



# Concussion Resources for Parents & Caregivers



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The Concussion Awareness Training Tool (CATT) is a series of online educational modules and resources with the goal of standardizing concussion recognition, diagnosis, treatment, and management. Good concussion management may decrease the risk of brain damage and potentially reduce long-term health issues.

Developed by Dr. Shelina Babul, Associate Director/Sports Injury Specialist with the BC Injury Research and Prevention Unit, BC Children’s Hospital, and Clinical Associate Professor, Department of Pediatrics, University of British Columbia, CATT is based upon the established principles of the Consensus Statement on Concussion in Sport and other evidence-based resources. The 2017 Berlin Concussion in Sport Group Consensus Statement builds on the principles outlined in previous concussion statements and aims to develop better understanding of sport-related concussion.

Research and evidence on concussions is evolving and the knowledge base is continually changing. As a result, this website is updated on a regular basis to provide current information, tools, and resources to support concussion recognition, diagnosis, treatment, and management.

The information, including text and images of this package are intended for your information only, does not substitute professional medical advice, and is provided for educational purposes only. Always seek the advice of a physician or other qualified health care provider about any questions you may have regarding a medical condition.

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# 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](https://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.

RED FLAGS	
	Neck pain or tenderness
	Seizure, 'fits', or convulsion
	Loss of vision or double vision
	Loss of consciousness
	Increased confusion or deteriorating conscious state (becoming less responsive, drowsy)
	Weakness or numbness/tingling in more than one arm or leg
	Repeated vomiting
	Severe or increasing headache
	Increasingly restless, agitated, or combative

\*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.

## 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

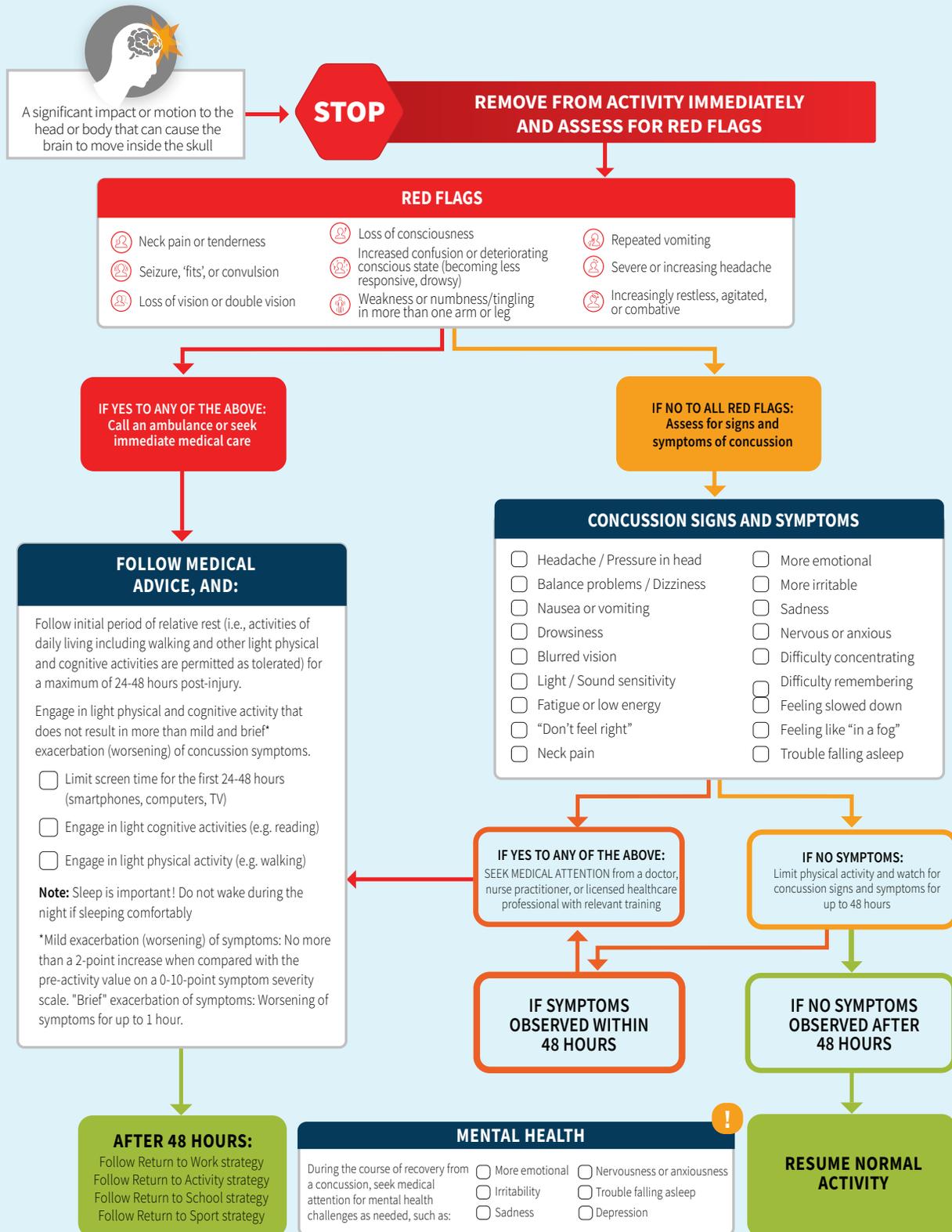
Proper management of a concussion can reduce the risk of complications. It is important that the individual has successfully returned to work or school before fully returning to sport and physical recreation activities. Returning to full activity too soon may result in more severe symptoms or long-term 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

# CATT Concussion Pathway



For more information on concussions, visit [cattonline.com](http://cattonline.com).

