Concussion is dangerous

Welsh Government guidance on concussion for school and community sport up to age 19

Sports concussion?
If in doubt, sit them out
Concussion is dangerous and can be fatal if handled incorrectly, so it is important that everyone is aware of the symptoms and what action to take.

Benjamin Robinson was only 14 years old when he died as a result of sustaining a double concussion during a school rugby match in Northern Ireland. Ben sustained his first concussion at the start of the second half but played on for another 25 minutes and was involved in two further heavy collisions. The Coroner ruled that Ben’s death was “second impact syndrome” (SIS) following concussion, and could have been avoided had someone been able to recognise the signs of concussion and removed him from the game.

Some sports clearly carry higher risks than others, but concussion can happen in any sport or recreational activity. Across Welsh Government we are committed to working with all of our partners to ensure the latest guidance on concussion awareness helps prevent tragedy for all children and young people in Wales.

Your help is needed to promote this leaflet and its key messages as widely as possible, across schools, players and parents to raise awareness of this important issue.

Sports organisations take concussion very seriously. The Welsh Rugby Union (WRU) applies the International Rugby Board’s policy very strictly and endorses the “recognise and remove” approach.

Prav Mathema, the WRU’s National Medical Manager said:

“Concussion is a serious matter. We must all take responsibility to recognise and remove anyone suspected of being concussed. We have developed a nationwide education programme for Rugby within Wales, which provides detailed guidance on this matter. This education has been devised utilising the IRB’s guidelines.”
All Football Association of Wales (FAW) doctors have the appropriate qualifications and training to recognise and manage concussion.

Dr Jonathan Houghton, FAW’s Chief Medical Officer said:

“The FAW is committed to the proper medical management of concussion in Sport and fully supports the Zurich consensus guidelines – which were developed by world leaders in the field of sporting concussion and are the gold standard for current management of this common condition.”

What is concussion?

Concussion is a disturbance in brain function caused by a direct or indirect force to the head or neck. It results in a variety of signs or symptoms, and often does not involve loss of consciousness.

Concussion should be suspected in the presence of any one or more of the following:

- Symptoms (e.g. headache, feeling sick, visual problems)
- Physical signs (e.g. unsteadiness, loss of coordination or consciousness)
- Impaired brain function (e.g. confusion, loss of memory)
- Abnormal behaviour (e.g. change in personality, unusual response)

Concussion management - Recognise and Remove

1. This guidance document applies to all aged under 19. Concussion must be taken extremely seriously to safeguard the welfare of young athletes.

2. Anyone under 19 suspected of having a concussion must be immediately removed from play and must not resume play in the match or training on the same day.

3. It is recommended that all players with suspected concussion are referred to a health professional to be assessed. Unless concussion is ruled out by a qualified health professional, players must follow the full concussion protocol.
4. After a concussion, the player must rest for a minimum period of 14 days and not take part in any form of training, matches, or significant mental exertion.

5. If after a minimum 14 day rest period the player is entirely symptom free and off medication that modifies symptoms of concussion, then they must follow a Graduated Return to Play (GRTP) protocol (see recommended GRTP below).

6. It is recommended that following concussion, every young person seeks advice from a suitable health professional before returning to play.

### Return to school

- It is reasonable for a child or young person to miss a day or two of school after concussion, but extended absence is uncommon. Health professional advice should be sought before return to school.
- Concussion may impact on the child or young person’s learning and performance at school, and teachers should take this into consideration.

The Welsh Government acknowledges the support of colleagues in Scotland, Northern Ireland, the Football Association of Wales (FAW), the Welsh Rugby Union and the International Rugby Board (IRB) in development of this advice.
Further guidance: Recognising concussion

To help identify concussion in children and young people.

Pocket CONCUSSION RECOGNITION TOOL™
To help identify concussion in children, youth and adults

RECOGNIZE & REMOVE
Concussion should be suspected if **one or more** of the following visible clues, signs, symptoms or errors in memory questions are present.

