

#### **Concussion and Graduated Return to Play**

St Andrew's Cathedral School (SACS) conducts the majority of their inter-school sporting activities through 'The Independent Sporting Association' (ISA).

While SACS and the ISA takes measures to make the sporting activities as safe as possible for participants, there is a risk that students can be injured because of their participation in these sporting activities, whether at training or in actual events. SACS and the ISA treats concussions with great concern therefore any student with a suspected head knock must no longer take part in a game/ activity or training sessions.

The purpose of this document is to provide an evidence-based, best practice summary according to current standards to recognise and manage sport related concussion.

The information in this policy is in line with the latest findings from the 6<sup>th</sup> International Conference on Concussion in Sport, Australian Institute of Sport Concussion and Brain Health Position Statement 2024 and Australian Institute of Sport Australian Concussion Guidelines For Youth and Community Sport.

This Policy's aim is to protect the welfare and health of students. The utmost caution must be taken in this situation. 'If in doubt, sit them out'. Where there is any suspicion of concussion, an athlete should be removed from the field of play and should not be allowed to return, until the successful completion of a graduated return to sport/learn program, and clearance by a healthcare practitioner.

The Graded Return To Sport Framework (GRTSF) aims to address both cognitive and physical rehabilitation and is a shared responsibility of parents, players, coaches, schools and medical practitioners.

#### **Definition**

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

A concussion occurs through a collision with another person or object where biomechanical forces to the head, or anywhere on the body transmit an impulsive force to the head/brain. In most cases, this results in transient neurological impairment. It should be noted that concussion can also occur with relatively minor 'knocks'.

Concussion is a subset of mild traumatic brain injury that is at the less severe end of the brain injury spectrum. It is characterised by a graded set of neurological symptoms and signs that typically arise rapidly and resolve spontaneously over a sequential course. The process of recovery, however, varies from person to person and injury to injury.



#### **Specific Information re Concussion:**

- any suspicion of concussion requires immediate removal from sport;
- children should not return to sport until cleared by a medical practitioner;
- a child's brain can take longer to recover than that of an adult brain;
- you do not necessarily need a knock to the head to sustain a concussion; and
- concussion is an evolving injury and anyone with suspected concussion should be monitored.

#### **Medical Practitioner:**

To date, there is no specific medical test, such as a blood test or medical imaging, that assists in the diagnosis of uncomplicated concussion. The ISA Concussion Protocol ensures that parents and students are referred to a medical practitioner for assessment. It is recommended that schools/parents source a medical practitioner with some experience in the management of concussion.

## **Management in SACS Environments**

All school members should be aware of the concussion management protocols and pathways relevant to SACS, including their role in the identification and management of concussion.

The Health Centre is the main point of contact and manages the coordination of matters related to concussion. Staff in the Health centre are not concussion experts and are not expected to diagnose concussion. Like the role of a 'fire warden', the Health Centre ensures that anyone diagnosed with concussion follows the school's agreed concussion protocol. Their job is to be the recipient of information in relation to concussion and to ensure that the concussion protocol is enacted.

#### Please refer to the attached:

Student / Parent Concussion Communications Guide within St Andrew's Cathedral School

# Graded Return To Sport Framework (GRTSF) For Community and Youth.

The graded return to sport framework (GRTSF) for community and youth assists athletes/coach/parents/teachers with concussion management through the recovery process and time frames for a safe return to sport/learn.

The Australian Institute of Sport (AIS) return to sport summary protocol for community and youth sport is below.

- Introduction of light exercise after an initial 24-48 hours of relative rest.
- Several checkpoints to be cleared prior to progression.
- Gradual reintroduction of learning and work activities. As with physical activity, cognitive stimulation such as using screens, reading, undertaking learning activities should be gradually introduced after 48 hours.
- At least 14 days symptom free (at rest) before return to contact/collision training. The temporary
  exacerbation of mild symptoms with exercise is acceptable, as long as the symptoms quickly resolve
  at the completion of exercise, and as long as the exercise-related symptoms have completely resolved
  before resumption of contact training.
  - A minimum period of 21 days until the resumption of competitive contact/collision sport.
  - Consideration of all symptom domains (physical, cognitive, emotional, fatigue, sleep) throughout the recovery process.



• Return to learn and work activities should take priority over return to sport. That is, while graduated return to learn/work activities and sport activities can occur simultaneously, the athlete should not return to full contact sport activities until they have successfully completed a fully return to learn/work activities.

After the initial period of relative rest, graded return to school and/or work is advised. The initiation of low-intensity exercise 24-48 hours post-concussion irrespective of the presence of low-level symptoms. Mild and brief exacerbation of symptoms may occur during progression through the GRTSF. This is acceptable if the exacerbations are temporary, that is, the symptoms return to baseline before the next exercise session. Mild is defined as an increase of no more than 2 points on a 10 point scale and brief is no more than 1 hour duration of exacerbation from pre-exercise symptoms. If there is moderate or severe exacerbation of symptoms or symptoms persist until the next scheduled bout of activity (considered prolonged symptoms) then a review with a HCP is recommended.

