the number of injurious events resulting in serious injury. As in previous years (see Berry & Harrison 2006a; Berry & Harrison 2007a), this report minimises double-counting injury events by omitting records which have a mode of admission of 'transfer from another acute hospital'. Records with mode of admission of 'transfer from another acute hospital', are, however, retained when estimating total bed-days attributable to community injury.

Accordingly, it is estimated that 356,260 community injury events (cases) resulted in inpatient hospital care in the 2004–05 period (Table 2.1).

Table 2.1: Key indicators for hospitalised community injury: males, females and persons, Australia 2004–05

Key indicators	Males	Females	Persons
Total number of hospital separations due to injury and poisoning	264,139	199,410	463,554 ^(a)
Community injury hospital separations (S00–T75 or T79)	223,634	160,463	384,102 ^(a)
Community injury separations as proportion of all injury separations	84.7%	80.5%	82.9%
Estimated number of community injury cases ^(b)	207,624	148,631	356,260 ^(a)
Cases per 100,000 population	2,065.9	1,462.9	1,762.8
Cases per 100,000 population—age-standardised ^(c)	2,091.5	1,369.9	1,747.4
Total patient-days due to community injury ^{(d), (e), (f)}	690,814	734,668	1,425,498
Mean patient-days per case	3.3	4.9	4.0

(a) Includes 5 separations for which sex was not reported.

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

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

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

(e) Includes 16 days of patient care for which sex was not reported.

(f) Excludes 1 separation with length of stay 4,229 days.

2.1 Community injury cases

ICD-10-AM inclusion criteria:

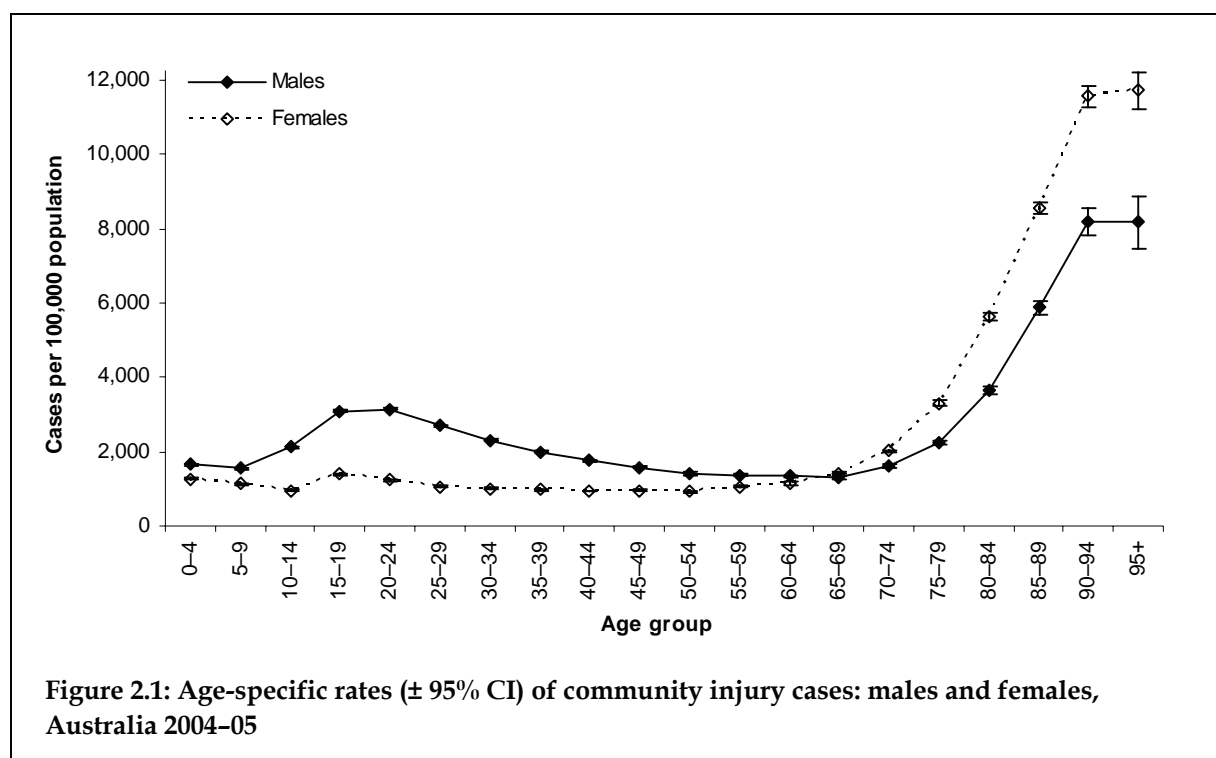
- Principal diagnosis [S00-T75](#) or [T79](#), and
- Mode of admission other than 'transfer from another acute hospital'.

As described above, an estimated 356,260 injury cases most likely occurring in the community resulted in hospitalisation in 2004–05. The age-standardised rate of these serious injury events was 1,747.4 per 100,000 population.

Age and sex

The age and sex profile of hospitalised community injury in 2004–05 was very similar to that presented for earlier years (Helps et al. 2002; Berry & Harrison 2006a; Berry & Harrison 2007a). Males accounted for a higher proportion of injury cases (58.3%, $n = 207,624$) than females ($n = 148,631$) and the age-standardised rate of community injury cases for males (2,091.5 per 100,000 population) was also higher than that for females (1,369.9 per 100,000, a M:F rate ratio of 1.5 to 1).

