



## **EAST MALVERN KNIGHTS JUNIOR FOOTBALL CLUB**

### **CONCUSSION POLICY**

#### **Introduction**

Concussion is an issue which must be taken seriously. The immediate and also potentially long-lasting effects, particularly on children, means that the Club must have a policy in place for the management of any of our players who have:

- (a) to leave the field because of a concussion or suspected concussion; or
- (b) subsequently been diagnosed as suffering from concussion.

#### **Application**

This policy applies to all players playing with the Club.

#### **Reason Behind the Policy**

There is a growing movement in Australian Rules Football and in other contact sports to address the issue of concussion and head injuries.

As set out in the summary of the *Concussion in Australian Football*, AFL Concussion Working Group Scientific Committee, June 2017:

*“Head impacts can be associated with serious and potentially fatal brain injuries.*

*In the early stages of injury, it is often not clear whether you are dealing with a concussion or there is a more severe underlying structural head injury. For this reason, the most important steps in initial management include:*

- (i) recognising a suspected concussion;*
- (ii) removing the player from the game; and*
- (iii) referring the player to a medical doctor for assessment”.*

In March 2021 the Club issued its first formal Concussion Policy. On 15 April 2021 the SMJFL released the AFL Community Concussion Guidelines, which introduced a mandatory 12-day break from playing matches following a concussion. The Club subsequently amended its Policy to be consistent with the SMJFL Policy.

This Policy is to be read in conjunction with the SMJFL - AFL Community Concussion Guidelines. Those Guidelines can be accessed in a link at the end of this Policy.

## **Importance Of Trainer's Decision Regarding Concussion Or Suspected Concussion**

For every game a team will have a trainer in attendance at the game. The trainer is the primary point of medical contact for any medical incident on the field.

In relation to concussion or suspected concussion, the trainer has the ultimate decision as to whether or not a player:

- (a) leaves the field;
- (b) remains off the field for the duration of the game.

The coach and parents/guardians of the player must accept the trainer's decision in this regard.

When playing home games at D W Lucas Oval, Basil Reserve or Stanley Grose Reserve, the Ground Manager for those venues is a qualified first aider and there is also rostered first aid personnel at the venue. A trainer can consult either the Ground Manager or the First Aid personnel in the assessment and treatment of a player.

## **Policy**

The Policy is divided into two sections:

- (i) game day management of concussion/head injury; and
- (ii) return to training and playing/medical clearance.

## **Game Day Management**

To assist trainers in assessing whether a player has suffered a concussion they are to use the "Concussion Recognition Tool 5" ("**CRT 5**") which is attached to this Policy. A copy of the CRT 5 is contained in the first aid kit for the team.

If there is a suspicion that a player may have suffered a concussion then the default position adopted by the Club and its trainers is "If in doubt, sit them out". The trainer is to use the CRT 5 to assess whether a player has suffered a concussion or may have suffered a concussion.

Step one of the CRT 5 lists the "red flags" ("**red flags**") which include:

- 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.

If a player presents with any red flag systems then they are deemed to suffer a concussion in accordance with this Policy. That will trigger the mandatory 12-day break before returning to playing matches.

If a player does not present with any red flag symptoms but, after using the CRT 5 assessment, a trainer believes the player has suffered a suspected concussion, the player must not return to play in that game and is deemed to suffer a suspected concussion in accordance with this Policy.

In those circumstances the player must be referred to a qualified medical practitioner to assess whether that player has suffered a concussion. In making that assessment the parent/guardian of the player must provide the qualified medical practitioner with the appropriate SCAT document (Child SCAT 5 for children aged 5 to 12 years and SCAT 5 for children 13 years and over) to determine whether that player has suffered a concussion.

If the qualified medical practitioner diagnoses the player as having suffered a concussion then the mandatory 12-day break from playing takes effect from the date on which the player suffered injury.

If the qualified medical practitioner:

- (a) concludes that the player has not suffered a concussion; and
- (b) certifies them fit to return to training and playing;

then the player is permitted to return to training and playing.

### **Return to Training and Playing/Medical Clearance**

If a player is required to observe the mandatory 12-day break from playing matches then, at the conclusion of the 12-day mandatory period, the player must be assessed by a qualified medical practitioner, in the company of a parent/guardian, using the appropriate SCAT document, to determine whether the player is fit to return to training and playing (“**medical clearance**”).

In those circumstances the player is only permitted to return to training and playing if the qualified medical practitioner certifies them fit to do so, using the appropriate SCAT document in making that assessment.

In order to ensure that the Club has a consistent means of assessment of the capacity of a player to return to training or playing, then the player must be assessed by a qualified medical practitioner adopting the “Child SCAT 5” tool for assessment (for children 5 to 12 years old) or the “SCAT 5” tool for assessment (for children 13 years and over). Links to these assessment tools are below. When the player is assessed by their medical practitioner, the medical practitioner is to be provided with the “Child SCAT 5” or “SCAT 5” (as appropriate) to assist in the assessment of the player. The medical practitioner must then provide their clinical opinion as to whether the player is fit to return to training and playing.

A copy of CRT 5, Child SCAT 5 and SCAT 5 will be located in the team’s first aid kit. **The Team Trainer is to use the CRT 5 document only when assessing whether a player has**

**suffered a concussion or suspected concussion. The child SCAT 5 and SCAT 5 is to be used only by a qualified medical practitioner in assessing whether either:**

- (a) a player has suffered a concussion;**
- (b) is fit to return to playing and training.**

### **Reporting to the Club**

The Club Concussion Officer's ("CCO") email is: [emjfc.concussion@gmail.com](mailto:emjfc.concussion@gmail.com)

Once the medical clearance has been received from a medical practitioner it must be given to the CCO and the player's Team Manager, to prove the player has a medical clearance, before they can return to training or playing.

