Volleyball Canada has developed the Volleyball Canada Concussion Protocol to help guide the management of athletes who may have a suspected concussion as a result of participation in Volleyball Canada activities.

**Purpose**
This protocol covers the recognition, medical diagnosis, and management of ATHLETES who may sustain a suspected concussion during a sport activity. It aims to ensure that athletes with a suspected concussion receive timely and appropriate care and proper management to allow them to return back to their sport safely. This protocol may not address every possible clinical scenario that can occur during sport-related activities but includes critical elements based on the latest evidence and current expert consensus.

**Who should use this protocol?**
This protocol is intended for use by all individuals who interact with athletes inside and outside the context of school and non-school based organized sports activity, including athletes, parents, coaches, officials, teachers, trainers, and licensed healthcare professionals.

For a summary of the Volleyball Canada Concussion Protocol please refer to the Volleyball Canada Sport Concussion Pathway figure in Appendix A at the end of this document.

**1. Pre-Season Education**

Despite recent increased attention focusing on concussion there is a continued need to improve concussion education and awareness. Optimizing the prevention and management of concussion depends highly on annual education of all sport stakeholders (athletes, parents, coaches, officials, teachers, trainers, licensed healthcare professionals) on current evidence-informed approaches that can prevent concussion and more serious forms of head injury and help identify and manage an athlete with a suspected concussion.

Concussion education should include information on:
- the definition of concussion,
- possible mechanisms of injury,
- common signs and symptoms,
- steps that can be taken to prevent concussions and other injuries from occurring in sport.
- what to do when an athlete has suffered a suspected concussion or more serious head injury,
- what measures should be taken to ensure proper medical assessment,
- Return-to-School and Return-to-Sport Strategies, and
- Return to sport medical clearance requirements

- **Who:** Athletes, parents, coaches, officials, teachers, and trainers, licensed healthcare professionals
- **How:** Pre-season Concussion Education Sheet
All parents and athletes are required to review and submit a signed copy of the *Pre-season Concussion Education Sheet* to their coach prior to the first practice of the season. In addition to reviewing information on concussion, it is also important that all sport stakeholders have a clear understanding of the *Volleyball Canada Concussion Protocol*. For example, this can be accomplished through pre-season in-person orientation sessions for athletes, parents, coaches and other sport stakeholders.

2. Head Injury Recognition

Although the formal diagnosis of concussion should be made following a medical assessment, all sport stakeholders including athletes, parents, teachers, coaches, teachers, officials, and licensed healthcare professionals are responsible for the recognition and reporting of athletes who may demonstrate visual signs of a head injury or who report concussion-related symptoms. This is particularly important because many sport and recreation venues will not have access to on-site licensed healthcare professionals.

A concussion should be suspected:

- in any athlete 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*.
- if a player reports *ANY* concussion symptoms to one of their peers, parents, teachers, or coaches or if anyone witnesses an athlete exhibiting any of the visual signs of concussion.

In some cases, an athlete may demonstrate signs or symptoms of a more severe head or spine injury including convulsions, worsening headaches, vomiting or neck pain. If an athlete demonstrates any of the ‘Red Flags’ indicated by the *Concussion Recognition Tool 5*, a more severe head or spine injury should be suspected, and Emergency Medical Assessment should be pursued.

- **Who:** Athletes, parents, coaches, officials, teachers, trainers, and licensed healthcare professionals
- **How:** *Concussion Recognition Tool 5 (CRT5)* *(Appendix B)*

3. Onsite Medical Assessment

Depending on the suspected severity of the injury, an initial assessment may be completed by emergency medical professionals or by an on-site licensed healthcare professional where available. In cases where an athlete loses consciousness or it is suspected an athlete might have a more severe head or spine injury, Emergency Medical Assessment by emergency medical professionals should take place (see 3a below). If a more severe injury is not suspected, the athlete should undergo Sideline Medical Assessment or Medical Assessment, depending on if there is a licensed healthcare professional present (see 3b below).
3a. Emergency Medical Assessment

If an athlete is suspected of sustaining a more severe head or spine injury during a game or practice, an ambulance should be called immediately to transfer the patient to the nearest emergency department for further Medical Assessment.