Male age-specific rates increased in the teens, were highest in the early 20s, then declined until 70 years of age (Figure 2.1). Age-specific rates for females followed a similar pattern, but rate increases in the teens and early 20s were lower than those observed for males. In every age-group until the age of 65 years, the rates for females were lower than those for males. From the age of 75 years, however, the age-specific rates of community injury for females were substantially higher than those for males in every age-group. The age-standardised rate of hospitalised injury cases for persons aged 75 years and older overall was 4,797.5 per 100,000 population.



External cause

The most common type of external cause attributed to hospitalised community injury cases in 2004–05 described unintentional falls (35.6% of injury cases, $n = 126,805$). Unlike most other types of community injury, injuries due to falls were more common for females than for males (Table 2.2). Unintentional falls were the most frequent external cause type for both younger (0–14 years) and older (> 44 years) Australians (Table 2.3). Transportation was the second most common *specific* external cause type for hospitalised community injury for both males and females. Transportation was the leading cause of injury for persons aged 15–44 years. Overall, unintentional injuries accounted for 85.9% of all community injury cases in 2004–05.

Approximately one in eight community injury cases were due to intentional injuries in 2004–05 (13.6%, $n = 48,305$). As in previous years, males were more frequently hospitalised due to assault (7.3% of cases involving males, $n = 15,152$) while females were more frequently hospitalised for self-inflicted injuries (10.0% of cases involving females, $n = 14,866$). Hospitalised intentional injury cases were most common for Australians aged 25–44 years.

Less than one per cent of community injury cases hospitalised in 2004–05 were not assigned external cause codes fitting into the ten defined external cause categories (0.6%, $n = 2,045$). Some of these cases did not have an external cause coded or had a first-listed external cause code outside of the appropriate V01–Y89 range (19.5%, $n = 399$). Most, however, had a first external cause describing complications of surgical and medical care (80.5%, $n = 1,646$). The very small number of cases in this group supports our understanding that hospitalised injuries assigned a principal diagnosis in the range S00–T75 or T79 most likely occur in a community setting.

Table 2.2: Major external cause groups for community injury cases: males, females and persons, Australia 2004–05

External cause	Males	Females	Persons *
Unintentional injuries			
Transportation	34,738 (16.7%)	16,269 (10.9%)	51,009 (14.3%)
Drowning	290 (0.1%)	166 (0.1%)	456 (0.1%)
Poisoning, pharmaceuticals	3,087 (1.5%)	3,722 (2.5%)	6,809 (1.9%)
Poisoning, other substances	1,380 (0.7%)	939 (0.6%)	2,319 (0.7%)
Falls	56,830 (27.4%)	69,973 (47.1%)	126,805 (35.6%)
Fires, burns & scalds	3,472 (1.7%)	1,930 (1.3%)	5,402 (1.5%)
Other unintentional injuries	80,618 (38.8%)	32,491 (21.9%)	113,110 (31.7%)
<i>Total unintentional injuries</i>	<i>180,415 (86.9%)</i>	<i>125,490 (84.4%)</i>	<i>305,910 (85.9%)</i>
Intentional injuries			
Intentional, self-inflicted (self-harm)	9,017 (4.3%)	14,866 (10.0%)	23,883 (6.7%)
Intentional, inflicted by another (assault)	15,152 (7.3%)	5,266 (3.5%)	20,418 (5.7%)
Undetermined intent	1,832 (0.9%)	2,172 (1.5%)	4,004 (1.1%)
<i>Total intentional injuries</i>	<i>26,001 (12.5%)</i>	<i>22,304 (15.0%)</i>	<i>48,305 (13.6%)</i>
Other or missing	1,208 (0.6%)	837 (0.6%)	2,045 (0.6%)
Total community injury cases	207,624	148,631	356,260

* Persons includes 5 cases for which sex was not reported.

Table 2.3: Major external cause groups for community injury cases by age, Australia 2004–05

External cause	0–4	5–14	15–24	25–44	45–64	65+	All ages *
Unintentional injuries							
Transportation	966	7,580	13,428	16,114	8,373	4,547	51,009
Drowning	212	60	59	53	46	26	456
Poisoning, pharmaceuticals	1,481	267	1,179	1,964	1,025	892	6,809
Poisoning, other substances	421	112	429	713	404	240	2,319
Falls	7,110	16,764	8,053	13,365	18,837	62,676	126,805
Fires, burns & scalds	1,384	692	797	1,311	726	492	5,402
Other unintentional injuries	6,602	12,554	23,684	36,290	22,205	11,775	113,110
Intentional injuries							
Intentional, self inflicted	9	643	6,948	10,808	4,600	875	23,883
Intentional, inflicted by another	252	449	6,680	10,148	2,541	348	20,418
Undetermined intent	68	134	1,163	1,770	657	212	4,004
Other or missing	40	64	149	377	623	792	2,045
Total community injury cases	18,545	39,319	62,569	92,913	60,037	82,875	356,260

Note: Shading denotes highest *specific* category for each age group.

* All ages includes 2 cases for which age was not reported.