In order to maintain consistency of assessment, if a player sustains more than one concussion or suspected concussion (that requires medical assessment in accordance with this policy) in a 12-month period, the Club requests that the same medical practitioner be used by the player for each assessment that the player has to undergo. If a different medical practitioner makes any subsequent assessment of a player, the Club requires written confirmation from the player's parent/guardian that any medical practitioner providing a subsequent assessment was informed of any previous instance or instances of concussion or suspected concussion or the need to obtain a medical clearance in accordance with this policy.

If a player:

- (a) leaves the field because of a concussion or suspected concussion; or
- (b) is subsequently diagnosed with concussion –

then the Team Manager or the Trainer of that team must report the incident to the CCO.

Upon the player receiving the medical clearance, the clearance must be provided to:

- (a) the Team Manager of the team in which the player is playing; and
- (b) the CCO.

Until the medical clearance is provided to the Team Manager and the CCO, the player will not be permitted to return to training or play in games.

The attached flow chart sets out the steps to be followed in the event of a player having to leave the field because of a concussion or suspected concussion.

### **If Player Suffers a Concussion Outside of Playing with the Club**

A number of our players play football for their schools outside of playing with the Club. They may also engage in activity outside of playing with the Club which carries with it the risk of concussion.

If a player has been diagnosed as suffering concussion as a result of an event outside of playing with the Club, then the parent/guardian of the player must inform the:

- (a) player's Team Manager; and

(b) the CCO.

In that event the player must observe the mandatory 12-day break from playing matches and can only return to playing and training with the Club by following the steps set out above in the same fashion as if they sustained the concussion whilst playing with a Club.

### **Reporting an incident to the SMJFL**

If the Trainer, Team Manager, Coach or Assistant Coach (“**Coaching staff**”) are of the opinion that the suspected concussion or concussion sustained by a player in their team was a result of rough or unfair play from an opposing player (for example, a sling tackle or deliberate strike) and the umpire did not penalise the offending player (whether by way of free kick, yellow or red card) then the team manager is to report the incident to the SMJFL.

### **Attached Documents**

Attached are:

- two documents to assist parents and players regarding concussion recognition and management guidelines, issued by the AFL in May 2012;
- The Management of Sport-Related Concussion in Australian Football, April 2021;
- Flow chart for this policy; and
- CRT 5

Links to the Child SCAT 5, SCAT5, Royal Children’s Hospital Information Sheet regarding head injury and return to school and sport, material from Sport Australia relevant to concussion in sport and the SMJFL – AFL Community Concussion Guidelines, are below:

[http://www.aflcommunityclub.com.au/fileadmin/user\\_upload/Health\\_Fitness/SCAT5.pdf](http://www.aflcommunityclub.com.au/fileadmin/user_upload/Health_Fitness/SCAT5.pdf)

[http://www.aflcommunityclub.com.au/fileadmin/user\\_upload/Health\\_Fitness/Child\\_SCAT\\_5.pdf](http://www.aflcommunityclub.com.au/fileadmin/user_upload/Health_Fitness/Child_SCAT_5.pdf)

[https://www.rch.org.au/kidsinfo/fact\\_sheets/Head\\_injury\\_return\\_to\\_school\\_and\\_sport/](https://www.rch.org.au/kidsinfo/fact_sheets/Head_injury_return_to_school_and_sport/)

[https://www.concussioninsport.gov.au/medical\\_practitioners#acute\\_cerebral\\_oedema](https://www.concussioninsport.gov.au/medical_practitioners#acute_cerebral_oedema)

<http://smjfl.com.au/wp-content/uploads/2021/03/SMJFL-Concussion-Interim.pdf>



## Concussion Recognition & Management Guidelines for PLAYERS

Concussion is a mild brain injury, caused by trauma that results in temporary dysfunction of the brain. When it occurs a player may experience symptoms and temporary loss of brain skills such as memory and thinking abilities. It is important for players to be aware of possible signs of concussion which are often subtle.

The trauma causing concussion can sometimes be obvious, but at other times may be very subtle and hardly noticed. Ask teammates, coaches or others who were present whether they observed you unconscious, dazed or confused at the time of the incident if you have some symptoms or signs. If a player with concussion returns to sport whilst still symptomatic, there is an increased risk of further injury. Therefore, **no player who has concussion, or is suspected of having concussion, should return to their sporting activity (training or playing) until cleared by a doctor.**

### Some of the possible symptoms of concussion:

- Headache
- Dizziness
- Fatigue
- Memory disturbance
- Nausea, vomiting and abdominal pain
- Altered or lost vision
- Ringing in the ears

### Some of the signs you may observe:

- Loss of balance
- Pale complexion
- Slow or altered verbal skills
- Mental confusion and memory loss
- Irritability
- Poor concentration
- Inappropriate behaviour

You might think that you are just not feeling your usual self! Think of concussion.

- If you observe any of these symptoms or signs **see a doctor as soon as possible.**
- If you observe deterioration in these symptoms or signs **go immediately to an accident and emergency department at your nearest hospital.**

### Progression and Management

As a temporary brain dysfunction, concussion will resolve with time. This may vary from an hour or so to several days. Occasionally the brain will recover even more slowly.

The best treatment is rest from physical activity and work/study. The player should be seen by a doctor who will monitor the symptoms, signs and brain functioning. **The doctor must clear the player to return to sporting activity** and this will usually involve a stepped approach with a gradual increase in activities over a few days.

The doctor may arrange a specialist opinion (if the concussion is slow to resolve) or cognitive testing (brain functioning).

