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# Safe Communities – an Approach to Injury Prevention

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# Summary

- The Safe Communities approach to injury prevention is an effective World Health Organisation supported method of reducing injury and promoting safety
- Nine Australian communities are internationally recognised / accredited 'safe communities' – there are currently no 'safe communities in Queensland'
- The Mackay / Whitsunday Safe Communities Project practically demonstrates the utilisation of the safe communities process
- Surveillance data collected by QISU from hospitals in the region is analysed at a state level by QISU and at a regional level by the James Cook University (JCU) in collaboration with Queensland Health and QISU
- Regional surveillance data is used to identify strategic areas for intervention and to monitor effectiveness of programs
- Dissemination of regional surveillance data improves community ownership of injury as a significant health problem

#### Introduction

Queensland Injury Surveillance Unit (QISU) is working in partnership with Queensland Health, Mackay City Council, Whitsunday Shire Council, Queensland Police Service, Queensland Transport and James Cook University to establish Queensland's first accredited 'safe community'.

QISU's key role is in the provision of emergency department based injury data to inform the Mackay/Whitsunday Safe Communities project. Data collection from all public hospitals in the Mackay and Moranbah Health Districts was established in 1997 providing an essential tool for prioritising areas for intervention and measuring outcomes.

Surveillance data is analysed at a state level by QISU and at a regional level by School of Public Health and Tropical Medicine James Cook University in collaboration with Queensland Health and QISU

This Bulletin provides an overview of the Safe Communities model of injury prevention focusing on the Mackay/ Whitsunday Safe Communities Project as a case study.

## What is Safe Communities?

Safe Communities is a World Health Organisation (WHO) supported approach to



injury prevention and safety promotion that originated in Sweden in the 1960's.

The safe community model aims to understand injury and intervene at a community level.

By involving the community in finding its own solutions, it aims to be a catalyst for environmental, structural, sociological and political change that empowers the community, and ultimately the individuals within the community to change their environment and their behaviours to reduce the risk of injury and increase the perception of safety.

The approach therefore has the potential to focus and coordinate existing injury control activities.

Since its inception the Safe Community approach has been internationally shown to be an effective means of reducing injury<sup>1,2</sup>. There are currently 53 WHO accredited Safe Communities, nine of these in Australia; four in new South Wales, three in Victoria and one each in South Australia and Western Australia. These are demonstration communities that other communities can model when seeking to establish their own community safety program.

Communities may apply for accreditation through the WHO Collaborating Centre for Community Safety Promotion (based at the Karolinska Institute in Stockholm, Sweden). Applications are assessed on 12 criteria. However the Safe Community approach is more a process than a program and accreditation more a commitment to the ongoing process of becoming a Safe Community, than a statement of what the community has achieved at the time of accreditation.

# Injury in the Mackay / Whitsunday Region

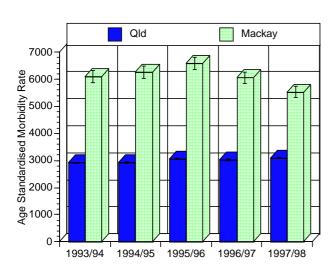
High mortality, and morbidity rates for injury have been observed in the Mackay / Whitsunday region. In particular, age standardised hospital separation rates are more than double those observed for other Queenslanders (Figure 1).

Male

# WHO Criteria for Safe Communities

- Formation of a cross sectoral group that is responsible for injury prevention.
- 2 Involvement of the local community network.
- 3 The program will address all ages, surroundings, and situations.
- 4 The program will address the concerns of high-risk groups (such as children and the elderly), high risk environments and aim to ensure equity for vulnerable groups.
- 5 The program should have a mechanism to document the frequency and causes of injuries.
- 6 Program must be a long-term approach, not one of brief duration.
- 7 The program evaluation should include indicators which show effects and provide information on the process as it advances.
- 8 Each community will analyse its organisations and their potential for participation in the program.
- 9 Participation of the health care community in both the registration of injuries and the injury prevention program is essential.
- 10 Be prepared to involve all levels of the community in solving the injury problem.
- 11 Disseminate information on the experience both nationally and internationally.
- 12 Be willing to contribute to the overall network of "Safe Communities".

