

MANITOBA SOCCER ASSOCIATION ADULT CONCUSSION PROTOCOL

SUMMARY

The following is a **summary** of the **MANITOBA SOCCER ASSOCIATION (MSA) ADULT CONCUSSION PROTOCOL**.

1) All adult athletes (18 years of age or older), coaches, trainers, and officials participating in MSA activities are required to review the [Canadian Guideline on Concussion in Sport Pre-season Concussion Education Sheet](#) 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 **MSA ADULT CONCUSSION PROTOCOL**.

2) In the event that an MSA adult athlete is suspected to have sustained a head injury or concussion, the following procedures must be followed:

a) If any athlete is suspected of sustaining a severe head or spine injury during a soccer-related activity, an ambulance should be called immediately to transfer the athlete to the emergency department of the nearest hospital for Medical Assessment. If follow-up care is needed, the patient should follow-up with their primary care provider or a sports medicine physician.

b) If the athlete develops symptoms of a concussion during a soccer game or practice, they must be evaluated immediately at the emergency department of the nearest hospital. If follow-up care is needed, the patient should follow-up with their primary care provider or a sports medicine physician.

c) If the athlete develops delayed concussion symptoms several hours later, the athlete should be evaluated by their primary care provider or at the emergency department of the nearest hospital if access to their primary care provider is not available.

All athletes with a suspected concussion must provide their coach with a [Canadian Guideline on Concussion in Sport Medical Assessment or Medical Clearance Letter](#) before returning to any soccer-related activities.

While these guidelines aim to reflect 'best practice', it must be recognized that there is a current lack of evidence with respect to their effectiveness in preventing long-term harm.

For more information on the **MSA ADULT CONCUSSION PROTOCOL** please see below for outline of the complete protocol.

The MSA also highly recommends that all participants become familiar with the *Making Headway Program* used by Canada Soccer in their coaching courses. See

<https://coach.ca/making-head-way-concussion-elearning-series-p153487>.

For more information on concussion, please visit <http://www.parachutecanada.org/injury-topics/item/canadian-guideline-on-concussion-in-sport>.

MANITOBA SOCCER ASSOCIATION ADULT CONCUSSION PROTOCOL

In collaboration with Sport Manitoba, the **MSA** has developed the **MSA ADULT CONCUSSION PROTOCOL** to help guide the management of athletes who may have a suspected concussion as a result of participation in soccer-related 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 as well as proper management to allow them to return to their sport safely. This protocol may not address every possible clinical scenario that can occur during soccer-related activities but includes critical elements based on the latest evidence and current expert consensus.

Application to non-sport related concussion

This guideline has been adapted from the *Canadian Guideline on Concussion in Sport*. However, the management principles described in these guidelines should also be applied to adults who sustain a concussion outside of a sporting activity and are returning to sports.

Who should use this protocol?

This guideline is intended for use by all individuals who interact with athletes inside and outside the context of organized sports activity, including athletes, coaches, officials, trainers, and licensed healthcare professionals.

Recommendations

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 the annual education of all sport stakeholders (i.e., athletes, coaches, officials, trainers, and licensed healthcare professionals). These stakeholders must be apprised of the current evidence-informed approaches that can prevent concussion (as well as more serious forms of head injury) and help identify/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-Sport Strategies*; and
- Return-to-Sport medical clearance requirements.

Who: Athletes, coaches, officials, trainers, and licensed healthcare professionals

How: [Canadian Guideline on Concussion in Sport Pre-season Concussion Education Sheet](#)

All athletes, coaches, trainers, and officials are required to review the *Canadian Guideline on Concussion in Sport Pre-season Concussion Education Sheet* prior to the first practice of each season. In addition to reviewing information on concussion, it is also important that all sport stakeholders have a clear understanding of the **MSA ADULT CONCUSSION PROTOCOL**.

2. Head Injury Recognition and Understanding

Although the formal diagnosis of concussion should be made following a medical assessment, all sport stakeholders (including athletes, coaches, 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](#).
- in any athlete who reports *ANY* concussion symptoms to anyone or if anyone witnesses an athlete exhibiting any of the visual signs of concussion.

Any one or more of the following visual clues can indicate a concussion:

- Dazed, blank or vacant look
- Lying motionless on ground / slow to get up
- Loss of consciousness – confirmed or suspected
- Unsteady on feet, balance problems, falling over, or decreased coordination
- Loss of consciousness or responsiveness
- Confused or not aware of play or events

- Grabbing, clutching, or shaking of the head
- Seizure
- More emotional or irritable than normal for that person
- Injury event that could have caused a 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.

Who: Athletes, parents, coaches, officials, teachers, trainers, and licensed healthcare professionals

How: [Concussion Recognition Tool 5](#)

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 health professional, where available.

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 athlete to the nearest emergency department for further *Medical Assessment*. Coaches, trainers, and officials should not make any effort to remove equipment or move the athlete until an ambulance has arrived. 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 addition, the athlete's emergency contact should be informed immediately of the athlete's injury.

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 athlete should be immediately removed from the field of play. 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). The SCAT5 is a clinical tool that should only be used by a licensed medical professional who has experience using this tool. It is important to note that the results of SCAT5 testing can be

normal in the setting of acute concussion. As such, this tool 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 athletes. Any athlete who is suspected of having sustained a concussion must not return to the game or practice and must be referred to a medical doctor, nurse practitioner, or physician assistant for *Medical Assessment*.

If an athlete is removed from play following a significant impact but there are NO visual signs of a concussion and the athlete reports NO concussion symptoms, the athlete can then be returned to play but should be monitored for delayed symptoms. Below are some questions that coaches/trainers/parents can ask to help determine whether an athlete sustained a suspected concussion:

QUESTIONS TO ASK AN ADULT PLAYER: Failure to answer any of these questions correctly is an indication of a suspected concussion.