Children and adolescents take longer to recover from concussion than adults. A more conservative approach should be taken with those aged under 19 years of age. The GRTSF requires those under 19 years of age and those without a dedicated HCP to guide recovery, to be symptom free for 14 days (at rest) before return to contact training, and not return to competitive contact sport until a minimum of 21 days from the time of concussion. To be clear, that is not 14 days from the time of concussion. It is 14 days from when the athlete becomes symptom-free. The day of the concussive incident is deemed day 0 of the GRTSF. This recommendation allows for the individual case variability in symptom duration. It ensures that the most vulnerable individuals have demonstrated a clear capacity to perform all normal activities of daily living, including non-contact exercise, without symptoms, before they return to the field of play.

#### Protocol for those with multiple suspected concussions.

A student athlete with a history of multiple concussions is at risk of experiencing prolonged symptoms before return to sport. Those who suffer from multiple concussions within a short period of time should be managed more conservatively and be assessed by a clinical management team with specific training and expertise in concussion.

Multiple concussions can be a minimum of two concussions within a 3-month period, or a minimum of three concussions in a 12-month period. If this occurs, the individual should follow a more conservative return to sport protocol. There is no evidence regarding specific time frames for return to sport following multiple concussions. The timeframes will be influenced by factors such as the severity of the most recent injury, the number of previous concussions and the general medical history of the athlete. A recommended starting point for return to sport after second concussion within three months, would be 28 days symptom-free before return to contact training and a minimum of six weeks from the time of the most recent concussion until return to competitive contact. In situations where more than two concussions have occurred within a 12-month period, consideration needs to be given to missing a season of contact / collision sport.



#### **HOW TO RECOGNISE CONCUSSION**

The Concussion Recognition Tool 6 (CRT6) may be used as an aid to the on field recognition of concussion. If any of the following visible clues (signs) or symptoms are present following an injury, the individual should be assumed to have concussion and must be immediately removed from play or training and must not return to activity that day.

The CRT6 is a simplified summary of the key signs and symptoms and 'red flags' that should raise a concern about a possible concussion. 20 symptoms listed in the CRT6 are:

- Headache
- 'Pressure in the 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

- Nervour of anxious
- Neck Pain
- Difficulty Concentrating
- Difficulty Remembering
- Feeling slowed down
- Feeling like 'in a fog'

The individual with suspected concussion should be reviewed by a Health Care Practitioner (HCP) at the earliest opportunity and should commence a graded return to sport and learning activities. The AIS Concussion Referral & Return Form provides important information to a healthcare practitioner following the suspected concussion of an athlete. The form outlines clear return to sport protocols, and the requirements for clearance for return to contact activities.

Concussion is an evolving condition. Therefore, signs and symptoms can change or be delayed, reflecting the changing underlying physiological injury status of the brain. In some instances, it will be obvious that there has been a significant injury where the athlete immediately suffers a loss of consciousness, has a seizure or has significant balance difficulties. However, signs and symptoms of concussion can be variable, non-specific, subtle, and may be difficult to detect. Symptoms that are initially subtle can become more significant in the hours and days following the injury and require repeat/serial evaluations. Owing to delays in presentation, it may take up to 48 hours following a head contact to exclude a diagnosis of concussion. Parents/caregivers, teachers, coaches and attending healthcare practitioners need to be alert to behaviour that is unusual or out of character.

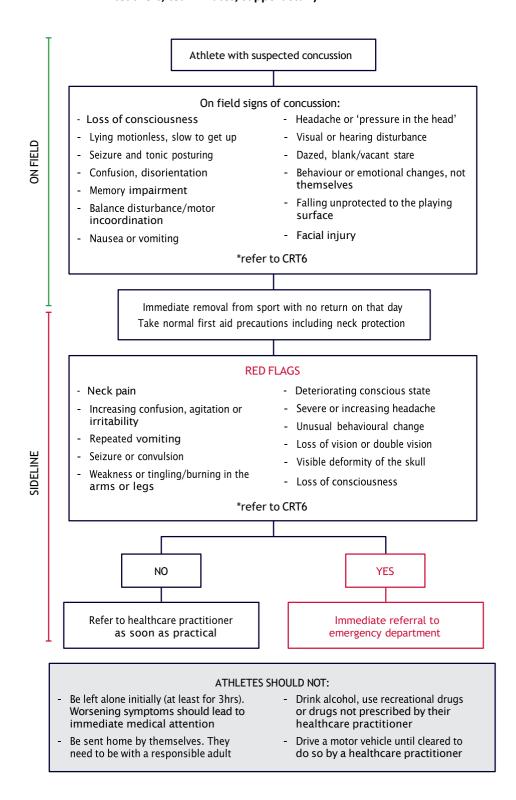
# WHAT TO DO NEXT: IMMEDIATE MANAGEMENT OF CONCUSSION



Immediately following a suspected concussion, it is important to exclude 'red flags' (signs that suggest the athlete should go straight to hospital). Once 'red flags' have been excluded, the athlete should be referred to a health care practitioner.

