

Management of Student Concussion Procedure

1. Introduction

Concussion is a growing health concern in Australia. Data has confirmed students can obtain concussion during sport related activities and also during the course of other school and non-school related activities.

Concerns about the incidence, and possible health ramifications for students, have led to an increased focus on the importance of diagnosing and managing the condition safely and appropriately.

Participant safety and welfare is paramount when dealing with all concussion incidents, both in the short term and long term.

Complications can occur if a student returns to learning or play before they have fully recovered from a concussion.

2. What is Concussion?

Concussion is a complex process caused by trauma that transmits force to the brain either directly or indirectly and results in temporary disturbance or impairment of brain function. It can happen from an impact that is not directly to the head, and concussion does not always cause loss of consciousness.

Most commonly, it causes temporary impairment, and the symptoms may develop over the hours or days following the injury. This means that it may be difficult to determine, by either staff, parents, or a medical practitioner, immediately after the injury whether a person is concussed. Cognitive functions in children and adolescents typically take up to 4 weeks to recover.

Concussion occurs most often in activities which involve body contact or collision at high speed.

3. Concussion in Children and Adolescents

The management of concussion in children (aged 5 to 12) and adolescents (aged 13 to 18) years) requires unique considerations suitable for the developing child.

Children have physical and developmental differences, including less developed neck muscles, increased head to neck ration, and brain cells and pathways that are still developing.

Children and adolescents may have greater susceptibility to concussion. They may also take longer to recover and they may be at risk of severe consequences such as second impact syndrome. Managing concussion in children and adolescents therefore requires different standards and a more conservative approach.

4. Symptoms and signs of concussion

It is helpful if a concussive incident is witnessed as the injured student may not remember what happened. Loss of consciousness (knocked out) occurs in only 10-20% of cases of concussion.

Common symptoms of concussion include headache, dizziness, nausea, blurred vision, unsteady gait, fatigue and feeling "not quite right".

Common signs include loss of consciousness, confusion, memory loss (for events before and/or after the incident), irritability and inability to concentrate or think clearly.

The symptoms and signs may be delayed in onset following a collision, so ongoing observation is important.

5. Action to be taken if a student has concussion or suspected concussion

During an activity or sporting event

Any student with suspected concussion must be withdrawn from the activity, play or training immediately and be assessed by a doctor.

Any student with concussion should not return to activity or play on the same day, as complications can occur, or recovery be delayed if the student returns before their concussion symptoms have fully resolved.

Note if the student is unconscious - first aid management of the unconscious patient is the priority remembering that there may be an associated neck injury. The injured student must not be moved, the activity/game must be stopped, the nurse on duty notified and an ambulance called.

See;- **Incident Control System Flow including Concussion**

It is the responsibility of the Team coach/Head of Sport to ensure that the Concussion Officer and parents have been contacted.

6. Further management of a student with concussion

“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 Graded Return to Sport Framework (GRTSF) requires those under 19 years of age and those without a dedicated Health Care Practitioner (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 student 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.

Initially rest and observation are necessary for all students with concussion. The doctor will monitor the symptoms, signs and brain function, and advise on when it is appropriate to return to school. Written permission after medical assessment will determine when the student resumes both classroom and sport activities.

Such permission should be given to the school Nurse who will then inform the relevant staff.

After 14 days when symptoms have resolved and a medical clearance obtained with a doctor's certificate provided, a graduated return to learning and sporting activity on alternate days is required post-concussion. The student must rest until symptoms have subsided.

With a gradual return to learning and activity: walking, then running, then skills sessions moving into contact training.

If at any stage post-concussion symptoms return this must be assessed by a Dr and activity discontinued until approved medically.

Note:

There may be a higher risk of repeated concussion or other injuries if a student returns to sport before full recovery.

The key components of management of concussion during a sporting event or other activities include:

- a) Removal of the student from the field and careful monitoring of any student with symptoms such as confusion or headache after a knock to the head

- b) Referring the student for medical assessment
- c) Ensuring the student has received medical clearance before allowing them to return to training or competition.

Concussion occurring in any other event

The above guidelines should be applied if concussion occurs or is suspected to have occurred in any circumstances outside a sporting event. In such circumstances, the teacher in charge must complete an Incident Report. He/she is responsible for ensuring that parent contact has been made.

In such circumstances written permission after medical assessment will determine when the student resumes any school activity. Such permission should be given to the school Nurse who will then notify the relevant staff.

