

7. External causes for admitted patients

Introduction

Whenever a patient is admitted to hospital due to injury or poisoning an external cause should be recorded. The external cause is defined as the event, circumstance or condition associated with the occurrence of the injury, poisoning or violence.

The tables in this chapter report on the external cause and place of occurrence reported for the separations using ICD-9-CM codes. The tables are grouped by numerical codes and use abbreviated descriptions of the categories. Full descriptions are available from the Australian edition of ICD-9-CM, implemented in July 1995 (National Coding Centre 1995).

Tables are presented with summary national separation, patient day and length of stay statistics for public and private hospitals. In addition, the data are presented by State and Territory and by age group and sex. Table 7.6 presents the data reported on the external causes categorised by the place of occurrence, where the ICD-9-CM code for it was included.

Records are included in this chapter whenever an external cause code was reported, regardless of whether the external cause related to the principal or additional diagnoses. This approach differs from that used in chapter 5 (Table 5.9), in which only records with a principal diagnosis of injury or poisoning (ICD-9-CM codes 800–999) are included, categorised by the reported external cause. A large proportion of the extra separations in this chapter which are not included in Table 5.9 had external causes that may have occurred as a result of the hospital stay, for example, *Misadventure during or due to medical care* (E870–E878). Only 50% of separations with a recorded external cause in this group had a principal diagnosis of injury or poisoning.

Highlights

National

There were 538,474 separations in 1995–96 with a recorded external cause (Table 7.1). This represented approximately 10% of all separations or 30 separations per 1,000 population. The majority of these, 80%, were from the public sector.

The most frequently reported external cause groups were *Other accidents, late effects of accidental injury* (E900–E929), *Misadventure during or due to medical care* (E870–E879), and *Accidental falls* (E880–E888). These accounted for 72% of all separations with an external cause—68% from the public sector and 88% from the private sector.

Transport accidents (E800–E848) accounted for a further 12% of external cause separations from public hospitals, but only 5% from private hospitals. *Suicide and self-inflicted injury* (E950–E959) and *Homicide, injury purposely inflicted by others* (E960–E969) when combined accounted for 10% of external cause separations from public hospitals but only 1% of external cause separations from private hospitals.

Misadventure during or due to medical care and *Accidental falls* were associated with 65% of patient days for separations with external causes. These two external cause groups were also

associated with high average length of stay figures, although *Adverse effects of therapeutic drugs, biologicals* (E930–E949), *Accidents caused by fire or flames* (E890–E899) and, for the private sector, *Suicide and self-inflicted injury*, recorded similar or higher averages. These data on patient days and average lengths of stay should, however, be interpreted with caution as all the patient days for these separations are not necessarily attributable to the reported external cause.

State and Territory

In most of the States and Territories external causes were recorded for at least 10% of all separations (Table 7.2 and Table 3.2). However, in Victoria they were recorded for only 7% of separations. The distribution of separations by external cause group was broadly consistent among States and Territories. A notable exception was in the Northern Territory where *Homicide, injury purposely inflicted by others* accounted for 19% of separations with an external cause compared with a national average of 4%. Another was for Victoria, where *Adverse effects of therapeutic drugs, biologicals* represented 1% of external cause separations, compared with a national average of 5%.

The distribution of patient days at the State and Territory level was broadly consistent with that observed for separations (Table 7.3). One exception was the relatively high number of patient days recorded in the Northern Territory for *Transport accidents*. The average length of stay for these separations was almost double that of the national average for separations in this external cause group (10.1 days compared with 5.1 days).

Age and sex

The numbers of separations with an external cause varied by age group and sex (Tables 7.4 and 7.5). Separations for *Transport accidents* were most commonly reported for the ages of 5 to 34 years for both sexes. Separations for *Accidental poisoning* (E850–E869), as proportions of total separations, were highest for the under 5 years age groups, although in absolute terms there was also a high number of separations for the age group 15 to 44 years. Similarly, separations for *Accidental falls* were proportionally higher within the 1 to 4, 5 to 14, 65 to 74 and 75 years and over age groups. Separations associated with *Adverse effects of therapeutic drugs, biologicals* were centred around the 65 years and over age groups, while for both *Suicide and self-inflicted injury* and *Homicide, injury purposely inflicted by others*, the highest frequencies were recorded for the 15 to 44 year age group.

Relative to total separations, females recorded a lower percentage of external causes of injury and poisoning (8%) compared with males (13%). The most common external cause groups for females were *Accidental falls* and *Misadventure during or due to medical care*. For males, however, *Other accidents, late effects of accidental injury* was the most prominent external cause group, accounting for 31% of all separations. Within this grouping, *Accidents caused by cutting or piercing instruments or objects* (E920), *Struck against or struck accidentally by objects or persons* (E917) and *Overexertion and strenuous movements* (E927) were the most prominent. Overall, the highest frequencies of external causes for females occurred in the 65 to 74 years and the 75 years and over age groups, whereas for males they occurred in the 15 to 24 and 25 to 34 years age groups.

Place of occurrence

For 64% of separations with an external cause a place of occurrence was reported (Table 7.6), with the categories of *Home* and *Residential institute* (which includes hospitals) accounting for the majority. *Home* was the most commonly reported place of occurrence for all but three of the external cause groups. The exceptions were *Transport accidents*, for which *Street and highway* was most frequently reported, and *Misadventure during or due to medical care* and *Adverse effects of therapeutic drugs, biologicals* for which *Residential institute* was the most common place of occurrence.

Accidental falls was the most common external cause group in the *Home* category, accounting for 43% of these separations, while *Misadventure during or due to medical care* was reported for 74% of separations in the *Residential institute* category.