ST JOSEPH'S COLLEGE GEELONG
POLICY 4.13 CONCUSSION MANAGEMENT

INTRODUCTION

Background

1. Concussion is a significant and complex health issue. The treatments and protocols to protect our students are paramount in our Duty of Care.

Rationale

2. The purpose of this policy is to ensure that all students with a suspected or confirmed concussion receive timely and appropriate advice and care to safely return them to everyday activities including classroom learning and school sport.

POLICY

What is Concussion?

3. Concussion is a traumatic brain injury caused by a direct blow to the head, neck or body resulting in an impulsive force being transmitted to the brain. Most commonly, it causes temporary impairment and the symptoms and signs may present immediately, or evolve over minutes or hours, and commonly resolve within days, but may be prolonged This means that it may be difficult to determine, by either staff, parents or medical practitioners, immediately after the injury whether a person is concussed. Cognitive functions in children and adolescents may be affected for up to the 2 months following concussion. Concussion is the most common type of brain injury and affects brain function rather than structure, so brain scans if performed are usually normal.

4. Concussion occurs most often in sports which involve body contact, collision or high speed. In many cases a person will recover from concussion without intervention, provided they follow appropriate advice around relative rest and performing a graded recovery. With good management, most children and adults (77%) will recover in 4 weeks (Kara et al 2020).

Guiding Principles

5. St Joseph's College acknowledges that it is not feasible to eliminate the risk of concussion particularly in activities such as Physical Education, Outdoor Education or sport. However, it is committed to responding to suspected or actual concussion in a way that facilitates the recovery of the student and does not put them at risk of further harm.

6. Employees must recognise that the College must communicate effectively whilst maintaining a professional standard and protecting student's privacy. The following guiding principles will support this policy:

a. A student suspected of having concussion will be removed from sport and not allowed to return to sport that day.

b. A student who has been hit in the head or the body showing some symptoms where concussion cannot be ruled out, will be treated as if they have concussion.

c. The College will work together with parents to ensure that a student with actual or suspected concussion obtains medical attention and only returns to school and to sport under appropriate guidance.

d. Any student who has a diagnosed concussion will not return to contact or collision sport until a min of 14 days after all of the symptoms of concussion have cleared.

e. Whilst a student is experiencing concussive or post concussive symptoms they are to avoid activities with a risk of contact, fall or collision that may increase the risk of sustaining another concussion during the recovery period.

f. When recovering from concussion, the priority will be for the student to return to learning before returning to sport.

g. Relative rest, may initially require time off school or work. Cognitive rest may include reduced or no screen time for the first 24 hours e.g. playing computer games, reading and watching television.

h. Staff will be trained in how to identify the possible symptoms of concussion and the immediate action they will need to take to ensure the safety of students who are suspected of being concussed.

i. Staff will be briefed on how to treat a student returning to school and physical activity following a concussion.

j. A student who has been concussed who returns to school will be provided with a modified return to learn program and return to sport, if required.

Immediate Symptoms

7. The following symptoms may be present immediately or may develop over the hours or days following the injury, therefore careful monitoring may be required:

a. loss of consciousness;

b. lying motionless, slow to get up;

c. seizure;

d. being unable to think or speak clearly;

e. confusion, disorientation;

f. memory impairment;

g. feeling dizzy or off balance;

h. nausea or vomiting;

i. brain fog and fatigue;

j. headache or 'pressure' in the head;

k. double vision or blurry vision;

l. being sensitive to light and / or sound;

m. dazed, blank/vacant stare; and/or

n. behaviour or emotional changes, 'not themselves'.

8. Staff will be issued with the Concussion Recognition Tool to assist them with identifying the signs of a suspected concussion (attachment 1).

Initial Response – Red Flags

9. There should be immediate referral to an emergency department (either via ambulance or parent transport depending on severity) if any of the following occurs:

a. neck pain or tenderness;

b. seizure or convulsion;

c. loss of vision or double vision;

d. loss of consciousness;

e. increasing confusion or irritability;

f. deteriorating conscious state (becoming less responsive, drowsy);

g. weakness or tingling/burning in the arms or legs;

h. repeated vomiting;

i. severe or increasing headache;

j. unusual behavioural change;

k. increasingly restless, agitated or combative;

l. visible deformity of the skull.