These Guidelines have been adopted from the "Australian Sports Commission 2024 Australian Concussion Guidelines endorsed by the AIS"

7. Relevant documents

[Concussion Statement](#)

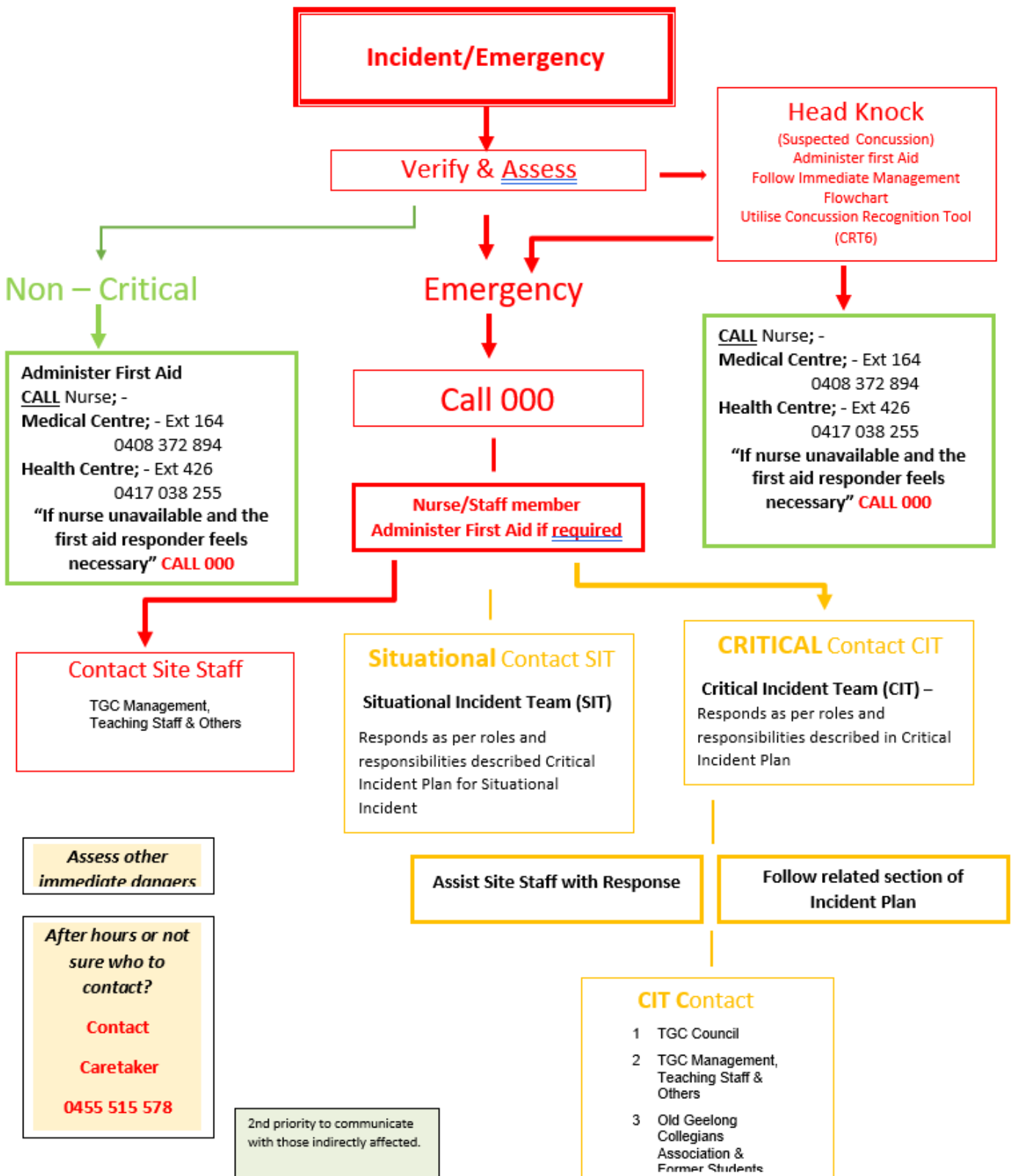
[Management of Student Concussion Policy](#)

[Incident Control System Flow including Concussion](#)

[Concussion Recognition Tool](#)

