

POLICY

THE BOARD OF TRUSTEES OF HORIZON SCHOOL DIVISION. RECOGNIZES THE IMPORTANT OF THE HEALTH, SAFETY, AND OVERALL WELL-BEING OF ITS STUDENTS AND THAT THE SAFETY OF STUDENTS ARE ESSENTIAL PRECONDITIONS FOR EFFECTIVE LEARNING AND AS SUCH IS COMMITTED TO TAKING STEPS TO MINIMIZE THE RISK OF CONCUSSION.

DEFINITIONS

Concussion is the term for a clinical diagnosis that is made by a medical doctor or a nurse practitioner.

A concussion:

- is a traumatic brain injury that causes changes in how the brain functions, leading to signs and symptoms that can emerge immediately or in the hours or days after the injury. It is possible for symptoms to take up to 7 days to appear.
- signs and symptoms can be physical (e.g., headache, dizziness), cognitive (e.g., difficulty concentrating or remembering), emotional/behavioural (e.g., depression, irritability) and/or related to sleep (e.g., drowsiness, difficulty falling asleep);
- may be caused by a jarring impact to the head, face, neck or body, with an impulsive force transmitted to the head, that causes the brain to move rapidly within the skull (for a visual description of how a concussion occurs, see <https://cdn.hockeycanada.ca/hockey-canada/Hockey-Programs/Safety/Concussion/Infographic/english.html>);
- can occur even if there has been no loss of consciousness (in fact, most concussions occur without a loss of consciousness);
- cannot normally be seen on X-rays, standard CT scans or MRIs; and
- is typically expected to result in symptoms lasting 1-4 weeks in children and youth (under 18 years), but in some cases symptoms may be prolonged.

GUIDELINES

1. It is very important to students' long-term health and academic success that individuals in schools have information on appropriate strategies to minimize risk of concussion, steps to follow if they suspect that a student may have a concussion and effective management procedures to guide students' return to learning and physical activity after a diagnosed concussion.
2. The following regulations are intended for use by all individuals who interact with students inside and outside the school as it relates to school based activities, including students, parents/guardians, teachers, administrators, coaches, officials, and trainers.

Policy IHCD – Concussion – Cont'd

REGULATIONS

1. Concussion Awareness Education

- 1.1. All Horizon staff, and students engaged in sport activities and their parents/guardians are encouraged to review the Concussion Recognition Tool and Concussion Guides (Appendix A) prior to the first day of school.
- 1.2. All stakeholders should have a clear understanding of Horizon's Concussion Protocol.
- 1.3. Coaches and Physical Education teachers are required to have taken the concussion training course via <https://cattonline.com/school-professional/>

2. Head Injury Recognition

- 2.1. Although the formal diagnosis of concussion should be made following a medical assessment, all school and sport stakeholders including students, parents/guardians, teachers, administrators, coaches, officials, trainers, and licensed healthcare professionals are responsible for the recognition and reporting of students who may demonstrate visual signs of a head injury or who report concussion related symptoms.
- 2.2. A concussion should be suspected:
 - 2.2.1. in any student who sustains a significant impact to the head, face, neck, or body and demonstrates ANY of the visual signs of a suspected concussion or reports ANY symptoms of a suspected concussion as detailed in the Concussion Recognition Tool 5 (Appendix A).
 - 2.2.2. if any student reports ANY concussion symptoms to one of their peers parents/guardians, teachers, or coaches or if anyone witnesses a student exhibiting any of the visual signs of concussion.
- 2.3. In some cases, a student may demonstrate signs or symptoms of a more severe head or spine injury including convulsions, worsening headaches, vomiting or neck pain. If a student demonstrates any of the 'Red Flags' indicated by the Concussion Recognition Tool 5 (Appendix A), a more severe head or spine injury should be suspected.

3. Initial Response

- 3.1. Emergency Response (Red Flag Procedure as per Concussion Recognition Tool 5, see Appendix A)
 - 3.1.1. If a student is suspected of sustaining a more severe head or spine injury during a game, practice, or other school activity, an ambulance should be called immediately. Coaches, teachers, administrators, parents/guardians, officials, and trainers should not make any effort to remove equipment or move the student until an ambulance has arrived. The student's parents/guardians (or emergency contact) should be contacted immediately to inform them of the student's injury and that emergency medical services have been contacted.

Policy IHCD – Concussion – Cont'd

3.2. If No Red Flags (as per Concussion Recognition Tool 5, see Appendix A) are Present

- 3.2.1. If a student is suspected of sustaining a concussion and there is no concern for a more serious head or spine injury, the student should be immediately removed from the field of play or setting in which the injury occurred.
- 3.2.2. Any student who is suspected of having sustained a concussion must not return to the activity (game, practice, physical education class, etc.) and must be referred to a medical doctor or nurse practitioner for medical assessment. The student must not be left alone until a parent/guardian arrives.
- 3.2.3. If a student is removed from an activity following a significant impact but there are NO visual signs of a concussion and the student reports NO concussion symptoms, the student can remain at school but should not participate in physical activity and should be monitored for delayed symptoms. The student's parents/guardians should be informed of the incident and that the student should be monitored for emerging symptoms.

3.3. Refer to Policy IHCD: Student Illness/Injury

4. Medical Assessment

- 4.1. The medical assessment is responsible for determining whether the student has been diagnosed with a concussion or not. Students assessed for a concussion should request a Medical Assessment Letter indicating whether or not a concussion has been diagnosed to aid the school with determining whether the student can return to school and sports activities without restriction.
- 4.2. Because the Medical Assessment Letter contains personal health information, it is the responsibility of the student or their parent/guardian to provide this documentation to the school.

5. Concussion Management

- 5.1. When a student is diagnosed with a concussion, the student and their parents/guardians should be provided with Concussion Recognition Tool, Concussion Guide for Athletes and Concussion Guide for Parents (Appendix A).
- 5.2. Students diagnosed with a concussion are to be managed according to their Return-to-School and Return-to-Sport Strategy under the supervision of a medical doctor or nurse practitioner (see sample Strategy for return to school after a concussion, and After a concussion: Return to sport strategy (Appendix B)
 - 5.2.1. The sample strategy should be provided to the student and their parents/guardians following a concussion diagnosis.

6. Medical Clearance for Return to Sport

- 6.1. Students who have been diagnosed with a concussion and have successfully completed their Return-to-School and Return-to-Sport Strategies can be considered for return to full sports and physical activities. The final decision to medically clear a student to return to unrestricted activities should be based on the clinical judgment of the medical doctor or nurse practitioner.

Policy IHCD – Concussion – Cont'd

- 6.2. Prior to returning to full contact practice and games/competition, the student or parent/guardian must provide the school with a Medical Clearance Letter specifying that a medical doctor or nurse practitioner has personally evaluated the student and has cleared them for return to sports.
 - 6.3. Students who have been provided with a Medical Clearance Letter may return to full sport and physical activities as tolerated. If the student experiences any new concussion-like symptoms while returning to play, they should be instructed to stop playing immediately, notify their parents/guardians, teachers, administrators, or coaches, and undergo follow up medical assessment.
 - 6.4. In the event that the student sustains a new suspected concussion, the Horizon Concussion Protocol should be followed.
7. Additional Resources
- 7.1. For more information on concussion, please visit
 - 7.1.1. www.parachutecanada.org/concussion.
 - 7.1.2. Volleyball Alberta Concussion Pathway
 - 7.1.3. Concussion & You: A handbook for parents and kids (Appendix C)

Policy IHCD – Concussion – Cont’d

APPENDIX A

Concussion Recognition Tool 5
Concussion Guide for Teachers
Concussion Guide for Coaches and Trainers
Concussion Guide for Athletes
Concussion Guide for Parents

CONCUSSION RECOGNITION TOOL 5 ©

To help identify concussion in children, adolescents and adults



RECOGNISE & REMOVE

Head impacts can be associated with serious and potentially fatal brain injuries. The Concussion Recognition Tool 5 (CRT5) is to be used for the identification of suspected concussion. It is not designed to diagnose concussion.

STEP 1: RED FLAGS — CALL AN AMBULANCE

If there is concern after an injury including whether ANY of the following signs are observed or complaints are reported then the player should be safely and immediately removed from play/game/activity. If no licensed healthcare professional is available, call an ambulance for urgent medical assessment:

- Neck pain or tenderness
- Double vision
- Weakness or tingling/burning in arms or legs
- Severe or increasing headache
- Seizure or convulsion
- Loss of consciousness
- Deteriorating conscious state
- Vomiting
- Increasingly restless, agitated or combative

Remember:

- In all cases, the basic principles of first aid (danger, response, airway, breathing, circulation) should be followed.
- Do not attempt to move the player (other than required for airway support) unless trained to do so.
- Do not remove a helmet or any other equipment unless trained to do so safely.