Coaches, parents, teachers, trainers and officials should not make any effort to remove equipment or move the athlete until an ambulance has arrived and the athlete should not be left alone until the ambulance arrives. After the emergency medical services staff has completed the Emergency Medical Assessment, the athlete should be transferred to the nearest hospital for Medical Assessment. In the case of youth (under 18 years of age), the athlete’s parents should be contacted immediately to inform them of the athlete’s injury. For athletes over 18 years of age, their emergency contact person should be contacted if one has been provided.

- **Who:** Emergency medical professionals

3b. Sideline Medical Assessment

If an athlete is suspected of sustaining a concussion and there is no concern for a more serious head or spine injury, the player should be immediately removed from the field of play.

**Scenario 1: If a licensed healthcare professional is present**

The athlete should be taken to a quiet area and undergo Sideline Medical Assessment using the Sport Concussion Assessment Tool 5 (SCAT5) or the Child SCAT5. The SCAT5 and Child SCAT5 are clinical tools that should only be used by a licensed healthcare professional that has experience using these tools. It is important to note that the results of SCAT5 and Child SCAT5 testing can be normal in the setting of acute concussion. As such, these tools can be used by licensed healthcare professionals to document initial neurological status but should not be used to make sideline return-to-sport decisions in youth athletes. Any youth athlete who is suspected of having sustained a concussion must not return to the game or practice and must be referred for Medical Assessment.

If a youth athlete is removed from play following a significant impact and has undergone assessment by a licensed healthcare professional, but there are NO visual signs of a concussion and the athlete reports NO concussion symptoms then the athlete can be returned to play but should be monitored for delayed symptoms.

In the case of national team-affiliated athletes (age 18 years and older), an experienced certified athletic therapist, physiotherapist or medical doctor providing medical coverage for the sporting event may make the determination that a concussion has not occurred based on the results of the Sideline Medical Assessment. In these cases, the athlete may be returned to the practice or game without a *Medical Clearance Letter* but this should be clearly communicated to the coaching staff. Players that have been cleared to return to games or practices should be monitored for delayed symptoms. If the athlete develops any delayed symptoms the athlete should be removed from play and undergo medical assessment by a medical doctor or nurse practitioner.
Scenario 2: If there is no licensed healthcare professional present
The athlete should be referred immediately for medical assessment by a medical doctor or nurse practitioner, and the athlete must not return to play until receiving medical clearance.

- **Who:** Athletic therapists, physiotherapists, medical doctor
- **How:** *Sport Concussion Assessment Tool 5 (SCATS), Child Sport Concussion Assessment Tool 5 (Child SCATS)*

4. Medical Assessment

In order to provide comprehensive evaluation of athletes with a suspected concussion, the medical assessment must rule out more serious forms of traumatic brain and spine injuries, must rule out medical and neurological conditions that can present with concussion-like symptoms, and must make the diagnosis of concussion based on findings of the clinical history and physical examination and the evidence-based use of adjunctive tests as indicated (i.e. CT scan). In addition to nurse practitioners, medical doctors\(^1\) that are qualified to evaluate patients with a suspected concussion include: pediatricians; family medicine, sports medicine, emergency department, internal medicine, and rehabilitation (physiatrists) physicians; neurologists; and neurosurgeons.

In geographic regions of Canada with limited access to medical doctors (i.e. rural or northern communities), a licensed healthcare professional (i.e. nurse) with pre-arranged access to a medical doctor or nurse practitioner can facilitate this role. The medical assessment is responsible for determining whether the athlete has been diagnosed with a concussion or not. Athletes with a diagnosed concussion should be provided with a *Medical Assessment Letter* indicating a concussion has been diagnosed. Athletes that are determined to have not sustained a concussion must be provided with a *Medical Assessment Letter* indicating a concussion has not been diagnosed and the athlete can return to school, work and sports activities without restriction.

