



SOUTH COUNTY PREDATORS GIRLS HOCKEY ASSOCIATION (SCPGHA) CONCUSSION PROTOCOL

*Adapted from: Parachute. (2017). Canadian Guideline on Concussion in Sport.
www.parachutecanada.org/guideline*

SOUTH COUNTY PREDATORS GIRLS HOCKEY ASSOCIATION has developed the **SOUTH COUNTY PREDATORS GIRLS HOCKEY ASSOCIATION Concussion Protocol** to help guide the management of athletes who may have a suspected concussion as a result of participating in **SOUTH COUNTY PREDATORS GIRLS HOCKEY ASSOCIATION** 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. As an Association this protocol abides by Rowan's Law Concussion Awareness rules and to those expectations as defined by our membership to the Ontario Women's Hockey Association.

Who should use this protocol?

This protocol is intended for use by all individuals, including volunteer coaches, trainers, bench staff, den mothers, parents, officials, teachers and athletes who interact with athletes inside and outside **SOUTH COUNTY PREDATORS GIRLS HOCKEY ASSOCIATION** activities.

For a summary of the **SOUTH COUNTY PREDATORS GIRLS HOCKEY ASSOCIATION Concussion Protocol** please refer to the **SOUTH COUNTY PREDATORS GIRLS HOCKEY ASSOCIATION Sport Concussion Pathway** figure 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 (volunteer coaches, trainers, bench staff, den mothers, parents, officials, teachers and athletes) 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

Annually, upon registration, all players, parents/guardians (for players under 18), coaches, trainers and other rostered individuals MUST review the Ontario Women’s Hockey Association Concussion Awareness Resources and the appropriate Appendixes as found on the **SOUTH COUNTY PREDADORT GIRLS HOCKEY ASSOCIATION** website. ALL must submit a signed copy of the **Ontario Women’s Hockey Association Rowan’s Law Acknowledgement Form** to their coach prior to the first practice of the season. Both the review and the signed acknowledgment form is a mandatory requirement. In addition to reviewing information on concussion awareness, it is also important that all sport stakeholders (volunteer coaches, trainers, bench staff, den mothers, parents & athletes) have a clear understanding of the **SOUTH COUNTY PREDATORS GIRLS HOCKEY ASSOCIATION Concussion Protocol**. For example, this can be accomplished by visiting the associations’ website to review and will again be presented by the association’s board members and coach’s at the initial parent/coaches and athlete in person initial team meeting.

1. Pre Season Education
Who: volunteer coaches, trainers, bench staff, den mothers, parents, officials, teachers and athletes
What: MANDATORY Review of OWHA Concussion Awareness Resources, Appendixs, SCPGHA Concussion Protocol & sign OWHA Rowan’s Law Acknowledgment Form
How: SCPGHA website, in person team meeting presentation/education

2. Head Injury Recognition

Although the formal diagnosis of concussion should be made following a medical assessment, all sport stakeholders including volunteer coaches, trainers, bench staff, den mothers, parents, athletes in addition to teachers & officials are all 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*. (See below)

Pocket CONCUSSION RECOGNITION TOOL

To help identify concussion in children, youth and adults



RECOGNIZE & REMOVE

Concussion should be suspected if **one or more** of the following visible clues, signs, symptoms or errors in memory questions are present.

1. Visible clues of suspected concussion

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

Loss of consciousness or responsiveness
Lying motionless on ground / Slow to get up
Unsteady on feet / Balance problems or falling over / Incoordination
Grabbing / Clutching of head
Dazed, blank or vacant look
Confused / Not aware of plays or events

2. Signs and symptoms of suspected concussion

Presence of any one or more of the following signs & symptoms may suggest a concussion:

- | | |
|--------------------------|----------------------------|
| - Loss of consciousness | - Headache |
| - Seizure or convulsion | - Dizziness |
| - Balance problems | - Confusion |
| - Nausea or vomiting | - Feeling slowed down |
| - Drowsiness | - "Pressure in head" |
| - More emotional | - Blurred vision |
| - Irritability | - Sensitivity to light |
| - Sadness | - Amnesia |
| - Fatigue or low energy | - Feeling like "in a fog" |
| - Nervous or anxious | - Neck Pain |
| - "Don't feel right" | - Sensitivity to noise |
| - Difficulty remembering | - Difficulty concentrating |

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3. Memory function

Failure to answer any of these questions correctly may suggest a concussion.

- "At what venue are we at today?"
"Which half is it now?"
"Who scored last in this game?"
"What team did you play last week / game?"
"Did your team win the last game?"

Any athlete with a suspected concussion should be **IMMEDIATELY REMOVED FROM PLAY**, and should not be returned to activity until they are assessed medically. Athletes with a suspected concussion should not be left alone and should not drive a motor vehicle.

It is recommended that, in all cases of suspected concussion, the player is referred to a medical professional for diagnosis and guidance as well as return to play decisions, even if the symptoms resolve.

RED FLAGS

If **ANY** of the following are reported then the player should be safely and immediately removed from the field. If no qualified medical professional is available, consider transporting by ambulance for urgent medical assessment:

- | | |
|--|---------------------------------|
| - Athlete complains of neck pain | - Deteriorating conscious state |
| - Increasing confusion or irritability | - Severe or increasing headache |
| - Repeated vomiting | - Unusual behaviour change |
| - Seizure or convulsion | - Double vision |
| - Weakness or tingling/burning in arms or legs | |

Remember:

- In all cases, the basic principles of first aid (danger, response, airway, breathing, circulation) should be followed.
- Do not attempt to move the player (other than required for airway support) unless trained to do so.
- Do not remove helmet (if present) unless trained to do so.

from McCrory et al, Consensus Statement on Concussion in Sport, Br J Sports Med 47 (5), 2013

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- 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* (as shown above), a more severe head or spine injury should be suspected, and Emergency Medical Assessment should be pursued.

