

# TRAUMATIC BRAIN INJURY 101

Traumatic brain injury resources for Veterans and Families







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This resource is an **overview of traumatic brain injuries (TBI)**. It includes information about how a TBI may happen as part of the Canadian Armed Forces (CAF) or Royal Canadian Mounted Police (RCMP) service, common symptoms, recovery and treatment information, and helpful strategies for Veterans and Families.

In addition to being informed by research, this resource was co-developed with an advisory committee comprised of CAF and RCMP Veterans and Veteran Family members. We thank these advisory members for sharing their time and expertise to co-create these resources.

# HOW ARE VETERANS IMPACTED BY TBI?

During their service, military and RCMP personnel may be exposed to events or conditions that can lead to a TBI.

There are many different causes of TBIs such as sports injuries, vehicle accidents and physical assault. **TBIs are most commonly caused by an object striking the head, the head forcefully coming in contact with an object, or sudden accelerations or decelerations.**

Military and RCMP members may be more likely to be exposed to the **type of impact, force or blast** that can cause a TBI due to events such as<sup>1</sup>:

- Blows to the head while carrying out duties or during an arrest
- Blows to the head from weapons or objects
- Assault

- Repeated firing of weapons or heavy machinery
- Simulated combat training exercises

- Repeated dynamic entry
- Explosive forced entry

- High-speed collisions during pursuits
- Aircraft or vehicle accidents, including blast events, collisions or rollovers

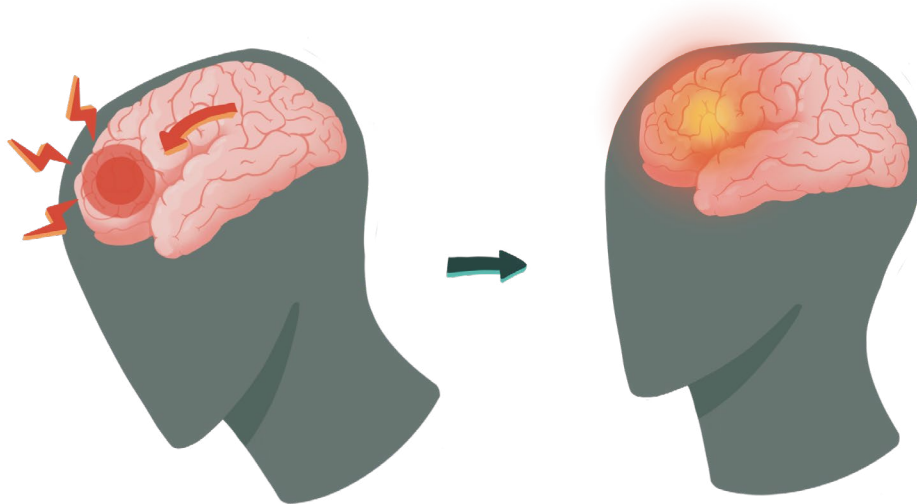
- Exposure to stun grenades (such as flash bangs)
- Exposure to mortar or artillery fire

- Blasts from improvised explosive devices (IEDs) or landmines
- Blasts from rocket-propelled grenades (RPGs)

- Jumps or high-altitude training
- Falls

# WHAT IS TBI?

- A TBI happens when the brain is injured after a sudden impact, jolt, bump or blow to the head or body.
- TBIs can happen because of events that make the brain move inside the skull, injure the brain directly or deprive the brain of oxygen.
- Being exposed to blasts can be enough to cause a TBI, even if someone's head isn't injured directly.<sup>2</sup>



People may lose consciousness and forget what happened right before, during or after the injury and may feel confused or disoriented – it might feel like someone has **“rung your bell.”**

Everyday life can feel more difficult with a TBI and people who have experienced one might find that they need more ways to “get by” than before. TBIs can also have long-term effects on a person's health and well-being.<sup>3</sup>



There are three levels of TBI depending on the symptoms someone experiences.

MILD

MODERATE

SEVERE

**Concussions** are a type of **mild TBI (mTBI)** and are the most common type of TBI that Veterans experience.

Each person's experience is different and the severity level of the injury can change over time as a person restores functioning or makes improvement. A person might experience no symptoms or mild symptoms after a TBI, but multiple injuries over time may compound to have more severe effects.

