Australian Cricket

CONCUSSION AND HEAD TRAUMA POLICY

Version:	4.0
Date last reviewed:	30 June 2018
Review frequency:	Annual

The CRICKET AUSTRALIA CHIEF MEDICAL OFFICER is responsible for this document.

DOCUMENT CONTROL

Name:	Concussion & Head Trauma Policy
Status:	Active
Last Updated:	30 June 2018
Owner:	CA Chief Medical Officer
Location:	AMS On request from the CA SSSM Manager
Version Release:	4.0
Next Review Date:	1 July 2019

REVISIONS

Date	By
25 September 2017	Alex Kountouris (CA SSSM Manager) John Orchard (CA Chief Medical Officer) Dr Michael Makdissi (Hawthorn FC MO) Peter Harcourt (AFL CMO) Dr Mark Young (Queensland Cricket SMO)
30 June 2018	Alex Kountouris (CA SSSM Manager) John Orchard (CA Chief Medical Officer) Dr Richard Saw (Australian Men's Team Doctor) Peter Harcourt (AFL CMO) Dr Mark Young (Queensland Cricket State Medical Officer)

1. PURPOSE

1.1 Australian Cricket considers it critical to pursue best practice in prevention and management of concussion and head trauma arising in the course of participating in Cricket Australia-sanctioned competitions and training sessions.

1.2 Cricket Australia (**CA**) endorses the *2017 Berlin Consensus Statement on Concussion in Sport* (**Consensus Statement**) and aims for this Policy to be consistent with the Consensus Statement to the fullest extent possible.

2. SCOPE

2.1 This Policy applies to: (i) all male, female and pathway players and (ii) all match officials (collectively referred to as **Participants**):

(a) participating in any CA sanctioned competitions and matches or training for such competitions or matches or training for international cricket competitions or matches (collectively, **Elite Cricket**); and

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

2.2 In relation to players representing Australia in international cricket competitions or matches, CA will (where possible within the ICC's rules) follow this Policy.

3. RELATED DOCUMENTS

3.1 2017 Berlin Consensus Statement on Concussion in Sport.

3.2 Sport Concussion Assessment Tool 5th edition (**SCAT5**).

3.3 CA Playing Conditions.

3.4 Relevant Clothing and Equipment Regulations.

4. PROTECTIVE EQUIPMENT REQUIREMENTS

4.1 The mandatory use of helmets by all players (regardless of age) as per the CA Playing Conditions and Clothing and Equipment Regulations.

4.2 The recommended use of helmets by umpires as per the CA Playing Conditions and Clothing and Equipment Regulations.

4.3 The recommended use of products/attachments properly fitted to helmets that provide additional protection for the vulnerable neck/occipital area of the batsman (**Neck Guards**).

4.4 Helmets should be replaced immediately in accordance with the manufacturer's recommendations following an impact.

4.5 Any helmet which is required to be replaced in accordance with clause 4.4 above, must be returned to CA, so that it may be examined and/or returned to the manufacturer for further analysis and testing.

5. HEAD AND NECK TRAUMA MANAGEMENT

5.1 If a Participant receives a non-trivial blow to the head or neck (either bare or while wearing protective equipment), whether by ball or otherwise, then the highest qualified medical personnel attending the match/training venue may undertake the Concussion Protocol outlined at Appendix 1 to this Policy, if they deem the blow warrants it or if signalled by the match officials to enter the field of play. Importantly, this can include:

(a) completing an on-field assessment (in accordance with the applicable CA Playing Conditions for a match) to determine whether a concussion is established or suspected.

Concussion is established through the reporting of symptoms and/or observation of signs. Symptoms are generally subjective to the individual (e.g. dizziness, headache, nausea) and signs are generally objective (e.g. loss of consciousness, altered balance, amnesia, disorientation, uncontrolled fall).

(b) if a concussion is suspected or a further assessment is required, following the Concussion Protocol by removing the Participant from the sporting environment and completing the compulsory multimodal concussion-specific (SCAT5 and CogSport) tests in a standardised fashion. For more detail on administering the SCAT5 and CogSport tests see section 9.

(c) if a concussion is diagnosed, following the return to play steps contained in the Concussion Protocol.

5.2 Trivial and non-trivial head or neck impacts:

(a) A non-trivial head or neck impact is defined as any ball impact that directly strikes a batter when bowled by a pace-bowler; or directly strikes a close fielder on the head or neck.

(b) The determination if other head or neck impacts are trivial or not, will be made by the highest-qualified medical person based on the observation of the incident either live or on reviewing video replay.

