



THE MANAGEMENT OF SPORT-RELATED CONCUSSION IN AUSTRALIAN FOOTBALL

WITH SPECIAL SUPPLEMENT FOR THE MANAGEMENT OF CONCUSSION IN CHILDREN AND ADOLESCENTS

MARCH 2024



SECTION 1

BACKGROUND

PURPOSE

1. To ensure that healthcare practitioners (including, but not limited to, general practitioners and physiotherapists), AFL First Aiders and sports trainers, coaches, teachers, players and parents understand how to recognise and manage concussion in Australian Football.
2. To protect the short and long-term health and safety of all Australian Football players across all levels of competition¹ from the risks presented by concussion and repeated head trauma.

INTRODUCTION

Protecting the short and long-term health and safety of players is an extremely important priority for the AFL across all levels of Australian Football.

Key components of the overall approach to the management of concussion and repeated head trauma are outlined in the [Strategic Plan for Sport-Related Concussion in Australian Football 2022-2026](#).

The guidelines provide a practical translation of the evidence and recommendations from the [6th International Conference on Concussion in Sport](#) as they relate to the sport of Australian Football. They also take into consideration recommendations from other documents such as the Australian Institute of Sport [Concussion and Brain Health and Position Statement 2024](#) and community guidelines of other major professional and participation sports in Australia (including Rugby League, Rugby Union and Soccer).

The guidelines have been modified and enhanced in line with evolving scientific evidence, best practice management strategies for concussion, and specific clinical experience of concussion management in AFL, AFLW and Community Football. They also take into consideration the variable and often limited healthcare resources that typically exist in Australian Football below the elite AFL and AFLW competitions.

The guidelines prioritise healthy participation across all levels of the game by focusing on optimal management of concussion through recognition, rest, recovery and a graded loading program, and by promoting risk reduction of both concussion and repeated head trauma. Overall, a cautious and conservative approach is recommended, especially in children and adolescents (aged 18 and under).

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

¹ These guidelines apply to players in all Australian Football competitions outside AFL / AFLW listed players, provided their recovery from concussion has been managed under the Advanced Care Settings of the AFL/AFLW team.

WHAT IS CONCUSSION?

- » Concussion is an injury to the brain caused by an impact to the head, or the body with force transmitting to the head.
- » While concussion is the most common form of head injury observed in Australian Football it is part of a spectrum of head injuries that ranges from severe traumatic brain injury to repetitive head trauma that does not cause any obvious or immediate symptoms.
- » The more severe injuries usually involve structural damage, such as fractures of the skull and bleeding in the brain. Fortunately, severe head injuries are uncommon, **but they do require urgent medical attention.**
- » Concussion typically falls into the milder spectrum of traumatic brain injury, where forces transmitted to the brain injure or “stun” the nerves and affect how the brain functions. There is usually no evidence of structural damage on commonly used scans such as Computerised Tomography (CT) or Magnetic Resonance Imaging (MRI).
- » Concussion is characterised by a range of observable signs (such as not behaving as their “usual self”, lying motionless on the ground, a 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 dinged, dazed or “not quite right”).
- » 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 less than 10% of cases of concussion. That is, the player does not have to lose consciousness to have a concussion.
- » 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. Any player suspected of sustaining a concussion **must be monitored for worsening effects and be assessed by a medical doctor as soon as possible after the injury.**



WHAT ARE THE POTENTIAL COMPLICATIONS FOLLOWING CONCUSSION?

- » There are several risks and complications associated with concussion. These include:
 - i. Increased risk of further concussion or other injuries on return to play;
 - ii. Prolonged or persisting symptoms (lasting greater than four weeks);
 - iii. Severe brain swelling, which may be a rare complication of head trauma in younger players. One of the risk factors for this condition is thought to be a second concussion before the player has fully recovered from a previous concussion (hence the name “second impact syndrome”);
 - iv. Symptoms of depression and other psychological problems (which may have already been present before the concussion); and
 - v. Long-term effect on brain health.
- » 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 and have been cleared by a medical practitioner.

WHAT IS THE CURRENT STATE OF KNOWLEDGE ABOUT NEURODEGENERATIVE PROBLEMS AND THEIR RELATIONSHIP TO HEAD IMPACTS IN SPORT?

- » Brain function usually peaks by the age of 20-30 years and then starts to gradually decline over subsequent years.
- » The decline in brain function is affected by several factors, many of which are reversible or modifiable (learn more [here](#)).
- » Modifiable risk factors include lifestyle factors such as inactivity, poor diet, smoking and use or abuse of alcohol and/or recreational drugs, as well as medical conditions including high blood pressure, sleep apnoea, hearing loss, diabetes, social isolation and mental health disorders (e.g. anxiety and depression).
- » Head trauma, either as a single concussion, repeat concussions or repetitive “non-concussive” head impacts, also appears to be associated with an increased risk of brain degeneration later in life.
- » Chronic Traumatic Encephalopathy Neuropathological Change (CTE-NC or CTE) describes a specific pattern of changes that have been identified at autopsy in the brains of people who are exposed to repeated head trauma. This includes both male and female Australian Football players.

- » The AFL supports and adopts the position on CTE by the National Institutes of Health: *“Chronic traumatic encephalopathy (CTE) is a delayed neurodegenerative disorder that was initially identified in postmortem brains, and research-to-date suggests, is caused in part by repeated traumatic brain injuries.”*
- » There are still many important questions related to CTE and other neurodegenerative conditions linked to head trauma that remain unknown. These include:
 - i. How common is CTE?
Many of the studies have been done on small and very select groups of individuals, most of whom have a documented history of concussion.
 - ii. How does CTE present during life?
It has been suggested that CTE may be a cause of changes in mental health and deterioration in brain health, but the presence of CTE at autopsy does not necessarily mean that the person had any symptoms while they were alive. This is especially true for lower severity of CTE.
 - iii. What is the link between concussion and/or repeated head trauma and mental health?
The research suggests that the risk of suicide or problems with mental health in those who played a contact sport was lower than or equal to that seen in the general population.
 - iv. What are the risk factors for developing CTE?
Exposure to repeated head trauma seems to be one factor, but the influence of other factors, including drug and alcohol use, other mental health and medical conditions remains unclear.
- » Many of these questions need large, long-term research programs to answer them. The AFL is undertaking such a program with its Brain Health Initiative.
- » In the meantime, the focus remains on continuous improvements to safe participation across all levels of the game. This includes promoting risk reduction (of both concussion and repeated head trauma) and focusing on optimal management of concussion through a process of recognition, rest, recovery and a graded return to full participation.



SECTION 2

GUIDELINES FOR THE MANAGEMENT OF CONCUSSION

SUMMARY

- » Concussion is an injury to the brain.
- » All concussions require a cautious and conservative approach.
- » Everyone in the team has a role to play in identifying and managing concussion (see Appendix 1).
- » Teams should create a culture that promotes honesty of reporting and safety to optimise the management of concussion.

