

# 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 healthcare professionals, workers & workplaces, coaches, athletes, youth, school professionals, parents & caregivers, and women's support workers (supporting survivors of intimate partner violence).

## 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.

The following signs and symptoms are consistent with concussion. Some signs and symptoms may be delayed for hours or days after an injury:

- Headache / Pressure in head
- Balance problems / Dizziness
- Nausea or vomiting
- Drowsiness
- Blurred vision
- Light / Sound sensitivity
- Fatigue or low energy
- "Don't feel right"
- Neck pain

- More emotional
- More irritable
- Sadness
- Nervous or anxious
- Difficulty concentrating
- Difficulty remembering
- Feeling slowed down
- Feeling like "in a fog"
- Trouble falling asleep

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

### 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.

- The individual should engage in limited physical activity that does not put them at risk for a head impact.
- If any signs or symptoms are present, seek medical attention from a doctor, nurse practitioner, or licensed healthcare professional with relevant training.
- If no signs or symptoms appear within 48 hours, the individual likely does not have a concussion, and can return to normal activities.
- If unsure, seek guidance from a doctor, nurse practitioner, or licensed healthcare professional with relevant training.

### Manage

A concussion can have a significant impact on physical, cognitive, and emotional functioning. The recovery process involves managing activities in order to not worsen symptoms beyond mild and brief exacerbation\*—the key is finding the balance between doing too much and too little.

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

\*Mild exacerbation (worsening) of symptoms: No more than a 2-point increase when compared with the pre-activity value on a 0-10-point symptom severity scale.\*\* "Brief" exacerbation of symptoms: Worsening of symptoms for up to 1 hour.

\*\*0-10 point symptom severity scale: Please see the Visual Analog Scale for an example of a 0-10 symptom severity scale.

### **RED FLAGS**



#### Within 48 hours:

The first and most important step in recovery from a concussion is relative rest for a maximum of 24-48 hours. The individual will need both physical and cognitive rest in order to allow the brain to heal. Relative rest: activities of daily living including walking and other light physical and cognitive activities are permitted as tolerated. Screen time should be limited for the first 24-48 hours following concussion.

### After 48 hours:

- Gradually increase physical and cognitive activity. Continue to increase as long as symptoms remain mild and brief. Examples: Computer work, watching TV, reading, jogging, light weight training
- Goal is to increase heart rate. Start with less demanding activities before harder ones.
- Keep naps during the day to a minimum. It is unlikely to help recovery.

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 worsen symptoms beyond mild and brief exacerbation. If you are worried that the individual is not improving, follow-up with a medical or licensed healthcare professional with relevant training.

#### **REMEMBER:**

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

On average, concussions resolve within 4 weeks. However, up to 30 percent will continue to experience persisting symptoms beyond this period. Persisting symptoms have the potential to cause long-term difficulties. If there is no improvement or symptoms are worsening 2-4 weeks after a concussion, referral to interdisciplinary care 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:**

CATT resources to support the recovery process include:

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