**Australian Cricket**

# Community Cricket Concussion and Head Trauma Guidelines

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| Version: | 5.0 |
| Date last reviewed: | 20 11 2023. |
| Review frequency: | As required. |

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## 1 EXECUTIVE SUMMARY

1.1 Community Cricket representatives and participants should take a conservative approach to managing concussion.

1.2 Participants in Community Cricket should wear appropriate and well fitted protective gear including helmets and neck protectors.

1.3 Any player or official that has a suspected concussion should:

1.3.1 be immediately removed from the training and playing environment;

1.3.2 not return on the same day without medical clearance;

1.3.3 not drive a motor vehicle or take part in any activity that puts them or others at risk; and

1.3.4 be assessed by a qualified medical doctor.

1.4 Any player or official with a confirmed concussion should:

1.4.1 not return to play or train on the same day; and

1.4.2 only return to play or train once cleared by a qualified medical doctor but no earlier than:

(a) 13 days from the concussion incident for adult players/umpires; and

(b) 14 days from the date the player became symptom-free for junior players.

## 2 INTRODUCTION

2.1 Australian Cricket (**AC**) considers it critical to pursue best practice in prevention and management of concussion and head trauma arising while participating in organised cricket competitions and training sessions, including Community Cricket.

2.2 Cricket Australia (**CA**) endorses the *2023 Amsterdam Consensus Statement on Concussion in Sport* (**Consensus Statement**), *2023 AIS Concussion and Brain Health Position Statement,* and 2018 *International Cricket Council Concussion Guidelines.* The aim is for the AC Community Cricket Guidelines to be consistent with the International Consensus Statement, and the AIS and ICC Guidelines where appropriate.

## 3 SCOPE

3.1 These Guidelines apply to:

(a) all players; and

(b) umpires,

(collectively referred to as **Participants**):

3.1.1 participating in any organised community (that is, non-elite including Premier Cricket) cricket competitions and matches or training for such competitions or matches (collectively, **Community Cricket**); and

3.1.2 who receive a blow to the head or neck (either bare or while wearing protective equipment), whether by ball or otherwise.

3.2 Affiliated Clubs and Associations should enforce these Guidelines for Participants taking part in Community Cricket training, matches and competitions.

## 4 RELATED DOCUMENTS

4.1 AC Helmet Recommendations

https://play.cricket.com.au/community/clubs/managing-your-club/helmet-recommendations

## 5 PROTECTIVE EQUIPMENT REQUIREMENTS

5.1 Players should wear:

(a) properly fitted British Standard (BS7928:2013) compliant helmets; and

(b) products/attachments properly fitted to helmets that provide additional protection for the vulnerable upper neck (occipital) area of the batsman or close in fielder (**Neck Protectors**),

when batting, fielding within seven meters of the bat (except for off-side slips and gully fielders) and when wicket-keeping up to the stumps (regardless of age).

5.2 Umpires should wear properly fitted BS7928:2013 compliant helmets in higher risk situations (umpiring for T20 formats or when there is a match situation where attacking batting is being played).

5.3 Helmets should be replaced immediately following a significant impact (a blow to the helmet) in accordance with the manufacturer's recommendations.

