



# INJURY BULLETIN

QUEENSLAND INJURY  
SURVEILLANCE & PREVENTION  
PROJECT

Ground Floor, Clarence Court  
Mater Children's Hospital  
South Brisbane Q 4101  
Ph: (07) 840 8569

*Mater Adult's Hospital   Mater Children's Hospital   Mater Priority Emergency Centre   Redlands Hospital  
Logan Community Hospital   Queen Elizabeth II Jubilee Hospital   Princess Alexandra Hospital*

## This Month...

We focus on **SPINAL INJURIES**.

The **SEASON WATCH**, in a follow-up on last month's football injuries, looks at injuries from **SOCCER**.

We also examine injuries from **SCAFFOLDING**, **WHEELCHAIRS** and **PINS AND NEEDLES**

## NEXT INJURY COALITION MEETING

The next meeting of Queensland's Injury Coalition will be held at 2 pm on Tuesday June 28 in Conference Room 4, Level 3, Mater Adult Hospital.

An address on sporting injuries will be given by Mike Knowles from the Australian Sports Medicine Foundation.

The future development of the Coalition will also be discussed. The objectives suggested by participants at the first meeting included:

- sharing of information
- establishment of a resource network
- working towards changes in public attitudes
- establishment of a unified voice on injury issues
- unified action in injury control.

Participants agreed that intentional injury - suspected child abuse and neglect, domestic violence, assault, suicide, self harm, homicide and sexual assault - be included in the terms of reference of the Coalition, although the Coalition would in all matters defer to the established groups specialising in these injury issues.

# SPINAL INJURIES

- Denise Jones BSc  
Co-ordinator  
QISPP

QISPP recorded 285 injury admissions to the Princess Alexandra Hospital Spinal Unit during the four year period ending 31/12/93.

Eighty-five percent of those requiring admission to the Spinal Unit during this period were males. In general, males constitute 65% of the population of injury admissions on the QISPP database, so it is apparent that males are significantly over-represented in admissions for spinal trauma.

## VEHICLES

Twenty-nine percent of cases were motor vehicle passengers in road traffic accidents. Of these, 12% of people reported vehicle rollover at the time of the accident. Only one third of people sustaining spinal injuries in motor vehicle accidents were reported to be wearing a seat belt at the time.

Over half (58%) of those injured in motor vehicles were in the driver's seat at the time of the accident. Of those who were passengers, 66% or two-thirds were in the front left passenger seat, and a further 24% in the rear left passenger seat.

8% of people admitted for spinal trauma were riding mopeds, motorcycles or trailbikes.

7 people were riding bicycles.

People on foot were struck by cars, bobcats and trains.

## RECREATIONAL

23% of cases were involved in recreational activities such as sport at the time of their injury:

- 11% of all admissions to the Spinal Unit during this four year period were the result of diving into creeks, rivers or the surf;

- 7% of all cases occurred during football or rugby;
- four injuries were the result of a helicopter or ultralight aircraft accident;
- two injuries occurred during hang gliding and one during para gliding;
- in two cases the injury occurred on a waterslide.

## OCCUPATIONAL

13% of people admitted to PAH Spinal Unit were on the job at the time of their injury. Nine of these thirty seven workers were employed in the construction industry and five were employed in the road transport industry.

## OTHER SCENARIOS

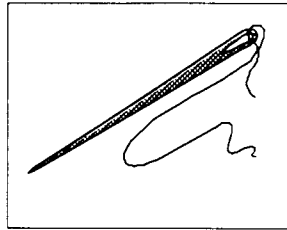
19% of injury cases were the result of falls from scaffolding, stairs, trees, roofs, boats and balconies, and in seven cases, falls from horseback.

Other less common scenarios were water skiing, throwing a ball, jumping, swinging from a rope and playing volleyball or basketball.

A number of people were struck by falling objects: weights, bales of hay, logs, buses, cars, pallets, rock slides (3 cases) and falling trees (4 cases).

- Three percent of admitted spinal injuries were violence-related.
- Alcohol was implicated in 8% of cases.
- Guns were a factor in three cases.
- Six people fell from ladders or stepladders.
- A jack or hoist failed in three cases.
- Two people were charged by a bull.

## INJURIES FROM NEEDLES AND PINS



Over a five year period QISPP has recorded 466 cases of injury due to needles or pins (excluding hypodermic needles). In most cases those injured were walking inside their own homes and stepped on needles or pins embedded in carpet. Of the 466 cases, 417 were injured in this way. Half of these resulted in foreign bodies embedded in the feet.

Swallowing pins and needles was also a common scenario with many people injured after holding them in their mouth while sewing, then sneezing or inhaling them. Small children swallowed pins they found on the floor while playing or crawling.

The severity of these injuries is demonstrated by the higher than average admission rate of 30%.

## WHEELCHAIR INJURIES



In a six year period from 1.1.88 to 31.12.93, QISPP recorded a total of 136 cases of injury involving wheelchairs. The highest number of these injuries (16%) occurred in the 20-29 year age group and in the 80 yrs and over (15%) age group.

