

What is Concussion?

Sports-related concussion is a traumatic brain injury that is caused by a direct blow to the head, neck or body resulting in an impulsive force being transmitted to the brain. Concussion results in an impairment of brain function.

Why MUST concussion be taken extremely seriously?

- ▶ The Irish Rugby Injury Surveillance (IRIS) reports indicate that, on average, there is one concussion every four matches in the amateur game. Ignoring the signs and symptoms of concussion may result in a prolonged recovery period, a more serious brain injury or death. This is why players should have a comprehensive medical assessment and follow-up until the concussion has fully resolved.
- ▶ Delayed removal from play and delayed access to healthcare professionals can increase the length of time before a player is able to fully return to sport.
- ▶ Returning to play before complete resolution of the concussion and without completion of a Graduated Return to Play (G RTP) protocol increases the risk of recurrent concussions.
- ▶ Repeat concussions could mean that a player must stop playing all contact sports earlier than expected and may have some potential to result in permanent neurological (brain) impairment.

How to recognise a concussion

If a player has **any one** of the following signs or symptoms, they must be **immediately removed from play and must not return that day**.

What you may see when the player is on field

- ▶ Suspected/actual loss of consciousness
- ▶ Seizure (fit) or convulsion
- ▶ Tonic posturing (abnormal movement of arms or legs)
- ▶ Balance problems / falling over (ataxia)
- ▶ Lying motionless on the ground
- ▶ Grabbing / clutching head
- ▶ Slow to get up / tripod position (on hands and knees for support)
- ▶ Unsteady on feet

What you may notice when talking to the player

- ▶ Confusion / dazed
- ▶ Disorientated
- ▶ Player is 'just not right'
- ▶ Player is more emotional / behavioural changes
- ▶ Complaining of any of the signs and symptoms listed above

What the player may tell you

- ▶ Nausea (feeling sick) or vomiting
- ▶ Headache
- ▶ Drowsiness
- ▶ Dizziness
- ▶ Irritability
- ▶ Feeling slowed down / "in a fog"
- ▶ Sadness
- ▶ "Pressure in head"
- ▶ Fatigue or low energy
- ▶ Blurred vision
- ▶ Player is more nervous or anxious
- ▶ Sensitivity to light
- ▶ "Doesn't feel right"
- ▶ Amnesia (memory loss)

Later on (at home or next day), the player may tell you or you may notice

- ▶ Any of the above mentioned
- ▶ Drowsiness
- ▶ Fatigue or low energy
- ▶ Trouble sleeping
- ▶ Trouble concentrating

The signs and symptoms of concussion usually start at the time of the injury but the onset of these may be delayed for up to 24–48 hours.

There is no HIA in the domestic game, any player with a suspected / confirmed concussion should be removed from play and may not return that day

What to do if you suspect concussion

- ▶ **RECOGNISE & REMOVE:** If, at any point during a match or training, a player is concussed or has a suspected concussion, that player must be **immediately and permanently removed from the field of play**. This is known as "Recognise and Remove".
It's the law (Law 3). The referee may enforce this rule with or without the support of the coaches to ensure that **the player's welfare is always the primary concern**.
- ▶ The player **MUST NOT be left alone**. A player with suspected concussion should be left in the care of a responsible adult who has been informed of the player's suspected concussion.
- ▶ They **MUST NOT drive a vehicle** in the first 24 hours.
- ▶ They **MUST NOT consume alcohol** in the first 24 hours.
- ▶ They **should be medically assessed** as soon as possible. **Early medical management can help with recovery and return to sport.**

What the coach must do:

1. Safely remove player from field of play
2. Observe or assign responsible adult to monitor player
3. Ensure player gets home safely
4. Handover to responsible adult
5. If player is U18 contact parent or guardian to inform of injury
6. Ensure an IRFU Injury report form is completed
7. Ensure player follows the IRFU G RTP Protocol

What the player / teammate must do:

1. STOP playing / training if you feel you have a suspected concussion
2. Be honest with how you feel and report to coach or parent
3. Inform your school / work
4. Follow the IRFU G RTP Protocol
5. Encourage a teammate to be honest and report symptoms if they have a suspected concussion.

