



# Concussion

## information and recommendations

### What is a concussion?

A concussion is a type of brain injury that is caused by a blow to the head or to the body with force transmitted to the head.

### What symptoms may occur following concussion?

| Physical               | Cognitive (thinking) | Emotional          | Sleep/Energy              |
|------------------------|----------------------|--------------------|---------------------------|
| Headache               | Feeling “foggy”      | Nervous or anxious | Increased fatigue         |
| Blurred vision         | Feeling slowed down  | Moody              | Sleeping more             |
| Dizziness/unsteadiness | Poor memory          | Irritable          | Drowsy                    |
| Nausea/vomiting        | Poor concentration   | Sad                | Difficulty falling asleep |
| Ring in the ears       | Easily distracted    | Less motivation    |                           |
| Sensitivity to light   | Easily confused      |                    |                           |
| Sensitivity to noise   |                      |                    |                           |
| Neck pain              |                      |                    |                           |

## What symptoms should I watch out for?



If you have any of the following **RED FLAG** symptoms, please go **immediately** to the nearest emergency department:

- Worsening headache
- Repeated vomiting
- Seizures
- Increasing confusion
- Increasing irritability
- Weak or numb arms or legs
- Slurred speech
- Unsteady on feet
- Abnormal pupil size
- Unusual behaviour
- Increasing drowsiness
- Inability to recognize familiar people/places

## How long does it take to recover from a concussion?

Most adults recover in 10 to 14 days and most children and youth recover in four weeks following a concussion. Some people will take longer to recover as each person is different and each concussion is different. During recovery, it is normal to feel frustrated, sad or irritable when you do not feel right and you cannot be as active. It will get better.

## What should you initially do after a concussion?

**24 to 48 hours following injury** → REST from cognitive (thinking) and physical activity

**After 24 to 48 hours** → Gradually return to your regular activities of daily living, as long as they do not make your symptoms worse.

## What else can I do to help recover from a concussion?

### Stay active

After the first 24-48 hours of rest, slowly begin increasing your activity. Stay away from physical and mental activities that worsen symptoms. Gradually return to your daily activities as symptoms improve. If symptoms worsen or return, decrease your level of activity until you are feeling better, and then gradually start returning to your daily activities again.

- Avoid strenuous physical activity (e.g.: gym class, sports practices, weight-training, running, heavy lifting) and any activity with a risk of fall or contact.
- Limit thinking and concentration activities (e.g., homework, classwork, job-related activity).
- Know your limits. Only do activities that do not produce or increase your symptoms.

## Pace yourself

Following a concussion many people find they have less energy than before. When performing tasks that require physical, cognitive (thinking) and/or emotional stamina ensure that your symptoms do not worsen. Do the following:

- Give yourself plenty of time to do each task.
- Balance activities with rest breaks.
- Rest before you are tired or before symptoms worsen.
- Break up a large task by doing a little at a time.
- Alternate between heavy and light tasks and between physical and thinking tasks.

## Get a good sleep

Be sure to get enough sleep at night. Keep the same bedtime and wake time weekdays and weekends. Limit daytime napping to no more than 30 minutes, and before 4 p.m., (and only if needed). It is not necessary to wake people up at night following a concussion, as long as they do not have the “red flag” symptoms noted above.

## Get proper nutrition and hydration

Maintain a normal healthy diet. Skipping or delaying meals and dehydration can trigger headaches in some people.

- Consume at least three meals per day.
- Consume 4 to 6 drinks per day of water, juice or milk.
- Avoid caffeinated drinks (coffee, cola).
- Avoid diet soft drinks with aspartame.
- Avoid recreational drugs and alcohol.

## Medication use

In the first 48 hours following a concussion, **do not** take prescription pain medication or sleeping aids. After this time, you should discuss appropriate medication with your doctor. **Do not** exceed 15 days of medication use for headaches per month as this can cause medication overuse headaches.

## Headache management

- Apply a cold or hot pack to the neck or head.
- Stretch and self-massage around the head and/or neck and shoulders.
- Practice visualization or other mindfulness-based exercises.
- Perform breathing exercises.
- Go to a quiet place.
- Lie down or maintain a tall, upright posture.
- Go outside and get fresh air.

## Limit stress

Stress, worry, anxiety and anger can trigger headaches. Relaxation strategies, meditation, yoga and exercise can assist to cope with stress.

## Return to work/school

Symptoms may worsen with long periods of work or focus. It is important to take frequent breaks BEFORE your symptoms worsen while at school or work.

## Return to sport

When your symptoms have gone away and you are feeling back to your normal self, you will follow a “return to play strategy” which your healthcare provider will discuss with you.

## Ongoing medical evaluations

Repeated evaluations of your symptoms by a medical professional is recommended to help guide recovery.

## Physiotherapy/rehabilitation

Referral for treatment may help improve a variety of symptoms (neck pain, headaches, dizziness, etc.). Return to play may also be monitored with a physiotherapist/athletic therapist.

## Where can I learn more?

The Sport Medicine Centre at the University of Calgary has an Acute Sport Concussion Clinic (ASCC). For more information, call 403.220.8946 or visit the concussion clinic website:

<https://sport-med.ucalgary.ca/clinic/ascc>

## Concussion recovery resources

### Parachute Canada

<http://www.parachutecanada.org/injury-topics/item/concussion>

### Concussion Awareness and Training Tool (CATT)

<http://www.cattonline.com>

### Concussion Recognition Tool 5 (CRT5)

<http://bjsm.bmj.com/content/51/11/872>

### Early Concussion Education Learning Module: Understanding Symptoms & Recovery for Adults

<https://myhealth.alberta.ca/learning/modules/Early-Concussion>