Q I S P P

QINJURY BULLETIN

QUEENSLAND INJURY SURVEILLANCE & PREVENTION PROJECT
Ground Floor, Clarence Court
Mater Children's Hospital
South Brisbane Q 4101
Ph: (07) 3840 8569

Mater Adult Hospital *Mater Children's Hospital* *Mater Private Emergency Centre* *Redland Hospital*
Logan Hospital *Queen Elizabeth II Jubilee Hospital* *Princess Alexandra Hospital*

Central Queensland Rural Injury Surveillance -initial findings

The Central Queensland Public Health Unit commenced rural injury surveillance early in 1996. The surveillance, based on the QISPP system, will run for 12 months with an option to extend.
Ten hospital and outpatient establishments are involved in the collection. 1262 injury surveillance forms were completed during the autumn quarter, 1 March - 31 May 1996.
Catherine Harper, Data Manager, CQPHU, in analysing the data found that while the results are generally in agreement with other injury surveillance programs, there are some specific issues to be addressed. These include:

- the numbers of injuries occurring in workplaces despite legislated requirements for workplace safety,
- the high proportion of football injuries,
- the excess of injury in people aged under 24 years (approximately 1/2 of the injuries), and
- the high number of eye injuries.

Manager of the project, Fran McFadzen, Health Promotion Coordinator, CQPHU, says that a major long term aim of the project is to involve hospital staff in developing injury prevention strategies specific to local needs.
Injuries in the Central Queensland area that are not usually found in the South Brisbane data collection are Farm and Mine injuries. Details page 3.

Participating hospital and outpatient establishments:

Baralaba Hospital
Blackwater Hospital
Capella Outpatients
Emerald Hospital
Gemfields Outpatients
Moura Hospital
Springfield Hospital
Theodore Hospital
Woorabinda Hospital
Yeppoon Hospital

Thank you to the staff of these establishments for their enthusiasm and hard work in collecting data for the CQPHU Rural Injury Surveillance Project.

Data recorded by QISPP for the same period has been used to provide a comparison to the data collected by Central Queensland.

QISPP recorded 6008 injuries over the three months. 65% of those injured were male and 57% were aged < 24 years. 70% of Central Queensland's 1262 injury incidents were to males, and 45% were to people in the < 24 years age group.

Activity

There were also similarities between the two collections in the proportional representation of various activities.

Activity	% of all activities	
	CQPHU	QISPP
Leisure	40	45
Recreation & Sport	14	16
Occupational	18	16
Chores	13	11

Table 2 Distribution of activity

However, while 80% of the Recreation and Sport injuries recorded by CQPHU were football related, football injuries constituted only 60% of QISPP data injuries in this category.

Location

The majority of injuries recorded by both collections occurred at home, ie 39% for QISPP and 33% for CQPHU.

Locations associated with the highest admission rate recorded by CQPHU were:

Location	Within category Admission/Transfer Rate
Farm (exterior)	27%
Sealed roads	27%
Mine	25%
Outdoor sports/ athletics	12%
Home/garden	8%

Table 4 CQPHU admission rate by location

External Cause

Information in the data which has the greatest application for prevention, is available from *External Causes*. Table 5 shows Central Queensland injuries by external cause in order of occurrence. Categories marked * would be most amenable to intervention.

External Causes	No.
Fall	221*
Hit by person (108 at football)	180*
Transport	149
Animal	142*
Cutting Piercing	139*
Hit by object	125
Other	96
Machinery in operation	79*
Hit object	60
Burns	38*
Slip	29
Poisioning	19*
Hit Person	10
TOTAL	1262

Table 5 Injuries by external cause

CQPHU			QISPP		
	No.	%		No.	%
Home	416	33	Home	2350	39
Athletics/sports area	157	12	Athletics/sports area	912	15
Recreation area	144	11	Street/highway	663	11
Street/highway	114	9	Trade/service area	562	9
Farm	113	9	School/Public admin	513	9

Table 3 Most common locations of injuries in rank order

Mine Injuries

40 injuries requiring hospital attention occurred in mines during the three months (1/3/96- 31/5/96).