(c) For trivial head or neck impacts, documentation must include a consultation note on the AMS but SCAT5 or CogSport testing are not routinely required.

(d) Medical staff should monitor participants with trivial head or neck impacts for evolving or delayed signs of concussion.

5.3 If a concussion is not suspected after a non-trivial head or neck impact, the highest-qualified medical person at the match or training session must ensure that SCAT5 and CogSport testing of the participant are completed at some stage on the same day as the impact incident.

(a) If there is still no concussion suspected after the assessments on the day of the impact incident, the highest-qualified medical person that was in attendance at the time of the head and neck impact, must ensure that a clinical review (either phone or in-person) takes place to confirm that the participant's status has not changed. The clinical review must occur before the next training session or match participation; or within 48 hours of the incident: whichever comes first.

(b) If there is no concussion diagnosed but the nature of the impact or initial presentation suggests that delayed concussion is a possibility after the routine post-impact assessment, the highest-qualified medical person must ensure that a clinical review (in-person), SCAT5 and CogSport testing take place before the next training session or match participation; or within 48 hours of the incident: whichever comes first to either confirm or exclude concussion diagnosis.

See Appendix 1 for further clarification of the management of participants when concussion is not suspected after a head or neck impact.

5.4 If the highest qualified medical personnel directs a Participant to leave the field or training area (if a concussion is diagnosed or if further assessment is required), the Participant must leave the field in accordance with applicable CA Playing Conditions or training area.

5.5 No person, including the Participant under assessment, should attempt to influence the medical personnel in making their assessment or the decision to remove the Participant from the field for further assessment.

5.6 The match situation is not relevant in the management of the Participant and whether they are required to leave the field of play if concussion is suspected or diagnosed. The primary and only concern in any assessment shall be the health, safety and welfare of the Participant suspected of having suffered a head or neck trauma/concussion. As an example, it is not relevant to the operation of this Policy, or the assessment of the Participant by the medical staff member or contractor, that the Participant is in a last wicket partnership to save or win a match.

5.7 If there is a qualified doctor on duty at a match or training session, the doctor will make any assessments required under this Policy. At matches or training sessions where a qualified doctor is not present, a physiotherapist, paramedic, sports trainer, or suitably qualified first aider will be present to make any necessary assessments (however he/she must refer the Participant to a doctor if he/she suspects a concussion or hospital if he/she suspects a serious head/neck injury). CA supports a conservative approach to the diagnosis and treatment of concussion and head/neck injuries.

5.8 More serious co-existing diagnoses (e.g. fractured skull, neck injury) should be managed as an emergency priority and once these are excluded then diagnosis of concussion can be considered.

5.9 After a non-trivial blow to the head/neck, if any of the following are present:

(a) loss of consciousness for any time;
(b) amnesia – inability to remember recent details;
(c) inability to keep balance;
(d) vomiting not explained by another cause, such as known gastroenteritis; and/or
(e) tonic posturing or fitting,

then the diagnosis of concussion (or more serious head trauma) is established.

5.10 Where available, broadcast footage must be used to help determine whether a concussion or serious head/neck injury should be suspected. For a clearly serious head injury, a doctor should immediately run on the field as part of emergency response without waiting to access a replay. However, in instances where the highest qualified medical personnel appropriately determines that it is not necessary to attend to the participant on the field of play, or attends to the participant on to the field of play and then decided a participant can continue without further assessment; a video replay of the incident must be checked (where available) to assist the medical personnel in double checking whether a concussion or serious head/neck injury should be suspected.

5.11 More subtle symptoms (e.g. headache, dizziness, feeling of vagueness) are less conclusive, and in these scenarios, the Concussion Protocol in Appendix 1 should be completed.

5.12 The medical officer or the highest qualified medical personnel on duty will make the final diagnosis of whether a concussion has occurred.

6. CONCUSSION SUBSTITUTE

6.1 A Concussion Substitute is available as per the applicable CA Playing Conditions, in the following CA sanctioned competitions:

(a) Sheffield Shield (on a trial basis in seasons 2017/18 and 2018/19);
(b) Male and Female One Day Domestic Competition;
(c) BBL and WBBL;
(d) Futures League;
(e) Male and Female Pathway Championships;
(f) Practice matches for the above listed competitions;
(g) Any other CA sanctioned matches.