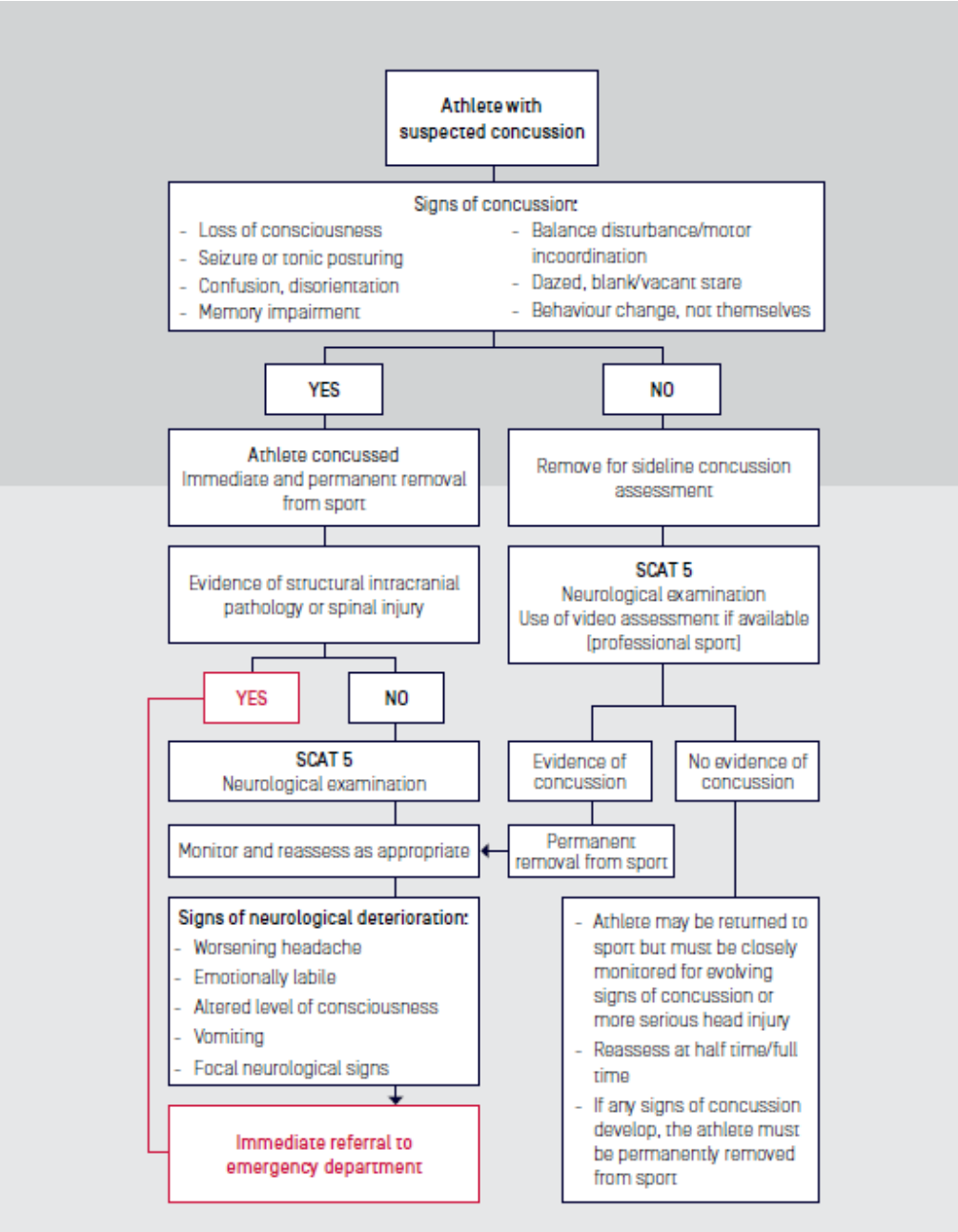
## 6 DIAGNOSIS OF CONCUSSION

6.1 If a Participant receives a blow to the head or upper neck (whether wearing protective equipment or not), these Guidelines should be followed:

6.1.1 Medical or First Aid Assistance

(a) If ***there is doctor or other medically trained person available***, they should be informed about the impact immediately if they did not witness it and should attend to the Participant. The process outlined below in the Concussion Assessment Flowchart can guide medical professionals with

