



# **CONCUSSION POLICY**

The following policy has been adapted from the Softball Canada Concussion Protocol to help guide the management of athletes who may have a suspected concussion as a result of participation in Softball NB activities.

## **Purpose**

1. This protocol covers the recognition, medical diagnosis, and management of Softball NB participants who may sustain a suspected concussion during a Softball NB 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 Softball NB Activity but includes critical elements based on the latest evidence and current expert consensus.

#### Who Should use this Protocol

2. This protocol is intended for use by all individuals who interact with athletes inside and outside the context of Softball Canada Activity, including athletes, parents, coaches, officials, trainers, and licensed healthcare professionals.

#### **Concussion Overview**

- 3. A concussion is a type of traumatic brain injury that can have serious effects particularly on a young, developing brain. While most individuals with concussions recover quickly and fully, some will have concussion symptoms that last for days, weeks, months even years. These may include changes in how an individual thinks, feels, and acts, as well as their ability to learn and remember. While rare, a repeat concussion can result in brain swelling or permanent brain damage. Concussions should be treated on a case by case basis, as no two concussions are the same.
- 4. A brain injury that causes change in how the brain functions, leading to symptoms that can be physical (e.g. headaches, dizziness), cognitive (e.g. difficulty concentrating or remembering), emotional/behavioral (e.g. depression/irritability), and/or related to sleep (e.g. drowsiness, difficulty falling asleep).
- 5. May be caused by either a direct blow to the head, face or neck, or blow to the body that transmits a force to the head that causes the brain to move rapidly in the skull.
- 6. Can occur even if there is no loss of consciousness and cannot normally be seen on x-rays, standard CT scans or MRIs.

## **Pre-Season Education**

1. 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 Softball Canada Stakeholders (athletes, parents, coaches, officials, 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.

- 2. Concussion education should include information on:
  - a. the definition of concussion,
  - b. possible mechanisms of injury (MOI),
  - c. common signs and symptoms,
  - d. steps that can be taken to prevent concussions and other injuries from occurring in sport,
  - e. what to do when an athlete has suffered a suspected concussion or more serious head injury,
  - f. what measures should be taken to ensure proper medical assessment,
  - g. Return-to-School and Return-to-Sport Strategies, and
  - h. Return to sport medical clearance requirements
- 3. All parents and athletes are encouraged to review the Pre-season Concussion Education Sheet with their coach prior to the first practice of the season (some associations, if this policy has been adopted by an association, may require athletes and parents to review and submit a signed copy). In addition to reviewing information on concussion, it is also important that all Softball NB Stakeholders have a clear understanding of the Softball NB Concussion Protocol. For example, this can be accomplished through pre-season in-person orientation sessions for Softball NB Stakeholders.
  - a. Softball Canada Pre-Season Concussion Education Sheet

#### **Head Injury Recognition**

- Although the formal diagnosis of concussion should be made following a medical assessment, all Softball NB Stakeholders 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.
- 2. A concussion should be suspected:
  - a. 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 Sport Concussion Recognition Tool 6.
  - If an athlete 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.
- 3. 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 Sport Concussion Recognition Tool 6, a more severe head or spine injury should be suspected, and Emergency Medical Assessment should be pursued.





## Procedure: Steps and Responsibilities in Suspected or Diagnosed Concussions Initial Response

- 1. Unconscious Athlete
  - a. Stop the activity immediately assume concussion.
  - b. Initiate Emergency Action Plan and call 911. Assume a neck injury. Only if properly trained, immobilize the athlete. DO NOT move athletes or remove equipment unless there is difficulty breathing.
  - c. Remain with the athlete until emergency medical help arrives.
  - d. Contact athlete's parent/guardian (or emergency contact) to inform of the incident a
  - e. that emergency medical help has been contacted.
  - f. Monitor athlete and document any changes (physical, cognitive, emotional/behavioral)
  - g. If an athlete regains consciousness, encourage the athlete to remain calm and still. Do not administer any medication (unless the athlete requires medication for other conditions i.e. insulin).
  - *h.* Complete the <u>Suspected Concussion Identification Tool 6</u>. Provide duplicate copy to parent/guardian as soon as possible.
  - *i.* Forward <u>Suspected Concussion Identification Tool 6</u> to the appropriate organizations (local association, Provincial/Territorial Association or Softball Canada).
  - j. Indicate to the athlete and their parent/guardian (if applicable), they shall not participate in any physical activities until the parent/guardian communicates the results of a medical examination to all required parties.
  - *k.* Complete an Injury Reporting Form (Appendix A) for documentation following the incident and upon the athletes return to activity.
- 2. Conscious Athlete but Concussion is Suspected
  - a. Stop the activity immediately.
  - b. When safe to do so, remove the athlete from current activity/game.
  - c. Initiate Emergency Action Plan as laid out by the coach.
  - d. Conduct an initial assessment using the Suspected Concussion Identification Tool 6
  - e. Do not allow an athlete to return to play in the activity, game or practice that day even if the athlete states he/she is feeling better.
  - f. Contact the athlete's parent/guardian (or emergency contact) to inform them:
    - i. Of the incident
    - ii. That they need to come and pick up the athlete
    - *iii.* That the athlete needs to be examined by a doctor or nurse practitioner as soon as possible that day
  - g. Monitor and document any changes (e.g., physical, cognitive, emotional/behavioral) in the athlete. If signs or symptoms worsen, call 911.
  - h. Do not administer medication (unless the athlete requires medication for other conditions, e.g., insulin).
  - i. Stay with the athlete until his/her parent/guardian (or emergency contact) arrives.
  - j. Athletes must not leave the premises without parent/guardian supervision.
  - k. Provide parent/guardian (emergency contact) a signed copy of <u>Suspected Concussion</u> <u>Identification Tool 6</u>



- Attending staff to inform appropriate organizations of suspected concussion, and forward a copy of the completed and signed <u>Suspected Concussion Identification Tool 6</u>, which is to be retained in athlete records.
- m. Inform all coaching staff and volunteers who work with the athlete of the suspected concussion.
- n. Indicate that the athlete shall not participate in any learning or physical activities until parent/guardian communicates the results of the medical examination to the Coaching staff.