6.2 For matches where a Concussion Substitute is available, the highest qualified medical personnel on duty must comply with the procedure outlined in the CA Playing Conditions when completing steps relating to the activation of the Concussion Substitute. Importantly, this includes:

(a) formally notifying (initially verbally and followed as soon as possible in writing) the match referee (or the highest-qualified match official at the match if there is no match referee) of any concussion diagnosis that he/she has made in relation to a Participant during a particular match;

(b) the highest qualified medical personnel must **NOT** be the person required to make the decision to activate the use of a Concussion Substitute. His/her involvement in the process should be limited to providing the medical advice associated with the management and/or diagnosis of a concussion; and

(c) formally notifying (initially verbally and followed as soon as possible in writing) the match referee (or the highest-qualified match official at the match if there is no match referee) when a concussion is resolved and the Participant is available to participate in the match again (if they have not already been substituted out of the match). A player will not be allowed to participate in the match again until the relevant medical personnel formally notifies the match official of the concussion being resolved.

7. RETURN TO PLAY

7.1 If a concussion has been diagnosed the final determination on whether a participant may return to play, must be made by a qualified medical officer. In case of uncertainty, the qualified medical officer should always adopt a conservative approach to return to play.

7.2 The return to play process will be determined by the Concussion Protocol in Appendix 1. Importantly:

(a) the Participant must not return to play on the same day (i.e. for the match in a limited overs match) if the diagnosis of concussion is established;

(b) the medical officer should not be influenced by the player or umpire, any coach, administrator or support staff or others suggesting an early return to play;

(c) regular medical reviews are required (e.g. daily or every second day) that should encompass: a medical assessment including a comprehensive history and neurological examination; determination of the clinical status of the Participant including whether there has been improvement or deterioration since the time of injury; and determination of the need for emergent neuroimaging to exclude a more severe brain injury or of referral to a neurology specialist (e.g. for multiple concussions or those not resolving within an expected time period);

(d) return to staged physical activity must not occur for at least 24 hours after a concussion diagnosis. After the initial 24 hours, the Participant may return to staged physical activity once they are able to complete their usual daily activities without concussion related symptoms or the Participant is cleared under clause 7.3;

(e) staged physical activity should be upgraded on a graduated basis with progression through stages and Participants must return to a previous stage if symptoms worsen. A Participant may be required to sit out the duration of a multi-day match and/or further matches if required through the medical review.

7.3 A Participant must not return to train for or play cricket until clearance has been provided by an AC MO (or other suitably qualified doctor) after conducting an assessment of the player (with the clearance and assessment to be documented on the AMS).

7.4 A Participant diagnosed with concussion must be instructed by the medical person making the diagnosis that they should not be performing activities that may put themselves and others at risk such driving a motor vehicle, climbing ladders, riding a bike etc. until medically cleared to do so.

8. PATHWAY PLAYERS

8.1 Managing concussion in pathway (adolescent) players requires a more conservative approach. The Child SCAT5 has been developed for use by medical professionals for the assessment of children between the ages 5-12 years. For players aged 13 years or older, the SCAT5 / CogSport tests can be used.

Child SCAT5 - http://bjsm.bmj.com/content/bjsports/early/2017/04/26/bjsports-2017-097492childscat5.full.pdf

8.2 Rehabilitation of adolescents is slower and initial attention should be to remove the adolescent from school and monitor symptoms related to schoolwork and then exercise and sport.

8.3 It is recognised that education of adolescent players and parents, guardians and coaches is an important part of managing the concussion in adolescent participants. The medical staff working with pathway teams in Cricket Australia sanctioned tournaments, should endeavour to educate pathway players on concussion management and the application of this policy.

9. DOCUMENTATION

9.1 All case notes related to a concussion or suspected concussion (and all other head traumas) must be documented on:

(a) the AMS (or through a separate incident report if the Participant is an umpire); **and**

(b) a Head Trauma Report Form (Appendix 2) completed on the Athlete Management System and sent to the CA Chief Medical Officer and CA Sports Science and Sports Medicine Manager.

The CA Chief Medical Officer will maintain, and make available as requested, a Head Trauma/Concussion Incident Register.

9.2 The case notes should record any difficulties in diagnosis, including:

(a) whether the Participant complied with the requirements of this Policy to leave the field or training area for assessment where required;

(b) whether any influence was attempted by the Participant or any other person involved in the match;

(c) the clinical reasoning if the SCAT5 assessment or CogSport Concussion Test were considered inconclusive; or

(d) where any clinical judgement overrides the SCAT5 assessment or CogSport Concussion Test results.

