



IF IN DOUBT SIT THEM OUT

CONCUSSION GUIDELINES

Introduction

The following guidance is intended to provide information on how to recognise concussion and how concussion should be managed from the time of injury through to a safe return to football.

This guidance contains general medical information but does not constitute medical advice and should not be relied on as such. You must not rely on this guidance as an alternative to seeking medical advice from a qualified medical practitioner or healthcare provider. If you have any questions or concerns, you should consult an appropriate healthcare professional. You should never delay seeking medical advice, disregard medical advice or discontinue medical treatment because of information contained in this guidance.

At all levels of football, if a player is suspected of having concussion, they must be immediately removed from the pitch, whether in training or match play.

IF IN DOUBT SIT THEM OUT

These guidelines are based on current evidence and examples of best practice taken from other sports and organisations around the world including the Rugby Football Union, World Rugby, Rugby Football League and the UK Concussion Guidelines for Non-Elite (Grassroots) Sport. Advice has also been sought from The FA's Expert Panel on Concussion and Head Injury in Football. The guidelines are in line with the consensus statement on Concussion in Sport issued by the sixth International Conference on Concussion in Sport, Amsterdam 2022. The FA will continue to monitor research and consensus in the area of concussion and update these guidelines accordingly.

It is envisaged that The FA's concussion guidelines will be followed in the professional leagues and in circumstances where an appropriately trained healthcare professional, with a valid FA emergency pitch-side care qualification which includes concussion management training, is in place to perform an initial assessment of a suspected concussion and to supervise

on-going further management, including the graduated return to play (GRTP). In circumstances where the additional pre-requisites for the enhanced care pathway are in place, the responsible healthcare professional may choose to follow the enhanced care pathway guidelines. In circumstances where no suitably trained healthcare professional with day to day responsibility is contracted to the player's club, it is recommended that the UK Government's Concussion Guidelines for Non-Elite (Grassroots) Sport will be followed.

This version of The FA's Concussion Guidelines has been updated as of August 2023 and supersedes previous versions.

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BJSM Para-Sport Concussion Consensus Paper

WHAT IS CONCUSSION?

What is concussion?

Concussion is an injury to the brain resulting in a disturbance of brain function. It affects the way a person thinks, feels and remembers things. There are many symptoms of concussion, with common ones including headache, dizziness, memory disturbance or balance problems.

What causes concussion?

Concussion can be caused by a direct blow to the head, but can also occur when a blow to another part of the body results in rapid movement of the head (e.g. whiplash type injuries).

Onset of symptoms

The first symptoms of concussion typically appear immediately or within minutes of injury but may be delayed and appear over 24-48 hours following a head injury. Over the next several days, additional symptoms may become apparent.

Loss of consciousness (being 'knocked out') does not always occur in concussion (in fact it occurs in less than 10% of concussions) and is not required to diagnose concussion.

A concussed player may still be standing up and may not have fallen to the ground after the injury.

Special considerations

Concussion can happen to players at any age. **However, children and adolescents** (18 and under):

May be more susceptible to concussion

Are more susceptible to rare and dangerous neurological complications, including death caused by a single or second impact

May require greater support for complicated presentations of concussion

Require a full return to education before returning to football

Studies indicate that concussion rates in females are higher than in males in football.

Standard methods for the assessment of concussion may need to be adapted to support those participating in disability football, para-football or those with individual medical or learning needs. These individuals may need specific, tailored advice which is outside the remit of this guidance. British Journal of Sports Medicine Para-Sport Concussion Consensus Paper

A history of previous concussion increases the risk of further concussions.

A history of a recent concussion may also increase the risk of other sport-related injuries (e.g. musculoskeletal injuries).

HOW TO RECOGNISE CONCUSSION

How to recognise concussion

If any of the following visible clues (signs) or symptoms are present following an injury the player should be suspected of having concussion and immediately removed from play or training and must not return to activity that day. The concussion recognition tool (<u>CRT6</u>) 6 may be used as an aid to the pitch-side recognition of concussion (see useful links section on page 19).