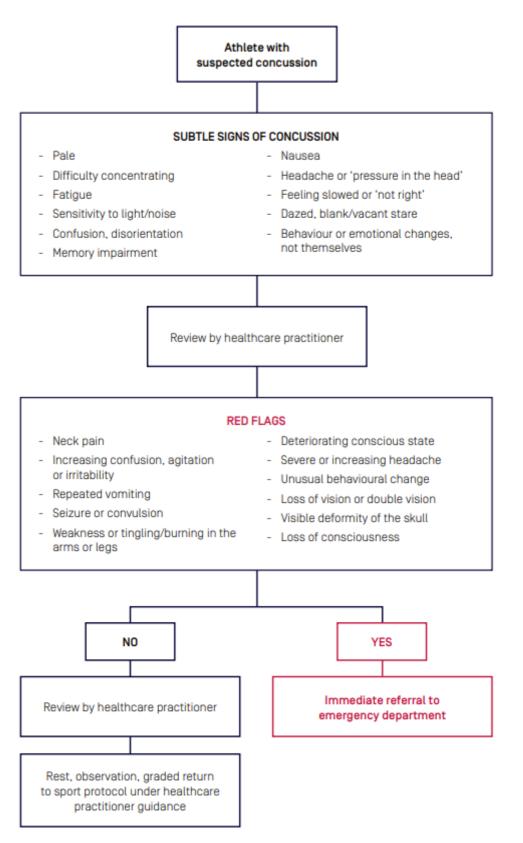
Return to sport and learning activities commences with a short period of rest of 24-48 hours, followed by a gradual return to sport and/or learn process. Relative rest involves providing rest for both the body (physical rest) and the brain (cognitive rest).

Non-healthcare practitioner at sporting event where there is a suspicion of concussion (for parents, coaches, teachers, team-mates, support staff)



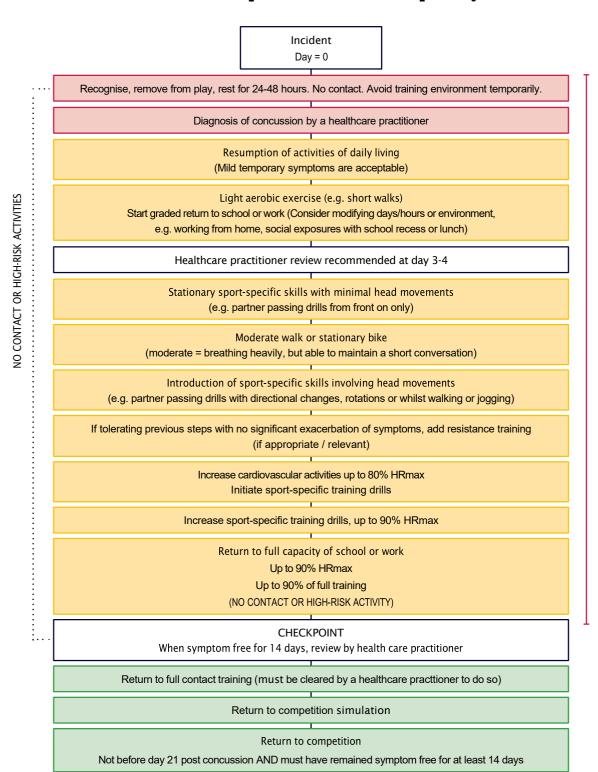


Non-Health care practitioner in a school or home where there is a suspicion of concussion.





# Graded Return to Sport Framework Adopted by ISA



Persistent symptoms or deterioration of symptoms at any stage REFER TO HEALTHCARE PROVIDER FOR REVIEW



# Examples of return to sport timeframes

#### Note:

- Day of concussive incident is considered 'Day 0'
- Examples below assume a sport where competiton occurs weekly on a Saturday
- The 14 day symptom free period does not start until the first day that the athlete is symptom free
- There must be a time period of 4 days of contact training prior to return to contact sport. A student cannot go from the 14 day symptom free period directly into a game with contact.

## Key:

Incident
Symptomatic
Symptom-free
Contact training
Full competition

Athlete symptom-free on day 3 (Tuesday of the 1st week)						
Saturday	5. Saturday	12. Saturday	Saturday	Saturday		
Sunday	6. Sunday	13. Sunday	Sunday	Sunday		
Monday	7. Monday	14. Monday	Monday	Monday		
1. Tuesday	8. Tuesday	Tuesday	Tuesday	Tuesday		
2. Wednesday	9. Wednesday	Wednesday	Wednesday	Wednesday		
3. Thursday	10. Thursday	Thursday	Thursday	Thursday		
4. Friday	11. Friday	Friday	Friday	Friday		

Athlete symptom-free on day 7 (Saturday of second week)						
Saturday	1. Saturday	8. Saturday	Saturday	Saturday		
Sunday	2. Sunday	9. Sunday	Sunday	Sunday		
Monday	3. Monday	10. Monday	Monday	Monday		
Tuesday	4. Tuesday	11. Tuesday	Tuesday	Tuesday		
Wednesday	5. Wednesday	12. Wednesday	Wednesday	Wednesday		
Thursday	6. Thursday	13. Thursday	Thursday	Thursday		
Friday	7. Friday	14. Friday	Friday	Friday		