

# Common causes of concussion and how to prevent them

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# About Parachute

Parachute is Canada's national charity dedicated to injury prevention.

We envision a Canada free of serious injuries, with Canadians living long lives to the fullest.

# Levels of injury prevention

## Primary Prevention

Preventing the incident or injury from happening

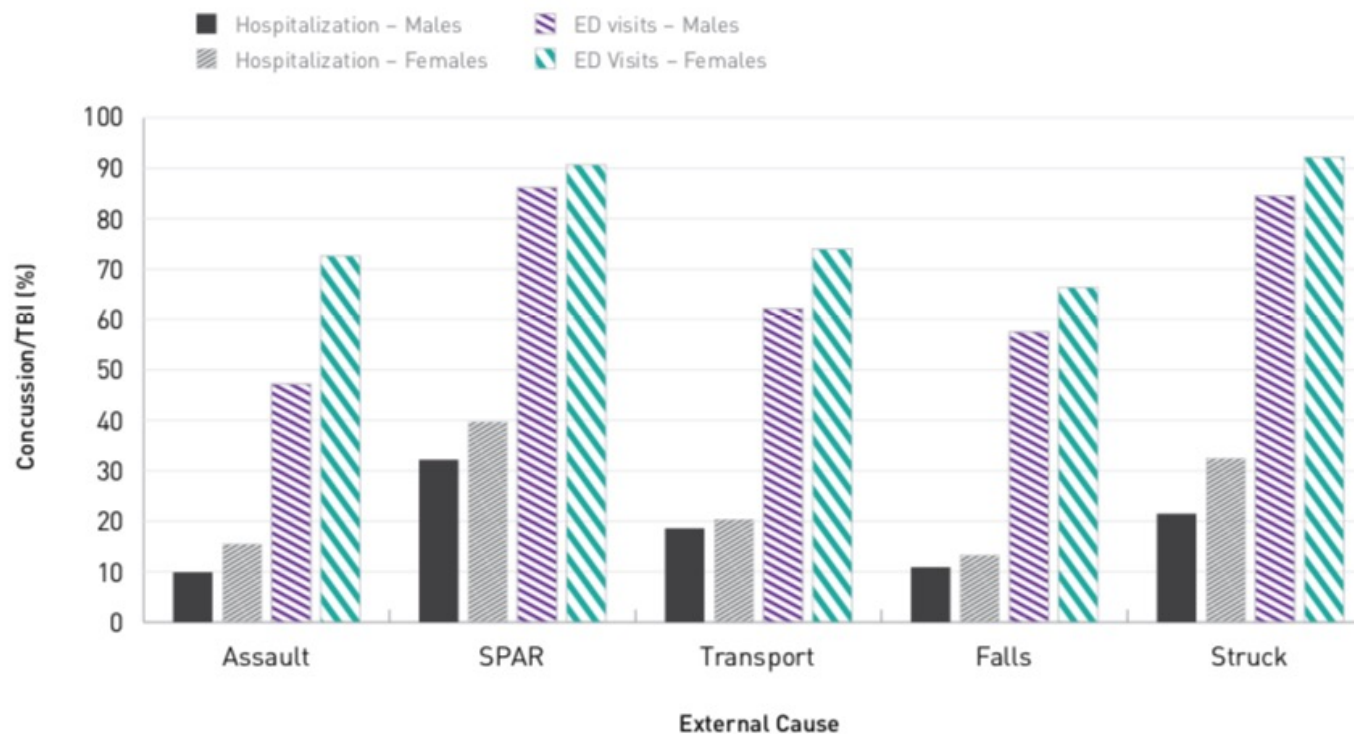
## Secondary & Tertiary Prevention

Reducing the severity of the injury

Improving the outcome of the injury (e.g., care, recovery)

