

1 Introduction

1.1. What is concussion?

Concussion is a brain injury resulting in a disturbance of brain function. It affects the way a person thinks, feels and remembers things. Concussion can affect an individual in a variety of ways, including:



1.2. Concussion is often an evolving injury, with symptoms changing over hours or days following the injury. There are often adverse effects on balance and cognitive function. Recovery times following concussion vary between athletes. Physiological recovery may take longer than measures of clinical recovery, and the average time taken to resolve symptoms may vary according to sex, age, presence of pre-injury medical conditions, and para-athlete status. While these guidelines apply to all in community and youth settings, additional information regarding certain individual characteristics can be found in the [AIS Concussion and Brain Health Position Statement 2024](#).

1.3 The purpose of this Concussion Policy document is to outline the Standards and Guidelines regarding the management of concussion in Tee-Ball in Western Australia.

2 Concussion Recognition and Management

By utilising the 5 Rs, we can ensure that the health and wellbeing of participants remains the number one priority. These include:

- Recognise
- Removal
- Referral
- Rest
- Return to play

2.1. Recognising the injury

a. Although a medical practitioner should formally diagnose a concussion, all sport stakeholders including players, parents, coaches, officials, teachers and trainers are responsible for recognising and reporting players with visual signs of a head injury or who report concussion symptoms. This is particularly important when a medical practitioner is not at the venue.

Watch for when a player collides with:

- another player.
- a piece of equipment; or
- the ground.

b. Any one or more of the following can indicate a possible concussion:

- Loss of consciousness
 - Dazed, blank or vacant look
 - Headache, blurred vision, dizziness
 - Confused/not aware of plays or events
 - Balance problems (unsteadiness)
 - Lying motionless on ground/slow to get up
 - Grabbing or clutching head
- c. Refer to the Pocket Concussion Recognition Tool to help identify concussion. It is important to note that brief sideline evaluation tools are designed to recognise a concussion but they cannot replace a comprehensive medical assessment.

2.2. Removing the participants from the game

- a. Initial management must adhere to the first aid rules, including airway, breathing, circulation, and spinal immobilisation. Any participant with a suspected concussion must be removed from the game. Removing them from the game allows the opportunity to rigorously evaluate the injury.
- b. Any participant who has suffered a concussion must not be allowed to return to play in the same game. In the case of an unconscious participant, they must only be moved by qualified health professionals. If no qualified health professional is on site, the participant must not be moved – call and await the arrival of the ambulance.
- c. It is important not to be influenced by the individual, other players, coaching staff, trainers, and parents or any others suggesting that they return to the game. **If there is any doubt, sit them out!**
- d. A player who is removed from an activity because of a suspected concussion must not resume the activity for at least 48 hours, even if there are no signs or symptoms of concussion. An absence of signs or symptoms immediately after an incident is not a reliable indicator, because the signs and symptoms of a concussion may emerge up to 48 hours after the impact.
- e. If an athlete is suspected of sustaining a severe head or spinal injury (“Red Flag”), call an ambulance immediately.

2.3. Refer the Person

- a. All participants with concussion or a suspected concussion need a medical assessment by a Health Care Practitioner (HCP) for return to play guidance. If a doctor is not present, then the participant should be sent to a local general practice or local hospital emergency department.

Urgent transfer to hospital is required if the participant displays any of the following symptoms:

- Loss of consciousness or seizures
 - Confusion
 - Deterioration following their injury (e.g., vomiting, increased headaches or drowsiness)
 - Neck pain or spinal cord symptoms (e.g., numbness, tingling or weakness)
- b. If there is any doubt on the participant’s condition they should be referred to hospital.

2.4 Rest

Rest is especially important after a concussion because it helps the brain to heal.

- a. **Concussions**
affect people differently. While most people with a concussion recover quickly and fully, some will have symptoms that last for days or even weeks. A more serious concussion can last for months or longer. It is important that people do not ignore their symptoms and in general, a more conservative approach be used in cases where there is any uncertainty.
- b. **Concussion in Children and Adolescents**

The management of sport related concussion in children (aged 5 to 12 years) and adolescents (aged 13 to 18 years) requires special paradigms suitable for the developing child. Children have physical and developmental differences - less developed neck muscles; increased head to neck ratio; and brain cells and pathways that are still developing. Children and adolescents may have greater susceptibility to concussion, they may also take longer to recover, and they may be at risk of severe consequences such as second impact syndrome.