If at any stage the symptoms or signs are getting worse **seek urgent medical attention.**

### Key Messages

1. **Concussion is a temporary dysfunction of the brain following trauma**
2. **Suspect concussion if you are irritable, sick, excessively fatigued, have a headache, or just not feeling your usual self**
3. **Seek medical attention – urgently if the symptoms or signs are getting worse**
4. **Rest is the best treatment followed by a gradual return to physical activity and work/study**

For more detailed information refer to the AFL brochure *Management of Concussion in Australian Football* and the *Coaches/Injury Management* section of the AFL's Community Development website [www.aflcommunityclub.com.au](http://www.aflcommunityclub.com.au)



## Concussion Recognition & Management Guidelines for PARENTS

Concussion is a mild brain injury, caused by trauma that results in temporary dysfunction of the brain. When it occurs a child may experience symptoms and temporary loss of brain skills such as memory and thinking abilities. It is important for parents of young athletes to be aware of possible signs of concussion which are often subtle.

The trauma causing concussion can sometimes be obvious, but at other times may be very subtle and hardly noticed. Ask your child or an adult who were present whether they were unconscious, dazed or confused at the time of the incident if they have some symptoms or signs. If a child with concussion returns to sport whilst still symptomatic, there is an increased risk of further injury to the child. Therefore, **no player who has concussion, or is suspected of having concussion, should return to their sporting activity (training or playing) until cleared by a doctor.**

### Some of the possible symptoms of concussion:

- Headache
- Dizziness
- Fatigue
- Memory disturbance
- Nausea, vomiting and abdominal pain
- Altered or lost vision
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### Some of the signs you may observe:

- Loss of balance
- Pale complexion
- Slow or altered verbal skills
- Mental confusion and memory loss
- Irritability
- Poor concentration
- Inappropriate behaviour

You might think that your child is just not themselves! Think of concussion.

- If you observe any of these symptoms or signs in your child **see a doctor as soon as possible.**
- If you observe deterioration in these symptoms or signs **go immediately to an accident and emergency department at your nearest hospital.**

### Progression and Management

As a temporary brain dysfunction, concussion will resolve with time. This may vary from an hour or so to several days. Occasionally the brain will recover even more slowly.

The best treatment is rest from physical activity and school. The child should be seen by a doctor who will monitor the symptoms, signs and brain functioning. **The doctor must clear your child to return to sporting activity** and this will usually involve a stepped approach with a gradual increase in activities over a few days.

The doctor may arrange a specialist opinion (if the concussion is slow to resolve) or cognitive testing (brain functioning).

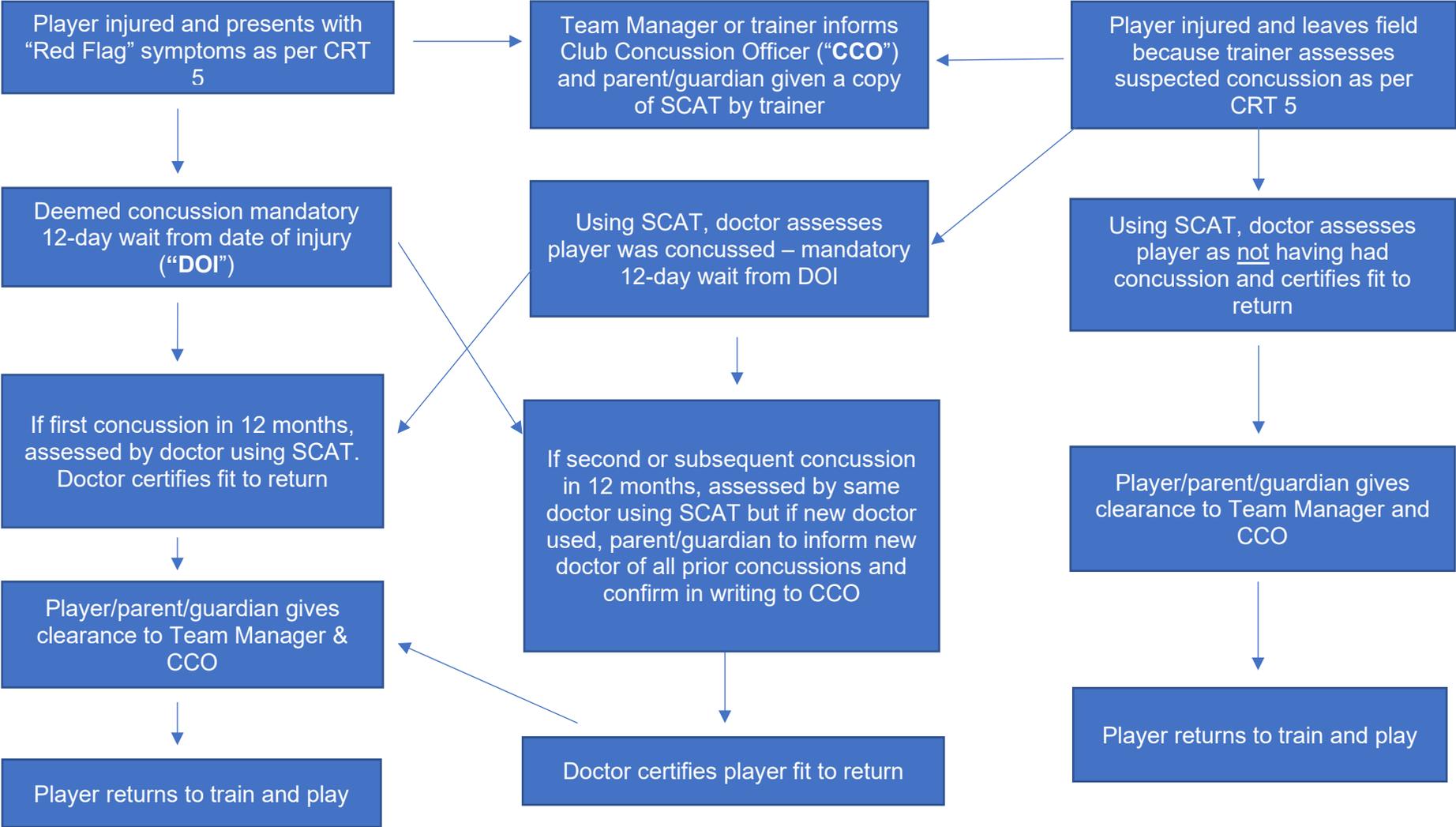
If at any stage your child's symptoms or signs are getting worse **seek urgent medical attention.**