If in doubt sit them out.

Visible clues (signs) of concussion

What you may see. Any one or more of the following visual clues can indicate concussion:

Dazed, blank or vacant look

Lying motionless on ground / slow to get up

Unsteady on feet / balance problems or falling over / poor co-ordination

Slow to respond to questions

Loss of consciousness or responsiveness

Player fails to protect themself when they fall

Confused / not aware of play or events

Grabbing / clutching of head

Seizure (fits) or other abnormal movements

More emotional or irritable than normal for that person

Tonic posturing - lying rigid/motionless due to muscle spasm

Vomiting

Any obvious external sign of trauma to the head

Symptoms of concussion

What you may be told by the injured player. The presence of any one or more of the following symptoms may suggest concussion:

Disorientated (not aware of their surroundings e.g. opponent, period, score

Headache

Dizziness / feeling off-balance

Memory loss, mental clouding, confusion or feeling slowed down

Drowsiness / feeling like "in a fog" / difficulty concentrating

Visual problems

Nausea

Fatigue

"Pressure in the head"

Sensitivity to light or sound

More emotional

Don't feel right

Concerns expressed by parent, official or spectators about a player

Delays in reporting and under-reporting of symptoms have been associated with a longer recovery and delayed return to activity and could risk incomplete recovery of the brain.

Questions to ask a player

These questions should be tailored to the particular activity and event, but a failure to answer any of the questions correctly may suggest concussion. Examples with alternatives include:

What venue are
we at today?
or
Where are we now?

Which half is it now?
or
Approximately what
time of the day is it?

who scored last in this game?
or
How did you get here today?

What team did you play last game? or Where were you on this day last week? Did your team win the last game? or What were you doing this time last week?

An incorrect answer to these questions may suggest concussion, but a concussed player might answer these questions correctly.

The Concussion Recognition Tool can be used to aid this initial assessment of a player with suspected concussion.

Video footage

If video footage of the incident is available this may be of assistance in identifying visible signs that a concussion has occurred as well as establishing the mechanism and potential severity of the injury. This may be viewed by the person assessing the injured player or can be commented on by a third party, such as the 'tunnel doctor' in an elite, professional setting.

A coach or parent may have video footage that could be helpful in the non-elite setting.

Video evidence must not be used to contradict the removal of the player.

WHAT TO DO NEXT

Immediate management of suspected concussion

Anyone with a suspected concussion MUST be IMMEDIATELY REMOVED FROM PLAY.

Once safely removed from play they must not return to activity that day and should follow these concussion guidelines.

Team-mates, coaches, match officials, team managers, administrators or parents who suspect someone may have concussion must do their best to ensure that they are removed from play and are supervised in a safe manner for the next 24 hours.

If a neck injury is suspected, suitable guidelines regarding the management of this type of injury at pitch side should also be followed (see useful links for pitch side injury management training).

If **ANY** of the following 'red flags' are reported then the player should receive urgent medical assessment from an appropriate healthcare professional on-site or at the nearest hospital Accident and Emergency department using emergency ambulance transfer if necessary:

Any loss of consciousness because of the injury

Deteriorating consciousness (more drowsy)

Amnesia (no memory) for events before or after the injury

Increasing confusion or irritability

Unusual behaviour change

Any new neurological deficit e.g.

- Difficulties with understanding, speaking, reading or writing
- Decreased or altered sensation (e.g. tingling/burning) in arms or legs
- Weakness in arms or legs
- · Loss of balance
- Double vision

Seizure (fit)/convulsion or limb twitching or lying rigid/ motionless due to muscle spasm

Severe or increasing headache

Repeated vomiting

Severe neck pain

Any suspicion of a skull fracture (e.g. cut, bruise, swelling, severe pain at site of injury)

Previous history of brain surgery or bleeding disorder

Current 'blood-thinning' therapy

Current drug or alcohol intoxication

In all cases of suspected concussion, it is recommended that the player is referred to a medical or healthcare professional for diagnosis and advice, even if the symptoms resolve. Where a healthcare professional is not in attendance at pitch-side this will typically involve calling NHS 111 or visiting an accident and emergency department, where required.