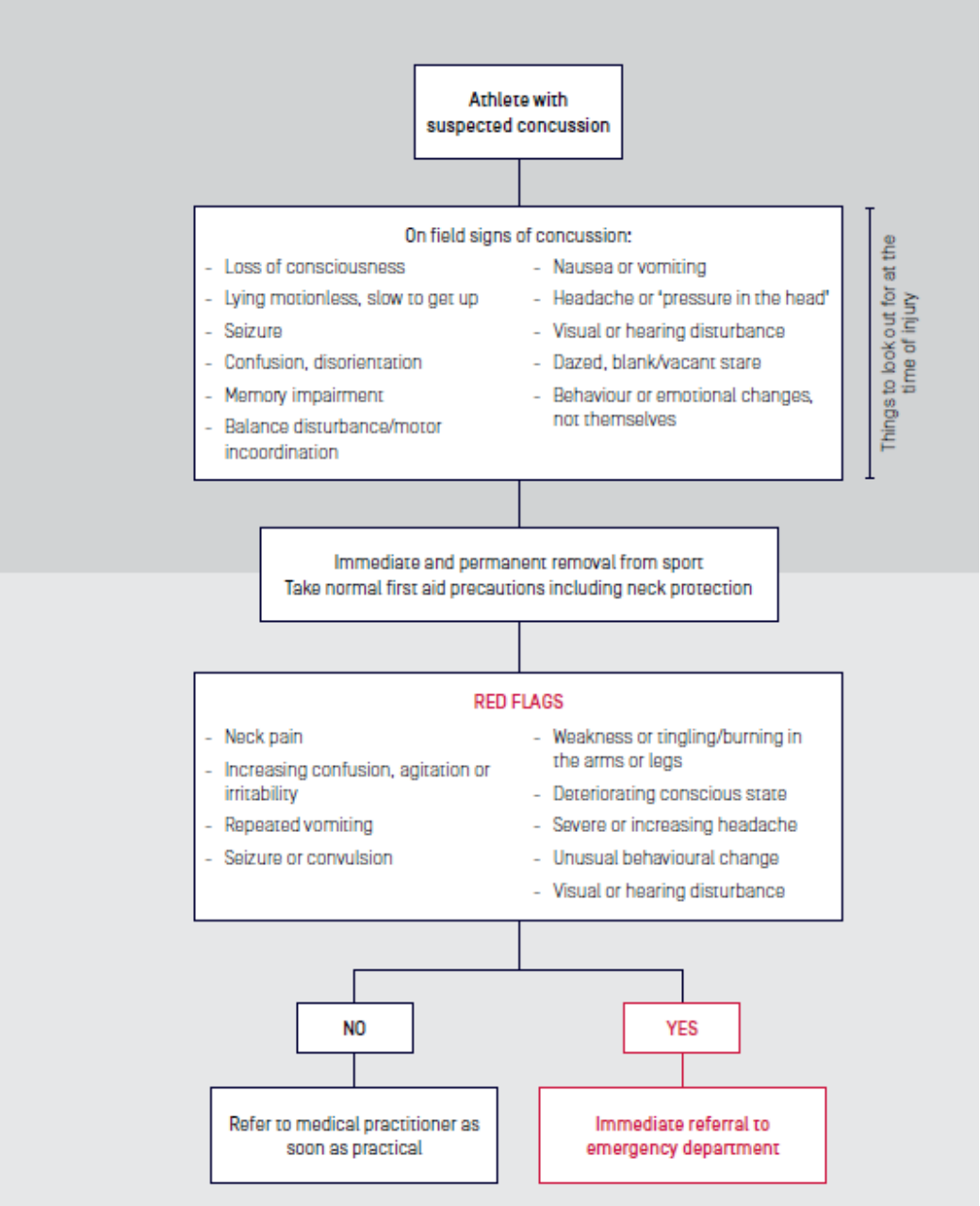
the on-field assessment process with Participants suspected of concussion.




***Concussion Assessment Flowchart for Medical Personnel***

***(AIS Concussion and Brain Health Position Statement February 2023)***

(b) If ***there is no doctor or medically trained person available***, another Participant (a player, coach or administrator etc.), ideally from the same team, or a match official (if there is one appointed) should assist in managing this process. The Concussion Assessment Flowchart below outlines the recommended process to assist in the on-field management of a Participant suspected of concussion.