Day of injury management

- » The most important steps in initial management include:
 - a. **Recognising** that a player may have suffered a concussion or injury to their brain;
 - b. **Removing** the player from the match or training; and
 - c. **Referring** the player to a medical doctor for assessment.
- » Any player who has suffered a concussion or is suspected of having a concussion must be medically assessed as soon as possible after the injury and **must NOT be allowed to return to play in the same match or training session.**
- » At a minimum, there should be an appropriately accredited AFL First Aider or sports trainer at every match and the basic rules of first aid should be used when dealing with any player who is unconscious or injured.

Return to play protocols

- » **The most important aspect of return to play protocols is guiding the player through key stages rather than simply following suggested timeframes or the number of days post injury.**
- » The critical stages for return to play following concussion include:
 1. A **brief** period of **relative rest** (24-48 hours),
 2. A period of **recovery**,
 3. A **graded loading program** (with medical clearance required before full contact training),
 4. Unrestricted return to play

- » **Players should not enter stage 3, 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 intense physical exertion, and they have successfully returned to work and/or study, without restrictions.
- » Any concussed player must not return to competitive contact sport (including full contact training sessions) before they have completed all stages of the return to play process and obtained medical clearance.
- » How concussion presents and the rate and pattern of recovery vary from person to person and injury to injury. Players will also have different individual circumstances (e.g. the number of previous concussions) and priorities (e.g. return to school in young people). The return to play program must be **individualised based on progress, rather than the number of days since the incident.**
- » The **earliest** that the player may return to play (once they have completed a graded loading program and have obtained medical clearance) is on the 21st day following the concussion (where the day of concussion is designated day “0”, see Figures 3 and 4). This means that a player who is concussed in a match on a Saturday will miss at least the next two Saturday matches and will only be able to return to play on the third Saturday (i.e. the 21st day after the concussion was sustained) if they have recovered according to the protocols and have been medically cleared to return to play. In many cases, recovery will be slower than the minimum 21 days.
- » The time frame for clinical recovery in players aged 18 years and under is often up to 4 weeks, but in some cases may be longer. In following the current return to play protocols, it is expected that many children and adolescents will require longer than 3 weeks before returning to play.

Management of more complicated cases

- » **Any player with symptoms lasting 4 or more weeks or those who are unable to progress through the return to play protocols due to recurrence of symptoms must not return to play while still symptomatic** and should seek review with a doctor with expertise in the management of concussion.
- » Any player with 2 or more concussions in the same season, or 3 concussions within 12 months should also be managed more conservatively, with a slow return to play protocol and reviewed by a doctor with expertise in the management of concussion.

Reduction of concussion and head impacts

- » Reduction of head impact and concussion risk requires a broad approach that includes consideration of education, protective equipment, training practices, policy, rules and rule enforcement. It is also important that the outcome of any changes is monitored and assessed. This includes measuring any potential unintended consequences of any changes made to reduce the risk of head trauma and concussion.

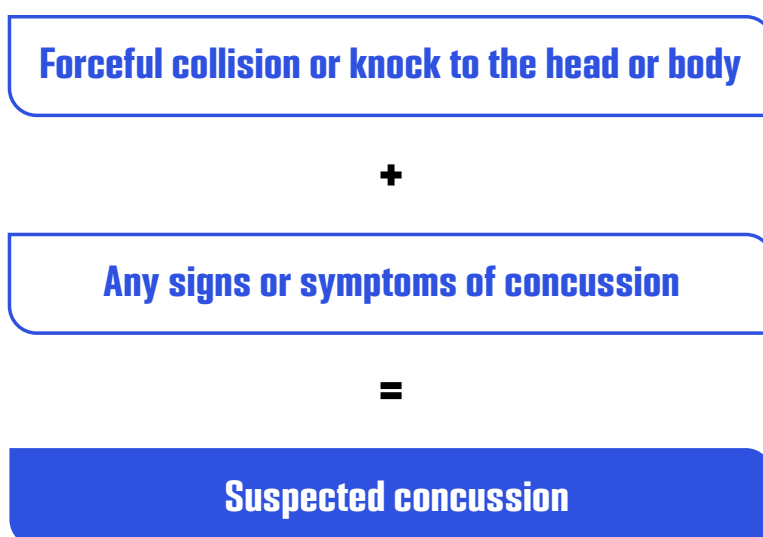
DAY OF INJURY MANAGEMENT

The most important steps in initial management include:

- a. **Recognising** a suspected concussion.
- b. **Removing** the player from the match or training session.
- c. **Referring** the player to a medical doctor for assessment.

FIGURE 1.

HOW TO RECOGNISE CONCUSSION



- » Concussion should be suspected when there is a possible mechanism of injury (e.g. direct knock to the head or forceful impact to the body) that may have been observed or reported, and/or the player exhibits any one or more visual signs or reports any symptoms.
- » In many cases, the trainer may not see exactly what happened and the possibility of a concussion should be kept in mind.
- » The key to recognising concussion is looking, asking and listening, and then monitoring the player for any changes over time.

- » **Look** for visual clues suggesting a possible concussion. These include:
 - i. Loss of consciousness or responsiveness
 - ii. Lying motionless on the ground/slow to get up
 - iii. Vomiting
 - iv. Tonic posturing or impact seizure
 - v. Unsteady on feet/balance problems or falling over/incoordination
 - vi. Grabbing/clutching of the 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

- » 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.

- » **Ask** about (and listen for) symptoms reported by the player. Symptoms that should raise suspicion of concussion include:
 - i. Headache
 - ii. Nausea or feeling 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. Feeling nervous or anxious
 - xi. Neck pain
 - xii. Feeling slowed down

- xiii. Feeling like in a fog
- xiv. Difficulty concentrating
- xv. Difficulty remembering
- » Tools such as the [Concussion Recognition Tool 6th edition](#) (CRT6) and the [HeadCheck App](#) should be used to help identify a suspected concussion.
- » The AFL has also developed a Match Day Head Injury Assessment Tool and Referral Form for community competitions to assist in the recognition and management of concussion (see Appendix 2). The form also ensures that important information about the injury and the player's initial symptoms are communicated accurately and completely to the doctor assessing the player.
- » It is important to note that brief sideline evaluation tools are not intended to replace a more comprehensive medical assessment and should never be used as a stand-alone tool for the management of concussion.
- » Currently, there are no commercially available tools (including blood biomarkers, impact sensors, goggles and balance Apps) that can be relied upon to either diagnose or exclude a concussion.
- » 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 hospital emergency departments,
 - ii. Ambulance services (000) and access to the venue, and
 - iii. Local general practices.
- » The pre-match checklist should also be provided to trainers and medical staff of the away team, who are likely to be less familiar with local medical services.

Removing the player from the match or training

- » The basic rules of first aid should be used when dealing with any player who is unconscious or injured (see below).
- » Removing the conscious player from the match or training session allows the first aid provider time and space to assess the player properly. Ideally, the assessment should take place in a quiet, distraction-free environment, such as the change rooms.
- » **Any player with a concussion or suspected concussion must be immediately removed from practice or play and not be allowed to return in the same match or training session.** Do not be swayed by the opinion of the player, teammates, trainers, coaching staff, parents or others suggesting a premature return to play.

Referring the player to a medical doctor for assessment

- » Management of head trauma is difficult for non-medical personnel. In the early stages of injury, it is often not clear whether the issue is a concussion or there is a more severe underlying structural head or neck injury.

