



INJURY BULLETIN

QUEENSLAND INJURY SURVEILLANCE & PREVENTION PROJECT

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DIY Home & Garden Safety

QISPP recorded 829 injuries related to home and garden DIY activities over the past 12 months for southeast Queensland. 16% of the total number of cases required admission to hospital. More DIY injuries occurred on Sunday than on any other week day.

A wide range of factors were implicated in the total number of presentations, the **most frequent** being:

factor	proportion of DIY injuries	proportion of injuries requiring admission
grinders	8.4%	11%
ladders	7.7%	38%
saws	5.9%	33%
lawnmowers	5.3%	34%
welders	3.0%	-
drills	2.3%	16%

It can be seen that while grinders are associated with the highest proportion of total presentations, of this group, the factor associated with the greatest proportion of admissions is 'ladders'. However, using a system of **hazard ranking** (1), these factors can be regrouped to take into account both frequency of presenta-

tion, and admission rate as indicators of 'danger', as follows:

hazard rank	DIY factor
1	ladders
2	grinders; saws; lawnmowers
3	drills
4	welders

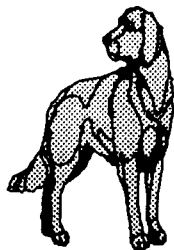
Male/Female Ratio: The male/female ratio for DIY injury was 3:1. Females were not represented at all in the grinding and welding subsets, were most frequently injured while using lawnmowers and ladders, but rarely saws or drills.

Causation and Control: As with all injuries, DIY injuries are the result of an often complex combination of human and environmental factors. Injuries associated with DIY activity involving a ladder occurred in 75% of cases as the result of a fall from the ladder. In 9% of cases injury occurred following the collapse of the ladder.

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**inside.....dog bites
bites & stings
shopping trolleys
seatbelts**

(1) Jones, D. *An integrated system for ranking causative factors* (Paper presented at the 2nd World Conference on Injury Control. Atlanta. May, 1993).



Bites

Dog Bites

- 138 dog bites were recorded on the QISPP database in the 12 months to 30 November 1995.
- 43% (59) of the bites were to children < 15 years.
- 42 bites were to children <10 years, 10 of which required admission or transfer. This represents an admission rate of 24%; an indication of the seriousness of the injuries.
- The majority of injuries (99) occurred at home, while 25 occurred on a footpath or road.
- Three quarters (104) of the bites were inflicted while engaged in leisure activities including 40 - playing, and 29 - walking or jogging.
- There were eight bites to people at work.
- Parts of the body most frequently bitten were the upper limbs (57), followed by the head (40) and the lower limbs (34).
- 30% of the bites to the head required admission.

Recommendations from the RSPCA to prevent dog bites include:

- Dogs are not toys and parents should not consider them as play things for children.
- When bringing a new baby home do not exclude the dog (if the dog has always been allowed in the house don't put it outside).
- Dogs are pack animals and need to be dominated. Obedience training from eight weeks of age will prevent the puppy from establishing itself as the "top dog".
- Desexing helps to stop the dogs need to dominate.
- Certain breeds of dog feel challenged when looked straight in the eye so small children at the dog's eye level are at a greater risk.
- Anybody being attacked by a dog should stand still with their arms folded.
- Walkers or joggers can carry an automatic umbrella which when activated may startle the dog or failing that provide a barrier between them and the dog. Similarly a weak antiseptic solution squirted from a water pistol will often deter dogs.



Bites & Stings

QISPP recorded 324 bites and stings (excluding dogs) for 1995. The distribution over the year confirms the warmer weather as the high season for "bities" (see below).

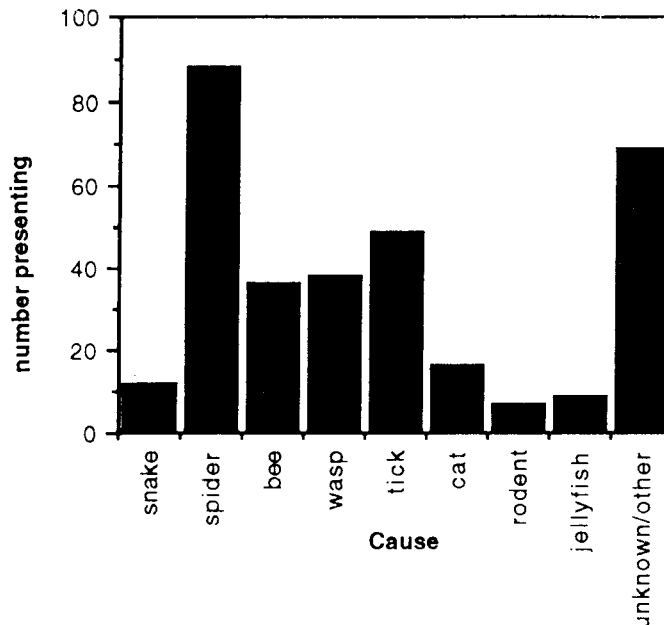
MONTH	NO. OF CASES
January	48
February	29
March	31
April	16
May	14
June	12
July	10
August	26
September	22
October	31
November	37
December	48

Distribution by month.

While there were 12 snake bites recorded for the 12 months more people presented with bites from a pet cat (16) !

Spider bites were the most common presentation with 18 of the 88 recorded identified as redbacks.