***Concussion Assessment Flowchart for Non-Medical Personnel***

***(AIS Concussion and Brain Health Position Statement February 2023)***

6.1.2 Before play resumes again, the Participant should be asked some general questions that they should be able to easily answer to ascertain if they are orientated. These questions are known as modified 'Maddocks' questions and should include some or all of the following:

- What happened?
- What day is it? What month is it?
- What venue are we at today?
- What is the current innings score (if on match day)?
- Who was the opposition at the last match you played (if during the cricket season)?
- Who bowled the ball to you (if blow was from batting at a team training)?

***If the Participant cannot answer the questions satisfactorily they should be immediately removed from the field of play (or training environment) and considered as 'concussion likely' and be required to undertake an assessment from a qualified medical practitioner (see Concussion Assessment Flowchart in section 6.1.1).***

6.1.3 Before play resumes after the head or neck blow, the Participant should be asked if they are currently experiencing any symptoms since the blow to the head or neck.

***If the Participant reports any of the following symptoms they should be immediately removed from the field of play (or training environment) and considered as 'concussion likely' and be required to undertake an assessment from a qualified medical practitioner (see Concussion Assessment Flowchart in section 6.1.1).***

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

6.1.4 The Participant should be instructed that if the Participant experiences any of the above symptoms over the 72 hours after the head or neck blow, they should assume that it is a sign of delayed concussion and be required to undertake an assessment from a qualified medical practitioner.

***If the Participant suffers from any symptoms that are severe, or worsening rather than improving, the participant should seek further medical care at a***

***local medical centre, hospital or general practitioner / medical doctor before resuming playing, training or umpiring.***

6.1.5 If the Participant is witnessed or suspected to have demonstrated any of the following signs after the head or neck blow, ***it should be assumed that they have sustained a concussion and be removed from the field of play immediately (see Concussion Assessment Flowchart in section 6.1.1)*:**

- loss of consciousness;
- no protective action in fall to the ground observed directly or on video;
- impact seizure or tonic posturing;
- confusion;
- disorientation;
- memory impairment (e.g. fails Maddocks questions – see above);
- balance disturbance (e.g. ataxia);
- athlete reports significant new or progressive concussion symptoms;
- dazed or blank/vacant stare;
- not their normal selves; or

  observed behaviour change.

6.1.6 An ambulance should be called (by dialling 000) if the Participant has any of the following signs or symptoms;

- loss of consciousness for any time;
- amnesia – inability to remember recent details;
- inability to keep balance;
- nausea or vomiting not explained by another cause, such as known gastroenteritis; or
- fitting.

***In no circumstance should the Participant return to playing, training or umpiring until an assessment is made by a qualified medical doctor. The Club or Association may request clearance by a qualified medical doctor prior to permitting the Participant to return to playing, training or umpiring (see Concussion Assessment Flowchart in section 6.1.1).***

6.2 If the Participant is suspected, presumed or has an established concussion, the Club or Association should seek a clearance by a qualified medical doctor before the Participant be permitted to return to playing, training or umpiring, in line with Section 7 below.

6.3 If the Participant is suspected, presumed or has an established concussion, the Participant should not perform activities that put them or others at risk such as driving a motor vehicle, climbing ladders, riding a bike etc. until medically cleared to do so.

6.4 More serious co-existing possible diagnoses (e.g. fractured skull, neck injury) should be managed as an emergency priority if suspected, and once these are excluded then diagnosis of concussion can be considered. In all circumstances, an ambulance should be called (see Concussion Assessment Flowchart in section 6.1.1).

## 7 RETURN TO PLAY

7.1 A Participant should not return to play on the same day if the diagnosis of concussion is suspected, likely or established.