- » For this reason, **ALL players with a suspected concussion need a prompt medical assessment** (with a registered medical doctor). This assessment can be provided by a medical doctor present at the venue, a local general practitioner or a hospital emergency department.
- » 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 should be created at the start of each season (in discussion with local medical services).
- » It is recommended that any player with a concussion or suspected concussion should not:
 - i. Be left alone at least for the first 3 hours after injury. If symptoms worsen after injury, they should seek urgent medical attention (see below),
 - ii. Drink alcohol, use recreational drugs or drugs not prescribed by their doctor, or
 - iii. Drive until cleared by a medical doctor.
- » The AFL Match Day Head Injury Assessment Tool and Referral Form (see Appendix 2) ensures that important information about the injury and the player's initial symptoms are communicated accurately and completely to the doctor assessing the player.

For teams with a medical doctor on the sideline

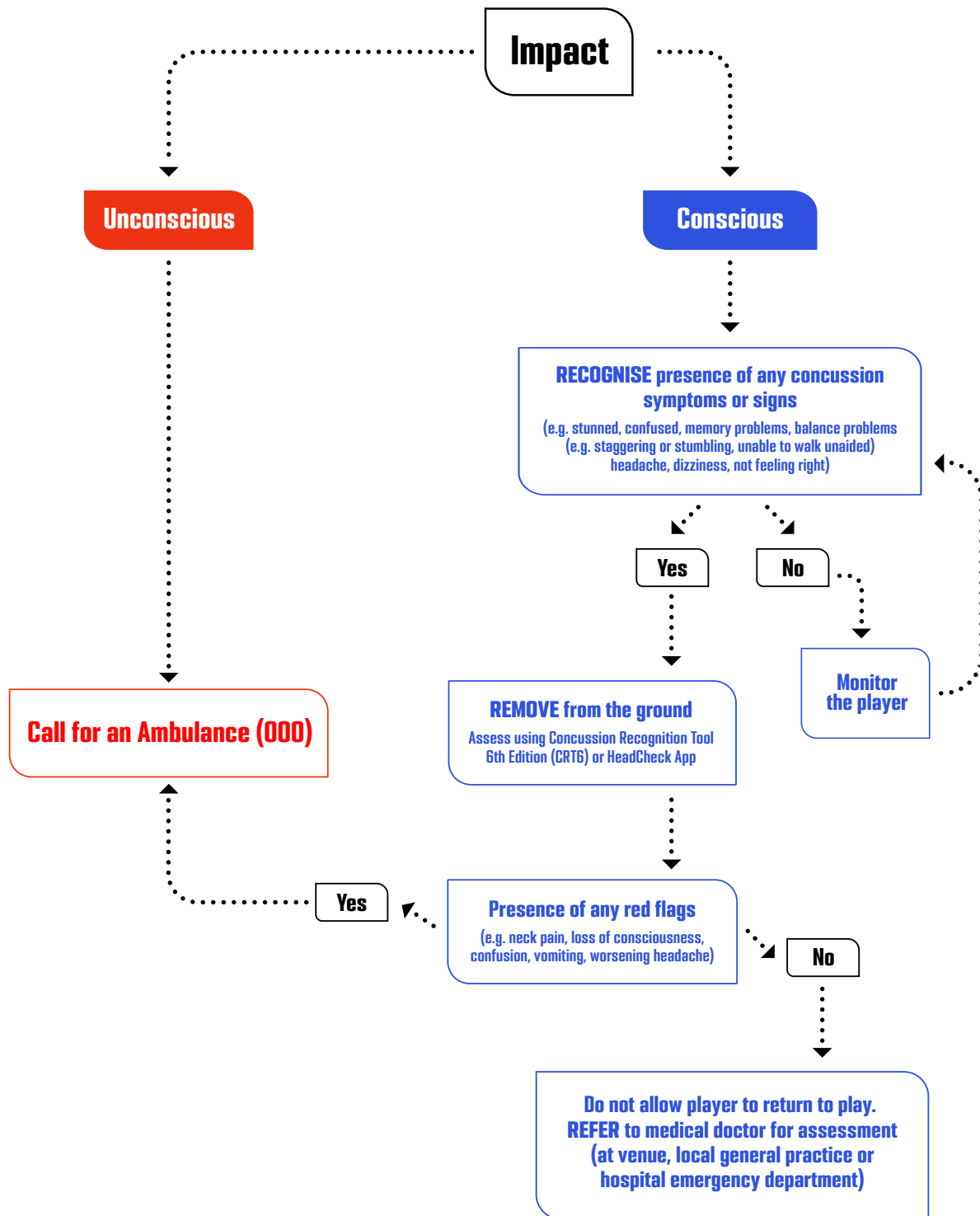
- » For teams with a medical doctor on the sidelines **who has experience in the management of concussion in sport, and has an ongoing role in the care of the players**, the [Sport Concussion Assessment Tool](#) 6th Edition (SCAT6) can be used in the assessment and management of the player.
- » The player should be removed from the field and must be assessed in a quiet distraction-free environment (such as the team rooms) with the player in a resting state.
- » The player should then be thoroughly assessed, including the use of the SCAT6.
- » The time taken to complete the SCAT6 is at least 10 minutes.
- » If the diagnosis of concussion is confirmed following assessment, then the player must not be returned to play or training on the day.
- » In cases where the doctor has conducted a thorough sideline assessment and is satisfied that the player does not have a concussion, then the doctor can clear the player to return to play.
- » The clinical features of concussion may be delayed or evolve over several hours. Consequently, in any cases where there is uncertainty about the diagnosis after an initial assessment, the player must be managed conservatively on the day of injury (i.e. not returned to play).
- » Furthermore, **all players who have had a concussion assessment during the match and are returned to play must be regularly medically assessed during the match and when clinically indicated undergo repeat SCAT6 assessment after the match (or the following day)**.
- » The doctor is expected to maintain comprehensive notes on any assessment conducted on the players under their care.

Management of an unconscious player and when to refer to hospital

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

FIGURE 2.

SUMMARY OF THE INITIAL SIDELINE MANAGEMENT



Note: For any player with loss of consciousness, basic first aid principles should be used (i.e. danger, response, airways, breathing, circulation). 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.

RETURN TO PLAY

- » Most concussions will recover uneventfully over days to weeks, and the player can follow a return to play (and return to school or work) program (see below).
- » In some cases, specialist care and rehabilitation will be required. This is particularly the case for players with persisting symptoms (i.e. greater than 4 weeks) or those who are unable to progress in the return to play program (see section on management of more complicated cases below).
- » **The most important aspect of return-to-play protocols is guiding the player through key stages rather than simply following suggested timeframes or the number of days post-injury.**
- » Critical stages for return to play following concussion include:
 1. A **brief period of relative rest** (24-48 hours),
 2. A period of **recovery**,
 3. A **graded loading program** (with medical clearance required for return to full contact training),
 4. Unrestricted return to play.
- » How concussion presents and the rate and pattern of recovery vary from person to person and injury to injury. Players will also have different individual circumstances (e.g. the number of previous concussions) and priorities (e.g. return to school in young people). The return to play program must be **individualised based on progress**, rather than the number of days since the incident.
- » The criteria for progressing through the stages of recovery are outlined to help ensure that the return-to-play program is appropriate in all circumstances (see Figure 3).
- » Any concussed player must not return to competitive contact sport (including full contact training sessions) before they have completed all stages of the return to play process (including the minimum number of days in each stage) and obtained medical clearance (see Appendix 3).
- » Any player who has sustained a concussion playing Australian Football, should also be restricted from participating in other contact or collision sports (e.g. Rugby Union, Rugby League, Soccer, Basketball, Netball) until they have recovered and have been cleared to return to play.

