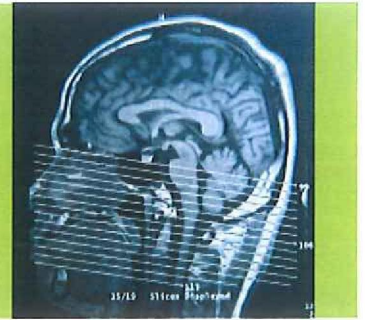


PARENTS & CAREGIVERS



WHAT IS A CONCUSSION?

A concussion is a brain injury that cannot be seen on routine x-rays, CT scans, or MRIs. It affects the way a child may think and remember things, and can cause a variety of symptoms.

WHAT ARE THE SYMPTOMS AND SIGNS OF CONCUSSION?

A CHILD DOES NOT NEED TO BE KNOCKED OUT (LOSE CONSCIOUSNESS) TO HAVE HAD A CONCUSSION.

THINKING PROBLEMS	CHILD'S COMPLAINTS	OTHER PROBLEMS
<ul style="list-style-type: none">• Does not know time, date, place, period of game, opposing team, score of game• General confusion• Cannot remember things that happened before and after the injury• Knocked out	<ul style="list-style-type: none">• Headache• Dizziness• Feels dazed• Feels "dinged" or stunned; "having my bell rung"• Sees stars, flashing lights• Ringing in the ears• Sleepiness• Loss of vision• Sees double or blurry• Stomachache, stomach pain, nausea	<ul style="list-style-type: none">• Poor coordination or balance• Blank stare/glassy eyed• Vomiting• Slurred speech• Slow to answer questions or follow directions• Easily distracted• Poor concentration• Strange or inappropriate emotions (ie. laughing, crying, getting mad easily)• Not playing as well

WHAT CAUSES A CONCUSSION?

Any blow to the head, face or neck, or a blow to the body which causes a sudden jarring of the head may cause a concussion (ie. a ball to the head, being checked into the boards in hockey).

WHAT SHOULD YOU DO IF YOUR CHILD GETS A CONCUSSION?

Your child should stop playing the sport right away.

They should not be left alone and should be seen by a doctor as soon as possible that day. If your child is knocked out, call an ambulance to take him/her to the hospital immediately. Do not move your child or remove any equipment such as helmet, in case of a cervical spine injury.

Wait for paramedics to arrive.

WHAT TO DO IF YOU SUSPECT YOUR CHILD HAS A CONCUSSION ?

In all suspected cases of concussion, the child should STOP the activity immediately and be removed from the activity.

The [sport concussion recognition tool 5 \(CRT5\)](#), can be used by anyone to help identify suspected concussion in children, youth, and adults. It is helpful in identifying how to recognize symptoms related to concussion.

HOW LONG WILL IT TAKE FOR MY CHILD TO GET BETTER?

The signs and symptoms of a concussion often last for 10-14 days but may last much longer. In some cases, children may take many weeks or months to heal. If symptoms are persistent (e.g, more than 1 month in children), the child should be referred to a healthcare professional who is an expert in the management of concussion. Having had previous concussions may increase the chance that a person may take longer to heal.

HOW IS A CONCUSSION TREATED?

After an initial short period of rest of 24-48 hours, light cognitive and physical activity can be initiated as long as they don't worsen symptoms. A physician, preferably one with experience managing concussions, should be consulted before beginning a step-wise [return to learn](#) and sport strategy.

The child should not exercise, go to school or do any activities that may make them worse, like riding a bike, play wrestling, reading, working on the computer or playing video games. If your child goes back to activities before they are completely better, they are more likely to get worse, and to have symptoms longer.

Beyond the initial period of 24-48 hours of rest, they can start a step-wise increase in activities. It is important that your child is seen by a doctor before he/she begins the steps needed to return to activity, to make sure he/she is completely better. If possible, your child should be seen by a doctor with experience in treating concussions.

WHEN CAN MY CHILD RETURN TO SCHOOL?

Sometimes children who have a concussion may find it hard to concentrate in school and may get a worse headache or feel sick to their stomach if they are in school. Children should stay home from school if their symptoms get worse while they are in class. Once they feel better, they can try going back to school part time to start (eg. for half days initially) and if they are okay with that, then they can go back full time.

Parachute's [Return to Learn protocol](#) provides easy and useful information on the different stages of returning to learn. A Return to Learn strategy must occur before returning to sport.

Parachute's Protocol for RETURN TO LEARN After a Concussion

1. Move forward to the next stage only when Symptom-free for 24 hours
2. If symptoms re-appear, regress to previous stages and only participate in activities that you can tolerate
3. Contact your physician or seek medical help immediately if symptoms worsen

AT HOME

Stage 1

Cognitive & physical rest for first 24-48 hours



- OK if tolerated**
- ✓ Short board games
 - ✓ Short phone conversations
 - ✓ Photography
 - ✓ Crafts

- Not OK**
- ✗ No TV
 - ✗ No computer/cellphone use
 - ✗ No reading
 - ✗ No school
 - ✗ No physical exertion/stair climbing
 - ✗ No organized sports

Symptom-free at least 24 hrs. between each stage

READY FOR NEXT STAGE?