9.3 Where any case notes are taken in relation to 9.2 (a) or (b), a separate notification containing these notes and any other relevant details must also be sent to the CA Chief Medical Officer and Sports Science Sports Medicine Manager as soon as possible.

9.4 The return to train/play written notification described in section 7.3 must also be clearly documented on the Athlete Management System.

10. MINIMUM REQUIREMENTS FOR CONCUSSION TESTING

10.1 In respect of each domestic cricket season, each State AC MO must complete:

(a) For players participating in domestic competitions including State/WNCL and the W/BBL, a baseline (where possible) CogSport Concussion Test on 100% of the male and female contracted players before commencement of the cricket season, excluding those who completed a baseline CogSport Concussion Test in respect of the immediately previous cricket season; and

(b) For all pathway players participating in the CA U17s Male, U18s Female and U19s Male National Championships, a baseline CogSport Concussion Test before commencement of the National Championship (as applicable), excluding those who completed a baseline CogSport Concussion Test in respect of the immediately previous cricket season.

10.2 The Concussion Protocol outlines the minimum requirements for conducting a SCAT5 assessment and a CogSport Concussion Test. All concussion assessments should be

conducted in a standardised fashion. CA has therefore set as minimum requirements for conducting assessments the following:

(a) Adequate time should be allowed to conduct the appropriate medical assessment, including the SCAT 5 and/or CogSport. For example, a concussion diagnosis cannot be excluded in less than 10 minutes; and

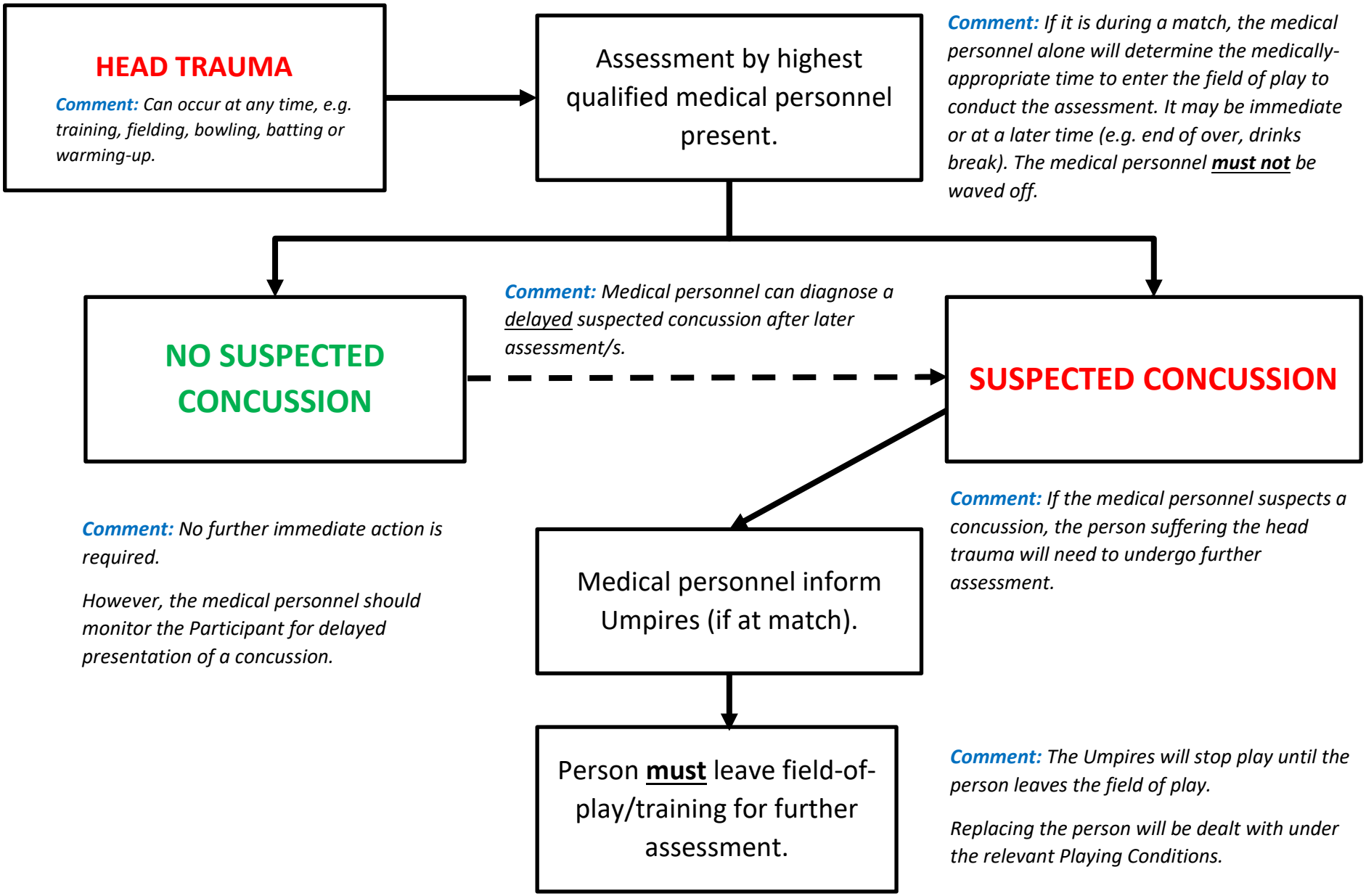
(b) Adequate facilities should be provided for the appropriate medical assessment. At a minimum, off-field assessments should be performed in a distraction-free environment (e.g., locker room, medical room) rather than on the sideline. No staff other than medical staff should be present while the assessment is being undertaken, unless permitted by the medical staff or expressly requested by the participant. Video replays of the impact may be consulted to identify any concussion signs or symptoms.