Female



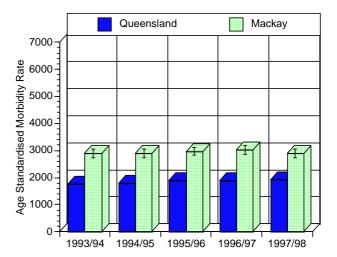


Figure 1 Age Standardised Morbidity (Hospital Separation) Rates per 100,000 and 95% Confidence Intervals for Queensland vs. Mackay.

QISU has collected high quality Level 2 NDS-IS (National Data Standard for Injury Surveillance) data from all public hospitals in the region since September 1997. Ascertainment rates of 94% have been achieved.

Mackay Base Hospital reports an average of 8700 injuries per annum from its Emergency Department (ED), constituting one quarter of its case load. Males in Mackay are 2.5 times more likely, and females 2.0 times more likely to sustain an injury requiring ED presentation when compared with the population of South Brisbane (Figure 2). Admission rates in the Mackay region (11.7%) are comparable with those observed in South Brisbane.

# Mackay/Whitsunday Safe Communities Project

The Mackay/Whitsunday Safe Communities Project was launched in February 2000 in response to the excessive risk of injury observed in the region.

While a number of single issue safety promotion projects have been run over recent years, this project aims to coordinate a systematic and intersectoral sustained response to injury within the region.

A central project management team facilitates and coordinates interventions designed and managed by local community based intersectoral action groups.

# Collaborative Injury Research Working Group

## Background:

- A collaboration was established involving the School of Public Health and Tropical Medicine at James Cook University, Queensland Health, & QISU to analyse QISU surveillance data at a regional level.
- All public hospitals in the region (Clermont, Dysart, Mackay, Moranbah, Proserpine, and Sarina) and the major private hospital (Mackay Mater) contribute to the QISU data base.
- This provides a powerful epidemiological tool to study the causation and impact of injury in a rural region and evaluate the effectiveness of interventions.

#### Initiatives:

- Ongoing analysis of local data to identify strategic areas for intervention.
- Presentation of papers at Injury 2000 national conference.
- Preparation of a baseline monograph of injury in the region.
- Baseline public perception telephone survey of 461 local residents conducted by JCU\*.

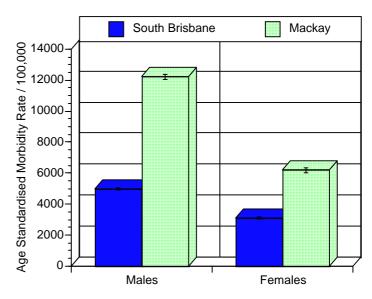


Figure 2 Age Standardised Morbidity (injury presentation) rates and 95% confidence intervals per 100,000 population for Mackay Base Hospital Emergency Department vs South Brisbane in 1998 and 1999

# Telephone survey results:

- Subjects overwhelmingly agreed that injuries can be prevented. However few were aware of specific accident prevention or safety programs. The majority of subjects perceived prevention to be the responsibility of the individual experiencing the injury.
- The street and the motor vehicle were perceived as the most likely locations for injury, whereas most injuries occur in the home.
- Majority of subjects complied with 3 or more safety practices (eg smoke detector, handrails, hot water tempering valve). Increased compliance with household safety practices was associated with increasing age.
- The 16-29 year age group were correctly perceived as the most likely group to be injured.