# Concussions are the most common TBI

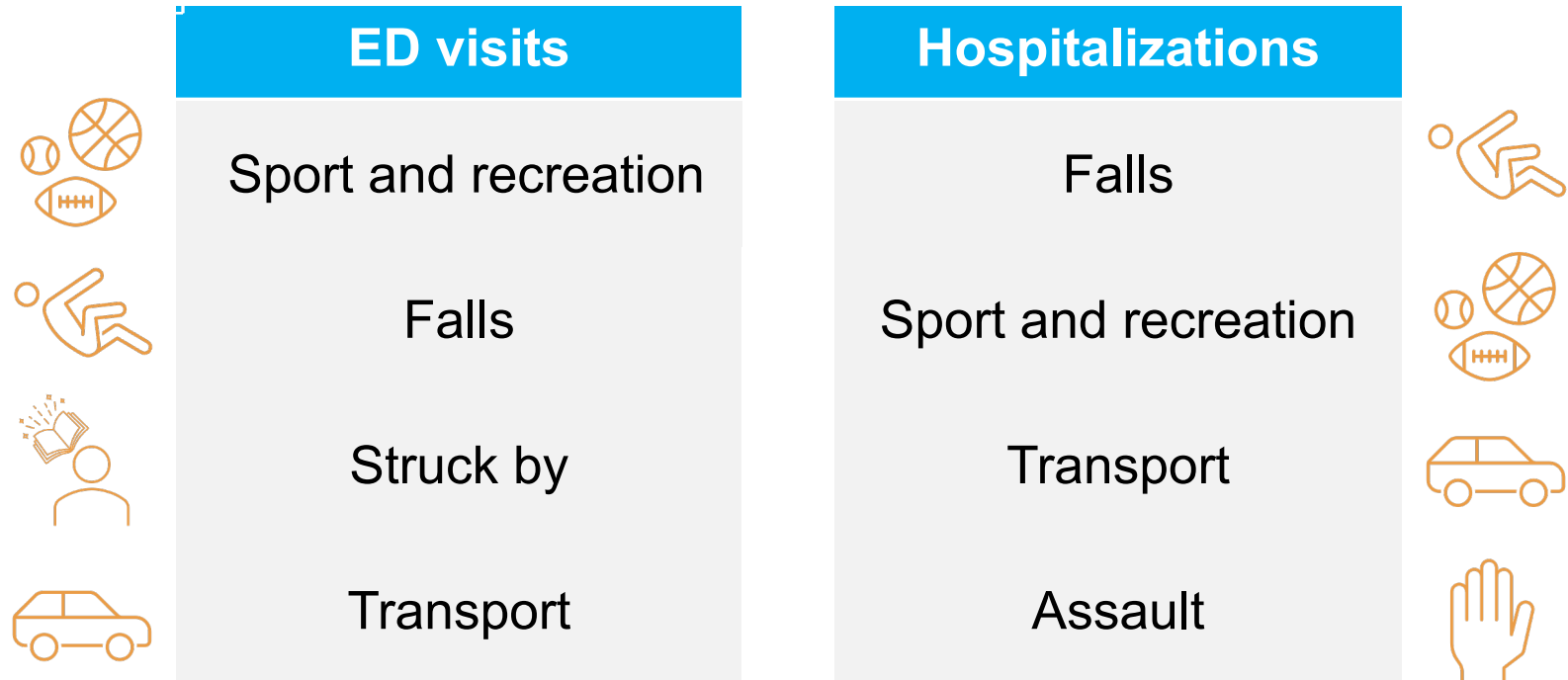
Percentage of concussions among all traumatic brain injuries, by external cause and hospital visit outcome



Source: Public Health Agency of Canada, 2020.

Data source: Hospitalizations: HMDB/DAD, 2006/07-2017/18; ED visits: NACRS, 2002/03-2017/18