Place and activity

The most common specified place of occurrence for community injury cases was the home, with more than a quarter of all hospitalised cases occurring here (26.4%, see Table 2.4). The home was a more common place of occurrence for cases involving females (36.2%, $n = 53,871$) than for males (19.4%, $n = 40,260$).

Consistent with a high number of transportation-related injuries, 10.4% of community injury cases occurred on public streets and highways ($n = 37,033$). Injuries reported to occur in streets and highways, as well as sports and athletics areas, trade and construction areas and farms, accounted for higher proportions of cases involving males than for cases involving females.

While only 0.1% of community injury cases lacked a place of occurrence code, an unfortunately large proportion of community injuries (39.9%, $n = 142,203$) had an 'unspecified' place of occurrence recorded. Injuries occurring in an unspecified place accounted for a higher proportion of cases involving males (44.3%, $n = 91,926$) than cases involving females (33.8%, $n = 50,276$).

While one in ten community injury cases occurred whilst the person was engaged in sporting activities (10.5%, $n = 37,253$), the most frequent types of activity reported for community injury cases were 'other' and 'unspecified' activities (Table 2.5). Males were more commonly injured while playing sport (14.0% of cases involving males, $n = 28,977$) than females (5.6%, $n = 8,275$).

Another ten per cent of community injury cases occurred while the person was engaged in work of some kind (either for income or not; 9.8% of cases, $n = 34,944$). Males were more commonly injured while working for income than females (9.4% vs. 2.0% respectively) while similar proportions of males and females were injured while engaged in 'other types of work' (3.5% vs. 3.4% respectively).

Table 2.4: Place of occurrence for community injury cases: males, females and persons, Australia 2004–05

Place of occurrence	Males	Females	Persons *
Home	40,260 (19.4%)	53,871 (36.2%)	94,133 (26.4%)
Residential institution	4,404 (2.1%)	11,623 (7.8%)	16,027 (4.5%)
School	4,309 (2.1%)	2,424 (1.6%)	6,733 (1.9%)
Health Service area	1,910 (0.9%)	2,424 (1.6%)	4,334 (1.2%)
Other specified institution & public administrative area	497 (0.2%)	601 (0.4%)	1,098 (0.3%)
Sports & athletics area	15,655 (7.5%)	3,867 (2.6%)	19,522 (5.5%)
Street & highway	23,025 (11.1%)	14,006 (9.4%)	37,033 (10.4%)
Trade & service area	6,957 (3.4%)	3,964 (2.7%)	10,921 (3.1%)
Industrial & construction area	5,764 (2.8%)	374 (0.3%)	6,138 (1.7%)
Farm	2,774 (1.3%)	699 (0.5%)	3,473 (1.0%)
Other specified place of occurrence	9,919 (4.8%)	4,353 (2.9%)	14,272 (4.0%)
Unspecified place of occurrence	91,926 (44.3%)	50,276 (33.8%)	142,203 (39.9%)
Place not reported/not applicable	224 (0.1%)	149 (0.1%)	373 (0.1%)
Total	207,624	148,631	356,260

* Persons includes 5 cases for which sex was not reported.

Table 2.5: Activity at time of occurrence for community injury cases: males, females and persons, Australia 2004–05

Activity	Males	Females	Persons
While engaged in sports	28,977 (14.0%)	8,275 (5.6%)	37,253 (10.5%)
While engaged in leisure	4,174 (2.0%)	2,355 (1.6%)	6,529 (1.8%)
While working for income	19,553 (9.4%)	2,959 (2.0%)	22,512 (6.3%)
While engaged in other types of work	7,317 (3.5%)	5,115 (3.4%)	12,432 (3.5%)
While resting, sleeping, eating, etc.	6,965 (3.4%)	10,737 (7.2%)	17,702 (5.0%)
Other specified activity	37,362 (18.0%)	34,126 (23.0%)	71,488 (20.1%)
Unspecified activity	101,946 (49.1%)	84,130 (56.6%)	186,080 (52.2%)
Activity not reported/not applicable	1,330 (0.6%)	934 (0.6%)	2,264 (0.6%)
Total	207,624	148,631	356,260

* Persons includes 5 cases for which sex was not reported.

Principal diagnosis

The most common type of injury resulting in hospitalisation due to a community injury was a head injury (18.2% of cases, $n = 64,963$. See Table 2.6). Head injuries were the most common principal diagnosis for both males (20.7% of cases involving males) and females (14.8%). Head injuries were common for people of all ages (Table 2.7), and were the most frequent type of principal diagnosis for young Australians aged 0–4 years and 15–24 years.

The second most common type of principal diagnosis for males described injuries to the wrist and hand (17.6%, $n = 36,485$) while the second most common type of principal diagnosis for females was an injury to the hip and thigh (12.7%, $n = 18,855$). This difference was due to the particularly high rate of injury for older females and the frequency of unintentional falls at this age; injuries to the hip and thigh being the most common type of principal diagnosis for Australians aged 65 years and older (Table 2.7).

That the third most common type of principal diagnosis for females was poisoning by drugs, medicaments and biological substances (12.3%, $n = 18,312$) similarly reflects the preponderance of females involved in injuries attributed to intentional self-harm. The third most common type of principal diagnosis for males was an injury of the knee or lower leg (12.0%, $n = 24,972$).

