

Badminton Ontario Concussion Prevention and Management Policy Return to Play Protocols (March 2017)

Purpose:

Although concussion in the sport of Badminton is very rare, Badminton Ontario wants to be proactive in the prevention and management of concussion. Concussion prevention and management is a matter of concern for all in sport, as is the importance of an appropriate Return To Play protocol to minimize any chances of further incidents.

Definitions:

Concussion

A concussion is a brain injury (where the brain makes contact with the inside of the skull) that causes changes in how the brain cells function, leading to symptoms that can be physical (e.g., headache, dizziness), cognitive (e.g., memory problems, decreased concentration), or emotional (e.g., feeling depressed). The brain injury cannot be seen on X-rays or CT scans. Concussion can occur even if there has been no loss of consciousness; **in fact most concussions occur without a loss of consciousness**. A concussion can occur from a direct blow to the head but may also occur from a major physical trauma to other parts of the body (e.g., a sideways check to the body) that causes a whiplash effect on the head and neck.¹

Second Impact Syndrome

Recent research indicates that “second impact syndrome” may occur when an athlete is injured and has a second concussion while he/she still has symptoms from a previous concussion. The second injury may initially appear to be very minor, but can progress to have serious consequences and can be fatal. It is, therefore essential to appropriately identify, track and manage **all** concussions.²

Application of the Policy:

Concussion Identification - Common Signs and Symptoms

An athlete may be reluctant to report symptoms of concussion because of a fear that they will be removed from the physical activity; it may jeopardize their status on a team or in a match or it will impact their standings. However, it is important to consider the permanent repercussions of a concussion. If concussions are not identified and properly managed they can result in permanent brain damage and even death. An athlete may experience many different signs and symptoms. A symptom is something the athlete will feel, whereas a sign is something that will be observed by a parent/guardian, coach, supervisor, etc. Signs and symptoms of concussion can appear right after the injury, or may appear later. No concussion is the same and so the signs and symptoms may be a little different for everyone.

It is everyone’s responsibility within Badminton Ontario to be cognizant of and pro-active regarding possible concussion symptoms and management within an individual. Whether a concussion occurs at a club, regional or provincial level of competition or training, Badminton Ontario needs to be made aware of the situation (confidentially) so that the appropriate concussion management protocol can be implemented to ensure that the Return To Play policy is upheld for the benefit of the individual themselves. Attached to this Policy is a Concussion Reporting

Document – this document must be completed and forwarded to the Badminton Ontario office by any coach, club and regional administrator, Official or Badminton Ontario staff or Board who have a duty of care to Badminton Ontario members within the training and competition environment. The Reporting Document provides detail on the situation that has precipitated the suspicion of concussion occurrence; once submitted to Badminton Ontario, the Badminton Ontario designated staff or Board member will follow up directly with the athlete or guardian regarding the matter and to ensure that the appropriate Return to Play protocol is adhered to prior to any clearance from Badminton Ontario for sanctioned training or competition play for the athlete in question.

1 Adapted from: “*ThinkFirst Position Statement on Concussion*”

2 Adapted from: “*Identification and management of children with sport-related concussion*”, Paediatrics & Child Health 2006;11(7):420-428

Concussion should be suspected in the presence of any one or more of the following symptoms and signs:

Signs Observed

Physical

- ✓ vomiting
- ✓ slurred speech
- ✓ slowed reaction time
- ✓ poor coordination or balance
- ✓ blank stare/glassy-eyed
- ✓ decreased playing ability
- ✓ loss of consciousness

Cognitive

- ✓ difficulty concentrating
- ✓ easily distracted
- ✓ general confusion
- ✓ cannot remember things that happened before and after the injury
- ✓ does not know time, date, place, class, type of activity in which he/she was participating
- ✓ slow to answer questions or follow directions

Emotional

- ✓ strange or inappropriate emotions, (e.g., laughing, crying, getting mad easily)
- ✓ sleep
- ✓ drowsiness

Symptoms Reported

Physical

- ✓ headache
- ✓ neck pain
- ✓ feeling off/not right
- ✓ ringing in the ears
- ✓ seeing double or blurry/loss of vision
- ✓ seeing stars, flashing lights
- ✓ pain at physical site of injury
- ✓ nausea/stomach ache/pain
- ✓ balance problems or dizziness
- ✓ fatigue or feeling tired
- ✓ sensitivity to light or noise

Cognitive

- ✓ having difficulty concentrating or remembering
- ✓ feeling slowed down, fatigued or low energy
- ✓ feeling dazed or in a fog

Emotional

- ✓ irritable, sad, more emotional than usual
- ✓ nervous, anxious, depressed
- ✓ sleepy
- ✓ drowsiness
- ✓ sleeps more/less than usual
- ✓ has trouble falling asleep

Note: All athletes need to consult a physician after a suspected concussion.