10. For all other concussion symptoms, the following action should be taken:

a. immediate and permanent removal from sport or activity on that day;

b. take normal first aid precautions including neck protection; and

c. refer to medical practitioner as soon as practical.

To Assist the Treating Doctor

11. To assist the treating doctor, it is helpful to note the following details at the time of the injury:

a. **When**: what time did the incident / injury take place?

b. **How**: How did the incident / injury occur? For example, is the injury from a knock to the head by a cricket bat or by an opponent's shoulder or by the head hitting the ground?

c. **Where**: Where on the body was the hit? For example, the temple, shoulder, back of the head or a full body collision?

d. **What**: What occurred next? Include any symptoms that have been witnessed or described by the student such as loss of consciousness, convulsions, amnesia, severe or increasing headache, vomiting or confusion?

e. **Additional useful information**: Any further symptoms such as behavioural changes, loss of memory visual or hearing disturbance?

Following Diagnosis of Concussion

12. Recommending strict rest until the complete resolution of concussion-related symptoms is no longer considered beneficial. Relative (**not strict**) rest, which includes activities of daily living and reduced screen time, is recommended immediately and for up to the first 2 days after injury.

13. Individuals may consider utilising the free HeadCheck app, developed by leading concussion experts to help recognise concussion early, the app includes a symptom assessment and support for recovery with a concussion management plan including daily symptoms check and personalised tasks. The app may also guide as to when to seek medical support e.g. a doctor or a concussion physiotherapist.

14. Individuals can return to light-intensity physical activity, such as walking that does not more than mildly exacerbate symptoms, during the initial 24–48 hours following a concussion.

15. Mild exacerbation of symptoms should not increase more than 2 points on a 0–10 point scale (with 0 representing no symptoms and 10 the worst symptoms imaginable) for less than an hour when compared with the baseline value reported prior to commencement of the activity.

16. School programs may need to be modified to promote return to learning, including:

a. **Environmental adjustments**, such as modified school attendance, frequent rest breaks from cognitive/thinking/deskwork tasks throughout the day and/or limited screen time on electronic devices.

b. **Physical adjustments** to avoid any activities at risk of contact, collision or falls, such as contact sports or game play during physical education classes or after-school activities, while allowing for safe non-contact physical activity (eg, walking).

c. **Curriculum adjustments**, such as extra time to complete assignments/homework and/or pre-printed class notes.

d. **Testing adjustments**, such as delaying tests/quizzes and/or permitting additional time to complete them.

17. Children and adolescents aged under 18 years take longer to recover so a more conservative approach to concussion management should be taken. Concussive symptoms usually resolve in less than four weeks.

18. Parents may consider seeking assessment with a concussion-trained professional (eg physiotherapist) if symptoms haven't fully resolved within 10 days, or if there are risk factors for a prolonged recovery e.g. repeated concussion especially in short time frame, history of prolonged recovery, history of learning difficulties, migraine or mental health issues, was knocked unconscious at the time of the injury and / or had a very high symptom load in the first few days) or there is a desire for the most optimal / timely recovery (e.g. VCE, upcoming sport competition/finals etc).

19. If requested by the College Parents are required to provide a clearance from the medical practitioner as a precondition to returning the student to school sport.

20. **Return to learn** - Following an initial period of relative rest (24–48 hours following an injury at Step 1), students can begin a gradual and incremental increase in their cognitive. Progression through the return to learn strategy for students should be slowed if there is more than a mild and brief exacerbation of symptoms.

Step 1. Daily activities that do not result in more than a mild exacerbation of symptoms related to the current concussion. Typical activities during the day (e.g., reading) while minimising screen time and walking. Start with 5–15 min at a time and increase gradually.

Step 2. School activities. Homework, reading or other cognitive activities outside of the classroom, gradually increasing tolerance to cognitive workload.

Step 3. Return to school part time. Gradual introduction of schoolwork. May need to start with a partial school day or with greater access to rest breaks during the day, gradually increasing academic activities.

Step 4. Return to school full time. Gradually progress in school activities until a full day can be tolerated without more than mild symptom exacerbation. Returning to full academic activities and catch up on missed work.