Stage 2a

Light cognitive activity



- OK if tolerated**
- ✓ Easy reading
 - ✓ Limited TV
 - ✓ Drawing/LEGO/board games
 - ✓ Some peer contact

- Not OK**
- ✗ Avoid computer use
 - ✗ No school attendance
 - ✗ No physical exertion/sports
 - ✗ No work
 - ✗ No stair climbing

Tolerate 30 min cognitive/school type activity at home

READY FOR NEXT STAGE?

Stage 2b

Light physical activity



- OK if tolerated**
- ✓ School-type work in 30 minute increments
 - ✓ Light physical activity
 - ✓ Some peer contact

- Not OK**
- ✗ No school attendance
 - ✗ No physical exertion/sports
 - ✗ No work
 - ✗ No stair climbing

Tolerate up to 1 hour of cognitive activity in 2-3 chunks

READY FOR NEXT STAGE?

AT SCHOOL

Stage 3

Part time school
Light load



- OK if tolerated**
- ✓ Up to 120 mins of cognitive activity in intervals
 - ✓ 0.5 days of school/1-2 times a week
 - ✓ Some light physical activity

- Not OK**
- ✗ Avoid music/gym class
 - ✗ No tests/exams
 - ✗ No homework
 - ✗ No heavy physical loads (e.g., backpack)

Tolerate school work up to 1-3 hours a day for 0.5-1 day/week

READY FOR NEXT STAGE?

Stage 4

Part time school
Moderate load



- OK if tolerated**
- ✓ Limited testing
 - ✓ School work in 4-5 hours/day chunks
 - ✓ Homework - up to 30 minutes/day
 - ✓ 3-5 days of school/week
 - ✓ Decrease learning accommodation

- Not OK**
- ✗ No gym/physical exertion
 - ✗ No standardized tests/exams
 - ✗ No organized sports

Tolerate 4-5 hours/day in chunks for 2-4 days/week

READY FOR NEXT STAGE?

Stage 5

Nearly normal workload



- OK if tolerated**
- ✓ Nearly normal cognitive activities
 - ✓ Routine school work as tolerated
 - ✓ Homework - up to 60 minutes/day
 - ✓ Minimal learning accommodation

- Not OK**
- ✗ No gym/physical exertion
 - ✗ No standardized tests/exams
 - ✗ No organized sports

Tolerate full-time academic load without worsening symptoms

READY FOR NEXT STAGE?

Stage 6

Full time



- OK if tolerated**
- ✓ Normal cognitive activities
 - ✓ Routine school work
 - ✓ Full curriculum load
 - ✓ No learning accommodation
 - ✓ Begin Return to Play protocol

- Not OK**
- ✗ No full participation in sports until medically cleared after Return to Play protocol

Follow Return to Sport protocol

READY FOR NEXT STAGE?

WHEN CAN MY CHILD RETURN TO SPORT?

It is very important that your child not go back to sports if he/she has any concussion symptoms or signs. Return to sport and activity must follow a step-wise approach:

STEP 1) After an initial short period of rest of 24-48 hours, light cognitive and physical activity can be initiated as long as they don't worsen symptoms. A physician, preferably one with experience managing concussions, should be consulted before beginning a step-wise [return to learn](#) and sport strategy.

STEP 2) Light exercise such as walking or stationary cycling, for 10-15 minutes. As long as these activities don't make symptoms worse, move on to step 3.

STEP 3) Individual sport-specific exercise with NO CONTACT (i.e., skating in hockey, running in soccer), for 20-30 minutes. When your child has no more symptoms and is back to full-time school activities, move on to step 4.

STEP 4) "On field" practice with NO CONTACT (i.e., ball drills, shooting drills. No checking, no heading the ball, etc.).

STEP 5) "On field" practice with body contact, once cleared by a doctor.

STEP 6) Normal game play.

Note: There should be at least 24 hours (or longer) for each step of the progression. If any symptoms worsen during exercise, STOP activity and go back to the previous step. Resistance training should be added only in the later stages (Step 4 or 5 at the earliest). If symptoms are persistent (e.g, more than 10–14 days in adults or more than 1 month in children), the athlete should be referred to a healthcare professional who is an expert in the management of concussion.

WHEN SHOULD I TAKE MY CHILD TO THE DOCTOR?

Every child who gets a head injury should be seen by a doctor as soon as possible. Your child should go back to the doctor IMMEDIATELY if, after being told he/she has a concussion, he/she has worsening of symptoms such as:

1. being more confused
2. headache that is getting worse
3. vomiting more than twice
4. strange behaviour
5. not waking up
6. having any trouble walking
7. having a seizure

Problems caused by a head injury can get worse later that day or night. The child should not be left alone and should be checked throughout the night. If you have any concerns about the child's breathing or how they are sleeping, wake them up. Otherwise, let them sleep. If they seem to be getting worse, you should see your doctor immediately. **NO CHILD SHOULD GO BACK TO SPORT UNTIL THEY HAVE BEEN CLEARED TO DO SO BY A DOCTOR.**

** If your child is having persistent symptoms four weeks after initial injury, you should return to your family doctor and request a referral to the multidisciplinary Concussion Assessment Team at the Janeway Children's Health and Rehabilitation Centre. The fax number is (709) 777-4499.

RESOURCES

Return to Learn Protocol

<http://horizon.parachutecanada.org/en/article/parachutes-return-to-learn-protocol/>