7.2 If a Participant has been diagnosed with a concussion, the final determination on whether the Participant may return to play, should be made by a ***qualified medical doctor***.

7.3 The graded return to training and playing should be adopted. An example of a Graded Return to Playing (**GRTP**) framework is outlined in Appendix 1 for adult Participants and Appendix 2 for junior Participants. It should be noted that the activities are examples and a guide to return to training and playing. Any Participant returning to play after a confirmed concussion should consult a qualified medical doctor, preferably with experience in sports concussion such as a qualified Exercise and Sport Physician or Sports Doctor, who should help determine when it is safe to return to training and playing.

7.4 Participants who are 19 years or older (adults)**, should not return to play for a minimum of 13 days from the time of concussion in accordance with the GRTP framework outlined in Appendix 1**. Importantly, progression from lower to higher intensity (or risk) activities requires a minimum 24–48-hour period to monitor for the return or exacerbation of symptoms.

7.5 Any player returning to;

(a) ***cricket skills training*** should do so only after consulting a qualified medical doctor; and

(b) ***play*** should provide their club with a letter (or other in-writing communication) from a qualified medical doctor stating that they have recovered from the concussion and are medically fit to return to unrestricted training, and, following this, matches if they remain symptom free (in line with the GRTP timeline).

## 8 JUNIOR PLAYERS

8.1 Managing concussion in junior players requires a more conservative approach. The AIS Concussion and Brain Health Position Statement (2023) states that;

*'young skulls are large compared to their brains because their brains are not fully developed and therefore easily move within the skull. Young brains have less myelination than adult brains and continue to increase/grow in size throughout adolescence until about 24 years*. Lack of myelination and the potential for the brain to move easily within the skull, predispose nerve fibres to be easily damaged during head trauma making youth more vulnerable to concussion. Also, weaker neck muscles in youth are proposed as being a confounding factor in impairing the attenuation of forces impacting the head and can increase the risk of concussions (compared to adult populations'**.*

** Arain M, et al. Maturation of the adolescent brain. Neuropsychiatr Dis Treat. 2013;9:449-61.*
** Giedd J. Structural magnetic resonance imaging of the adolescent brain. Ann N Y Acad Sci. 2004;1021:77-85.*
** Giedd J, et al. Brain development during childhood and adolescence: a longitudinal MRI study. Nat Neurosci 1999;2(10):861-3.*
*** Bretzin A, et al. Association of sex with adolescent soccer concussion incidence and characteristics. JAMA Netw Open. 2021;4(4):e218191.*

8.2 If concussion is suspected or confirmed in a junior player based on the criteria in section 6.1 above, they should be removed from playing and training (cricket or other sports) until cleared to return by a qualified medical doctor.

8.3 Recovery from concussion for adolescents is slower than in adults, so return to school and studying should be guided by medical advice. ***Participants who are 18 years or younger, should not return to play for a minimum of 14 days from the time they become symptom free in accordance the GRTP Framework outlined in Appendix 2.*** *For clarity, this is not 14 days from the time of concussion*. This is the minimum amount of time that is recommended but some concussions require longer that 14 days to fully recover after symptom free. As with adult Participants, progression from lower to higher intensity (or risk) activities requires a minimum 24–48-hour period to monitor for the return or exacerbation of symptoms.

## 9 DOCUMENTATION

CA recommends that all cases of concussion or suspected concussion (and all other head traumas) should be documented on an injury report. As a minimum, the injury report should record the date and time of the incident, the venue and how the incident occurred (e.g. batting, fielding) and any of the symptoms reported or signs observed.

