

Regular linkage of crash and hospital data to inform the monitoring and evaluation of countermeasures on serious injury

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Abstract

New South Wales is targeting a 30 per cent reduction in serious injuries over the decade. This presentation outlines NSW's journey to develop and implement a serious injury reporting system which provides high quality data on all serious injuries from the hospital records, with details on the crash characteristics of those serious injuries that can be matched to a Police crash report.

This presentation also details the key results from the newly available data, how we are progressing on our target and how the availability of the data will impact on road safety policy and strategy in NSW.

Background

The NSW Road Safety Strategy 2012-2021, in line with the National Road Safety Strategy, has set a target of a 30 per cent reduction in serious injuries over the decade. It is therefore critical that serious injury data are available in order to influence the direction of the NSW Road Safety Strategy and the progress towards achieving its targets.

Method

In 2012 a commissioned study to identify serious injuries was undertaken using a data linkage process developed and conducted by Transport and Road Safety (TARS) Research, University of NSW. Following the success of this study, work began in 2013 on a project to refine the process and establish a regular data linkage between Police crash records and NSW hospital records.

The Centre for Road Safety has now established a quarterly process of matching crash data with hospital admissions for identification, monitoring and analysis of serious injuries. This provides high quality data on all serious injuries from the hospital records, and has details on the crash characteristics of those serious injuries that can be matched to a Police crash report.

Results

Data are now available for the ten-year period from 2005 to 2014. In 2014, just under 12,500 people were seriously injured on NSW roads.

The study found that some road-related serious injuries identified from hospital admission records were not reported to police or could not be linked to a police crash report. Overall, 61% of serious injuries identified in hospital admissions could be matched to police reports. Match rates varied considerably by road user type, from 22% for cyclists and 49% for motorcyclists, up to 86% for drivers. The reasons why some serious injuries could not be matched to police reports are under further research.

Over the ten-year period, annual serious injuries have increased by 11%, largely due to a 30% increase in serious injuries not matched to a police report. Serious injuries matched to a police report increased by 1% over the same period.

This presentation will outline some of the significant differences between the characteristics of fatalities and serious injuries. It will also discuss the costs of road trauma, the categorisation of non-fatal injuries according to severity and some work done to examine how jurisdictions around the world are addressing serious injury on our roads.

Discussion

The availability of serious injury data will enable us to better research and analyse road trauma and target road safety initiatives to reduce serious injuries, helping the Centre for Road Safety to fine tune infrastructure treatments, behavioural programs and other road safety initiatives.