Table 2.6: Principal diagnosis groups for community injury cases: males, females and persons, Australia 2004–05

Principal diagnosis	Males	Females	Persons *
Injuries to the head	42,957 (20.7%)	22,006 (14.8%)	64,963 (18.2%)
Injuries to the neck	4,258 (2.1%)	3,164 (2.1%)	7,422 (2.1%)
Injuries to the thorax	8,349 (4.0%)	5,731 (3.9%)	14,082 (4.0%)
Injuries to the abdomen, lower back, lumbar spine & pelvis	10,113 (4.9%)	10,220 (6.9%)	20,333 (5.7%)
Injuries to the shoulder & upper arm	13,014 (6.3%)	9,944 (6.7%)	22,958 (6.4%)
Injuries to the elbow & forearm	21,660 (10.4%)	18,036 (12.1%)	39,697 (11.1%)
Injuries to the wrist & hand	36,485 (17.6%)	10,766 (7.2%)	47,252 (13.3%)
Injuries to the hip & thigh	10,900 (5.2%)	18,855 (12.7%)	29,756 (8.4%)
Injuries to the knee & lower leg	24,972 (12.0%)	16,688 (11.2%)	41,660 (11.7%)
Injuries to the ankle & foot	7,701 (3.7%)	4,692 (3.2%)	12,393 (3.5%)
Injuries involving multiple body regions	216 (0.1%)	162 (0.1%)	378 (0.1%)
Injuries to unspecified parts of trunk, limb or body region	1,250 (0.6%)	1,001 (0.7%)	2,251 (0.6%)
Effects of foreign body entering through natural orifice	4,014 (1.9%)	2,682 (1.8%)	6,696 (1.9%)
Burns	4,272 (2.1%)	2,156 (1.5%)	6,428 (1.8%)
Frostbite	25 (0.0%)	11 (0.0%)	36 (0.0%)
Poisoning by drugs, medicaments & biological substances	10,762 (5.2%)	18,312 (12.3%)	29,074 (8.2%)
Toxic effects of non-medical substances	4,017 (1.9%)	2,736 (1.8%)	6,753 (1.9%)
Other & unspecified effects of external causes	1,894 (0.9%)	1,120 (0.8%)	3,014 (0.8%)
Certain early complications of trauma	765 (0.4%)	349 (0.2%)	1,114 (0.3%)
Total	207,624	148,631	356,260

* Persons includes 5 cases for which sex was not reported.

Table 2.7: Principal diagnosis groups for community injury cases by age, Australia 2004–05

Principal diagnosis	0–4	5–14	15–24	25–44	45–64	65+	All ages †
Injuries to the head	6,687	7,437	14,314	16,490	8,041	11,993	64,963
Injuries to the neck	89	586	1,734	2,531	1,336	1,146	7,422
Injuries to the thorax	55	294	1,569	3,274	3,311	5,579	14,082
Injuries to the abdomen, lower back, lumbar spine & pelvis	281	1,349	2,772	4,565	3,122	8,244	20,333
Injuries to the shoulder & upper arm	1,072	2,946	3,058	4,666	4,115	7,101	22,958
Injuries to the elbow & forearm	1,685	12,896	5,004	6,660	6,031	7,421	39,697
Injuries to the wrist & hand	1,678	4,046	11,962	17,289	9,053	3,224	47,252
Injuries to the hip & thigh	484	964	1,129	1,832	2,802	22,545	29,756
Injuries to the knee & lower leg	502	3,520	7,496	12,760	9,095	8,287	41,660
Injuries to the ankle & foot	545	1,681	2,315	3,833	2,505	1,514	12,393
Injuries involving multiple body regions	9	24	*	132	*	92	378
Injuries to unspecified parts of trunk, limb or body region	75	179	359	586	429	623	2,251
Effects of foreign body entering through natural orifice	1,411	942	449	1,202	1,442	1,250	6,696
Burns	1,482	790	994	1,682	967	513	6,428
Frostbite	0	0	*	34	*	0	36
Poisoning by drugs, medicaments & biological substances	1,523	833	7,480	11,831	5,427	1,979	29,074
Toxic effects of non-medical substances	570	611	1,200	2,262	1,480	630	6,753
Other & unspecified effects of external causes	376	167	464	950	606	451	3,014
Certain early complications of trauma	21	54	195	334	227	283	1,114
Total	18,545	39,319	62,569	92,913	60,037	82,875	356,260

Note: Shading denotes highest category for each age group.

* Small cell counts have been suppressed.