Note: Athletes with special needs or those for whom English or French is not their first language will have the same signs and symptoms of a concussion as listed above, but it may be more difficult for them to communicate how they are feeling.

Management Procedures for a Suspected Concussion

Initial Response

Unconscious Athlete:

For an athlete who is unconscious or there is/was a loss of consciousness, a concussion should be assumed and medical attention must be sought:

- Initiate Emergency Action Plan and call 911
- Assume there is a possible neck injury and, only if the responder/coach has been trained, immobilize the athlete before ambulance transportation to hospital
- Do not remove athletic equipment (e.g., helmet) unless there is difficulty breathing
- If the athlete regains consciousness, encourage him/her to remain calm and to lie still; do not administer medication
- Even if the athlete regains consciousness, he/she must be taken to the hospital for examination

Conscious Athlete:

If there is no loss of consciousness, but a concussion is suspected due to a direct blow to the head or a major physical trauma to other parts of the body causing whiplash effect on the head and neck:

- Remove the athlete from the current activity or game immediately
- Conduct an initial assessment of the athlete (i.e., check signs and symptoms)
- Do not leave the athlete alone and continue to monitor signs and symptoms
- Do not administer medication
- Do not allow the athlete to return to play in the activity, game or practice that day even if the athlete states that he/she is feeling better. (**If in doubt, sit them out**)
- The athlete must not leave the premises without parent/guardian (or emergency contact) supervision

1. All athletes with a suspected concussion (brain injury), even if there was no loss of consciousness, need to be evaluated by a physician as soon as possible.

2. Parents/guardians must be informed of the:

- ✓ injury
- ✓ importance of monitoring their child during the initial hours following a suspected concussion
- ✓ importance of the head injury being evaluated by a physician as soon as reasonable possible

3. Provide parents/guardians/coach with an accident report form.

4. Following medical examination the athlete must be monitored by a responsible adult for the next 24-48 hours for signs of deterioration. If any signs of deterioration occurs, the athlete needs to be immediately re-evaluated by a physician.

When can an athlete return to the sport?

It is the responsibility of the athlete or the guardian to ensure that the Badminton Ontario Return To Play protocol is adhered to in order for Badminton Ontario to allow the athlete to return to any sanctioned training and competition environment.

Physician Visit #1

If **NO CONCUSSION** is determined by a physician:

- a) The physician must indicate in a note to Badminton Ontario that the athlete has “**No concussion - athlete may return to:**” and signs and dates the note.
- b) As part of the Badminton Ontario Return To Play Policy, the physician’s note must be returned to Badminton Ontario. If all other elements of the Badminton Ontario Return To Play Policy have been met, Badminton Ontario will inform all relevant personnel (parents, coach of athlete, club, etc.) that the athlete can participate in all physical activities with no restrictions.

Note: Badminton Ontario shall keep an electronic record of this note in its e-files.

If **CONCUSSION** is determined by a physician:

- c) As part of the Badminton Ontario Return To Play Policy, the physician must indicate in a note to Badminton Ontario that the athlete has “**Concussion – no physical activity until symptoms and signs have gone**” and signs and dates the note.
- d) In this instance, Badminton Ontario will continue to implement the steps included in the Return To Play Policy for the athlete, and will inform all relevant personnel (parents, coach of the athlete, club, etc.) that the athlete is **NOT** to participate in physical activities until further notice.

Note: Badminton Ontario shall keep an electronic record of this note in its e-files.

How long does it take to get better?

The signs and symptoms of a concussion often last for 7 – 10 days, but may last much longer. The exact length of this period is unclear, but the brain temporarily does not function normally, and during this time, it is more vulnerable to a second head injury. In some cases, athletes may take many weeks or months to heal. Significant cognitive symptoms may result from concussion, including; poor attention and concentration, reduced speed of information-processing and impaired memory and learning. There may also be a significant negative effect on educational and social attainment, as these functions are critical for learning new skills. Return-to-physical activity following a concussion from a practice/competition must only occur after medical clearance has been received, in writing, by a physician. The athlete and parents/guardians/coach monitor symptoms and signs of a concussion. It is very important that an athlete not do any physical activity if he/she has any signs or symptoms.