Stage 1: A brief period of relative rest (24-48 hours)

- » Players should be allowed to engage in activities of daily living immediately following injury, even during the initial period of relative rest.
- » There is some benefit in reducing screen time in the first 48 hours after a concussion, but it may not be effective beyond that.
- » The player may use simple painkillers (e.g. paracetamol) to help manage symptoms during this time.
- » Players should progress to the recovery stage after a maximum of 48 hours even if they have symptoms from their concussion.

Stage 2: Recovery

- » Physical activity during the recovery stage can be used as part of the treatment.
- » The player may have symptoms during this stage but should be encouraged to participate in activity, commencing with light physical and cognitive activity. Mild symptom worsening (see below) during and immediately following light physical activity is not harmful during this stage.
- » Any physical activity performed during this stage must be performed in a safe environment that is free from the risk of repeat head contact (i.e. no team training drills).
- » The program should be structured and ideally supervised or overseen by a qualified healthcare practitioner with expertise in the management of concussion and who is familiar with these guidelines (e.g. physiotherapist, osteopath, chiropractor). A guide to graded activity that includes criteria for progression is provided in Figure 3.
- » Mild and brief worsening of symptoms is acceptable during the recovery stage (i.e. an increase of no more than 2 points on a 0-10 point scale for less than an hour when compared with the baseline value reported before physical activity). If there is more than a mild worsening of symptoms, the player should stop and attempt to exercise at the same level the next day.
- » The recovery stage should start with simple day-to-day activities such as watching TV, reading the papers, using social media, going for a walk.
- » The player should progress slowly back to full work/school during the recovery stage (for specific return-to-school provisions, see the section on “Special Supplement for the Management of Concussion in Children and Adolescents”).
- » The priority for students is to successfully return to school/university before returning to sport.
- » The recovery stage will be **variable in length** from injury to injury and person to person, but usually takes days to weeks.

Stage 3: Graded loading program (with monitoring)

- » **Players can only enter stage 3 once they have recovered fully from their concussion.** Recovery means that **all concussion-related symptoms and signs have fully resolved (for at least 24 hours) at rest and with intense physical exertion**, and they have successfully returned to work/school without restriction.
- » 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 and 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).
- » Progression through the graded loading program requires **careful monitoring** for a recurrence of symptoms. The player must be honest with themselves, the team and the team medical/coaching staff about symptoms.
- » The player should experience **no concussion-related symptoms** during the graded loading program. Players experiencing any concussion-related symptoms during this stage must return to Stage 2 and should have a medical review.
- » The duration of the graded loading program is a minimum of 14 days.

- » In following these guidelines, the focus must be on ensuring that players pass through each of the stages safely (i.e. rest, recovery and graded loading).
- » **Any concussed player must not be allowed to return to competitive contact sport (including full contact training sessions) before having a medical clearance.**
- » For a medical clearance for unrestricted return to full contact training and play (see Appendix 3), the player must:
 - i. Be completely free of concussion-related symptoms at rest and with activity,
 - ii. Have completed rest, recovery and graded loading stages without any issues or complications,
 - iii. Be confident and comfortable to return to play, and
 - iv. Have continued to monitor for any delayed symptoms or signs.

Return to Play Overview

Medical oversight by a doctor is very important in the management of concussion

- » Any player with a concussion or suspected concussion must consult with a doctor:
 - i. As soon as possible after the initial injury to confirm the diagnosis and provide guidance on management,
 - ii. Before the player is allowed to return to full contact training, and
 - iii. If the progress of the player is slow or stalls due to symptoms at any stage (see section on management of more complicated cases below).

The day-to-day progression and movement between the steps of the program can be guided by the player and the medical personnel at the club (physiotherapist, sports trainer, AFL First Aider) or other healthcare providers in the community.

- » **The overall time taken to return to play = 1-2 days of initial relative rest + time taken to recover completely from the concussion + graded loading program with a medical clearance.**
- » **The duration of concussion-related symptoms in the recovery stage is the largest determinant of timing to return to play.**
- » The **earliest** that the player may return to play (once they have completed a graded loading program and have obtained medical clearance) is on the 21st day following the concussion (where the day of concussion is designated day "0", see Figures 3 and 4). This means that a player who is concussed in a match on a Saturday will miss at least the next two Saturday matches and will only be able to return to play on the third Saturday (i.e. the 21st day after the concussion was sustained) if they have recovered according to the protocols and have been medically cleared to return to play. In many cases, recovery will be slower than the minimum 21 days.

- » It is prudent to be more conservative in players aged 18 and under due to younger players having a developing brain, being less likely to advocate for themselves and less likely to be able to articulate symptoms properly in all instances.
- » The time frame for clinical recovery in players aged 18 years and under is often 4 weeks or longer. In following the current return to play protocols, it is expected that **many children and adolescents will require longer than 3 weeks before a full return to play.**
- » **Any player with symptoms lasting 4 or more weeks or those who are unable to progress through the return to play protocols due to recurrence of symptoms must not return to play while still symptomatic** and should seek review with a doctor with expertise in the management of concussion.

For teams with a medical doctor involved in the care of players

- » **The minimum requirement for a return to play is that a player must have had resolution of all concussion-related symptoms and neurological signs (at rest and with exertion), and has completed a graded loading program without recurrence of their symptoms.**
- » The [SCAT6](#) is a useful tool to facilitate the assessment of players within the acute phase of concussion (i.e. within 72 hours of injury).
- » The [SCOAT6](#) (or components thereof) facilitates the assessment of players from 72 hours following injury. The SCOAT6 (or components thereof) is a screening tool, and abnormalities in any domain may require further assessment and management including referral to clinical psychology, neuropsychology, vestibular physiotherapy, cervical physiotherapy, etc).



For teams with allied healthcare practitioners involved in the care of players

- » Experienced allied healthcare practitioners (e.g., physiotherapists, osteopaths, chiropractors) are an important part of the team in the recognition and management of concussion. Allied healthcare practitioners who are familiar with the use of the SCAT6 (including its interpretation, strengths and limitations) may use the tool in the initial assessment and to help guide the progress of players through the return to play protocols. It is important to note however that the confirmation of the diagnosis of concussion and clearance before return to full contact training **must** still be made by a medical doctor.