- **Who:** Medical doctor, nurse practitioner, nurse
- **How:** *Medical Assessment Letter (Appendix C)*

5. Concussion Management

When an athlete has been diagnosed with a concussion, it is important that the athlete’s parent/legal guardian is informed. All athletes diagnosed with a concussion must be provided with a standardized *Medical Assessment Letter* that notifies the athlete and their parents/legal guardians/spouse that they have been diagnosed with a concussion and may not return to any activities with a risk of concussion until medically cleared to do so by a medical doctor or nurse practitioner. Because the *Medical Assessment Letter* contains personal health information, it is the responsibility of the athlete or their parent/legal guardian to provide this documentation to the athlete’s coaches, teachers, or employers. It is also important for the athlete to provide this

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\(^1\) Medical doctors and nurse practitioners are the only healthcare professionals in Canada with licensed training and expertise to meet these needs; therefore all athletes with a suspected concussion should undergo evaluation by one of these professionals.
information to sport organization officials that are responsible for injury reporting and concussion surveillance where applicable.

Athletes diagnosed with a concussion should be provided with education about the signs and symptoms of concussion, strategies about how to manage their symptoms, the risks of returning to sport without medical clearance and recommendations regarding a gradual return to school and sport activities. Athletes diagnosed with a concussion are to be managed according to their Return-to-School and Sport-Specific Return-to-Sport Strategy under the supervision of a medical doctor or nurse practitioner. When available, athletes should be encouraged to work with the team athletic therapist or physiotherapist to optimize progression through their Sport-Specific Return-to-Sport Strategy. Once the athlete has completed their Return-to-School and Sport-Specific Return-to-Sport Strategy and are deemed to be clinically recovered from their concussion, the medical doctor or nurse practitioner can consider the athlete for a return to full sports activities and issue a Medical Clearance Letter.

The stepwise progressions for Return-to-School and Return-to-Sport Strategies are outlined below. As indicated in stage 1 of the Return-to-Sport Strategy, reintroduction of daily, school, and work activities using the Return-to-School Strategy must precede return to sport participation.

5a. Return-to-School Strategy

The following is an outline of the Return-to-School Strategy that should be used to help student-athletes, parents, and teachers to collaborate in allowing the athlete to make a gradual return to school activities. Depending on the severity and type of the symptoms present student-athletes will progress through the following stages at different rates. If the student-athlete experiences new symptoms or worsening symptoms at any stage, they should go back to the previous stage. Athletes should also be encouraged to ask their school if they have a school-specific Return-to-Learn Program in place to help student-athletes make a gradual return to school.

<table>
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<td>1</td>
<td>Daily activities at home that do not give the student-athlete symptoms</td>
<td>Typical activities during the day as long as they do not increase symptoms (i.e. reading, texting, screen time). Start at 5-15 minutes at a time and gradually build up.</td>
<td>Gradual return to typical activities</td>
</tr>
<tr>
<td>2</td>
<td>School activities</td>
<td>Homework, reading or other cognitive activities outside of the classroom.</td>
<td>Increase tolerance to cognitive work</td>
</tr>
<tr>
<td>3</td>
<td>Return to school part-time</td>
<td>Gradual introduction of schoolwork. May need to start with a partial school day or with increased breaks during the day.</td>
<td>Increase academic activities</td>
</tr>
<tr>
<td>4</td>
<td>Return to school full-time</td>
<td>Gradually progress</td>
<td>Return to full academic activities and catch up on missed school work</td>
</tr>
</tbody>
</table>
5b. Volleyball-Specific Return-to-Sport Strategy

The following is an outline of the Return-to-Sport Strategy that should be used to help athletes, coaches, trainers, and medical professionals to partner in allowing the athlete to make a gradual return to sport activities. An initial period of 24-48 hours of rest is recommended before starting the Volleyball-Specific Return-to-Sport Strategy. If the athlete experiences new symptoms or worsening symptoms at any stage, they should go back to the previous stage. It is important that youth and adult student-athletes return to full-time school activities before progressing to stage 5 and 6 of the Volleyball-Specific Return-to-Sport Strategy. It is also important that all athletes provide their coach with a Medical Clearance Letter prior to returning to full contact sport activities.

