

QISU collects and analyses data from emergency department injury presentations on behalf of Queensland Health. Participating hospitals represent urban, rural and remote areas of Queensland.

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

HOSPITALS:

- Atherton
- Mareeba
- Tully
- Innisfail
- Dysart
- Clermont
- Sarina
- Proserpine
- Moranbah
- Mackay Base
- Mackay Mater
- Mount Isa
- Royal Children's
- Mater Children's
- Queen Elizabeth II
- Logan
- Robina

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INJURY BULLETIN

A 5 year review of information requests to QISU

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Introduction

The Queensland Injury Surveillance Unit (QISU) has been collecting and analysing injury data in Queensland since 1988. QISU data is collected from participating emergency departments (EDs) in urban, rural and remote areas of Queensland. Using this data, QISU produces several injury bulletins per year on selected topics, providing a picture of Queensland injury, and setting this in the context of relevant local, national and international research and policy. These bulletins are used by numerous government and non-government groups to inform injury prevention and practice throughout the state. QISU bulletins are also used by local and state media to inform the general public of injury risk and prevention strategies. In addition to producing the bulletins, QISU regularly responds to requests for information from a variety of sources. These requests often require additional analysis of QISU data to tailor the response to the needs of the end user. This edition of the bulletin reviews 5 years of information requests to QISU.

Method

Information requests are logged by QISU staff as the request is made. This log includes the date the request was made, the requesting person or contact and the topic or nature of the request. Requests are also categorised according to the type of end user, (media, Queensland Health (QH), other government, University or research group, other and unspecified). The other and unspecified category includes requests from private businesses and general public. The information request log for the 5 year period July 2004 to May 2009 was reviewed to provide the data for this bulletin.

Results

There were a total of 788 requests for information to QISU over the 5 year period. The number of requests per year varied from 105 to 206 (table 1). The most common source of data request was the media (255 or 32%), followed by government organisations other than Queensland Health (180 or 23%), Queensland Health (112 or 14%), and universities or researchers (63 or 8%).

| | Media | QH | Other Gov | Uni/Research | Other | Unspecified | Total |
|--------------|------------|------------|------------|--------------|------------|-------------|------------|
| 2004/5 | 57 | 33 | 55 | 19 | 32 | 9 | 205 |
| 2005/6 | 28 | 41 | 63 | 23 | 46 | 5 | 206 |
| 2006/7 | 37 | 15 | 33 | 12 | 15 | 18 | 130 |
| 2007/8 | 65 | 12 | 18 | 5 | 12 | 30 | 142 |
| 2008/9 | 68 | 11 | 11 | 4 | 9 | 2 | 105 |
| Total | 255 | 112 | 180 | 63 | 114 | 64 | 788 |

Table 1. Number of requests by year and requesting source.

Request topic

Over the 5 year period, information requested covered a wide range of injury topics. (Table 2) Overall, requests for general or age group specific injury information were the most common (141 or 18%), followed by information on household related injuries (134 or 17%).

| Topic | | Sub-topic | |
|-----------------------------------|------------|---------------------------------|----|
| Injury General | 141 | General Inquiry | 53 |
| | | Childhood Injury | 78 |
| | | Senior Injury | 10 |
| Household related | 134 | | |
| | | Motor Vehicle related/Transport | 79 |
| Motor Vehicle related/Transport | 79 | Motor Vehicle | 75 |
| | | Other Modes | 4 |
| Ingestion/Poisoning | 51 | Object | 24 |
| | | Drug | 11 |
| | | Plant | 11 |
| Bicycle/Small Wheel | 41 | Chemical | 5 |
| | | Bicycle | 24 |
| | | Small Wheel Devices | 17 |
| Sports related | 38 | | |
| Animal related | 35 | | |
| Work related | 31 | | |
| Recreational Activity related | 27 | | |
| Playground/Play Equipment related | 22 | | |
| Toy related | 16 | | |
| Pool related | 14 | | |
| Building related | 13 | | |
| | | Assault General | 10 |
| Violence related | 12 | Sexual Assault | 2 |
| School/Child care | 11 | | |
| Product related | 10 | | |
| Wheelchair/Trolley/Stroller | 9 | | |
| Equipment related | 8 | | |
| Farm related | 8 | | |
| Alcohol related | 6 | | |
| Public Space related | 5 | | |
| Intentional | 4 | | |
| Environment related | 3 | | |
| Other | 8 | | |
| Data clarification/question | 18 | | |
| Unspecified | 44 | | |
| Total | 788 | | |

Table 2: Requested information by topics

Nature of the QISU request

The majority of requests were for statistical data (589 or 75%) followed by requests for media comment or interview (146 or 19%). (Table 3).

