



Sporting Programme - Concussion Management Guidelines

Concussion

A head injury resulting from direct or indirect force to the head, face or neck or from anywhere else in the body where force is transmitted through the head. **A player/student does not need to lose consciousness in order to sustain a concussion.**

Concussion disrupts brain function causing neurological symptoms that usually occur immediately but can take days or weeks to appear.

Concussion needs to be managed carefully; consequences can be severe and prolonged.

Children and adolescents are more susceptible to concussion and will often take longer to recover. They experience greater memory and concentration issues and are more likely to suffer dangerous neurological complications, including death.

If symptoms persist for more than four weeks, children and adolescents should seek further specialist medical review.

Players, coaches, parents, teachers and trainers are all responsible for recognising and reporting concussion symptoms. **Any students reporting or displaying symptoms should be referred to the Medical Centre.**

Signs and Symptoms include:

- Loss of consciousness
- Seizure
- Neck pain
- Drowsiness
- Dizziness
- Light sensitivity
- Noise sensitivity
- Feeling emotional
- Difficulty concentrating
- Difficulty remembering
- Headache
- Confusion
- Visual disturbance
- Balance problems
- Nausea/vomiting
- Fatigue
- Feeling 'not quite right'

Immediate Management:

- Assess airway, breathing, circulation and consider applying spinal precaution/immobilisation.
- Calm and reassure the student, even if they are unconscious.
- Do not move an unconscious student in case of fractured neck or spinal cord injury.
- If safe, remove player from play.
- Contact the Medical Centre if a head injury or concussion is suspected.
- Monitor for signs and symptoms of concussion.
- Do not leave student unattended - ensure the student remains in the care of a responsible adult.

- Inform parents/carers, coaches and other key stakeholders of injury.
- Give parent/carers concussion head injury information sheet.
- Advise parents/carers if medical attention is required.

All students presenting with a potential head injury or concussion must seek review by a medical practitioner within 72 hours of the injury.

If a diagnosis of concussion is received, the Health Centre must be informed in writing.

Immediate transfer to hospital by a responsible adult or ambulance is required if the student displays any of the following symptoms:

- Airway compromise
- Loss of consciousness or deterioration in conscious state
- Neck pain
- Spinal cord symptoms
- Bradycardia, hypertension
- CSF leak from the nose or ear
- Signs of increased intracranial pressure e.g. Cheyne-stokes breathing, decorticate or decerebrate posturing, dilated non-reactive pupils
- Penetrating injury
- Seizure activity
- Repeated vomiting
- Visual disturbance
- Slurred speech
- Increasing headache

Return to learn and play

The student must have 24 to 48 hours of complete physical and cognitive rest post a concussion injury.

When symptom free, a gradual return to activity can commence by following Stages 1 to 6 shown in the table below. Each stage should take at least 24 hours. If symptoms return or worsen the student should return to the previous stage.

STAGE	ACTIVITY	AIM OF STAGE
Stage 1 Daily activities while remaining symptom free	Daily activities that do not provoke symptoms	Gradually introduce school work
Stage 2 Light aerobic exercise	Walking, swimming, stationary cycling. No strength or weight training.	Gentle increase in heart rate
Stage 3 Sport specific exercise	Running drills at football, cricket, basketball, netball or	Adds movement

	hockey. No activities with potential head impact.	
Stage 4 Non-contact training drills	Passing drills at football, cricket, basketball, netball or hockey. Start progressive strength and weight training.	Adds co-ordination exercise and mental load
Medical Clearance	Student must forward medical clearance to Health Centre and Head of Sport before returning to contact activities.	
Stage 5 Full contact training 14 to 18 days post resolution of symptoms recommended for children and adolescents	Participate in normal training activities	Restores confidence and allows coaching staff to assess progress
Stage 6 Return to play	Normal game play	

Current evidence suggests children and adolescents should not return to full contact activities for at least 14 days from resolution of symptoms.

ARU guidelines state players under 18 years should not return to contact training or playing for at least 18 days after symptoms have subsided.

Before a student returns to contact activities parents/carers are required to gain a medical clearance certificate from their doctor. A copy of the certificate should be given to the Health Centre and to the Head of Sport.

References

- <https://sma.org.au/resources-advice/concussion/>
<http://brainfoundation.org.au/disorders/concussion>
https://www.rch.org.au/clinicalguide/guideline_index/Head_Injury_Guideline/
<https://www.dsr.wa.gov.au/support-and-advice/safety-and-integrity-in-sport/concussion>
<http://www.rugbyaustralia.com.au/>
<https://ww2.health.wa.gov.au/About-us/Child-and-Adolescent-Health-Service>

Authors:

Fiona Richmond, Nurse Manager
Rebecca Manning, Registered Nurse
Scotch College Health Centre
August 2018