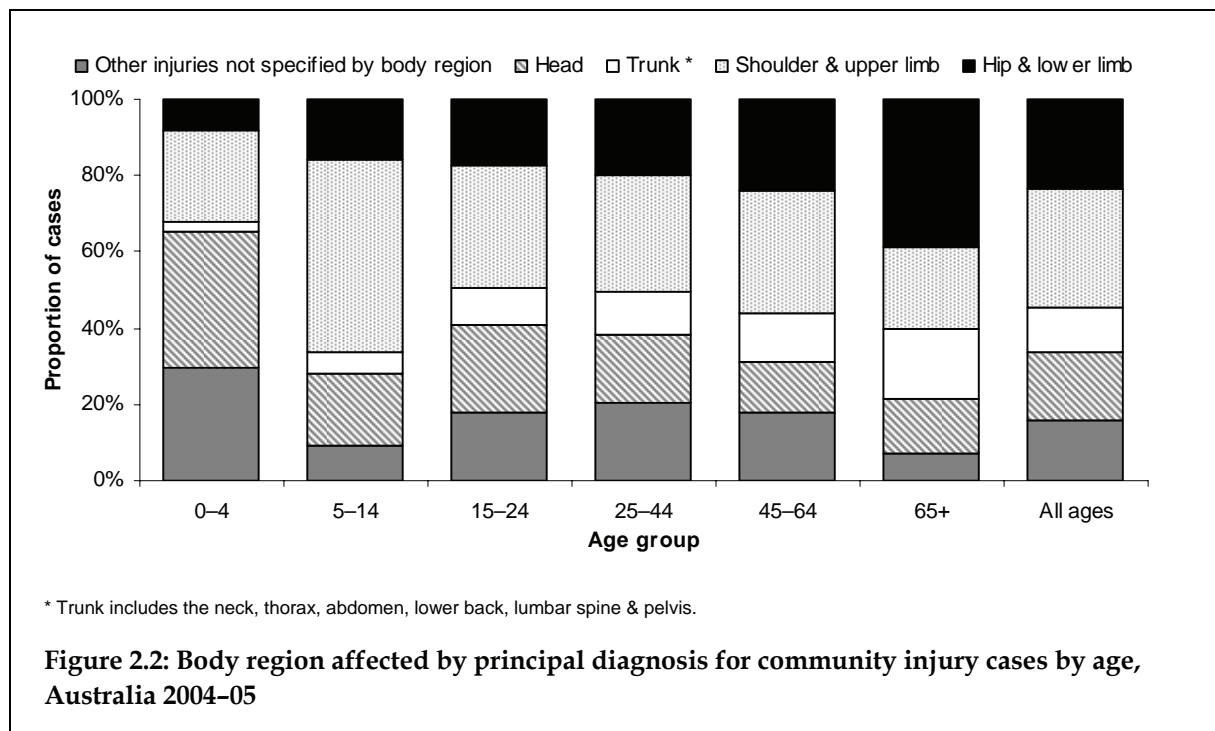
† All ages includes 2 cases for which age was not reported.

Body region

As in previous reports (Helps et al. 2002; Berry & Harrison 2006a; Berry & Harrison 2007a), the region of the body injured is classified here according to the principal diagnosis for the record. If a person is admitted due to multiple injuries, the most serious injury is normally coded as principal diagnosis and others as additional diagnoses. Our classification of 'other injuries not specified by body part' therefore generally refers to systemic injuries such as drowning and submersion or poisoning rather than injuries to multiple parts of the body.

The shoulder and upper limb region was the most commonly injured body region for community injury cases requiring hospitalisation in 2004–05. This body region was injured in a higher proportion of cases involving males (34.3%, $n = 71,159$) than for cases involving females (26.1%, $n = 38,746$). Injuries to the hip and lower limb region were also common, and this was the most frequently injured body region for females (27.1% vs. 21.0% for males). As described above, head injuries were more common for males than for females.

As can be seen in Figure 2.2, the proportion of community injury cases involving injuries to the hip and thigh and trunk region increased with age. Head injuries accounted for a large proportion of injuries in children aged 0–4 years compared to other age groups and injuries to the shoulder and upper arm were common in children 5–14 years.



High threat to life

Hospitalised injuries with an International Classification of Diseases-based injury severity score (ICISS) of less than 0.941 are considered to represent a high threat to life (Stephenson et al. 2003; Stephenson et al. 2004, also section 9.5).

In 2004–05, one in six community injury cases (16.4%, $n = 58,550$) were classed as high threat to life cases (Table 2.8). Similar number of high threat to life cases involved males ($n = 29,970$) and females ($n = 28,577$). As more males than females were hospitalised due to community injury overall, high threat to life cases represented a smaller proportion of all cases involving males (14.4%) than for females (19.2%).

Falls and transportation-related injuries were the most common causes of high threat to life cases for both males and females, and accounted for more than three-quarters of high threat to life community injuries for persons overall (78.0%, $n = 45,642$). About a quarter of all falls and transportation-related community injury cases were considered to represent a high threat to life (Table 2.8). Nearly all cases of drowning and submersion were considered of high threat (90.8%, 414) while less than two per cent of cases of poisoning by pharmaceuticals were judged as being a high threat to life (1.9%). Interestingly, while more females are admitted to hospital due to self-inflicted injuries than males (14,866 vs. 9,017, respectively), more self-harm cases involving males were classed as being of high threat to life; 7.1% of self-harm cases for males were a high threat to life, compared to only 2.5% of female cases.

High threat to life transportation injuries were more common than high threat to life fall-related injuries for children aged 5–14, but otherwise the age-related patterns of high threat to life cases was similar to that observed for all community injury (Table 2.3 previously).