What the parent / guardian or family member must do:

1. Ensure you have full details of the incident.
2. Get player medically assessed
3. Monitor player for signs and symptoms of concussion for 48 hours.
4. Encourage reduced mental and physical activities for first 24–48 hours.
5. Inform school / work / other sports of the suspected concussion.
6. Ensure player follows the IRFU G RTP.
7. Prioritise return to school / college / work before return to sport.

Report the concussion / suspected concussion to Club / School

Click here to go to the IRFU website and report a concussion.

Head Injury Card:

PLAYER NAME

has had a suspected concussion on:

DATE AND TIME

VENUE

Describe event:

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Symptoms:

Completed by:

NAME

ROLE



NOT ALL HEAD INJURIES ARE CONCUSSIONS

RED FLAGS FOR MORE SERIOUS HEAD INJURY

- ▶ Unresponsive or becoming less alert
- ▶ Seizures (fits) or convulsions
- ▶ Loss of vision or double vision
- ▶ More than one episode of vomiting
- ▶ Severe or increasing headache
- ▶ Increasing or worsening of any symptom of the concussion



If a player has a suspected spinal injury, then this becomes the primary concern.

IF THERE ARE ANY RED FLAGS

- ▶ Call an ambulance
- ▶ Do not move an unconscious player unless in harm's way
- ▶ Do not move a player with suspected serious spinal injury
- ▶ Player should be medically assessed as soon as possible

RED FLAGS FOR SERIOUS SPINAL (NECK) INJURY

- ▶ Player is unresponsive
- ▶ Significant neck pain or tenderness
- ▶ Reluctant to move
- ▶ Loss of normal sensation or movement in the arms or legs (weakness or numbness / tingling)



Concussion is treatable

Immediate removal from the field of play and early access to healthcare professionals with experience in concussion assessment and management improves recovery timelines.

- ▶ Playing on even for just 5 minutes after sustaining a concussion can delay full return to sport by approximately 3 days.
- ▶ Young adults who continue playing on with signs or symptoms of a concussion are nine times more likely to have a delayed recovery longer than 21 days.

Not all concussions are the same

A thorough assessment can categorise a concussion based on the signs and symptoms. Treatment and rehabilitation may need to be tailored to the specific clinical profile. Currently there are five concussion clinical profiles:

- 1. Cognitive / Fatigue:** This profile typically causes trouble with prolonged or complex mental tasks and long days. It can cause increased fatigue. Cognitive issues include decreased concentration, decreased ability to multi-task, increased distractibility and trouble learning.
- 2. Vestibular:** This profile typically causes trouble with balance, motion and vision. Impairment of the vestibular system (the balance centre of the brain) affects one's ability to coordinate head and eye movements, steady or balance vision and interpret movement. Treatment for vestibular issues is required and will not resolve with rest alone.

- 3. Ocular:** This profile typically causes trouble with visual tasks like reading, looking at a computer screen or mobile phone. Treatment for ocular issues is required and will not resolve with rest alone.
- 4. Migraine:** This profile typically causes trouble with your normal routine, such as sleeping in or avoiding loud concerts or sporting events. Symptoms include headache, nausea, sensitivity to light or noise.
- 5. Anxiety / Mood:** This profile typically causes trouble with your mood, makes it hard to turn your thoughts off and causes excessive worry or concern. This can cause problems with social interactions and may worsen if you avoid routine activities because of your concussion.

Profiles may overlap or you may have more than one profile at a time.

! There is no such thing as a minor concussion or 'knock to the head'.