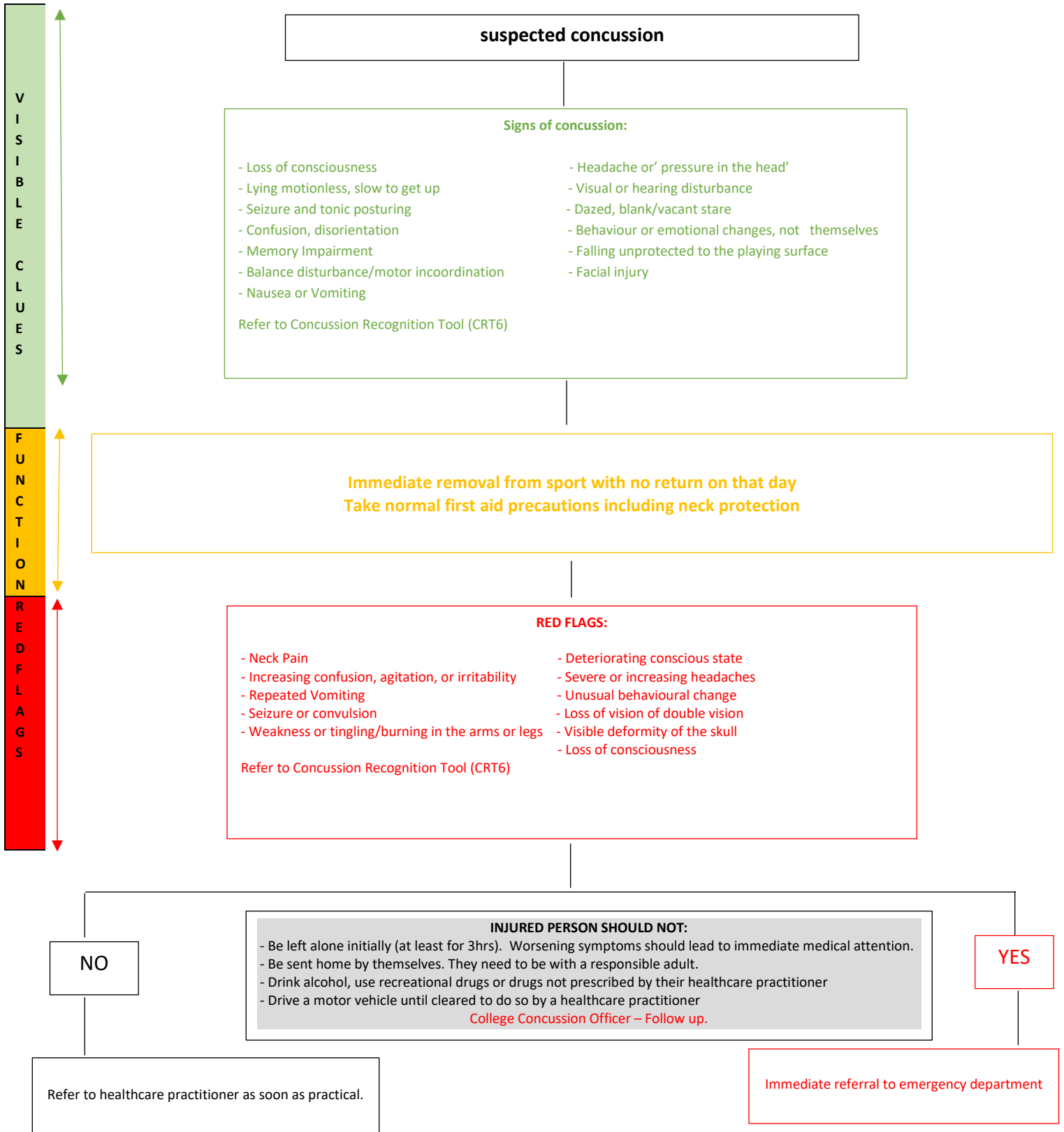
[Concussion Medical Clearance Form](#)

INCIDENT CONTROL SYSTEM



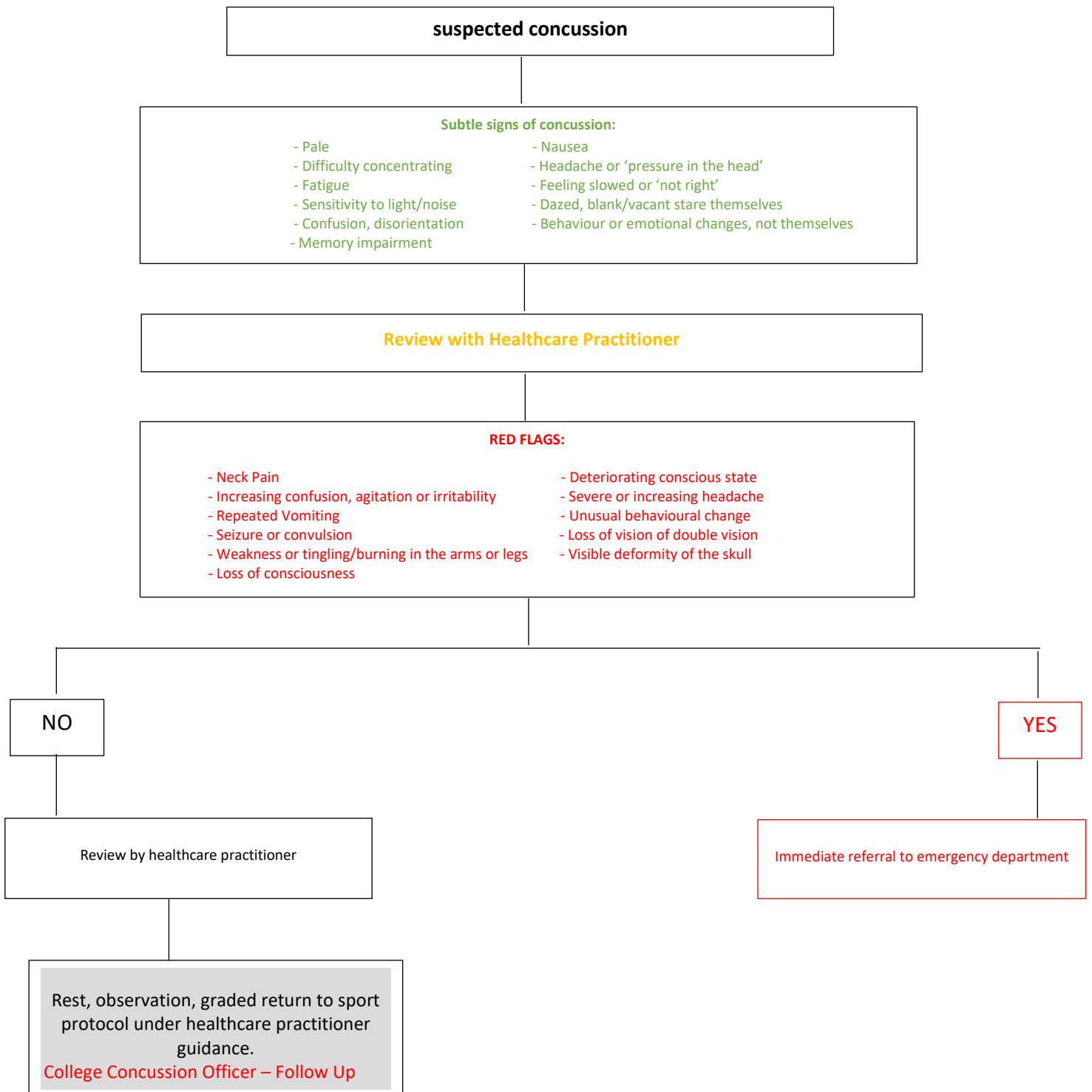
CONCUSSION IMMEDIATE MANAGEMENT FLOWCHART

