



- An initial period of 24-48 hours of physical, cognitive and social rest should be completed before proceeding with the step-wise rehabilitation process.
- Each stage must take a minimum of 24 hours, but could last longer depending on the student and their specific situation.
- If the student experiences new or worsening symptoms at any specific stage, they should go back to the previous stage for at least 24 hours.
- The student may need to move back a stage more than once during their recovery process.

INITIAL REST PERIOD The objective of this stage is to ensure cognitive, physical and social rest for at least 24 hours

Cognitive Rest – includes avoiding all activities that require concentration and attention. (e.g., reading, texting, television, computer, video/electronic games).

Physical Rest – includes avoiding participation in activities that require physical effort (e.g., training, sports, recreational activities).

Social Rest - includes limiting social interactions that may elicit or worsen anxiety, nervousness, irritability, etc.

• Stay home in a quiet and calm environment and keep any social visits brief

• Acceptable exertion at this stage may include activities such as taking short phone calls, playing basic board games and completing simple arts and crafts projects.

• Avoid using alcohol, tobacco, caffeine and other stimulants

• Avoid driving until consulted by a healthcare professional

• Reminder: The parent/guardian must inform the school administration/designate of the results of the medical examination.



RETURN TO SCHOOL STRATEGY

A Daily Activities at Home

- The objective of this stage is to ensure a gradual return to typical activities at home
- Acceptable exertion at this stage may include additional activities such as drawing and easy reading.
- The student may gradually be reintroduced to cognitive activities by starting with 5 to 15 minutes at a time and gradually build to 15 to 30 minute sessions
- Avoid using computers, texting or playing mobile games on any electronic device
- Students should not complete any homework or attend school at this stage

B School Work at Home

- The objective of this stage is to increase the student's tolerance to cognitive work
- Acceptable exertion at this stage may include additional activities such as limited texting or computer use.
- The student may gradually be reintroduced to cognitive activities by building to the equivalent of 1 hour of school-type work in 30 minute increments or four 15 minute sessions.
- Avoid caffeine or other stimulant use.
- Students should not attend school at this stage. However, the parent/guardian should communicate with school administration/designate to prepare for the student's return to school.

C Back to School Part-time as an Observer

• **The student may proceed directly to Stage D, unless advised otherwise**

- The objective of this stage is to ensure a maximum usage of learning accommodations as needed which will help with the student's gradual cognitive recovery (e.g. avoiding noisy locations, modifying the lighting, repeating instructions, etc.).
- The student may begin with half a day at school, and increase gradually
- No music class, classroom evaluations or homework.

D Return to School Part-time

- The objective of this stage is to gradually increase academic activities with a moderate usage of personalized accommodations as needed for a gradual return to learn.
- The student may attend school part-time with the use of accommodations such as reducing the student's workload, extending deadlines to complete assignments and dividing assignments into smaller parts.
- The student should try to build their cognitive tolerance towards being able to complete 45-60 minute intervals of learning activities at school and 30 minutes of homework.
- No standardized tests, but the student may complete adapted classroom evaluations.

E Gradual Elimination of Accommodations

- **The student may proceed directly to Stage F, unless advised otherwise**
- The objective of this stage is to work towards a full day at school with minimal usage of learning accommodations.
- The student may gradually eliminate the use of learning accommodations at school as tolerated.
- The student may continue to complete adapted classroom evaluations.
- The student may also attempt to build their cognitive tolerance towards being able to complete 1 hour of homework.

F Return to School Full-time

- The objective of this stage is to gradually resume full academic activities and catch up on missed school work
- The student may return to full days at school with no learning accommodations (e.g. attend all classes, resume routine schoolwork/homework, resume all standardized tests, etc.).
- The student may also resume full extracurricular involvement for non-sport activities such as debating club, drama club or chess club.



RETURN TO SPORT/PHYSICAL ACTIVITY STRATEGY

1 Symptom-limited Activities

- The objective of this stage is to ensure a gradual reintroduction of daily activities that do not provoke symptoms
- The person may resume certain activities such as walking at a slow to medium pace and daily household tasks (e.g. meal preparation, doing dishes, doing the laundry) for short periods of time (15 to 20 minutes).
- Avoid intense physical exertion or sports

2 Light Aerobic Activity

- The objective of this stage is to increase the person's heart rate
- The person may resume certain activities such as jogging or stationary cycling at a slow to medium pace for short periods of time (up to 30 minutes).
- Avoid all resistance or weight training

3 Individual Physical Activity with No Contact

- The objective of this stage is to add movement to complete training drills individually.
- The person may progressively increase the intensity and duration of their workout (up to 60 minutes) with activities such as
 - Skating drills in hockey
 - Running drills in soccer
 - Shooting drills in basketball
- Avoid activities involving head impacts or jarring motions
- No full participation in physical education class.

4 Non-contact Training Drills

- The objective of this stage is to resume more complex training drills requiring greater coordination and an increased cognitive load (e.g. passing drills)
- The person may start progressive resistance training
- The person may participate in activities which involves high speed stops or sprinting
- Avoid activities involving body contact

A medical clearance is required before allowing for participation in unrestricted practice during full contact team practice or with activities involving a risk of collision and fall (moving to stage 5).