If there are no Red Flags, identification of possible concussion should proceed to the following steps:

STEP 2: OBSERVABLE SIGNS

Visual clues that suggest possible concussion include:

- Lying motionless on the playing surface
- Slow to get up after a direct or indirect hit to the head
- Disorientation or confusion, or an inability to respond appropriately to questions
- Balance, gait difficulties, motor incoordination, stumbling, slow laboured movements
- Blank or vacant look
- Facial injury after head trauma

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STEP 3: SYMPTOMS

- Headache
- "Pressure in head"
- Balance problems
- Nausea or vomiting
- Drowsiness
- Dizziness
- Blurred vision
- Sensitivity to light
- Sensitivity to noise
- Fatigue or low energy
- "Don't feel right"
- More emotional
- More Irritable
- Sadness
- Nervous or anxious
- Neck Pain
- Difficulty concentrating
- Difficulty remembering
- Feeling slowed down
- Feeling like "in a fog"

STEP 4: MEMORY ASSESSMENT

(IN ATHLETES OLDER THAN 12 YEARS)

Failure to answer any of these questions (modified appropriately for each sport) correctly may suggest a concussion:

- "What venue are we at today?"
- "Which half is it now?"
- "Who scored last in this game?"
- "What team did you play last week/game?"
- "Did your team win the last game?"

Athletes with suspected concussion should:

- Not be left alone initially (at least for the first 1-2 hours).
- Not drink alcohol.
- Not use recreational/ prescription drugs.
- Not be sent home by themselves. They need to be with a responsible adult.
- Not drive a motor vehicle until cleared to do so by a healthcare professional.

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ANY ATHLETE WITH A SUSPECTED CONCUSSION SHOULD BE IMMEDIATELY REMOVED FROM PRACTICE OR PLAY AND SHOULD NOT RETURN TO ACTIVITY UNTIL ASSESSED MEDICALLY, EVEN IF THE SYMPTOMS RESOLVE

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Concussion guide for TEACHERS



Parachute
Concussion Series

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 student may think and remember things, and can cause a variety of symptoms.

What are the signs and symptoms of a concussion?

A student does not need to be knocked out (lose consciousness) to have had a concussion. The student might experience one or more of the following:

Thinking Problems	Student's Complaints	Other Problems
<ul style="list-style-type: none">• Does not know time, date, place, details about a recent activity• 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 co-ordination or balance• Blank stare/glassy-eyed• Vomiting• Slurred speech• Slow to answer questions or follow directions• Easily distracted• Poor concentration• Strange or inappropriate emotions (i.e., laughing, crying, getting mad easily)• Not participating well

Get medical help immediately if a student has any “red flag” symptoms such as neck pain, repeated vomiting, growing confusion, seizures, and weakness or tingling in their arms or legs. These may be signs of a more serious injury.



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 (e.g., a ball to the head, colliding with another person).

What should I do if I suspect a student has a concussion?

In all suspected cases of concussion, the student should stop the activity right away.

Continuing increases their risk of more severe, longer-lasting concussion symptoms, as well as increases their risk of other injury.

The Concussion Recognition Tool 5 (CRT5) can be used by anyone to help recognize the signs and symptoms of a possible concussion.

The student should not be left alone and should be seen by a doctor as soon as possible that day. They should not drive.

If the student loses consciousness, call an ambulance to take them to the hospital right away. Do not move them or remove any equipment such as a helmet.

The student should not return to play the same day.

How long will it take for the student to get better?

The signs and symptoms of a concussion often last for one to four weeks but may last longer. In some cases, students may take many weeks or months to heal. If the student has had a concussion before, they may take longer to heal.

If the student's symptoms are persistent (i.e., last longer than four weeks in youth under 18 years old or last longer than two weeks in students aged 18

or older), they should be referred to a healthcare professional who is an expert in the management of concussion.

How is concussion treated?

After an initial short period of rest (24 to 48 hours), light cognitive and physical activity can begin, as long as these don't worsen symptoms.

As the student is recovering from concussion, they should not do any activities that may make their symptoms worse. This might mean limiting activities such as exercising, driving, and screen time on their phone or other devices. If mental activities (e.g., reading, using the computer) worsen the student's symptoms, they might have to stay home from school.

Recovering from concussion is a process that takes patience. If the student goes back to activities before they are ready, it is likely to make their symptoms worse, and their recovery might take longer.

When should the student go to the doctor?

Anyone with a possible head injury should be seen by a doctor as soon as possible.

The student should go back to the doctor immediately if, after being told they have a concussion, they have worsening symptoms, such as:

- being more confused
- headache that is getting worse
- vomiting more than twice
- not waking up
- having any trouble walking
- having a seizure
- strange behaviour

When can the student return to school?

The student may find it hard to concentrate in class, may get a worse headache, or feel sick to their stomach. They should stay home from school if being in class makes their symptoms worse. Once they feel better, they can try going back to school part time to start (i.e., for half days) and if they are OK with that, then they can go back full time.

On average, students with concussion miss one to four days of school. Each concussion is unique, so the student may progress at a different rate than others.

The Return-to-School Strategy provides information on the stages of returning to the classroom. Return to school must come before full return to sport.

When can the student return to sport and physical activity?

It is very important that the student does not go back to full participation in sport if they have any concussion signs or symptoms. Return to sport and physical activity must follow a step-wise approach.

In this approach:

- Each stage is at least 24 hours.
- The student moves on to the next stage when they can tolerate activities without new or worsening symptoms.
- If any of the student's symptoms worsen, they should stop and go back to the previous stage for at least 24 hours.

Stage 1: After an initial 24 to 48 hours of rest, light cognitive and physical activity can begin, as long as these don't worsen symptoms. The student can start with daily activities like moving around the home and simple chores, such as making their bed.

Stage 2: Light aerobic activity such as walking or stationary cycling, for 10 to 15 minutes. The student

shouldn't do any heavy lifting or resistance training (e.g., bodyweight exercises, weight training).

Stage 3: Individual physical activity with no risk of contact for 20 to 30 minutes. The student can participate in simple, individual activities, such as going for a walk at recess or shooting a basketball. The student shouldn't do any resistance training.

Stage 4: Begin practising with no contact (no checking, no heading the ball, etc.). Add in longer and more challenging physical activity. Start to add in resistance training (if appropriate for the student).

Get clearance from a doctor before moving on to Stages 5 and 6.

Stage 5: Participate in practice with contact, if the student plays a contact sport.

Stage 6: Full game play or competition.

The Return-to-Sport Strategy provides more information on the stages of returning to sport.

The student should never return to sport until cleared by a doctor!

Returning before full recovery from concussion puts the student at higher risk of sustaining another concussion, with symptoms that may be more severe and last longer.

Additional Resources

Available at parachute.ca/concussion:

- Return-to-School Strategy
- Return-to-Sport Strategy
- Canadian Guideline on Concussion in Sport



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 an athlete may think and remember things, and can cause a variety of symptoms.

What are the signs and symptoms of a concussion?

An athlete does not need to be knocked out (lose consciousness) to have had a concussion. The athlete might experience one or more of the following:

Thinking Problems	Athlete'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 • Feeling dazed • Feeling “dinged” or stunned; “having my bell rung” • Seeing stars, flashing lights • Ringing in the ears • Sleepiness • Loss of vision • Seeing double or blurry vision • Stomachache, stomach pain, nausea 	<ul style="list-style-type: none"> • Poor co-ordination or balance • Blank stare/glassy-eyed • Vomiting • Slurred speech • Slow to answer questions or follow directions • Easily distracted • Poor concentration • Strange or inappropriate emotions (i.e., laughing, crying, getting mad easily) • Not playing as well

Get medical help immediately if an athlete has any “red flag” symptoms such as neck pain, repeated vomiting, growing confusion, seizures, and weakness or tingling in their arms or legs. These may be signs of a more serious injury.



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 (e.g., a ball to the head, being checked into the boards).

What should I do if I think an athlete might have a concussion?

In all suspected cases of concussion, the athlete should stop playing right away. Continuing to play increases their risk of more severe, longer-lasting concussion symptoms, as well as increases their risk of other injury.

The Concussion Recognition Tool 5 (CRT5) can be used by anyone to help recognize the signs and symptoms of a possible concussion.

The athlete should not be left alone and should be seen by a doctor as soon as possible that day. They should not drive.

If the athlete loses consciousness, call an ambulance to take them to the hospital right away. Do not move them or remove any equipment such as a helmet.

The athlete should not return to play the same day.

How long will it take for the athlete to get better?

The signs and symptoms of a concussion usually last for one to four weeks, but may last longer. In some cases, it may take many weeks or months to heal. If the athlete has had a previous concussion, they may take longer to heal.

If the athlete's symptoms are persistent (i.e., last longer than two weeks in adults or longer than four

weeks in youth under 18 years old) they should be referred to a healthcare professional who is an expert in the management of concussion.

How is concussion treated?

After an initial short period of rest (24 to 48 hours), light cognitive and physical activity can begin, as long as these don't worsen symptoms.

As the athlete is recovering from concussion, they should not do any activities that may make their symptoms worse. This might mean limiting activities such as exercising, driving, and screen time on their phone or other devices.

Recovering from concussion is a process that takes patience. Going back to activities before the athlete is ready is likely to make their symptoms worse, and their recovery may take longer.

When should the athlete go to the doctor?

Anyone with a possible head injury should be seen by a doctor as soon as possible.