# **Onsite Medical Assessment**

1. 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.

#### 2. Emergency Medical Assessment

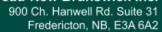
- a. If an athlete is suspected of sustaining a more severe head or spine injury during a game or practice, an ambulance should be called immediately to transfer the patient to the nearest emergency department for further Medical Assessment.
- b. Softball NB Stakeholders should not make any effort to 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.

#### 3. Sideline Medical Assessment

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

#### b. Scenario 1: If a licensed healthcare professional is present

i. The athlete should be taken to a quiet area and undergo Sideline Medical Assessment using the Sport Concussion Assessment Tool 6 (SCAT6) or the Child SCAT6. The SCAT6 and Child SCAT6 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 SCAT6 and Child SCAT6 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.
- ii. 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 return to play but should be monitored for delayed symptoms.
- iii. 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.

# c. Scenario 2: If there is no licensed healthcare professional present

i. 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.

#### **Medical Assessment**

- 1. 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 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.
- 2. In geographic regions with limited access to medical doctors, 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.
- 3. 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.

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## **Concussion Management**

- 1. 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 information to sport organization officials that are responsible for injury reporting and concussion surveillance where applicable.
- 2. Athletes diagnosed with a concussion should be provided with education about the signs and symptoms of a 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.
- 3. 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.

## Return-to-School/Work Strategy

1. The following is an outline of the Return-to-School/Work 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.

Stage	Aim	Activity	Goal of Each Step
1	Daily activities at home that do not give the individual symptoms	Typical activities during the day as long as they do not increase symptoms (i.e. reading, texting, screen time). Start at 5-15	Gradual return to typical activities



		minutes at a time and gradually build up	
2	School/Work activities	Homework/work, reading or other cognitive activities outside of the classroom/work	Increase tolerance to cognitive work
3	Return to school/work part-time	Gradual introduction of work. May need to start with a partial day or with increased breaks during the day.	Increased cognitive activities
4	Return to school/work full-time	Gradually progress	Return to full academic and work activities

# Softball-Specific Return-to-Sport Strategy

Stage	Aim	Activity	Goal of Each Step
1	Symptom-limiting activity	Daily activities that do not provoke symptoms	Gradual introduction of work/school activities
2	Light aerobic activity	Walking or stationary cycling at slow to medium pace. No resistance training	Increase heart rate
3	Sport-specific exercise	Low to moderate intensity individual running, throwing and outfield catching. No in-field, catching or pitcher position practice.	Add movement
4	Non-contact training drills	High intensity running (including non-contact base running), throwing, out-field and in-field catching. Non-contact individual and team drills. Batting cage or taking pitches from a coach. May start progressive resistance training. Individual catcher and pitcher positional practice	Exercise, coordination and increased thinking
5	Full contact practice	Following medical clearance, high intensity full contact practice and scrimmage	Restore confidence and assess functional skills by coaching staff
6	Return to Play	Normal game play	





## **Multidisciplinary Concussion Care**

- 1. 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.
- 2. 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 healthcare professionals with areas of expertise that address the specific needs of the athlete based on the assessment findings.

# **Return to Sport**

- 1. 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 Softball-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 considering 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.
  - a. 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 Softball Canada Concussion Protocol should be followed as outlined here.



#### **Prevention**

- 1. Any time an athlete is involved in a physical activity, there is a chance of sustaining a concussion; therefore it is important to take preventative measures while encouraging a culture of safety and mindfulness when athletes are being physically active. Regardless of the steps taken to prevent injury, some athletes will continue to be injured. The severity of the injury can be mitigated by the following:
  - a. Education of the coaches, staff, parent, volunteers and athletes to:
    - i. Recognize symptoms of a concussion
    - ii. Remove the athlete from play
    - iii. Refer the athlete to a medical doctor/nurse practitioner
  - b. Wearing sport specific protective equipment:
    - i. Equipment should fit properly;
    - ii. Equipment should be well maintained;
    - iii. Equipment should be worn consistently and correctly;
    - iv. Equipment should meet current safety standards; and
    - v. Damaged or expired equipment should be replaced.
  - c. Follow Softball Canada's rulebook and enforce a Code of Conduct (see Appendices for example).
    - i. Ensure players receive instruction, understand and follow softball specific safety rules and skills prior to participation.
    - ii. Teach skills in proper progression.
    - iii. Outline the concussion risks associated with the sport and demonstrate how they can be minimized (teach proper sport techniques sliding, hitting, etc.).
    - iv. Athletes must follow their coach/supervising volunteer's safety instructions at all times.
    - v. Reinforce the importance of following Softball Canada's rulebook.
    - vi. Discourage parents/guardians/coaches/teachers/volunteers/staff from pressuring recovering concussed athletes to play before they are ready.
    - vii. Parents need to reinforce with their child the importance of following Softball NB safety procedures.
    - viii. Parents need to report concussion history to their coaches/volunteers/staff.
    - ix. Provide reassurance, support and make accommodations to concussed athletes as needed.

# Conclusion

Despite prevention strategies listed above, head injuries will still occur. Softball NB, its staff and
organization, coaches and volunteers who are involved in a Softball NB event will not be held
personally liable in a civil proceeding for an act of omission if the person acts reasonably in the
circumstance and in good faith.