# QUESTIONS TO ASK YOUR DOCTOR

## (For Parents)



If you suspect that your child may have a concussion, you should see a doctor, nurse practitioner, or licensed healthcare professional with relevant training right away. This is a list of questions you can take with you.

### CARING FOR MY CHILD

Are you familiar with the latest guidelines on concussion management?

What kind of medication can I give my child?

Does someone need to be with my child at all times?

What vitamins/supplements can my child take?

### WHAT MY CHILD CAN DO

Can my child eat? Will they have an upset stomach?

What kind of activities can my child do at this stage of their recovery?

Can my child read/use the computer/play video games?

When can my child go back to school or work?

When can my child return to physical activity?

Can my child drive?

### SYMPTOMS

What symptoms should I be watching for?

How soon will symptoms begin to improve?

How long will these problems last?

How can my child cope with changes in their mental health or behaviour (e.g., feeling anxious, sad, irritable) as a result of their concussion?

### THE RISKS

What is the risk of a future concussion?

What is the risk of long-term complications?

## FOLLOW-UP WITH THE DOCTOR

When should we come back to see you?

Under what circumstances should I call you?

Should a specialist be consulted?

Are there any resources you recommend?

**ADDITIONAL QUESTIONS:**



## Medical Assessment Letter

<b>Medical Office, please complete:</b>	
Practitioner Name	
Role and License #	
Email / Contact #	
Date of event / injury	

To Whom It May Concern:

Any individual who sustains a blow or impact to the head, face, neck or body and demonstrates any visual signs of concussion or reports any of the symptoms of concussion is recommended to be assessed by a doctor, nurse practitioner, or licensed healthcare professional with relevant training. Accordingly, I have personally completed a medical assessment on this patient.

Name of Patient: \_\_\_\_\_

### Results of the Medical Assessment

This patient has not been diagnosed with a concussion or other injury and can return, with full participation to work, school, or physical activities without restriction.

This patient has not been diagnosed with a concussion but the assessment led to the following diagnosis and recommendations:

This patient HAS been diagnosed with a concussion. *See below for concussion management protocol.*

This patient has been instructed to avoid all activities that could potentially place them at risk of another concussion or head injury, or activities with implications for the safety of others (e.g., driving, dangerous job duties, and contact sports) until a medical or licensed healthcare professional with relevant training provides a Medical Clearance Letter.

Yours Sincerely,

Signature \_\_\_\_\_

Stamp

## Concussion Management

The goal of concussion management is to allow complete recovery through a safe and gradual return to work, school, and physical activities following a step-wise approach. *Note: a patient's progress through the return to activity steps is unique to the individual.* After Step 2, if more than mild and brief symptom exacerbation\* occurs, the patient may need to try the activity again the next day, and consider reassessment by their doctor, nurse practitioner, or licensed healthcare professional with relevant training if symptoms beyond mild and brief exacerbation persist. For more detailed guidance on step progression, please refer to the Concussion Awareness Training Tool (CATT) at [cattonline.com](http://cattonline.com).

### Step 1: Symptom-limited activity

In the first 24-48 hours the patient has been instructed to engage in relative physical and cognitive rest\*\* prior to initiating a return to work or activity.

Not yet completed  
 Completed on (dd/mm/yyyy) \_\_\_\_\_  
 Time period has passed

### Step 2: Prepare to return to activity

The patient can begin the return to activity process at home, by increasing familiar tasks that do not result in more than mild and brief symptom exacerbation, until no new or worsening concussion symptoms are experienced.

Not yet completed  
 Completed on (dd/mm/yyyy) \_\_\_\_\_  
 Time period has passed

### Step 3: Return to work, school, and physical activity and gradually resume daily activities

The patient can initiate a graduated return to work, school, and physical activities on a part-time basis, by increasing and gradually resuming usual activities (supported with accommodations, modifications, and restrictions as needed) as tolerated and only at a level that does not result in more than mild and brief symptom exacerbation.

Not yet completed  
 Completed on (dd/mm/yyyy) \_\_\_\_\_  
 Time period has passed

Restrictions/Accommodations	Details	Timeline

\*Mild and brief symptom exacerbation: an increase in current concussion symptoms of no more than 2 points on a 0-10 point scale for less than an hour compared to the resting value prior to the activity (i.e., physical or cognitive).

\*\*Relative rest: activities of daily living including walking and other symptom-limited physical and cognitive activities are permitted, as tolerated.