Not every person who has a TBI knows that they have one and the symptoms can be missed by the individual, their Family and their health care providers. Sometimes the symptoms of a TBI can look similar to posttraumatic stress disorder (PTSD).

## WHAT ARE THE SYMPTOMS OF A TBI?

While there is often no objective test (like a brain scan or blood test) to determine if someone has a concussion or TBI, a health care provider may screen you for a TBI if you have experienced a blow to the head or body.

### What happens during the injury?

- Loss of consciousness or "blacking out"
- Loss of memory from right before, during or after the injury
- Feeling confusion, disorientation or slowed thinking
- Physical symptoms such as dizziness, headaches, blurry vision, ringing in the ears, loss of balance, physical weakness, troubles with speech and communication, sensory loss or vomiting

# What symptoms may be experienced after the injury?

You might experience different symptoms depending on what part of your brain was injured. A TBI can also impact other areas of your health and well-being. This may include<sup>1</sup>:



### Behavioural

Risky or impulsive behaviour, uncharacteristically aggressive behaviour



### Social

Difficulty with socializing, difficulty in relationships



### Cognitive

Trouble with everyday thinking, slow thinking speed, difficulties concentrating, trouble with communication, making decisions, remembering things or reading and writing



### Physical

Headaches, sleep troubles, low energy or fatigue, pain, sensory changes like vision or hearing loss, dizziness, troubles with balance, changes in mobility



### Emotional

Loss of interest in usual activities, trouble with managing or coping with emotions, difficulties coping with stress



### Psychological

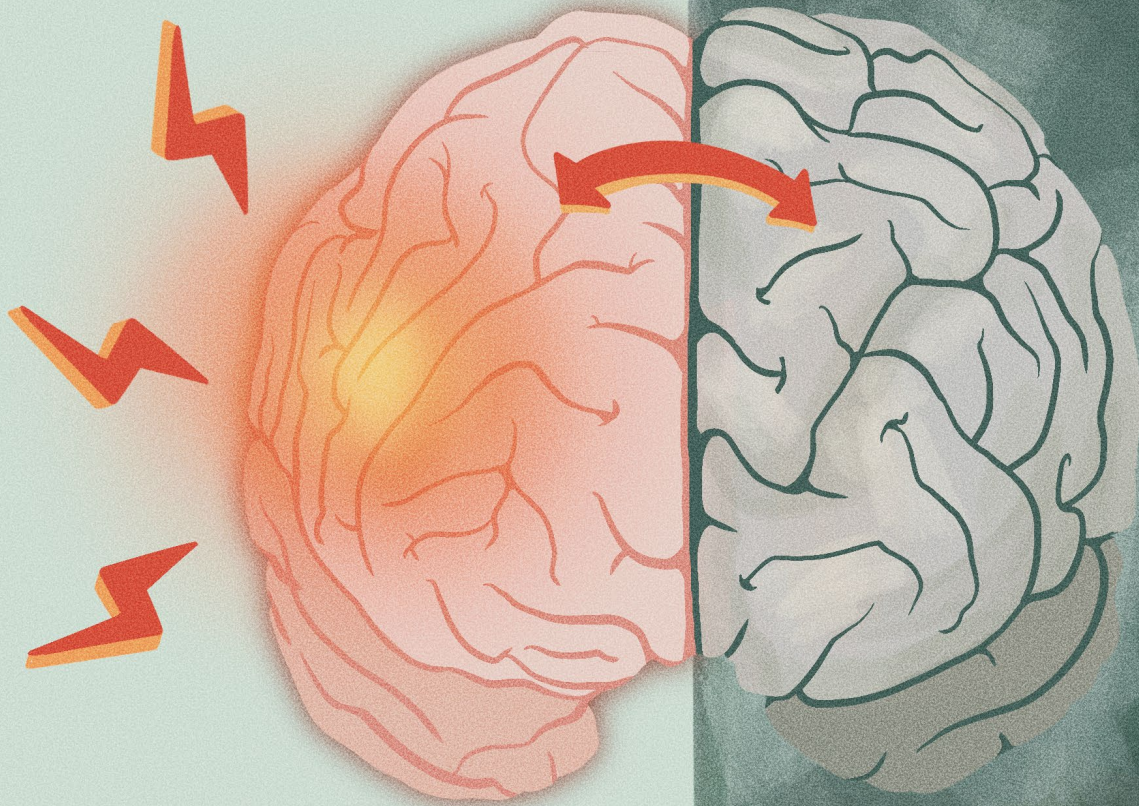
Personality changes, anxiety, depression, anger, irritability, mood swings, thoughts of suicide

