



The Injury Alberta Report, 2011

By 2015

480 Lives Saved

30% Fewer Injury Hospital Admissions

\$700 Million in Healthcare Costs Saved

Injury Alberta is an initiative led by graduate students with the School of Public Health, University of Alberta, and Dr. Louis Hugo Francescutti, MD, PhD, MPH, FRCPC, FACPM

Injury Alberta is a partnership of organizations and individuals that are committed to a vision of a safer and healthier province.

Injury is a major issue both provincially and nationally. In Canada alone, there were approximately 14,500 deaths caused by injury (6.4% of all deaths) in 2005.¹ Alberta has one of the highest injury rates in Canada and compares poorly to other countries (Figure 1).

Each year over 1,700 lives and 2.9 billion dollars are lost to injury in Alberta.^{2,3} The tragedy: injuries are preventable.

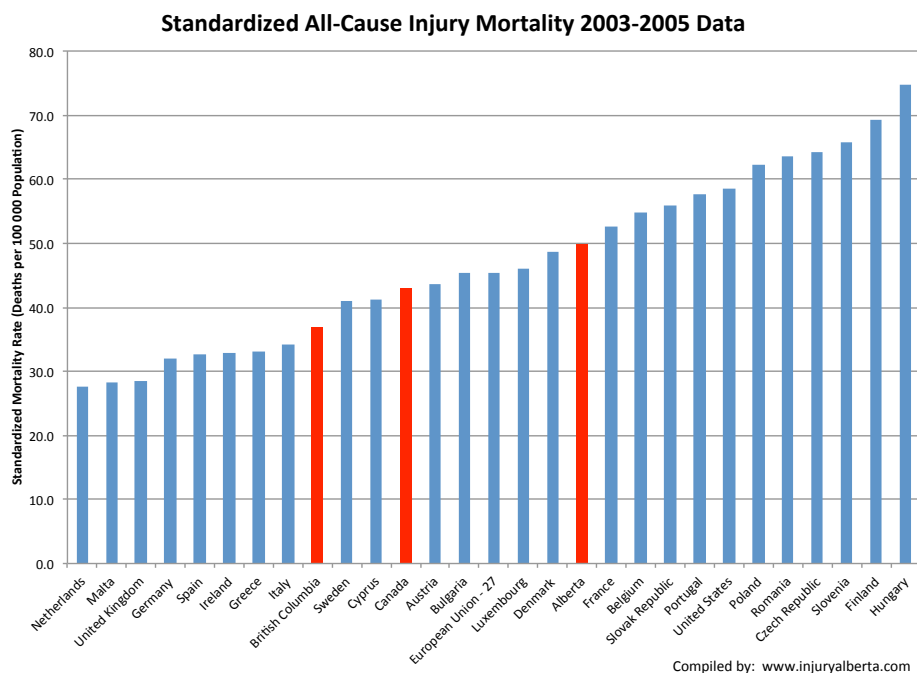


Figure 1. Standardized All-Cause Injury Mortality 2003-2005^{4,5}

Each year, approximately 8,000 Albertans are permanently disabled due to injury.³ Furthermore, for every injury death, there are 33 people hospitalized, and 273 who visit an emergency department (Figure 2).² Not only do these injuries cause enormous human loss and suffering, these preventable events are taxing our overburdened healthcare system.

