



**CLUB
CONNECTS**

Concussion Management Guidelines for Cricket in the Community



APRIL 2023

Cricket Ireland (CI) is Cricket's national sports governing body on the island of Ireland. Cricket Ireland is responsible for leading the development of the sport at all levels throughout Ireland.

With that in mind Cricket Ireland recognises the need for a specific Concussion Policy to direct actions, responses and treatment of concussion of all cricketers in Ireland at all levels of participation.

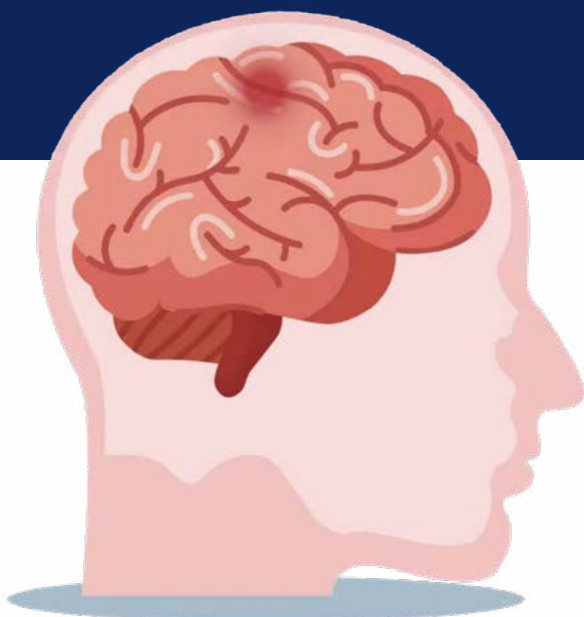
This document is intended as a guideline to those involved in the sport and as an assistance to players, coaches, umpires and parents in understanding and managing suspected concussion at all levels of the game, especially when medical assistance is not present at a training session or game. In this document, Cricket Ireland reaffirms a strong message and its position that if there are any signs leading to a suspicion of a concussion for a player, at any level or any age, the player should be removed immediately from play, and not return to play until the correct protocol, outlined in this document, is followed.

Any player suspected of concussion should be medically assessed and not return until they have full resolution of any symptoms of concussion and a graded return to train and play phase is completed or cleared with thorough medical approval. At Cricket Ireland, we support the message of 'If In Doubt, Sit Them Out'. It is also important to recognise that research has shown that children and adolescents require more time and are slower to recover from concussive than adults over the age of 18. These differences will also be outlined in the protocols in this document.

These guidelines apply to all male and female Cricket players including adults (over 18 years), adolescents (18 and under) and children (12 and under). Provincial Unions can adjust these age levels upwards at their discretion.

CONCUSSION FACTS

- A concussion is a traumatic brain injury
- All concussions are serious
- Concussions can occur without loss of consciousness
- All athletes with any new symptoms following a head injury:
 - must be removed from playing or training
 - must not return to playing or training until symptom free or until all concussion-related symptoms have cleared or have returned to pre-concussion level
 - must complete a Graduated Return To Play programme
 - should be assessed by a medical practitioner
- Specifically, return to play or training on the day of a concussion or suspected concussion is forbidden
- Recognise and Remove to help prevent further injury or even death
- Head injuries can be fatal - do not return to play if symptoms persist
- Most players with concussion recover with physical and mental rest



What is concussion?

- Concussion is defined as a traumatic brain injury induced by biomechanical forces.
- Concussion may be caused either by a direct blow to the head, face, neck or elsewhere on the body with an “impulsive” force transmitted to the head.
- Concussion typically results in the rapid onset of short-lived impairment of neurological function that resolves spontaneously. However, in some cases, symptoms and signs may evolve over a number of minutes to hours.
- Concussion may result in neuropathological changes, but the acute clinical symptoms largely reflect a functional disturbance rather than a structural injury and, as such, no abnormality is seen on standard structural neuroimaging studies (Brain Scans).
- Concussion results in a graded set of clinical symptoms that may or may not involve loss of consciousness. Resolution of the clinical and cognitive symptoms typically follows a sequential course. However, it is important to note that in some cases symptoms may be prolonged.

Who is at risk?

Concussions can happen at any age. However, children and adolescent athletes:

- are more susceptible to concussion
- take longer to recover
- are reported to have more significant memory and mental processing issues
- are more susceptible to rare and dangerous neurological complications, including death caused by a single or second impact

Repeated or multiple concussion

Players with a history of two or more concussions within the past year are at greater risk of further brain injury and slower recovery and should seek medical attention from practitioners experienced in concussion management before return to play.