Immediately following suspected concussion, it is important to exclude 'Red flags' (signs that suggest the injured person should go straight to hospital). Once 'red flags' have been excluded, the injured person should be referred to a health care practitioner. Return to learning and sport activities commences with a short period of rest of 24-48 hours, followed by a gradual return to learn and/or sport process. Relative rest involves providing rest for both toe body (physical rest) and the brain (cognitive rest).

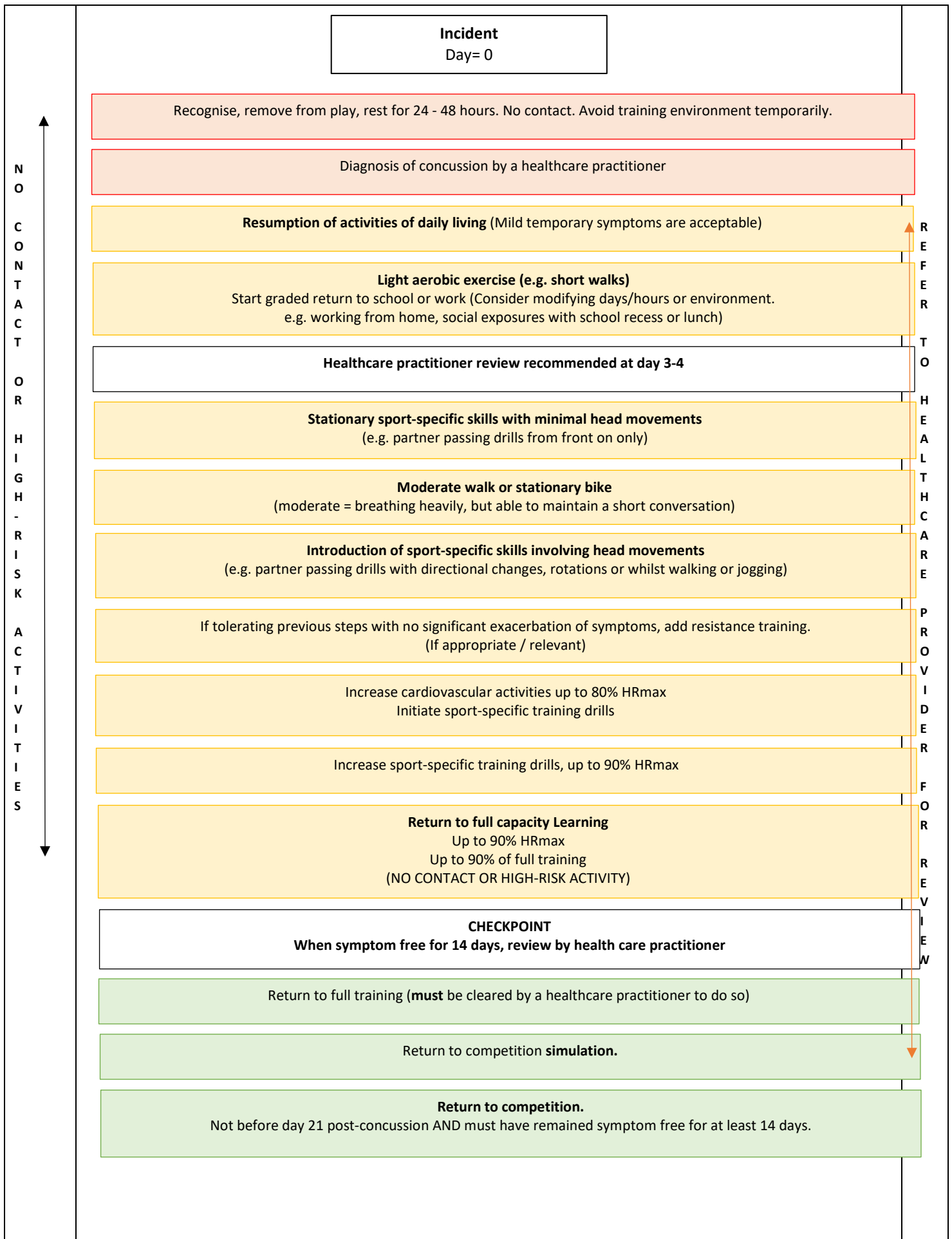


LATE PRESENTATION MANAGEMENT FLOWCHART

Sometimes concussion is not detected or suspected at the time of injury. The injured person may present two or three days later at home, or at school, with subtle changes in behaviour. It is important that teachers, coaches, parents, school mates and teammates understand the subtle symptoms and signs that can suggest someone has suffered concussion.



GRADED RETURN TO LEARNING AND SPORT



RETURN TO LEARNING & SPORT STRATEGIES AND TIMELINES

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 (e.g. 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 activities and catchup on missed work.