10.3 The diagnosis of a concussion (and/or fitness to train and play) is a clinical judgment, made by a medical professional. Neither the SCAT5 nor the CogSport Concussion Test should be used by itself (or together) to make, or exclude, the diagnosis of concussion. Nevertheless, an AC MO can use their clinical judgement to override the SCAT5 assessment or CogSport Concussion Test results when inconclusive and the AC MO must keep detailed clinical notes as required under section 9 above.

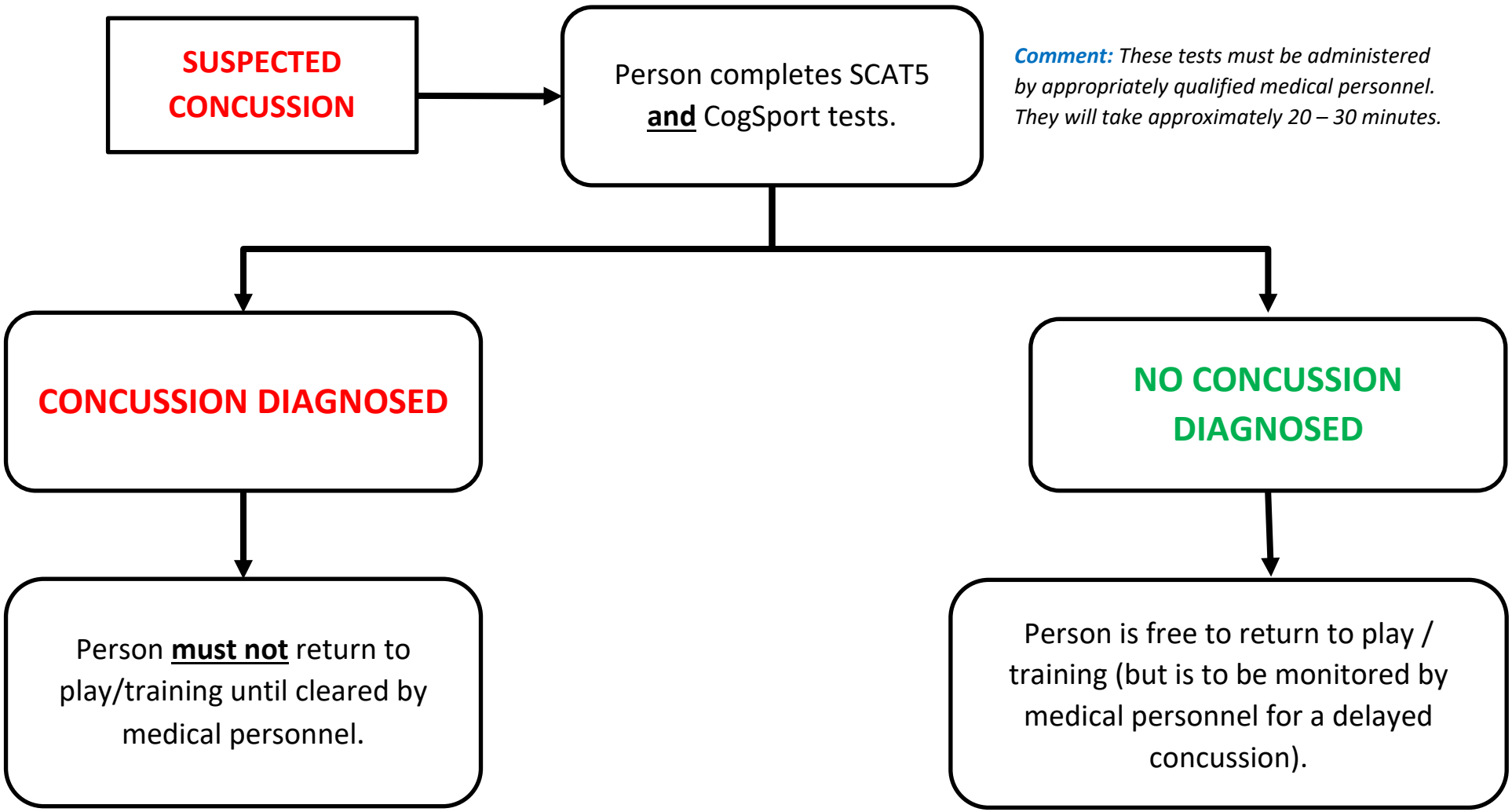
10.4 The diagnosis of concussion cannot be excluded until a minimum of 48 hours after the head or neck impact to account for possible delayed concussion.