Table 2.8: Major external cause groups for high threat to life ^(a) community injury cases: males, females and persons, Australia 2004–05

External cause	Males		Females		Persons ^(b)	
	Count	Per cent of type	Count	Per cent of type	Count	Per cent of type
Unintentional injuries						
Transportation	9,512	27.4	4,052	24.9	13,566	26.6
Drowning	259	89.3	155	93.4	414	90.8
Poisoning, pharmaceuticals	67	2.2	59	1.6	126	1.9
Poisoning, other substances	105	7.6	44	4.7	149	6.4
Falls	11,588	20.4	20,487	29.3	32,076	25.3
Fires, burns & scalds	979	28.2	468	24.2	1,447	26.8
Other unintentional injuries	3,205	4.0	1,858	5.7	5,063	4.5
<i>Total unintentional injuries</i>	<i>25,715</i>	<i>14.3</i>	<i>27,123</i>	<i>21.6</i>	<i>52,841</i>	<i>17.3</i>
Intentional injuries						
Intentional, self inflicted	639	7.1	376	2.5	1,015	4.2
Intentional, inflicted by another	3,362	22.2	884	16.8	4,246	20.8
Undetermined intent	108	5.9	72	3.3	180	4.5
<i>Total intentional injuries</i>	<i>4,109</i>	<i>15.8</i>	<i>1,332</i>	<i>6.0</i>	<i>5,441</i>	<i>11.3</i>
Other and/or missing	146	12.1	122	14.6	268	13.1
Total community injury cases	29,970	14.4	28,577	19.2	58,550	16.4

(a) High threat to life cases defined as ICISS < 0.941 (Stephenson et al. 2004).

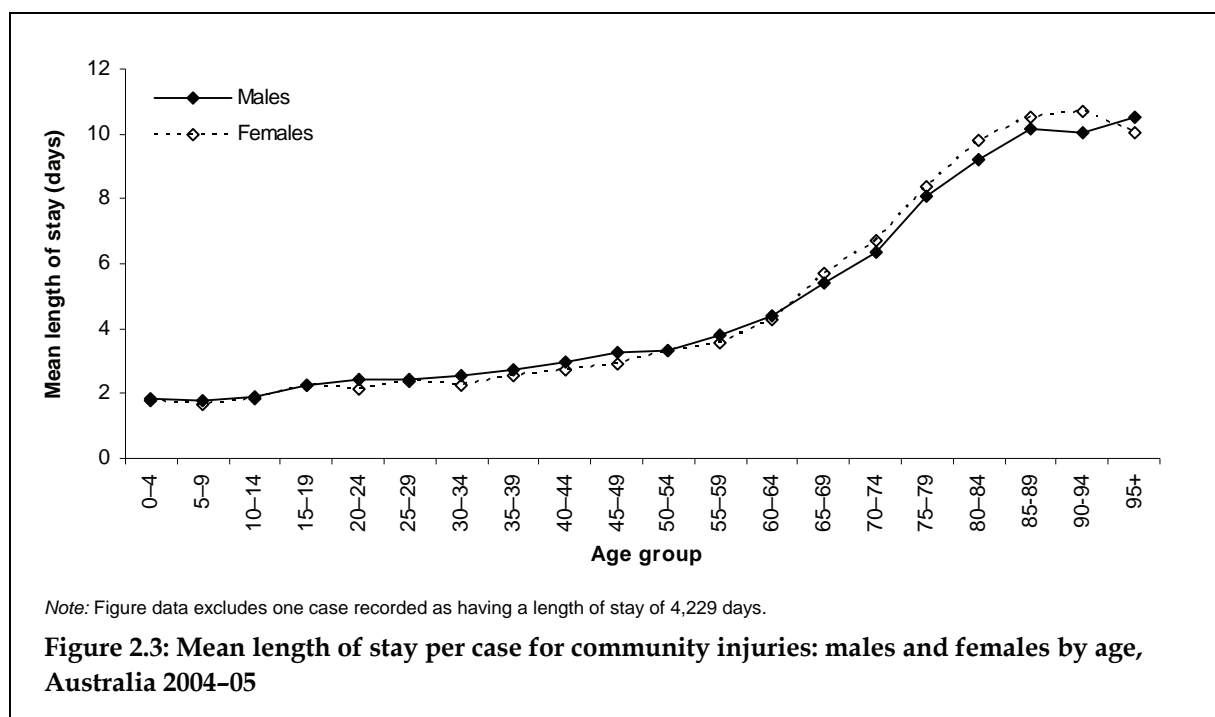
(b) Persons includes 3 cases for which sex was not reported.

Length of stay

'Patient-days' are the number of full or partial days a patient received care during their hospital admission. Unlike the previous sections, which discuss the estimated number of cases of hospitalised injury in 2004–05, analysis of patient-days includes the inward transfer separations omitted from the case analyses (as these transfers also contribute to the total *burden* of hospital care due to community injury). Accordingly, mean lengths of stay per injury case have been calculated in this report by dividing the total number of patient-days attributed to community injury separations in 2004–05 by the estimated number of cases.