In addition, a history of multiple concussions or players with unusual presentations or prolonged recovery should be assessed and managed by health care providers with experience in sports-related concussions.

Onset of symptoms

It should be noted that the symptoms of concussion can be delayed but typically become evident in the first 48 hours following a head injury.



Protective equipment

The risk of concussion in cricket appears relatively low compared to other sports but still carries significant risk where a cricket ball can be projected at high speed directly at someone's head within the laws of the game. Protective headgear, although not always worn in all situations of a game, especially by fielders and umpires, does provide a significant level of protection, especially more modern helmets with a current safety standard certification.

There are, however, shortcomings in that a helmet does not guarantee to stop any type of concussion, face or head injuries and do not routinely protect the back of the head or occipital region. Cricket Ireland strongly recommends that all batters and 'close fielders' wear a current safety standard certified helmet at all times during the game. CI also recommend the use of rear helmet protectors or 'stem guards' that are designed to work with their respective helmets.

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Recognising concussion or suspected concussion

Everyone involved in the game (including side-line medical staff, umpires, coaches, players, parents and guardians of children and adolescents) should be aware of the signs, symptoms and dangers of concussion. If any of the following signs or symptoms are present following a head injury the player should at least be suspected of having concussion and be immediately removed from play or training.

What you may see:

- A cricket ball strike to the head or neck, with or without wearing a helmet
- An on-field collision between 2 or more players
- A player diving and impacting their head on the ground or seeing their head be thrown in any direction, or subsequently hitting their head on the ground.

Signs and symptoms

Clear Indicators of concussion/suspected concussion - what you may see or hear immediately:

Any one or more of the following clearly indicate a concussion:

- Seizure (fits)
- Loss of consciousness – confirmed or suspected
- Unsteady on feet or balance problems or falling over or poor coordination
- Confused
- Disorientated – not aware of where they are or who they are or the time of day
- Dazed, blank or vacant look
- Behavioural changes e.g. more emotional or more irritable

Other signs of concussion/suspected concussion – what you see:

Any one or more of the following may suggest a concussion:

- Lying motionless on ground
- Slow to get up off the ground
- Grabbing or clutching of head



Injury event that could possibly cause concussion

What questions you ask adults and adolescents - Modified Maddocks questions

Failure to answer any of these questions correctly is a strong indication of concussion or at least suspected concussion:

“What venue are we at?”

“What sessions of the game are we in?”

“Who is bowling/batting at the moment in the game?”

“What team did you play last week/last game?”

“What was your score in the last game/figures in the last game?”

What questions you ask children (12 years and under)


Failure to answer any of these questions correctly is a strong indication of concussion or at least suspected concussion:

“Where are we now?”

“Is it before or after lunch?”

“What was your last game?”

“What is your coach’s name?”



**Recognise.
Remove.
If in doubt,
sit them out.**

Management of a suspected concussion

- Management of a suspected concussion should occur immediately following a head strike or any other mechanism that could lead to a suspicion of concussion.
- On field umpires should stop the game from continuing to allow an individual to assess the player. This individual should be a coach, umpire or parent who will familiarise themselves with the information in this document.
- This individual should look for any signs and symptoms of a concussion and asked the modified Maddocks outlined above.
- If a player is showing no signs of concussion and passes all of the modified Maddocks questions, they should be permitted to continue with the game. However, they should be reassessed periodically throughout the remainder of the game, during drinks breaks, intervals and immediately after the game.
- During any of these reassessments, if any signs and symptoms do become present, they should be removed from the field of play and take no further part in the game or training session.

Immediate management of suspected concussion

If any of the following symptoms are reported or observed, then the player should be transported immediately to the nearest hospital for urgent medical assessment:

- Neck pain, numbness, tingling, hot or cold or altered sensation in the arms and legs (suspected neck or spinal injury)
- Losing consciousness or becoming increasingly drowsy
- Increasing confusion or irritability
- Repeating same sentences or questions
- Severe or increasing headache
- Behavioural changes – becoming irritable, emotional or aggressive
- Vomiting
- Seizure
- Visual disturbances
- Slurring of speech or finding difficult to communicate

Caring for suspected or confirmed concussion cases

Players with concussion or suspected concussion:



Should not be left alone in the first 24 hours



Should not consume alcohol or drugs in the first 24 hours and thereafter should avoid alcohol until provided with medical or healthcare professional clearance or if no medical or healthcare professional advice is available the injured player should avoid alcohol until symptom free. Medications should only be taken



Should not drive any motor vehicle, heavy machinery or ride a bike to travel.



Rest is the most important treatment for concussion. This includes both physical rest (body) and cognitive rest (the brain).

