

Benefits of The Infrascanner



What is the Infrascanner?

A pioneering handheld device utilizing Near-Infrared (NIR) technology to rapidly detect brain hematomas in the field. The device provides swift, non-invasive diagnostics to enhance triage and treatment.



The Infrascanner identifies head trauma patients at high risk of intracranial bleeding



allows for timely medical interventions that can save lives and prevent long-term disabilities.

Who uses the Infrascanner?



Defence & Homeland Security



Hospitals



Seniors



Children

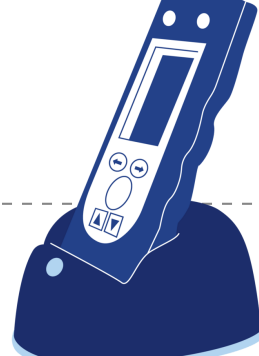


Sports



Remote communities

How does the Infrascanner work?



Real-Time Monitoring: instant data on intracranial bleeding



Enhanced Performance: prevents severe health deterioration through early detection



Portable and Non-Intrusive: Compact design ensures ease of use in various operational settings, requiring minimal training and setup



Integration with Advanced Technologies:

The device can be part of a larger health monitoring system, integrating data with AI-enabled predictive analytics to offer comprehensive health insights and personalized interventions.



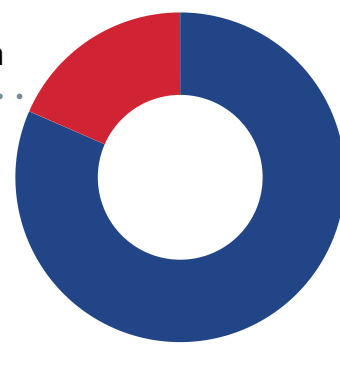
In Canada, **20,000** people a year are hospitalized for **traumatic brain injury (TBI)**



Between 2002 and 2016 there were approx 235,471 **injury deaths** and of those,

53,200

(22.6%) were associated with a TBIs



Between 2006/07 and 2017/18 there were:

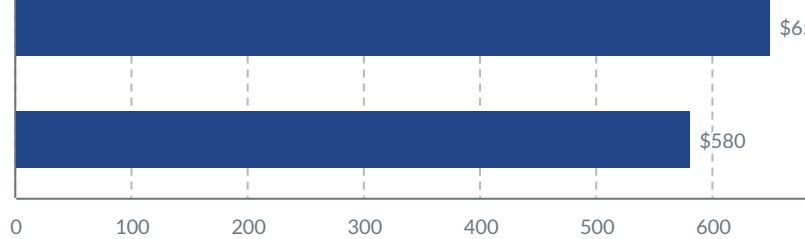
399,376

hospitalizations for head injuries in Canada

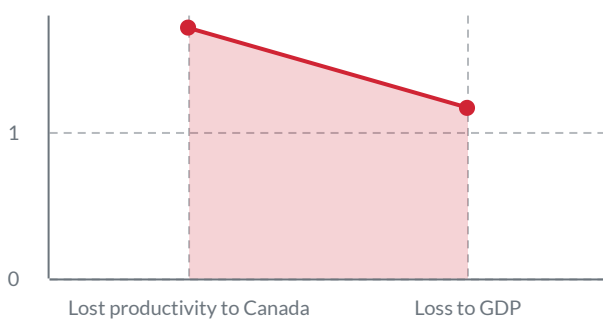
Based on the current estimates, the nationwide **direct cost of care following a traumatic brain injury is over \$650 million CDN annually**. In terms of **lost productivity**, the **estimated cost of brain injury is \$580 million CDN annually**. That means the total cost associated with traumatic brain injuries is estimated to be over a billion dollars each year?

Cost of care following a traumatic brain injury

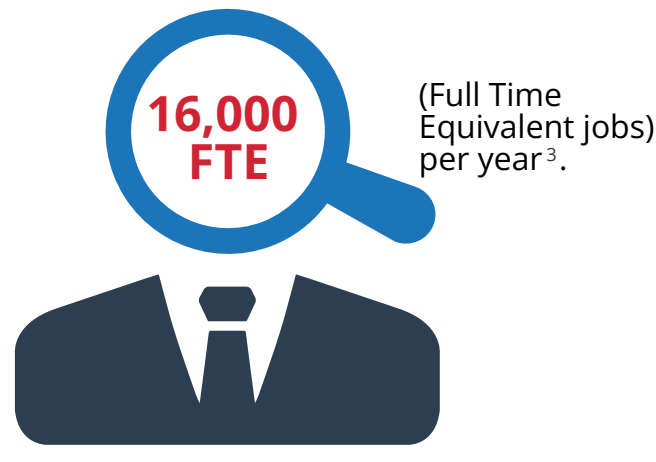
Estimated cost of loss productivity due to brain injury



The Economic Impact of this **lost productivity to Canada is over \$1.7Billion dollars CDN Annually**, with a **loss to GDP of over \$1.159Billion dollars CDN Annually**.