### Key Messages

1. **Concussion is a temporary dysfunction of the brain following trauma**
2. **Suspect concussion if your child is irritable, complains of a headache, is sick, excessively fatigued or just not themselves**
3. **Seek medical attention – urgently if the symptoms or signs are getting worse**
4. **Rest is the best treatment followed by a gradual return to physical activity and school-work**

For more detailed information refer to the AFL brochure *Management of Concussion in Australian Football* and the *Coaches/Injury Management* section of the AFL's Community Development website [www.aflcommunityclub.com.au](http://www.aflcommunityclub.com.au)

**FLOW CHART FOR CONCUSSION MANAGEMENT**





# THE MANAGEMENT OF SPORT-RELATED CONCUSSION IN AUSTRALIAN FOOTBALL

With Specific Provisions for Children and Adolescents  
(Aged 5-17 Years)

FOR TRAINERS, FIRST-AID PROVIDERS, COACHES, CLUB OFFICIALS, PLAYERS AND PARENTS

**APRIL 2021**

TOYOTA   
**CLUBHELP**

**All players with a suspected concussion must seek an urgent medical assessment with a registered doctor.**

**These guidelines do not replace the need to seek medical assessment and are intended to assist in the management of concussion only.**

This document has been published by the AFL as a position statement on the management of concussion in Australian Football. It is based on guidelines developed by the AFL Concussion Working Group Scientific Committee.



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# 1. SUMMARY

- (a) Head impacts can be associated with serious and potentially fatal brain injuries.
- (b) In the early stages of injury, it is often not clear whether you are dealing with a concussion or if there is a more severe underlying structural head injury. For this reason, the most important steps in initial management include:
  - (i) Recognising a suspected concussion;
  - (ii) Removing the player from the match or training; and
  - (iii) Referring the player to a medical doctor for assessment.
- (c) Any player who has suffered a concussion or is suspected of having a concussion (i.e. in cases where there is no medical doctor present to assess the player or the diagnosis of concussion cannot be ruled out at the time of injury) must be medically assessed (see paragraph 3.4) as soon as possible after the injury and must NOT be allowed to return to play in the same match/training session.
- (d) There should be an appropriately accredited first aid provider at every match and the basic rules of first aid should be used when dealing with any player who is unconscious or injured.
- (e) Important steps for return to play following concussion include:
  - (i) A brief period of complete physical and cognitive rest (24-48 hours);
  - (ii) A period of symptom-limited activity to allow full recovery; and
  - (iii) A graded loading program (with monitoring).
  - (iv) Clearance by a medical doctor
- (f) Players should **not** enter the graded loading program until they have recovered from their concussion. Recovery means that **all concussion-related symptoms and signs have fully resolved (for at least 24 hours)** at rest and with activities of daily living, and they have successfully returned to work or school, without restrictions.
- (g) In addition to the processes outlined in this document, any concussed player must not return to competitive contact sport (including full contact training sessions) before having moved through the graded recovery process outlined in Schedule 2 and obtained medical clearance.
- (h) The earliest that a player may return to play (once they have successfully completed a graded loading program and they have obtained medical clearance) is on the 12<sup>th</sup> day after the day on which the concussion was suffered.
- (i) The AFL-approved concussion management app HeadCheck ([www.headcheck.com.au](http://www.headcheck.com.au)) should be utilised to recognise and assist in the management of any suspected concussion for both adults and children.

## 2. BACKGROUND

### 2.1 Introduction

- (a) In considering the best practice management of sport-related concussion, the priority remains the short and long-term welfare of the player.
- (b) These guidelines have been developed on scientific basis that endorse an approach that prioritises **assessment, rest, recovery and a graded return to full participation.**
- (c) ***Children and adolescents typically take longer to recover following a concussion than adults.*** In general, children and adolescents (aged 5-17) require a different approach from adults because their brains are developing, and they need to continue learning and acquiring knowledge. As such, the priority is not just player welfare and return to sport, but a critical element is return to school and learning.

### 2.2 What is concussion?

- (a) Head impacts can be associated with serious and potentially fatal brain injuries. "Traumatic brain injury" is the broad term used to describe injuries to the brain that are caused by trauma.
- (b) The more severe injuries usually involve structural damage, such as fractures of the skull and bleeding in the brain. Structural injuries require urgent medical attention. Concussion typically falls into the milder spectrum of traumatic brain injury, without evidence of structural damage on traditional scans such as Computerised Tomography (CT) or Magnetic Resonance Imaging (MRI).
- (c) Concussion is caused by trauma to the brain, which can be either direct or indirect (e.g. whiplash injury). When the forces transmitted to the brain are high enough, they can injure or "stun" the nerves and affect the way in which the brain functions.
- (d) Concussion is characterised by a range of observable signs (such as lying motionless on the ground, blank or vacant look, balance difficulties or motor incoordination) or symptoms reported by the player (such as headache, blurred vision, dizziness, nausea, balance problems, fatigue and feeling "not quite right").
- (e) Other common features of concussion include confusion, memory loss and reduced ability to think clearly and process information. It is important to note that loss of consciousness is seen in only 10-20% of cases of concussion in Australian football. That is, the ***player does not have to lose consciousness to have a concussion.***
- (f) The effects of concussion evolve or change over time. Whilst in most cases, symptoms improve, in some cases effects can worsen in the few hours after the initial injury. It is important that a player suspected of sustaining concussion be monitored for worsening effects and be assessed by a medical doctor as soon as possible after the injury.