Step 4: Full return to work, school, and physical activities

The patient can return with full participation to work, school, and physical activities.

Not yet completed  
Completed on (dd/mm/yyyy) \_\_\_\_\_  
Time period has passed

Restrictions/Accommodations	Details	Timeline

Yours Sincerely,

Signature \_\_\_\_\_

Stamp 

It is recommended that this document be provided to the patient without charge.

# 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. Every concussion is unique, and recovery is very different for each individual. Not everyone will require a Return to School Strategy. Timelines and activities may vary based on direction from a doctor, nurse practitioner, or licensed healthcare professional with relevant training. Note: For information about returning to activities that pose risk of head contact, please refer to Return to School or Return to Activity.

STEP 1:	STEP 2:	STEP 3:	STEP 4:
<p><b>Activities of daily living and relative rest*</b></p> <ul style="list-style-type: none"> <li>• Maximum of 24-48 hours</li> <li>• 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.</li> </ul> <p><b>Examples:</b></p> <ul style="list-style-type: none"> <li>• Preparing meals</li> <li>• Housework</li> <li>• Light walking</li> </ul> <ul style="list-style-type: none"> <li>• Minimize screen time for the first 24-48 hours following concussion.</li> <li>• Avoid driving during the first 24-48 hours after a concussion.</li> </ul> <p>Contact school to create a Return to School plan.</p>	<p><b>School activities (as tolerated)</b></p> <ul style="list-style-type: none"> <li>• Returning to school as soon as possible (as tolerated) is encouraged.</li> <li>• Reading or other cognitive activities at school or at home. Goal: Increase tolerance to cognitive work, and connect socially with peers.</li> <li>• Take breaks and adapt activities if concussion symptom exacerbation (worsening) is more than mild and brief.**</li> <li>• Use of devices with screens may be gradually resumed, as tolerated.</li> <li>• Clearance from your doctor is not required to return to low-risk in-person or at-home school activities.</li> <li>• A complete absence from the school environment for more than one week is not generally recommended.</li> </ul> <p>Communicate with school on student's progression</p>	<p><b>Part-time or full-time days at school with accommodations (if needed)</b></p> <ul style="list-style-type: none"> <li>• Gradually reintroduce schoolwork.</li> <li>• May require accommodations, such as:               <ul style="list-style-type: none"> <li>• Partial school days with access to breaks throughout the day</li> <li>• Academic accommodations (extra time to complete work, reduced workload) to tolerate the classroom or school environment.</li> </ul> </li> </ul> <p>Communicate with school on student's progression.</p>	<p><b>Return to school full-time</b></p> <p>Return to full days at school and academic activities without requiring accommodations (related to the concussion).</p> <p><b>Note: Medical clearance is NOT required to return to school</b></p> <p>For returning to P.E. or sports, please refer to Return to Sport protocol.</p>
<p><b>Activities of daily living, as tolerated</b></p>	<p><b>Return to school as soon as possible, as tolerated</b></p>	<p><b>Gradually reduce accommodations and increase workload</b></p>	<p><b>Full academic load (no academic accommodations related to the concussion)</b></p>
<p>After a maximum of 24-48 hours after injury, <b>BEGIN STEP 2</b></p>	<p>If can tolerate school activities, <b>BEGIN STEP 3</b></p>	<p>If can tolerate full days without concussion-related accommodations, <b>BEGIN STEP 4</b></p>	<p>Return to School completed</p>

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. Driving should resume after consultation with a doctor, nurse practitioner, or healthcare professional.

\*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.

# STUDENT RETURN TO LEARN PLAN



## STUDENT INFORMATION

STUDENT NAME:	HOMEROOM TEACHER:	GRADE:	INJURY DATE:
PARENT/GUARDIAN:	PHONE:	EMAIL:	
SCHOOL CONTACT:	PHONE:	EMAIL:	

## STUDENT SUPPORT SYSTEM

NAME	ROLE	CONTACT INFORMATION (PHONE/EMAIL)

## MONITORING AND EVALUATION

<p><b>Preferred communication with parent/guardian</b></p> <p>In person                      Frequency:</p> <p>Student agenda</p> <p>Email                              Regular meetings:</p> <p>Phone</p>	<p><b>Communication between school contact and teachers</b></p> <p>In person                      Frequency:</p> <p>Email                              Regular meetings:</p>
<p><b>Symptom reporting</b></p> <p>Student self-report:                      Student monitored by:</p> <p>To school contact                      School contact</p> <p>To teacher                                  Teacher</p> <p>In person to                                  Other</p>	<p><b>Academic progress measured by</b></p> <p>Workload                      Length of time tolerated                      Number of courses</p> <p><b>Emotional progress</b></p> <p>Monitored by:</p> <p>In case of concerns:</p>
<p><b>Comments:</b></p>	

# RETURN TO LEARN PLANNING TOOL

The student's individual symptoms will guide the creation of this planning document. 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.