5 Unrestricted Practice

- The objective of this stage is to restore the person's confidence and assess their functional skills during practices
- The person may proceed with a full return to training (with or without teammates) which may include activities involving risks of collision, fall or contact.
- Avoid participation in any competitive activity

6 Return to Game-play and/or Competition

- The objective of this stage is to provide a continued assessment of the person's athletic performance
- The person may proceed with a full participation in any physical activity, practice, game or sport competition
- Avoid disrespecting the rules of the sport and bad sportsmanship

RECOMMENDED SEQUENCE FOR RESUMING ACTIVITIES AFTER A CONCUSSION

REST for at least 24 hours



RETURN TO SCHOOL STRATEGY



RETURN TO SPORT/PHYSICAL ACTIVITY STRATEGY

A Daily Activities at Home

B School Work at Home

C Back to School Part-time as an Observer

D Return to School Part-time

E Gradual Elimination of Accommodations

F Return to School Full-time

1 Symptom-limited activities

2 Light Aerobic Activity

3 Individual Physical Activity with No Contact

4 No-contact Training Drills

Medical Clearance

5 Unrestricted Practice

6 Return to Game-play and/or Competition

Students should not have any new or worsening symptoms at these stages

Students should not have any symptoms at these stages

These steps can be completed in parallel

RETURN TO SCHOOL GUIDELINES FOLLOWING A CONCUSSION DIAGNOSIS



NB Trauma Program
Programme de traumatologie du NB

Be aware and take care

For more information about the **Return to School and Return to Sport/Physical Activity Strategies**, please consult our available concussion resources by visiting us at www.NBTrauma.ca.

NB Trauma Program
Programme de traumatologie du NB

Horizon Health Network | Réseau de santé Horizon | Vitalité Health Network | Réseau de santé Vitalité | Ambulance NB | New Brunswick Department of Health | Ministère de la santé du Nouveau-Brunswick

[NBTraumaProgram](https://www.facebook.com/NBTraumaProgram) [@TraumaNB](https://twitter.com/TraumaNB)

What is a concussion?

A concussion is a type of traumatic 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 such a hit takes place, the brain twists or moves back and forth inside the skull. If this sudden movement is hard enough, the brain can become injured and can cause a variety of signs and symptoms.

When should I suspect a concussion?

A concussion can only be diagnosed by a physician or nurse practitioner. However, **ANYONE** may suspect a concussion if an injured person reports **ANY** symptoms or shows **ANY** signs after sustaining a hit to the head or body. For help in the identification of a suspected concussion, it is recommended that you use a concussion recognition tool such as the **Concussion Recognition Tool 5 (CRT5)** or the **Tool to Identify a Suspected Concussion**.

What should I do once I return home from the hospital?



Rest/Sleeping

Concussion symptoms tend to get worse with physical and mental exertion. This is why the most important initial treatment for a concussion is rest. The concussed person should not exercise, go to school or do any activities that may worsen symptoms, like riding a bike, texting or playing video games for at least 24 hours.

Sleep is important to the healing process, especially soon after the injury. It is recommended that any concussed person follow a good routine for sleep (Sleep Hygiene) in order to address this concern.

Surveillance



Concussion signs and symptoms may only appear or worsen hours or days after the injury. It is recommended that someone monitor the concussed person for the first 24 to 48 hours following the incident in order to identify any new or worsening signs and symptoms.

It is not necessary to wake a person up periodically following a concussion. Interrupting this rest can make the recovery more difficult. However, if you have any concerns about the person's breathing or how they are sleeping, you may wake them up. Otherwise, you should let them sleep.

Alcohol/Drugs



Do not use any recreational drugs. Alcohol, tobacco, caffeine and other stimulant use should also be avoided. Those substances may worsen signs and symptoms of concussion and interfere with the recovery process. In addition, you should not take any medications unless advised by your primary care provider.

Consulting your primary care provider



It is recommended that you contact your primary care provider (family physician or nurse practitioner) as soon as possible after receiving a concussion diagnosis in order to schedule a follow-up appointment. Follow their guidelines and report any new or ongoing symptoms during your conversation.

A concussed person should not drive or operate machinery without a medical clearance from their primary care provider.

When should I go back to seek immediate medical attention?

Sometimes serious problems may develop hours or days after a head injury. If you identify **ANY** new or worsening concussion signs or symptoms that are found in the list below, seek medical attention **IMMEDIATELY**.

You see:

- | | |
|--|---|
| <input type="checkbox"/> Vomiting | <input type="checkbox"/> Loss of consciousness |
| <input type="checkbox"/> Seizure or convulsion | <input type="checkbox"/> Increasingly agitated or combative |
| <input type="checkbox"/> Deteriorating conscious state | |

The student/player complains of:

- | | |
|--|---|
| <input type="checkbox"/> Neck pain or tenderness | <input type="checkbox"/> Double vision |
| <input type="checkbox"/> Severe or increasing headache | <input type="checkbox"/> Weakness or tingling/burning in arms or legs |

RED FLAGS

When can I return to regular activities?