The estimated impact to **lost jobs** due to productivity loss is:



(Full Time Equivalent jobs) per year³.



In the United States: approximately **2.87 million** people experience a **traumatic brain injury (TBI)**

Culminating in:
2.53 million hospital visits
288,000 hospitalizations and
56,800 deaths
 per year. ↓
Which is 53% increase since 2006



Canada would be about 1/10th of these figures



Rapid triage, diagnosis and treatment are critical in minimizing the adverse consequences of the more serious TBI cases.



Since many **TBI cases occur in clusters** and are part of complex, extensive trauma to the individual victim (stemming from automobile accidents, war-zone explosions, etc.), the challenges presented to on-site medical personnel are significant.



For patients with **moderate-to-severe TBI in particular**, diagnosis within the first hour (**the "golden" hour**) of the traumatic event is critical.



The South Eastern Tuscany region Emergency Medical Services reported that through **using the Infrascanner technology**, **Patient remote evacuation was decreased by more than half**.

The Italian pediatric study claims: **The use of Infrascanner** would have led to avoid ten CT scan, **reducing the CT scan rate by 58.8 %**.

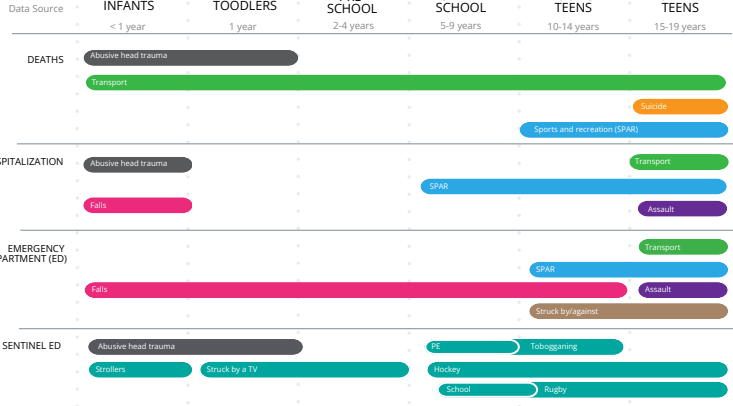


Cost of a CT scan in Canada is approximately **\$500 each** with approximately **6.5 million** scans done per year.

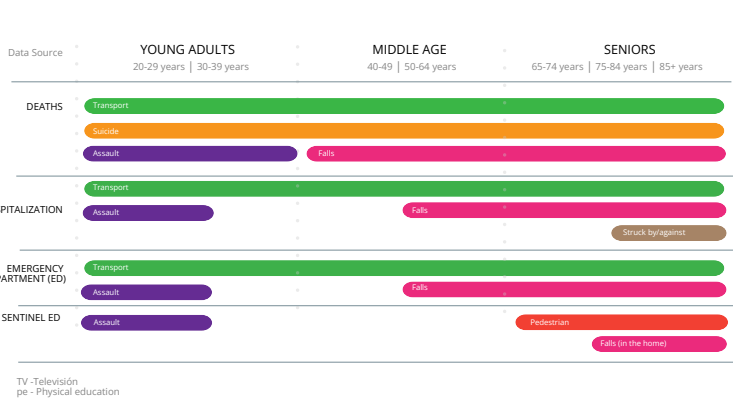


Reducing those scans would save nearly **\$2Billion** in Canada.

Causes of TBI in Canada¹



Causes of TBI in Canada¹



1 <https://www.canada.ca/en/public-health/services/injury-prevention/canadian-hospitals-injury-reporting-prevention-program/injury-reports/2020-spotlight-traumatic-brain-injuries-life-course.html>

2 <https://www.lexology.com/library/detail.aspx?g=df627449-7653-470b-a275-4bd426a81134#:~:text=Based%20on%20the%20current%20estimates,a%20billion%20dollars%20each%20year>

3 OMX Economic Impact calculator based on 2020 Federal Input/Output methodology assuming \$1B/year productivity loss and Miscellaneous ambulatory and health care costs