Management of more complicated cases

- » Any player with symptoms lasting 4 or more weeks **must not return to play while still symptomatic** and should seek review with a doctor with expertise in the management of concussion (e.g. Sport and Exercise Physician, Neurologist, Rehabilitation Physician).
- » The doctor may then refer the player with persisting symptoms to other allied healthcare providers who specialise in concussion or neurological rehabilitation (e.g. physiotherapist, chiropractor, or osteopath), or to a multidisciplinary concussion clinic, as part of their management.
- » Other complicated cases include players who:
 - iv. Suffer a second concussion within the same season (or three concussions within the previous 12 months),
 - v. Have an apparent lower or reducing threshold for concussion (whereby the player appears to sustain a concussion or increasing symptoms with reduced force of head impact),
 - vi. Fail to progress through their return-to-play program due to a recurrence or persistence of symptoms,
 - vii. Have self-reported concerns with brain function
- » In these situations, the player should also be reviewed by a doctor with expertise in the management of concussion (e.g. Sport and Exercise Physician, Neurologist, Rehabilitation Physician).

FIGURE 3.

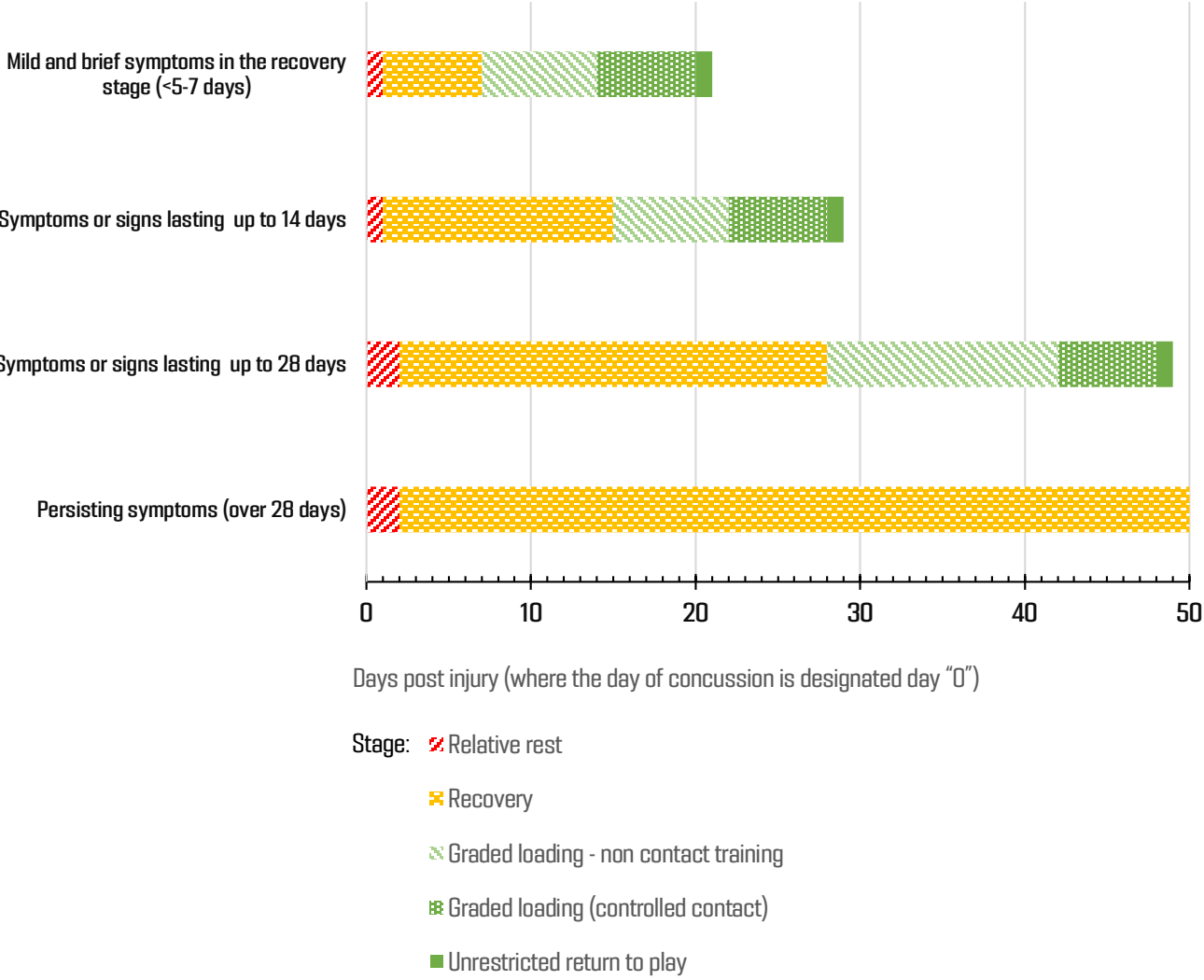
STAGES OF GRADED RETURN TO PLAY

STAGE 1: RELATIVE REST 1		
ACTIVITY Relative rest Gentle day-to-day activities - as guided by symptoms. Minimise screen time (TV, computer/homework/work, phone/social media and gaming)	DURATION 1-2 days	CRITERIA TO PROGRESS Nothing specific - should progress after 1-2 days
STAGE 2: RECOVERY 2		
ACTIVITY i. Daily activities that do not provoke symptoms Increase day-to-day activities - as guided by symptoms. Include short walks. Limit screen time (TV, computer/homework/work, phone/social media and gaming) -duration depends on symptoms No team training drills. No resistance training.	DURATION Minimum 1 day	CRITERIA TO PROGRESS Progress if concussion-related symptoms resolved or not worsened from their previous level (either during activity or by the next day)
ii. Light aerobic exercise Start light activity e.g., walking, jogging or cycling at a slow to medium pace. Aim for about 50-60% maximum heart rate (can carry a conversation when exercising) No team training drills. No resistance training.	DURATION Minimum 1 day	CRITERIA TO PROGRESS Progress if concussion-related symptoms resolved or not worsened from their previous level (either during activity or by the next day)
iii. Moderate aerobic exercise Start moderate aerobic exercise e.g., walking, jogging or cycling at a medium pace. Aim for about 60-80% maximum heart rate. May continue with moderate aerobic exercise over a number of days/ sessions if still has symptoms related to concussion. No team training drills. No resistance training.	DURATION Minimum 2 days	CRITERIA TO PROGRESS Progress if concussion-related symptoms resolved or not worsened from their previous level (either during activity or by the next day)
iv. High intensity aerobic exercise Start high-intensity aerobic exercise (e.g. running or cycling at high intensity) Up to maximum heart rate. No team training drills. Can commence gentle resistance training (50-75% of usual loads)	DURATION Minimum 2 days	CRITERIA TO PROGRESS Progress if a) Complete recovery of all concussion-related symptoms and signs at rest and with high intensity training; b) Have returned to school or work (without any need for modifications);
STAGE 3: GRADED LOADING PROGRAM 3		
ACTIVITY i. Non-contact training Return to full team training sessions - <u>non-contact activities only</u> Minimum of 2-3 training sessions with no consecutive days of football training (to allow for rest and recovery)	DURATION Minimum 7 days	CRITERIA TO PROGRESS Progress if remaining completely free of any concussion-related symptoms*
ii. Limited contact training Full team training allowed -able to participate in drills with incidental and/or controlled contact (including tackling) <u>No consecutive days of training (i.e. must have 'non-contact activity' days in between training sessions)</u>	DURATION Minimum of 7 days to progress through graded contact training	CRITERIA TO PROGRESS Progress if: a) Remaining completely free of any concussion-related symptoms* b) Player is confident to return to full contact training c) Player has medical clearance to return to full contact training
iii. Full contact training		CRITERIA TO PROGRESS Progress if: a) Remaining completely free of any concussion-related symptoms* b) Player is confident to return to play
STAGE 4: UNRESTRICTED RETURN TO PLAY 4		

*If concussion-related symptoms reappear at any time in stage 3 (Graded loading program) then the player should go back to the previous symptom-free step in stage 2 (Recovery) and seek medical review from a doctor.