STUDENT:	SCHOOL CONTACT:	DATE:
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<b>Identify Student's Needs</b>	<b>Determine Learning Accommodations</b>	<b>Determine School Work</b>
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SYMPTOMS	STEP	LEARNING ACCOMMODATIONS		SCHOOL WORK
<b>Physical:</b>	<b>STEP 1</b> Activities of daily living and relative rest  <b>STEP 2</b> School activities (as tolerated)  <b>STEP 3</b> Part-time or full-time days at school with accommodations (if needed)  <b>STEP 4</b> Return to School full-time	<b>Rest Breaks:</b>	<b>Processing Speed:</b>	<b>Attendance:</b>
Headache		Frequency:	Extra time for tasks and tests	All school days
Fatigue		Duration:	Slow down verbal information	Limited days:
Sleep disturbance		Location:	Check comprehension vs. memorization	Adjusted school hours
Dizziness/lightheadedness		<b>Classroom Environment:</b>	Provide notes/notetaker	Start time:
Nausea/vomiting		Sit at front of class	<b>Mood:</b>	End time:
Light sensitivity		Sit away from bright sunlight	Facilitate access to school counsellor	<b>Course Expectations:</b>
Noise sensitivity		Limit classes with noise/safety issues	Reduce stressful situations	Limited courses:
Blurred vision		Band/choir	Provide supportive feedback/reassurance	
Double vision		Wood/metalwork	Can leave class when needed	
Balance problems		Other:	Facilitate avenues to express themselves	All courses
Neck pain		Quiet work/rest space	Allow time for socialization	
Other:		Library	Set appropriate goals with student	<b>Learning Support (see page 3 for details)</b>
<b>Cognitive:</b>		Learning Support	<b>Homework:</b>	
Poor attention/concentration		Counselling room	Limited to mins per day	<b>PHYSICAL ACTIVITY</b>
Forgetfulness/poor memory		Other:	<b>Assessment:</b>	<b>Physical Activity Permitted:</b> (provided by parent/guardian)
Slow response time		<b>General Classroom Learning:</b>	No testing	
<b>Emotional:</b>		Reduce course/workload	Limited testing (1 test per day)	
Irritability/easily angered		Prioritize essential work	Accommodations	<b>Physical Education (P.E.):</b>
Frustration/impatience		Provide extra support/learning assistance	Extra time	No P.E.
Restlessness	Provide written instruction	Separate setting	Adapted P.E. program as per health care professional	
Depression	Provide class notes	Breaks as required	Full P.E.	
Anxiety	Use agenda/online school software	Open book	Written medical clearance provided:	
<b>Pre-Existing Issues:</b>	Other:	Modified content		
Prior concussion	<b>Attention/Concentration:</b>	<b>Additional Considerations:</b>		
Dates:	Limit focus time to mins	Sunglasses/blue light-blocking glasses	<b>NEXT REVIEW DATE:</b>	
Learning disability	Shorter assignments	Hat		
ADD/ADHD	Chunk information into smaller pieces	Ear plugs/noise-reducing headphones		
Depression	Lighter workload	Water bottle		
Anxiety	Other:	Earbuds/headphones for music		
History of migraines	<b>Memory:</b>	Class transition before bell		
Other:	Use visual reminders and recognition cues	Restrict/limit noisy environments		
	Written instructions	Restricted recess/lunch activities		
	Use calculator	Alternative:		
	Shorter reading passages	Elevator pass		
	Chunk information into smaller pieces	Other:		
	Other:			

*\*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.*

## LEARNING SUPPORT DETAILS

## COMMENTS

# LEARNING ACCOMMODATIONS AND MODIFICATIONS FOR STUDENTS FOLLOWING A CONCUSSION

For more information about learning accommodations, see the Resources section of the Concussion Toolkit for School Professionals.