2. Head Injury Recognition

Who: volunteer coaches, trainers, bench staff, den mothers, parents, officials, teachers and athletes

What: Concussion Recognition Tool 5

How: Tool available online and with each team's trainer; **document in trainer's injury log.**

3. 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.

Trainers, coaches, bench staff, officials & parents 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. Emergency Medical Assessment
Who: Emergency Medical Personnel

3a. 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.

The Team trainer should review and implement the Suspected Concussion & Identification Follow up Tool

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.

3a. Sideline Medical Assessment
Who: Team Trainer
What/How: Use of the SCGHA Suspected Concussion Identification & Followup tool; document in trainer's injury log

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. 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.

4. Medical Assessment

Who: Medical doctor, nurse practitioner
What/How: Provision of a 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 and made aware. 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, trainers, teachers, or employers.

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. 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* or *Return to Play 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.

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.

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

McCroly et al. (2017). Consensus statement on concussion in sport – the 5th international conference on concussion in sport held in Berlin, October 2016. *British Journal of Sports Medicine*, 51(11), 838-847.

HOCKEY-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 ***HOCKEY-Specific Return-to-Sport Strategy***. The athlete should spend a minimum duration of 24 hours without symptom increases at each stage before progressing to the next one. 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 ***HOCKEY-Specific Return-to-Sport Strategy***. It is also imperative that all athletes provide their coach with a *Medical Clearance Letter or Return to Play Form* 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 work/school activities
2	Light aerobic activity	Walking or stationary cycling at slow to medium pace. No resistance training or weight lifting. -Light intensity jogging or stationary cycling for 15-20 minutes at sub-symptom threshold intensity	Increase heart rate
3	Sport-specific exercise	Running or skating drills. No head impact activities - Moderate intensity jogging for 30-60 minutes at sub-symptom threshold intensity - Low to moderate impact passing, dribbling, shooting, and agility drills	Add movement

4	Non-contact training drills	Harder training drills, i.e. passing drills. May start progressive resistance training - Participation in high intensity running and drills - Non-contact practice without heading - Participation in resistance training work-outs	Exercise, coordination and increased thinking
5	Full contact practice	Following medical clearance/Return to Play Form - Participation in full practice without activity restriction	Restore confidence and assess functional skills by coaching staff
6	Return to sport	Normal game play	

McCroly et al. (2017). Consensus statement on concussion in sport – the 5th international conference on concussion in sport held in Berlin, October 2016. *British Journal of Sports Medicine*, 51(11), 838-847.

5. Concussion Management
Who: Medical doctor, nurse practitioner
What/How: Provision and adherence to Return-to-School Strategy, Sport-Specific Return to Sport Strategy
NOTIFY TRAINER IN CHIEF VIA EMAIL

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.

6. Multidisciplinary Concussion Care
Who: Multidisciplinary medical team, medical doctor with clinical training and experience in concussion

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 HOCKEY-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 copy of the standardized *Medical Clearance Letter/Return to Play Form* that specifies that a medical doctor or nurse practitioner has personally evaluated the patient and has cleared the athlete to return to sports.

Athletes who have been provided with a *Medical Clearance Letter/Return to Play Form* 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 **SOUTH COUNTY GIRLS HOCKEY ASSOCIATION Concussion Protocol** should be followed as outlined next.

7. Return to Sport

Who: Medical doctor, nurse practitioner

What/How: Provision of Medical Clearance Letter or Return To Play form

Notify **TRAINER IN CHIEF VIA EMAIL**



South County Predators Girls Hockey Association Concussion Pathway

1. Pre Season Education

Who: volunteer coaches, trainers, bench staff, den mothers, parents, officials, teachers and athletes
What: MANDATORY Review of OWHA Concussion Awareness Resources, Appendixs, SCPGHA Concussion Protocol & sign OWHA Rowan's Law Acknowledgment Form
How: SCPGHA website, in person team meeting presentation/education

Impact to the head, face, neck or body

Head injury is suspected

2. Head Injury Recognition

Who: volunteer coaches, trainers, bench staff, den mothers, parents, officials, teachers and athletes
What: Concussion Recognition Tool 5
How: Tool available online and with each team's trainer; **document in trainer's injury log.**

Is a more serious head or spine injury suspected?

Yes

No

Remove from Play

3. Emergency Medical Assessment

Who: Emergency Medical Personnel

3a. Sideline Medical Assessment

Who: Team Trainer
What/How: Use of the SCGHA Suspected Concussion Identification & Followup tool; **document in trainer's injury log**

4. Medical Assessment

Who: Medical doctor, nurse practitioner
What/How: Provision of a Medical Assessment Letter

Is a concussion suspected?

Yes

No

Was a concussion diagnosed?

Yes

No

Return to Sport

5. Concussion Management

Who: Medical doctor, nurse practitioner
What/How: Provision and adherence to Return-to-School Strategy, Sport-Specific Return to Sport Strategy
NOTIFY TRAINER IN CHIEF VIA EMAIL

Does the athlete have persistent symptoms?

*symptoms lasting > 4 weeks in children & youth; >2 weeks in adults

Yes

No

6. Multidisciplinary Concussion Care

Who: Multidisciplinary medical team, medical doctor with clinical training and experience in concussion

7. Return to Sport

Who: Medical doctor, nurse practitioner
What/How: Provision of Medical Clearance Letter or Return To Play form
Notify TRAINER IN CHIEF VIA EMAIL