APPENDIX 1 – CONCUSSION PROTOCOL

1. ASSESSMENT: AFTER A HEAD TRAUMA



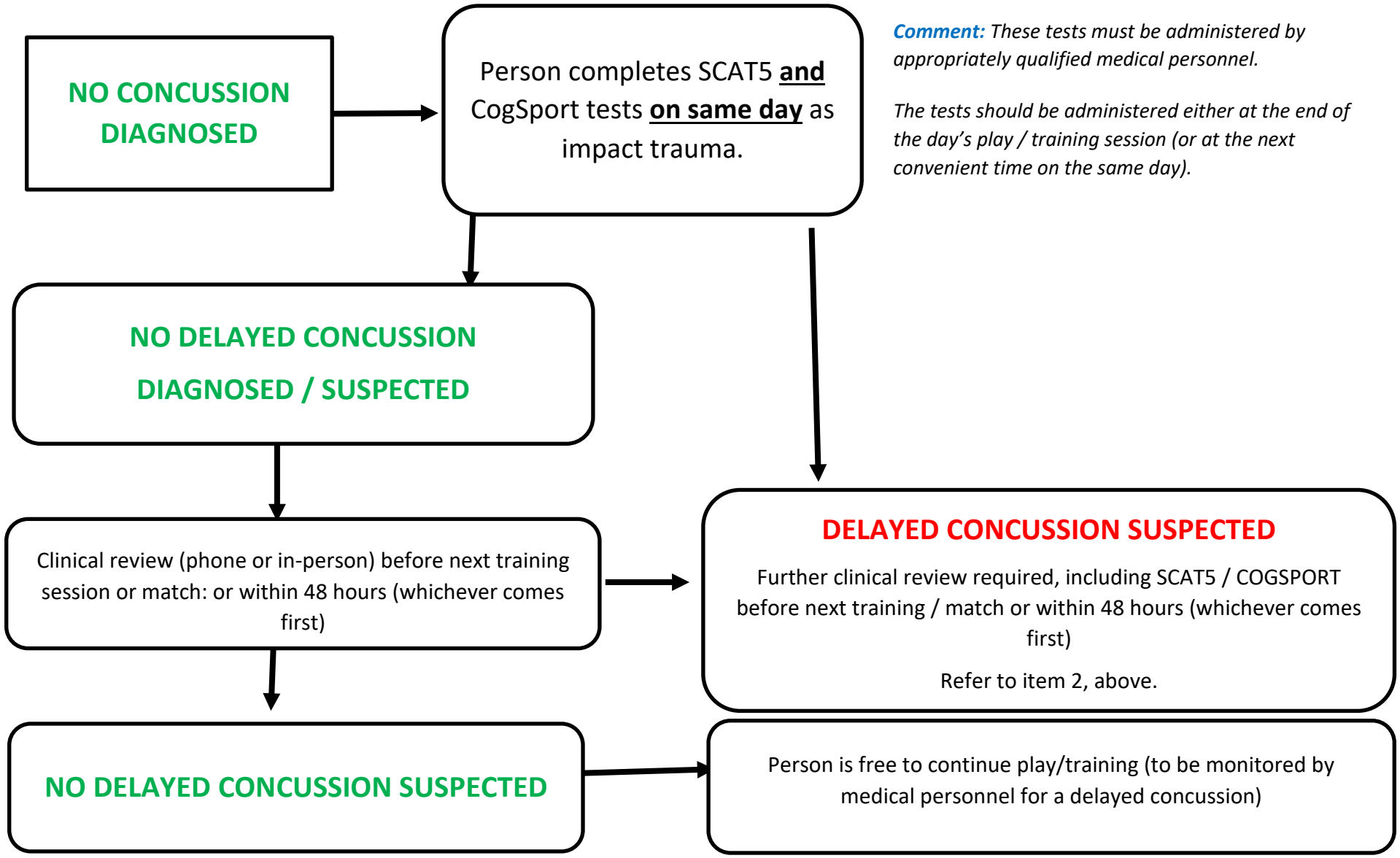
2. DIAGNOSIS: AFTER A SUSPECTED CONCUSSION



