Injury Prevention Centre: Injury 101

Injuries are defined as:

Any damage to the body resulting from exposure to external energy sources such as mechanical energy, heat, electricity, or chemicals; in some cases resulting from the sudden lack of essentials such as oxygen or heat.

Injuries are *not* accidents.

- Misperception or misunderstanding that injuries are accidents that can neither be anticipated or prevented.
- Dictionary definition of accident: *unavoidable act of fate.*

- Reality is that *most* injuries follow a distinct pattern and are, therefore, predictable and preventable.
- Despite the evidence, Canadian policy makers and the public remain largely unaware of the injury burden and many known ways to effectively reduce injuries.

The Injury Spectrum

Prevention

1° PRIMARY PREVENTION:
preventing the event from occurring, or preventing it from leading to injuries.

2° SECONDARY PREVENTION:
reducing the number or severity of injuries that occur.

3° TERTIARY INTERVENTION:
rehabilitation and prevention of further complications leading to disability or death.

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INJURY PREVENTION CENTRE

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Injury can be classified in 7 ways:

1. MECHANISM:
the external energy source.

- Mechanical or kinetic (e.g. fracture)
- Thermal (e.g. burn)
- Electrical (e.g. electrocution)
- Chemical (e.g. intoxication / poisoning)
- Radiation (e.g. sunburn)
- Absence or excess of vital energy (e.g. drowning, strangulation, hypothermia

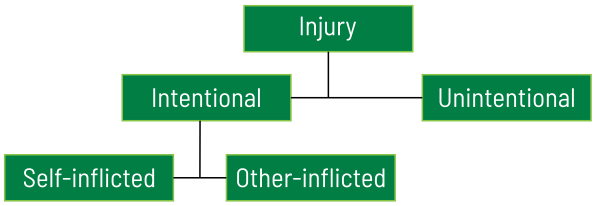
2. EXTERNAL CAUSE:
whatever brings about the energy transfer.

Example
Motor Vehicle Crash

Example
Fall

Example
Poisoning

3. INTENT:
was the injury caused by an unintentional incident or, because of violence or self-harm?



4. PLACE OF OCCURRENCE:
where the injury happened (e.g. on road, sea, work, playgrounds, at home, school, sports fields, etc.)

5. NATURE OF INJURY:
the specific damage done by the energy transfer (e.g. fracture, burn, traumatic brain injury, sprain, etc.)

6. SEVERITY:
the degree of injury is on a scale from fatal, severe trauma, hospital admission, emergency department visits, medically treated but not at hospital, self- or home-treated, not treated.

7. POPULATION GROUPS:
while *everyone* is susceptible to injury to a certain degree, some population groups are more at risk than others (e.g. children, youth, older people, Indigenous peoples, rural populations, some industries [farming, mining, healthcare, etc.])

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10 things Albertans *need* to know about injuries.

1. Injuries are the leading cause of death for Albertans ages 10 to 44. Injuries also account for more potential years of life lost than any other disease in Alberta. Injuries claim the lives of more than 2,200 Albertans every year and cause Albertans to be hospitalized over 35,000 times annually. Injury is probably the most under-recognized major public health problem facing the nation today. The challenge of injuries is significant.

2. Injuries can be **unintentional** (such as injuries from motor vehicle collisions or falls) or **intentional** (such as suicide and assault).

3. In Alberta, the 3 leading causes of injury-related death are unintentional poisoning, suicide, and falls. The 3 leading causes of injury-related hospitalization are falls, suffocation / foreign body / choking and motor vehicle collisions. The 3 leading causes of emergency department visits are falls, struck by / against person / object and cutting / piercing.

4. We are all at risk for injuries where we live, learn, work, play, and travel.

5. Injuries are predictable and preventable. We must create a culture where citizens refuse to accept injuries as 'accidents' over which they have no control, to a culture where injuries are viewed as predictable, preventable, and unacceptable.

6. Communities need to involve and mobilize a wide variety of local stakeholders and resources in order to develop a vision and a coordinated plan and approach to local injury prevention.

7. Injuries, whether unintentional or intentional, fatal or non-fatal, result in tremendous financial and productivity costs to injury victims and their families, to the health system and to society. In addition, the impact of injuries on the physical, mental, social, spiritual, and emotional health and wellbeing of Albertans is staggering, inflicting enormous personal burdens on the injured and their families. The most current cost of injury in Alberta report showed that injuries cost Alberta **$7.1 billion** annually, **$4.6 billion** in direct medical costs. In 2021-22 Alberta spent $254 million dollars on injury hospital admissions or roughly $69,000 dollars a day. This money could be allocated to other needs in the health system.

8. The problem of injuries is not the exclusive responsibility of any one person or group. We are all stakeholders in this important issue and we all have roles and responsibilities for reducing the number and severity of injuries occurring in our communities.

9. Injury prevention is both an art and a science. We need to base our efforts on good information about the most common causes of injuries in our communities and what works in reducing them.

10. Community involvement, commitment, and action are some of the most powerful tools in tackling the injury problem. Ordinary people accomplish extraordinary things if they believe they can. Strong collaboration at the local level has been proven to be the most effective way to identify and mobilize resources to create effective, comprehensive, coordinated, sustained action on injuries. It is the people who live, learn, work and play in a community who best understand their community's specific problems, needs, assets, and capacities.

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