The athlete should go back to the doctor immediately if, after being told they have a concussion, they have worsening symptoms, such as:

- being more confused
- headache that is getting worse
- vomiting more than twice
- not waking up
- having any trouble walking
- having a seizure
- strange behaviour

When can the athlete return to school?

On average, students with concussion miss one to four days of school. Each concussion is unique, so the athlete may progress at a different rate than others.

The Return-to-School Strategy provides information on the stages of returning to the classroom. **Return to school must come before full return to sport.**

When can the athlete return to sport?

It is very important that an athlete not go back to full participation in sport if they have any concussion signs or symptoms. Return to sport and physical activity must follow a step-wise approach.

In this approach:

- Each stage is at least 24 hours.
- The athlete moves on to the next stage when they can tolerate activities without new or worsening symptoms.
- If any symptoms worsen, the athlete should stop and go back to the previous stage for at least 24 hours.

Stage 1: After an initial 24 to 48 hours of rest, light cognitive and physical activity can begin, as long as these don't worsen symptoms. The athlete can start with daily activities such as moving around the home and simple chores, such as making their bed.

Stage 2: Light aerobic activity such as walking or stationary cycling, for 10 to 15 minutes. The athlete shouldn't do any resistance training or other heavy lifting.

Stage 3: Individual sport-specific exercise with no contact for 20 to 30 minutes (e.g., running, throwing). The athlete shouldn't do any resistance training.

Stage 4: Begin practising with no contact (no checking, no heading the ball, etc.). Add in more challenging drills. Start to add in resistance training.

Stage 5: Participate in practice with contact, once cleared by a doctor.

Stage 6: Full game play or competition.

The Return-to-Sport Strategy provides more information on the stages of returning to sport.

An athlete should never return to sport until cleared by a doctor!

Returning before full recovery from concussion puts athletes at higher risk of sustaining another concussion, with symptoms that may be more severe and last longer.

Additional Resources

Available at parachute.ca/concussion:

- Return-to-School Strategy
- Return-to-Sport Strategy
- Canadian Guideline on Concussion in Sport
- Concussion: Baseline Testing
- Making Headway eLearning (Coaching Association of Canada)



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 you may think and remember things, and can cause a variety of symptoms.

What are the signs and symptoms of a concussion?

You do not need to be knocked out (lose consciousness) to have had a concussion. You might experience one or more of the following:

Thinking Problems	How You Might Feel	Other Problems
<ul style="list-style-type: none"> • Do 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 • Feeling dazed • Feeling “dinged” or stunned; “having my bell rung” • Seeing stars, flashing lights • Ringing in the ears • Sleepiness • Loss of vision • Seeing double or blurry vision • Stomachache, stomach pain, nausea 	<ul style="list-style-type: none"> • Poor co-ordination or balance • Blank stare/glassy-eyed • Vomiting • Slurred speech • Slow to answer questions or follow directions • Easily distracted • Poor concentration • Strange or inappropriate emotions (i.e., laughing, crying, getting mad easily) • Not playing as well

Get medical help immediately if you have any “red flag” symptoms such as neck pain, repeated vomiting, growing confusion, seizures, and weakness or tingling in your arms or legs. These may be signs of a more serious injury.



What causes a concussion?

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

What should I do if I think I might have a concussion?

You should stop playing right away. Continuing to play increases your risk of more severe, longer-lasting concussion symptoms, as well as increases your risk of other injury.

Tell a coach, parent, official, or other responsible person that you are concerned you might have a concussion. You should not be left alone and should be seen by a doctor as soon as possible that day. You should not drive.

If you lose consciousness, an ambulance should be called to take you to a hospital immediately.

Do not return to play the same day.

What should I do if I think my teammate might have a concussion?

If another athlete tells you about symptoms or if you notice signs they might have a concussion, tell a coach, parent, official or other responsible person. They should not be left alone and should be seen by a doctor as soon as possible that day.

If another athlete is knocked out, an ambulance should be called to take them to a hospital immediately.

How long will it take to get better?

The signs and symptoms of a concussion usually last for one to four weeks, but may last longer. In some cases, it may take many weeks or months to heal. If you have had a previous concussion, you may take longer to heal.

If your symptoms are persistent (i.e., last longer than four weeks if you're under 18 or last longer than two weeks if you're 18 or older) you should be referred to a healthcare professional who is an expert in the management of concussion.

How is concussion treated?

After an initial short period of rest (24 to 48 hours), light cognitive and physical activity can begin, as long as these don't worsen your symptoms.

As you're recovering from concussion, you should not do any activities that may make your symptoms worse. This might mean limiting activities such as exercising, driving, and screen time on your phone or other devices. If mental activities (e.g., reading, using the computer) worsen your symptoms, you might have to stay home from school or work.

Recovering from concussion is a process that takes patience. Going back to activities before you are ready is likely to make your symptoms worse, and your recovery may take longer.

When should I go to the doctor?

Anyone with a possible head injury should be seen by a doctor as soon as possible. If you are diagnosed with a concussion, your doctor should schedule a follow-up visit with you within the next one to two weeks.

You should go back to the doctor immediately if, after being told you have a concussion, you have worsening symptoms, such as:

- being more confused
- headache that is getting worse
- vomiting more than twice
- not waking up
- having any trouble walking
- having a seizure
- strange behaviour

When can I return to school?

You may find it hard to concentrate in class, may get a worse headache, or feel sick to your stomach. You should stay home from school if being in class makes your symptoms worse. Once you feel better, you can try going back to school part-time to start (i.e., for half days) and if you are OK with that, then you can go back full time.

On average, students with concussion miss one to four days of school. Each concussion is unique, so you may progress at a different rate than other people you know.

The Return-to-School Strategy provides information on the stages of returning to the classroom. Remember, return to school must come before full return to sport.

When can I return to sport?

It is very important that you do not go back to full participation in sport if you have any concussion signs or symptoms. Return to sport and physical activity must follow a step-wise approach.

In this approach:

- Each stage is at least 24 hours.
- Move on to the next stage when you can tolerate activities without new or worsening symptoms.
- If any symptoms worsen, stop and go back to the previous stage for at least 24 hours.

Stage 1: After an initial 24 to 48 hours of rest, light cognitive and physical activity can begin, as long as these don't worsen your symptoms. Start with daily activities like moving around your home and simple chores, such as making your bed.

Stage 2: Light aerobic activity such as walking or stationary cycling, for 10 to 15 minutes. Don't do any resistance training or other heavy lifting.

Stage 3: Individual sport-specific exercise with no contact for 20 to 30 minutes (e.g., running, throwing). Don't do any resistance training.

Stage 4: Begin practising with no contact (no checking, no heading the ball, etc.). Add in more challenging drills. Start to add in resistance training.

Stage 5: Participate in practice with contact, once cleared by a doctor.

Stage 6: Full game play or competition.

The Return-to-Sport Strategy provides more information on the stages of returning to sport.

Never return to sport until cleared by a doctor!

Returning to active play before full recovery from concussion puts you at higher risk of sustaining another concussion, with symptoms that may be more severe and last longer.

Additional Resources

Available at parachute.ca/concussion:

- **Return-to-School Strategy**
- **Return-to-Sport Strategy**
- **Canadian Guideline on Concussion in Sport**



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 signs and symptoms of a concussion?

Your child does not need to be knocked out (lose consciousness) to have had a concussion. Your child might experience one or more of the following:

Thinking Problems	Child's Complaints	Other Problems
<ul style="list-style-type: none">• Does not know time, date, place, details about a recent activity• 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 co-ordination or balance• Blank stare/glassy-eyed• Vomiting• Slurred speech• Slow to answer questions or follow directions• Easily distracted• Poor concentration• Strange or inappropriate emotions (i.e., laughing, crying, getting mad easily)• Not participating well

It is harder for infants, toddlers, and preschoolers to communicate how they are feeling. If you have a young child, you might notice any of the following: crying more than usual; unsteady walking; lack of interest in favourite toys; changes in nursing, eating or sleeping patterns; or loss of new skills, such as toilet training.

Get medical help immediately if your child has any “red flag” symptoms such as neck pain, repeated vomiting, growing confusion, seizures, and weakness or tingling in their arms or legs. These may be signs of a more serious injury.



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 (e.g., a ball to the head, colliding with another person).

What should I do if I suspect my child has a concussion?

In all suspected cases of concussion, your child should stop the activity right away. Continuing increases their risk of more severe, longer-lasting concussion symptoms, as well as increases their risk of other injury.

The Concussion Recognition Tool 5 (CRT5) can be used by anyone to help recognize the signs and symptoms of a possible concussion.

Your child should not be left alone and should be seen by a doctor as soon as possible that day.

If your child loses consciousness, call an ambulance to take them to the hospital right away. Do not move your child or remove any equipment such as a helmet.

Your child should not return to play the same day.

How long before my child gets better?

The signs and symptoms of a concussion often last for one to four weeks but may last longer. In some cases, children may take many weeks or months to heal. If your child has had a concussion before, they may take longer to heal.

If your child's symptoms are persistent (i.e., last longer than four weeks in youth under 18 years old), they should be referred to a healthcare professional who is an expert in the management of concussion.

How is concussion treated?