<table>
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<th>Stage</th>
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<tbody>
<tr>
<td>1</td>
<td>Symptom-limiting activity</td>
<td>Daily activities that do not provoke symptoms</td>
<td>Gradual re-introduction of work/school activities</td>
</tr>
<tr>
<td>2</td>
<td>Light aerobic activity</td>
<td>Walking or stationary cycling at slow to medium pace. No resistance training - Light intensity jogging or stationary cycling for 15-20 minutes at sub-symptom threshold intensity. - Volleyball specific warm-up and cool-down</td>
<td>Increase heart rate</td>
</tr>
<tr>
<td>3</td>
<td>Sport-specific exercise</td>
<td>Running drills. No head impact activities - Moderate intensity jogging for 30-60 minutes at sub-symptom threshold intensity - Low to moderate impact passing, standing serves, setting, and agility drills</td>
<td>Add movement</td>
</tr>
<tr>
<td>4</td>
<td>Non-contact training drills</td>
<td>Harder training drills, i.e. passing drills. May start progressive resistance training - Participation in high intensity running and drills - High intensity practice without risk of receiving hard driven spikes to the head - Participation in resistance training work-outs</td>
<td>Exercise, coordination and increased thinking</td>
</tr>
<tr>
<td>5</td>
<td>Full contact practice</td>
<td>Following medical clearance - Participation in full practice without activity restriction</td>
<td>Restore confidence and assess functional skills by coaching staff</td>
</tr>
<tr>
<td>6</td>
<td>Return to sport</td>
<td>Normal game play</td>
<td></td>
</tr>
</tbody>
</table>

**Who:** Medical doctor, nurse practitioner and team athletic therapist or physiotherapist (where available)

**How:** Return-to-Learn Strategy, Sport-Specific Return-to Sport Strategy, Medical Assessment Letter (Appendix C)

6. Multidisciplinary Concussion Care

Most athletes who sustain a concussion while participating in sport will make a complete recovery and be able to return to full school and sport activities within 1-4 weeks of injury. However, approximately 15-30% of individuals will experience symptoms that persist beyond this time frame. If available, individuals who experience persistent post-concussion symptoms (>4 weeks for youth athletes, >2 weeks for adult athletes) may benefit from referral to a medically supervised
multidisciplinary concussion clinic that has access to professionals with licensed training in traumatic brain injury that may include experts in sport medicine, neuropsychology, physiotherapy, occupational therapy, neurology, neurosurgery, and rehabilitation medicine.

Referral to a multidisciplinary clinic for assessment should be made on an individualized basis at the discretion of an athlete’s medical doctor or nurse practitioner. If access to a multidisciplinary concussion clinic is not available, a referral to a medical doctor with clinical training and experience in concussion (e.g. a sport medicine physician, neurologist, or rehabilitation medicine physician) should be considered for the purposes of developing an individualized treatment plan. Depending on the clinical presentation of the individual, this treatment plan may involve a variety of health care professionals with areas of expertise that address the specific needs of the athlete based on the assessment findings.