<b>PHYSICAL</b>	
<b>HEADACHES:</b>	<b>TIRES EASILY:</b>
<ul style="list-style-type: none"> <li>Provide opportunities to ensure student stays hydrated</li> <li>Allow frequent rest breaks with equipment as needed (ear/headphones, music, relaxation tapes, etc.)</li> <li>Limit or restrict noisy classes (music, woodworking, auto mechanics, foods/home economics, etc.)</li> <li>Limit or restrict noisy environments (assemblies, cafeteria, hallways, etc.)</li> <li>Allow the use of noise-cancelling ear plugs/headphones</li> <li>Allow sunglasses/hat in classroom</li> <li>Seat student away from window</li> <li>Dim light, pull shades</li> </ul>	<ul style="list-style-type: none"> <li>Limit time spent doing school work</li> <li>Allow frequent rest breaks with equipment as needed (ear/headphones, music, relaxation tapes, etc.)</li> <li>Allow student to leave class/school early</li> <li>Allow student to start school later in the day</li> <li>Modify the student's attendance requirements, classes, and/or timetable</li> <li>Reduce backpack weight</li> <li>Schedule activities/subjects during student's best time of day</li> </ul>
<b>SENSITIVE TO LIGHT:</b>	<b>SENSITIVE TO NOISE:</b>
<ul style="list-style-type: none"> <li>Allow sunglasses/hat or blue light-blocking glasses</li> <li>Seat student away from window</li> <li>Dim light, pull shades</li> <li>Reduce exposure to computers, smart boards, videos by offering pre-printed notes</li> <li>Reduce brightness on screens</li> </ul>	<ul style="list-style-type: none"> <li>Limit or restrict noisy classes (music, woodworking, auto mechanics, foods/home economics, etc.)</li> <li>Limit or restrict noisy environments (assemblies, cafeteria, hallways, etc.)</li> <li>Provide a quiet work space (library, learning support or counselling room, etc.)</li> <li>Provide a quiet place for lunch, recess</li> <li>Allow the use of noise-cancelling earplugs/headphones</li> <li>Allow student to leave class early to avoid noisy hallways</li> </ul>
<b>DIZZINESS/BALANCE PROBLEMS:</b>	
<ul style="list-style-type: none"> <li>Allow student to leave early to avoid crowded hallway</li> <li>Limit standing for long periods and allow student to sit or lie down as needed</li> </ul>	
<b>COGNITIVE</b>	
<b>COGNITIVE FATIGUE:</b>	
<ul style="list-style-type: none"> <li>Limit time focusing on schoolwork</li> <li>No new learning</li> <li>Allow frequent rest breaks</li> <li>Reduce workload</li> <li>Decrease academic expectations</li> <li>Prioritize essential schoolwork</li> <li>Reduce repetition of work</li> </ul>	<ul style="list-style-type: none"> <li>Allow for extra time to complete work, tests</li> <li>Provide shorter assignments, tests</li> <li>Allow alternative forms of testing (quiet space, oral, one-to-one, open-book, technology, etc.)</li> <li>Chunk information into smaller pieces</li> <li>Provide audio alternative for reading</li> <li>Schedule high cognitive demand tasks to be followed by less demanding work</li> <li>Allow alternative submission formats (e.g. electronic vs hard copy)</li> </ul>

## COGNITIVE

### DIFFICULTY CONCENTRATING:

- Provide a quiet place to work
- Limit time focusing on schoolwork
- Decrease distractions
- Work on one task at a time
- Chunk information into smaller pieces
- Allow for extra time to complete work
- Provide class notes
- Allow alternative forms of testing (quiet space, oral, one-to-one, open-book, technology, etc.)
- Provide shorter assignments, tests
- Provide or support use of assistive technology and software
- Provide extra support or learning assistance (TA, LA teacher, parent, peer, etc.)
- Allow preferential seating (front of class, away from windows, doors, other distractions, etc.)
- Limit or restrict noisy classes (music, woodworking, auto mechanics, foods/home economics, etc.)
- Limit or restrict noisy environments (assemblies, cafeteria, hallways, etc.)

### DIFFICULTY REMEMBERING:

- Provide written instructions for tasks, homework
- Use peer tutor or partner
- Check comprehension
- Provide class notes/allow class notes for testing
- Provide or support use of assistive technology and software
- Use student agenda, communication book
- Chunk information into smaller pieces
- Provide extra support or learning assistance (TA, LA teacher, parent, peer, etc.)
- Use recognition rather than recall for testing
- Use repetition
- Use visual reminders (schedules, checklists, calendars, sticky notes, etc.)
- Use visual cues (highlighting, underlining, pictures/diagrams, colour coding, etc.)
- Use memory strategies (categorizing, associations, chunking, rehearsal, mnemonics, visualization, etc.)

## EMOTIONAL

### SAD/DEPRESSED/FRUSTRATED:

- Allow time for socialization
- Listen to and validate student's concerns
- Provide reassurance
- Use proactive behaviour management to encourage healthy lifestyle
- Provide safe place for student when feeling overwhelmed
- Ensure student has ready access to support services (school counsellor, school psychologist, etc.)
- Provide extra support or learning assistance (TA, LA teacher, parent, peer, etc.)
- Provide student and parent/caregiver with mental health and substance use resources
- Schedule regular check-ins with student
- Schedule regular check-ins with parent/caregiver

### ANXIETY:

- Set appropriate goals with the student
- Allow student to leave class when needed
- Set a signal for the student when they need to leave the classroom
- Listen to and validate student's concerns
- Provide reassurance
- Provide safe space for student when feeling overwhelmed
- Ensure student has ready access to support services (school counsellor, school psychologist, etc.)
- Reduce workload
- Provide extra support or learning assistance (TA, LA teacher, parent, peer, etc.)
- Allow alternative forms of testing (quiet space, oral, one-to-one, open-book, technology, etc.)
- Decrease academic expectations
- Prioritize essential schoolwork
- Allow for extra time to complete work, tests
- Schedule regular check-ins with student
- Schedule regular check-ins with parent/caregiver

# Return to Sport

This tool is a guideline for managing an individual's return to sport following a concussion and does not replace medical advice. Timelines and activities may vary based on direction from a doctor, nurse practitioner, or licensed healthcare professional with relevant training. **Begin Step 1 within 24 hours of injury, with progression through each subsequent step taking a minimum of 24 hours.**

