14 PEDESTRIAN INJURY AT SIGNALISED MIDBLOCK VERSUS SIGNALISED INTERSECTIONS LOCATIONS IN TORONTO, CANADA

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Background Signalised intersections are the 'gold standard' providing the safest environment for pedestrian crossings; however, it is

unknown whether the safety effects of traffic signals are maintained at midblock locations.

Aims/Objectives/Purpose To evaluate injury outcomes of pedestrian collisions at signalised midblock compared to signalised intersection locations.

Methods Police-reported pedestrian collision data from 2000–2009 in Toronto, Canada were obtained. Multinomial logistic regression analyses were used to assess the relationship between a four level categorical outcome of injury severity and signalised midblock versus signalised intersection locations. Models were stratified by age and adjusted for road type.

Results Of 8479 collisions analysed, 88% of collisions were at signalised intersections. Almost ¼ of child collisions occurred at midblock versus 11% in adults. Over 25% of signalised midblock collisions in seniors resulted in major or fatal injury. The odds of major injury were 2.21 (95% CI 1.32 to 3.70) in children and 2.11 (95% CI 1.57 to 2.83) in adults. The odds of fatal injury were 4.37 (95% CI 1.92 to 9.97) in seniors at signalised midblock versus intersection locations.

Significance Traffic signals at midblock locations do not provide the same degree of protection against major and fatal collisions as they do at intersections. The increased likelihood of a fatal injury in seniors at signalised midblock locations may indicate difficulty in usage or ineffectiveness in slowing down traffic. The barriers to safe use of signalised midblock crossings need to be identified to ensure effectiveness for all ages.