

07

MOTORCYCLE SPEEDS AT URBAN INTERSECTIONS

doi:10.1136/injuryprev-2012-040590s.7

¹J Buchanan, ²D Walton. ¹ACC, Wellington, New Zealand; ²HSC, Wellington, New Zealand

Background Drivers at fault cause approximately 40% of all motorcycle crashes in New Zealand.

Aim To identify relative speed of cars and motorcycles in an urban setting.

Methods Five urban, uncontrolled T-intersections known to be motorcycle crash 'black spots' were monitored using instrumentation and a roadside observer.

Two sets of 12-h observations were collected for each site (N≈100 000). Instrumentation recorded the 'events' of vehicles passing to measure, speed, direction, lane position, vehicle type (broadly characterised) and headway. Observers further recorded times of bicycle events, type of motorcycle (scooters or motorcycles), the behaviour of motorcycles and the use of 'high conspicuity' gear such as clothing or helmets.

The data was analysed for mean speeds and influences such as the time of day, the presence of a car at the T-intersection, and the influence of free headway. The results were compared for robustness across locations and days.

Results Results establish that motorcycles travel around 10% faster than other traffic, with motorcycles travelling on average 3.3 kph faster than cars. Motorcycles are 3.4 times more likely to be exceeding the speed limit than cars. It is concluded that in urban areas motorcycles are travelling significantly faster than other traffic.

Contribution to the Field These findings are discussed against a concern to reduce motorcycle crashes by improving conspicuity and previous research that implicates a 'looked-but-failed-to-see' effect for car drivers. These results suggest a 'looked but-failed-to-judge-the-approach-speed' effect, and this may have little to do with motorcycle conspicuity.