# Mackay Senior Safety Working Group

## Background:

- Patients greater than 65 years account for 5% of all injury presentations.
- They are more likely to require hospitalisation (32%), accounting for 10% of all injury admissions.
- Falls account for just over half of all injuries. 60% of these falls occurring in the home.
- Fall rates are comparable to those observed in South Brisbane, (264 per 100,000 person years in Mackay cf 310 per 100,000 person years in South Brisbane)<sup>3</sup>

#### Initiatives:

- Implementation of Healthy Homes Parties a volunteer based peer education falls prevention program
- Promotion of physical activity through integration of Just Walk It and Sitting Dance Programs
- Community displays and distribution of home safety information
- Implementation of Safe Shop Program in central business district to enhance perceptions of safety

# Whitsunday Child Safety Working Group Background:

- Children under 15 years account for 26% of all injury presentations.
- Mackay residents are 1.9 times more likely to present to an ED with an injury sustained while riding a pushbike than residents of South Brisbane.
- Half of all pushbike injuries are sustained by children less than 15 years of age.

#### Initiatives:

- Integration of Queensland Transport's BP Bike Ed Program into local schools.
- Development and implementation of Operation BikeSafe, a proactive bike safety program using positive reinforcement as its strategy, utilising local police, schools and the media.
- Liaison with Local Government to discuss supportive infrastructure/environments for safe bike riding.
- Kidpower an innovative injury prevention resource kit aimed at reducing primary school based injuries.

# Road Safety Working Group

# Background:

- 9.3% of all injuries were related to transport.
- in 1998-1999, Mackay / Whitsunday residents were 1.8 times more likely to require admission to hospital due to injuries sustained in a transport accident than other Queenslanders.

# Initiatives:

- This recently established working party has identified the following strategic issues for action: driver fatique, data collaboration and coordination, driver education, train crossings, target groups (especially young males), cyclists, alcohol, footpaths / bicycle paths and drug driving.
- Development / implementation of a safe party kit.
- Promoting responsible drinking of alcohol through integration of Drink Rite Program.

# Other partnerships:

• Links have been established with the Mackay Crime Prevention Partnership.

# Planned working groups:

- · Child safety working group for Mackay.
- Working group to address injuries related to alcohol in the region.
- Sports injury working group.



#### References

- 1. Day, L, M., Ozanne-Smith, J., Cassell, E., McGrath, A. Latrobe Valley Better Health Project. Evaluation of the injury prevention program 1992-1996. VicHealth. Accident Research Centre. Report No 114, July 1997.
- 2. Schelp, L. Community intervention and changes in accident pattern in a rural Swedish municipality. Health Promotion 1987;2:109-25.
- 3. Hockey, R., Miles, E. Falls in Older People. QISU Injury Bulletin 56 October 1999.
- \* Telephone survey conducted by Mr Anthony Carter, JCU PhD student, sponsored by the Tom and Dorothy Cook Fellowship.

# For further information contact:

Mackay / Whitsunday Safe Communities

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- ◆Victorian Safe Communities Network : www.general.monash.edu.au/muarc/vscn/vcsn.htm
- WHO Collaborating Centre on **Community Safety Promotion:**

www.phs.ki.se/csp

# **QISU** Staff

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# **QISU** Injury Bulletin

Injury Bulletin comment or feedback is welcomed and can be directed to: Elizabeth Miles Phone 07 3840 1591 or email lizm@qisu.qld.gov.au

# **QISU** Data

QISU collects and analyses data from emergency department injury presentations on behalf of Queensland Health. Participating hospitals represent three distinct regions of Queensland and include:Mater Children's Hospital, Mater Adult Hospital, Mater Private Emergency Care Centre, Queen Elizabeth II Jubilee Hospital, Redland Hospital, Logan Hospital, Princess Alexandra Hospital, Royal Children's Hospital, Mt Isa Hospital, Mackay Base Hospital, Proserpine Hospital, Sarina Hospital, Clermont Hospital, Dysart Hospital and Moranbah Hospital

QISU publications and data are available on request for research, prevention and education activities.

# **OISU** Web site

www.qisu.qld.gov.au