RETURNING TO ACTIVITY AND PLAY

Ongoing management of concussion or suspected concussion

Ongoing management of concussion or suspected concussion

Concussion should be managed with a short period of relative rest followed by a gradual return to normal activities as symptoms allow. Relative rest involves resting both the body (physical rest) and resting the brain (cognitive rest). The period of rest may allow symptoms to recover and in the non-professional setting allows a return to work or study prior to resuming training and playing.

Anyone with concussion or suspected concussion should NOT:

Be left alone in the first 24 hours

Consume alcohol in the first 24 hours, and thereafter should avoid alcohol until free of all concussion symptoms

Drive a motor vehicle within the first 24 hours. Commercial drivers (HGV etc.) should seek review by an appropriate healthcare professional before driving. The initial period of 48 hours means avoiding:

Physical activities such as running, cycling, swimming, physical work activities etc.

Cognitive activities (thinking activities) such as school-work, homework, smart-phone and other screen use. Even after the initial 48 hours students with a diagnosis of concussion may need to have allowances made for impaired cognition during recovery, such as additional time for class-work, homework and exams.

After the initial 24-48 hour period of relative rest, a staged and graduated return to full daily activities (education/work) and football training is allowed but at a rate that does not worsen existing symptoms, more than mildly, or produce new symptoms.

Graduated return to play (GRTP) programme

The graduated return to play (GRTP) is a progressive exercise programme that introduces an individual back to sport in a stepwise fashion.

Where no suitably trained healthcare professional with day to day responsibility is contracted to the player's club, the UK Government's Concussion Guidelines for Non-Elite (Grassroots) Sport should be followed. (See useful links section on page 19)

Where an appropriately trained healthcare professional, with a valid FA emergency pitch-side care qualification which includes concussion management training, is in place, the FA's Concussions Guidelines should be followed.

Only where the additional pre-requisites are in place should the enhanced care pathway be followed.

Under the GRTP programme, the individual should only advance to the next stage as long as symptoms are not more than mildly and briefly exacerbated (an increase of no more than 2 points on a 0-10 point scale for less than an hour when compared with the baseline value).

If there is a worsening of symptoms at any stage of the GRTP programme, the individual must return to the previous stage and attempt to progress again after a minimum 24-hour period.

Progressing too quickly through the stages of the GRTP, whilst symptoms are significantly worsened by exercise, may slow recovery. Failure to consult a healthcare professional to deal with on-going symptoms may also slow recovery.

It is recommended that a player undergoes a review by the healthcare professional responsible for their day to day care prior to entering stage 5 (full contact training).

This six stage GRTP programme should be followed in all cases.

Stage 1	Stage 1 is an initial rest period of 48 hours. In the first 48 hours, it is ok to perform mental activities (e.g. reading), and normal activities of daily living as well as walking.
Stage 2	Light exercise
Stage 3	Football specific exercise
Stage 4	Non-contact training
Stage 5	Full contact training
Stage 6	Return to play (RTP)

Standard return to play pathway

It is recognised that players will often want to return to play as soon as possible following concussion.

Players, coaches, management, parents and teachers must exercise caution to:

Ensure that the GRTP programme is followed.

Ensure that the advice of medical practitioners and other healthcare professionals is strictly adhered to.

After returning to play, all those involved with the players, especially coaches and parents must remain vigilant for the return of symptoms even if the GRTP has been successfully completed.

If symptoms recur after return to play the player must consult their healthcare professional as soon as possible as they may need a referral to a specialist in concussion management.

How are recurrent or multiple concussions managed?

Any player with a second concussion within 12 months, a history of multiple concussions, with an unusual presentation or a prolonged recovery should be assessed and managed by a healthcare professional with experience in sports related concussions working within a multi-disciplinary team.