Return to Physical Activity Process (6 Step Approach)

An athlete with a diagnosed concussion is to follow the medically supervised six step ***Return to Physical Activity Process*** below. All steps must be completed. Documentation must be provided to Badminton Ontario throughout the six steps ***Return to Physical Activity Process*** to track the attainment of each step,

including the necessary signatures by the physician, parent/guardian and coaches.

The athlete may proceed to the next step only when he or she is asymptomatic at the current step.

Procedures:

1. Steps are not days - each step must take a minimum of 24 hours

2. The length of the time needed to complete each step will vary based on the severity of the concussion and on the athlete

3. If signs and symptoms return during any one of the six steps of the process, the athlete must:

- stop all physical activities immediately
- rest for a minimum of 24 hours (i.e., physical and cognitive rest)
- return to Step 1

Responsibilities of the parent/guardian/coach:

Step 1

Rest: No activity, complete physical and cognitive rest

Duration: Until asymptomatic (minimum of 24 hours)

Step 2

Activity: Individual activity only / light aerobic exercise (walking or stationary cycling)

Duration: Maximum of 10-15 minutes over a 24 hour period

Restrictions: No resistance / weight training / no competition (including practices, scrimmages) / no participation with equipment or with other athletes

Note: Parent/guardian communication with Badminton Ontario - parent/guardian/coach signs and dates a note to indicate their child is symptom free after Step 2 and is permitted to proceed to Step 3 and return to physical activity.

Responsibilities of Badminton Ontario:

Step 3 *Badminton Ontario will inform the athlete of the activity they can perform for Step 3*

Activity: Individual activity only

Duration: Maximum of 20 - 30 minutes over a 24 hour period

Restrictions: No competition (including practices). No

body contact, head impact activities (e.g., heading a ball in soccer), and other jarring motions (e.g., high speed stops, hitting a baseball with a bat)

Step 4

Activity: Activities where there are minimal opportunities for body contact (e.g., dance, badminton, volleyball) Reviewing videos of matches and technique.

Restrictions: No activities that involve body contact or head impact (e.g., “heading the ball” in soccer)

Note: Badminton Ontario communication with parent/guardian - the coach will write a note to Badminton Ontario indicating that the athlete has successfully completed Steps 3 and 4 and requires an

examination by a physician prior to being permitted to engage in regular activities (Steps 5 and 6)

Physician Visit #2

Physician assesses that all symptoms and signs of a concussion are gone after Step 4:

a) The physician will write a note to Badminton Ontario stating that “**Concussion symptoms and signs have gone – athlete may return to:**” and signs and dates the note.

b) The note must be sent to the Badminton Ontario Technical Director who will inform all relevant personnel (parents, coach of the athlete, club, etc.) that the athlete can participate in all physical activities with no restrictions.

Note: Badminton Ontario shall keep an electronic record of this note in its e-files.

Step 5

Activity: Full participation in regular physical activities/with no body contact

Restrictions: No competition (e.g., games, meets, events) that involves body contact

Step 6

Activity: Full participation in all physical activities, including full contact games

Restrictions: None

Further Concussion Resources:

An athlete's safe return to physical activity after a concussion is enabled when the athlete and the coach/parents/guardians are familiar with the symptoms and treatment.

Summaries (*appropriate hand-outs*) of this information are available on the ThinkFirst website:

- **Athlete Information:**

<http://www.thinkfirst.ca/downloads/concussion/concussion-information-athletes.pdf>

- **Parent Information:**

<http://www.thinkfirst.ca/downloads/concussion/concussion-parent.pdf>

- **General Information:**

<http://www.thinkfirst.ca/downloads/concussion/Concussion%20Handout%20for%20Families%20and%20Caregivers.pdf>

A concussion is more successfully evaluated if the athlete completes a neuropsychological baseline evaluation prior to beginning the sport season. For more information about concussion and sample

Sport Concussion Assessment Tools, see:

ThinkFirst: <http://www.thinkfirst.ca/downloads/resources/SCAT-pg1.pdf>

IMPACT Concussion Management for further information, contact: www.impacttest.ca

An excellent video "*Concussions 101, a Primer for Kids and Parents*" by Dr. Mike Evans is available on YouTube.

With gratitude to Ophea for use of their resource materials:

Adapted with permission from Ophea, *Ontario Physical Education Safety Guidelines, Secondary Interschool Module, Appendix C – Physical Activity and Sport-Related Concussion, 2012.*

Note: The Safety Guidelines are updated on an annual basis. Please visit <http://safety.ophea.net> to ensure referencing of the most up-to-date version