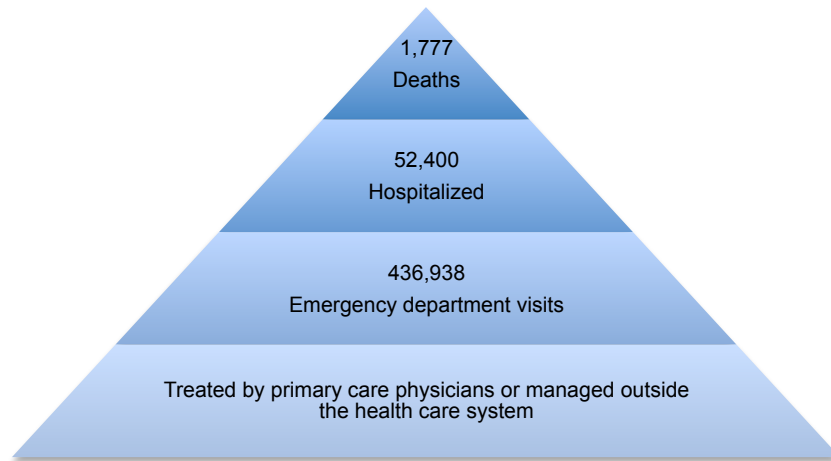


Figure 2. Magnitude of injury in Alberta 2008

Data source: ACICR

Injuries are the number one killer of Albertans under the age of 45 (Figure 3).² Among Albertans between 15 and 24 years of age, 77% of deaths were due to injury.²

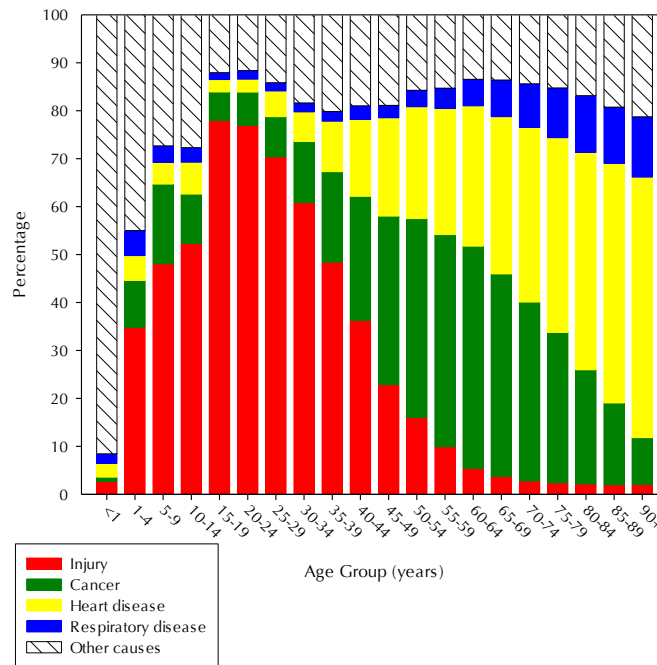


Figure 3. Cause of death by age, Alberta 2007

Data Source: ACICR

Cause of Injuries

Injuries may be intentional or unintentional. Intentional injuries are self-inflicted, such as suicide, or deliberately inflicted on others, such as murder or assault.⁶ Examples of

unintentional injuries include motor vehicle collisions, fires, falls or poisonings.⁶ In 2008, suicide was the leading cause of injury deaths, followed by motor vehicle collisions and falls (Figure 4).²



Figure 4. Injury deaths by cause, Alberta 2008

*Includes deaths resulting from: machinery, water transportation, air transportation, environmental factors, and unspecified.

Data source: ACICR

Suicide

Suicide has been the leading cause of injury-related death in Alberta over the past 10 years. In 2008, there were 466 deaths, accounting for 27% of all injury-related deaths.⁷ Suicide is the single greatest cause of injury-related deaths for Aboriginal people; the suicide rate of First Nations youth is five to seven times higher than the national average.⁸ The toll of suicide is immeasurable; each suicide is estimated to have a serious impact on at least six people.⁹ Furthermore, the largest number of suicide deaths occurred among males 40 to 54 years of age, accounting for many years of potential life lost.⁷ Suicide and self-inflicted injuries also cost the healthcare system. In 2008 alone, attempted suicide/self-inflicted injury accounted for 1,895 hospital admissions and 5,909 emergency department visits.⁷ Suicide/self-harm injuries account for 49% of the total costs of intentional and undetermined/other injuries at \$336 million.³

Motor Vehicle Collisions

Motor vehicle collisions were responsible for 391 deaths in 2008 and were the leading cause of injury deaths for Albertans under 30 years of age.¹⁰ The province's hospital admission rate from motor vehicle collisions (115 admissions/100,000 population), is 1.5 times the national rate, and Alberta's fatality rate per billion kilometres travelled exceeds the national average.¹⁰ Between 1999 and 2008, motorcycle deaths have increased by 15% per year.¹¹ Males consistently have a higher rate of motor vehicle-related injuries than females.¹⁰ Collisions in rural areas were more likely to be fatal and alcohol was a factor in 23% of fatal collisions.¹⁰