Following an initial period of relative res (24-48) hours following an injury at Step 1). Injured persons can begin a gradual and incremented 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.

Note:

- > Day of concussive incident is considered 'Day 0'.
- > Examples below assume a sport where competition occurs weekly on a Saturday.
- > The 14 day symptom free period does not start until the first day that the injured person is symptom free.

Key:

Incident
Symptomatic
Symptom-free
Contact training
Full competition

Injured Person 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

Injured Person 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

PROTOCOL FOR THOSE WITH MULTIPLE SUSPECTED CONCUSSIONS

An Injured person 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 injured person. A recommended starting point for return to learning & 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.

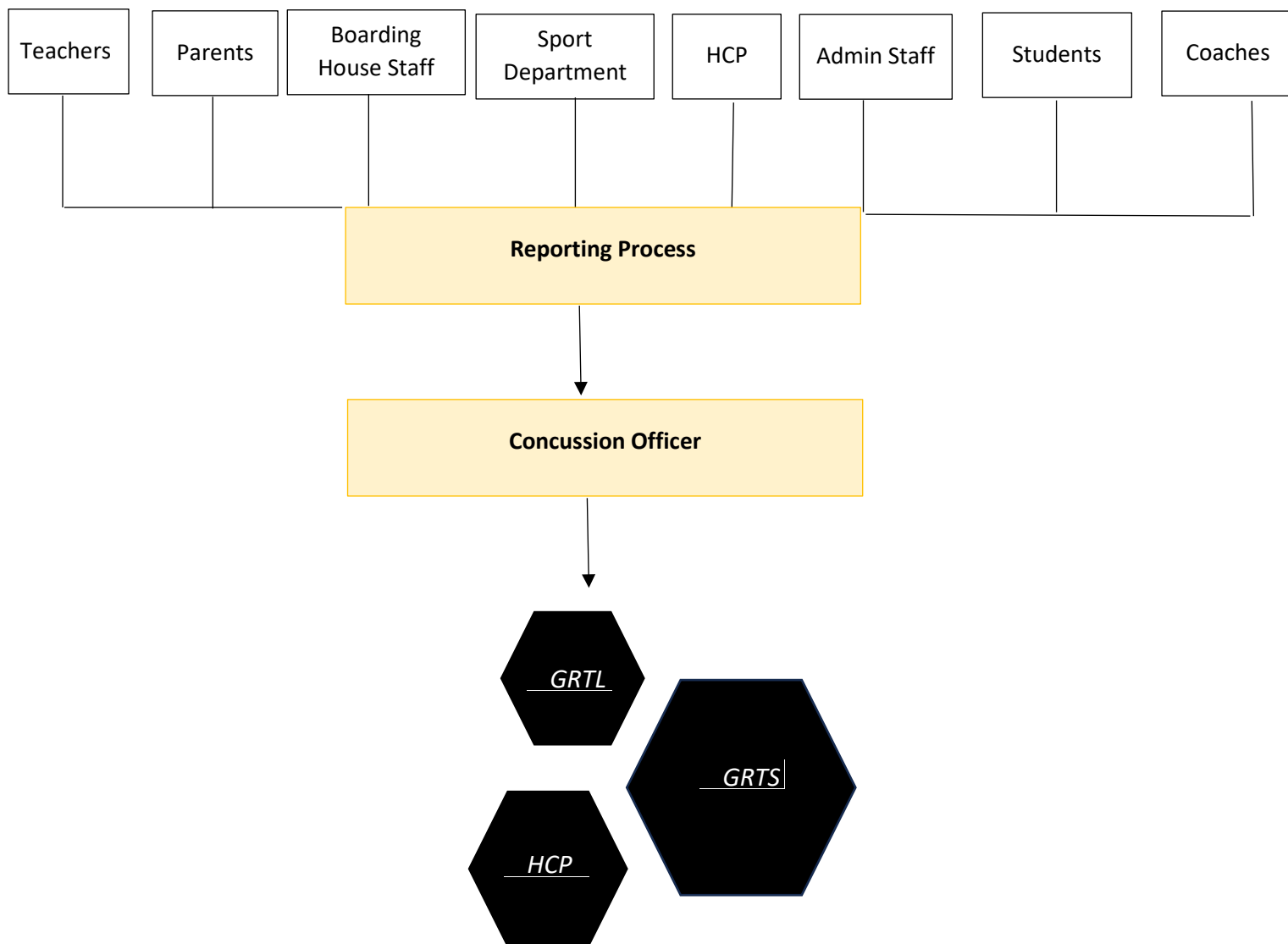
In situations where more than two concussions have occurred within a 12-month period, consideration needs to be given to missing a season of contact / collision sport.

