

CONCUSSION: WHAT YOU **NEED** TO KNOW

A concussion is a brain injury caused by a sudden hit, bump or jolt to the head, face, neck or somewhere else on the body. The impact can prevent the brain from working normally. A concussion cannot be seen on X-rays, CT scans or MRIs. You do not need to lose consciousness (knocked out or blacked out) to have a concussion. **Signs and symptoms can be immediate, delayed or not show for a period of time, perhaps days or even weeks.**

Signs and symptoms

Physical	Emotional/Behavioural	Thinking	Sleep
<ul style="list-style-type: none">• Headache• Nausea• Dizziness• Vision problems• Light sensitivity• Noise sensitivity• Loss of consciousness• Memory loss• Vomiting• Loss of balance/poor coordination• Seizure or convulsion	<ul style="list-style-type: none">• Irritability• Personality changes• Strange or inappropriate emotions• Sadness• Anxiety• Depression	<ul style="list-style-type: none">• Slow reaction times• Difficulty concentrating• Difficulty remembering• Confusion• Feeling in a fog• Feeling dazed	<ul style="list-style-type: none">• Drowsiness• Trouble falling asleep• Sleeping more than usual• Sleeping less than usual



Call 911 or go to the Emergency Department if any of these 'Red Flag' symptoms are present:

- **Loss of consciousness (do not move the person)**
- **Seizure or convulsions**
- **Uncontrollable vomiting**
- **Worsening mental status**
- **Neck pain**
- **Severe or increasing headache**
- **Trouble with vision**
- **Slurred speech**
- **Very tired or lethargic**
- **Weakness or tingling in arms or legs/unsteady/paralysis**

Even if a person is not showing symptoms above:

- Immediately remove the person from the activity
- Do not return to the activity for the rest of the day
- Monitor for signs and symptoms of a concussion
- Ensure they are assessed by a medical doctor or a nurse practitioner

What to do: Concussion management

A person with a concussion may not know if they are ready to return to activity. **For return to school/work and return to play/sport, remember:**

- 1 Move forward to the next stage only when symptom-free for 24 hours.
- 2 If symptoms reappear, go back to previous stages and only participate in activities that you can tolerate.
- 3 Contact your medical doctor if symptoms worsen.
- 4 Returning to learn and school must always happen **before** full return to sport.

Return to school/work				
	Stage	Aim	Activity	Goal of each step
At home	1	Cognitive and physical rest for first 24 to 48 hours	Typical activities at home that do not increase symptoms. No TV, computer, cellphone, reading or physical strain	Rest with gradual return to typical activities
	2	Light cognitive and physical activity	Gradually build up typical activities – easy reading, limited TV, peer contact, school-type work at home. Still no computer, school/work or physical strain	Tolerate up to one hour of cognitive activity in two to three chunks
At school/work	3	Part time school/work – light load	Gradual introduction of academic/work activities. Up to 120 minutes of cognitive activity, in intervals. Half days of school/work, one to two times/week	Add movement
	4	Part time school/work – moderate load	School/work in four to five hours/day, three to five days/week; homework up to 30 minutes/day. No gym, organized sports or exams	Increase academic/work activity
	5	Nearly normal workload	Nearly normal cognitive activities; routine academic/work as tolerated (homework up to 60 minutes/day, minimal learning accommodation). No gym, exams or organized sports	Increase academic/work activity
	6	Full time	Normal cognitive and school/work activities; full curriculum load with no learning accommodation. <i>No full participation in sports until medically cleared after return to play/sport protocol</i>	Return to full academic/work activities and catch up on missed work – <i>can begin to follow return to play/sport protocol</i>

Return to play/sport			
Stage	Aim	Activity	Goal of each step
1	Symptom-limited activity	Daily activities that do not provoke symptoms	Gradual reintroduction of work/school activities
2	Light aerobic exercise	Walking or stationary cycling at slow to medium pace - no resistance training	Increase heart rate
3	Sport-specific exercise	Running or skating drills - no head impact activities	Add movement
4	Non-contact training drills	Harder training drills (such as passing drills) - may start progressive resistance training	Exercise, coordination and increased thinking
5	Full contact practice	Following medical clearance, participate in normal training activities	Restore confidence and assess functional skills by coaching staff
6	Return to sport	Normal game play	

Recovering from a concussion

Physical and **mental** rest is important for the **first 24 to 48 hours** after a concussion. Mental rest means no driving, watching TV, playing video games, reading or working on a computer.

After 24 to 48 hours, you can *gradually* become more active. Returning to activities too quickly and too soon may cause symptoms to get worse or take longer to go away.

A person may need to stay home from school or work because regular activities could make their symptoms worse.



It may take longer to recover if a person has, or had in the past:

- Headaches (such as migraines)
- Learning disabilities
- Previous brain injury/concussion
- Mental illness
- Attention Deficit Hyperactivity Disorder



Talk to your medical doctor to decide:

- When you can drive a car or ride a bike. Your ability to react may be slower after a concussion
- When you can return to normal activities (work or school)



**Concussion symptoms
can last for 10 to 14 days
in adults and four weeks
in children and youth.
For some people,
they can last weeks
or even months.**

Concussion prevention

It is important to raise awareness of concussions — they can happen at home, school, work or play.

- Make your home safe by maintaining well-lit floors and stairs, free of anything that might cause a fall
- Create awareness and educate players on the effects of brain injury
- Ensure players use certified and proper fitting equipment for the game, position or activity
- Promote rules for safety and rules of sport
- Make sure activities are appropriate for the player's skill and comfort level
- Promote fair play and respect for all players
- Helmets and mouth guards are not designed to prevent concussion, but they can help prevent other serious injuries such as skull fractures and dental injuries

CONCUSSION: IT'S NOT JUST A **BUMP** TO THE HEAD

PUBLIC HEALTH

1-877-464-9675

TTY 1-866-512-6228

Learn more about concussions
by visiting york.ca/concussion

Not OK?!
DON'T PLAY ■