

What You Need to Know About Concussion

This information sheet provides a brief overview on the appropriate care for an individual with a concussion. It outlines the three key steps in dealing with concussion to assist recovery from this injury: recognize, respond, and manage. Visit cattonline.com for further information, resources, or to take one of the e-learning courses tailored for medical professionals, workers & workplaces, coaches, school professionals, and parents & caregivers.

Recognize

A concussion is the most common form of brain injury caused by an impact or forceful motion to the head or body that causes the brain to move inside the skull. Common causes of concussion include **falls, motor vehicle crashes, and sport and recreational-related activities.**

There is no way to know for certain whether a particular event will lead to a concussion—a relatively minor impact may result in a concussion while a higher-magnitude impact may not. It is important to note that if there is a history of concussion, even a minor impact or forceful motion can cause a concussion.

The **signs** (observed in individual) **and symptoms** (experienced by individual) consistent with concussion may include, but are not limited to:

- Headaches
- Neck pain
- Dizziness or loss of balance
- Nausea
- Blurred vision or seeing “stars”
- Sensitivity to light or sound
- Ringing in the ears
- Confusion or fogginess

Some symptoms may be **delayed for hours or days** after an injury and can include:

- Frustration or irritability
- Concentration or memory issues
- Sadness
- Anxiety or nervousness
- Fatigue
- Trouble sleeping

Concussion signs to watch for in an **infant or toddler** may include:

- Crankiness and irritability (beyond their usual)
- Cannot be comforted or excessive crying
- Sudden changes in nursing, eating, sleeping or playing patterns
- Loss of balance, unsteady walking (more so than normal)
- Lack of interest in favourite toys or activities
- Listlessness or tiring easily
- Loss of ability to carry on with newly acquired skills (across any social and emotional, language, physical development domains)

Respond










Immediately:

Following a potential concussion-causing event, the individual should be removed from activity and assessed for a **medical emergency**.

If any of the **Red Flags** are present, call 911 or seek immediate medical care.

Next steps if not a medical emergency:

- Do not leave the individual alone
- Notify an emergency contact person
- Continue to monitor for Red Flags and signs and symptoms of concussion
- Do not let the individual return to their activity
- Do not give the individual any immediate medication
- Do not let the individual leave by themselves
- Do not let the individual drive or ride a bike

| RED FLAGS | |
|---|---|
|  | Neck pain or tenderness |
|  | Double vision |
|  | Weakness or tingling/ burning in arms or legs |
|  | Severe or increasing headache |
|  | Seizure or convulsion |
|  | Loss of consciousness |
|  | Deteriorating conscious state |
|  | Vomiting |
|  | Increasingly restless, agitated, or combative |

Within 48 hours:

The individual should be monitored before assuming that a concussion has not occurred, including monitoring throughout the night following the initial injury. Do not wake the individual unless you have concerns about their breathing, changes in skin colour, or how they are sleeping. Call 911 or seek immediate medical care if the individual is slow to wake or shows any of the **Red Flags**.

- If any signs or symptoms are present, seek medical attention from a licensed medical professional such as a physician or nurse practitioner.
- If no signs or symptoms appear, the individual can return to normal activity while being monitored for several days. If no signs or symptoms appear, chances are that a concussion was not sustained. If unsure, see a medical professional for guidance.

Manage

A concussion can have a significant impact on physical, cognitive, and emotional functioning. The recovery process involves managing activities in order to not trigger or worsen symptoms—the key is finding the “sweet spot” between doing too much and too little.

The recovery process is best approached in collaboration with key individuals, such as medical professionals, family members, friends, employers, teachers and school staff, and coaches.

Within 48 hours:

The first and most important step in recovery from a concussion is to rest for a maximum of 2 days. The individual will need both physical and cognitive rest in order to allow the brain to heal.

After 48 hours:

- Physical exertion should be limited to activities that do not result in an increased heart rate or breaking a sweat. Restrict: physically strenuous work, exercise, sports, running, biking, rough play, etc.
- Cognitive activity should be limited, minimizing activities that require concentration and learning. Restrict: work or schoolwork, reading, electronics (computers, smartphones, video games, TV), musical instruments, loud music, etc.

Once symptoms start to improve, the individual should begin to increase activities in a step-wise process to return to regular levels of activity, including work, school, and sports.

Symptoms should decrease over time, but some symptoms may return, worsen, or new symptoms may appear as new activity levels are introduced. If this happens, return to a lower level of activity that does not affect or bring on new symptoms. If you are worried that the individual is not improving, follow-up with a licensed medical professional, such as a physician or nurse practitioner.

On average, it typically takes 2 to 4 weeks to recover from concussion. However, 15 to 30 percent will continue to experience persistent symptoms beyond this period. Persistent symptoms have the potential to cause long-term difficulties. If there is no improvement or symptoms are worsening 4-12 weeks after a concussion, physician referral to an interdisciplinary clinic is recommended.

The recovery period may be influenced by:

- Previous concussions
- History of headaches or migraines
- Learning disabilities
- Mental health issues
- ADHD
- Use of drugs or alcohol
- Returning to activities too soon
- Lack of family or social supports
- Participating in high-risk sport

Proper management of a concussion can reduce the risk of complications. It is important that the individual has successfully returned to work or school before fully returning to sport and physical recreation activities. Returning to full activity too soon may result in more severe symptoms or long-term problems. As well, returning to high risk activities (contact sports, dangerous job duties) before full recovery and medical clearance can put the individual at risk of sustaining another concussion with more severe symptoms and a longer recovery period.

REMEMBER:

Recovery is a fluctuating process. The individual can be doing well one day but not the next.

REMEMBER:

CATT resources to support the recovery process include:

- Return to Work
- Return to Activity
- Return to School
- Return to Sport