CONCUSSION OFFICER FOR COMMUNITY/SCHOOL ENVIRONMENTS

The College community should be aware of the concussion management **Policy, Procedure, this Incident Control System flowchart**, and their role in the identification and management of concussion. The College has appointed a 'concussion officer' to oversee the management of concussion.

A 'concussion officer' is a single point of contact and manages the coordination of matters related to concussion. A 'concussion officer' is not a concussion expert and is not expected to diagnose concussion. The 'concussion officer' ensures that anyone diagnosed with concussion follows the College concussion procedure. Their job is to be the recipient of information in relation to concussion and to ensure that the concussion procedure is enacted.

Systems for managing the concussed person in the school environment



Key

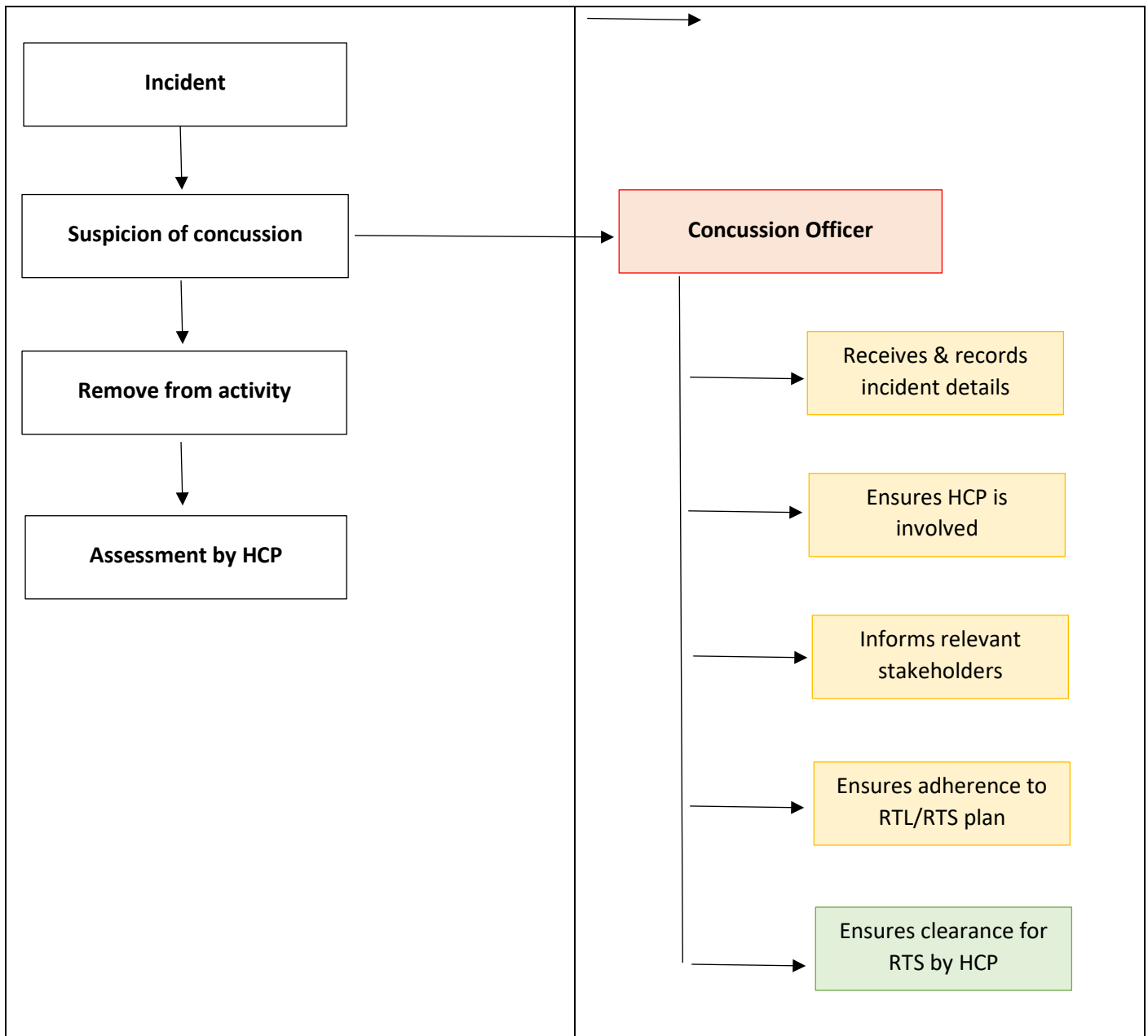
GRTL: Graded Return to Learn

GRTS: Graded Return to Sport

HCP: Healthcare Practitioner

“Everybody has a responsibility to report a suspected concussion”.

Systems for managing the concussed person in the school environment.



CRT6 - CONCUSSION RECOGNITION TOOL

To Help Identify Concussion in Children, Adolescents and Adults

What is the Concussion Recognition Tool?

