

passengers than the boys and much less likely to be killed as drivers. As regards the type of road, in 2013 most youngster fatal road accidents occurred on rural roads. Finally, the 15–17 year olds are more likely to be killed in road accidents during spring and summer, as well as during weekends, than the whole population.

Conclusions The results of the analysis allow for an overall assessment of the youngsters safety level in the European road network in relation to the younger or older road users, providing thus useful support to decision makers working for the improvement of safety in the European road network.

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AUTOMOBILE MANUFACTURERS, ADVERTISING AND TRAFFIC SAFETY: CASE STUDY FROM INDIA

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Background The first crash tests of five brands of the most popular small cars from India were released by Global NCAP in early 2014 showing that very unsafe cars are being marketed in India. This prompted an in-depth look into the advertisements behind the vehicles sold in India and their role in promotion of safety features

Methods We surveyed the print advertisements and TV commercials for safety content, and the pricing policy for offering safety technology, of six major automobile manufacturers of India. The observations were coded on a numerical scale and graded based on the safety features advertised, along with the selling price at which these features are available.

Results For TV advertisements scores ranged from 0.83 to –1.3 (on a scale of +1 to –8). Similarly for print advertisements scores ranged from 1.5 to 0 (on a scale of +4 to –3). Mainly because features like airbags and ABS were not offered in the base model of vehicles under UD \$ 12000. These safety features were available in higher end models of the same vehicle usually bundled with high end trims which had a price difference of US \$ 1500–2000 from the base model. As a positive sign though most TV commercials showed adult passengers wearing seat belts and children were usually shown in the backseat.

Conclusions Our study show that at present the Indian manufacturers are not promoting safety issues or their safety technology in any significant manner in their print advertisements or TV commercials. When safety features are offered as options they force the consumer to spend more than US \$ 1500 extra. Reliable industry sources inform us that these features should not cost more than US \$ 250 or less. The Global NCAP results inform us in a graphic manner that very unsafe cars are being marketed in India in the knowledge of the manufacturers and government officials. Therefore, it is the responsibility of the Indian Government to announce strict crashworthiness standards for cars sold in India.

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CHILD PEDESTRIANS' PERCEIVED RISK OF THE CROSSING PLACE

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Background To decide whether to cross the road, one is first required to judge whether the crossing place is safe. Young

children have impoverished crossing skills manifested in lower awareness toward potential hazards, situation awareness and overall readiness for crossing. The aim of this study was to identify the environmental features that make children think a place is safe or dangerous for crossing.

Methods 24 children in three age categories (ages 7–8, 9–10, 11–13) and 12 adults viewed 41 still images of real-world roadside scenes on a wide screen, and were asked to rate each scene for safety of crossing as fast as possible using a slide bar (0–100). Safety evaluation and the time to decision were recorded. Each scenario was classified by the elements of the environment: the urban area it was located in (e.g., commercial, residential), crossing location, proximity to road features (e.g., junction), road type, number of lanes, and distractors in the environment.

Results Children in all age categories estimated crossing safety mainly by obvious conspicuous features, like presence of a crosswalk, which anchored their decision. They were indifferent to certain relevant factors (e.g., number of lanes). In contrary, adults seemed to base their decision more on higher order reasoning (e.g. the duration of exposure to danger derived from the number of lanes). In general, children felt less secure when coming to cross the road, and it took them longer to reach a decision on the crossing location's safety level. When the decision was made, answers were more diverse than for adults.

Conclusions Children and adults use different strategies to estimate the safety level of a certain place for crossing. It seems that adults relay more upon sophisticated decision making processes that improves with age and experience. In contrary, children, even as old as 13 years-old, often rely on the fact that a place is designed for crossing as a guaranty for their safety.

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SAFE FOLLOWING DISTANCE? –DRIVER PERCEPTIONS TO HELP REDUCE REAR END ROAD CRASHES IN AUSTRALIA

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Background To reduce road trauma we must better understand the factors contributing to crashes. In Queensland, Australia, rear end crashes are the 3rd leading crash type, with mild to serious injuries a likely outcome and whiplash a common injury occurrence. Road design, traffic congestion, and weather/road conditions have been implicated in rear end crashes. Human factors also play a key role, with the act of 'following too closely' being a major issue. Queensland legislation requires motorists to maintain a safe following distance between their vehicle and the one in front, although no specific information about this distance is prescribed by law for cars.

Methods To better understand perceptions of safe following distance, 495 licensed Queensland drivers (42% male; mean age 46.2 yrs; range 16–81 yrs) completed an online questionnaire.

Results Overall, there was wide variation in descriptions of safe following distance including time between vehicles (2 seconds = 21%; 3 seconds = 11%), distance between vehicles (metres = 11%; car lengths = 32%); and combinations of time and distance (1%). No one reported having received an infringement for not keeping a safe following distance, although 29% reported being involved in a crash where their vehicle hit the one

in front. The majority (86%) reported that it was somewhat extremely unlikely they would be caught by police if following too closely, indicating a perceived lack of enforcement for this offence. Reasons for this included perceptions of difficulty for police to enforce this offence (5%), not having heard of anyone being caught for this offence (17%), and other police priorities (30%).