## APPENDIX 1. GRADED RETURN TO PLAY AFTER CONCUSSION FRAMEWORK FOR ADULT CRICKET PARTICIPANTS [19 YEARS & OLDER]

| Stage | Recommended Activity |
|---|---|
| **Physical & cognitive rest** | ***Relative physical and cognitive rest, and until all symptoms & signs have resolved (mild temporary symptoms acceptable).***<br>e.g. time off or modified school or work.<br>No physical activity.<br>*Minimum of 48 hours.* |
| **Light aerobic exercise** | e.g. walking, swimming or low intensity stationary cycling.<br>No resistance/strength training.<br>*Move to next stage if no symptoms during or after activity.*<br>*Minimum of 48 hours.* |
| **Moderate intensity exercise** | Increase intensity of exercise (breathing heavily, but able to maintain a short conversation).<br>Light resistance training.<br>*Minimum of 48 hours.* |
| **High intensity exercise** | e.g. higher intensity physical exercise such as jogging or running drills.<br>Strength/resistance training activities can be added.<br>*Move to next stage if no symptoms during or after activity.*<br>*Minimum of 48 hours.* |
| **Non-competitive (low risk) skills training**<br>**Medical review** | Progression to more cricket training drills **with a low risk of head impact.**<br>e.g. bowling drills with no batter, individual fielding drills, batting drills or facing throwdowns with no bowler.<br>***Must have formal medical review* from an appropriately qualified medical doctor prior to starting full unrestricted training.**<br>*Move to next stage if no symptoms during or after activity.*<br>*Minimum of 48 hours.* |
| **Full training** | Full participation in cricket skills training and strength and conditioning training at a volume and intensity appropriate to the time lost to injury.<br>Should include skills that challenge physical and cognitive capabilities.<br>*Move to next stage if no symptoms during or after activity.*<br>*Minimum of 48 hours.* |
| **Return to play** | Available for selection if has remained symptom and sign free since the last training session. If any symptoms re-appear during the match, withdraw from the match and review with qualified medical doctor.<br>No earlier than 13 days after concussion incident. |

## APPENDIX 2. GRADED RETURN TO PLAY AFTER CONCUSSION FRAMEWORK FOR JUNIOR CRICKET PARTICIPANTS [18 YEARS & YOUNG]

| Stage | Recommended Activity |
|---|---|
| **Physical & cognitive rest** | ***Relative physical and cognitive rest, and until all symptoms & signs have resolved (mild temporary symptoms acceptable).***<br>e.g. time off or modified school or work.<br>No physical activity.<br>*Minimum of 48 hours.* |
| **Light aerobic exercise** | e.g. walking, swimming or low intensity stationary cycling.<br>No resistance/strength training.<br>*Move to next stage if no symptoms during or after activity.*<br>*Minimum of 72 hours.* |
| **Moderate intensity exercise** | Increase intensity of exercise (breathing heavily, but able to maintain a short conversation).<br>Light resistance training.<br>*Minimum of 48 hours.* |
| **High intensity exercise** | e.g. higher intensity physical exercise such jogging or running drills.<br>Strength/resistance training activities can be added.<br>*Move to next stage if no symptoms during or after activity.*<br>*Minimum of 48 hours.* |
| **Non-competitive (low risk) skills training**<br>**Medical review** | Progression to more cricket training drills **with a low risk of head impact.**<br>e.g. bowling drills with no batter, individual fielding drills, batting drills or facing throwdowns with no bowler.<br>*Move to next stage if no symptoms during or after activity.*<br>***Must have formal medical review* from an appropriately qualified medical doctor prior to starting full unrestricted training.**<br>*Minimum of 48 hours.* |
| **Full training** | Full participation in cricket training and strength and conditioning training at a volume and intensity appropriate to the time lost to injury.<br>Should include skills that challenge physical and cognitive capabilities.<br>*Move to next stage if no symptoms during or after activity.*<br>*Minimum of 48 hours.* |
| **Return to play** | Available for selection if has remained symptom and sign free since the last training session. If any symptoms return, should attend doctor for a formal medical review before clearance can be granted.<br>If any symptoms re-appear during the match, withdraw from the match and review with qualified medical doctor.<br>No earlier than 14 days after concussion incident. |