- **Who:** Multidisciplinary medical team, medical doctor with clinical training and experience in concussion (e.g. a sports medicine physician, neurologist, or rehabilitation medicine physician), licensed healthcare professionals

7. Return to Sport

Athletes who have been determined to have not sustained a concussion and those that have been diagnosed with a concussion and have successfully completed their *Return-to-School and Volleyball-Specific Return-to-Sport Strategy* can be considered for return to full sports activities. The final decision to medically clear an athlete to return to full game activity should be based on the clinical judgment of the medical doctor or nurse practitioner taking into account the athlete’s past medical history, clinical history, physical examination findings and the results of other tests and clinical consultations where indicated (i.e. neuropsychological testing, diagnostic imaging). Prior to returning to full contact practice and game play, each athlete that has been diagnosed with a concussion must provide their coach with a standardized *Medical Clearance Letter* that specifies that a medical doctor or nurse practitioner has personally evaluated the patient and has cleared the athlete to return to sports. In geographic regions of Canada with limited access to medical doctors (i.e. rural or northern communities), a licensed healthcare professional (such as a nurse) with pre-arranged access to a medical doctor or nurse practitioner can provide this documentation. A copy of the *Medical Clearance Letter* should also be submitted to sports organization officials that have injury reporting and surveillance programs where applicable.

Athletes who have been provided with a *Medical Clearance Letter* may return to full sport activities as tolerated. If the athlete experiences any new concussion-like symptoms while returning to play, they should be instructed to stop playing immediately, notify their parents, coaches, trainer or teachers, and undergo follow-up *Medical Assessment*. In the event that the athlete sustains a new suspected concussion, the *Volleyball Canada Concussion Protocol* should be followed as outlined here.

- **Who:** Medical doctor, nurse practitioner
- **Document:** *Medical Clearance Letter (Appendix D)*
LIST OF APPENDICES

Appendix A. Volleyball Canada Concussion Pathway.

Appendix B. Concussion Recognition Tool 5.

Appendix C. Medical Assessment Letter.

Appendix D. Medical Clearance Letter.
1. Pre-Season Education
   - **Who:** Athletes, parents, coaches, officials, trainers, teachers, healthcare professionals
   - **How:** Pre-season Education Sheet

   Impact to the head, face, neck or body
   → Head injury is suspected

2. Head Injury Recognition
   - **Who:** Athletes, parents, coaches, officials, trainers, teachers, healthcare professionals
   - **How:** Concussion Recognition Tool S (CRTS)

   Is a more serious head or spine injury suspected?
   3A. Emergency Medical Assessment
      - **Who:** Emergency medical personnel

   Remove from play
   → Is a licensed healthcare professional present?
   3B. Sideline Assessment
      - **Who:** Athletic therapist, physiotherapist, medical doctor
      - **How:** SCATS, Child SCATS

   Is a concussion suspected?

4. Medical Assessment
   - **Who:** Medical doctor, nurse practitioner
   - **How:** Medical Assessment Letter

   Was a concussion diagnosed?
   → Yes: Concussion Management
   → No: Return to Sport Medical Clearance

5. Concussion Management
   - **Who:** Medical doctor, nurse practitioner, and team athletic therapist or physiotherapist
   - **How:** Return-to-School Strategy, Sport-Specific Return-to-Sport Strategy

   Does the athlete have persistent symptoms?*
   6. Multidisciplinary Concussion Care
      - **Who:** Multidisciplinary medical team, medical doctor with clinical training and experience in concussion, licensed healthcare professionals

   7. Return to Sport Medical Clearance
      - **Who:** Medical doctor, nurse practitioner
      - **How:** Medical Clearance Letter

*Persistent symptoms: lasting > 4 weeks in children & youth or > 2 weeks in adults
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 dizziness
- Burning in arms or legs
- Nausea or vomiting
- Headache, more severe or increasing
- Drowsiness
- Dizziness
- Bothering or confusing headache
- Severe or increasing headache
- Nausea or vomiting
- Loss of consciousness
- Disorientation or confusion, or an inability to respond appropriately to questions
- Blurred vision
- Sensitivity to light
- Balance problems
- Sensitivity to noise
- Dizziness
- "Don't feel right"
- Fatigue or low energy
- Nervous or anxious
- Neck Pain
- Difficulty concentrating
- Difficulty remembering
- Feeling slowed down
- Feeling like "in a fog"