Activities to avoid for physical rest include running, cycling, swimming etc

Activities to avoid for cognitive rest include work, school and homework, reading, watching television/ phone or tablet screens and avoiding video games.

Role of umpires and officials

Whilst it is unlikely that the officiating umpires at matches will have in depth knowledge or experience of dealing with concussion, they too should familiarise themselves with the information in this document to enable themselves to identify common signs and symptoms of possible concussion.

Their role during these scenarios should be to stop the game immediately after seeing an incident that could lead to a concussion for an assessment to be made. If they recognise any signs and symptoms in an individual who has experienced a potential mechanism, they should have the authority to remove the player from the field of play for further assessment and immediate care without opposition from any party when a medical professional is not present to advise on or supersede such a decision.

Substitutions in the case of head injuries

Currently, substitutions for suspected or confirmed concussions are permitted at international and interprovincial representative levels with an official process in place. Cricket Ireland currently do not see a requirement for this to be extended to any level below this currently and so substitutions will not be permitted. Cricket Ireland may reconsider the need for this at any time if it feels there is a need for it in the future.

Graded return to activities and cricket

In order to complete the appropriate graded return, we must distinguish between adults, adolescents and children:

Adults:
Over 18

Adolescents:
12-18 years old

Children:
12 and below

Adults should not return to play until at least 7 days whereas as children and adolescents will requires a minimum of 14 days due to longer recovery rate after concussion.

Adults

At least 24 hours of complete physical and cognitive rest. If symptom free after this period, then they may begin to reintroduce modified and light activities. During this graded reintroduction of activity, the individual should have no symptoms. If the individual is still experiencing symptoms, then the physical and cognitive rest period should be prolonged until their symptoms are no longer present. If the individual is symptom free and then begins the graded return, but should their symptoms reoccur, the period of physical and cognitive rest should start again until they become symptom free again.

Below is an example of what a graded return could/should look like:

Timeline	Stage of rehabilitation	Action
Day 0	Mechanism leading to suspicion of or confirmed concussion	Player is removed from field of play and takes no further part. Is monitored closely.
Day 1	No Activity for 24 hours	Complete Physical and cognitive rest. Needs to have a minimum 24 hour window of being symptoms free before progressing to next stage.
Day 2	Symptom limited activity	Normal daily activities that do not provoke symptoms.
Day 3	Light aerobic exercise	Walking, swimming, stationary bike, mild to moderate intensity. 20-30 mins. Avoid resistance training
Day 4	Sport specific exercises	Simple fielding - catching and throwing Simple batting drills eg. Underarms and throw downs Bowlers bowl in to empty net at their subjective 50% intensity Increase aerobic exercise
Day 5	Non-contact training	Progression to more complex training Fielding drills more challenging Predictable batting against throws/machine Bowling at 75-100% intensity in empty net Aerobic exercises to approach maximum effort
Day 6	Full practice	If still symptoms free. Participation in full match and team training session with no limitations. Bowlers at batters, full batting, bowling and fielding.
Day 7	Return to play	Can play next scheduled match.

Please note that during the graded return to play, if the individual begins an RTP programme and symptoms begin to reoccur, they should then continue to rest until they are symptom free once again before restarting the protocol.

Children and adolescents

The graded return protocol for children and adolescents will differ due to the increased time required for recovery before return to full training and playing. Anyone under of the age of 18 should have 1 week of physical and cognitive rest before beginning a further 7 days of graded return activity as outlined above.

If symptoms still persist for longer than 7 days in either adults or adolescents, then medical evaluation should be sought by a GP or a neurologist.



Onward referrals and specialist care

When seeking medical care when necessary, the player or players parents should contact their GP initially. If it is deemed that any specialist onward referral is necessary, then your GP should be able to facilitate this.

If a player or parent wishes to seek a private option for assessment or treatment, Cricket Ireland would recommend that they contact the University of Pittsburgh Medical Centre (UPMC) concussion network. UPMC have a network throughout Ireland at various locations with a team of sports concussions specialists who will assess, devise treatment plans and monitor the individual throughout the process.

More information and contact details on the UPMC concussion network can be found at <https://upmc.ie/services/concussion>

Disclaimer

This policy is a generalised recommendation of how to best identify suspected concussion in the cricketing environment and the processes thereafter. It is not intended to act as a diagnostic tool and should not be used as a substitute for professional medical advice.

This policy is based on current best practice and the relevant supporting literature and will be revised and updated as required. Players, coaches, officials, Centres, Clubs and schools are encouraged to promote and adhere to these guidelines in the interests of player wellbeing/welfare.

References

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