FIGURE 4.

EXAMPLES OF RETURN-TO-PLAY TIMELINES BASED ON PATTERNS OF RECOVERY FOLLOWING CONCUSSION*



*The timing of return to play depends largely on the duration of the recovery stage, which is variable in length from injury to injury and person to person.

REDUCTION OF CONCUSSION AND HEAD TRAUMA

- » Reduction of head trauma and concussion risk requires a broad approach that includes consideration of education, protective equipment, training practices, policy, rules and rule enforcement. It is also important that the outcome of any change is monitored and assessed. This includes measuring any potential unintended consequences of the changes.

Education

- » The AFL has a focus on education to ensure that all participants understand the risks of concussion and repeated head trauma, how to recognise a concussion and how to manage a suspected concussion.

Protective equipment

i. Headgear

- » There is no evidence that currently available soft-shell headgear reduces the risk of concussion or other brain injuries in Australian Football.
- » Helmets or headgear may have a role in the protection of players on return to play following specific injuries (e.g. face or skull fractures).
- » Overall, however, there is insufficient evidence to make a recommendation for the use of helmets for the prevention of concussion in Australian Football.
- » The AFL has developed a set of basic and advanced headgear standards for Australian Football and is currently working with commercial and research partners to develop and test headgear that meets these standards.

ii. Mouthguards

- » 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.
- » There is some evidence that mouthguards may also prevent concussion or other brain injuries in contact sports such as Australian Football.
- » Custom-fitted laminated mouthguards are considered to offer the best protection, where precision fit and quality materials offer maximum comfort & injury prevention. Over the counter “boil and bite” mouthguards provide better protection than no mouthguard, however, their protection may vary depending on the design, comfort, adaptation and thickness of the final product.

Rule changes

- » The AFL has made more than 30 rule changes to the AFL Regulations and Tribunal Guidelines since 2005 to assist in the deterrence of conduct causing or giving rise to the risk of concussion and other head trauma, and to both encourage and enforce change of behaviour on field ([learn more here](#)).
- » The AFL has modified rules for junior football that have been developed based on research and best practice and which provides the opportunity for participants in our junior competitions to develop their skills whilst experiencing activities relevant to their age, progression, physical development, and maturation level. Contact is gradually introduced to help children learn and develop in a safe environment ([learn more here](#)).

Changes to training

- » Education about proper tackling technique and practical training drills is also useful to reduce the magnitude and number of head impacts as well as reduce the risk of concussion. The AFL in partnership with LaTrobe University has developed a specific AFL/AFLW education program that incorporates both active warm-up and practical training drills. In a recent pilot study, the program has been shown to reduce risk of head impact and concussion.

RESEARCH PROJECTS

- » The AFL and its research partners (including Monash University and La Trobe Sport and Exercise Medicine Research Centre) are actively involved in several important research projects to help reduce the risk or improve the management of concussion and/or repeated head trauma.
- » These projects include:
 - i. Headgear: trialing new headgear standards to see if they can reduce the force of head impacts and reduce the risk of concussion,
 - ii. Mouthguards: using mouthguards with in-built impact sensors to measure the number and magnitude of head knocks in football,
 - iii. A community football junior league testing a best practice model for the management of concussion in the community, including access to timely, quality medical care,
 - iv. Prep-to-Play: investigating the role of an active warm-up and improved tackling technique to reduce the risk of head trauma and concussion in female players,
 - v. AFL Brain Health Initiative: investigating the impact of head trauma and concussion on long-term brain health and investigating other factors that may contribute to this complex relationship.

WHAT ABOUT ...

i. Baseline testing

- » Baseline testing can be useful, but it is often time-consuming and expensive
- » It is not usually needed in community football - especially when combined with a conservative return-to-play program.

ii. Brain scans

- » Brain scans are rarely required. However, the doctor may choose to order one if there is concern about a structural head or neck injury.
- » A normal brain scan does not rule out a concussion diagnosis.

iii. New Apps or blood tests that have been promoted to make diagnosing concussion easier

- » Currently, there are no apps, tools or tests that can reliably diagnose concussion. However, the AFL endorses the [HeadCheck app](#) developed by the MCRI, that assists in the management of concussion in children, adolescents and adults.



SECTION 3

SPECIAL SUPPLEMENT FOR THE MANAGEMENT OF CONCUSSION IN CHILDREN AND ADOLESCENTS

BACKGROUND

- » In general, children and adolescents (aged 5-18) require a modified approach to the management of concussion as 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.
- » The evidence regarding children and adolescents has recently been reviewed following the [6th International Conference on Concussion in Sport](#).
- » These guidelines highlight important additional considerations in the management of concussion and repeated head trauma in Australian Football for children and adolescents (i.e. aged 18 and under).

DAY OF INJURY MANAGEMENT

- » The same basic approach to the initial management is recommended, including
 1. **Recognising** a suspected concussion
 2. **Removing** the player from the match or training session
 3. **Referring** the player to a medical doctor for assessment
- » It is important to note that symptom evaluation in a child often requires the addition of parent and/or teacher input.

RETURN TO PLAY

- » Overall, the important stages for return to play following concussion in children and adolescents are the same as those in adults and include:
 1. A **brief** period of **relative rest** (24-48 hours),
 2. A period of **recovery**,

3. A **graded loading program** (with medical clearance required for return to full contact training and unrestricted return to play).
 4. Unrestricted return to play.
- » Figure 3 in these guidelines (above) also applies in guiding return to play post-concussion for children and adolescents. The time frame for clinical recovery in players aged 18 years and under is often up to 4 weeks, but in some cases may be longer. In following the current return to play protocols, it is expected that many children and adolescents will therefore require longer than 3 weeks before returning to play.
 - » A child is not to return to football, or other sport/s, until they have successfully returned to school/learning, are symptom-free, and have received medical clearance. However, as with adults, early introduction of limited physical activity is appropriate.
 - » Any player who has sustained a concussion playing Australian Football should also be on similar restrictions participating in other contact or collision sports (e.g. Rugby Union, Rugby League, Soccer, Basketball and Netball) until they have recovered and have been cleared to return to play.