- (g) The presence of concussion is occasionally associated with a neck injury and may be difficult to assess in the early period after head trauma. ***All concussed athletes should be considered to have a neck injury until medically cleared.***

## 2.3 What are the potential complications following concussion?

- (a) There are several risks and complications associated with concussion. These include:
- (i) Severe brain swelling (or “second impact syndrome”) which is a rare complication of head trauma in younger players;
  - (ii) Increased risk of further concussion or other injuries on return to play;
  - (iii) Prolonged symptoms (lasting greater than 14 days in adults; and greater than four weeks in children/adolescents);
  - (iv) Symptoms of depression and other psychological problems; and
  - (v) Long-term damage to brain function.
- (b) The risk of complications is thought to be increased by allowing a player to return to sport before they have fully recovered. This is why it is important to recognise concussion and keep the player out of full-contact training and matches until they have fully recovered, as outlined below.
- (c) Concussion can cause problems with memory and information processing, which interferes with the child’s ability to learn in the classroom. It is for this reason that it is strongly recommended that a child does not return to school until medically cleared to do so.
- (d) The AFL-approved concussion management app HeadCheck, is a useful resource that should be utilised to help manage the player’s recovery phase, including the child’s return to school and sport.

## 2.4 For children and adolescents (aged 5-17 years)

- (a) Symptom evaluation in a child often requires the addition of parent and/or teacher input.
- (b) A child is not to return to football, or other sport, until he/she has successfully returned to school/learning, is symptom-free, and has received medical clearance. However early introduction of limited physical activity is appropriate, as long as symptoms do not worsen – see paragraph 4 for more detail.
- (c) It is reasonable for a child to miss a day or two of school after concussion, but extended absence from school is uncommon.

# 3. MANAGEMENT GUIDELINES FOR SUSPECTED CONCUSSION

## 3.1 Initial management

- (a) The most important steps in the initial management include:
  - (i) Recognising a suspected concussion
  - (ii) Removing the player from the match or training session
  - (iii) Referring the player to a medical doctor for assessment
- (b) ***Refer flow diagram in Schedule 1 – Management of Concussion***

## 3.2 Recognising a suspected concussion

- (a) Any one or more of the following visual clues can indicate a possible concussion:
  - (i) Loss of consciousness or responsiveness
  - (ii) Lying motionless on ground/slow to get up
  - (iii) Vomiting
  - (iv) Seizure or convulsion
  - (v) Unsteady on feet / balance problems or falling over/incoordination
  - (vi) Grabbing/clutching of head
  - (vii) Dazed, blank or vacant look
  - (viii) Confused/not aware of plays or events
  - (ix) Impaired memory (unable to recall events leading up to or following the injury)
  - (x) Facial injury
  - (xi) Player does not seem like their normal self
- (b) Loss of consciousness, confusion and memory disturbance are all classic features of concussion. The problem with relying on these features to identify a suspected concussion is that they are not present in every case.

- (c) Symptoms reported by the player that should raise suspicion of concussion include:
- (i) Headache
  - (ii) Nausea or feel like vomiting
  - (iii) Blurred vision
  - (iv) Balance problems or dizziness
  - (v) Feeling “dinged” or “dazed”
  - (vi) “Don’t feel right”
  - (vii) Sensitivity to light or noise
  - (viii) More emotional or irritable than usual
  - (ix) Sadness
  - (x) Nervous/anxious
  - (xi) Neck pain
  - (xii) Feeling slowed down
  - (xiii) Feeling like in a fog
  - (xiv) Difficulty concentrating
  - (xv) Difficulty remembering
- (d) Tools such as *HeadCheck* or the Concussion Recognition Tool 5<sup>th</sup> edition (**CRT5**) should be used to help identify a suspected concussion.
- (e) It is important to note however that brief sideline evaluation tools (such as *HeadCheck* or the CRT5), are designed to help identify a suspected concussion. They are **not** meant to replace a more comprehensive medical assessment and should never be used as a stand-alone tool for the management of concussion.
- (f) Currently, there are no commercially available tools (impact sensors, goggles, balance apps, etc) that can be relied upon to either diagnose or exclude a concussion.
- (g) A pre-match/pre-training checklist should be printed and provided to trainers and other staff involved in the care of players. The checklist should include contact details for:
- (i) Local general practices;
  - (ii) Local hospital emergency departments; and
  - (iii) Ambulance services (000).

- (h) The pre-match checklist can also be provided to trainers and medical staff of the away team, who are likely to be less familiar with local medical services.

### 3.3 Removing the player from the match or training

- (a) The basic rules of first aid should be used when dealing with any player who is unconscious or injured.
- (b) Immobilisation of the neck in a cervical collar by a qualified first aid provider may be required. An appropriately sized collar should be available at every match and training session.
- (c) Removing the conscious player from the match or training session allows the first aid provider time and space to assess the player properly. Assessment should take place in a distraction-free environment, such as the change rooms.
- (d) Any player with a concussion or suspected concussion (i.e. in cases where there is no medical doctor present to assess the player or the diagnosis of concussion cannot be ruled out at the time of injury) **must be removed from play and not be allowed to return in the same match or training session. Do not** be swayed by the opinion of the player, trainers, coaching staff, parents or others suggesting premature return to play.