Outcomes in concussion are better if the injured player is well informed and understands what has happened.

Measures to improve understanding and deal with emotional problems and anxiety should also be considered in the management of concussed players.

Persisting symptoms

If symptoms persist for more than 28 days, individuals should be assessed by an appropriate healthcare professional. Headaches can persist for several months or longer and they may be associated with other symptoms such as nausea, sensitivity to light/sound or mood disturbances. Whilst these symptoms may not preclude a player from returning to school, work or physical activity, the healthcare professional should consider onward referral, including where symptoms may be due to another treatable condition, for instance, for specialist physiotherapy where symptoms may arise from a neck injury.

Graduated return to play (GRTP) programme

The pathway begins at midnight on the day of injury. Each stage must take a minimum of 24 hours. Progression to the next stage should only occur as long as symptoms are not more than mildly and briefly exacerbated. If there is a worsening of symptoms at any stage of the GRTP programme, the individual must return to the previous stage and attempt to progress again after a minimum 24-hour period.

	Stage 1 Initial relative rest period	Stage 2 Light exercise	Stage 3 Football-specific exercise	Stage 4 Non-contact training	Stage 5 Full contact practice		Stage 6 Return to play (RTP)
	Combined progression through stages 1-4 must take a minimum of 14 days					Stage 5 must only start	
	48 hours	Minimum 24 hours	Minimum 24 hours	Minimum 24 hours		after a minimum period of 14 days symptom free	Earliest RTP at Day 21
Exercise allowed	Stage 1 is an initial relative rest period of 48 hours. In the first 48 hours, it is ok to perform mental activities (e.g. reading) and normal activities of daily living, as well as walking for no more than 15 minutes at a time.	Light jogging, swimming, stationary cycling or equivalent. No football, resistance training, weightlifting, jumping or hard running.	Simple movement activities (e.g. running drills) Limit body and head movement No head impact activities including no heading	Progression to more complex training activities with increased intensity, co-ordination and attention (e.g. passing, change of direction, shooting, small sided game) No head impact activities including no heading - goalkeeper activities should avoid diving and any risk of the head being hit by a ball	Review by doctor / healthcare professional	Normal training activities (e.g. tackling, heading, diving saves etc.)	Player rehabilitated and cleared to participate in match play
% max heart rate	No training	<70%	<80%	<90%			
Duration (min)		<15	<45	<60			
Objective	Recovery	Increase heart rate	Add movement	Exercise, co-ordination and skills/tactics		Restore confidence and assess functional skills by coaching staff	Return to play

It is recommended that a player undergoes a review with the healthcare professional responsible for their day to day care prior to entering stage 5 (full contact training).

It must be emphasised, that these are minimum return to play times and in players who do not fully recover within these time frames, return to play times will need to be longer.

Enhanced care setting

In some settings, such as in professional clubs, international teams and academies, there may be an enhanced level of medical care available with a team of healthcare professionals experienced in sports concussion management who take responsibility for an individualised, structured, multimodal, multi-disciplinary management plan which allows a closer supervision of a players care and graduated return to play (GRTP). In these instances, a shorter timeframe for return to play (RTP) may be possible but only under strict supervision by the appropriate medical personnel as part of a structured concussion management programme. It is never appropriate for a player aged 16 or under to follow the Enhanced Care pathway.

In these circumstances **only**, can the return to play pathway in an enhanced care setting be followed.