RETURN TO SCHOOL

- » Concussion may impact a child's ability to learn at school. This must be considered, and medical assessment is recommended to assist the child with returning to school.
- » It is reasonable for a child to miss a day or two of school after concussion, but extended absence from school is uncommon.
- » The child's doctor may assist in the return to play process, which may include guiding return to school modifications (see below), providing letters to communicate key components and milestones of the return to school (and return to sport) program with parents and teachers or advice about the use of medication to help manage symptoms.
- » In some children, a graduated return to school program will need to be developed for the child. Additional management by a paediatric neuropsychologist may assist in more difficult cases.
- » The child will progress through the return to school program provided that there is only a mild and temporary worsening of their concussion-related symptoms. If any activity worsens symptoms (including when using computers or other devices), the child should abstain from that activity until this no longer occurs.
- » This program should include communication between the parents, teachers, and health professionals and will vary from child to child.
- » The return to school program may require consideration of:
 - 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
- » The child is not to return to football or other sport, until they have 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 there is not more than mild worsening of symptoms.
 - » If there are any doubts, the child should be referred to a doctor who is an expert in the management of concussion in children.

OTHER CONSIDERATIONS

Role of the Doctor

- » Children or adolescents with a concussion or suspected concussion must consult with a doctor:
 - As soon as possible after the initial injury to confirm the diagnosis and provide guidance on management,
 - Before the player is allowed to return to full contact training,
 - If the progress of the player is slow or stalls due to symptoms at any stage,
 - If they have had two or more previous concussions.
- » Ideally, children or adolescents should also consult with a medical doctor prior to return to school.

Role of the school

- » ALL schools need to have a suitably qualified and accredited person(s) with first aid skills (e.g. trained first aid provider, paramedic, school nurse or doctor) available to attend injuries both at the school campus and at sporting events.

Overseeing concussion (the role of a concussion officer)

- » Junior football clubs and schools should nominate a concussion officer to oversee the management of young players with concussion or a suspected concussion, who:
 - provides a single point of contact and can help coordinate matters related to concussion, such as communication of activity restrictions and progress through the graded return to play process.
 - is not expected to be a medical expert but rather to understand the concussion guidelines and assist in ensuring compliance at the club or school. They may include the team manager, school nurse or team trainer. The primary role is to ensure that anyone diagnosed with concussion follows the concussion protocol.
 - Should strongly encourage the player and/or parents or guardian to disclose the concussion to school and/or other sports that the player participates in.



APPENDIX 1

CONCUSSION IS EVERYBODY'S RESPONSIBILITY

1. Role of the player

- » Come off the ground when asked by the medical staff, trainer or coach.
- » Be honest with how you are feeling both at the time of injury and during the recovery process.
- » Take care of yourself and your teammates - if someone is not right, let the trainer or medical staff know.
- » Be patient with your return to play program. Like any other injury, the process is designed to return you to play safely, not as quickly as possible.

2. Role of the trainer/medical staff

- » Know the Guidelines for the Management of Sport-Related Concussion in Australian Football.
- » Assess the player and ask others who might have witnessed the incident.
- » Err on the side of caution.
- » Do not allow coaches, parents or teammates to influence your decisions.
- » No one can override your decision to take a player off for assessment if you think there may be a concussion.
- » The trainer (in the absence of other medical staff) is responsible for the medical care of the players.

3. Role of the coach

- » Be familiar with the Guidelines for the Management of Sport-Related Concussion in Australian Football.
- » Understand the importance of managing concussion conservatively.
- » Accept the recommendations of the sports trainers and never try to over-rule the trainer (or question the player who is reporting symptoms).
- » Don't try to rush or influence the sports trainer's decisions.
- » Ensure that your player has been medically cleared to full contact training and playing.
- » Set the culture of the team in terms of concussion management.

4. Role of the parent or guardian

- » Trust the sports trainer and NEVER try to override their advice.
- » Look after your child - do not leave them alone for 24-48 hours.
- » Allow an initial period of rest and sleep especially if at a time when expected to sleep (i.e. at night-time).
- » Take your child to a doctor for a medical assessment if they have sustained a concussion or a suspected concussion.
- » Support your child's entire recovery.
- » Continue to monitor their progress throughout the recovery.
- » Make sure they have fully recovered and are confident to return to play.

5. Role of the concussion officer

- » Coordinate matters related to concussion, such as communication of activity restrictions and progress through the graded return to play process.
- » Understand the concussion guidelines and assist in ensuring compliance at the Club level.
- » Ensure that anyone diagnosed with concussion follows the concussion protocol.
- » Encourage the player and/or parents or guardian to disclose the concussion to school and/or other sports that the player participates in.

6. Role of the Umpire

- » Enforce the rules to protect the heads of players.
- » Alert the sports trainer if you are concerned that a player may have had a concussion.



MATCH DAY HEAD INJURY

ASSESSMENT & REFERRAL FORM | AGES 13 & ABOVE



SIDELINE FORM (to be completed by the examiner (first aider/trainer) on the day of the suspected concussion)

PLAYER NAME	CLUB
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DETAILS OF INCIDENT

DATE
OCCURRED AT: <input type="checkbox"/> MATCH <input type="checkbox"/> TRAINING <input type="checkbox"/> OTHER
BRIEF DESCRIPTION

1 IDENTIFICATION OF RED FLAGS (tick all those that apply)

Loss of consciousness	<input type="checkbox"/>
Seizure or convulsions	<input type="checkbox"/>
Deterioration of conscious state	<input type="checkbox"/>
Persistent or increasing vomiting	<input type="checkbox"/>
Double vision	<input type="checkbox"/>
Severe or increasing headache	<input type="checkbox"/>
Increasing restlessness, agitation, or combative behaviour	<input type="checkbox"/>
Neck pain	<input type="checkbox"/>
Weakness or tingling/burning in the arms or legs	<input type="checkbox"/>

ACTION: If any one of the boxes above is ticked, an ambulance should be called for immediate transportation to hospital.

2 FEATURES OF A SUSPECTED CONCUSSION (tick all those that apply)

Loss of responsiveness	<input type="checkbox"/>
Motor incoordination (losing balance, staggering, etc)	<input type="checkbox"/>
Confused/disorientation (not aware of plays or events)	<input type="checkbox"/>
Impaired memory (unable to recall events before or after the injury)	<input type="checkbox"/>
Looking/feeling dazed, blank or vacant	<input type="checkbox"/>
Player reporting symptoms:	
a. 'don't feel right'	<input type="checkbox"/>
b. more emotional than usual - sad, nervous or anxious	<input type="checkbox"/>
c. 'feel slowed down', confused or 'feel like in a fog'	<input type="checkbox"/>
d. Sensitivity to light or noise	<input type="checkbox"/>
The player is not their normal self, or there is any other concern that they are not quite right	<input type="checkbox"/>
Other (please list):	

ACTION: for any suspected concussion, the player needs to see a doctor as soon as practical for assessment, including confirmation of the diagnosis. The player must not return to play or full contact training until they have been cleared by a doctor.

EXAMINER NAME	ROLE AT CLUB
EXAMINER SIGNATURE	DATE

APPENDIX 2A.

MATCH DAY HEAD INJURY

ASSESSMENT & REFERRAL FORM | AGES 13 & ABOVE

**PLAYER FORM** (to be completed on the day of the suspected concussion)

PLAYER NAME	
CLUB	AGE
How many concussions have you had in the past?	
When was the most recent concussion?	
How long was the recovery (time to being cleared to play) for the most recent concussion? (approximate number of weeks)	

SCORE YOURSELF ON THE FOLLOWING SYMPTOMS, BASED ON HOW YOU FEEL RIGHT NOW.

