

Emergency Services

Concussion (Minor Head Injury) in Children

Your child has injured his or her head

Our medical team has not found any signs of a serious brain injury. A concussion is a type of brain injury that cannot be seen on regular X-rays or scans. It can affect the way a child thinks and remembers things, and it can cause a variety of symptoms.

It is safe for your child to go home in your care. It is important that you check your child carefully over the next 24 to 48 hours. As a parent, you are the best person to notice any unusual behaviour in your child.

How to check your child at home

Let your child sleep if he or she wants to. Sleep is good for your child but it is important to **check your child** over the next 24 to 48 hours.

Make sure your child:

- Knows his or her name
- Knows who you are
- Know where he or she is
- Wakes up as easily as he or she normally does
- Can hold your hand tight with both hands
- Has no blood or fluids in the ears or nose
- Is breathing easily
- Is not feeling a lot of pain

Trust your gut feeling about your child. Some signs of a brain injury are changes that only someone who knows the child well might notice.

Call 9-1-1 right away if your child:

- Loses balance when sitting or walking
- Falls or trips often
- Loses strength in an arm or leg
- Drops things
- Cannot see clearly (could complain of blurred vision or seeing double)
- Has any unusual movements or body jerks and twitches (seizures)

When to bring your child to Emergency

- You notice your child acting differently than his or her usual self.
- Your child has no energy or wish to do anything.
- Your child cannot do things he or she could do before the head injury.
- Your child is restless, irritable, or confused.
- You have trouble waking your child up.
- Your child has blood or yellow coloured fluid coming from the ears or nose
- Your child throws up (vomits) more than two times (once or twice is common and expected).
- Your child has a headache that gets worse or does not get better even with pain medicine.
- Your child is very young and:
 - Cannot be comforted or quieted
 - Will not breast feed or eat

Over the next 24 hours

- You can give plain acetaminophen or ibuprofen for headache. (Tylenol is one kind of acetaminophen.)
Do not give sedatives or stronger pain medicines. They can cover up some important signs of injury.
If simple pain medicines do not help, call your family doctor.
- Your child might feel sick to the stomach (nauseated) for a few days. Give small snacks and drinks rather than big meals.
- Keep your child where you can see him or her. Until your child is feeling well again, read or play quietly with your child. Do not allow rough play or games. Rest is important.

Tips for helping your child recover

- Make sure your child gets plenty of sleep at night and rest periods during the day.
- Make sure your child returns to normal activities gradually, not all at once.
- Limit noise and stimulation (such as TV, video games, iPads, computers and other electronics, loud music, etc.).
- Try to do one thing at a time with your child so your child does not get distracted.
- To help your child remember things, write notes and use a calendar.
- Talk about the injury with others who know your child (family members, friends, teachers, counsellors, babysitters, coaches, etc.). They need to understand what has happened so they can help.
- For school-aged children, follow the 'Return to School' then 'Return to Activity' tools attached.

To learn more, it's good to ask

- Your family doctor
- BC Centre for Ability 604-451-5511
(for ages 12 and under)
- Adolescent Complex Concussion Clinic 604-737-6291
(for ages 12 to 15)
- Fraser Health Concussion Services 604-514-7431
(for ages 16 to 18)
Online: fraserhealth.ca and search "concussion"
- Fraser Health Virtual Care 1-800-314-0999
Live chat online: fraserhealth.ca/virtualcare
10:00 a.m. to 10:00 p.m., daily
- HealthLinkBC 8-1-1 (7-1-1 TTY)
Online: HealthLinkBC.ca

HealthLinkBC is open 24 hours. Available in 130 languages. For an interpreter, say your language in English. Wait until an interpreter comes on the phone.

Originally adapted with permission from 'Head Injury', Emergency Department, BC Children's Hospital (October 2012)

Web Resources on Concussion

Concussion Awareness

Training Tool

cattonline.com

Select 'Parent or Caregiver', 'Athlete' or 'Coach'



Parachute Canada

parachutecanada.org

Select 'Injury Topics' then choose 'Concussion'



Return to Activity

This tool is a guideline for managing an individual's return to activity following a concussion and does not replace medical advice. Timelines and activities may vary by direction of a health care professional.

STAGE 1:	STAGE 2:	STAGE 3:	STAGE 4:	STAGE 5:
<p>Initial rest</p> <ul style="list-style-type: none"> Stay home in a quiet and calm environment. Limit your screen time (computer, television, and smartphone use). Keep any social visits brief. Sleep as much as your body needs while trying to maintain a regular night sleeping schedule. <p>Note: The goal for each stage is to find the 'sweet spot' between doing too much and too little.</p>	<p>Prepare to return to activity</p> <ul style="list-style-type: none"> Test your readiness by trying some simple, familiar tasks such as reading, using the computer, or shopping for groceries. Keep the time on each activity brief (e.g., less than 30 minutes) and take regular rest breaks. Go for walks or try other light physical activity (e.g., swimming, stationary bike), without becoming short of breath. Keep bed rest during the day to a minimum. It is unlikely to help your recovery. 	<p>Increase your activity</p> <ul style="list-style-type: none"> Gradually return to usual activities and decrease rest breaks. Start with less demanding activities before harder ones. Physical activity might include jogging, lifting light weights, or non-contact sport drills, gardening, dancing. <p>Note: You could start returning to school or work on a part-time basis (e.g., a few hours per day).</p>	<p>Gradually resume daily activities</p> <p>Resuming daily activities can be challenging because your energy and capacity for activities may be variable, but should improve day-to-day or week-to-week.</p> <p>Students and workers may require accommodations, such as reduced hours, reduced workload, extra time for assignments, or access to a quiet distraction-free work environment.</p>	<p>Full return to activity</p> <ul style="list-style-type: none"> Full class schedule, with no rest breaks or accommodations. Full work schedule with usual expectations for productivity Student athletes should not return to sport competition until they have fully returned to school. <p>Only return to contact sports or dangerous job duties (e.g., operating heavy equipment, working from heights) when cleared by your doctor.</p>
<p>Rest</p>	<p>Get ready to return</p>	<p>Start your return</p>	<p>Continue your return</p>	
<p>When symptoms start to improve OR after resting for 2 days max, BEGIN STAGE 2</p>	<p>Tolerates simple, familiar tasks, BEGIN STAGE 3</p>	<p>Tolerates further increase in level of activity, BEGIN STAGE 4</p>	<p>Tolerates partial return to usual activities, BEGIN STAGE 5</p>	