Managing concussion in children and adolescents therefore requires different standards and a more conservative approach. Children typically take longer to recover from concussion than adults (up to four weeks).

c. Return to Learn

The priority when managing concussion in children should be returning to school and learning, ahead of returning to sport. Concussion symptoms can interfere with memory and information processing. This can make it hard for children to learn in the classroom. Parents should discuss with their doctor and child's school, an appropriate return-to-school strategy.

2.5. Return

- a. A concussed participant must not be allowed to return to play, or in the case of juniors must not return to school, before having a medical clearance. In every case the decision regarding the timing of return to school or play should be made by a medical doctor with experience in managing concussion (Sports Doctor). Junior participants should not return to play until they have returned to school.
- b. Participants should be returned to sport in a graduated manner that should be supervised by their medical practitioner. See player example (Appendix 1).

3 Resources

3.1. Pocket Concussion Recognition Tool 5

<http://bjsm.bmj.com/content/51/11/872>

The Pocket Concussion Recognition Tool was designed to help identify concussion in children, youth, and adults, and is a quick reference guide that can be referred to at any time for concussion recognition and management – available online.

CONCUSSION RECOGNITION TOOL 5[®]
To help identify concussion in children, adolescents and adults

Supported by: IHF, FIFA, IOC, KOCBY, FEI

RECOGNISE & REMOVE
Head impacts can be associated with serious and potentially fatal brain injuries. The Concussion Recognition Tool 5 (CRT5) is to be used for the identification of suspected concussion. It is not designed to diagnose concussion.

STEP 1: RED FLAGS – CALL AN AMBULANCE
If there is concern after an injury including whether ANY of the following signs are observed or complaints are reported then the player should be safely and immediately removed from play/game/activity. If no licensed healthcare professional is available, call an ambulance for urgent medical assessment.

- Neck pain or tenderness
- Double vision
- Weakness or tingling/burning in arms or legs
- Severe or increasing headache
- Seizure or convulsion
- Loss of consciousness
- Deteriorating conscious state
- Vomiting
- Increasingly restless, agitated or combative

Remember:

- In all cases, the basic principles of first aid (danger, response, airway, breathing, circulation) should be followed.
- Assessment for a spinal cord injury is critical.
- Do not attempt to move the player (other than required for airway support) unless trained to do so.
- Do not remove a helmet or any other equipment unless trained to do so safely.

If there are no Red Flags, identification of possible concussion should proceed to the following steps:

STEP 2: OBSERVABLE SIGNS
Visual clues that suggest possible concussion include:

- Lying motionless on the playing surface
- Slow to get up after a direct or indirect hit to the head
- Disorientation or confusion, or an inability to respond appropriately to questions
- Blank or vacant look
- Balance, gait difficulties, motor incoordination, stumbling, slow laboured movements
- Facial injury after head trauma

STEP 3: SYMPTOMS

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

STEP 4: MEMORY ASSESSMENT
(IN ATHLETES OLDER THAN 12 YEARS)

Failure to answer any of these questions (modified appropriately for each sport) correctly may suggest a concussion:

- "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?"

Athletes with suspected concussion should:

- Not be left alone initially (at least for the first 1-2 hours).
- Not drink alcohol.
- Not use recreational/ prescription drugs.
- Not be sent home by themselves. They need to be with a responsible adult.
- Not drive a motor vehicle until cleared to do so by a healthcare professional.

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ANY ATHLETE WITH A SUSPECTED CONCUSSION SHOULD BE IMMEDIATELY REMOVED FROM PRACTICE OR PLAY AND SHOULD NOT RETURN TO ACTIVITY UNTIL ASSESSED MEDICALLY, EVEN IF THE SYMPTOMS RESOLVE

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3.2. The 5th International Conference on Concussion in Sport: Consensus Statement

<http://bjsm.bmj.com/content/51/11/838>

Rehabilitation Stage	Exercise/Activity Suggestions
No activity stage	<ul style="list-style-type: none"> • Physical and cognitive rest
Light aerobic activity stage after 24 hours of no symptoms	<ul style="list-style-type: none"> • Light jogging • Light stretching • No throwing or swings • Intensity must be < 70% max heart rate
Sport specific exercise stage	<ul style="list-style-type: none"> • Increasing intensity of jogging/running as tolerated • Player can now jog/run to bases/positions • Throwing stages/breakdown • Progress to full throws
Non-contact training drills	<ul style="list-style-type: none"> • Throwing and catching • Infield/Outfield drills • Hitting wiffle balls • Continue with tracking drills/pitch recognition drills • Base running drills • No base runners to minimise risk of collisions
Full contact practice	<ul style="list-style-type: none"> • Following medical clearance. Full practice with team including sliding, hitting real balls, and base runners
Return to play	<ul style="list-style-type: none"> • Game

(Reference: McCrory et al, 2013 – Consensus Statement on Concussion in Sport – the 4th International Conference on Concussion in Sport).

