



Post-Concussion Information Sheet

WHAT IS A CONCUSSION?

A concussion is a brain injury that affects how the brain works. A concussion can't be seen on x-rays or brain scans. Use this Post-Concussion Information Sheet to help you understand what to do, where to get help, and how to get better safely after a concussion.

CONCUSSION RECOGNITION: Identify a suspected concussion

Any blow or hit to the head, face, neck, or body that causes sudden shaking of the head can cause a concussion. Concussions can happen from falling, during a motor vehicle collision, during sports, or during play at school, camp or in the neighbourhood.



A concussion should be suspected in anyone who takes a blow to the head, face, neck, or body and shows ANY of the signs or symptoms of a concussion.

Concussion symptoms: Symptoms describe how someone feels after they are injured. Some symptoms may not appear until the next day. A person does not have to be knocked out (black out or unconscious) to have a concussion. Common concussion symptoms:

- Headaches or head pressure
- Blurred or fuzzy vision
- Dizziness
- Sensitivity to light or sound
- Nausea and vomiting
- Balance problems
- Easily upset or angered
- Feeling more emotional
- Nervous or anxious
- Sadness
- Sleeping more or less
- Having a hard time falling asleep
- Feeling slow, tired or having no energy
- Difficulty working on a computer
- Not thinking clearly
- Difficulty reading or remembering

Visible signs of a concussion: Signs of concussion describe how a person looks or acts when they are injured. Common concussion signs:

- Lying still on the ground or ice
- Slow to get up
- Confusion or can't answer questions
- Blank stare
- Difficulty standing or walking
- Injury to the face or holding their head

TAKE ACTION: What should you do if you think someone has a concussion?

**IF IN DOUBT,
SIT THEM OUT!**

- Remove them from the activity.
- If the person has any 'red flag symptoms' this may indicate a more serious head or neck injury and an emergency medical assessment is required. Call an ambulance immediately.
- **RED FLAG SYMPTOMS:** severe or worsening headache, neck pain or tenderness, double vision, seizures or convulsions, loss of consciousness, increase in confusion, restlessness, agitation or aggressive behaviours, repeated vomiting, or slurred speech. These red flag symptoms may appear immediately or within a few hours or days after injury.
- Contact the parents or caregivers immediately and do not leave alone.
- For a suspected concussion, recommend that the person be seen by a medical doctor or nurse practitioner as soon as possible.
- Everyone with a concussion should get permission from a doctor or nurse practitioner before returning to full contact sport or high-risk activities.





CONCUSSION RECOVERY:

Understand the steps involved

- First 1-2 days after concussion: Relative rest with activities of daily living.
- After this short rest, and even if the person is still experiencing concussion symptoms, they should start activities (physical and thinking) that can be tolerated, increasing the intensity gradually as part of the initial treatment for concussion.
- **Resting for more than 1-2 days can delay recovery**



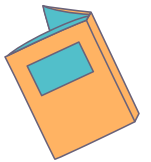
Steps for returning to school and sports or activities should happen at the same time.

It is important that the person returns to school full-time at a full academic load (i.e. writing exams without accommodations in place as a result of the concussion) before returning to full-contact sport or high-risk activities.



Clearance from a doctor or a doctors note is not required to return to school for in-person or at-home academic activities but students should avoid any school activity that has a risk of a fall or hit to the head until medically cleared.

Return-to-School Steps:



Steps	Activity	Example
1	Activities of daily living and relative rest (max 1-2 days)	Activities at home such as social interactions and light walking that do not result in more than mild and brief exacerbation (worsening) of concussion symptoms. Minimize screentime.
2	School activities with encouragement to return to school as soon as possible (as tolerated)	Reading or other cognitive activities at school or at home. Goal: increase tolerance to cognitive work, and connect socially with peers. Take breaks and adapt activities if concussion symptom exacerbation (worsening) is more than mild and brief.
3	Part-time or full days at school with academic accommodations if needed	Gradual reintroduction of school work. May require partial school days with access to breaks throughout the day, or with academic accommodations to tolerate the classroom or school environment. Gradually reduce accommodations and increase workload until full days without concussion-related accommodations are tolerated.
4	Return-to-school full-time (no academic accommodations related to concussion)	Return to full days at school and academic activities without requiring concussion-related accommodations. Medical clearance is NOT required to return to school.