One quarter of all injuries involving wheelchairs were admitted or transferred while two thirds were treated and sent home.

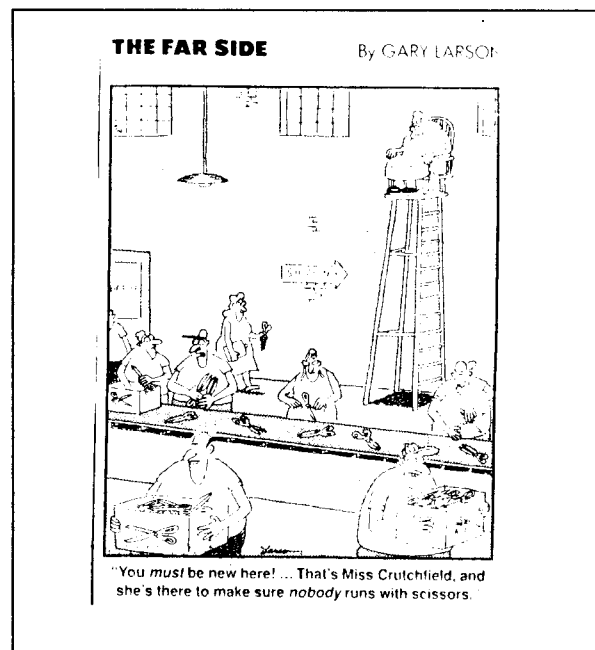
More than one quarter (26%) of all wheelchair injuries occurred in a residential institution with another 38% occurring in the person's own home.

Falls from wheelchairs accounted for nearly half of the injuries recorded.

Fractures were the most common type of injury recorded (35%), with cuts and lacerations accounting for another 20%. It is possible that this high proportion of fractures may be associated with the fact that a significant proportion of people using wheelchairs are generally immobile, aged and may have more brittle bones.

Common injury scenarios included people falling when getting into and out of wheelchairs and others walking into, falling against or being hit by a wheelchair.

A spokesperson from the Physiotherapy Department at the Mater Adult Hospital stated that a contributing factor in wheelchair safety was having correct tyre pressure (90 lb/square inch). Having tyres at the incorrect pressure makes the brakes inefficient and also causes instability of the chair. Comment was also made that over a period of time, a person's mobility may change and they may have to learn different transfer techniques to accommodate this change in mobility. In addition, after having been initially taught correct wheelchair handling, some people can become 'lazy' with the way they use their chair and need to be reminded of the possible hazards associated with wheelchair mobility.



Copyright FARWORKS INC., distributed by Universal Preditss Syndicate

# SCAFFOLDING INJURIES

During the 6 year period 1.1.88 to 31.12.93, QISPP recorded 494 injuries associated with the use of scaffolding.

388 injuries (nearly 80%) occurred on the job and these occupational injuries were mostly amongst construction industry workers including carpenters, bricklayers, painters, plasterers and construction labourers. The majority of the accidents (nearly 70%) occurred at construction sites or other areas of production and commerce, while a quarter of injuries occurred in a residential setting.

In over 70% of cases, the injury occurred when the person fell on or from scaffolding and over 16% of these falls were reported as due to collapse of the scaffolding. Being hit by falling scaffolding contributed to injury in 11% of cases. Other injuries resulted from hitting against the scaffolding (6% of cases) or being caught in or snagged by parts of the scaffolding (5% of cases).

Possibly because of the height of the scaffolding and the fact that in falling, the person often hit construction materials or landed on concrete or other hard surfaces, the accidents often resulted in serious injury, with 18% of cases requiring admission to hospital.

In 6 cases, the accident resulted in admission to the Spinal Unit at the Princess Alexandra Hospital.

# SOCCER INJURIES



In our last issue of the Injury Bulletin, we published a report on football injuries, which covered Rugby League, Rugby Union, Australian Rules and Touch football. In this issue, we examine injuries which occurred while playing soccer in organised matches.

During the six year period from 1.1.88 to 31.12.93, QISPP recorded 2,739 injuries occurring during soccer. The majority of injured players were male (93%), and over two thirds of all injuries occurred in the 10 to 24 years age group with 15 to 19 year olds being the most frequently injured.

As might be expected, the injuries occurred mostly on weekends with the highest incidence occurring in the autumn/winter months of May, June, July and August.

One in six injuries occurred at an educational institution.

As with football, the common injuries from soccer included sprains and strains (36%), fractures (24%) and bruising (18%). However, where football injuries affected mainly the head and upper extremities, in soccer over half the injuries were to the lower extremities with sprains to the ankle (15% of injuries) and knee (8% of injuries) being the most frequent injuries recorded. Injuries to the upper extremities occurred in 29% of cases, with fracture of the forearm being the most frequent (6% of all injuries).

Although soccer is regarded as a non-contact sport, nearly 40% of the injuries reportedly involved another player.