STEP 1:	STEP 2:		STEP 3:	STEP 4:	STEP 5:	STEP 6:
<p><b>Activities of daily living and relative rest*</b></p> <ul style="list-style-type: none"> <li>Maximum of 24-48 hours</li> <li>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.</li> </ul> <p><b>Examples:</b></p> <ul style="list-style-type: none"> <li>Preparing meals</li> <li>Housework</li> <li>Light walking</li> </ul> <ul style="list-style-type: none"> <li>Minimize screen time for first 24-48 hours following concussion.</li> </ul>	<p><b>2A: Light effort aerobic exercise</b></p> <ul style="list-style-type: none"> <li>Up to approximately 55% of maximum heart rate (predicted according to age - i.e. 220-age).</li> <li>In a safe and controlled environment, engage in light aerobic exercise.</li> </ul> <p><b>Examples:</b></p> <ul style="list-style-type: none"> <li>Stationary cycling</li> <li>Walking at slow to medium pace</li> <li>Light resistance training that does not result in more than mild and brief** exacerbation (worsening) of concussion symptoms.</li> </ul>	<p><b>2B: Moderate effort aerobic exercise</b></p> <ul style="list-style-type: none"> <li>Up to approximately 70% of maximum heart rate (predicted according to age - i.e. 220-age).</li> <li>Take a break and modify activities as needed with the aim of gradually increasing tolerance and the intensity of aerobic activities.</li> </ul>	<p><b>Individual sport-specific activities (that do not have a risk of inadvertent head impact)</b></p> <ul style="list-style-type: none"> <li>Addition of individual sport-specific activities that are supervised by a teacher/coach/parent.</li> </ul> <p><b>Examples:</b></p> <ul style="list-style-type: none"> <li>Skating drills (hockey)</li> <li>Running drills (soccer)</li> <li>Change of direction drills</li> <li>Individual gym class activities</li> </ul> <p><b>It is important to get medical clearance before returning to training that involves any risk of inadvertent head impact.</b></p>	<p><b>Non-contact training drills and activities</b></p> <ul style="list-style-type: none"> <li>Progress to exercises at high intensity, including more challenging drills and activities.</li> </ul> <p><b>Examples:</b></p> <ul style="list-style-type: none"> <li>Passing drills</li> <li>Multi-player training</li> <li>Supervised non-contact gym class activities</li> <li>Practices without body contact</li> </ul>	<p><b>Return to all non-competitive activities</b></p> <ul style="list-style-type: none"> <li>Return to all non-competitive activities, all gym class activities, and full-contact practices</li> <li>Participate in higher-risk activities including normal training activities, all school gym-class activities, and full-contact sports practices and scrimmages. Avoid competitive gameplay.</li> </ul>	<p><b>Return to sport</b></p> <p>Back to normal, unrestricted competitive game play, school gym class, and physical activities.</p>
	<p><b>Increase heart rate</b></p>		<p><b>Increase intensity of aerobic activities and introduce low-risk sport-specific movements and changing of directions</b></p>	<p><b>Resume usual intensity of exercise, coordination, and activity-related cognitive skills</b></p>	<p><b>Return to activities that have a risk of falling or body contact, restore game-play confidence, and have coaches assess functional skills.</b></p>	<p><b>Note: Returning to full contact, competitive play or high-risk activities before you have recovered increases the risk of delayed recovery and for sustaining another more severe concussion or serious injury.</b></p>
<p><b>Activities of daily living, as tolerated</b></p>						
<p>After a maximum of 24-48 hours after injury, <b>BEGIN STEP 2</b></p>	<p>If can tolerate moderate aerobic exercise, <b>BEGIN STEP 3</b></p>		<p>If medically cleared and have fully returned to school, <b>BEGIN STEP 4</b></p>	<p>If can tolerate usual intensity of activities, <b>BEGIN STEP 5</b></p>	<p>If can tolerate non-competitive, high-risk activities, <b>BEGIN STEP 6</b></p>	

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. Individuals experiencing concussion 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.

\*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.

**Medical determination of readiness to return to at-risk activities should occur prior to returning to any activities that pose risk of contact, collision, or fall.**

[www.cattonline.com](http://www.cattonline.com)

Adapted from: Zemek, R., Reed, N., Dawson, J., et al. "Living Guideline for Pediatric Concussion Care." [www.pedsconcussion.com](http://www.pedsconcussion.com) (the PedsConcussion protocol was modified with permission from the [Amsterdam International Consensus Statement on Concussion in Sport](#))  
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CONCUSSION AWARENESS TRAINING TOOL

**BC INJURY** research and prevention unit

[www.injuryresearch.bc.ca](http://www.injuryresearch.bc.ca)