21. **Return to sport** - Students may begin Step 1 (ie, symptom-limited activity) within 24 hours of injury, with progression through each subsequent step typically taking a minimum of 24 hours. If more than mild exacerbation of symptoms (ie, more than 2 points on a 0–10 scale, for greater than 1 hour) occurs during Steps 1–3, the student should stop and attempt to exercise the next day. Students experiencing concussion-related symptoms during Steps 4–6 should return to Step 3 to establish full resolution of symptoms with exertion before engaging in at-risk activities. At this point the College may require guidance from the medical practitioner:

Step 1. Symptom-limited activity, daily activities that do not result in more than a mild exacerbation of symptoms related to the current concussion. Typical activities during the day e.g. walking.

Step 2. Aerobic exercise, Stationary cycling or walking at slow to medium pace. May start light resistance training that does not result in more than mild and brief exacerbation of concussion symptoms:

- **Step 2A – Light** – up to approximately 55% maxHR) then
- **Step 2B – Moderate** - up to approximately 70% maxHR)

Step 3. Individual sport-specific exercise adding movement, change of direction. Sport-specific training away from the team environment (e.g., running and, change of direction and/or individual training drills away from the team environment). No activities at risk of head impact.

Note:

- If sport-specific training involves any risk of inadvertent head impact, medical clearance should occur prior to Step 3.

- Steps 4–6 should begin after the resolution of any symptoms, abnormalities in cognitive function and any other clinical findings related to the current concussion, including with and after physical exertion.

Step 4. Non-contact training drills Exercise to high intensity including more challenging training drills (e.g., passing drills, multiplayer training) can integrate into a team environment. With the goal of resuming usual intensity of exercise, coordination and increased thinking.

Step 5. Full contact practice Participate in normal training activities, with the goal of restoring confidence and assess functional skills by coaching staff.

Step 6. Return to sport, and normal game play.

Role of Parents/Carers

22. Parents/carers are instrumental in working with the College to manage student concussions. While watching students, parents/carers may also see an injury or a delayed sign or symptom that a College staff member or first aid officer did not witness and therefore provide important information.

23. Parents/carers are required to:

a. On enrolment and on an ongoing basis notify the College of all medical conditions including details regarding previous concussions and any other relevant medical conditions to ensure the school has the correct procedures in place.

b. Notify the College if the student has suffered concussion at a non-College event as well as any measures recommended by medical practitioners. This can be done via:

(1) PAM, selecting 'concussion' as the reason for absence,
(2) by sending an SMS to 0427 687 117 including information regarding the concussion, or
(3) by emailing the school (Edmund Rice sjcoffice@sjc.vic.edu.au) or (Westcourt wcreception@sjc.vic.edu.au) or
(4) phoning reception (Edmund Rice 5226 8100) or (Westcourt 5247 7000).

c. Provide clearance from the medical practitioner where requested by the College as a precondition to returning the student to school and / or school sport.

24. Where concussion occurred at a College activity the parent/carer should:

a. Notify the College of the medical treatment and advice received from a medical practitioner.

b. Provide clearance from the medical practitioner where requested by the College as a precondition to returning the student to school and / or school sport.

c. Comply with staff directions for time out of College for the student's condition if required in accordance with this policy.

Incident Reporting and Record – Keeping

25. Staff must report (SJC Safety Incident Injury/Illness/Near Miss form) any actual or possible case of concussion as soon as practicable.

Please note the distinction between 'internal' and 'external' 'Concussion/Possible Concussion' options on both the staff and student Safety Incident Forms

- 'Concussion/Possible Concussion - Internal' - relates to school related activities.
- 'Concussion/Possible Concussion - External' - relates to non-school related activities. E.g., club football.

Implementation

26. This policy is implemented though a combination of:

a. staff training;

b. communication and coordination with parents/carers;

c. incident notification; and

d. initiation of strategies to address students returning from concussion.

Consequences of Breaching this Policy

27. Non-compliance with this policy may be grounds for disciplinary action. Depending on the seriousness of the circumstances, disciplinary action can be up to and including termination of employment.

CONCLUSION

28. Sometimes people who sustain a concussion have no observable signs, which can make diagnosis difficult. Recognising the condition often depends on the affected person reporting the symptoms they are experiencing. These can occur either immediately after the head injury or minutes to hours later.

29. This policy provides a greater understanding of concussion and by following the protocols outlined, St Joseph's College staff will be better positioned to support the affected person.