Workplace Injuries

Fortunately, occupational injury rates in Alberta are decreasing. In 2010, the lost-time claim rate was the lowest in the past nineteen years. The number of disabling injuries decreased 4.4% between 2009 and 2010.¹²

Despite a decrease in the rate of occupational injury, injury continues to be an issue in Alberta and specific groups are clearly at higher risk. The incidence of injury is higher for men compared with women.¹² In 2010, men represented just over half of the Alberta work force at 55%; however, 65% of lost-time claims and 71% of disabling injury claims were filed by males.¹² Younger workers have a higher likelihood of getting injured compared with older age groups.¹³ In 2010, the labour force survey reported that Alberta had the second highest proportion of young workers in its working age population of all provinces in Canada.¹³ The occupational areas at the highest risk of occupational injury were manufacturing, processing and packaging, followed by transportation, communication and utilities.¹²

Injuries Related to Recreational Activities

All terrain vehicle (ATV), skiing, and snowboarding accidents account for many of the sports and recreational injuries in Alberta. Between 2002 and 2009, there were 113 deaths related to ATVs; 90% of these victims were male.¹⁴ Two major factors in ATV-related accidents are alcohol use and helmet use. Of the victims tested for alcohol consumption, 55% tested positive.¹⁴ Sixty-eight percent of the deceased were not wearing a helmet at the time of their death.¹⁴ ATV-related emergency department visits and hospitalizations have increased by 32% since 2003.¹⁴ Alberta has the second highest ATV sales in Canada, after Quebec. Although Albertans make up one-tenth of Canada's population, 25% of new ATVs sold in Canada in 2008 were in Alberta.¹⁴

Between 2003 and 2006, 5,148 skiing or snowboarding fall-related injuries were treated in emergency departments in Alberta.¹⁵ The majority of these injury victims were young males between 10 and 14 years of age.¹⁵

Economic Burden of Injury

The costs associated with injury are a significant burden to the health care system in Alberta and in Canada. In 2004, the total health-related cost of injury in Canada was \$19.8 billion and \$2.9 billion in Alberta, with unintentional injuries accounting for 81% and 77% of these costs respectively.¹⁶ Furthermore, Alberta has the highest rate of potential years of life lost (PYLL) due to injury per 100,000 at 1,479, compared to other provinces and to the national average of 993 PYLL/100,000.¹⁶ In addition, Alberta has the highest economic burden per capita (\$918) compared to the rest of the provinces and territories (Figure 5).¹⁶

The cost of injury is typically reported as direct and indirect costs. Direct costs, such as hospitalization, diagnosis and treatment, are directly related to healthcare spending. These costs represent 48% of the total injury costs in Alberta at \$1.4 billion.¹⁶ The indirect costs, which include lost productivity from hospitalization, disability, and premature death, account for the remaining \$1.5 billion or 52% of the total cost of injury.¹⁶ In Canada, injury represented the second largest expense for acute care hospitals, after circulatory system diseases, at approximately 10% of total expenditures.¹⁶