- “What field are we at today?”
- “Which half is it now?”
- “Who scored last in this game?”
- “What team did you play last?”
- “Did your team win your last game?”

Note: Failure to recognize and report symptoms of concussion or returning to an activity with ongoing symptoms can place athletes at an elevated risk of repeat injury that can be associated with worse symptoms, prolonged symptoms, and severe or fatal brain injury (i.e., second impact syndrome).

Who: Athletic therapists, physiotherapists, medical doctor

How: [*Sport Concussion Assessment Tool 5 \(SCAT5\)*](#)

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 and physician assistants, medical doctors¹ that are qualified to evaluate patients with a suspected concussion include pediatricians, physicians in family medicine, sports

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.

medicine, emergency medicine, and rehabilitation (physiatrists), as well as neurologists and neurosurgeons. In geographic regions of Manitoba or Canada with limited access to medical doctors (e.g., rural or northern communities), a licensed healthcare professional (e.g., nurse) with pre-arranged access to a medical doctor or nurse practitioner can facilitate this role. The result of the *Medical Assessment* will indicate whether the athlete has been diagnosed with a concussion or not. All athletes with a diagnosed concussion should be provided with a *Canadian Guideline on Concussion in Sport 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 their regular, everyday activities without restriction.

Who: Medical doctor, nurse practitioner, physician assistant, nurse

How: [Canadian Guideline on Concussion in Sport Medical Assessment Letter](#)

5. Concussion Management

When an athlete has been diagnosed with a concussion, it is important that the athlete's emergency contact is informed. All athletes diagnosed with a concussion must be provided with a standardized *Canadian Guideline on Concussion in Sport Medical Assessment Letter* that notifies the athlete and their emergency contact 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, nurse practitioner, or physician assistant. Because the *Medical Assessment Letter* contains personal health information, it is the responsibility of the athlete or emergency contact to provide this documentation to the athlete's coaches, trainers, teachers, or employers, etc. It is also important for the athlete to provide this information to sport, school or employment officials that are responsible for injury reporting and concussion surveillance, where applicable.

All 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 their regular, everyday activities. Athletes diagnosed with a concussion are to be managed according to their *Sport-Specific Return-to-Sport Strategy* under the supervision of a medical doctor, nurse practitioner, or physician assistant. 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 *Sport-Specific Return-to-Sport Strategy* and are deemed to be clinically recovered from their concussion, the medical doctor, nurse practitioner, or physician assistant can consider the athlete for a return to full sports activities.

Return-to-Sport Strategy (Soccer)

The following is an outline of the Return-to-Sport Strategy that should be used to help athletes, coaches, trainers, employers, 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 *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 athletes return to their regular, everyday 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 *Canadian Guideline on Concussion in Sport Medical Clearance Letter* prior to returning to full contact sport activities.

Stage	Aim	Activity	Goal of each step
1	Symptom-limiting activity	Daily activities that do not provoke symptoms.	Gradual re-introduction of regular, everyday 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, agility, shooting and passing drills. No team drills or head impact activities.	Add movement
4	Non-contact training drills	High intensity running, agility, shooting, and passing drills. Non-contact individual and team drills. May start progressive resistance training. No head impact activities.	Exercise, coordination and increased thinking
5	Full contact practice	Following medical clearance. High intensity full contact practice and drills including head impact activities	Restore confidence and assess functional skills by coaching staff
6	Return to sport	Normal game play	

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

How: *Return-to-Learn Strategy, Sport-Specific Return-to Sport Strategy, [Canadian Guideline on Concussion in Sport Medical Assessment Letter](#), [Canadian Guideline on Concussion in Sport Medical Clearance Letter](#)*

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, work and/or sport activities within one to four weeks of injury. However, approximately 15-30% of individuals will experience symptoms that persist beyond this time frame. Adult athletes who experience persistent post-concussion symptoms (i.e. more than two weeks) may benefit from their primary care provider making a referral to a medically-supervised, multi-disciplinary concussion or sports medicine clinic. Such a clinic should have access to professionals (e.g. experts in neurosurgery, sport medicine, neuropsychology, physiotherapy, and neurology) with licensed training in traumatic brain injury.

Referral to a multidisciplinary clinic for assessment should be made on an individualized basis at the discretion of the athlete's medical doctor, nurse practitioner, or physician assistant.

Who: Multidisciplinary medical team, medical doctor with clinical training and experience in concussion (e.g., a sports medicine physician, neurosurgeon, 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 *Sport-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, nurse practitioner, or physician assistant 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 (e.g., neuropsychological testing, diagnostic imaging, etc.). 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 *Canadian Guideline on Concussion in Sport Medical Clearance Letter* that specifies that a medical doctor, nurse practitioner, or physician assistant has personally evaluated the athlete and has cleared the athlete to return to sports. In geographic regions of Manitoba and Canada with limited access to medical doctors (e.g. 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 *Canadian Guideline on Concussion in Sport*

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 coaches, emergency contact, or trainer and undergo a follow-up *Medical Assessment*. In the event that the athlete sustains a new suspected concussion, the **MSA ADULT CONCUSSION PROTOCOL** should be followed as outlined here.

Who: Medical doctor, nurse practitioner, physician assistant

Document: [Canadian Guideline on Concussion in Sport Medical Clearance Letter](#)

For more information on concussion and how to download the Concussion Recognition Tool 5 & SCAT5 please visit <http://www.parachutecanada.org/injury-topics/item/canadian-guideline-on-concussion-in-sport>