Media release

Tram accidents increasing: Melbourne study

Despite improved safety measures, the incidence of trauma related to trams has increased, even when adjusted for population growth, a Melbourne study has found.

The study, by Alfred Hospital consultant emergency physician Dr Biswadev Mitra, emergency medicine registrar Dr Jubair Al Jubair, Professor Peter Cameron, and Dr Belinda Gabbe, is published in the latest issue of *Emergency Medicine Australasia*, the journal of the Australasian College for Emergency Medicine.

The researchers reviewed all tram-related injury cases who presented to an emergency department (ED) over eight years from January 2001 to December 2008.

This is the first study of tram-related injuries in Australia.

During the study period 1769 people presented to EDs after trauma related to trams in Melbourne, and of these, 107 patients had injuries classified as major trauma.

“There was a significant increase in the rate of ED presentations, with falls (46%) the most commonly reported mechanism,” the researchers said.

Most falls occurred inside the trams.

“There was also a significant increase in the incidence rates of major trauma cases, with pedestrians accounting for most major trauma cases.

“Most cases of trauma related to trams have minor injuries and are discharged following ED management,” they commented.

There were 11 deaths in patients presenting to ED. A further four confirmed tram-related deaths were identified through the National Coroners’ Information System, bringing the total number of tram-related deaths to15.

Nine deaths were pedestrians hit by trams, 5 were falls from trams while the remaining case was a pedal cyclist struck by a tram.

Of the pedestrians affected by major trauma, 35 (77.8%) were within 10 km of the central business district of Melbourne.

The average age was 37 years, and 57.8% were male.

Pedestrians were struck by a tram in 35 cases; the remaining cases were struck by motor vehicles as the person was getting on or off a tram.

Primary prevention of falls in trams and the separation of pedestrians from trams are key areas requiring improvement.

In the face of increasing trauma associated with trams, continuing safety surveillance and targeted public safety messages are important to sustain trams as safe and effective mode of transport.

The researchers recommend that the focus of primary prevention should focus on separating trams from pedestrians and making pedestrians more aware of trams.

With a planned boost to the tram service, safety mechanisms must also focus on the prevention of falls in and around trams, they suggest.

“Seat design and supports for standing passengers should be investigated. Improved access to trams through lower floors, wheel chair lifts and greater disability awareness are planned, but these interventions could be fast tracked to reduce the number of ED presentations from tram-related trauma.”