# CONCUSSION GUIDANCE



MCWPC recognises the inherent risk of head trauma and will adopt the Water Polo Australia concussion policy which helps to provide guidance for all those involved in water polo in Australia.

This document is prepared by Water Polo Australia specifically for the Water Polo community and is not a medical document.

#### Water Polo Australia Concussion Policy

Concussion is a well-recognised injury that may affect athletes involved in collision and contact sports. It is important that players, parents, coaches and other official are aware of this condition. They should be on the look-out for symptoms and signs that could indicate concussion: and be practised in the way it should be managed.

Fortunately, concussion is not nearly as common in water polo as it is in other sports. Nevertheless, cases have occurred and, no doubt, will continue to happen, due to the nature of the sport. When they do occur, cases need to be recognised and the players must be appropriately looked after.

### FACTS

Concussion is a form of brain injury

- All concussions should be considered serious
- Concussion results in a brain disturbance
- Children and adolescents should be treated more conservatively than adults, as they:
- 1. Are more prone to concussion
- 2. Take longer time to recover
- 3. Have more significant memory and mental processing problems
- 4. Are at greater risk of rare and dangerous neurological complications, caused by a single or second impact.

- Concussion usually follows a head collision
- Symptoms can also occur with a collision not involving the head
- Symptoms usually develop quickly, often within 1-2 hours. Sometimes there is a delay 24-48 hours after a collision
- Most concussions occur without the player being knocked out (losing consciousness)
- However, if a player is knocked out, they will be concussed
- Players with a suspected or recognised concussion MUST immediately be removed from the pool
- A player suspected of concussion cannot return to play or training on the same day
- Only a medical doctor can certify a player fit to return and not concussed, in suspected cases.
- Concussion that is ignored or not recognised can prove fatal
- Most concussion recover with physical and mental rest



## THE SIX 'R' MANAGEMENT PLAN



The management of concussion involves sequentially following steps. Each step must be followed and completed before moving to the next step.

#### RECOGNISE

Concussion must be suspected or recognised if a player has any of the following signs, symptoms or fails to answer any of the memory questions after a head or body collision.

SIGNS	SYMPTOMS	MEMORY
(WHAT YOU MAY SEE)	(PLAYER MAY REPORT)	(QUESTIONS TO ASK)
<ul> <li>Loss of consciousness</li> <li>Dazed, blank or vacant look</li> <li>Slow to get up</li> <li>Unsteady on feet / balance problems</li> <li>Confused / Not aware of plays or events</li> <li>Grabbing / clutching of head</li> <li>Seizure (fits)</li> <li>More emotional/irritable</li> </ul>	<ul> <li>Headache</li> <li>Dizziness</li> <li>Mental clouding, confusion, or feeling slowed down</li> <li>Visual problems</li> <li>Nausea or vomiting</li> <li>Fatigue</li> <li>Drowsiness / feeling like "in a fog"</li> <li>Difficulty concentrating</li> <li>"Pressure in head"</li> <li>Sensitivity to light or noise</li> </ul>	<ul> <li>"What venue are we at today?"</li> <li>"What is the score?"</li> <li>"Which half is it now?"</li> <li>"Who scored last in this game?"</li> <li>"What team did you play last week / game?"</li> <li>"Did your team win the last game?"</li> </ul>

#### REMOVE

- Any player with a suspected or recognised concussion MUST be removed from the pool immediately
- The player must not take any further part in any training or games (including other sports) on this day
- Any player with a head injury may also have a neck injury

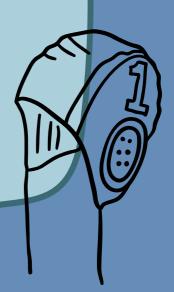
RECOGNISE AND REMOVE - IF IN DOUBT, SIT THEM OUT



- All players with suspected or recognised concussion MUST be referred to a medical doctor or emergency department as soon as possible
- This referral must happen even if symptoms and signs have disappeared
- Ideally, the medical doctor who reviews the player should have experience in the diagnosis and management of sports concussion
- The player must at all times
  - Be in the care of a responsible adult
    - Not consume alcohol
    - Not drive a motor vehicle
- If any of the following warning signs of head injury appear, the player must be taken to the closest hospital Emergency Department immediately or a responsible adult must call an ambulance (000)

#### **Warning Signs**

- Severe neck pain
- Deteriorating consciousness
- Increasing confusion or irritability
  - Worsening headache
  - Vomiting more than once
- Unusual or uncharacteristic behaviour
  - Seizure (fitting)
  - Double vision
- Weakness or tingling or burning in arms or legs



