0394 THE INFLUENCE OF CROSSING CONTROLS AND CROSSING LOCATION ON SEVERITY OF INJURY AMONG URBAN PEDESTRIANS

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Background Pedestrian injuries impose a significant burden on society, particularly in urban environments. The objective of this study was to determine the relationship between severity of pedestrian injury and presence of crossing controls at intersections and midblock locations in a large urban centre.

Methods The data were obtained from the City of Toronto's Traffic Data Centre and Safety Bureau. All police-reported motor vehicle collisions involving pedestrians between 1 January 2000 and 31 December 2005 were included. Logistic regression was used to assess the relationship between injury severity and the location of the collision.

Results There were 98.6/100 000 motor vehicle versus pedestrian collisions. 11/100 000 of these collisions resulted in severe injury and 1.4/100 000 resulted in fatal injury. At intersections, absence of a crossing control conferred a 1.8 greater odds of severe injury and a four times greater odds of fatal injury compared to where controls were present. At midblock locations, crossing controls did not reduce the odds of a severe or fatal injury; there was a 1.5 times greater odds of either severe/fatal injury at midblock locations compared to intersections with crossing controls.

Discussion More intersection crossing controls would decrease the severity of pedestrian injury by slowing down traffic. Midblock crossing controls do not appear to have the same effect. There were 86 fatalities which occurred at uncontrolled midblock locations and overall, midblock fatalities represented 44% of all fatal pedestrian collisions. Effective strategies to deal with pedestrian midblock collisions are essential, considering the large injury burden these collisions represent.