



Badminton WA Concussion Management Policy

Badminton WA has introduced this policy in 2020 in compliance with the requirements of the WA Department of Local Government, Sporting & Cultural Industries (DLGSC), which manages investment funding to all Western Australian State Sporting Organisations (SSOs). The Board of Badminton WA noted that at date of this policy adoption, neither the Badminton World Federation (BWF), Badminton Oceania (BO), nor Badminton Australia (BA) had publicly adopted a similar Concussion Management Policy for the sport of Badminton in their respective jurisdictions.

Undoubtedly, Badminton WA considers this would be due to the fact that:

- Badminton is considered wholly a non-contact sport, and
- Badminton is considered relatively one of the safest sports, on available insurance industry & sports medicine statistics (but one in which there is a recognised risk of certain injuries such as injury to the eye, joint & ligament damage, falls for aged participants etc), and
- Concussion injury as medically defined in Badminton is practically unreported in our playing history in Western Australia and Australia overall, nearing a century of participation in our sport in these jurisdictions

Nevertheless, Badminton WA recognises that it is remotely possible for concussion injury as medically defined to occur to participants in club based or competitive badminton:

- From collisions bodily with other players on court, in training off or near court, or
- From collisions bodily with objects immediately adjacent to courts, and/or
- As a result of a fall where the body or head impacts with the court surface.

Accordingly Badminton WA adopts a Concussion Management Policy in the interests of best practice in the recognition, management and treatment of concussion injury occurring from member participation in its own competitive events or in members' club based badminton, and recognises a need for advice and information to assist badminton member regional associations and member clubs address concussion injury at the community level.

First Adopted Date : January 2020

Next Review Date:

Reviewed Date:

Concussion has increasingly become a significant public health issue, particularly relevant to sport.

Badminton WA programmes, events and activities are supported by



Department of
Local Government, Sport
and Cultural Industries



Badminton
Australia

SPORTAUS



Since 2001, international conferences have been held to address key issues in the understanding and management of concussion in sport. After each of these meetings, a consensus statement provides the most up-to-date knowledge on concussion in sport.^{1,2,4} The consensus statement outlines the current best practice management guidelines and provides practitioners with simple clinical tools to help manage a concussion.

The primary purpose of the Badminton WA policy is at all times to protect the welfare of Badminton WA players. Accurate diagnosis and management is needed to ensure that a concussed player is appropriately treated.

This policy sets out guidelines, procedures, information and references that can be used by medical staff, athletes, coaches, support staff, and parents responding to players who have received a concussion injury.

The policy comprises of:

1. Important Facts on Concussion
2. Mandatory procedures for Badminton WA Competitions & Events
3. Further Information on Concussion Management as required in other contact sports

Acknowledgements

This policy could not be completed without the excellent resources and information from the joint Australian Institute of Sport and Australian Medical Association statement on concussion as well as the resources provided by the British Journal of Sports Medicine.

1. IMPORTANT FACTS ON CONCUSSION

What is Concussion

Concussion, as defined by the Concussion in Sport Group (CISG) international consensus statement,¹ is a complex pathophysiological process affecting the brain, induced by biomechanical forces. It is known to be complex injury and can be challenging to evaluate and manage.

Concussion is a disturbance in the brain's ability to acquire and process information. The reduced function of the brain represents damage to nerve cells (neurons). Either a direct or indirect blow to the head can cause this injury. The effect that this has on the player can vary from person to person, depending on which part of the brain is affected. The impact can cause concussion signs visible to those who witnessed the collision.

Key Points on Concussion

Concussion can occur in traditional contact sports and sports such as basketball, netball, horse riding, skiing and hockey.

- In badminton the incidence/risk of concussion, as a non-contact sport, is negligible.
- 90% of concussions occur in competitive matches.
- Women are twice as likely to suffer concussion as men.
- Most concussions are not reported.
- Concussion may go undetected due to the subtlety and widespread occurrence of the typical signs and symptoms of concussion.
- Concussion symptoms can manifest immediately or hours and even days later.
- Not all athletes develop the same symptoms or signs of concussion.

Badminton WA programmes, events and activities are supported by



2. MANDATORY PROCEDURES FOR PLAYERS PARTICIPATING IN BADMINTON WA EVENTS

Before the event starts association/club's medical/support staff will:

- Prepare for the sport's season by studying up on concussion.
- Have easy access to a checklist of the warning signs of structural brain injury.
- Know where the closest emergency department or medical practice is in relation to your current location.

Suspected concussion playing at an event or in training:

If a concussion is suspected, a standard primary survey and cervical spine precautions should be used. Once safe to do so, the player must be removed from court/play and assessed in a quiet, safe environment.