A concussion is 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.

This tool may be freely copied in its current form for distribution to individuals, teams, groups, and organizations. Any alteration (including translations and digital re-formatting), re-branding, or sale for commercial gain is not permissible without the expressed written consent of BMJ.

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	Changes in Emotions
Headache	More emotional
“Pressure in head”	More Irritable
Balance problems	Sadness
Nausea or vomiting	Nervous or anxious
Drowsiness	
Dizziness	Changes in Thinking
Blurred vision	Difficulty concentrating
More sensitive to light	Difficulty remembering
More sensitive to noise	Feeling slowed down
Fatigue or low energy	Feeling like “in a fog”
“Don’t feel right”	
Neck Pain	

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 injured person with suspected concussion should be – IMMEDIATELY REMOVED FROM PRACTICE, PLAY or Activity and should NOT RETURN TO ANY ACTIVITY WITH THE RISK OF HEAD CONTACT, FALL OR COLLISION, including SPORT ACTIVITY until ASSESSED MEDICALLY, even if the symptoms resolve.

Injured Persons 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.

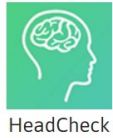
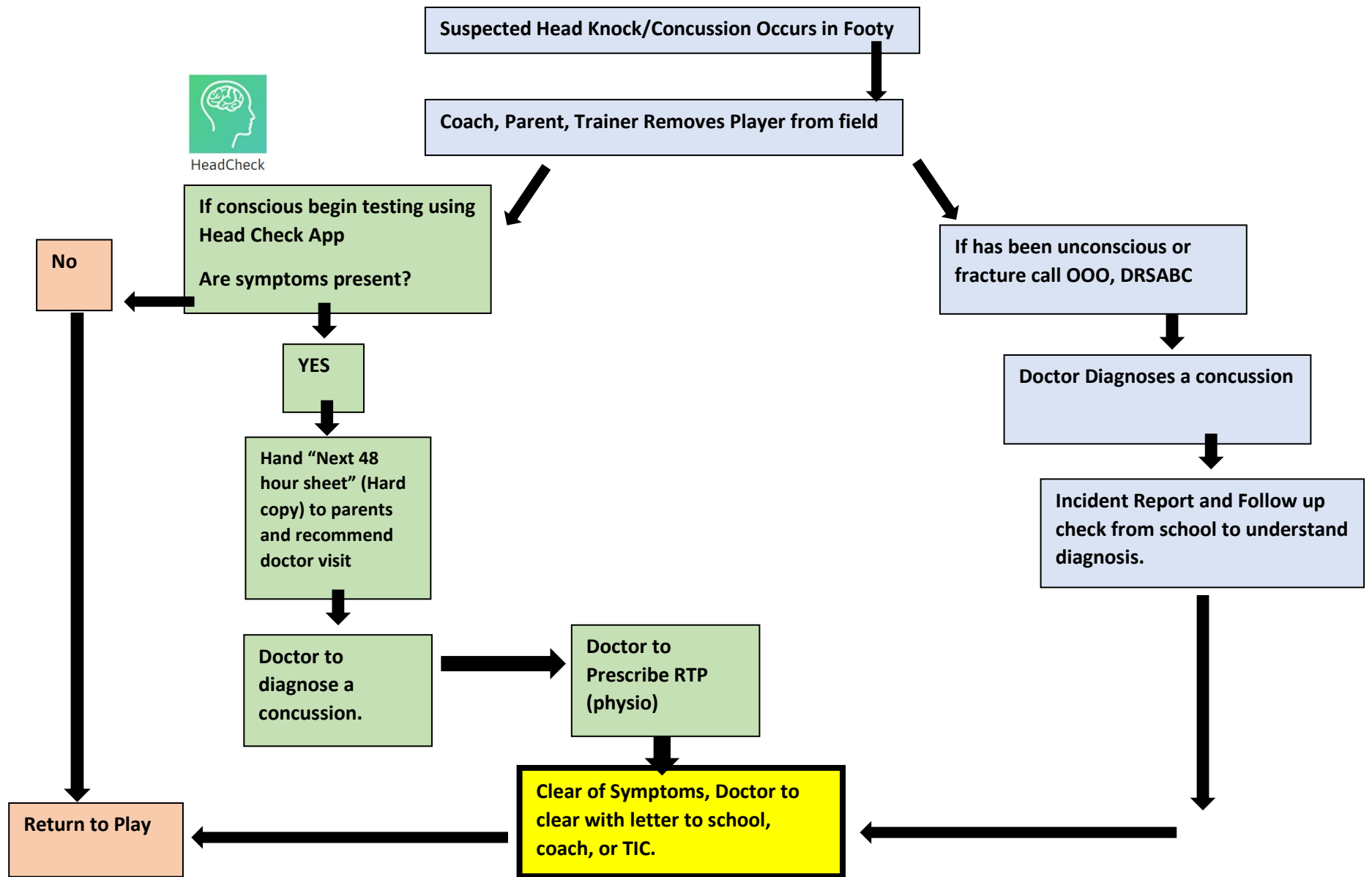
Ask:-