Conclusions This study is part of a larger research project that aims to improve knowledge about driving conditions, patterns and locations, and driver behaviours that lead to driving at unsafe headways (i.e. following too closely). Recommendations for use of these findings to inform driver education and awareness campaigns are discussed.

861 INFLUENCE OF THE BUILT ENVIRONMENT ON CRASHES INVOLVING PEDESTRIANS IN COMPLEX URBAN AREAS

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Background On urban roads, road users interact in a highly complex environment. Few previous multivariable studies investigated the association between the built urban environment (including the road, roadside and human activity) and crashes. Roadside design and amenities and facilities that impact road user movements were rarely considered. This research aimed to identify characteristics of the built urban environment associated with the frequency of pedestrian-vehicle casualty crashes (PVC) on shopping strips in metropolitan Melbourne, Australia.

Methods The study had a cross-sectional design. Strip shopping arterial road segments in Melbourne, Australia, were identified (n = 142). Data were collected for a broad range of potential risk factors relating to the road, roadside and human activity. Analysis using Poisson regression identified factors associated with PVC frequency. Diagnostic tests were conducted to assess model fit.

Results From 2005 to 2009 there were 519 (median = 5.4/km) PVC on the 142 midblock road segments. Aspects of the built environment associated with increased PVC frequency were: road width, unsignalised intersections, medians or traffic islands, midblock pedestrian crossings, roadside development height, off-street parking facilities, establishments with a late night liquor license, railway stations and tertiary education institutions. Lane width and parking clearways were associated with significant reductions in PVC. Speed limits were associated with PVC in a non-linear fashion. There was no association between traffic volume or estimated pedestrian activity and PVC.

Conclusions A range of risk factors were related to PVC on strip shopping road segments including traditionally studied characteristics like road design and less commonly studied aspects such as the roadside and facilities and amenities on the road segment. This study can contribute to the design of PVC countermeasures and better risk assessment tools for urban road segments.

862 MYANMAR ROAD SAFETY SITUATION 2015: AN URGENT ISSUE FOR THE NATION

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Background The estimated road traffic injury death rate in Myanmar increased rapidly from 15 per per 100,000 pop in 2013 to 20.3 in 2015. This recent death rate is 2nd only to Thailand within the Region. A great change from the 6th rank in 2013.

Description of the problem and activities In 2015, the policy maker in the WHO SEARO being informed of the rapid increase reacted in response to the information by reassigning the Regional advisor to Myanmar WHO office and mobilised 16,000 USD for intervention. With the seed money and limited time available, a multisectoral road safety project was initiated by the WHO office and the injury prevention focal point from the MOH with the focus on the Yangon – Nay pyi taw – Mandalay Express highway due to the more public awareness and concerned at the national level. This will serve as a pilot project for a larger scale intervention afterwards. The project has very tensed time limitation to finalise all activities within less than 6 months. The project started with a multisectoral meeting among important stakeholders. This already has drawn the attention of the media as news was disseminated. The frame work of the project is the 5 pillars of the Decade of Action for Road Safety 2011–2020. The major activities of the project are 1) close and regular collaboration with the National road safety committee, the transport and police authority 2) secondary data collection from existing combine data sources 3) road safety data workshop 4) journalist workshop 5) “Black Spot” road signage project 6) training of traffic police trainers on preventing road traffic injuries. 7) workshop on strategy development on road safety in collaboration with the ADB.

Results The activities are ongoing. The output, outcome, impact and lessons learned will be presented in the conference.

Conclusions Myanmar road safety situation 2015 is an urgent issue for the nation.

863 UNDERSTANDING THE PROFILE OF INJURIES FOR VULNERABLE ROAD USERS: A DATA LINKAGE STUDY

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Background Unless substantial gains are made in the prevention of road crashes, they will become the third ranked global burden of disease and injury by 2020. A growing proportion of this burden relates to vulnerable road users (e.g., motorcyclists, cyclists, and pedestrians). In order to reduce this burden, there is a need to fully understand the nature and contributing circumstances of crashes and the resulting injuries. While police-reported crash data contain detailed information about crash circumstances, they lack accurate information about the severity and nature of injuries which are included in hospital data. By bringing these data collections together using data linkage, the relationship between the characteristics of vulnerable road user crashes and their resulting injuries were explored.

Methods Data from the Queensland Road Crash Database (QRCD) and the Queensland Hospital Admitted Patients Data Collection (QHAPDC) for the year 2010 were linked. There were 1,382 police-reported motorcyclist injuries that linked to a hospital record (42% of all police-reported motorcyclist injuries), 429 cyclists (25%), and 644 (39%) pedestrians. The relationships between crash characteristics such as counterpart involvement, alcohol, fatigue, speed, and helmet use and injury severity (e.g.,