**Students should begin a gradual increase in their cognitive load with the goal of minimizing time away from the school environment. The return to school should not be restricted if the student is tolerating full days. Progression through the strategy may be slowed when there is more than a mild and brief symptom exacerbation; however, missing more than one week of school is not generally recommended.*

Work with your child/adolescent's school to help put these steps into practice. Your healthcare provider can advise what supports may be needed to return to school such as:

- Environmental supports (e.g. alternate workspace, reducing noise, rest breaks)
- Instruction supports (e.g. extra help, alternatives for screen-based instruction)
- Assessment and evaluation supports (e.g. extra time for tests, quiet workspace for test taking)



CONCUSSION RECOVERY:

Understand the steps involved



Return-to-Activity/Sport/Play Steps:

Steps	Activity	Example
1	Activities of daily living and relative rest (max 1-2 days)	Activities at home such as social interactions and light walking that do not result in more than mild and brief exacerbation (worsening) of concussion symptoms. Minimize screentime.
2	Aerobic exercise: Gradually increase intensity as tolerated	Walking, stationary cycling, or jogging. Take a break and modify activities as needed with the aim of gradually increasing tolerance and the intensity. Light resistance training that does not result in more than mild and brief exacerbation of concussion symptoms. Goal is to increase the heart rate.
3	Individual sport-specific activities that do not have a risk of inadvertent head impact	Sport-specific training (e.g., running, change of direction, and/or individual training drills and individual gym class activities that do not have a risk of head impact and are supervised by a teacher or coach). Goal is to increase the intensity of aerobic activities and introduce low-risk sport-specific movements and changing of directions.
Medical clearance and full return to school required before progress to Step 4		
4	Non-contact training drills and activities	Exercise to high intensity, including more challenging training drills and activities (e.g., passing drills, multiplayer training, supervised non-contact gym class activities, and practices without body contact). Goal: Resume usual intensity of exercise, coordination, and activity-related cognitive skills
5	Return to all non-competitive activities, all gym class activities, and full-contact practices	Participate in higher-risk activities including normal training activities, all school gym-class activities, and full-contact sports practices and scrimmages. Avoid competitive gameplay. Goal: return to activities that have a risk of falling or body contact, restore game-play confidence, and have coaches assess functional skills.
6	Return to Sport	Normal, unrestricted competitive gameplay, school gym class, and physical activities.



Avoid any activity with a risk of a fall or hit to the head or body that could cause another concussion (e.g. contact sports, game play) until medically cleared. A person returning to an activity where they can fall or get hit in the head too soon after a concussion may complicate the injury further and result in a longer recovery.

Instructions:

Begin Step 1 (i.e., relative rest) within 24 hours of injury, with progression through each subsequent step taking a minimum of 24 hours. If more than mild exacerbation (worsening) of symptoms (i.e., more than 2 points on a 0-10 scale^{***}) occurs during Steps 1-3, stop the activity and attempt to exercise the next day. People experiencing concussion-related symptoms during Steps 4-6 should return to Step 3 to establish full resolution of symptoms with exertion before engaging in at-risk activities. Written determination of medical clearance should be provided before unrestricted Return to Sport as directed by local laws and/or sporting regulations.

Definitions: *Relative rest: activities of daily living, including walking and other light physical and cognitive activities, are permitted as tolerated. **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. These definitions were harmonized with and modified with permission from the Amsterdam International Consensus Statement on Concussion in Sport)



Take Action

What can I do to help recover from a concussion?

Everyone's experience with concussion is **different**. Here are some tips for recovery.

- Return to activities that can be tolerated even if you are still experiencing concussion symptoms.
- Remember that returning to activities such as safe physical exercise and school is helpful for recovery.
- Spend time with friends and family.
- Avoid activities that may involve contact or falling.
- Get regular amounts of sleep.
- If you usually drive, talk to your medical team about when it is safe for you to drive.
- Drink water and eat balanced meals.
- Avoid drugs and alcohol.
- Go to all medical appointments.
- If school is difficult or you feel more sad or nervous than normal, tell someone you are comfortable with. This might be a trusted friend, family member, teacher, guidance counsellor, doctor, nurse, or elder.