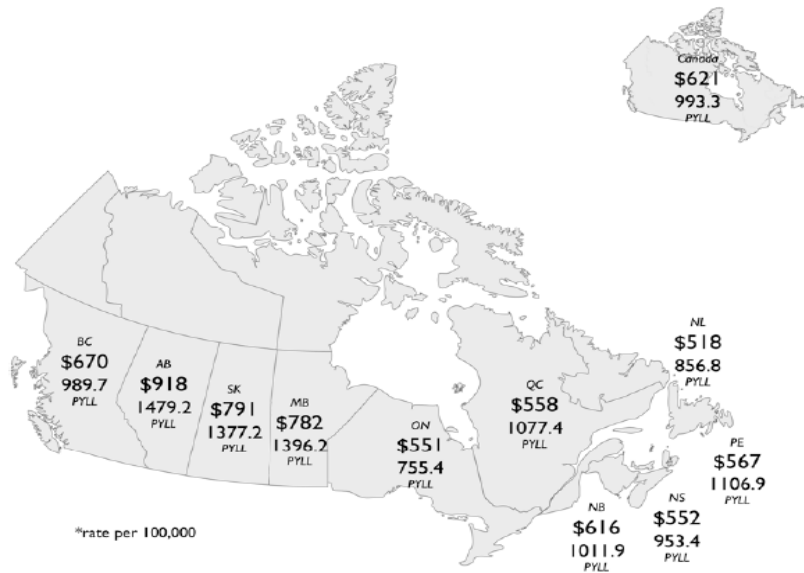


Figure 5. Economic burden of injury in Canada

Data Source: SMARTRISK

Between 1986 and 1999, injury rates were declining, but since 1999 rates have leveled (Figure 6).¹⁷ This tells us that injury prevention needs a new approach. Through collaboration and partnership, we can combine our strengths and achieve even greater results.

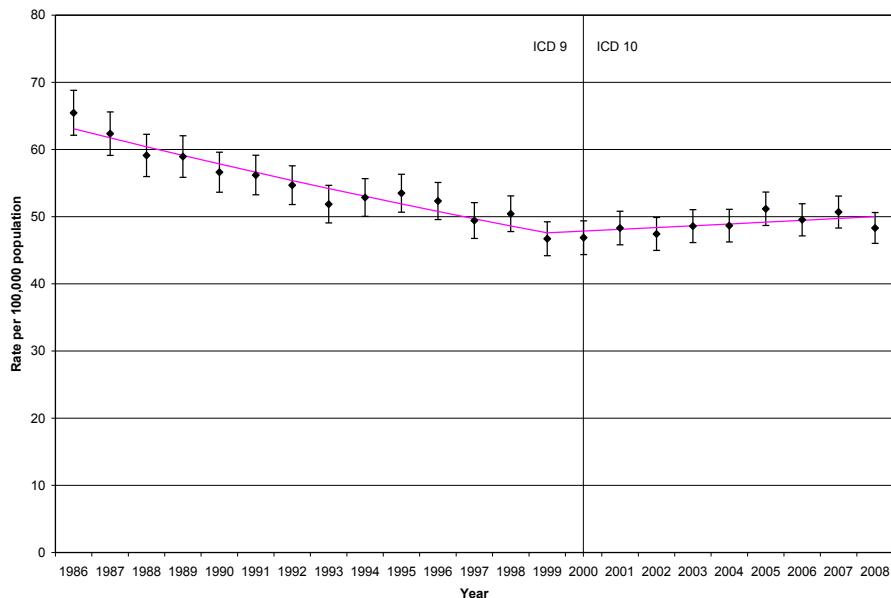


Figure 6. Injury deaths time trend Alberta, 1986-2008

Source: ACICR



Partnership for a Safer and Healthier Alberta

Our Vision for Injury Alberta

Injury Alberta is a partnership of organizations and individuals that are committed to a vision of a safer and healthier province.

By 2015, our goal is to reduce injuries by 30% across the province. This reduction in injuries and injury-related hospital admissions will save 480 lives, and will eliminate \$700 million in health care costs.

Injury Alberta will lead by example, participating in a national movement: Injury Canada, to be launched on October 28, 2011 in Ottawa. This partnership will lead to 4,000 lives and \$6 billion saved nationwide each year.

Strategies:

- Raise awareness of the injury epidemic and unite organizations and interested parties in injury prevention;
- Recognize committed parties at the Injury Alberta press conference on October 26, 2011;
- Reduce preventable injuries in Alberta;
- Participate in a national movement for bringing about a more complete set of injury control solutions to benefit Canadians by 2015;
- Create Injury Earth, an international partnership committed to injury prevention;
- Establish a \$50 million endowment fund to support organizations working in injury prevention and control in Alberta.