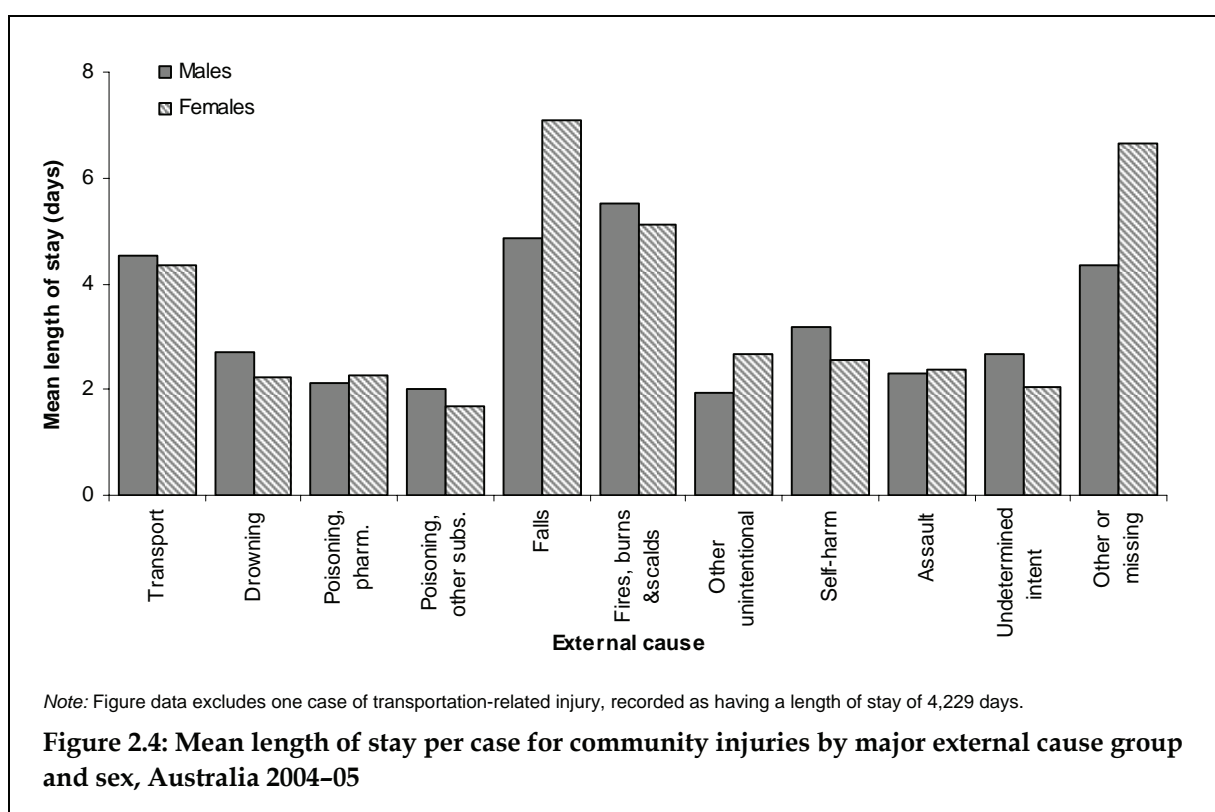
The total number of patient-days attributed to hospitalised community injury in 2004–05 was 1,425,498*. Episodes of care for community injuries in 2004–05 were frequently short; a third of records directly related to community injury separated from hospital on the same day as admitted (34.2%, $n = 131,233$) and nearly two-thirds of separations, including the same-day separations, had a length of stay of only one day (62.5%, $n = 239,941$). Only five per cent of episodes of care due to community injury required a hospital stay of more than a fortnight (5.3%, $n = 20,237$).

While a larger proportion of the estimated number of community injury cases involved males (58.3%), males accounted for only 48.5% of patient-days due to community injury ($n = 690,814$). Most likely due to the high rate of injury cases for older females, 51.5% of patient-days in 2004–05 ($n = 734,668$) involved females. Accordingly, the mean length of stay per case was shorter for males (3.3 days) than for females (4.9 days). The mean length of stay per case for persons overall was 4.0 days. Mean lengths of stay per case were similar for males and females in each age group, and mean lengths of stay increased markedly with age for both males and females (Figure 2.3).



* One separation had a length of stay of 4,229 days recorded (over 11 years) and was omitted from this analysis.

Figure 2.4 describes the mean length of stay per community injury case for males and females according to external cause. Injuries due to falls had the longest mean length of stay per case for both females (7.1 days) and persons overall (6.1 days). Injuries due to fire, burns and scalds had the longest mean length of stay per case for males however (5.5 days, compared to 4.9 days per falls case for males). Injuries due to fire, burns and scalds had the second-longest mean length of stay per case for persons overall (5.4 days). Injuries described here as 'other or missing external causes' (chiefly complications of surgical and medical care) had the third-longest mean length of stay per case (person: 5.3 days) and the mean length of stay for females with these injuries was substantially longer than that for males. Transportation injuries had the fourth-longest mean length of stay per case (4.5 days) and this was similar for both males and females. Length of stay can be considered a rough measure of injury severity and these findings correlate with our analysis of high threat to life community injury cases in the previous section.