When should I go back to see a doctor or nurse:

→ **If you have any red flag signs or symptoms, call an ambulance immediately. Symptoms may appear right away or up to a couple of days after the injury.**

- Severe or worsening headache
- Neck pain or tenderness
- Double vision
- Seizures or convulsions
- Loss of consciousness
- Increase in confusion, restlessness, agitation, or aggressive behaviours
- Repeated vomiting
- Slurred speech

→ **If you notice new concussion-like symptoms or if you sustain a new suspected concussion, go and see a medical doctor or nurse practitioner as soon as you can.**

→ **If you are not improving after 2-4 weeks or have not returned to school, see your doctor for a re-assessment and ask for a referral to an interdisciplinary concussion care team.**

- Specialized interdisciplinary concussion care is ideally initiated within the first two weeks post-injury.

→ **If you are highly active or a competitive athlete, it is suggested that you ask for a referral to a medically supervised interdisciplinary team that can individually assess aerobic exercise tolerance and prescribe aerobic exercise treatment.**

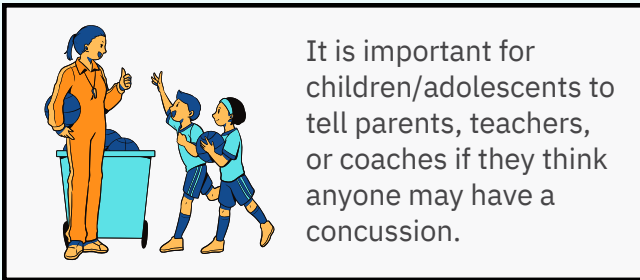
- This exercise tolerance assessment can be as early as 24-48 hours post-injury.



Additional Information

How long does it take a child or adolescent to recover from a concussion?

Most people recover in 1-4 weeks, but it can take longer for some people. Some children and adolescents have a higher risk of a longer recovery and may benefit from early specialized treatment. Your doctor or nurse practitioner can give you more information based on your personal medical information and can help refer you to an interdisciplinary team of concussion experts.



It is important for children/adolescents to tell parents, teachers, or coaches if they think anyone may have a concussion.

What can happen if I go back to full-contact sports, game-play, or high risk activities too early after a concussion?

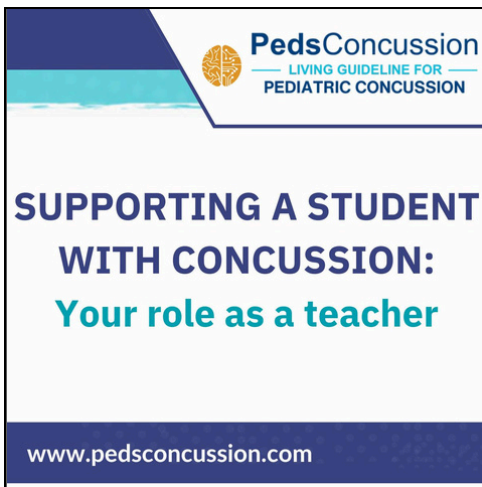
If children/adolescents with a concussion go back to activities that include a risk of hitting their head or falling down again too early after a concussion, they can have another injury. Having another injury can lead to worse symptoms that last longer or result in a more severe or fatal brain injury.

when

How can children/adolescents help prevent concussions and their consequences?

To prevent concussions, follow the rules of your sport, respect your opponents, and avoid head contact. Youth should always wear helmets during activities such as skating or riding bikes, snowmobiles, or all-terrain vehicles.

[Guide for Teachers](#)



[Guide for Parents](#)



[Guide for Coaches](#)



About this resource: The information shared in this resource is based on the [Living Guideline for Pediatric Concussion](#). Elementary and Highschool teachers reviewed and selected recommendations from this Guideline that they thought teachers should be aware of. Date of last update: July 2024