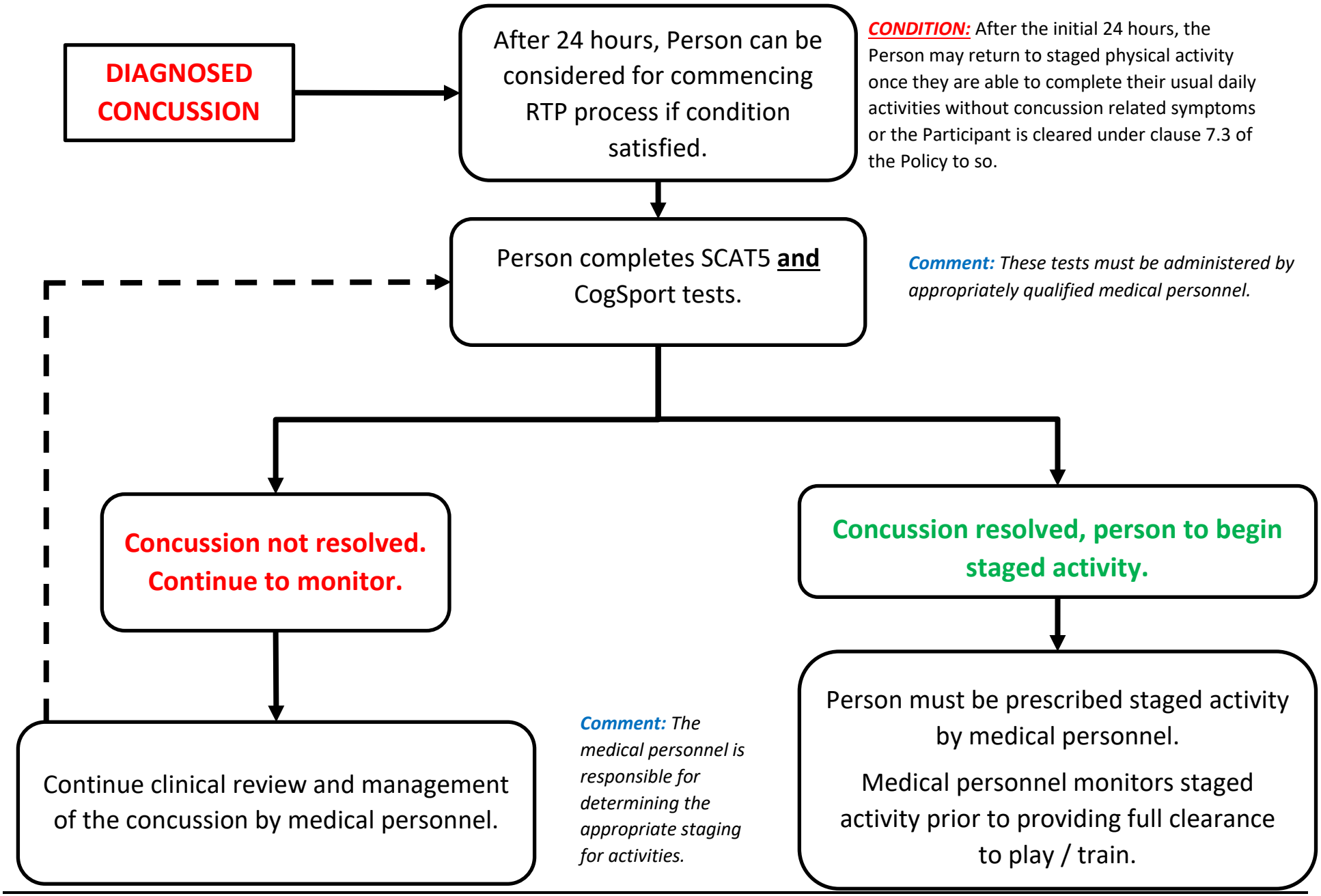
IMPORTANT: *The activation of the concussion substitute is **NOT** a medical decision, however, can only be made after the diagnosis of a concussion. This decision to activate will need to be made by Team Management in accordance with the relevant Playing Conditions.*

However, Team Management may wish to consult with the medical personnel regarding the nature of the concussion prior to making their decision, recognising that the medical personnel is unlikely to be able to then provide a precise return to play time.

