

2017-18 WINNIPEG AAA HOCKEY CONCUSSION PROTOCOL SUMMARY

The following is a summary of the **WINNIPEG AAA HOCKEY CONCUSSION PROTOCOL**.

1.) All athletes participating in Winnipeg AAA Hockey and their parents 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 **WINNIPEG AAA HOCKEY CONCUSSION PROTOCOL**.

2.) In the event that a Winnipeg AAA Hockey 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 Winnipeg AAA Hockey activity, an ambulance should be called immediately to transfer the patient to Children's Hospital Emergency Department or nearest hospital for Medical Assessment.

b) If the athlete develops symptoms of a concussion during a hockey game or practice, they must be evaluated immediately at the Children's Hospital Emergency Department or the nearest emergency room. If the player is diagnosed with a concussion, the patient must be referred to the Pan Am Concussion Program for follow-up care.

c) If the athlete develops delayed concussion symptoms several hours later, the athlete should be evaluated immediately at the Children's Hospital Emergency Department or the nearest emergency room. If the athlete develops delayed concussion symptoms that are identified during regular office hours (9:00am-4:00pm) on weekdays (Monday-Friday) they should be evaluated at the Pan Am Concussion Program.

In the case of any Winnipeg AAA Hockey athlete who has a suspected head injury or concussion, the parent or coach of the athlete must contact Winnipeg AAA Hockey Director of Athlete Safety, Kelsey McCuspey by email: kmccuspey@hotmail.com or phone at 204-229-4134.

All Winnipeg AAA Hockey athletes with a suspected concussion must provide their coach with a Medical Assessment or Medical Clearance Letter before returning to any Winnipeg AAA Hockey activities.

For more information on the **WINNIPEG AAA HOCKEY CONCUSSION PROTOCOL** please see below for outline of the complete protocol.

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

2017-18 WINNIPEG AAA HOCKEY CONCUSSION PROTOCOL

Winnipeg AAA Hockey has developed the **WINNIPEG AAA HOCKEY CONCUSSION PROTOCOL** to help guide the management of athletes who may have a suspected head injury or concussion.

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 Winnipeg AAA Hockey 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 for the management of Winnipeg AAA Hockey athletes who sustain a concussion during sport. However, the management principles described in these guidelines should also be applied to children and adolescents who sustain a concussion outside of a sporting activity and are returning to Winnipeg AAA Hockey activities including practices and games.

Who should use this protocol?

This guideline is intended for use by all individuals who interact with athletes inside and outside the context of Winnipeg AAA Hockey, including athletes, parents, coaches, officials, teachers, 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 annual education of all sport stakeholders (students, 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 athletes participating in Winnipeg AAA Hockey and their parents are required to review and submit a signed copy of the *Pre-season Concussion Education Sheet* to Winnipeg AAA Hockey 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 **WINNIPEG AAA HOCKEY CONCUSSION PROTOCOL**.

2. Head Injury Recognition

Although the formal diagnosis of concussion should be made following a medical assessment, all sport stakeholders including students, parents, coaches, teachers, officials, and licensed healthcare professionals are responsible for the recognition and reporting of Winnipeg AAA Hockey 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 Winnipeg AAA Hockey 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 Winnipeg AAA Hockey 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.

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

How: *Concussion Recognition Tool 5 (See below)*

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 a Winnipeg AAA Hockey 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, 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 addition, the athlete's parents should be contacted immediately to inform them of the student's injury. After initial assessment at the nearest hospital, the parent or coach of the Winnipeg AAA Hockey athlete should contact Winnipeg AAA Hockey Director of Athlete Safety, Kelsey McCuspey by email: kmccuspey@hotmail.com or phone at 204-229-4134 to arrange a follow-up assessment at the Pan Am Concussion Program.

Who: Emergency medical professionals

3b. Sideline Medical Assessment

If a Winnipeg AAA Hockey 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) or the Child SCAT5. The SCAT5 and Child SCAT5 are clinical tools that should only be used by a licensed medical 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 Winnipeg AAA Hockey 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

then the athlete can be returned to play but should be monitored for delayed symptoms.

Who: Athletic therapists, physiotherapists, medical doctor

How: *Sport Concussion Assessment Tool 5 (SCAT5)*, *Child Sport Concussion Assessment Tool 5 (Child SCAT5)*(See below)

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). The *Medical Assessment* is responsible for determining whether the athlete has been diagnosed with a concussion or not.

In the case of Winnipeg AAA Hockey players with a suspected concussion, the following procedures should taken:

- 1.) If the athlete develops symptoms of a concussion during a hockey game or practice, they must be evaluated immediately at the Children's Hospital Emergency Department or the nearest emergency room. If the player is diagnosed with a concussion, the patient must be referred to the Pan Am Concussion Program for follow-up care.
- 2.) If the athlete develops delayed concussion symptoms several hours later, the athlete should be evaluated immediately at the Children's Hospital Emergency Department or the nearest emergency room. If the athlete develops delayed concussion symptoms that are identified during regular office hours (9:00am-4:00pm) they should be evaluated at the Pan Am Concussion Program.

In the case of any Winnipeg AAA Hockey athlete who has a suspected concussion during sports or non sports-related activities, the parent or coach of the athlete must contact Winnipeg AAA Hockey Director of Athlete Safety, Kelsey McCuspey by email: kmccuspey@hotmail.com or phone at 204-229-4134.

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

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 Winnipeg AAA Hockey 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.

Winnipeg AAA Hockey 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 the Pan Am Concussion Program. 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 Pan Am Concussion Program will consider the athlete for a return to full sports Winnipeg AAA Hockey activities.

Return-to-School Strategy

The following is an outline of the *Return-to-School Strategy* that should be used to help 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 athletes will progress through the following stages at different rates. If the athlete experiences new symptoms or worsening symptoms at any stage, they should go back to the previous stage.

Stage	Aim	Activity	Goal of each step
1	Daily activities at home that do not give the student-athlete symptoms	Typical activities of the child 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	Gradual return to typical activities

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

Return-to-Sport Strategy

The following is an outline of the Return-to-Sport Strategy that should be used to help athletes, coaches, trainers, teachers 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 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/teacher with a *Medical Clearance Letter* prior to returning to full sports contact activities.

Stage	Aim	Activity	Goal of each step
1	Symptom-limiting activity	Daily activities that do not provoke symptoms	Gradual re-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	Running or skating drills. No head impact activities	Add movement
4	Non-contact training drills	Harder training drills, i.e. passing drills. May start progressive resistance training	Exercise, coordination and increased thinking
5	Full contact practice	Following medical clearance	Restore confidence and assess functional skills by coaching staff
6	Return to sport	Normal game play	

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*

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 not already done so, athletes who experience persistent post-concussion symptoms (>4 weeks) should have their family doctor or pediatrician make a referral to the Pan Am Concussion Program, a medically-supervised multi-disciplinary concussion clinic that has access to professionals with licensed training in traumatic brain injury that include experts in neurosurgery, sport medicine, neuropsychology, exercise science, physiotherapy, and neurology.

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

Winnipeg AAA Hockey 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 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 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, all Winnipeg AAA Hockey athletes that have been diagnosed with a concussion must provide their coach with a standardized *Medical Clearance Letter* that specifies that a medical doctor at the Pan Am Concussion Program has personally assessed the athlete and has cleared the athlete to return to sports.

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 student sustains a new

suspected concussion, the **WINNIPEG AAA HOCKEY CONCUSSION PROTOCOL** should be followed as outlined here.

Who: Medical doctor, nurse practitioner

Document: *Medical Clearance Letter*

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