| | Statistical Data | Media Interview | Information | Others | Unspecified | Total |
|--------------|------------------|-----------------|-------------|----------|-------------|------------|
| 2004/5 | 163 | 22 | 10 | 2 | 8 | 205 |
| 2005/6 | 187 | 3 | 10 | 1 | 5 | 206 |
| 2006/7 | 112 | 6 | 6 | 1 | 5 | 130 |
| 2007/8 | 83 | 57 | 2 | 0 | 0 | 142 |
| 2008/9 | 44 | 58 | 2 | 1 | 0 | 105 |
| Total | 589 | 146 | 30 | 5 | 18 | 788 |

Table 3. Nature of QISU request

Request Topic by End User

The requested topics were similar for the top 3 end users; Media, QH and University/ research groups. Household related injury was the most common topic requested overall, and the second most common topic requested for all top 3 end users, representing 26%, 12% and 17% of requests respectively. Motor vehicle related injury represented 11%, 4% and 10% of requests respectively. The media focussed more on toy related injuries, with 10% of media inquiries relating to toys.

| Topic | Media | QH | Uni/Research |
|-----------------------------------|------------|------------|--------------|
| Injury General | 19 | 29 | 17 |
| Household related | 67 | 13 | 11 |
| Motor Vehicle related | 28 | 5 | 6 |
| Ingestion/Poisoning | 6 | 11 | 4 |
| Bicycle/Small Wheel | 10 | 6 | 3 |
| Sports related | 11 | 7 | 2 |
| Animal related | 12 | 7 | 3 |
| Work related | 7 | 2 | 2 |
| Recreational Activity related | 14 | 4 | 3 |
| Playground/Play Equipment related | 6 | 1 | 3 |
| Toy related | 25 | 1 | 0 |
| Pool related | 9 | 0 | 0 |
| Building related | 0 | 0 | 2 |
| Violence related | 4 | 4 | 0 |
| School/Child care | 5 | 2 | 0 |
| Product related | 9 | 0 | 0 |
| Wheelchair/Trolley/Stroller | 1 | 1 | 0 |
| Equipment related | 2 | 0 | 0 |
| Farm related | 3 | 1 | 1 |
| Alcohol related | 0 | 4 | 0 |
| Public Space related | 0 | 1 | 1 |
| Intentional | 1 | 0 | 0 |
| Environment related | 1 | 0 | 0 |
| Other | 2 | 1 | 1 |
| Data Clarification | 3 | 4 | 2 |
| Unspecified | 10 | 8 | 2 |
| Total | 255 | 112 | 63 |

Table 4: Requested topic by end user: top 3 requested topics by each user highlighted

Discussion

QISU's role is to collect and analyse Level 2 injury surveillance data from representative EDs across Queensland. This data is collected by triage nurses in EDs throughout the state and supplied to QISU in electronic and paper based formats for cleaning and analysis. In this role, QISU is funded by Queensland Health and supported by Mater Health Services. Level 2 injury surveillance data gives significant detail with regard to injury mechanisms and other factors that contribute to an injury event (time and date of injury, major injury factor, mechanism of injury, intent). In particular, Level 2 data captures the location where the injury occurred and details of the activity at time of injury (occupation, sporting activity), which is not captured in Level 1 data. Whilst some other Queensland data sets do collect highly specific mechanism of injury data (Queensland Poisons Information Centre (QPIC) and the Royal Children's Hospital burns unit), QISU data is unique in Queensland in regard to the level of data that can be used to inform prevention strategies over a wide range of injuries.

QISU is also unique in that QISU data is collated and analysed by staff who also work in a clinical setting or have a clinical background. QISU is based at the Mater Children's Hospital, and data analysis is directed by medical staff that perform a clinical role in the Mater Children's Hospital Emergency Department. As such, QISU staff understand the commitment required to collect the data, and the time and quality limitations imposed by the Emergency Department setting. QISU staff are also well placed to interpret clinical injury data particularly in relation to developmental age (paediatric data) and clinical severity (triage scores and admission criteria). QISU shares a paediatric emergency fellow with the Mater Children's Hospital Emergency Department. The fellow's position is designed to enable him/ her to develop skills in data analysis and presentation, and to develop an understanding of the health worker's potential role in public health and injury prevention advocacy.

QISU undertakes regular analysis of QISU data by different injury topics, and currently produces quarterly injury bulletins that are circulated (in print or electronically) to approximately 700 subscribers across Queensland and Australia. In addition, QISU maintains a website that provides public access to current and past bulletins and will soon host a data request page designed to streamline our data request process and tracking.

The information request service that QISU provides is performed alongside the core business of data collection and analysis. Whilst many information requests (particularly media requests for comment or interviews) occur after QISU media releases specific to each bulletin, others occur in response to random events such as high profile injuries reported in the media, coronial inquests, policy changes and legislative reviews. The information request log is intended to capture all

formal requests for data analysis and comment from QISU. In addition to the formal requests that QISU receives, there are many informal requests for advice, contacts, data sources and reference materials. The request log does not capture many of these informal requests.

The nature of injury surveillance data is such that not all requests for information can be accommodated. Some requests require region specific data that QISU does not have, or a level of detail that is not possible to accurately retrieve. QISU is attempting to improve data collection techniques by simplifying data entry at the collecting hospital and refining coding and reporting techniques within QISU.