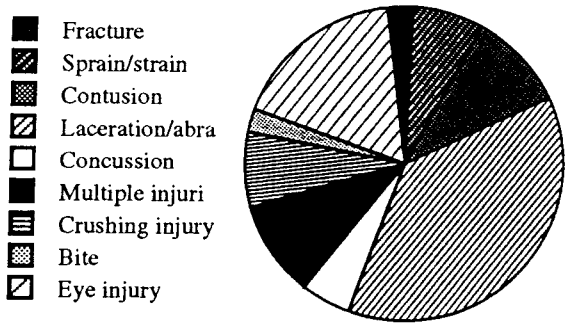
All of the injuries were to males and all were working for income at the time of injury. The age distribution was approximately evenly spread between 20-59 years.

63% (25) of patients reported wearing safety equipment at the time of injury although in 2 instances it was not being used properly (eg "lifted up welding helmet prior to the completion of the job").

An indication of the severity of injuries is evidenced by the admission/transfer rate of 25%. This compares with an overall admission/transfer rate of 14% for Central Queensland for the same period.

The injuries most frequently occurred as a result of the following causes:-

- struck by object - 38%
- machinery in operation - 20%
- foreign body in eye - 10%
- cutting/piercing object - 10%
- trip/slip/fall - 6%



Graph 1 Nature of mining injuries

Occupation	Number of mine injuries	%
Carpenters & Joiners	1	3
Crane Operators	1	3
Drilling Plant Operators	2	5
Electrical Fitters	2	5
Excavating & Earthmoving Plant Operators	2	5
Metal Fitters & Machinists	3	8
Managing Supervisor	1	3
Other Construction & Mining Labourers	20	50
Other Mobile Plant Operators	2	5
Structural Steel, Boilermaking & Welding Trades	1	3
Trades Assistants	1	3
Truck Drivers	2	5
Vehicle Mechanics	2	5

Table 6 Mine Injuries by Occupation

Farm Injuries

There were 113 injury presentations, for the three month period, from farms (not including farm houses) in Central Queensland. 76% of farm injuries involved males. The causes of the injuries are detailed below.

Cause	% of farm injuries
Cattle related	10
Horse related	20
Other animal related	3
Motor vehicle	8
Motorcycle	6
Bicycle	1
Cutting, piercing object	12
Machinery in operation	9
Struck by person or object	8
Fall	6

Table 7 Cause of farm injuries

Finger Laceration Injuries

The CQPHU analysis revealed that lacerations and abrasions constituted one third of all injuries.

The major injury site was limbs (63% or 705 injuries). More than half of these (54%) involved the upper limbs, with finger and hand being the most predominant sites involved.

A similar picture emerges from QISPP data. Lacerations alone constituted 21% of all injuries. Over this three month period, there were 290 cases of cuts to fingers, which made up close to one quarter (23%) of all laceration injuries. Almost half of the 290 finger lacerations were associated with just three factors, as set out in the table below.

Because of the predominance of these factors, it is not surprising to learn that 133 cases (46%) occurred in the context of Working for Income. The second most common activity involved Cooking/Food Preparation.

The "high-risk" industries for finger lacerations, in rank order are:

- Other Manufacturing
- Accommodation, Cafes & Restaurants
- Construction Trade Services
- Metal Products
- Retail Trade
- General Construction

The other half of the story is the 123 cases (42%) that occurred in a home location. Most (43 cases) occurred in the kitchen, 28 cases occurred in the home yard/garden, and 12 occurred in the garage/shed.

Rank	Factors	No. of Cases	% of all factors
1.5	Knives	56	19%
1.5	Machinery	56	19%
3	Glass	26	9%

Table 7 Factors most commonly associated with finger lacerations

What can be done?

A perusal of the QISPP data text narrative reveals that some injuries appear easier to control than others:

- *Assembling a shed on private property, when lacerated his finger on a piece of steel framing. Wearing gloves.*

Steel-mesh gloves may have prevented this injury. However, while the use of some safety equipment may not completely prevent an injury, it often minimises its severity.

The following injury description has a clear message for injury control:

- *Putting the catcher on the lawn mower whilst still running, when caught his hand on the mower blades. Wearing safety goggles and ear muffs.*

It is good to see in these accounts an increased awareness of the need for safety equipment. However, moving mower blades should be treated with the utmost respect. Mowers should also be turned off before any attempt is made to remove blockages of grass or other debris.

"Time out, please! ... Eyelash!"