## ACTIVITY SUGGESTIONS FOR RECOVERY STAGES AFTER CONCUSSION

TODDLER (0-4)	CHILD (5-10)	
<p><b>Stage 1 – Short Phase of Physical and Cognitive Rest with Symptom Guided Activity 24-48 hours</b></p> <ul style="list-style-type: none"> <li>• Crafts: colouring, drawing</li> <li>• Nap in favourite spot</li> <li>• Parents can read stories</li> <li>• Watch fish in an aquarium</li> </ul>	<p><b>Stage 1 – Short Phase of Physical and Cognitive Rest with Symptom Guided Activity 24-48 hours</b></p> <ul style="list-style-type: none"> <li>• Basic board games (i.e. not monopoly)</li> <li>• Crafts: making bracelets, necklaces</li> <li>• Light gardening</li> <li>• Singing</li> <li>• Static stretching</li> <li>• Talking on phone</li> <li>• Talking to friends/family</li> </ul>	<p><b>Stage 3 – Individual Sport-Specific Activity (No Contact)</b></p> <ul style="list-style-type: none"> <li>• Air hockey or foosball</li> <li>• Biking</li> <li>• Dribbling and stickhandling</li> <li>• Golf</li> <li>• iPad applications (no gaming)</li> <li>• Light badminton</li> <li>• Sit ups and push-ups few repetitions</li> <li>• Ping pong</li> <li>• Skating</li> <li>• Sprinklers and splash pads</li> <li>• Tag</li> <li>• Tai chi/karate (non-contact)</li> <li>• Wii or Xbox Kinect games</li> <li>• Word searches</li> </ul>
<p><b>Stage 2 - Light Exercise (No Contact)</b></p> <ul style="list-style-type: none"> <li>• Bird watching</li> <li>• Crafts: painting</li> <li>• Exersaucer</li> <li>• Play in the Sand</li> <li>• Play blocks, Lego, dolls, cars or small toys</li> <li>• Puzzles/matching games</li> <li>• Sensory/water play</li> <li>• Supervised walking or crawling</li> </ul>	<p><b>Stage 2- Light Exercise (No Contact)</b></p> <ul style="list-style-type: none"> <li>• Balance exercises</li> <li>• Challenging board games</li> <li>• Fishing</li> <li>• Flying kites</li> <li>• Freestyle swimming</li> <li>• Helping cook and bake</li> <li>• Light jogging</li> <li>• Listening to quiet music (no headphones)</li> <li>• Magazines</li> <li>• Playing catch</li> <li>• Puzzles</li> <li>• Walking</li> </ul>	<p><b>Stage 4 – Sport-Specific Practice with Team (No Contact)</b></p> <ul style="list-style-type: none"> <li>• Baseball/cricket</li> <li>• Basketball</li> <li>• Dance</li> <li>• Field hockey</li> <li>• Figure skating (no jumps)</li> <li>• Hockey drills</li> <li>• Soccer without heading</li> <li>• Slide and swing at playground</li> <li>• Squash</li> <li>• Tennis, Badminton</li> <li>• Volleyball (no diving)</li> </ul>
<p><b>Stage 3 – Individual Sport-Specific Activity (No Contact)</b></p> <ul style="list-style-type: none"> <li>• Archery game</li> <li>• Ball throwing (ex basketball)</li> <li>• Bowling (at home)</li> <li>• Crawling</li> <li>• Dramatic play/role-playing</li> <li>• Walking</li> </ul>		
<p><b>Stage 4- Sport-Specific Practice with Team (No Contact)</b></p> <ul style="list-style-type: none"> <li>• Dance lessons</li> <li>• Kicking/passing a soccer ball</li> <li>• Mini sticks</li> <li>• Splash pad</li> <li>• Swim lessons</li> </ul>		

**WARNING: Perform activities ONLY if symptom free. If any symptoms appear during activity, STOP immediately.**

Use suggestions in conjunction with CanChild concussion protocols available at:  
<https://canchild.ca/en/diagnoses/brain-injury-concussion/brain-injury-resources>

## ACTIVITY SUGGESTIONS FOR RECOVERY STAGES AFTER CONCUSSION

### TEENAGER (11+)

#### Stage 1 – Short Phase of Physical and Cognitive Rest with Symptom Guided Activity 24-48 hours

- Cellphone (no texting only calling)
- Crafts: molding clay
- Friends visit (one at a time)
- Knitting and quilting
- Listen to Audiobooks
- Meditation/nap
- Photography/scrapbooking
- Static stretching

#### Stage 2 – Light Exercise (No Contact)

- Archery
- Camping
- Cooking and baking
- Fishing
- Freestyle swimming
- Going to the beach
- Light jogging
- Listening to quiet music (no headphones)
- Magazines
- Playing catch
- Puzzles
- Re-read familiar books
- Stationary cycling
- Walking
- Yoga (no hot yoga)

#### Stage 3 – Individual Sport-Specific Activity (No Activity)

- Air hockey or foosball
- Basketball (passing, shooting)
- Air hockey or foosball
- Basketball (passing, shooting)
- Biking
- Crosswords/sudoku
- Curling
- Dance/Gymnastics/Cheer (no stunts)

- Figure skating (stroking, footwork)
- Football (dynamic throwing and catching, one on one plays)
- Golf
- Hiking/orienteering
- Hockey (passing, shooting, skating drills)
- Light badminton, Ping Pong
- Sit ups and push-ups few repetitions
- Running
- Rugby (passing and catching drills)
- Shopping at mall
- Soccer (dribbling, passing, shooting)
- Snorkeling
- Tai chi/Karate
- Volleyball (keep ups)
- Wii or Xbox Kinect games