- Are you a Boarding Person
- How are you getting home
- 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

Reference: Note; The concussion Management flowcharts, strategies and information used throughout this document have been taken from the Australian Government – Australian Sports Commission (AIS) Australian Concussion Guidelines for youth and community sport & The Concussion in Sport Group (CISG)

The above has been amended to include all injured persons concussion management whilst considering a gradual return to learning and sport.

[\(AIS\) Australian Concussion Guidelines for youth and community sport Concussion Recognition Tool](#)



HeadCheck

APPENDIX A

Medical Clearance Form - Concussion referral

SECTION 1 - INITIAL CONSULTATION / DETAILS OF INJURED PERSON - VISIT 1

SCHOOL STAFF / TEAM OFFICIAL TO COMPLETE; (MANAGER, COACH OR FIRST AID / HEALTH PRACTITIONER) AT THE TIME / ON THE DAY OF THE INJURY, BEFORE PRESENTING TO MEDICAL PRACTITIONER REVIEWING THE STUDENT

Name of Student:	Date of Birth:
Sport:	School:

MEDICAL PRACTITIONER WOULD IDEALLY SEE THE INJURED PERSON WITHIN 72 HOURS OF THE INCIDENT

Dear Medical Practitioner,

This person has presented to you today because they were injured on

(day & date of injury) _____ in a

(game or training session) _____ and suffered a potential head injury or concussion.

The injury involved: (select one option)

Direct Blow or Knock to head or body	Indirect injury to the head e.g. whiplash	Incident not seen
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The subsequent signs or symptoms observed (tick one or more):

Neck pain or tenderness Loss of consciousness Double vision Deteriorating conscious state Weakness or burning/tingling in arms or legs	Vomiting Severe or increasing headache Increasingly restless, agitated or combative Seizure or convulsion Other:
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- Is this their first concussion in the last 12 months?
- If NO, number of concussions sustained in the last 3 months:
- If NO, how many concussions in the last 12 months:

Name:	Role:
Signature:	Date:

PARENT / LEGAL GUARDIAN'S CONSENT

I _____ (insert name) consent to
 _____ (insert Medical Practitioner's name) providing information to my School regarding the head injury / concussion and confirm the information I have provided the medical practitioner has been complete and accurate.

Name:	Signature:	Date:
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SECTION 2 - INITIAL CONSULTATION - VISIT 1 (continued)

- **Students who have suffered a concussion or a suspected concussion must be treated as having suffered concussion.**
- Please note, any person who has been diagnosed showing signs and symptoms of concussion MUST follow the College [Guidelines for Management of Student Concussion Incident Control System Flowchart with Head Knock/Concussion](#)
- The student has been informed that they must be referred to a medical practitioner. Your role as this medical practitioner is to assess the person and to guide their progress through the protocol steps outlined in the [Geelong College Management of Concussion Procedure](#)
- **FOR CHILDREN & ADOLESCENTS AGED UNDER 19 IN COMMUNITY THE STUDENT MUST BE SYMPTOM FREE FOR 14 DAYS BEFORE RETURN TO ANY CONTACT TRAINING. THE MINIMUM TIME FOR RETURN TO COMPETITIVE CONTACT IS 21 DAYS.**

I have read and understood the information above and have assessed the person.

Confirmation of Concussion: Yes / No

Medical Practitioner's Name:

Signed:

Date:

FAMILY RETURNS SECTION 1 and 2 TO [SCHOOL CONCUSSION OFFICER](#)