3. FOLLOW-UP: AFTER NO CONCUSSION DIAGNOSED



4. RETURN TO PLAY



APPENDIX 2 – HEAD TRAUMA REPORT FORM

1. Incident Details

Time of Incident:		Date of Incident:	
Did the incident happen at training, match or other			
Exact location:			

2. Person Involved

Full Name:		Position:	
Employment details (player or other)			

3. Incident details ☐ [Tick here if this incident was unwitnessed by doctor / opposition eg nets]

Video Review ☐ [Tick here if there is video of the incident and it has been reviewed]

Match Referee Notified ☐ [Tick here if the Match Referee was notified of a concussion diagnosis]

TRAUMA THAT MAY HAVE RESULTED IN HEAD INJURY / CONCUSSION

i.) Batsman, fielder or umpire struck in the head, helmet or neck by ball ☐ Yes ☐ No

ii.) Player / umpire colliding with another player, umpire or fixture ☐ Yes ☐ No

(If neither of these has occurred then CA Head Injury policy does not apply)

HELMET DETAILS

If the Participant was wearing a helmet and/or neck guard, please describe the make and model of the helmet and/or neck guard that was hit.

Helmet Make		Helmet Model:	
Neck Guard Make			
Please describe where on the helmet / neck guard the Participant was hit:			

REMOVAL FROM PLAY

Under the CA Concussion Policy the injured person should be removed from play if a concussion is suspected or diagnosed.

The person must be removed from the field if any of the following observations, diagnostic for concussion, are made by any medical staff member, teammate or umpire:

Loss of consciousness ☐ Yes ☐ No

No protective action in fall to ground directly observed or on video ☐ Yes ☐ No

Impact seizure or tonic posturing ☐ Yes ☐ No

Inability to keep balance (either on pitch or during subsequent testing) ☐ Yes ☐ No

Vomiting (not explained by other cause such as gastro) ☐ Yes ☐ No

Disorientation (Maddock's questions modified for cricket) ☐ Yes ☐ No

Amnesia / memory disturbance ☐ Yes ☐ No

Unusual behavioural change (e.g. crying, irrational) ☐ Yes ☐ No

A concussion should be suspected and the player removed for further assessment if suffering any of the following symptoms:

Headache ☐ Yes ☐ No

Dizziness / nausea ☐ Yes ☐ No

Unable to resume play in a timely manner ☐ Yes ☐ No

Stumbles, staggers, drops to knees, delay in standing up ☐ Yes ☐ No

4. Outcome – Initial (Acute) assessment (must only tick one applicable option)

Clear diagnosis of concussion - removed from field / training ☐

Removed from play / training: then **not** permitted to return as diagnosed with concussion ☐

Removed from play / training: then permitted to return as not diagnosed with concussion ☐

Concussion not suspected - not removed from the field / training ☐

5. Off-field assessment - later on day of incident (if not initially diagnosed with concussion)

Concussion diagnosed - not permitted to return to play / training ☐

No concussion diagnosed ☐

Not applicable ☐

6. Off-field assessment - Day 1 post incident (if not initially diagnosed with concussion)

Concussion diagnosed - not permitted to return to play / training ☐

No concussion diagnosed ☐

Not applicable ☐

7. Player cleared to return to play after concussion (if concussion diagnosed in a multi-day game)

Player not cleared to return to play ☐

Player cleared to return to play (on / / at am/pm) ☐

Not applicable ☐

OUTCOME OF HEAD TRAUMA ON-FIELD ASSESSMENT

8. Response to Injury

Name of attending Medical Personnel			
Did the person attend a doctor / hospital offsite?		Name, address & phone number of doctor & hospital:	
Medical treatment administered			

9. Compliance with Concussion Policy Requirements

If the person injured or any other staff / players did not comply with the CA Concussion Policy, give details	

10. Sign-off

Medical Officer	Date	Signature