## Post-concussion syndrome

Although many people recover from a concussion within days or weeks, sometimes it can take months or years to fully restore functioning.

A person might experience ongoing effects from an mTBI such as confusion, disorientation, headaches, memory and concentration problems, and mood or anxiety symptoms that can look like PTSD.<sup>4</sup>





## ARE TBI RELATED TO PTSD?

- You can have PTSD and a TBI from the same event, although the two do not always happen together.
- Some symptoms overlap in PTSD and TBI, such as troubles with memory and attention, difficulty sleeping, irritability and feelings of depression and anxiety.<sup>5</sup>
- Because of the overlap in symptoms, sometimes it can be difficult to tell if a person has a TBI alongside PTSD.
- **There are treatment options** and strategies for both PTSD and TBI. Treatment and recovery are not “one-size-fits-all” and can look different for each person.



For more information about PTSD, visit [atlasveterans.ca/ptsd](https://atlasveterans.ca/ptsd)

# CAN YOU RECOVER AFTER A TBI?

It is possible to recover from a TBI and get back to feeling like yourself and meeting your potential.

For a person with a TBI, *recovery* can mean restoring capabilities and improving functioning in daily life. That means that through treatment and strategies you may be able to live well and find new ways to engage in the activities and relationships that you enjoy.

Treatment may help you *restore your capability* to meaningfully participate in daily life, although you may develop new ways to accomplish your goals that take into account the effects and symptoms of your injury.

## What do I need to know about treatment?

- **Seeking treatment as soon as possible after an injury can help improve treatment outcomes.** If your injury is from many years ago, the next best time to seek treatment is now.
- **Recovery is a process that takes time and is unique to each individual** – it can take weeks, months or years to rehabilitate. However, the sooner you seek help the better your chances of recovery and restoring capabilities.
- **Many people with an mTBI recover within weeks of the injury.**<sup>6</sup> However, for some people, the TBI symptoms continue after three months – these are referred to as persistent concussive symptoms and may take longer to treat.
- **If you have had multiple concussions or TBIs, your treatment process may take more time.** You may not be able to live your life exactly as you did before the injury, but you can take steps to improve your daily life and get some of your functioning back.



## What does treatment for a TBI look like?

If you have experienced a concussion or another type of TBI, the first step is to speak with your Family doctor or primary care physician.



**Rest and a gradual return to your usual activities** are often part of caring for a TBI, but you may need other treatments depending on your injury.



**Education about TBI** and strategies for coping with symptoms may be part of improving your life with a TBI.



People with an mTBI may experience cognitive symptoms such as problems with memory, concentration or everyday thinking. A common type of treatment for this is a group of therapies called **cognitive rehabilitation therapy (CRT)**<sup>7</sup>.

### Cognitive rehabilitation therapy

CRT helps to address the cognitive difficulties that come with a brain injury such as problems with memory, concentration or everyday thinking.

There isn't one specific type of CRT and the treatment is adapted to the individual. Often it can include:

- Treatments to help improve your brain's functioning, such as practising memory test to improve memory
- Strategies and solutions for specific problem areas, such as writing things down to help with memory problems.

Treatments can take place in different settings, including **hospitals, rehabilitation centres or brain injury clinics**. Although the recovery process often starts with a conversation with your **primary care physician**, there are a number of other health care providers who may also be able to help you.