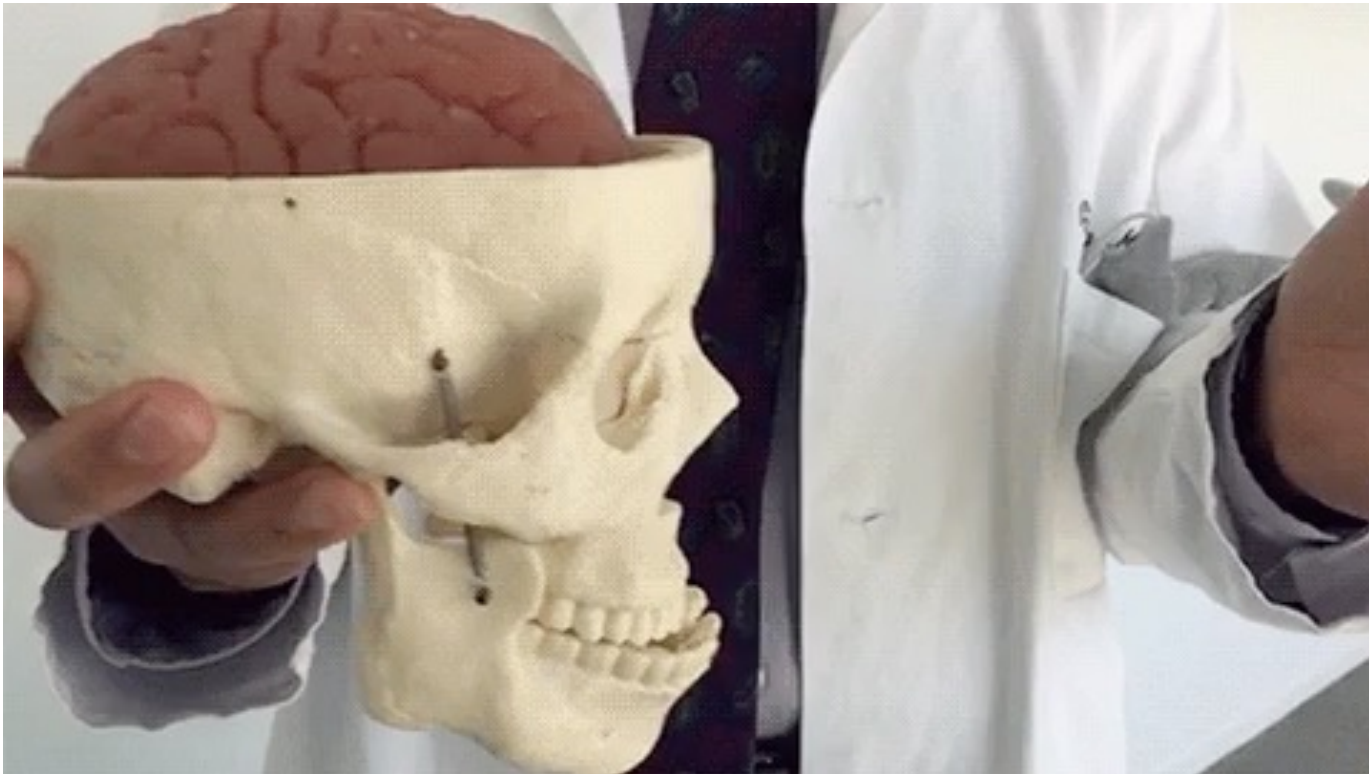
# Leading causes of concussion



Source: Public Health Agency of Canada, 2020.

Data source: Hospitalizations: HMDB/DAD, 2006/07-2017/18; ED visits: NACRS, 2002/03-2017/18

# What works to prevent concussions?



Despite claims, **there is no consumer product** available that can prevent concussions.

# Fall prevention

- Young children:
  - Stair gates, window guards
- Older adults:
  - Home environment (handrails, grab bars)
  - Ice/snow removal
  - Strength and balance training
  - Health management, medication review

▶ **November is Fall Prevention Month**  
[www.fallpreventionmonth.ca](http://www.fallpreventionmonth.ca)





# Transport

- Major contributing factors in collisions:
  - Speeding
  - Impaired driving
  - Distracted driving
- Passenger safety: Seatbelts, car seats/booster seats

# Sport - Protective equipment

Helmets are an important piece of equipment for many sports and activities and can prevent serious head injuries. However, **helmets are not proven to prevent concussions.**



# Sport - Protective equipment

- Headgear:
  - potential protection in soccer, more research needed to recommend
  - no evidence of protection in rugby or lacrosse
- Mouthguards:
  - evidence suggests mouthguards may be associated with lower odds of concussion
  - prevent injuries to teeth and mouth area

# Sport – Participation environment

- Environment (e.g., field/surface, equipment)
- Training and skill development
- Control of the game/activity
- Culture

# Sport policies and enforcement

Policy changes have  
the **strongest evidence base**  
for concussion prevention

# Prevention matters

Concussion

Long-lasting symptoms

Cumulative effects

Sub-concussive impacts

Second Impact Syndrome

School and work

Mental health and identity

Lifelong physical activity

# Thank you



@parachutecanada

[www.parachute.ca](http://www.parachute.ca)

# Resources


 : [parachute.ca/concussion](https://parachute.ca/concussion)

Injury Topics > Concussion

## Concussion

This page was last reviewed on September 8, 2021



 See professional resource collection

### Concussion

- Signs and symptoms of a concussion
- What to do if you suspect a concussion
- Concussion treatment
- Concussion healing time varies
- Concussion prevention
- Mandatory baseline testing not recommended

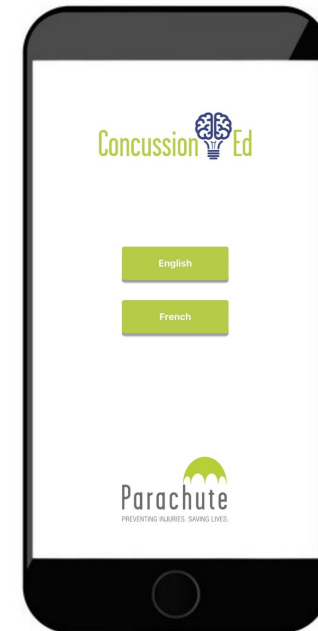
 Resources

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A concussion is a brain injury that can't be seen on routine X-rays, CT scans or MRIs. It affects the way a person may think and remember things, and can cause a variety of symptoms. Any blow to the head, face or neck, or a blow to the body that jars your head, could cause a concussion.



Parachute's "CheckForConcussion" awareness campaign features champion Canadian athletes Scott Moir, Marie-Philip Poulin, Cindy Ouellet and Steve Podborski.





# Resources

- Concussion Awareness Training Tool (CATT)  
[cattonline.com](http://cattonline.com)
- Abused & Brain Injured Toolkit  
(Content warning: Intimate partner violence)  
[abitoolkit.ca](http://abitoolkit.ca)
- Rowan's Law (Ontario)  
[ontario.ca/concussions](http://ontario.ca/concussions)