Remember:
- In all cases, the basic principles of first aid (danger, response, airway, breathing, circulation) should be followed.
- Assessment for a spinal cord injury is critical.
- 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
- Blank or vacant look
- Balance, gait difficulties, motor incoordination, stumbling, slow laboured movements
- Facial injury after head trauma

STEP 3: SYMPTOMS

- Headache
- "Pressure in head"
- Balance problems
- Nausea or vomiting
- Drowsiness
- Dizziness
- Blurred vision
- Sensitivity to light
- More emotional
- More irritable
- Sadness
- Nervous or anxious
- Fatigue or low energy
- 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 ball is it now?"
- "Did your team win the last game?"
- "What team did you play last week/game?"
- "Who scored last in this game?"
- "What team are we playing next?"
- "What does your team uniform look like?"
- "Who are the other teams in our league?"
- "What is your team called?"
- "What is your team's slogan?"
- "Who are your team's main sponsors?"

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.

The CRT5 may be freely copied in its current form for distribution to individuals, teams, groups and organisations. Any revision and any reproduction in a digital form requires approval by the Concussion in Sport Group. It should not be altered in any way, rebranded or sold for commercial gain.

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
Medical Assessment Letter

Date: ____________________________  Athlete’s Name: ________________________________

To whom it may concern,

Athletes who sustain a suspected concussion should be managed according to the Canadian Guideline on Concussion in Sport. Accordingly, I have personally completed a Medical Assessment on this patient.

Results of Medical Assessment

☐ This patient has not been diagnosed with a concussion and can resume full participation in school, work, and sport activities without restriction.

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

__________________________________________________________

__________________________________________________________

☐ This patient has been diagnosed with a concussion.

The goal of concussion management is to allow complete recovery of the patient’s concussion by promoting a safe and gradual return to school and sport activities. The patient has been instructed to avoid all recreational and organized sports or activities that could potentially place them at risk of another concussion or head injury. Starting on _____________(date), I would ask that the patient be allowed to participate in school and low-risk physical activities as tolerated and only at a level that does not bring on or worsen their concussion symptoms. The above patient should not return to any full contact practices or games until the coach has been provided with a Medical Clearance Letter provided by a medical doctor or nurse practitioner in accordance with the Canadian Guideline on Concussion in Sport.

Other comments:

__________________________________________________________

__________________________________________________________

Thank-you very much in advance for your understanding.

Name ____________________________  Designation:  M.D. / N.P. (circle appropriate)

Signature __________________________

*In rural or northern regions, the Medical Assessment Letter may be completed by a nurse with pre-arranged access to a medical doctor or nurse practitioner. Forms completed by other licensed healthcare professionals should not otherwise be accepted.

We recommend that this document be provided to the athlete without charge.

Canadian Guideline on Concussion in Sport  |  Medical Assessment Letter
www.parachutecanada.org/Guideline
Return-to-School Strategy

The following is an outline of the Return-to-School Strategy that should be used to help student-athletes, parents, and teachers to partner in allowing the athlete to make a gradual return to school activities. Depending on the severity and type of the symptoms present, student-athletes will progress through the following stages at different rates. If the student-athlete experiences new symptoms or worsening symptoms at any stage, they should go back to the previous stage.

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<td>Typical activities during the day as long as they do not increase symptoms (i.e. reading, texting, screen time). Start at 5-15 minutes at a time and gradually build up.</td>
<td>Gradual return to typical activities.</td>
</tr>
<tr>
<td>2</td>
<td>School activities</td>
<td>Homework, reading or other cognitive activities outside of the classroom.</td>
<td>Increase tolerance to cognitive work.</td>
</tr>
<tr>
<td>3</td>
<td>Return to school part-time</td>
<td>Gradual introduction of schoolwork. May need to start with a partial school day or with increased breaks during the day.</td>
<td>Increase academic activities.</td>
</tr>
<tr>
<td>4</td>
<td>Return to school full-time</td>
<td>Gradually progress.</td>
<td>Return to full academic activities and catch up on missed school work.</td>
</tr>
</tbody>
</table>

Sport-Specific Return-to-Sport Strategy

The following is an outline of the Return-to-Sport Strategy that should be used to help athletes, coaches, trainers, and medical professionals to partner in allowing the athlete to make a gradual return to sport activities. Activities should be tailored to create a sport-specific strategy that helps the athlete return to their respective sport.