After an initial short period of rest (24 to 48 hours), light cognitive and physical activity can begin, as long as these don't worsen symptoms. A medical doctor, preferably one with experience managing concussions, should be consulted before beginning step-wise Return-to-School and Return-to-Sport Strategies.

As your child is recovering from concussion, they should not do any activities that may make their symptoms worse. This might mean limiting activities such as riding their bike, play wrestling, reading, working on the computer or playing video games.

Recovering from concussion is a process that takes patience. If your child goes back to activities before they are ready, it is likely to make their symptoms worse, and their recovery might take longer.

When should my child go to the doctor?

Anyone with a possible head injury should be seen by a doctor as soon as possible. If your child is diagnosed with a concussion, the doctor should schedule a follow-up visit within the next one to two weeks.

Take your child back to the doctor immediately if, after being told they have a concussion, they have worsening symptoms, such as:

- being more confused
- headache that is getting worse
- vomiting more than twice
- not waking up
- having any trouble walking
- having a seizure
- strange behaviour

When can my child return to school?

Your child may find it hard to concentrate in class, may get a worse headache, or feel sick to their stomach. Your child should stay home from school if being in class makes their symptoms worse. Once they feel better, they can try going back to school

part time to start (i.e., for half days) and if they are OK with that, then they can go back full time.

On average, children with concussion miss one to four days of school. Each concussion is unique, so your child may progress at a different rate than others.

The Return-to-School Strategy provides information on the stages of returning to the classroom. Return to school must come before full return to sport.

When can my child return to sport and physical activity?

It is very important that your child does not go back to full participation in sport if they have any concussion signs or symptoms. Return to sport and physical activity must follow a step-wise approach.

In this approach:

- Each stage is at least 24 hours.
- Your child moves on to the next stage when they can tolerate activities without new or worsening symptoms.
- If any of your child's symptoms worsen, they should stop and go back to the previous stage for at least 24 hours.

Stage 1: After an initial 24 to 48 hours of rest, light cognitive and physical activity can begin, as long as these don't worsen symptoms. Your child can start with daily activities such as moving around the home and simple chores, such as making their bed.

Stage 2: Light aerobic activity such as walking or stationary cycling, for 10 to 15 minutes. Your child shouldn't do any heavy lifting or resistance training (e.g., bodyweight exercises, weight training).

Stage 3: Individual physical activity with no risk of contact for 20 to 30 minutes. Your child can participate in simple, individual activities, such as

going for a walk at recess or shooting a basketball. Your child shouldn't do any resistance training.

Stage 4: Begin practising with no contact (no checking, no heading the ball, etc.). Add in longer and more challenging physical activity. Start to add in resistance training (if appropriate for your child).

Get clearance from a doctor before moving on to Stages 5 and 6.

Stage 5: Participate in practice with contact, if your child plays a contact sport.

Stage 6: Full game play or competition.

The Return-to-Sport Strategy provides more information on the stages of returning to sport.

Your child should not return to sport until cleared by a doctor!

Returning too soon before full recovery from concussion puts your child at higher risk of sustaining another concussion, with symptoms that may be more severe and last longer.

Additional Resources

Available at parachute.ca/concussion:

- Return-to-School Strategy
- Return-to-Sport Strategy
- Canadian Guideline on Concussion in Sport
- Concussion: Baseline Testing

Policy IHCD – Concussion – Cont’d

APPENDIX B

Strategy for return to school after a concussion

After a concussion: Return to sport strategy

Volleyball Concussion Pathway



Parachute
Concussion Series

Strategy for RETURN TO SCHOOL after a Concussion

1. Each stage is at least 24 hours. Move to the next stage only when activities are tolerated without new or worsening symptoms.
2. If symptoms re-appear, return to the previous stage for at least 24 hours.
3. If symptoms don't improve, but continue to get worse, contact your doctor or get medical help immediately.

AT HOME

Cognitive & physical rest (24-48 hours)



- | OK if tolerated | Not OK |
|--|---|
| <ul style="list-style-type: none"> ✓ Short board games ✓ Short phone calls ✓ Camera photography ✓ Crafts | <ul style="list-style-type: none"> ✗ School ✗ Physical exertion/ stair climbing ✗ Organized sports |

If tolerated, limited amounts of

- TV
- Computer/cell phone use
- Reading

READY FOR NEXT STAGE?

Symptoms start to improve OR after resting for 48 hours max.

Stage 1 Light cognitive activity



- | OK if tolerated | Not OK |
|--|---|
| <ul style="list-style-type: none"> ✓ Easy reading ✓ Limited TV ✓ Drawing/LEGO/ board games ✓ Some peer contact | <ul style="list-style-type: none"> ✗ School ✗ Work ✗ Physical exertion/ stair climbing ✗ Organized sports |

If tolerated, limited amounts of

- Computer/cell phone use

READY FOR NEXT STAGE?

Tolerate 30 mins. of cognitive activity at home

Stage 2 School-type work/ Light physical activity



- | OK if tolerated | Not OK |
|--|--|
| <ul style="list-style-type: none"> ✓ School-type work in 30 min. chunks ✓ Light physical activity ✓ Some peer contact | <ul style="list-style-type: none"> ✗ School attendance ✗ Work ✗ Physical exertion/ stair climbing ✗ Organized sports |

READY FOR NEXT STAGE?

Tolerate up to 60 mins. of cognitive activity in 2-3 chunks

AT SCHOOL

Stage 3a Part-time school Light load



- | OK if tolerated | Not OK |
|--|---|
| <ul style="list-style-type: none"> ✓ Up to 120 mins. of cognitive activity in chunks ✓ Half-days at school, 1-2 times a week ✓ Some light physical activity | <ul style="list-style-type: none"> ✗ Music/Phys. Ed class ✗ Tests/exams ✗ Homework ✗ Heavy physical loads (e.g. backpack) ✗ Organized sports |

READY FOR NEXT STAGE?

Tolerate school work up to 120 mins. a day for 1-2 days/week

Stage 3b Part-time school Moderate load



- | OK if tolerated | Not OK |
|--|---|
| <ul style="list-style-type: none"> ✓ Limited testing ✓ School work for 4-5 hours/day in chunks ✓ Homework up to 30 mins./day ✓ 3-5 days of school/week ✓ Decrease learning accommodations | <ul style="list-style-type: none"> ✗ Phys. Ed class/ physical exertion ✗ Standardized tests/exams ✗ Organized sports |

READY FOR NEXT STAGE?

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

Stage 4a Nearly normal workload



- | OK if tolerated | Not OK |
|--|--|
| <ul style="list-style-type: none"> ✓ Nearly normal cognitive activities ✓ Routine school work as tolerated ✓ Homework up to 60 mins./day ✓ Minimal learning accommodations | <ul style="list-style-type: none"> ✗ Phys. Ed class ✗ Standardized tests/exams ✗ Full participation in organized sports |

READY FOR NEXT STAGE?

Tolerate full-time academic load without worsening symptoms

Stage 4b Full time



- | OK if tolerated | Not OK |
|--|--|
| <ul style="list-style-type: none"> ✓ Normal cognitive activities ✓ Routine school work ✓ Full curriculum load ✓ No learning accommodations | <ul style="list-style-type: none"> ✗ Full participation in sports until medically cleared. (See Return-to-Sport Strategy) |

READY FOR NEXT STAGE?

Stages 5-6 of the Return-to-Sport Strategy

After a Concussion:

RETURN-TO-SPORT STRATEGY



Parachute
Concussion Series

A concussion is a serious injury, but you can recover fully if your brain is given enough time to rest and recuperate.

Returning to normal activities, including sport participation, is a step-wise process that requires patience, attention, and caution.

In the Return-to-Sport Strategy:

- ▶ Each stage is at least 24 hours.
- ▶ Move on to the next stage when activities are tolerated without new or worsening symptoms.
- ▶ If any symptoms worsen, stop and go back to the previous stage for at least 24 hours.
- ▶ If symptoms return after medical clearance, follow up with a doctor for re-assessment.

Stage 1: Symptom-limiting activities

After an initial short period of rest of 24 to 48 hours, light cognitive and physical activity can begin, as long as these don't worsen symptoms. You can start with daily activities like moving around the house, simple chores, and gradually introducing school and work activities at home.

Stage 2: Light aerobic activity

Light exercise such as walking or stationary cycling, for 10 to 15 minutes. The duration and intensity of the aerobic exercise can be gradually increased over time if symptoms don't worsen and no new symptoms appear during the exercise or in the hours that follow. No resistance training or other heavy lifting.

Stage 3: Individual sport-specific exercise with no contact

Activities such as skating, running, or throwing can begin for 20 to 30 minutes. There should be no body contact or other jarring motions, such as high-speed stops or hitting a ball with a bat. No resistance training.

Stage 4: Begin training drills with no contact

Add in more challenging drills like passing drills. There should be no impact activities (no checking, no heading the ball, etc.). Start to add in progressive resistance training.

Stage 5: Full contact practice following clearance by a doctor.

Stage 6: Return to Sport

Full game play or competition.



How long does this process take?

Each stage is a minimum of 24 hours, but could take longer, depending on how activities affect the way you feel. Since each concussion is unique, people will progress at different rates. For most people, symptoms improve within 1 to 4 weeks. If you have had a concussion before, you may take longer to heal the next time.