#### Stage 4- Sport-Specific Practice with Team (No Contact)

- Aerobics and plyometrics
- Baseball/Cricket
- Basketball
- Canoeing/kayaking
- Dance/Gymnastics/Cheer (beginner stunts, maximum two rotations)
- Figure Skating (beginner jumps, run through no music)
- Football (offensive/defensive plays)
- Hockey (breakout, defense drills, 3 on 2)
- Light Weight Training
- Mountain/rock climbing
- Rugby (team drills, lineouts no contact)
- Shadow boxing
- Soccer (offensive/defensive plays)
- Squash or tennis
- Track and field
- Volleyball (no diving)

**WARNING: Perform activities ONLY if symptom free. If any symptoms appear during activity, STOP immediately.**

Use suggestions in conjunction with CanChild concussion protocols available at:  
<https://canchild.ca/en/diagnoses/brain-injury-concussion/brain-injury-resources>



## Medical Clearance Letter

<b>Medical Office, please complete:</b>	
Practitioner Name	
Role and License #	
Email / Contact #	
Date of Clearance Letter	
<b>Practitioner / Patient please complete:</b>	
Date of Concussion	
Date of Concussion Diagnosis	
Organization/Individual Requesting Medical Clearance	

To Whom It May Concern:

Patients with a concussion should be assessed and managed by a doctor, nurse practitioner, or licensed healthcare professional with relevant training. The goal of concussion management is to support the patient’s complete recovery from concussion by promoting a safe and gradual return to activity following a step-wise approach. For more detailed information and resources, please refer to the Concussion Awareness Training Tool (CATT) at [cattonline.com](http://cattonline.com).

As part of the strategy, this patient had previously been instructed to avoid all activities that could potentially place them at risk of another concussion or head injury until a medical clearance letter is provided (due to organizational requirements, dangerous job duties, contact sports, etc.). This patient has explained the organizational requirements and the duties/activities they participate in, and I have personally completed a medical clearance on this patient.

Name of Patient: \_\_\_\_\_

Note that the patient’s recovery is individual. After Step 2, if more than mild and brief symptom exacerbation\* occurs, the patient may need to try the activity again the next day, and consider reassessment by their medical or licensed healthcare professional if symptoms beyond mild and brief exacerbation persist.

This patient can return with full participation to work, school, or physical activities **without restriction**.

This patient can return to work, school, or physical activities **with the following restriction(s)**:

Restriction(s) Physical & Cognitive	Details	Timeline

\*Mild and brief symptom exacerbation: an increase of no more than 2 points on a 0-10 point scale for less than an hour when compared with the baseline value reported prior to the activity (i.e., physical or cognitive).

This patient can return with full participation to work, school, or physical activities **without accommodation**.

This patient can return to work, school, or physical activities **with the following accommodation(s)**:

Accommodation(s) Physical & Cognitive	Details	Timeline

Your understanding and support are critical components in this patient's continuing recovery.

Yours Sincerely,

Signature \_\_\_\_\_

Stamp 

It is recommended that this document be provided to the patient without charge.

# Additional Resources

Active & Safe Central (2018)

<https://activesafe.ca/>

Canadian Concussion Collaborative – 4 Characteristics of a Good Concussion Clinic (2017)

<https://casem-acmse.org/wp-content/uploads/2018/06/CCES-PUB-CCC-4Qs-E-FINAL.pdf>

CATT – Concussion Incident Report (2023)

<https://cattonline.com/wp-content/uploads/2023/10/CATT-Concussion-Incident-Report.pdf>

CATT – Learning Accommodations and Modifications for Students Following a Concussion (2019)

<https://www.cattonline.com/wp-content/uploads/2023/09/CATT-Learning-Accommodations-Following-Concussion.pdf>

CATT – Return to Activity (2023)

<https://cattonline.com/wp-content/uploads/2023/09/CATT-Return-to-Activity.pdf>

CATT – Return to Work (2023)

<https://cattonline.com/wp-content/uploads/2023/10/CATT-Return-to-Work.pdf>

Parachute – Statement on Concussion Baseline Testing in Canada (2017)

<https://parachute.ca/wp-content/uploads/2019/06/Concussion-Baseline-Testing.pdf>

University of Georgia – Driving After Concussion: Is it safe to get behind the wheel?

<https://cattonline.com/wp-content/uploads/2020/07/Driving-After-Concussion-Is-It-Safe-to-Get-Behind-The-Wheel-2020.pdf>

For more information and resources on concussion, please visit [cattonline.com](https://cattonline.com).

The Concussion Legacy Foundation Canada HelpLine supports patients and families struggling with the outcomes of brain injury. If you or a loved one are seeking guidance on how to choose the right doctor, struggling with lingering concussion symptoms, or have any other specific questions, submit a HelpLine request and a dedicated member of the Concussion Legacy Foundation Canada team will assist you:

<https://www.concussionfoundation.ca/helpline>

