

0813 BICYCLE-RELATED HEAD INJURY RATE IN CANADA OVER THE PAST 10 YEARS

T Middaugh-Bonney, I Pike, M Brussoni, S Piedt, A Macpherson* *Correspondence:* School of Kinesiology and Health Science, York University, 222 Norman Bethune College, 4700 Keele St., Toronto, Ontario M3J 1P3, Canada

10.1136/ip.2010.029215.813

Introduction Bicycle use is common among Canadian children. Legislation to promote bicycle helmet use varies by province and previous publications examining the association between legislation and head injuries are now outdated due to changes in legislation status over time.

Purpose To determine bicycle-related injury rates (head and other injuries) in Canada over the past 10 years using hospitalisation data as well to compare those provinces with and without legislation.

Methods Childhood bicycle related injuries were extracted from the Canadian Institute for Health Information hospital admissions database. Injury rates were calculated for each province for children aged 5–19 using 2001 census data.

Results During the 10 years there were 23 685 hospital admissions due to bicycle-related injuries among Canadian children age 5–19 (76% men and 24% women). A total of 22% of the children sustained a head injury while 78% had other injuries due to a bicycle incident. 22% of men and 21% of women incurred a head injury. The injury rate varied by age group and by provincial legislation status. In general the rate of head injuries is declining, but this is not consistent across the country, nor is it attributable to legislation as some provinces with legislation experienced a decline while others did not.

Conclusion Although bicycle-related injuries are generally declining, this decline is not consistent, nor is it clearly associated with helmet laws.