#### REST

- Rest is the cornerstone of concussion management
- The player should rest completely until all symptoms and signs of concussion have gone

#### What does complete rest mean?

- Resting quietly at home until symptoms and signs are settled
- Limit any physical exercise to short periods of low level activities
- The brain needs to rest limit any tasks that require prolonged or focused memory or concentration
- Avoid excessive TV, use of mobile devices, electronic games, computers and phones as these can aggravate symptoms

#### How long should the player rest completely?

- Players must rest until all their signs and symptoms have disappeared and they have stopped all medication required for treatment for their concussion symptoms
  - The minimum complete rest period is 24 hours for adults
  - Children and adolescents need a longer complete rest period
- The required period of complete rest varies from players to player so a medical doctor will specify the minimum time for each case





- Once symptoms and signs are settled and medications are stopped, the player then returns to activities of normal daily living (school, study, work)
- The player must not perform any exercise or organised sport
- If any symptoms re-occur during recovery, the player may need more complete rest time
- If symptoms re-occur they should be reviewed by their medical doctor

#### RETURN

- Exercise can only start after a player has returned to activities of normal daily living without signs or symptoms of concussion and does not require medical attention for their symptoms
- The best way to return to sport is to follow a gradual re-introduction of exercise in a stepwise progression know as graduated return to play programme (GRTP) as per the following:

#### **GRTP Stage 1-4** Return to Exercise

- Stage 1 is complete rest and recovery period
- A player should be cleared by a medical doctor to commence light exercise (Stage 2)
- A player can only proceed to the next stage of the GRTP if they have no signs or symptoms of concussion at the time of exercise, later that day (after exercise) and on waking the following day. The minimum time between stages is 24 hours, although children and adolescents may require a longer period between stages
- If there is a recurrence of symptoms at any time during the GRTP the player must:
  - -Rest for a minimum of 24 hours until all symptoms and signs have settled
     -Return to the previous stage at which they had no symptoms
- -Recommence the progression of the GRTP

  -If a player has a recurrence of severe
  symptoms (eg: requiring them to miss school,
  study, work) or repeatedly (more than once)
  during the GRTP, or if the recurrent symptoms
  are prolonged (more than 24 hours), the player
  should be reviewed by their medical doctor

#### <u>GRTP Stage 5 - Return to Contact Training</u>

- The player must have a medical certificate from a medical doctor to start full training
- This certificate must be given to the club
- Players 18 years and under cannot return to full training or playing for at least 2 weeks (14 days) after all symptoms and signs have disappeared
- This restriction to the return to contact training and playing applies to all players aged 18 years and under including those playing senior water polo

#### <u>GRTP Stage 6 –</u> Return to Play

- A player should only return to play when they have fully recovered from concussion. This means the player must:
  - -Not have any signs or symptoms of concussion at rest or in normal daily activities (school, study, work)
  - -Have successfully completed the GRTP without any symptoms or signs of concussion (during or after full training)

	EXERCISE MODE	EXERCISE ACTIVITY EXAMPLE	PROGRESSION POIO
1	Rest	Complete rest of the brain and body	Medical doctor decides on amount of time needed
2	Light cardiovascular exercise	Light jogging for 10-15 minutes, swimming or stationary cycling at low to moderate intensity. No weights training	If no symptoms, start Stage 3 after minimum of 24 hours. If symptoms occur, rest 24 hours & repeat Stage 2
3	Waterpolo specific exercise	Individual swimming skills and drills without contact No weights training	If no symptoms, start Stage 4 after minimum of 24 hours. If symptoms occur, rest 24 hours & repeat Stage 2, then progress
4	Waterpolo specific non- contact training	More complex training drills e.g. passing drills May start progressive (low level) weights training	If no symptoms, medical certificate required before Stage 5. If symptoms occur, rest 24 hours & repeat Stage 3, then progress
5	Waterpolo practice	Full training following medical clearance certificate being handed to the club or school sport master	Player, coach, parent to report any symptoms to medical doctor. If symptoms occur, then medical doctor to review
6	Waterpolo game	Full game	Monitor for recurring symptoms or signs

#### MULTIPLE AND COMPLEX CONCUSSIONS

This guidance applies only to players who have suffered their first concussion in a 12 month period. The guidance does not apply to players with more complex injuries. The following players must see a medical doctor experienced in sports concussion management:

-Greater than 2 concussions in 12 months
-Multiple concussions over their playing career
-Concussions occurring with less collision force
-Concussion symptoms lasting longer than expected