The minimum criteria for an enhanced care setting are as follows:

- 1. There is a doctor on the GMC register with a valid ATMMiF qualification to closely supervise the players care and GRTP and review the player prior to RTP.
- 2. There is a structured concussion management programme in place for the player as outlined below:
 - a. Baseline <u>SCAT6</u> and/or computerised neuro-psychometric/cognitive testing of the player has been conducted prior to the injury.
 - b. Clinical serial multi-modal assessment of the player occurs post-concussion to guide the recovery protocol. Acknowledging that more than one area of brain function can be affected by concussion, this will involve formal documented assessment of areas such as cognitive function, emotional wellbeing, neurological function, and any physical trauma sustained.
 - c. A formalised GRTP programme with regular <u>SCAT6/SCOAT6</u> or equivalent assessments is followed and recorded in the players medical records.
 - d. The player has access to a multi-disciplinary team including neuropsychology / neurology / neurosurgery specialists and other clinicians as required to supervise the return to play and instigate any treatment or investigation required should the RTP progression not be straightforward.
 - e. A formal and documented concussion education programme exists for coaches and players in the club or team involved.

If any element of the above criteria is absent, the player should follow the standard return to play pathway.

Enhanced care setting

The minimum time in which a player can return to play in the enhanced care setting is summarised in the table below. Each day compromises one 24-hour period. The pathway begins at midnight on the day of the injury.

It is never appropriate for a player aged 16 or under to follow the Enhanced Care pathway.

Within the enhanced care pathway, there may be exceptional circumstances where an adult player can be considered for an earlier return to play.

It is never appropriate for a player aged 18 or under to follow the exceptional criteria for early RTP.

No history of complex, significant or recurrent concussion which can be classified by:

- a. A prior concussion in the previous twelve months
- b. Five or more career concussions
- c. Any previous concussion complicated by psychological symptoms
- d. Previous concussion with prolonged recovery (>21 days)

No evidence on initial assessment, either by video or clinical examination, of the following:

Loss of consciousness

Convulsion

Tonic posturing

Balance disturbance / ataxia

Clearly dazed

Disorientated in time, place or person

Confusion

Behavioural changes

Oculomotor signs (e.g. spontaneous new nystagmus)

Normal SCAT6 recorded at 36-48 hours post-injury.

Daily review of symptoms and progressions guided by a healthcare professional.

Sign off to return to play from an independent GMC registered doctor on the specialist register for neurology, neurosurgery, sport and exercise medicine or other appropriate speciality with experience in management of sports related concussion.

Enhanced care pathway

Stage 1 Initial relative rest period	Stage 2 Light exercise	Stage 3 Football-specific exercise	Stage 4 Non-contact training		Stage 5 Full-contact practice	Stage 6 Return to play
An initial relative rest period of 48 hours where normal daily activities is permitted. Beview by doctor/healthcare	Day 3 and day 4 Minimum of 24 hours if exceptional criteria met	Day 5 and day 6 Minimum of 24 hours if exceptional criteria met	exceptional	Review by doctor/healthcare professional with <u>SCOAT6</u>	Day 9, day 10 and day 11 Minimum of 24 hours if exceptional criteria met	Day 12 Earliest return to play (RTP) Day 7 RTP permitted only if exceptional criteria met

The whole return to play process must be supervised by a suitably qualified doctor as outlined above.

It must be emphasised that these are **minimum** return to play times and in players who do not recover fully within these timeframes return to play will need to be longer.

It is recognised that players will often want to return to play as soon as possible following a concussion. Players, coaches, management and others in a position of responsibility must exercise caution to:

- a. Ensure that all symptoms have resolved before RTP.
- b. Ensure that the GRTP programme is followed.
- c. Ensure that the advice of medical practitioners and other healthcare professionals is strictly adhered to.

After returning to play, all those involved with the player, especially coaches, support staff and parents must remain vigilant for the return of symptoms even if the GRTP has been successfully completed.

Useful links

FA ITMMiF course

Intermediate pitch-side trauma management for doctors, physiotherapists and allied health care professionals working in football

www.TheFA.com

FA ATMMiF course

Advanced pitch-side trauma management for doctors, physiotherapists and allied health care professionals working in football www.TheFA.com

England Football Brain Health web page

<u>UK Government's Concussion Guidelines for</u> <u>Non-Elite (Grassroots) Sport</u>

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Concussion Recognition Tool 6

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