3.3. **Sports Medicine Australia**
<https://sportconcussion.com.au/>

Example - Club Concussion Checklist Pre-Season Preparation and Education

Below is an example of some suggested measures forming part of a club concussion checklist which a club or organisation can use to ensure they have undertaken the appropriate pre-season education and preparation to recognise and manage concussion. Where possible, clubs and event organisers should identify and develop a positive relationship with a local medical practitioner who is willing and available to:

- receive referrals of players with suspected concussion from the club
- provide concussion recognition and management information and training to the club
- work with the club and players to coordinate the return-to-participation process

Club Concussion Checklist Pre-Season Preparation and Education 2017

Club Name:

Club Concussion Coordinator(s) and Contact Number:

To reduce the risk of concussion the following pre-season preparation and education has been implemented:

<p>Concussion Fact Sheets have been:</p> <ul style="list-style-type: none"><input type="checkbox"/> posted on the club website or at the club<input type="checkbox"/> distributed with registration information<input type="checkbox"/> emailed to all parents, coaches and officials	<p>Concussion Recognition Tool 5 has been:</p> <ul style="list-style-type: none"><input type="checkbox"/> provided to all coaches, officials and designated individuals<input type="checkbox"/> included in all first aid kits
<p>Concussion Information Posters have been:</p> <ul style="list-style-type: none"><input type="checkbox"/> posted on the club website<input type="checkbox"/> distributed with registration information<input type="checkbox"/> emailed to all parents, coaches and officials	<p>In-person concussion education has been delivered to:</p> <ul style="list-style-type: none"><input type="checkbox"/> all coaches<input type="checkbox"/> players<input type="checkbox"/> parents
<p>Concussion recognition and management training has been provided to:</p> <ul style="list-style-type: none"><input type="checkbox"/> the concussion co-ordinator<input type="checkbox"/> all first aid providers and sports trainers<input type="checkbox"/> interested coaches and parents	<p><input type="checkbox"/> A Medical Emergency Plan has been developed and communicated to all coaches, officials and designated individuals.</p>

Local Medical Contacts

Medical practitioner with experience in managing concussion:

Sports Medicine Clinics:

Local Hospital:

Example - Club Concussion Practice and Game Day Management

Below is an example of a club concussion checklist which a club or organisation can use to ensure they have undertaken the appropriate concussion recognition and management processes in place at practice and games.

Club Concussion Checklist Practice and Game Day Management 2017	
Club Name:	
Club Concussion Coordinator(s) and Contact Number:	
The following procedure should be followed for recognising and managing concussion at practice and on game day:	
<input type="checkbox"/>	Identify one or more people who are responsible for coordinating all concussion-related activity
<input type="checkbox"/>	Ensure at least one person has a fully charged mobile phone and the phone number for emergency services (000)
<input type="checkbox"/>	Ensure all coaches, officials and first aid providers have access to a Concussion Recognition Tool 5
<input type="checkbox"/>	Ensure an ambulance is called immediately if any "Red Flags" are raised.
<input type="checkbox"/>	Ensure all players who are suspected of having a concussion are:
<input type="checkbox"/>	Removed from participation immediately
<input type="checkbox"/>	Assessed by someone experience and trained in using the Concussion Recognition Tool 5
<input type="checkbox"/>	Not allowed to return to participation on the same day
<input type="checkbox"/>	Supervised and monitored for at least 2 hours following a suspected concussion
<input type="checkbox"/>	Provided with appropriate information about how to manage a concussion including return-to-play protocols
<input type="checkbox"/>	Provided with the contact details of a local medical practitioner with experience in managing concussion
<input type="checkbox"/>	Contacted within 48 hours to check they are okay and have all the information they need.
Local Medical Contacts	
Medical practitioner with experience in managing concussion:	
Sports Medicine Clinics:	
Local Hospital:	

3.4. AIS/AMA position statement on concussion in sport

<https://concussioninsport.gov.au/>