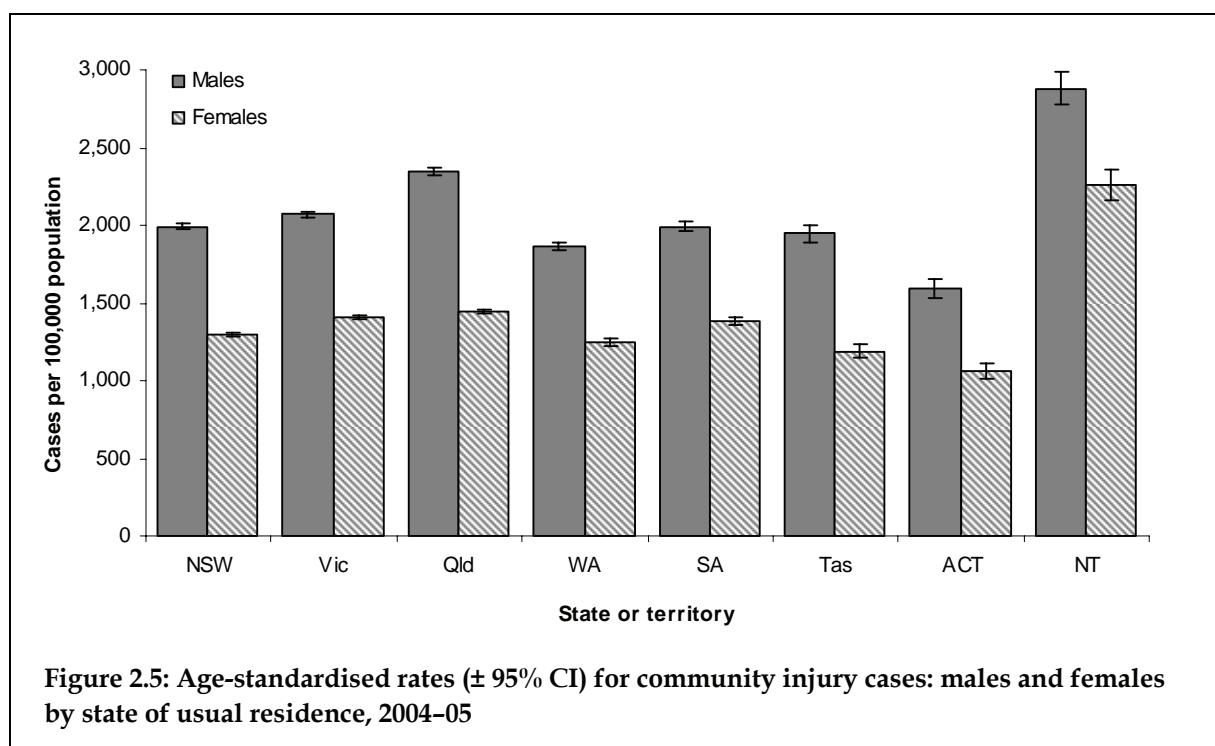


State of usual residence

Rates of hospitalised community injury cases in 2004–05 were analysed according to the state of usual residence of the patient. This does not necessarily reflect the state in which the injury event or hospitalisation occurred; the person may have been injured (and hospitalised) outside of their state of usual residence (e.g. while on holiday) or the person may have been injured in their home state but hospitalised in a different jurisdiction according to the level of care required or the availability of hospital services. Nonetheless, given the availability of population data at state-level, this method is considered to be the best measure of the distribution of serious injury cases across the nation.

Similar to previous reports (Berry & Harrison 2006a; Berry & Harrison 2007a), residents of the Northern Territory had the highest rate of hospitalised community injury cases in 2004–05 (2,596.6 per 100,000 population), and both male and female rates were significantly higher than those for the other states and territories (Figure 2.5). Rates of hospitalised injury cases for residents of Queensland were also significantly higher than other states and territories (other than the Northern Territory); 1,908.4 per 100,000 population. Again, this significant difference was observed for both males and females resident in Queensland. The lowest rate of hospitalised injury cases in 2004–05 was observed for both males and females resident in the Australian Capital Territory (persons: 1,339.2 per 100,000 population).

Less than 0.2% of community injury cases in 2004–05 ($n = 693$) involved Australians resident in the Cocos and Keeling Islands, Christmas Island and Jervis Bay. Rates were not calculated for these populations. In addition, 2,790 records for community injury cases in 2004–05 did not provide a state of usual residence (0.8% of all cases). It is thought that a large proportion of these cases involved international visitors.



Remoteness of usual residence

Rates of hospitalised community injury cases were also analysed according to the remoteness classification of the person's usual residence. The Remoteness Structure of the Australian Standard Geographical Classification (ASGC) categorises census collection districts which share common characteristics into broad geographical regions called Remoteness Areas (RAs). The ASGC Remoteness Structure is more fully described in the Data Issues section. As for state of usual residence, the RA of usual residence differs from the RA of hospitalisation for some cases, and will not always be the same as the RA in which the injury was sustained.

The age-standardised rate of hospitalised community injury cases in 2004–05 increased monotonically with increasing remoteness of the person's place of usual residence; the lowest rate was observed for residents of Australia's major cities (1,600.5 per 100,000 population) and the highest rate was observed for residents of Australia's very remote regions (3,644.2 per 100,000). This pattern was also seen for both males and females separately (Figure 2.6). This is similar to patterns observed for rates of hospitalisation and rates of deaths due to injury in previous years (Berry & Harrison 2006a; see also AIHW 2007; Henley et al. 2007). Figure 2.6 suggests that rates for males show a more linear increase with increasing remoteness of usual residence, while rates of community injury cases for females show a more marked increase for residents of very remote areas compared to the other regions of the country.

The high rate of injury morbidity for residents of the more remote areas of Australia may be partly attributable to higher injury risk among Aboriginal and Torres Strait Islander Australians, who comprise a relatively large proportion of the remote area populations (Helps & Harrison 2006). The high rate of hospitalised injury for residents of the Northern Territory, described in the previous section, is most likely related to remoteness factors; the majority of the Territory being classed as Remote or Very remote (ABS 2004; AIHW 2004).

