

Why we are Worried: The Facts

Trauma

Trauma is a global health concern (Canadian Institute for Health Information [CIHI], n.d.) — representing some 16 per cent of the global burden of disease in 2002 (Mathers et al., p. 57). Traumatic injuries have a major impact on health and well-being and have the potential to result in long-term disability or death (CIHI, 2006).

Unintentional trauma is the leading cause of death for Canadians aged 1 to 35 (Public Health Agency of Canada [PHAC], 2008a), yet 90 per cent of injuries are preventable (CIHI, 2011a, p. 1). For all age groups except seniors (65 and older), motor vehicle collisions were noted as the main cause of injury in 2008-2009, according to the National Trauma Registry report (CIHI, 2011a, p. vii). Motor vehicle collisions accounted for more than one-third of all major injury hospitalizations and 32 per cent of all deaths (CIHI, 2011a, p. vii). Youth in their late teens and early twenties accounted for most motor vehicle collisions (CIHI, 2011a, p. 18).

Spinal cord injury serves as a good example of what is meant when trauma is described as a (relatively) low-incidence, high-cost disease. With its highest prevalence among males between the ages of 15 and 35, and primarily caused in that age group by motor vehicle crashes, sports injuries and violence (Farry & Baxter, 2010), the effects of a spinal cord injury can be catastrophic and lifelong. Fewer than 4,000 Canadians survive spinal cord injuries to be discharged from hospital each year, but the cost for direct health-care services exceeds \$1.8 billion — double that when non-direct costs are factored in (Canadian Paraplegic Association, 2012).

Sports are also a major cause of injury in youth (PHAC, 2008b). According to the National Trauma Registry report (CIHI, 2011a, p. viii), 13 per cent of all injury cases in 2008-2009 involved a sports or recreational activity. The “three leading activities were cycling (24%), using all-terrain vehicles (22%) and dirt biking (12%)” (CIHI, 2011a, p. viii). Among cyclists with a head injury admitted to a special trauma centre in the years between 2001-2002 and 2009-2010, 78 per cent were not wearing a helmet at the time of the injury (CIHI, 2011b, p. 1). Hospital admissions for cycling injuries in these years were most common among those younger than the age of 20 (42 per cent), with boys aged 10 to 14 hospitalized the most often (CIHI, 2011b, p. 1). A majority of cyclists who die each year do so from brain injuries (Brain Injury Association of Canada [BIAC], n.d.).

Traumatic head injury is common not only in youth but also in the elderly — often as the result of a fall (Centers for Disease Control, n.d.). The National Trauma Registry report (CIHI, 2011a, p. vii) notes that falls were the leading cause of major injury in seniors (74 per cent) in 2008-2009. Slipping, tripping and stumbling, as well as falls involving stairs and steps, are the most frequent types of falls by this age group (CIHI, 2011a, p. vii). Falls account for more than 90 per cent of all hip fractures in seniors, and 20 per cent of these individuals die within a year of the fracture (PHAC, 2005, p. 6). Frequently, families are incapable of providing care; “40% of all nursing home admissions occur as a result of falls by older people” (PHAC, 2005, p. 6).

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Impact of social and economic determinants of health

- Death resulting from traumatic injury increases in the presence of poverty. A Washington State Department of Health report (cited in MyNorthwest.com, 2011) found that, generally, people from low socioeconomic backgrounds “are more likely to die from trauma suffered in motor vehicle accidents, drowning, traumatic brain injuries suicide and homicide.”
- Research conducted in 2004-2005 found that more than half of the people who are homeless in Toronto are suffering from a traumatic brain injury, which is an injury often caused by a fall, motor vehicle crash or an assault. It is worthwhile noting that 70 per cent of these individuals were found to have incurred the injury before they ended up on the street (Hwang et al., 2008).
- Children born into poverty also are at greater risk of traumatic injury. The Washington State Department of Health study (cited in MyNorthwest.com, 2011) found that these children are more likely to die as a result of a motor vehicle crash or a fire or to drown, possibly because poor households are less able to afford injury prevention items such as car seats, fire alarms and life jackets.

Did you know...

- In 2008-2009, data from eight Canadian provinces revealed 14,065 major injury cases (including those having injury severity scores greater than 12 among other criteria), in which 1,605 individuals died, either in the emergency department or after admission to hospital (CIHI, 2011a, p. 9).
- “The most common type of injury was an internal organ injury (86%), followed by musculoskeletal (79%) and superficial (39%) injuries” in 2008-2009 (CIHI, 2011a, p. vi). Most cases of major injury (71 per cent) involved males (CIHI, 2011a, p. 9).

Fiscal implications:

- A 2009 study of The Economic Burden of Injury in Canada found that “injury costs Canadians \$19.8 billion annually — more than \$600 for each man, woman and child in the country” — including \$10.7 billion for direct health costs and \$9.1 billion associated with reduced productivity related to hospitalization, disability and premature deaths (SMARTRISK, 2009).

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The document strives to use the most recent Census data available. In many cases, 2011 Census data were not yet available.