If the player successfully completes assessments, within 15 minutes from injury, and remains asymptomatic they can return to play if the medical doctor/first aider present believes it is medically safe to do so. Once returned to play, the player must be closely monitored for evolving signs of concussion.

A player may only return to court or training after being cleared by the Event Referee or Director relying on any available medical/first aider advice. If concussion is suspected the player must remain out of play/training until they have had a chance to be medical assessed.

If the player fails assessments, and a diagnosis of concussion is made they must be removed from play/training and monitored as below.

Signs to watch for:

Problems could arise over the first 24-48 hours. A player should not be left alone and must be seen by doctor or go to a hospital at once if they:

- Have a headache that gets worse (and doesn't resolve with Panadol).
- Are very drowsy or can't be awakened.
- Can't recognize people or places.
- Have repeated vomiting.
- Behave unusually or seem confused; are very irritable.
- Have seizures (arms and legs jerk uncontrollably).
- Have weak or numb arms or legs.
- Are unsteady on your feet; have slurred speech.

Mandatory Return to Play Protocol:

When returning athletes to play, they should follow a stepwise symptom-limited program, with stages of progression:

1. Rest until asymptomatic (physical and mental rest)
2. Light aerobic exercise (e.g. stationary cycle)
3. Sport-specific exercise (e.g. light ball and court work)
4. Non-contact training drills (start light resistance training also)
5. Full contact training after medical clearance
6. Return to competition (game play)

There should be 24 hours (or longer) for each stage and the athlete should return to the previous,

Badminton WA programmes, events and activities are supported by



asymptomatic stage if symptoms recur. Resistance training should only be added in the later stages. Children and adolescents may be more susceptible to concussion and take longer to recover. A more conservative approach should be taken with those aged 18 years or younger and the symptom-free rest period should be extended from 24 to 48 hours in this group. The graduated return to sport protocol should be extended such that the child does not return to contact training, sport, or play in less than 14 days.

No player suspected/diagnosed with concussion can return to play without being cleared by a Sport and Exercise Physician or a recognised medical practitioner.

3. OTHER USEFUL FACTS:

- The diagnosis of concussion should be based on a clinical history and examination that includes a range of domains including mechanism of injury, symptoms and signs, cognitive functioning, neurology including balance assessment.
- The early onset of a concussion headache is most effectively treated with paracetamol painkillers. Avoid anti-inflammatories, especially within the first 24 to 72 hours, as they have been associated with rebound headaches and bleeding of the brain.
- Limited use of computers, mobile phones and television is recommended when suffering from concussion.
- If suitably managed, the majority of concussive symptoms should resolve in 7–10 days. After a minimum of 24 hours without any symptoms the patient can commence a return to cognitive and physical activity.
- Blood tests are not indicated for uncomplicated concussion. Medical imaging is not indicated unless there is suspicion of more serious head or brain injury.

Useful Links / Resources

AIS/AMA position statement on concussion in sport <https://concussioninsport.gov.au>

The 4th International Conference on Concussion in Sport: Consensus Statement

<http://bjsm.bmj.com/content/47/5/250.full>

NICE: Head injury assessment & management in children

<https://www.nice.org.uk/guidance/cg176/chapter/1-recommendations>

Pocket Recognition Tool <http://bjsm.bmj.com/content/47/5/267.full.pdf>

SCAT5 Adult – Sport Concussion Assessment Tool <http://bjsm.bmj.com/content/47/5/259.full.pdf>

SCAT5 Child – Sport Concussion Assessment Tool <http://bjsm.bmj.com/content/47/5/263.full.pdf>

References:

1. McCrory P, Meeuwisse WH, Aubry M, et al. Consensus statement on concussion in sport: the 4th International Conference on Concussion in Sport held in Zurich, November 2012. *Br J Sports Med* 2013;47:250–58.
2. Aubry M, Cantu R, Dvorak J, et al. Summary and agreement statement of the First International Conference on Concussion in Sport, Vienna 2001. Recommendations for the improvement of safety and health of athletes who may suffer concussive injuries. *Br J Sports Med* 2002;36:6–10.
3. McCrory P, Johnston K, Meeuwisse W, et al. Summary and agreement statement of the 2nd International Conference on Concussion in Sport, Prague 2004. *Br J Sports Med* 2005;39:196–204.
4. McCrory P, Meeuwisse W, Johnston K, et al. Consensus Statement on Concussion in Sport: the 3rd International Conference on Concussion in Sport held in Zurich, November 2008. *Br J Sports Med* 2009;43 Suppl 1:i76–90.

Badminton WA programmes, events and activities are supported by