Most people will fully recover following a concussion. However, it's important to remember that the necessary recovery time following a concussion is different for each person and can vary from days to weeks to months. Generally, concussion symptoms can last up to 4 weeks in youth under the age of 18 years old and 2 weeks in adults. Individuals may also need a longer time to proceed through each step of their progressive and individualized recovery strategy due to "modifying factors" of clinical recovery such as:

- Having had multiple concussions in the past
- Severity of initial symptoms in the first days
- History of mental health problems
- History of migraine headaches

How can I help with efforts to return to school?

When symptoms start to improve or after resting for two days maximum, you may begin a step-wise process to gradually increase cognitive activity at home. It is important to follow a medically supervised gradual Return-to-School Strategy, especially during the first few steps of the rehabilitation process. Once the student is ready to go back to school, they may require individualized classroom strategies and/or approaches to help address the possible difficulties that may be encountered when returning to learning activities. School attendance, after-school activities and homework may also need to be modified to avoid the possibility of triggering or worsening the signs and symptoms of concussion. It is recommended that you maintain open lines of communication with school administration and the designated school staff lead in order to ensure that the required academic accommodations are in place.

The **Return-to-School Strategy** provides information on each of the stages that are required for a gradual return to regular learning activities. Keep in mind that a return to school full-time with no learning accommodations and without any signs or symptoms of concussion (Stage F) must be completed before a return to certain physical activities.

How can I help with efforts to return to sport and/or physical activity?

Talk to your primary care provider about the steps involved in the individualized and gradual approach for a return to physical activity. Remember that physical education teachers, coaches and trainers also play an important role at this stage since they have an opportunity to observe and analyse the person's physical performance directly during their recovery process. Consult with them as much as needed to provide the most accurate information to your primary healthcare provider.

The **Return-to-Sport/Physical Activity Strategy** provides information on each of the stages that are required for a gradual return to regular physical activities. It is important to remember that certain steps of the Return-to-School and Return-to-Sport/Physical Activity Strategies can be done in parallel. However, the Return-to-School Strategy should be completed before starting Stage 5 of Return-to-Sport/Physical Activity Strategy. For more information, please consult the **Recommended Sequence for Resuming Activities after a Concussion** on the reverse side for this handout.

Why do I need to obtain a Medical Clearance?

It is dangerous for the brain to be injured again if it has not recovered from the first concussion. A repeat concussion may slow the recovery process and increase the likelihood of serious long-term problems such as Post-Concussion Syndrome (PCS), Second Impact Syndrome (SIS) and Chronic Traumatic Encephalopathy (CTE). In addition, a medical clearance is required for **ALL** students and/or athletes before they are allowed to return to Unrestricted Practice (Stage 5).

For more information about each step of the Return-to-School and Return-to-Sport/Physical Activity Strategy in addition to the Recommended Sequence for Resuming Activities, please consult the reverse side for this handout.

SIGNS AND SYMPTOMS OF A CONCUSSION

| Possible Signs Observed | Possible Symptoms Reported |
|---|--|
| A sign is something that is observed by another person (e.g. teacher, coach, supervisor, peer). | A symptom is something that the student reports. |
| Physical <ul style="list-style-type: none"> <input type="checkbox"/> Slurred speech <input type="checkbox"/> Poor coordination or balance <input type="checkbox"/> Dazed or vacant look <input type="checkbox"/> Motionless on the ground or slow to get up <input type="checkbox"/> Grabbing or clutching of the head Cognitive <ul style="list-style-type: none"> <input type="checkbox"/> Difficulty concentrating <input type="checkbox"/> Easily distracted <input type="checkbox"/> General confusion <input type="checkbox"/> Slowed reaction time (e.g. answering questions) Emotional/Behavioral <ul style="list-style-type: none"> <input type="checkbox"/> Strange or inappropriate emotions (e.g. laughing, crying, easily angered) Other: _____ | Physical <ul style="list-style-type: none"> <input type="checkbox"/> Headache <input type="checkbox"/> Ringing in the ears <input type="checkbox"/> Sensitivity to light or noise <input type="checkbox"/> Seeing stars, flashing lights <input type="checkbox"/> Fatigue or feeling tired <input type="checkbox"/> Balance problems or dizziness <input type="checkbox"/> Difficulty seeing or blurry / loss of vision <input type="checkbox"/> Feeling off / not right Cognitive <ul style="list-style-type: none"> <input type="checkbox"/> Difficulty concentrating or remembering <input type="checkbox"/> Slowed down, fatigue or low energy <input type="checkbox"/> Dazed or "in a fog" Emotional/Behavioral <ul style="list-style-type: none"> <input type="checkbox"/> Irritable, sad, more emotional than usual <input type="checkbox"/> Nervous, anxious, depressed Other: _____ |

IF ANY OBSERVED SIGNS OR REPORTED SYMPTOMS WORSEN, SEEK MEDICAL ATTENTION