STAGE	ACTIVITY	DAYS	
		ADULTS	U20
1 Symptom limited activity	Daily activities that do not provoke symptoms	0-1	0-1
	Light aerobic linear activities		
2 Aerobic exercise	Progressively increase aerobic activity	2-6	2-6
	Moderate aerobic & light resistance activities		
3 Rugby specific exercise	Speed & skill work without risk of head impact	7-9	7-9
	Progressively challenging aerobic & resistance activities		
Players must be symptom-free and should be assessed by a healthcare professional before stage 4			
4 Non-contact drills	Agility, decision making & complex skill work	10-13	10-15
	Progressively challenging rugby specific drills		
5 Full contact practice	Full uncontrolled contact training	14	16
	Intense exercise & conditioning drills		
6 Return to play	Full unrestricted match play	21	23
	Full return to pre-injury status		

Concussion Treatment

Rugby-specific Competencies

Graduated return-to-play (GRTP) Protocol

The GRTP Protocol is a treatment for concussion. It also provides a development opportunity to enhance performance.

The GRTP takes a minimum of 21 days for adults and 23 days for players under the age of 20 years old.

Some players may take longer to complete the GRTP. The full protocol can be found on the IRFU website and the IRFU GRTP wallet card.

[Click here to find out more.](#)

PLAYERS SHOULD NOT RETURN TO PLAY UNTIL THEY:

Have returned to learn / work	Are symptom-free	Have completed the GRTP Protocol	Have had an assessment by a healthcare professional
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Recovery from concussion

Normal clinical recovery of symptoms occurs in 10-14 days for the majority of adults. In children it may take up to 4 weeks. Some players may take longer to recover and may need medical advice

How is concussion managed?

- ▶ Stop playing immediately after sustaining a concussion.
- ▶ Seek medical advice early.
- ▶ **Early light physical and mental activity helps treat symptoms.**
- ▶ **Reduce screentime in the first 48 hours.**
- ▶ **Avoid STRICT absolute physical and mental rest in first 48 hours.**
- ▶ **Avoid HIGH intensity vigorous exercise in first 48 hours.**

General advice

- ▶ Gradually and progressively increase activity levels as shown in the GRTP Protocol.
- ▶ Maintain regular sleeping pattern.
- ▶ Remain socially interactive.
- ▶ Maintain your normal eating regime.

Prolonged rest is NOT encouraged. Return to learn BEFORE return to play.

When to seek medical advice after sustaining a concussion

- ▶ At time of injury.
- ▶ Before Stage 4 of the GRTP or return to full contact activities.
- ▶ If you are on medications such as pain killers, anti-depressants and / or sleeping medication.
- ▶ If you have 2 or more concussions in a 12-month period.
- ▶ If you have symptoms beyond Day 10-14 of the GRTP Protocol.
- ▶ If you have persistent or worsening symptoms with a specific activity within the GRTP Protocol.
- ▶ If you are failing to improve or progress through the GRTP as expected.

Current concussion facts

- 💡 **You do not have to lose consciousness to sustain a concussion.** Less than 1 in 10 concussions involve a loss of consciousness.
- 💡 **You do not have to have a direct blow to the head to sustain a concussion.** Concussion can be caused by a direct blow to the head, neck or body, or from a whiplash type movement that can occur when a player is tackled or collides with another player or the ground.
- 💡 **Concussion is treatable.** Several effective treatments are available especially if symptoms last more than a few days. Treatment, from a healthcare professional experienced in concussion, should be tailored to each player depending on their symptoms.
- 💡 **Early light physical and mental activity treats symptoms and helps recovery.** Prolonged rest delays recovery.
- 💡 **The effects of concussion CANNOT be seen on standard x-ray, CT scan or MRI.**
- 💡 **Concussions can occur in a match or at training.**
- 💡 **The onset of concussion symptoms may be delayed for up to 24-48 hours.**
- 💡 **Symptoms generally resolve over a period of days or weeks, but sometimes can be prolonged.**

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

- 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.

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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	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 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