### 3.4 Referring the player to a medical doctor for assessment

- (a) Management of a head injury is difficult for non-medical personnel. In the early stages of injury, it is often not clear whether you are dealing with a concussion or there is a more severe underlying structural head injury.
- (b) For this reason, **ALL players with a suspected concussion need an urgent medical assessment (with a registered medical doctor)**. This assessment can be provided by a medical doctor present at the venue, local general practice or hospital emergency department.
- (c) It is useful to have a list of local doctors and emergency departments near the ground at which the match or training session is taking place. This resource can be determined at the start of each season (in discussion with local medical services).



### 3.5 Management of an unconscious player and when to refer to hospital

- (a) Basic first aid rules should be used when dealing with any unconscious player (i.e. danger, response, airway, breathing, circulation).
- (b) Care must be taken with the player's neck, which may have also been injured in the collision.
- (c) In unconscious players, the player must only be moved (onto the stretcher) by qualified health professionals, trained in spinal immobilisation techniques.
- (d) If no qualified health professional is on site, then do not move the player - await arrival of the ambulance.
- (e) If the unconscious player is wearing a helmet, do not remove the helmet unless trained to do so.
- (f) Urgent hospital referral is necessary if there is any concern regarding the risk of a structural head or neck injury.
- (g) Overall, if there is any doubt, an ambulance should be called, and the player transferred to hospital.
- (h) Urgent transfer to hospital is required for a player with any of the following:
  - (i) Neck pain or tenderness
  - (ii) Double vision
  - (iii) Weakness or tingling/burning in the arms or legs
  - (iv) Severe or increasing headache
  - (v) Seizure or convulsions
  - (vi) Loss of consciousness
  - (vii) Deteriorating conscious state
  - (viii) Vomiting
  - (ix) Increasing restlessness, agitation or combative behaviour

# 4. FOLLOW-UP MANAGEMENT

## 4.1 Important steps

- (a) Important steps for return to play following concussion include:
  - (i) Rest
  - (ii) Recovery – symptom-limited activity
  - (iii) Graded loading program (with monitoring)
  - (iv) Clearance by a medical doctor
- (b) **See Schedule 2 for Phases of Rest, Recovery and Return to Play following Concussion**
- (c) The earliest that a player may return to play (once they have successfully completed a graded loading program and they have obtained medical clearance) is on the 12<sup>th</sup> day after the day on which the concussion was suffered.
- (d) Schedule 2 outlines the minimum process to follow in returning to play following a concussion. However, a more conservative approach is strongly recommended to allow a longer period of time for recovery where there is a lack of baseline testing and the absence of regular contact between players and a medical doctor limits the ability to assess recovery following concussion.

## 4.2 Complete (physical and cognitive) rest

A brief period of complete physical and cognitive rest in the first 24-48 hours after injury helps symptoms improve/resolve.

## 4.3 Recovery – symptom-limited activity

- (a) After a brief period of complete rest, players can gradually become more active as long as the activity does not bring on or worsen any symptoms.
- (b) This period should start with simple day to day things such as watching TV, reading the papers, using social media, going for a walk, etc.
- (c) The duration and/or intensity of the activity may need to be limited based on appearance and/or worsening of symptoms.
- (d) The player should progress slowly back to full work/school during this period (for specific return to school provisions, see section below).
- (e) The priority for students is to successfully return to school/university before returning to sport.
- (f) Recovery means that the player has **no concussion-related symptoms at rest or with both physical and brain activity**, they have recovered back to their baseline on specific tests of balance, brain function, etc, and that they have successfully returned to work and/or school, without restrictions.

- (g) The recovery period will be variable in length (days to weeks) across different people and level of injury, noting that **children and adolescents typically recover slower**.
- (h) A more conservative approach is required if there is a lack of baseline testing and active medical practitioner oversight of each stage of the graded return to football.
- (i) If the player has concussion-related symptoms for more than 10-14 days (or four weeks in children/adolescents), or there is any uncertainty about recovery following concussion, then review by a medical practitioner with expertise in concussion (e.g. sport and exercise medicine physician, neurologist) is strongly recommended.

#### 4.4 Graded loading program (with monitoring)

- (a) **Players should not enter the graded loading program until they have recovered from their concussion. Recovery means that all concussion-related symptoms and signs have fully resolved (for at least 24 hours) at rest and with activities of daily living, and they have successfully returned to work/school, without restriction.** Ideally, the player should have a medical clearance before entry into the graded loading program.
- (b) Given the challenges and limitations in assessing recovery following concussion, a conservative approach is required regarding return to play. The graded loading program allows incremental increases in physical plus/minus cognitive load once the player has recovered to ensure that concussion-related symptoms or signs do not return (which is a sign of incomplete recovery).
- (c) **A more conservative approach is important in children or adolescent athletes as it is recognised that recovery from concussion tends to be slower in this group. A more conservative approach is likely to include longer timeframe for recovery of symptoms and entry into graded loading program and/or longer time spent at each step in the graded loading program.**
- (d) Review with a medical doctor (and a more conservative approach to return to play) is also important in:
  - (i) Players with a history of multiple concussions – especially in the same season
  - (ii) Players who fail to progress through their return to play program due to a recurrence of symptoms
  - (iii) Cases where there is any uncertainty about recovery following concussion
- (e) Entry into a graded loading program requires careful monitoring for recurrence of symptoms. It is important that the player is honest with themselves, the team and the team medical/coaching staff about symptoms.
- (f) If any symptoms return while exercising, the player should go back to the previous symptom free step and seek medical advice.
- (g) In following these guidelines, the **focus must be on ensuring that players pass through each of the steps safely** (i.e. rest, recovery and a graded return).