	NONE		MILD		MODERATE		SEVERE
	0	1	2	3	4	5	6
Headache	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
"Pressure in head"	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Neck Pain	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nausea or vomiting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dizziness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Blurred vision	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Balance problems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sensitivity to light	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sensitivity to noise	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Feeling slowed down	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Feeling like "in a fog"	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
"Don't feel right"	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Difficulty concentrating	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Difficulty remembering	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fatigue or low energy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Confusion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Drowsiness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Trouble falling asleep	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More emotional	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Irritability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sadness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nervous or Anxious	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

PLAYER SIGNATURE	DATE
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(Please take a copy of both the sideline and player form with you to your visit to the doctor)

MATCH DAY HEAD INJURY

ASSESSMENT & REFERRAL FORM | AGES 12 & UNDER

SIDELINE FORM (to be completed by the examiner (first aider/trainer) on the day of the suspected concussion)

PLAYER NAME	CLUB
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DETAILS OF INCIDENT

DATE

OCCURRED AT: **MATCH** **TRAINING** **OTHER**

BRIEF DESCRIPTION

IDENTIFICATION OF RED FLAGS

(tick all those that apply)

- Loss of consciousness
- Seizure or convulsions
- Deterioration of conscious state
- Persistent or increasing vomiting
- Double vision
- Severe or increasing headache
- Increasing restlessness, agitation, or combative behaviour
- Neck pain
- Weakness or tingling/burning in the arms or legs

ACTION: If any one of the boxes above is ticked, an ambulance should be called for immediate transportation to hospital.

FEATURES OF A SUSPECTED CONCUSSION

(tick all those that apply)

- Loss of responsiveness
- Motor incoordination (losing balance, staggering, etc)
- Confused/disorientation (not aware of plays or events)
- Impaired memory (unable to recall events before or after the injury)
- Looking/feeling dazed, blank or vacant
- Player reporting symptoms:
 - a. 'don't feel right'
 - b. more emotional than usual - sad, nervous or anxious
 - c. 'feel slowed down', confused or 'feel like in a fog'
 - d. Sensitivity to light or noise

The player is not their normal self, or there is any other concern that they are not quite right

Other (please list):

ACTION: for any suspected concussion, the player needs to see a doctor as soon as practical for assessment, including confirmation of the diagnosis. The player must not return to play or full contact training until they have been cleared by a doctor.

EXAMINER NAME	ROLE AT CLUB
EXAMINER SIGNATURE	DATE

APPENDIX 2B.

MATCH DAY HEAD INJURY

CHILD REPORT | AGES 12 & UNDER



PLAYER FORM (to be completed on the day of the suspected concussion)

PLAYER NAME	
CLUB	AGE
How many concussions has your child had in the past?	
When was the most recent concussion?	
How long was the recovery (time to being cleared to play) for the most recent concussion? (approximate number of weeks)	

Ask the child to rate their symptoms based on how they are feeling now, with "1" representing the symptom is "a little" and "3" representing that the symptom is "a lot"

SYMPTOM EVALUATION

	NOT AT ALL/NEVER 0	A LITTLE/RARELY 1	SOMEWHAT/SOMETIMES 2	A LOT/OFTEN 3
I have headaches	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel dizzy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel like the room is spinning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel like I'm going to faint	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Things are blurry when I look at them	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I see double	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel sick to my stomach	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I get tired a lot	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I get tired easily	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have trouble paying attention	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I get distracted easily	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have a hard time concentrating	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have problems remembering what people tell me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have problems following directions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I daydream too much	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I get confused	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I forget things	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have problems finishing things	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have trouble figuring things out	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It's hard for me to learn new things	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My neck hurts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Do the symptoms get worse with physical activity? **YES** **NO**

Do the symptoms get worse with trying to think? **YES** **NO**

OVERALL RATING FOR CHILD TO ANSWER

On a scale of 0 to 100% (where 100% is normal), how would you rate the child now?	VERY BAD									VERY GOOD
	1	2	3	4	5	6	7	8	9	10
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If not 10, in what way do you feel different?

.....

MATCH DAY HEAD INJURY

PARENT OR GUARDIAN REPORT | AGES 12 & UNDER

SYMPTOM EVALUATION	NOT AT ALL/NEVER	A LITTLE/RARELY	SOMEWHAT/SOMETIMES	A LOT/OFTEN
	0	1	2	3
has headaches	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
feels dizzy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
has a feeling that the room is spinning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
feels faint	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
has blurred vision	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
has double vision	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
experiences nausea	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
gets tired a lot	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
gets tired easily	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
has trouble sustaining attention	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
is distracted easily	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
has difficulty concentrating	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
has problems remembering what he/she is told	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
has difficulty following directions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
tends to daydream	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
gets confused	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
is forgetful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
has difficulty completing tasks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
has poor problem-solving skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
has problems learning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
has a sore neck	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Do the symptoms get worse with physical activity? YES NO

Do the symptoms get worse with trying to think? YES NO

OVERALL RATING FOR PARENT/TEACHER/COACH/CARER TO ANSWER

On a scale of 0 to 100% (where 100% is normal), how would you rate the child now?

If not 100%, in what way does the child seem different? _____

APPENDIX 3.

MEDICAL CLEARANCE FORM

RETURN TO PLAY CLEARANCE FORM

**PLAYER DETAILS**

PLAYER NAME
PLAYER DOB
CLUB

The player (or parent / guardian on behalf of their child) must complete the declaration and take the form to a medical doctor to receive medical clearance before returning to full contact training or playing Australian Football.

The player (or parent / guardian on behalf of their child) must return the completed and signed form to their club, who may retain a copy and provide it to the league if requested.

PLAYER DECLARATION

I (or my child if applicable) sustained a concussion on / /

I (or my child if applicable) have successfully returned to school/study/work (if applicable) without any issues.

I (or my child if applicable) have progressed through all of the stages of the AFL Concussion Management Protocol (i.e. 1. Relative Rest, 2. Recovery and 3. Graded Loading Program) and have had no symptoms since entering the Graded Loading Program.

PLAYER SIGNATURE	DATE
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(or parent / guardian if Player 18 or under)

MEDICAL PRACTITIONER CERTIFICATION

I assessed (player) on / /

Based on the information provided to me, and my clinical assessment, I can confirm that the player has recovered from their concussion (including full resolution of concussion-related symptoms and signs, return to work/study) and has completed a graded loading program without any recurrence of symptoms or signs.

I understand that the earliest that a player can return to play (following successful completion of a graded loading program and with medical clearance) is on the 21st day after a concussion, where the day of concussion is designated day "0".

I understand that a more conservative approach and specialist review may be required in the following:

- i. A second concussion within the same season (or three concussions within the previous 12 months),
- ii. An apparent lower or reducing threshold for concussion (whereby the player appears to sustain a concussion or increasing symptoms with reduced force of head impact),
- iii. Failure to progress through their return-to-play program due to a recurrence or persistence of symptoms, or
- iv. Self-reported concerns with brain function.

In my opinion, the player is now medically fit to return to full contact training. If they complete full contact training without any issues or concussion symptoms, they can return to playing Australian Football

SIGNATURE	DATE
DOCTOR NAME	PROVIDER #