30. The College expects that all employees and volunteers will abide by this policy and all related policies.

Related Policies

31. The SJC Concussion Policy has linkages to other relevant College policies and procedures, as follows:

a. SJC First Aid Policy

b. Injury and Incident Notification Procedure

Policy Review

32. The custodian of this Policy is the College Office Manager. It will be reviewed every other year or following legislative changes or material changes information regarding concussion management.

Authority

33. This policy has been authorised by the St Joseph's College Leadership Team.

Attachments:

1. Concussion Recognition Tool
2. Concussion in Sport Infographic

References

The following references have been consulted in producing and updating this policy:

a. Consensus statement on concussion in sport: the 6th International Conference on Concussion in Sport– Amsterdam, October 2022

b. Concussion Recognition Tool (CRT6)

c. Child Sports Concussion Assessment Tool (SCAT6)

d. Concussion In Sport Australia – Concussion and Brain Health Position Statement (AIS Interim report) 2023

e. Concussion In Sport Australia – Concussion in Sport Position Statement 2019 (developed in by Sports Medicine Australia (SMA) the Australian Institute of Sport (AIS), Australian Medical Association (AMA) and Australasian College of Sport and Exercise Physicians (ACSEP))

f. Sports Medicine Australia – Concussion in Sport Policy (V1.0 Jan 2018)

CRT6™

Concussion Recognition Tool

To Help Identify Concussion in Children, Adolescents and Adults

What is the Concussion Recognition Tool?

A concussion is a brain injury. The Concussion Recognition Tool 6 (CRT6) is to be used by non-medically trained individuals for the identification and immediate management of suspected concussion. It is not designed to diagnose concussion.

Recognise and Remove

Red Flags: CALL AN AMBULANCE

If **ANY** of the following signs are observed or complaints are reported after an impact to the head or body the athlete should be immediately removed from play/game/activity and transported for urgent medical care by a healthcare professional (HCP):

- **Neck pain or tenderness**
- **Seizure, 'fits', or convulsion**
- **Loss of vision or double vision**
- **Loss of consciousness**
- **Increased confusion or deteriorating conscious state (becoming less responsive, drowsy)**
- **Weakness or numbness/tingling in more than one arm or leg**
- **Repeated Vomiting**
- **Severe or increasing headache**
- **Increasingly restless, agitated or combative**
- **Visible deformity of the skull**

Remember

- In all cases, the basic principles of first aid should be followed: assess danger at the scene, check airway, breathing, circulation; look for reduced awareness of surroundings or slowness or difficulty answering questions.
- Do not attempt to move the athlete (other than required for airway support) unless trained to do so.
- Do not remove helmet (if present) or other equipment.
- Assume a possible spinal cord injury in all cases of head injury.
- Athletes with known physical or developmental disabilities should have a lower threshold for removal from play.

If there are no Red Flags, identification of possible concussion should proceed as follows:

Concussion should be suspected after an impact to the head or body when the athlete seems different than usual. Such changes include the presence of **any one or more** of the following: visible clues of concussion, signs and symptoms (such as headache or unsteadiness), impaired brain function (e.g. confusion), or unusual behaviour.

CRT6™

Developed by: The Concussion in Sport Group (CISG)

Supported by:

International Olympic Committee · FEI · FIA · FIFA · IIHF · World Rugby

CRT6 Concussion Recognition Tool

To Help Identify Concussion in Children, Adolescents and Adults

1: Visible Clues of Suspected Concussion

Visible clues that suggest concussion include:

- Loss of consciousness or responsiveness
- Lying motionless on the playing surface
- Falling unprotected to the playing surface
- Disorientation or confusion, staring or limited responsiveness, or an inability to respond appropriately to questions
- Dazed, blank, or vacant look
- Seizure, fits, or convulsions
- Slow to get up after a direct or indirect hit to the head
- Unsteady on feet / balance problems or falling over / poor coordination / wobbly
- Facial injury

2: Symptoms of Suspected Concussion

Physical Symptoms
Headache
"Pressure in head"
Balance problems
Nausea or vomiting
Drowsiness
Dizziness
Blurred vision
More sensitive to light
More sensitive to noise
Fatigue or low energy
"Don't feel right"
Neck Pain

Changes in Emotions
More emotional
More Irritable
Sadness
Nervous or anxious

Changes in Thinking
Difficulty concentrating
Difficulty remembering
Feeling slowed down
Feeling like "in a fog"

Remember, symptoms may develop over minutes or hours following a head injury.