- (h) ***Any concussed player must not be allowed to return to competitive contact sport (including full contact training sessions) before having a medical clearance.***



## 4.5 Return to School

- (a) Concussion may impact a child's ability to learn at school. This must be considered, and medical clearance is strongly recommended before the child may return to school.
- (b) It is reasonable for a child to miss a day or two of school after concussion, but extended absence from school is uncommon.
- (c) The child's doctor should help them get back to school after a few days.
- (d) In some children, a graduated return to school programme will need to be developed for the child. Additional management by a paediatric neuropsychologist may assist in more difficult cases.
- (e) The child will progress through the return to school programme provided that there is no worsening of their concussion-related symptoms. If any particular activity worsens symptoms (including computers and internet), the child should abstain from that activity until this no longer occurs.
- (f) This program should include communication between the parents, teachers, and health professionals and will vary from child to child.
- (g) The return to school programme should consider:

- (i) Extra time to complete assignments/tests
  - (ii) Quiet room to complete assignments/tests
  - (iii) Avoidance of noisy areas such as cafeterias, assembly halls, sporting events, music class
  - (iv) Frequent breaks during class, homework and tests
  - (v) No more than one exam per day
  - (vi) Shorter assignments
  - (vii) Repetition/memory cues
  - (viii) Use of peer helper/tutor
  - (ix) Reassurance from teachers that the child will be supported through the recovery process through accommodations, workload reduction and alternate forms of testing
  - (x) Later start times, half-days and only attending certain classes
- (h) All schools are encouraged to have a concussion policy that includes education on sport-related concussion prevention and management for teachers, staff, students and parents, and should offer appropriate academic accommodations and support to children recovering from sport-related concussion.
  - (i) The child is not to return to football or other sport, until he/she has successfully returned to school/learning, is symptom-free, completed the graded recovery process and has received medical clearance. However early introduction of limited physical activity is appropriate, as long as symptoms do not worsen.
  - (j) If there are any doubts, the child should be referred to a qualified health practitioner who is an expert in the management of concussion in children.

# 5. ROLE OF PROTECTIVE EQUIPMENT IN AUSTRALIAN FOOTBALL

## 5.1 Helmets

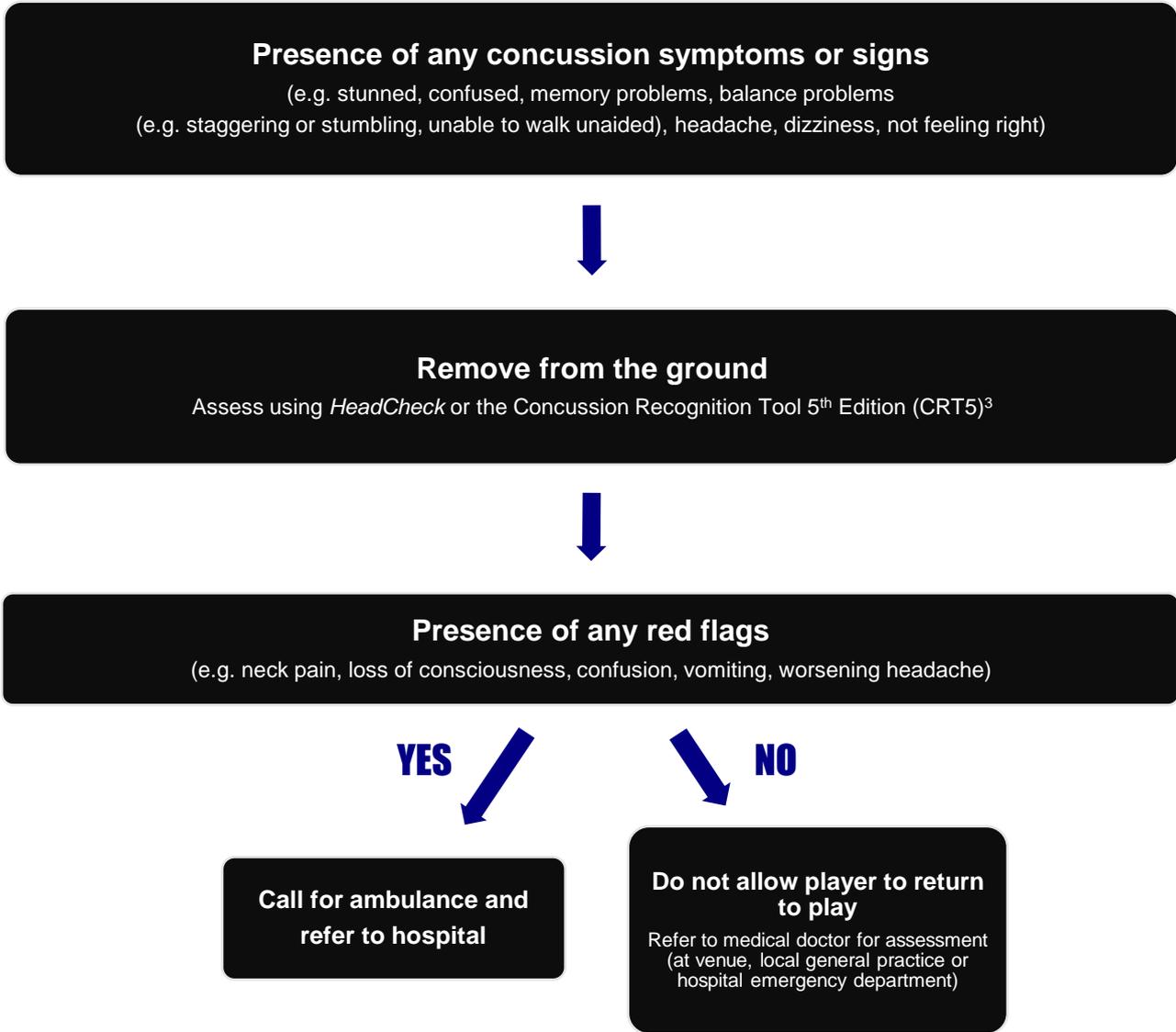
- (a) There is no definitive evidence that helmets prevent concussion or other brain injuries in Australian Football.
- (b) Helmets may have a role in the protection of players on return to play following specific injuries (e.g. face or skull fractures).
- (c) Overall, however, there is insufficient evidence to make a recommendation for the use of helmets for the prevention of concussion in Australian Football.

