QUEENSLAND INJURY SURVEILLANCE UNIT



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INJURIES ON STEPS AND STAIRS

QISPP recorded 1,166 injuries to people of all ages involving stairs and steps during 1991. This is one of the few accident scenarios QISPP has identified in which more females are injured than males. The average proportion of females in the QISPP database is around one third, while the proportion of females who were injured on steps and stairs was 53%.

The higher proportion of females may be because 70% of stair injuries occurred in the home, and since women tend to spend more time in or around the home, they have more exposure to the hazard. Another contributing factor may be the greater numbers of women than men who live into old age, when stairs become more of a hazard.

Surprisingly the most commonly represented age group was the 20 - 29 year old group. The majority of these people were injured in their own homes, while only 13% were injured on the job. The injuries in this age group tended to be less severe (6% admission rate) than the injuries suffered by the whole group (11% admission rate).

Half of the injuries occurring in residential locations (homes, hospitals, prisons, tents, caravans etc.) happened on external steps and stairs while a little under half (46%) occurred indoors. 7% occurred at places of private enterprise (eg. shop, pub, cinema). 6% of stair injuries occurred at schools.

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* QISU data is based on emergency department presentations to the following hospitals: Mater Children's Hospital, Mater Adult Hospital, Mater Private Emergency Care Centre, Queen Elizabeth II Jubilee Hospital, Redland Hospital, Logan Hospital, Royal Children's Hospital, Mt Isa Hospital and Mackay and district hospitals.



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Eight percent of those injured on stairs were on the job. Injuries on stairs and steps were relatively frequent (3% of all injuries in 1991). However these injuries had a lower admission rate (11%) than the average in the QISPP collection (14%).

Sprained ankles were the most common injury resulting from a slip, trip or fall on the stairs. Five percent of the injuries sustained on stairs were concussion.

The most common factors implicated in these injuries were water on the stairs (5% of cases), baby walkers (1%) and alcohol (1%). It is interesting to note that 16 of the 21 injuries to babies involving baby walkers in 1991 also involved steps or stairs and 11 of the 13 injuries involving both stairs and alcohol in 1991 occurred in men.

INJURIES IN THE ELDERLY

People aged 60 years and older presently comprise 15% of the Brisbane population and the proportion of older people in the population can be be expected to increase for some years. Caring for an ageing population has recently been the focus of political debate.

We have examined common factors leading to injury in this age group in 1991. We arbitrarily defined 'elderly' as those aged 60 years or more.

We found that a large proportion of these injuries occurred in a residential location (67%), compared with the database average for injuries occurring in residential locations, which is around 42%.

Many older people (12%) were carrying out maintenance activities (for example on the car or around the house) at the time of their injury. Three percent of injured people aged 60 years and over reported a faint, collapse or fit leading to their injury and 2% reported the injuries being violence related.

One half of the injuries in this older group were the result of falls.

A minor proportion of the incidents were reported as having a chemical mechanism of injury, ie. were due to the effects of drugs, alcohol, domestic chemicals or pesticides, although drugs and alcohol had guite high admission rates. Less than 1% of the injuries were burns.

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We ranked the factors which were most hazardous to the elderly according to our own injury scoring system.

*. According to this system, floors, cars, beds, stairs and ladders were the five most hazardous items for people aged 60 years or more (see Table 1, below):

TABLE 1: INJURIES IN THE ELDERLY - MOST COMMON FACTORS BY INJURY INDEX IN ORDER OF DECREASING RISK FACTOR

RANK	FACTOR	INJURY SCORE
1	Floors	64
2	Passenger car/station wagons	64
3	Beds	56
4	Stairs/steps	43
5	Ladders	43
6	Heavy trucks >3 tons	42.5
7	Water	42
8	Motor vehicles excl. cars & trucks	42
9	Toilets	41
10	Crutches/canes/walkers	40.5
11	Portable circular power saws	40
12	Tiles	39.5
13	Bathtubs/showers	37
14	Barbiturates/sedatives/tranquillisers	36.5
15	Chairs	36
16	Furniture excl. beds & chairs	34.5
17	Electrical wire/wiring systems	34.5
18	Bicycles	32.5
19	Alcohol	32
20	Lawn mowers incl. ride-ons	31.5
21	Wheelchairs	30
22	Runners/rugs/doormats	29
23	Food & drink	28.5
24	Dogs	28
25	Boats	28
26	Knives	27
27	Insects & spiders	27
28	Horses	26.5
29	Garden hoses & acces	25
30	Cats	23

[*A factor involved in causing injury (such as the motor vehicle) could be defined as 'hazardous' if it were responsible for a large number of injuries, or if the injuries caused were consistently severe (or both). Based on these principles, we looked at factors implicated in injuries in the elderly and ranked them according to both definitions of 'hazardous'. We then added these two ranks together and came up with au injury score for each factor. If you have any questions, comments or suggestions about our method, please telephone us on (07) 3840 8569.]