An initial period of 24-48 hours of rest is recommended before starting their Sport-Specific Return-to-Sport Strategy. If the athlete experiences new symptoms or worsening symptoms at any stage, they should go back to the previous stage. It is important that youth and adult student-athletes return to full-time school activities before progressing to stage 5 and 6 of the Sport-Specific Return-to-Sport Strategy. It is also important that all athletes provide their coach with a Medical Clearance Letter prior to returning to full contact sport activities.

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<td>Symptom-limiting activity</td>
<td>Daily activities that do not provoke symptoms.</td>
<td>Gradual re-introduction of work/school activities.</td>
</tr>
<tr>
<td>2</td>
<td>Light aerobic activity</td>
<td>Walking or stationary cycling at slow to medium pace. No resistance training.</td>
<td>Increase heart rate.</td>
</tr>
<tr>
<td>3</td>
<td>Sport-specific exercise</td>
<td>Running drills. No head impact activities.</td>
<td>Add movement.</td>
</tr>
<tr>
<td>4</td>
<td>Non-contact training drills</td>
<td>Harder training drills, e.g. passing drills. May start progressive resistance training.</td>
<td>Exercise, coordination and increased thinking.</td>
</tr>
<tr>
<td>5</td>
<td>Full contact practice</td>
<td>Following medical clearance and complete return to school.</td>
<td>Restore confidence and assess functional skills by coaching staff.</td>
</tr>
<tr>
<td>6</td>
<td>Return to sport</td>
<td>Normal game play.</td>
<td></td>
</tr>
</tbody>
</table>

Medical Clearance Letter

Date: ________________________ Athlete’s Name: ______________________________________

To whom it may concern,

Athletes who are diagnosed with a concussion should be managed according to the Canadian Guideline on Concussion in Sport including the Return-to-School and Return-to-Sport Strategies (see page 2 of this letter). Accordingly, the above athlete has been medically cleared to participate in the following activities as tolerated effective the date stated above (please check all that apply):

☐ Symptom-limiting activity (cognitive and physical activities that don’t provoke symptoms)
☐ Light aerobic activity (Walking or stationary cycling at slow to medium pace. No resistance training)
☐ Sport-specific exercise (Running drills. No head impact activities)
☐ Non-contact practice (Harder training drills, e.g. passing drills. May start progressive resistance training. Including gym class activities without a risk of contact, e.g. tennis, running, swimming)
☐ Full-contact practice (Including gym class activities with risk of contact and head impact, e.g. soccer, dodgeball, basketball)
☐ Full game play

What if symptoms recur? Any athlete who has been cleared for physical activities, gym class or non-contact practice, and who has a recurrence of symptoms, should immediately remove himself or herself from the activity and inform the teacher or coach. If the symptoms subside, the athlete may continue to participate in these activities as tolerated.

Athletes who have been cleared for full contact practice or game play must be able to participate in full-time school (or normal cognitive activity) as well as high intensity resistance and endurance exercise (including non-contact practice) without symptom recurrence. Any athlete who has been cleared for full-contact practice or full game play and has a recurrence of symptoms, should immediately remove himself or herself from play, inform their teacher or coach, and undergo medical assessment by a medical doctor or nurse practitioner before returning to full-contact practice or games.

Any athlete who returns to practices or games and sustains a new suspected concussion should be managed according to the Canadian Guideline on Concussion in Sport.

Other comments:

__________________________________________________________________________

__________________________________________________________________________

Thank-you very much in advance for your understanding.