If symptoms are persistent (i.e., last longer than two weeks in adults or longer than four weeks in youth), your doctor should consider referring you to a healthcare professional who is an expert in the management of concussion.

How do I find the right doctor?

When dealing with concussions, it is important to see a doctor who is knowledgeable in concussion management. This might include your family doctor or a specialist like a sports medicine physician. Your family doctor may be required to submit a referral for you to see a specialist.

Contact the Canadian Academy of Sport and Exercise Medicine (CASEM) to find a sports medicine physician in your area. Visit www.casem-acmse.org for more information. You can also refer your doctor to parachute.ca/concussion for more information.

What if my symptoms return or get worse during this process?

If symptoms return or get worse, or new symptoms appear, return to the previous stage for at least 24 hours. Continue with activities that you can tolerate.

If symptoms return after medical clearance (Stages 5 and 6) you should be re-assessed by your doctor before resuming activities. Remember, symptoms may return later that day or the next, not necessarily during the activity!

Never return to sport until cleared by a doctor!

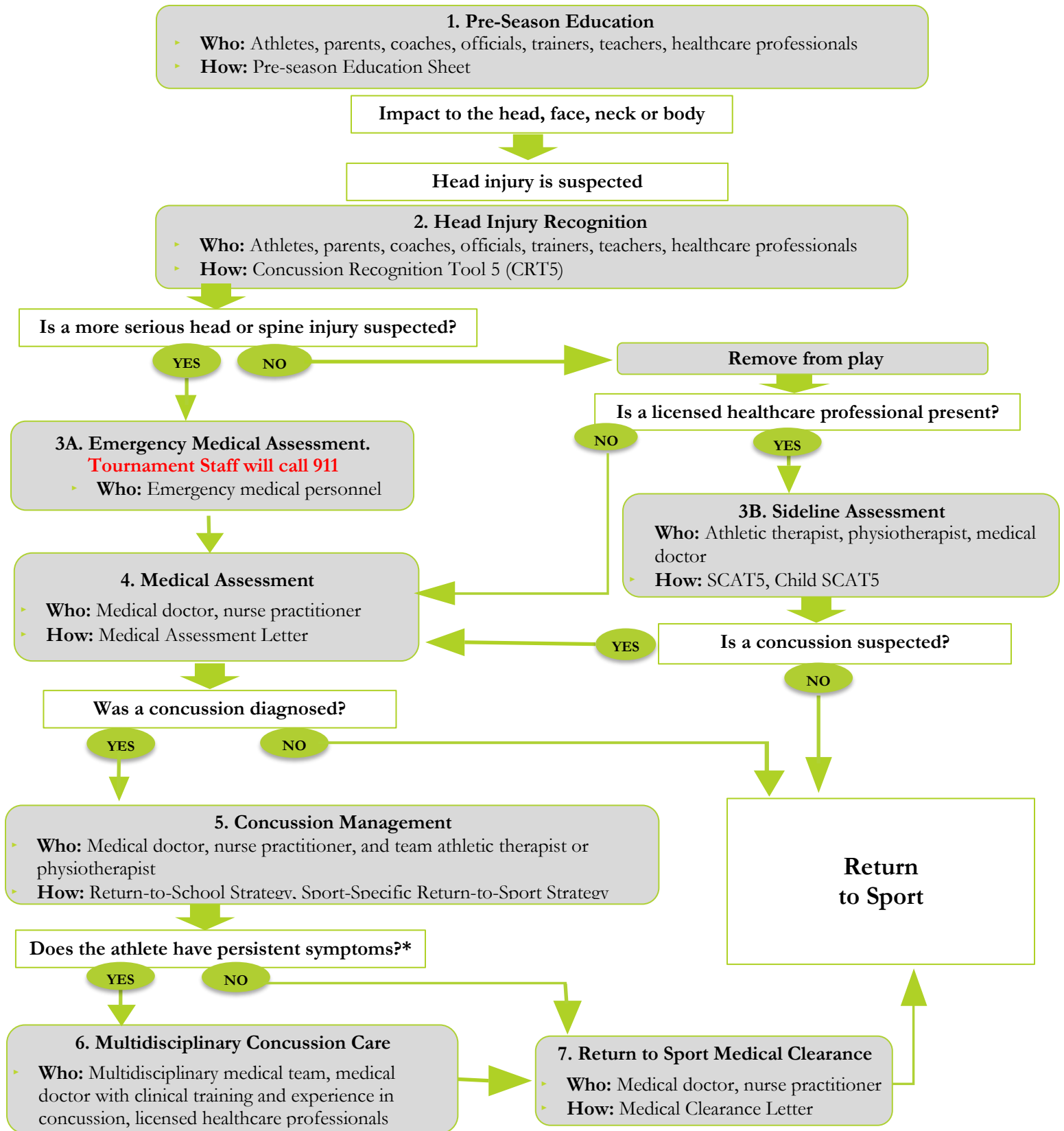
Returning to active play before full recovery from concussion puts you at higher risk of sustaining another concussion, with symptoms that may be more severe and last longer.

Additional Resources

Available at parachute.ca/concussion:

- **Return-to-School Strategy**
- **Canadian Guideline on Concussion in Sport**
- **Concussion: Baseline Testing**

Volleyball Alberta Concussion Pathway



*Persistent symptoms: lasting > 4 weeks in children & youth or > 2 weeks in adults

Policy IHCD – Concussion – Cont’d

APPENDIX C

Concussion & You: A handbook for parents and kids

Concussion & You

A Handbook for Parents and Kids

DEVELOPED BY CONCUSSION EXPERTS AT
HOLLAND BLOORVIEW KIDS REHABILITATION HOSPITAL

INTRODUCTION

This Concussion Handbook is designed to help with your concussion management and recovery. Whether you're a kid or teenager who recently suffered a concussion or a parent, teacher or coach of someone dealing with concussion, the management techniques laid out in this concussion handbook can help to speed up the path to recovery.

The information in this Concussion Handbook is informed by experts in youth concussion from the Holland Bloorview Kids Rehabilitation Hospital Concussion Centre. The team includes healthcare professionals, from neuropsychologists and pediatricians to occupational therapists, who are sharing their concussion management methods.

A timeline for returning to your regular life

This handbook will provide information on returning to the various aspects of your daily life. The concussion researchers and clinicians at Holland Bloorview know that concussion recovery is a process, not a quick fix.

It's important to remember that recovery times are different for each individual and can vary from days to weeks to months, and while some of that is based on the injury itself, you can also help improve your recovery time by resting your brain and body. You can also accidentally prolong your recovery by doing too much too soon, suffering repeated concussions, or if you have other complicating factors such as: ADHD, learning disabilities, headaches, sleep disorders or mental illness.



ENERGY
CONSERVATION



SLEEP

WHAT IS IN THE CONCUSSION HANDBOOK?

In this handbook you will find:

- Information about concussion and its potential effect on your mind and body.
- Strategies to help with recovery, including:
 - * Energy conservation
 - * Sleep
 - * Nutrition
 - * Relaxation
 - * Return to school
 - * Return to physical activity and sport
- Self-management tools to ensure you are doing everything you can to recover quickly and get back to the activities you need, want and love to do.
- We have incorporated these strategies and tools into a Recovery Timeline with visuals to help you see how phases of recovery fit together.

Please note: The information in this handbook is for education only. If you have questions about your concussion, call your doctor or contact us at Holland Bloorview (concussion@hollandbloorview.ca).



NUTRITION



RELAXATION



RETURN TO
SCHOOL



RETURN TO PHYSICAL
ACTIVITY AND SPORT

CONCUSSION: WHAT IS IT EXACTLY?

A concussion is a brain injury that can affect how your brain works. Concussions may happen because of a hit to the head, face, neck or somewhere else on the body. When a hit takes place, the brain moves back and forth inside the skull. If it moves hard enough, the brain can become injured. This can make your brain and body work and feel different.

6 things you should know about concussions

1 Concussion is a brain injury.

2 A child's brain is still developing and requires a unique approach to care.

3 You can have a concussion without losing consciousness.



4 Concussion symptoms are more than just physical. They can be mental, emotional or behavioural.

5 Most concussions resolve quickly, however 30% of people have symptoms that last longer than 4 weeks.

6 It's essential for optimal recovery to rest your mind and body.

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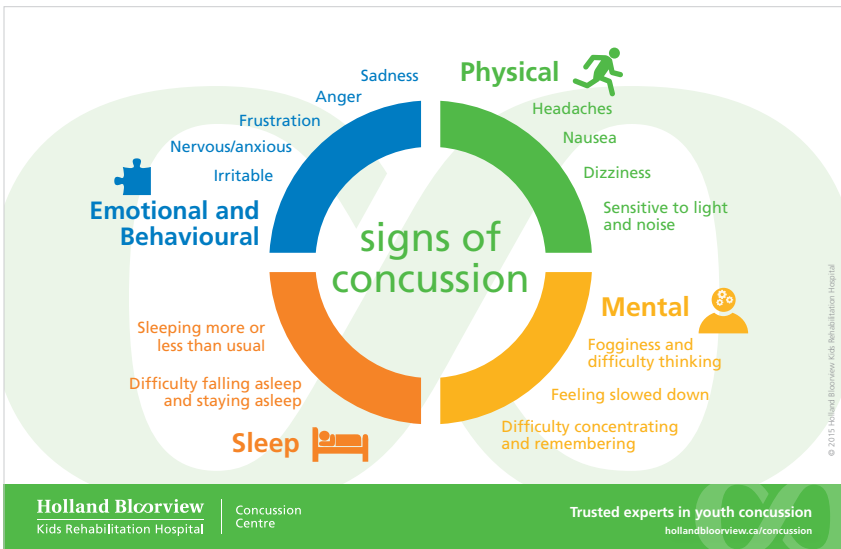
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HOW CAN I TELL IF I HAD A CONCUSSION?