Bites & Stings - 1995 (n=324)



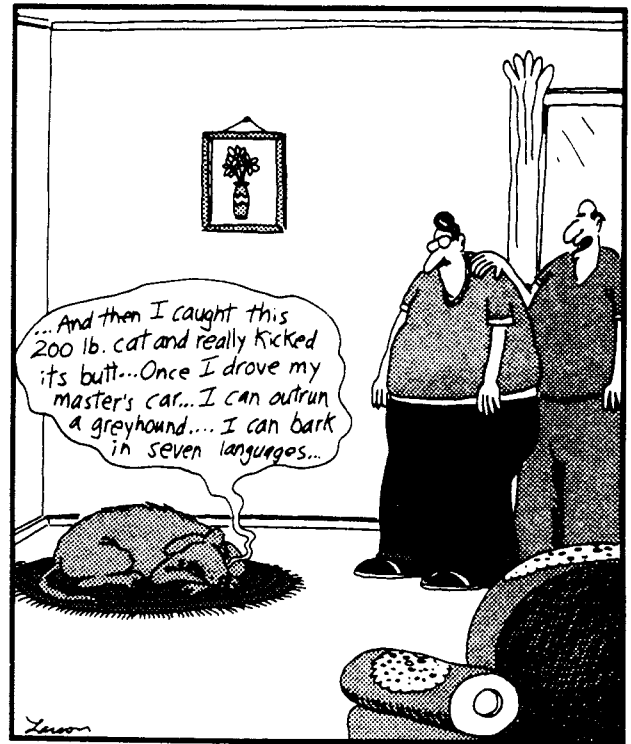
bites and stings continued

15% of the bites and stings were from ticks, while 12% were from wasps and 11% were bee stings.

The majority of bites and stings occurred in the home (210) and in the garden or yard (134). A further 49 occurred in recreational areas including National Parks (19) and beaches (14). There were 18 recorded at schools.

Bites and stings occurred most commonly during leisure activities (195) or performing chores (57) including gardening or yard maintenance. 22 occurred while engaged in paid work. Disturbingly 11 bites and stings were recorded as happening while the person was sleeping!!

42% of those bitten or stung were children (<15 years).



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odd bites: *Odd bites recorded include those inflicted by: a bat, a crab, a koala, a possum and ..a cockatoo.*

Seatbelt Safety

○ Of the 114 cases of passenger injuries to children (<14 years) for 1993, 45 (39%) occurred to children who *were not* wearing a seatbelt. 69 (61%) occurred to children who *were* wearing a seatbelt at the time of injury.

○ However, QISPP data shows children wearing seatbelts when injured sustain *less severe* injuries than those not wearing seatbelts.

○ Of the 45 children not wearing a seatbelt one-third were admitted and there was one death. While, of the children wearing seatbelts, only 13% were admitted and no deaths were recorded.

Shopping Trolley Injuries to Children

- In the 12 months 1/12/94 - 30/6/95 QISPP recorded eight injuries to children from falls from shopping trolleys.
- The injuries included four cases of concussion, of which two required admission or transfer to a larger hospital.
- Three children sustained fractures to the arm and one a contusion.
- The children injured were aged one to two years.

DIY cont.

Nature of Injuries:

factor	most common injury
ladders	bone fracture (52%) - most frequently involving the wrist;
grinders	foreign bodies in eyes;
saws	cuts and lacerations (89%) - most frequently involving fingers;
lawnmowers	cuts and lacerations to fingers (31%);
drills	penetrating wounds to the finger;
welders	flashburns to eyes (52%), foreign bodies in eyes (24%).

Age Breakdown: The age breakdown for most of the listed DIY factors is most likely to reveal patterns of usage. Few injuries occurred in the under 15 and over 59 years age groups, although a significant level of injuries while using ladders continued from 35 through to 69 years. However, there is an interesting bimodal age distribution in the data subset for power saws, with frequency of presentations peaking at the 25 to 29 years age group and again for the 50 to 59 years age group. However, there were no admissions in the 25 to 29 years age group. Such a pattern might suggest that strength and fast reflexes have a greater effect than experience in protecting against serious injury in this DIY subset. Of course, this in no way undermines the need for design modification and improved safety features.

Safety Usage: The use of safety equipment was only reported in 4% of cases. While eye injuries were the most common injury when using grinders and welders, eyes were also commonly injured as a result of foreign bodies being ejected from saws (16% of cases), lawnmowers, and drills.

Logan Hospital Study: For the last three months of 1995, in addition to routine injury surveillance, the Logan Hospital Emergency

Power Saw Injuries by Age Group



Department collected additional data for DIY injuries. This included product details such as: type; brand; age and condition of equipment; whether or not it was hired; whether or not the injured person was left handed; product modification (eg whether or not guards had been removed) etc. 86% of the participants indicated that they were willing for a representative from the Officer of Consumer Affairs to contact them to obtain additional information that will be applied to developing standards to improve the design and safe usage of DIY products.

Department of Human Services and Health Study: *Prevention of Injuries associated with Do-It-Yourself Activities* by the Monash University Accident Research Centre is a recent report of a study to examine the feasibility of piloting projects to transfer safe work practices from work to home through the identification of a set of priority issues that offer good potential for improving the safety of DIY home handyman activities. The report includes a comprehensive table of the major factors causing DIY injury and characteristics of DIY injury. Five of QISPP's six top-ranking factors are included in the table. The factor that does not appear is *drills*. Additional factors in the report, in order of significance, are: vehicle parts; nails, screws, bolts; knives; hammers; hatchets, axes; hoists, lifts, and jacks.