If new or worsening symptoms are experienced at any stage, go back to the previous stage for at least 24 hours. You may need to move back a stage more than once during the recovery process.

Each person will progress at his/her own pace. It is best not to "push" through symptoms. If you do too much, your symptoms may worsen. Decrease your activity level and your symptoms should settle. Then continue to gradually increase your activity in smaller increments.

Return to School

This tool is a guideline for managing a student's return to school following a concussion and does not replace medical advice. Timelines and activities may vary by direction of a health care professional.

AT HOME			AT SCHOOL			
STAGE 1:	STAGE 2:		STAGE 3:	STAGE 4:	STAGE 5:	STAGE 6:
<p>Physical & cognitive rest</p> <ul style="list-style-type: none"> Basic board games, crafts, talk on phone Activities that do not increase your heart rate or cause you to break a sweat <p>Limit/Avoid:</p> <ul style="list-style-type: none"> Computer, TV, texting, video games, reading <p>No:</p> <ul style="list-style-type: none"> School work Sports Work Driving until cleared by a health care professional 	<p>Start with light cognitive activity:</p> <p>Gradually increase cognitive activity up to 30 min. Take frequent breaks.</p> <p>Prior activities plus:</p> <ul style="list-style-type: none"> Reading, TV, drawing Limited peer contact and social networking <p>Contact school to create Return to School plan.</p>	<p>When light cognitive activity is tolerated:</p> <p>Introduce school work.</p> <p>Prior activities plus:</p> <ul style="list-style-type: none"> School work as per <i>Return to School</i> plan <p>Communicate with school on student's progression.</p>	<p>Back to school part-time</p> <p>Part-time school with maximum accommodations.</p> <p>Prior activities plus:</p> <ul style="list-style-type: none"> School work at school as per <i>Return to School</i> plan <p>No:</p> <ul style="list-style-type: none"> P.E., physical activity at lunch/recess, homework, testing, sports, assemblies, field trips <p>Communicate with school on student's progression.</p>	<p>Part-time school</p> <p>Increase school time with moderate accommodations.</p> <p>Prior activities plus:</p> <ul style="list-style-type: none"> Increase time at school Decrease accommodations Homework – up to 30 min./day Classroom testing with adaptations <p>No:</p> <ul style="list-style-type: none"> P.E., physical activity at lunch/recess, sports, standardized testing <p>Communicate with school on student's progression.</p>	<p>Full-time school</p> <p>Full days at school, minimal accommodations.</p> <p>Prior activities plus:</p> <ul style="list-style-type: none"> Start to eliminate accommodations Increase homework to 60 min./day Limit routine testing to one test per day with adaptations <p>No:</p> <ul style="list-style-type: none"> P.E., physical activity at lunch/recess, sports, standardized testing 	<p>Full-time school</p> <p>Full days at school, no learning accommodations.</p> <ul style="list-style-type: none"> Attend all classes All homework Full extracurricular involvement All testing <p>No:</p> <ul style="list-style-type: none"> full participation in P.E. or sports until <i>Return to Sport</i> protocol completed and written medical clearance provided
	<p>No:</p> <ul style="list-style-type: none"> School attendance Sports Work 					
	<p>Gradually add cognitive activity including school work at home</p>		<p>School work only at school</p>	<p>Increase school work, introduce homework, decrease learning accommodations</p>	<p>Work up to full days at school, minimal learning accommodations</p>	<p>Full academic load</p>
<p>Rest</p> <p>When symptoms start to improve OR after resting for 2 days max, BEGIN STAGE 2</p>	<p>Tolerates 30 min. of cognitive activity, introduce school work at home</p>	<p>Tolerates 60 min. of school work in two 30 min. intervals, BEGIN STAGE 3</p>	<p>Tolerates 120 min. of cognitive activity in 30-45 min. intervals, BEGIN STAGE 4</p>	<p>Tolerates 240 min. of cognitive activity in 45-60 min. intervals, BEGIN STAGE 5</p>	<p>Tolerates school full-time with no learning accommodations BEGIN STAGE 6</p>	<p><i>Return to School</i> protocol completed; focus on RETURN TO SPORT</p>

Note: A student is tolerating an activity if symptoms are not exacerbated.

Adapted from the Return to Learn protocol by G.F. Strong School Program (Vancouver School Board), Adolescent and Young Adult Program, G.F. Strong Rehabilitation Centre.