Everyone's concussion experience is different and not everyone reacts the same way. For some people, recovery from a concussion is quick, and for others, the road to recovery is longer. It's hard to predict how long a concussion will last. Using the strategies in this handbook can help promote recovery and get you back to the things you need, want and love to do.

You can experience different signs and symptoms after having a concussion.
Take a look at the chart below for details.



SO I HAD A CONCUSSION: WHAT DO I DO?

When you've had a concussion, it's important for you to immediately:

- 1. Stop studying, working or playing**
- 2. See your doctor for help**
- 3. Rest your brain and body**

You and your doctor or healthcare team member need to work together to help you get better from your concussion. They will help you slowly go back to studying, working or playing.

Keep in mind - to get better you need PHYSICAL & MENTAL rest!

Taking steps to conserve energy will help you manage your concussion: get enough sleep, relax, eat the right food and plan return to school or return to activities.

The rest of the Concussion Handbook will show you how to conserve energy, sleep well, relax, eat right and return to school or activities.

The concussion recovery timeline

Everyone's timeline for concussion recovery is a bit different, but there are some general rules that will help you return to regular life safely.

- Using the sleep, energy conservation, relaxation and nutrition strategies from the beginning of your recovery process will provide you with the tools and skills necessary to let your brain recover, and make it easier to begin reintegration into school and then sport.
- At Holland Bloorview we recommend that you successfully return to school without post-concussion symptoms before you move on to returning to sport. This will reduce your chances of re-injury by moving you through the stages of lower risk to higher risk activities in the right order.



I had a concussion, I need to ...

- STOP studying, working, playing
- Get HELP from my doctor
- REST my mind & body
- SLOWLY get back to studying, working, playing

I think I have a concussion, how can I get better?

Stop: studying, using electronic devices and playing

Get help: get immediate medical attention, ask your doctor for advice

Rest: take time to rest your mind and your body

Take it slow: slowly get back to studying, working and playing

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ENERGY CONSERVATION



**I had a concussion,
I need to ...**

- **PRIORITIZE** daily activities and decide which ones can wait
- Take **BREAKS** and work through tasks in stages
- **CREATE** non-distracting environments

After you've had a concussion, you need to rest your body (physical rest) and your brain (mental rest). Rest helps your brain recover so you can return to the activities you want or need to participate in. One way to help with resting is through energy conservation.

What is energy conservation?

Everything you do from the time you wake up to the time you go to bed uses energy. Through energy conservation you can save mental and physical energy allowing you to feel better throughout the day. Your brain will also have the proper fuel to promote recovery from your concussion.

How do I conserve energy?

You can conserve energy by using the “Four P’s” – Prioritize, Plan, Pace and Position.

The Four P’s concept is used frequently by occupational therapists. The multi-disciplinary team at the Concussion Centre, which includes occupational therapy expertise, has adapted the Four P’s principle for use in concussion recovery.

The diagram below explains the Four P’s:

PRIORITIZE

(#1 What is important?)

Decide: What is important? What are you able to do based on how you currently feel?

Break daily activities into:

- Urgent: must be done today.
- Important: must be done in next few days.
- For later: must be done this week/month.
- Don’t need to/can’t do: can it wait until you are feeling better?
- Help needed: can someone do it for you?

PACE

(#3 How are you going to do it?)

- Take breaks if you don’t feel well.
- After a concussion, your brain is less able to do tasks that were once automatic (e.g. tasks you have a lot of practice doing). It may take more time to complete tasks as you recover.
- Complete the task over stages (you may not be able to finish everything all at once).
- Plan tasks throughout the day so you aren’t doing too much at one time.

PLAN

(#2 What are you going to do?)

- Organize what you need to do.
- Do tasks that use more energy at times in the day when you feel best.
- Make rest breaks part of your routine.
- Planning saves mental energy and helps you avoid trying to remember what to do and when to do it during the day.

POSITION

(#4 Where are you going to do it?)

- Noisy, busy and distracting environments make it hard to concentrate and will use up more energy.
- Think about your environment and how you stand/sit in it.
- Your environment can make a difference in how you feel.

SLEEP



After you've had a concussion, getting enough and good quality sleep is one way to help your brain recover so you can return to your daily life and go back to the activities you want or need to participate in.

Helpful sleep tips

To get a good night's sleep, remember to:

- Wake up and go to bed at the same time each day, even on weekends.
- Get up at the same time every day no matter what time you fall asleep.
- Create a relaxing, regular bedtime routine for yourself. You can do this by taking a warm bath or shower, using aroma therapy or listen to soothing music. Things you can also try are:
 - Deep breathing exercises: concentrate on your breathing
 - Mental imagery: close your eyes and think about doing something you enjoy or being in a relaxing place
- Sleep in a quiet, dark and cool room. Make sure your mattress and pillow(s) are comfortable.
- Use your bedroom for sleep only. Work/school materials, computers, cell phones, tablets and TVs should be in another room.



I had a concussion, I need to ...

- AVOID naps so I am not awake at night (If I need to nap, it shouldn't be longer than 1 hour)
- KEEP your bedroom as a sleep only zone
- AVOID caffeine and screen time before bed
- WRITE down why I can't sleep so I can avoid what is keeping me awake (I shouldn't do this right before bed)

Sleep tips to recover from concussion

- 1**
Try to wake up and go to bed at the same time every day.
- 2**
Create a relaxing routine to help you fall asleep, try listening to soothing music or taking a warm bath before bedtime.
- 3**
Choose a quiet, dark and cool room where you are comfortable.
- 4**
Make your bedroom a restful sleep only zone.

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NUTRITION



The food we put into our body gives us the energy we need to promote recovery in our brain and body, and help us recover from concussion.

Remember to:

- Eat a balanced diet.
- Have regular meals and snacks.
- Include healthy carbohydrates in your diet. A protein only diet may affect how your body recovers from concussion. You need to eat healthy carbohydrates to give your brain fuel (e.g. whole grains, sugar from fruit and vegetables).
- Drink water regularly throughout the day. It is important to stay hydrated. Also, the more water you drink, the more you need to go to the bathroom, and so this forces you to take more rest breaks and pace yourself.

“There is a common misconception that people eat so their bodies have energy, but the reality is that your brain needs fuel too – you are not just feeding your body. Athletes eat protein for their muscles, but often forget they need carbohydrates for their brain. Your brain runs off glucose.”

– DR. NICK REED



**I had a concussion,
I need to ...**

- EAT a balanced diet
- Have REGULAR meals and snacks
- Include healthy CARBOHYDRATES in my diet
- DRINK water regularly

RELAXATION



Taking time to relax and using relaxation strategies can help calm your brain. Relaxation can be done at any time during your concussion recovery.

Why is relaxation training important?