This can include:

### Medical professionals

- Cognitive therapist
- ENT (ear, nose, throat specialist)
- Family doctor or primary care physician
- Neurologist
- Neuropsychologist
- Nurse
- Occupational therapist or mental health occupational therapist
- Physiatrist
- Physical therapists
- Rehabilitation therapists
- Speech-language pathologist
- Veterans Affairs Canada (VAC) case manager

### Mental health specialists

- Psychiatrist
- Psychologist
- Psychotherapist
- Social worker



# WHAT CAN YOU DO IF YOU THINK YOU HAVE A TBI?

If you have experienced an event that may have caused a TBI, it is important to speak with your health care provider about your experiences and symptoms. You can also get services, support and resources through the following options.

## Where and how to get help

- **Speak with a health care provider about your symptoms.** They may ask you some questions about how you were injured and what you experienced after the injury.
- **Reach out to VAC if you are receiving benefits from them.** If you are receiving benefits from VAC, you may be able to speak with them about getting support or services for a TBI. Reach out to the person or department with whom you have coordinated for your benefits to ask about services for TBI. CAF and RCMP Veterans and their Families can call VAC for information or claims support at **1-866-522-2122**, and can also call the VAC Assistance Service for professional mental health support at **1-800-268-7708**.
- **Ask your Family, loved ones or friends for support.** They may be able to provide support for you and help you with day-to-day challenges, like scheduling and remembering appointments, taking medication or remaining hopeful about the future.
- **Get additional support and services through an operational stress injury (OSI) clinic.** OSI clinics offer assessment, treatment and supports for mental health and injuries related to service.
- **Connect with other Veterans and Families through peer support.** Many other Veterans and Families are also impacted by a TBI. It can be helpful to talk with people who are going through a similar experience and to stay connected with others. Local or online organizations or groups for Veterans and Families can be a good place to start.

“Don't run your race by yourself.  
Ask for help and let people help you.”  
— CAF Veteran



## Strategies for daily living with a TBI



### Learn strategies to reduce the impact of TBI symptoms.

It can be frustrating or distressing to experience the symptoms of a TBI or to have challenges with processing information, remembering and communicating. Your support and understanding can be a positive part of someone's recovery.



### Limit intake of alcohol and other substances.

Alcohol may limit your optimal functioning and its effects can add to or worsen your symptoms. Other substances can also have negative impacts.



### Rest and take breaks.

Getting enough rest can help you deal with your symptoms and taking regular breaks can prevent you from getting overwhelmed or overstimulated.



### Learn about and respect your limits.

You may find that you get tired sooner than you did before the injury. It's important to recognize when you have reached your limits and not push beyond them.



### Pay attention to the impact of using electronics.

Technology can help people with TBI through calendars, reminders and note applications. However, using screens for long periods of time can aggravate symptoms in some people. Try to take notice of whether electronics have this impact on you. If they do, aim to take breaks from screens at during the day.



For more information about strategies for daily living with a TBI, visit [atlasveterans.ca/tbi](https://atlasveterans.ca/tbi)

# HOW CAN YOU HELP SOMEONE WITH A TBI?



## Be patient with them.

It can be frustrating or distressing to experience the symptoms of a TBI or to have challenges with processing information, remembering and communicating. Your support and understanding can be a positive part of someone's recovery.



## Learn about strategies to reduce the impact of TBI symptoms.

There are strategies for daily living with TBI that you can learn about to share with your Veteran loved one. This might look like encouraging your loved one to write things down and make use of calendars or whiteboards. You may also adopt strategies together to improve communication and increase your loved one's independence in coping with their symptoms.



## Practise good communication skills.

It can help to slow down, remove background noise and check in to make sure you are understanding each other. Try not to interrupt the person with a TBI. Sometimes it helps to take a break and come back to a conversation at a later time.



## Get support for yourself.

Although an individual experiences a TBI, the whole Family can be impacted by it. It is important to look after yourself when you are supporting a Veteran you care about. Your experience matters and there are resources and services available to help you. Families can reach out to the **Family Information Line** at **1-800-866-4546** for information on programs, services and resources.



For more information about TBI, visit [atlasveterans.ca/tbi](https://atlasveterans.ca/tbi)

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