## 5.2 Mouthguards

- (a) Mouthguards have a definite role in preventing injuries to the teeth and face and for this reason they are **strongly recommended** at all levels of football. Mouthguards should be worn for all matches and contact training sessions.
- (b) Dentally fitted laminated mouthguards offer the best protection. 'Boil and bite' type mouthguards are not recommended for any level of play as they can dislodge during play and block the airway.
- (c) There is some preliminary scientific evidence that mouthguards may prevent concussion or other brain injuries in Australian Football.



# SCHEDULE 1: MANAGEMENT OF CONCUSSION ON THE DAY OF INJURY



**Figure 1. Summary of the management of concussion in Australian Football.**

Note: For any player with loss of consciousness, basic first aid principles should be used (i.e. airways, breathing, CPR). Care must also be taken with the player’s neck, which may have also been injured in the collision. The unconscious player must not be moved by anyone other than a medical professional or ambulance officer. An ambulance should be called, and these players transported to hospital immediately for further assessment and management.

# SCHEDULE 2: PHASES OF REST, RECOVERY AND RETURN TO PLAY FOLLOWING CONCUSSION

Focus	Goal	Requirements to move to next stage
<b>Rest</b>		
Rest	<ul style="list-style-type: none"> <li>• Help speed up recovery</li> </ul>	<ul style="list-style-type: none"> <li>• Complete physical and cognitive rest in the first 24 – 48 hours</li> </ul>
<b>Recovery</b>		
Symptom limited activity	<ul style="list-style-type: none"> <li>• Two days of activities that do not provoke symptoms</li> </ul>	<ul style="list-style-type: none"> <li>• No concussion-related symptoms at rest or with physical or brain activity for at least 1 day and the player has successfully returned to work/school</li> <li>• The player should also have a medical clearance (e.g. physiotherapist, sports trainer, first aider) to confirm that the player has had no concussion-related symptoms for at least 1 day</li> </ul>
<b>Graded Loading – individual program</b>		
Light / moderate aerobic exercise	<ul style="list-style-type: none"> <li>• Light / moderate aerobic exercise (e.g. walking, jogging, cycling at slow to medium pace)</li> <li>• No resistance training</li> </ul>	<ul style="list-style-type: none"> <li>• Remain completely free of any concussion-related symptoms</li> </ul>
<b>Recovery day</b>		
Sport-specific exercise	<ul style="list-style-type: none"> <li>• Increased intensity (e.g. running at an increased heart rate) and duration of activity</li> <li>• Add sports specific drills (e.g. goal kick, stationary handball)</li> <li>• Commence light resistance training</li> </ul>	<ul style="list-style-type: none"> <li>• Remain completely free of any concussion-related symptoms</li> <li>• The player should also have a medical clearance (e.g. physiotherapist, sports trainer, first aider) to confirm that the player has had no concussion-related symptoms for at least 1 day</li> </ul>
<b>Recovery day</b>		
<b>Graded Loading – full team training</b>		
Limited contact training	<ul style="list-style-type: none"> <li>• Return to full team training – non-contact except drills with incidental contact (incl. tackling)</li> </ul>	<ul style="list-style-type: none"> <li>• Remain completely free of any concussion-related symptoms</li> <li>• Player confident to return to full contact training</li> </ul>
<b>Recovery day</b>		
<b>Clearance by a medical doctor is required before returning to the final full contact training session and competitive contact sport</b>		
Full contact training	<ul style="list-style-type: none"> <li>• Full team training</li> </ul>	<ul style="list-style-type: none"> <li>• Remain completely free of any concussion-related symptoms</li> <li>• Player confident to participate in a match</li> </ul>
<b>Recovery day</b>		
<b>Return to Play</b>		

Note: Schedule 2 outlines the minimum process to follow in returning to play following a concussion. The earliest that a player may return to play (once they have successfully completed a graded loading program and they have obtained medical clearance) is on the 12th day after the day on which the concussion was suffered.

A more conservative approach is required if there is a lack of baseline testing and active medical practitioner oversight of each stage of the graded return to football. Section 4.4 of these guidelines also outlines the importance of a more conservative approach in certain situations including for children and adolescents, players with a history of concussion and where there is a recurrence of symptoms at any stage during the return to play program.

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# CONCUSSION RECOGNITION TOOL 5<sup>©</sup>

To help identify concussion in children, adolescents and adults



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

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## 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.

The CRT5 may be freely copied in its current form for distribution to individuals, teams, groups and organisations. Any revision and any reproduction in a digital form requires approval by the Concussion in Sport Group. It should not be altered in any way, rebranded or sold for commercial gain.

**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**