Name ___________________________ Designation: M.D. / N.P. (circle appropriate)

Signature ____________________________________________

*In rural or northern regions, the Medical Clearance Letter may be completed by a nurse with pre-arranged access to a medical doctor or nurse practitioner. Forms completed by other licensed healthcare professionals should not otherwise be accepted.

We recommend that this document be provided to the athlete without charge.

Canadian Guideline on Concussion in Sport | Medical Clearance Letter
www.parachutecanada.org/guideline
Return-to-School Strategy

The following is an outline of the Return-to-School Strategy that should be used to help student-athletes, parents, and teachers to partner in allowing the athlete to make a gradual return to school activities. Depending on the severity and type of the symptoms present, student-athletes will progress through the following stages at different rates. If the student-athlete experiences new symptoms or worsening symptoms at any stage, they should go back to the previous stage.

<table>
<thead>
<tr>
<th>Stage</th>
<th>Aim</th>
<th>Activity</th>
<th>Goal of each step</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Daily activities at home that do not give the student-athlete symptoms</td>
<td>Typical activities during the day as long as they do not increase symptoms (i.e. reading, texting, screen time). Start at 5-15 minutes at a time and gradually build up.</td>
<td>Gradual return to typical activities.</td>
</tr>
<tr>
<td>2</td>
<td>School activities</td>
<td>Homework, reading or other cognitive activities outside of the classroom.</td>
<td>Increase tolerance to cognitive work.</td>
</tr>
<tr>
<td>3</td>
<td>Return to school part-time</td>
<td>Gradual introduction of schoolwork. May need to start with a partial school day or with increased breaks during the day.</td>
<td>Increase academic activities.</td>
</tr>
<tr>
<td>4</td>
<td>Return to school full-time</td>
<td>Gradually progress.</td>
<td>Return to full academic activities and catch up on missed school work.</td>
</tr>
</tbody>
</table>

Sport-Specific Return-to-Sport Strategy

The following is an outline of the Return-to-Sport Strategy that should be used to help athletes, coaches, trainers, and medical professionals to partner in allowing the athlete to make a gradual return to sport activities. Activities should be tailored to create a sport-specific strategy that helps the athlete return to their respective sport.

An initial period of 24-48 hours of rest is recommended before starting their Sport-Specific Return-to-Sport Strategy. If the athlete experiences new symptoms or worsening symptoms at any stage, they should go back to the previous stage. It is important that youth and adult student-athletes return to full-time school activities before progressing to stage 5 and 6 of the Sport-Specific Return-to-Sport Strategy. It is also important that all athletes provide their coach with a Medical Clearance Letter prior to returning to full contact sport activities.

<table>
<thead>
<tr>
<th>Stage</th>
<th>Aim</th>
<th>Activity</th>
<th>Goal of each step</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Symptom-limiting activity</td>
<td>Daily activities that do not provoke symptoms.</td>
<td>Gradual re-introduction of work/school activities.</td>
</tr>
<tr>
<td>2</td>
<td>Light aerobic activity</td>
<td>Walking or stationary cycling at slow to medium pace. No resistance training.</td>
<td>Increase heart rate.</td>
</tr>
<tr>
<td>3</td>
<td>Sport-specific exercise</td>
<td>Running drills. No head impact activities.</td>
<td>Add movement.</td>
</tr>
<tr>
<td>4</td>
<td>Non-contact training drills</td>
<td>Harder training drills, e.g. passing drills. May start progressive resistance training.</td>
<td>Exercise, coordination and increased thinking.</td>
</tr>
<tr>
<td>5</td>
<td>Full contact practice</td>
<td>Following medical clearance and complete return to school.</td>
<td>Restore confidence and assess functional skills by coaching staff.</td>
</tr>
<tr>
<td>6</td>
<td>Return to sport</td>
<td>Normal game play.</td>
<td></td>
</tr>
</tbody>
</table>