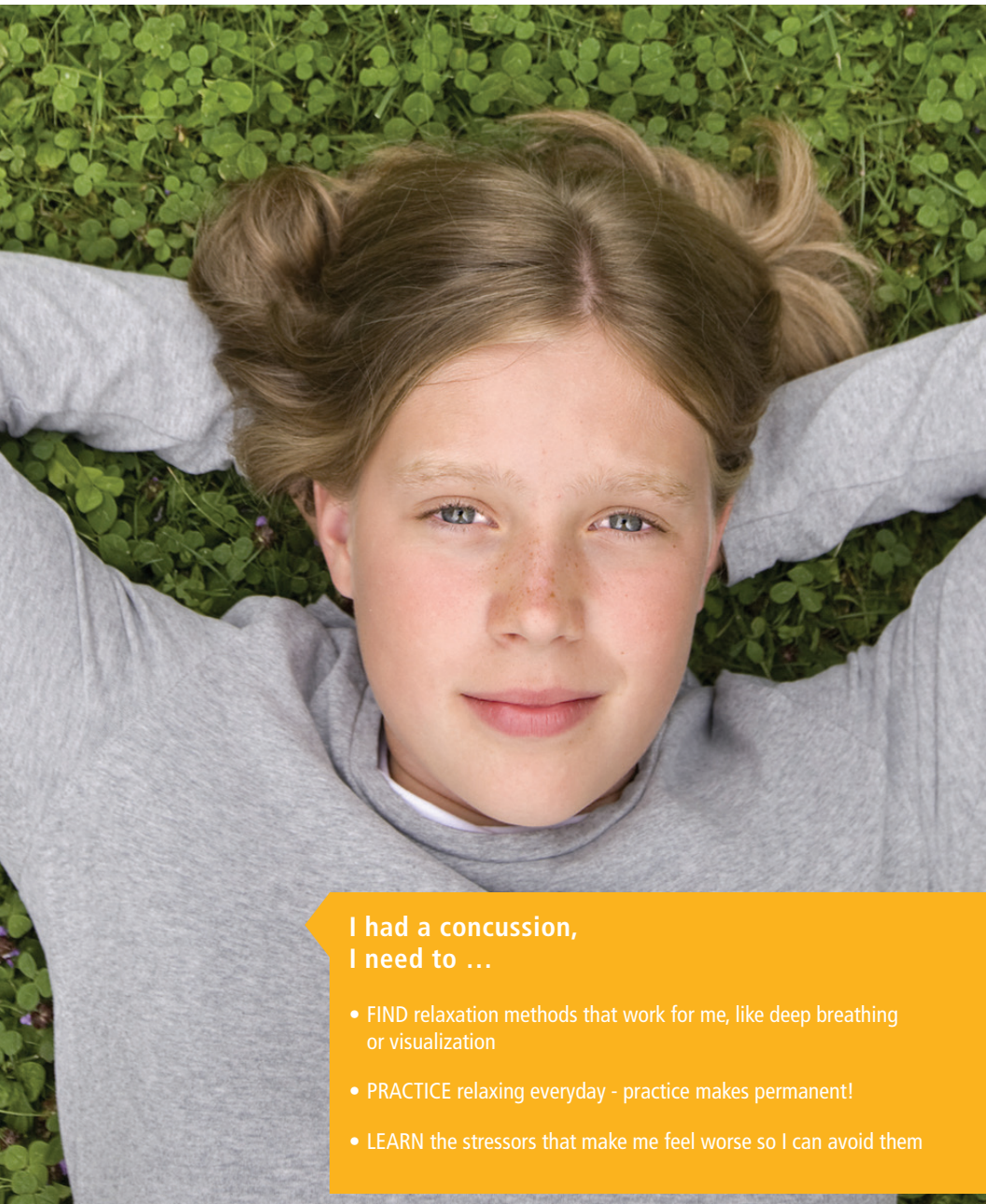
Relaxation:

- Is a way to give yourself a break to focus on you.
- Can help prevent anxiety and nervousness (caused by things like school exams, assignments, missed sleep, loud school hallways or cafeterias) from affecting how you feel.
- Can allow you to rest your brain and body so they can recover.

How does relaxation training work?

Relaxation training can help:

- You control how fast your heart beats, your blood pressure, the amount you sweat, how well you sleep and how alert you feel. During stress, your heart rate and blood pressure increase, your body produces more sweat, your breathing becomes shallow and your muscles can contract.
- Reverse some of the ways your body responds to stress and give you more control over your body, as well as help reduce anxiety, depression, irritability, insomnia and blood pressure.
- You recognize signs of stress in your body and reduce those stressors before they affect how you feel.



**I had a concussion,
I need to ...**

- FIND relaxation methods that work for me, like deep breathing or visualization
- PRACTICE relaxing everyday - practice makes permanent!
- LEARN the stressors that make me feel worse so I can avoid them

RETURNING TO SCHOOL



This is a time when your brain needs all of its energy to recover, so it's very important to rest your brain and limit how hard your brain works until all of your symptoms have gone away.

Slowly returning to school is best. As a student, it can be hard for you to focus, remember and process information, which can affect how well you learn and perform at school. You and your school staff, including your teachers and guidance counselor, can work together to adjust your school work and school environment so you can gradually return to full school activities and performance.

Please share this information with your teacher!

Preparing to return to school

Return to school when your symptoms are gone or when you can go for longer periods of thinking without making your symptoms much worse.

Limit the following activities until symptoms have cleared:

- Reading.
- Using a computer, tablet or cell phone.
- Video gaming.
- Physical activity (e.g. gym class, sports, exercise).
- Walking or taking the bus (avoid noisy environments; a drive to school is a better option).
- Begin brief periods of reading or studying when your symptoms are better or go away (stop activity and rest if symptoms return).



I had a concussion, I need to ...

- SHARE my return to school plan with my teachers
- AVOID gym until I am symptom free

When you're back at school

- Have a contact person at school (e.g. guidance counselor, nurse) who can share information on your behalf about the injury (e.g. severity, necessary needs) with other teachers, the principal, etc.
- Talk to this person daily to discuss making changes at school as you need them.
- Know what you can handle, and attend core classes over non-core classes.
- If your symptoms come back while in the classroom, get help. REST is important and you might need to go to a quiet area at school to manage your symptoms, or go home.
- Try to avoid missing the same classes all the time.
- Avoid gym/physical activity until symptom free or you're approved by your doctor to participate.

RETURN TO PHYSICAL ACTIVITIES



Having a concussion and symptoms can make it difficult for you to go back to being physically active. It is critical that you are able to successfully return to school and social activities **before** returning to physical activity or sport.

Going back to activity or sport too soon before your brain recovers can:

- Slow down your recovery from your concussion.
- Affect how you perform during the activity.
- Put you at risk for another concussion and for a more serious injury.

This is why it is important for you to rest your brain and your body. Return to physical activity and sport gradually, slowly and as you feel ready.

Work with your doctor to return to activity or sport. Your return to activity or sport must be approved by your doctor.

- Share any symptoms you are experiencing as you return to physical activity with your doctor.
- Your doctor will help you decide on next steps, and help you modify your return to sport to ensure you are safe and comfortable at each level of activity before progressing to the next.
- Most importantly, listen to your body as you go through this process. If your symptoms worsen while being physically active, it is your body's way of telling you that you are not ready.

“If you are having new problems at school and your normal day to day life (i.e. your symptoms get worse) then you are not ready to return to sports. Your body and brain have to be ready to take on the added demand or risk.”

– DR. PETER RUMNEY



I had a concussion, I need to ...

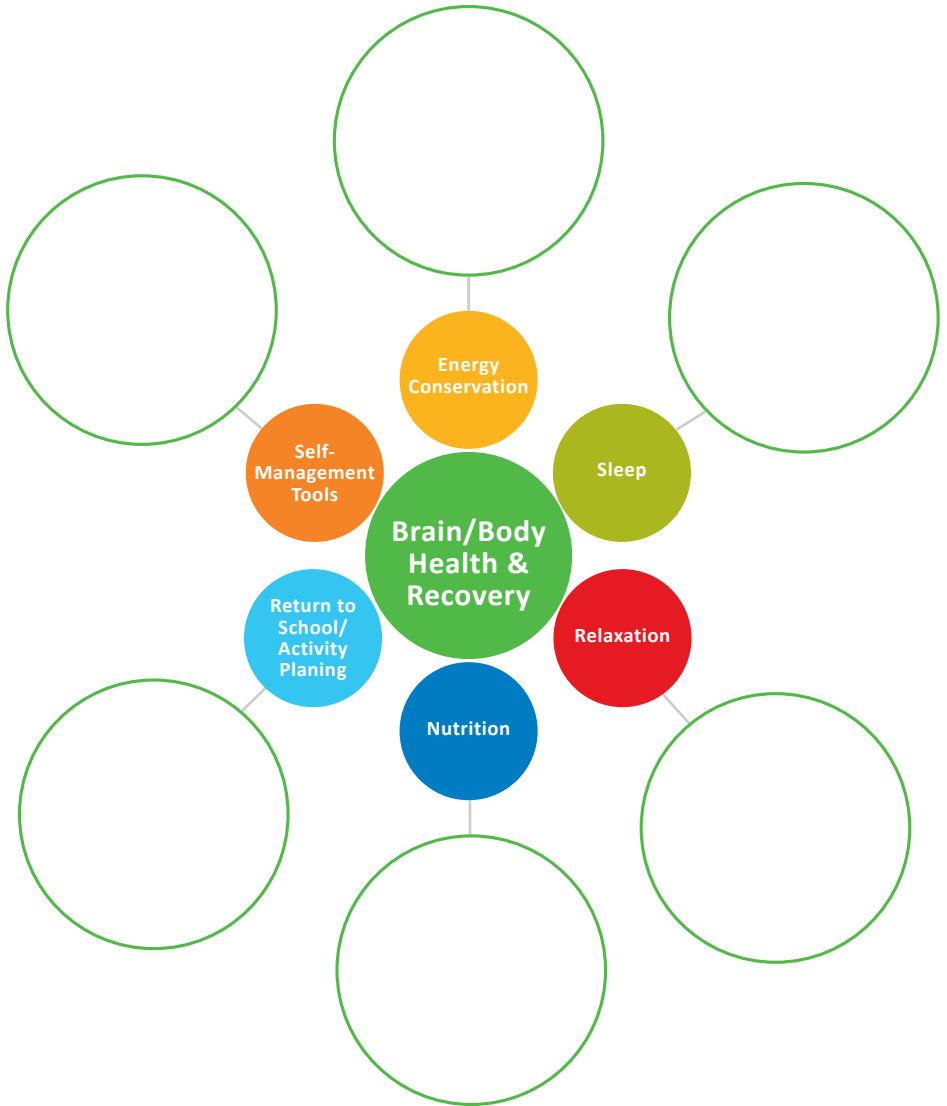
- WORK with my doctor on a return to sports plan
- MODIFY my activities to make sure I am safe
- SHARE my symptoms as I gradually return



SELF-MANAGEMENT
TOOLKIT

MAKE A PLAN. WHAT STRATEGIES WILL YOU USE?