Other jurisdictions have already committed to reducing fatalities from injury. For example, Sweden developed a road safety program that, despite increasing traffic volume, has reduced fatality rates dramatically. Sweden now has one of the world's lowest traffic-related fatality rates.¹⁸ Through improvements in road safety infrastructure, reduction of speed limits, and implementation of graduated licensing, South Australia has also reduced the number of deaths due to traffic collisions from an average of 252 deaths in 1981–1983 to 112 for the period 2008–2010.¹⁹

Working in partnership, we can bring about a more cohesive and complete set of injury control solutions to benefit Albertans and all Canadians by 2015.

Pledge your commitment to reducing injuries in Alberta by attending the Injury Alberta press conference on October 26, 2011.

For more information go to www.injuryalberta.com

References

1. Statistics Canada. (2005). *Mortality, Summary List of Causes, 2005*. Retrieved from <http://www.statcan.gc.ca/pub/84f0209x/84f0209x2005000-eng.htm>
2. Alberta Centre for Injury Control & Research. (2010). *Injuries in Alberta*. Edmonton, AB: Alberta Centre for Injury Control & Research.
3. Alberta Centre for Injury Control & Research. (2009). *Economic burden of Injuries in Alberta*. Edmonton, AB: Alberta Centre for Injury Control & Research.
4. Angermann, A., Bauer, R., Nossek, G., & Zimmermann, N. (2007). *Injuries in the European Union: Statistics summary 2003–2005*. Retrieved from <https://www.webgate.ec.europa.eu/idb>
5. Kung, H. C., Hoyert, D. L., Xu, J. Q., & Murphy, S. L. (2008). Deaths: Final data for 2005. *National Vital Statistics Reports*, 56(10), 1–124.
6. Health Canada. (2007). *Safety and injuries*. Retrieved from <http://www.hc-sc.gc.ca/hl-vs/securit/index-eng.php>
7. Alberta Centre for Injury Control & Research. (2008). *Suicide and attempted suicide/self-inflicted injuries in Alberta*. Edmonton, AB: Alberta Centre for Injury Control & Research.
8. Indian and Northern Affairs Canada. (2006). *Aboriginal health: The status of Aboriginal health in Canada*. Retrieved from <http://www.aadnc-aandc.gc.ca/eng/1100100016257>
9. World Health Organization. (2000). *Preventing suicide: A resource for primary health care workers*. Geneva: World Health Organization.
10. Alberta Centre for Injury Control & Research. (2009). *Motor vehicle injuries in Alberta*. Edmonton, AB: Alberta Centre for Injury Control & Research.
11. Alberta Centre for Injury Control & Research. (2010). *Motorcycle injuries, fact sheet*. Edmonton, AB: Alberta Centre for Injury Control & Research.
12. Government of Alberta. (2011). *Occupational injuries and diseases in Alberta: Lost-time claims, disabling injury claims and claim rates, 2010 summary*. Retrieved from <http://employment.alberta.ca/SFW/129.html>
13. Government of Alberta. (2011). *Occupational injuries and diseases in Alberta: Lost-time claims, disabling injury claims, and claim rates, young workers 2006–2010*. Retrieved from <http://employment.alberta.ca/SFW/129.html>
14. Alberta Centre for Injury Control & Research. (2010). *All Terrain Vehicle (ATV) Injuries in Alberta*. Edmonton, AB: Alberta Centre for Injury Control & Research.
15. Alberta Centre for Injury Control & Research. (2009). *Snowboarding and skiing injuries in Alberta*. Edmonton, AB: Alberta Centre for Injury Control & Research.
16. SMARTRISK. (2009). *The economic burden of injury in Canada*. Toronto, ON: SMARTRISK.
17. Alberta Centre for Injury Control & Research. (2009). *Alberta injury data: Comparison of injuries in Alberta's health regions, 2006*. Edmonton, AB: Alberta Centre for Injury Control & Research.
18. Vision Zero Initiative. (n.d.). *Does the vision Zero work?* Retrieved from <http://www.visionzeroinitiative.com/en/Concept/Does-the-vision-zero-work/>
19. Government of South Australia. (n.d.). *Towards ZERO together: South Australia's road safety strategy 2020*. Retrieved from <http://dtei.sa.gov.au/towardszerotogether/article?item=17>