3: Awareness

(Modify each question appropriately for each sport and age of athlete)

Failure to answer any of these questions correctly may suggest a concussion:

"Where are we today?"

"What event were you doing?"

"Who scored last in this game?"

"What team did you play last week/game?"

"Did your team win the last game?"

Any athlete with a suspected concussion should be - IMMEDIATELY REMOVED FROM PRACTICE OR PLAY and should NOT RETURN TO ANY ACTIVITY WITH RISK OF HEAD CONTACT, FALL OR COLLISION, including SPORT ACTIVITY until ASSESSED MEDICALLY, even if the symptoms resolve.

Athletes with suspected concussion should **NOT**:

- Be left alone initially (at least for the first 3 hours). Worsening of symptoms should lead to immediate medical attention.
- Be sent home by themselves. They need to be with a responsible adult.
- Drink alcohol, use recreational drugs or drugs not prescribed by their HCP
- Drive a motor vehicle until cleared to do so by a healthcare professional

British Journal of Sports Medicine

Table 1 Return-to-learn (RTL) strategy

Step	Mental activity	Activity at each step	Goal
1	Daily activities that do not result in more than a mild exacerbation* of symptoms related to the current concussion	Typical activities during the day (eg, reading) while minimising screen time. Start with 5–15 min at a time and increase gradually.	Gradual return to typical activities
2	School activities	Homework, reading or other cognitive activities outside of the classroom.	Increase tolerance to cognitive work
3	Return to school part time	Gradual introduction of schoolwork. May need to start with a partial school day or with greater access to rest breaks during the day.	Increase academic activities
4	Return to school full time	Gradually progress in school activities until a full day can be tolerated without more than mild* symptom exacerbation.	Return to full academic activities and catch up on missed work

Following an initial period of relative rest (24–48 hours following an injury at Step 1), athletes can begin a gradual and incremental increase in their cognitive load. Progression through the strategy for students should be slowed when there is more than a mild and brief symptom exacerbation.

*Mild and brief exacerbation of symptoms is defined as an increase of no more than 2 points on a 0–10 point scale (with 0 representing no symptoms and 10 the worst symptoms imaginable) for less than an hour when compared with the baseline value reported prior to cognitive activity.

Table 2 Return-to-sport (RTS) strategy—each step typically takes a minimum of 24 hours

Step	Exercise strategy	Activity at each step	Goal
1	Symptom-limited activity	Daily activities that do not exacerbate symptoms (eg, walking).	Gradual reintroduction of work/school
2	Aerobic exercise **2A—Light** (up to approximately 55% maxHR) **then** **2B—Moderate** (up to approximately 70% maxHR)	Stationary cycling or walking at slow to medium pace. May start light resistance training that does not result in more than mild and brief exacerbation* of concussion symptoms.	Increase heart rate
3	Individual sport-specific exercise Note: If sport-specific training involves any risk of inadvertent head impact, medical clearance should occur prior to Step 3	Sport-specific training away from the team environment (eg, running, change of direction and/or individual training drills away from the team environment). No activities at risk of head impact.	Add movement, change of direction
Steps 4–6 should begin after the resolution of any symptoms, abnormalities in cognitive function and any other clinical findings related to the current concussion, including with and after physical exertion.			
4	Non-contact training drills	Exercise to high intensity including more challenging training drills (eg, passing drills, multiplayer training) can integrate into a team environment.	Resume usual intensity of exercise, coordination and increased thinking
5	Full contact practice	Participate in normal training activities.	Restore confidence and assess functional skills by coaching staff
6	Return to sport	Normal game play.	

*Mild and brief exacerbation of symptoms (ie, 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 prior to physical activity). Athletes may begin Step 1 (ie, symptom-limited activity) within 24 hours of injury, with progression through each subsequent step typically taking a minimum of 24 hours. If more than mild exacerbation of symptoms (ie, more than 2 points on a 0–10 scale) occurs during Steps 1–3, the athlete should stop and attempt to exercise the next day. Athletes experiencing concussion-related symptoms during Steps 4–6 should return to Step 3 to establish full resolution of symptoms with exertion before engaging in at-risk activities. Written determination of readiness to RTS should be provided by an HCP before unrestricted RTS as directed by local laws and/or sporting regulations.

HCP, healthcare professional; maxHR, predicted maximal heart rate according to age (ie, 220-age).