There are many local (Victorian Injury Surveillance Unit (VISU)), national (Canadian Hospitals Injury Reporting and Prevention Program (CHIRPP), National Electronic Injury Surveillance System in the USA (NEISS), National Injury Surveillance Unit in Australia (NISU)) and international (European Injury Database (EU IDB)) injury databases in the world. It is difficult to compare QISU's end user profile to that of other injury surveillance units, as little has been reported on that subject. The Royal society for the Prevention of Accidents (RoSPA) in the UK performed an analysis of end-users of the Household Accident Surveillance System (HASS) and Leisure Accident Surveillance System (LASS) injury surveillance data as part of a proposal to establish a national UK injury surveillance database. In this analysis, injury surveillance data was utilised almost evenly between injury prevention programmes, policy development, research, and risk assessment [1].

Utilisation of QISU data is facilitated by the development of working relationships between QISU and end users. As such, QISU performs a significant advocacy role, seeking representation on a variety of state and national committees tasked with developing performance standards, policy and legislation. Currently, QISU is represented on the Australian Standards committee for child resistant packaging, the Queensland Government Consumer Product Safety Committee and Pool Safety Committee. In addition, QISU actively engages business and industry groups in order to inform industry practice and improve product safety outcomes. Formal participation in committees together with informal sharing of injury data and experience with the above groups helps to inform injury prevention practice and strategy across a variety of systems both at state and national level.

A significant challenge for injury surveillance units is to make the data accessible and relevant to community members. QISU's media profile has been developed in an attempt to address this by circulating injury stories (including risk assessment and prevention strategies) through print and electronic media. This relationship with the media has been productive in terms of the number of media reports generated, largely due to the combination of access to local injury cases sourced through the Mater Children's ED and data to back up

the story. Whether circulation of injury stories in this format results in change at an individual or policy/ legislative level is unclear.

QISU also has developed a direct relationship with Queensland Safe Communities (currently Mackay, Mt Isa, Cairns and Townsville) through its injury surveillance role and its relationship with the Queensland Safe Communities Support Centre (QSCSC). QISU shares office space and staff with the QSCSC, which was developed in 2006 to facilitate the establishment and maintenance of Safe Communities initiatives and networks in Queensland. Mackay and Mt Isa hospitals participate in QISU data collection, and data from these sites helps inform local injury prevention initiatives through the Safe Communities network. In particular, QISU data is able to assist in identification of local injury prevention priorities, development of grant applications and programmes and evaluation of injury prevention strategies in the communities.

Some authors have questioned the need for and relevance of injury surveillance systems, suggesting that other data collection techniques (community surveys) and other measures (safety behaviours rather than injuries) would be a more appropriate reflection of a community's injury and safety profile. [2,3] The alternatives suggested would potentially inform at a local level, but would be costly and time consuming to maintain over prolonged periods, unwieldy in terms of application over greater distances or different communities and would offer only limited interpretation in terms of actual injury reduction.

Johnston [3] commented that:

Too often, surveillance systems are structured in a manner that divorces the information collected from those best positioned to make use of it. Ideally the end users of the data should be subsidizing the surveillance system, integrally involved in its design and conduct, and - ultimately - getting what they need from it.

Whilst this ideal may be possible for small communities with targeted injury prevention needs (and adequate funding), it is difficult for a system to be everything to all users. QISUs strategy of engaging bodies responsible for policy development and legislation as well as data collection sites, Safe Communities, clinical networks, industry and the media, will hopefully result in the data being delivered to "those best positioned to make use of it".

Summary

Data collected by QISU represents a unique body of injury information that can be used to inform and transform injury prevention strategy in Queensland. QISU would like to thank the dedicated health staff who complete the injury forms that make this database possible and the families who have

stepped into the media limelight in order to prevent their injury experiences from being repeated.

References

[1] The Royal Society for the Prevention of Accidents. Feasibility of establishing a UK-wide injury database. Available at http://www.rosipa.com/hassandlass/update_june08.pdf

Accessed June 2009

[2] Langley J, Simpson J. Injury Surveillance: Unrealistic expectations of safe communities. *Inj. Prev.* 2009;15;146-149

[3] Johnston BD. Surveillance: to what end? *Inj. Prev.* 2009; 15, 73-74

Further information

Victorian Injury Surveillance Unit

<http://www.monash.edu.au/muarc/VISU/>

National Injury Surveillance Unit (Australia) – Research Center for Injury Studies

<http://www.nisu.flinders.edu.au/>

Canadian Hospitals Injury Reporting and Prevention Program

<http://www.phac-aspc.gc.ca/injury-bles/chirpp/injrep-rapbles/index-eng.php>

National Center for Injury Prevention and Control (USA)

<http://www.cdc.gov/injury/index.html>

European Injury Database

<https://webgate.ec.europa.eu/idbpa/>