



A second can last a lifetime . . .

Decisions that can change our lives forever - take only a split second to make .

Brain injury happens in an instant - recovery is lifelong.

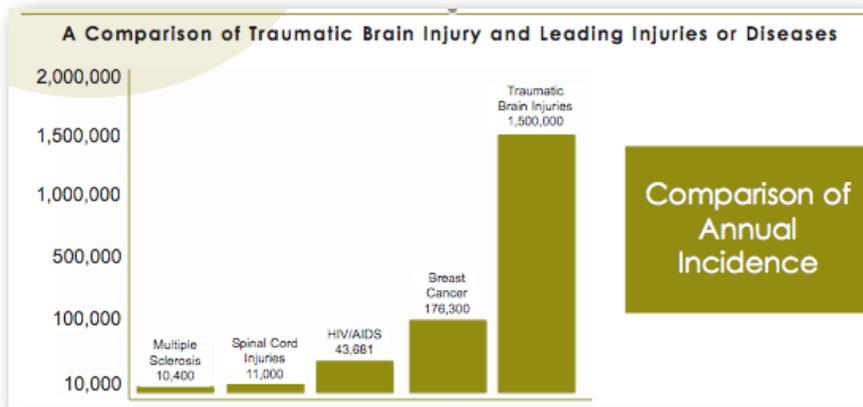
THE FACTS ABOUT BRAIN INJURY

Of all types of injury - brain injury is the most likely to result in permanent disability and death. Acquired brain injury has become recognized throughout the world as a problem of epidemic proportions. Unfortunately, due to the cognitive nature of the disability it has become known as ***the Silent Epidemic***.

The true numbers are staggering...

No reliable estimates have been completed in Canada to date. The US Centers for Disease Control (USCDC) keeps data relating to trauma based injury only (Motor Vehicle Crashes, falls, sports related trauma, assault etc). Other acquired injury (stroke, aneurysm, anoxic events, tumors, infections, toxins, surgical procedures, drugs and alcohol, electrocutions, arterial venous malformations, etc.) is estimated to double incidence and prevalence rates. According to the USCDC* brain injury from trauma alone (TBI):

- ▶ occurs at an annual rate of 500/100,000 individuals¹ (166,455 in Canada, and 22,000 in BC each year).
- ▶ The incidence is even higher among children - 795/100,000²
- ▶ that is 456 people every day, one person injured every 3 minutes in Canada,
- ▶ the highest incidence of traumatic injury are men aged 16 - 24¹,
- ▶ occurs at a rate 100 times that of spinal cord injury³.
- ▶ is the greatest killer under the age of 45, the greatest disabler under the age of 44 and kills more children under the age of 20 than all other causes combined.
- ▶ When injury due to stroke or other non-traumatic causes is included, close to 4% of the population lives with brain injury has a population prevalence % (1,400,000 in Canada, 160,000 in BC living with permanent disability from brain injury)
- ▶ A significant incidence of missed cases, misdiagnoses or misattribution has been reported in the literature⁴⁻⁹, making already staggering estimates truly epidemic in proportion.
- ▶ New data demonstrates an underestimation of the incidence of concussion, resulting in early onset dementias underestimation of gender differences predisposing females to a greater rate of injury.¹⁰⁻¹¹
- ▶ When compared with other health conditions, the incidence of brain injury is staggering.



Brain Injury Association of America

* The USCDC underestimates the actual rate as their data does not include data for over 500,000 treated by physicians during office visits in outpatient setting, unreported injuries (25% of all mild to moderate TBI's) and data from federal, military, or Veteran's Administration hospitals. The US data is compatible and relevant for Canadian population estimates.

What Happens

Brain injury results in a complex variety of physical, cognitive and behavioural problems. Unless significant physical injuries occur it is often misdiagnosed or missed completely.

Cognitive difficulties are not always obvious, but have devastating consequences:

- ▶ 53% of homeless individuals live with brain injury the vast majority 77% were injured prior to becoming homeless¹²,
- ▶ 82% of the prison population live with disability as a result of traumatic brain injury¹³,
- ▶ up to 10% of all children have an undiagnosed brain injury affecting learning abilities⁹,
- ▶ 20% of children diagnosed with emotional disabilities and 30% classified as Learning Disabled have brain injury⁶,
- ▶ after brain injury people are up to 7 times more likely to develop mental illness¹⁴,
- ▶ people living with disability as a result of brain injury are often the most complex and difficult to serve. They are often not served because their complex needs can not be met with limited resources offered by non-specialized programs,
- ▶ Traditional service strategies, based on motivational or behaviour management strategies, are ineffective for people living with cognitive disabilities from acquired brain injury.
- ▶ The data demonstrates that brain injury is a permanent chronic condition that plays a significant “gateway” role in the development of other costly health and social issues.¹⁵

The Costs

The rate of injury has remained stable, while, with the advent of new emergency medicine strategies, the rate of survival has increased dramatically. The result is an increasing rate of individuals surviving what would previously have been a mortal injury to live the remainder of their lives with complex cognitive disabilities.

From existing estimates, the cost in direct care costs is estimated at over \$650 million dollars annually. Lost productivity costs are estimate at \$580 million dollars - totaling over 1 billion dollars annually.

Unfortunately support services have not been developed at the same rate as life saving procedures. The vast majority of health dollars are dedicated to acute care and short term rehabilitation. A small fraction of resources are dedicated to decades of living with a profound disability incurring increasing health, social service and criminal justice system costs.

If we prevent just one serious brain injury each year, over the lifetime of the first injury prevented, we realize a support care cost savings of over \$90 million dollars.

Prevention of brain injury is one of the most cost effective strategies to save health, social service and criminal justice resources.



Brain injury is an issue of enormous proportions with devastating social and economic consequences.

In the majority, this is a condition of the young. The highest incidence group are just starting careers and / or families and do not possess significant resources to fall back on when injured. The cost in health care, lost wages, increased reliance on social welfare, justice costs and the devastating impact on families are nearly incalculable.

Unfortunately, the effects are lifelong. There is no foreseeable treatment to restore brain function following organic damage.

Prevention is the only cure.

Help is Not On Its Way - Yet

With the increasing rate of individuals surviving what would previously have been a mortal injury - living the remainder of their lives with complex cognitive disabilities, the responsibility to provide appropriate and effective treatment and support strategy also rises.

Unfortunately support services have not been developed at the same rate as life saving procedures. The vast majority of health dollars are dedicated to early acute care and rehabilitation.

A small fraction of resources are dedicated to decades of living with disability as a result of brain injury.

This needs to change.

People living with brain injury have the right to resources to address their disabilities in order they may live in health and safety.

Because some seconds last a lifetime...

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