Each of the six topics covered in this handbook are important for your brain, body health and recovery. Think of some strategies you could use for each topic and write them down in the circles. Setting goals, making a plan and regularly updating that plan to meet your needs will help you work towards a successful concussion recovery.



ENERGY CONSERVATION

Here is a list of questions that you should ask yourself when planning your daily activities and before performing a particular activity. Asking these questions will help to make sure you have enough energy to do the activities you need to throughout the day and to help your brain recover from the concussion.

Step 1

What is the activity?

Step 2

Apply the 4 P's

1. PRIORITIZE

Is the activity:

- Urgent (must be done today)
- Important (must be done in next few days)
- For later (must be done this week or month)
- Don't need to/can't do (think big picture - can it wait until you are feeling better)
- Can someone do it for you

2. PLANNING

When am I going to do the activity?

*Consider: energy levels, when feeling best, other activities during the day, etc.

3. PACING

How am I going to do the activity?

- *Consider:
- how your body feels (headaches, etc. = stop and rest)
 - can I do the activity over different stages?
 - can I break the activity down into easier steps

4. POSITIONING

Where am I going to do the activity?

What position will my body be in while I am doing the activity?

- *Consider:
- is the environment going to make me use more energy (distractions, stairs vs. escalator, etc.)
 - is my body position going to make me use more energy (standing vs. sitting, taking breaks to change body position, etc.)

Step 3

Evaluation of your plan and the activity

- did you perform the activity in a way that you are satisfied with?
- do you need to make changes to your plan to perform it differently?

For more information about energy conservation and the 4 P's, see page 8 & 9.

DAILY SCHEDULE AND ACTIVITY LOG

Planning out what you will do each day, and when you will do it, can help you make sure you don't take on too much too soon and that rest and relaxation are a priority within your daily routine. You can make your plan the night before and record what you actually did at the end of each day, including how what you did made you feel. This can help you organize your day and allow you to know what activities make you feel best.

Time	Planned Activities	Actual Activities	Post-concussion Symptoms
7:00 am-8:00 am			<input type="checkbox"/> No change: <input type="checkbox"/> up <input type="checkbox"/> down Primary symptoms:
8:00 am-9:00 am			<input type="checkbox"/> No change: <input type="checkbox"/> up <input type="checkbox"/> down Primary symptoms:
9:00 am-10:00 am			<input type="checkbox"/> No change: <input type="checkbox"/> up <input type="checkbox"/> down Primary symptoms:
10:00 am-11:00 am			<input type="checkbox"/> No change: <input type="checkbox"/> up <input type="checkbox"/> down Primary symptoms:
11:00 am-12:00 pm			<input type="checkbox"/> No change: <input type="checkbox"/> up <input type="checkbox"/> down Primary symptoms:
12:00 pm-1:00 pm			<input type="checkbox"/> No change: <input type="checkbox"/> up <input type="checkbox"/> down Primary symptoms:
1:00 pm-2:00 pm			<input type="checkbox"/> No change: <input type="checkbox"/> up <input type="checkbox"/> down Primary symptoms:
2:00 pm-3:00 pm			<input type="checkbox"/> No change: <input type="checkbox"/> up <input type="checkbox"/> down Primary symptoms:
3:00 pm-4:00 pm			<input type="checkbox"/> No change: <input type="checkbox"/> up <input type="checkbox"/> down Primary symptoms:
4:00 pm-5:00 pm			<input type="checkbox"/> No change: <input type="checkbox"/> up <input type="checkbox"/> down Primary symptoms:
5:00 pm-6:00 pm			<input type="checkbox"/> No change: <input type="checkbox"/> up <input type="checkbox"/> down Primary symptoms:
6:00 pm-7:00 pm			<input type="checkbox"/> No change: <input type="checkbox"/> up <input type="checkbox"/> down Primary symptoms:
7:00 pm-8:00 pm			<input type="checkbox"/> No change: <input type="checkbox"/> up <input type="checkbox"/> down Primary symptoms:
8:00 pm-9:00 pm			<input type="checkbox"/> No change: <input type="checkbox"/> up <input type="checkbox"/> down Primary symptoms:
9:00 pm-10:00 pm			<input type="checkbox"/> No change: <input type="checkbox"/> up <input type="checkbox"/> down Primary symptoms:

For more information on planning physical activity see page 9.

RETURN TO PLAY – PHYSICAL ACTIVITY LOG

After you successfully return to school and social activities, this Physical Activity Log can be used to help you slowly return to physical activity or sport. Log the type of activity (e.g. walking, running) and other details to know what your body can handle as you work towards returning to sports.

Date	Activity (Be specific)	Duration (Minutes)	Exertion (Scale 1-10)	Outcome
		___mins	___/10	<input type="checkbox"/> No rise in symptoms <input type="checkbox"/> Rise in symptoms <input type="checkbox"/> During; <input type="checkbox"/> After (how long after? _____) Which symptoms: Symptom 1: _____/6 Symptom 2: _____/6 Symptom 3: _____/6
Additional notes:				

Date	Activity (Be specific)	Duration (Minutes)	Exertion (Scale 1-10)	Outcome
		___mins	___/10	<input type="checkbox"/> No rise in symptoms <input type="checkbox"/> Rise in symptoms <input type="checkbox"/> During; <input type="checkbox"/> After (how long after? _____) Which symptoms: Symptom 1: _____/6 Symptom 2: _____/6 Symptom 3: _____/6
Additional notes:				

Date	Activity (Be specific)	Duration (Minutes)	Exertion (Scale 1-10)	Outcome
		___mins	___/10	<input type="checkbox"/> No rise in symptoms <input type="checkbox"/> Rise in symptoms <input type="checkbox"/> During; <input type="checkbox"/> After (how long after? _____) Which symptoms: Symptom 1: _____/6 Symptom 2: _____/6 Symptom 3: _____/6
Additional notes:				

For more information on return to physical activities see page 18.

NOTES

HELPFUL RESOURCES AND LINKS

As part of this handbook, we are including some helpful links and additional resources to help guide your return to daily activities, school, sport and work. The links and resources that we are providing you do not represent all of the valuable information that is available, but provides key sources that can help you in your recovery:

Holland Bloorview Kids Rehabilitation Hospital – Concussion Centre

Free concussion education sessions, groundbreaking research information, and information about Holland Bloorview's clinical services.
www.hollandbloorview.ca/concussion

Ontario Neurotrauma Foundation – Pediatric Concussion Guidelines

New, comprehensive pediatric concussion guideline. Holland Bloorview researchers and doctors contributed to the ONF guidelines:
<http://onf.org/>

Canadian Paediatric Society

Information for parents, coaches and trainers:
<http://www.caringforkids.cps.ca/>

Position Statement on Management of Children with Sport-Related Concussion

<http://www.cps.ca/en/documents/position/sport-related-concussion-evaluation-management>

CanChild

Mild Traumatic Brain Injury (Concussion) Education:
<https://canchild.ca/>

Centers for Disease Control and Prevention

Injury prevention and control - Traumatic Brain Injury: <http://www.cdc.gov/Concussion/>

Montreal Children's Hospital/McGill University Health Centre

Trauma concussion kit: <http://www.thechildren.com/>

Ontario Physical Health and Education (OPHEA)

Safety Guidelines: <http://safety.ophea.net/concussion-protocols>

Parachute

Concussion toolkit:
<http://www.parachutecanada.org/>

Children's National Medical Centre – Post-Concussion Symptom Inventory for Children

<https://childrensnational.org/>

Concussion Awareness Training Toolkit (CATT)

<http://www.cattonline.com/>

Kids Help Phone

1-800-668-6868
<http://org.kidshelpphone.ca/>

HANDBOOK DEVELOPMENT AND SOURCES

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Holland Bloorview

Holland Bloorview Kids Rehabilitation Hospital is Canada's largest children's rehabilitation hospital dedicated to improving the lives of children with disability. As a fully affiliated hospital with the University of Toronto, we are home to the Bloorview Research Institute and the Teaching and Learning Institute, allowing us to conduct transformational research and train the next generation of experts in childhood disability. For more information please visit www.hollandbloorview.ca

Bloorview Research Institute

The Bloorview Research Institute is dedicated to improving the lives of children with disabilities through client and family-centred rehabilitation research.

Located onsite at the Holland Bloorview Kids Rehabilitation Hospital, the Bloorview Research Institute is recognized in Canada and around the world for its unique client population and leadership in the field of childhood disability. The Research Institute brings together a multi-disciplinary team of scientists who work collaboratively with clinical staff, clients, and families to generate clinically-linked and applied pediatric rehabilitation research.

Concussion Centre

The Holland Bloorview Concussion Centre is one of the first in the world dedicated exclusively to pediatric concussion. Our centre includes clinicians specifically trained in pediatric brain injury and researchers who are leading experts in the field of youth concussion care, research, and education. The Concussion Centre is focused on getting kids back to doing what they need, want and love to do after sustaining a concussion.

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