1. **Visible clues of suspected concussion**
   Any one or more of the following visible clues can indicate a possible concussion:
   
   - Loss of consciousness or responsiveness
   - Lying motionless on ground/Slow to get up
   - Unsteady on feet/Balance problems or falling over/Incoordination
   - Grabbing/Clutching of head
   - Dazed, blank or vacant look
   - Confused/Not aware of plays or events

2. **Signs and symptoms of suspected concussion**
   Presence of any one or more of the following signs & symptoms may suggest a concussion:
   
   - Loss of consciousness
   - Seizure or convulsion
   - Balance problems
   - Nausea or vomiting
   - Drowsiness
   - More emotional
   - Irritability
   - Nervous or anxious
   - "Don’t feel right"
   - Difficulty remembering
   - Headache
   - Dizziness
   - Confusion
   - Feeling slowed down
   - “Pressure in head”
   - Blurred vision
   - Sensitivity to light
   - Amnesia
   - Feeling like “in a fog”
   - Neck Pain
   - Sensitivity to noise
   - Difficulty concentrating

3. **Memory function**
   Failure to answer any of these questions correctly may suggest a concussion.
   
   - "What venue are we at today?"
   - "Which half is it now?"
   - "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 PLAY, and should not be returned to activity until they are assessed medically. Athletes with a suspected concussion should not be left alone and should not drive a motor vehicle.

It is recommended that, in all cases of suspected concussion, the player is referred to a medical professional for diagnosis and guidance as well as return to play decisions, even if the symptoms resolve.

**RED FLAGS**
If ANY of the following are reported then the player should be safely and immediately removed from the field. If no qualified medical professional is available, consider transporting by ambulance for urgent medical assessment:

- Athlete complains of neck pain
- Increasing confusion or irritability
- Seizure or convulsion
- Weakness or tingling/burning in arms or legs
- Athlete moves the player (other than required for airway support)
- Do not remove helmet (if present) unless trained to do so.
- Do not remove helmet (if present) unless trained to do so.
- Deteriorating conscious state
- Severe or increasing headache
- Unusual behaviour change
- Double vision

**Remember:**
- In all cases, the basic principles of first aid (danger, response, airway, breathing, circulation) should be followed.
- Do not attempt to move the player (other than required for airway support) unless trained to so do.
- Do not remove helmet (if present) unless trained to do so.


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If in doubt, sit them out
Concussion return to play protocol

This simple protocol can be applied in considering the gradual return of children, and young people to any sport after head injury.

Welsh Government recommended Graduated Return To Play (GRTP) Protocol following Concussion For School and Community Sports up to age 19 (A player’s age is deemed to be that at 1st September of the school year.)

DO NOT RETURN TO PLAY OR CONTINUE TO PLAY OR TRAIN IF YOU HAVE ANY SYMPTOMS – SEEK HEALTH PROFESSIONAL ADVICE

INTRODUCTION:
- Following concussion there must be a minimum rest period (no excessive physical or intellectual exercise) of at least 14 days.
- Graduated return to play may continue only after completion of the minimum rest period, and only at each stage if symptom free and off medication that modifies concussion symptoms.
- Health professional advice should be obtained during the rest and return to play period.

Any player with any symptoms following a head injury should not return to training or playing whilst symptoms persist.

A second head impact in a player who has not fully recovered from concussion could lead to serious brain injury or death.

<table>
<thead>
<tr>
<th>GRADUATED RETURN TO PLAY STAGES 1 - REST (AT LEAST 14 GRTP DAYS)</th>
<th>GRADUATED RETURN TO PLAY STAGES 2-4 (AT LEAST 6 GRTP DAYS)</th>
<th>GRADUATED RETURN TO PLAY STAGE 5 (AT LEAST 2 GRTP DAYS)</th>
<th>GRADUATED RETURN TO PLAY STAGE 6 (FOLLOWING AT LEAST 22 GRTP DAYS)</th>
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</thead>
<tbody>
<tr>
<td>Minimum of 14 days rest with no excessive physical or intellectual exercise. Player should return to school or college during this time if symptom free and off any medication for concussion.</td>
<td>Stage 2 - Light aerobic exercise 48 hours  Stage 3 - Sport specific exercise 48 hours  Stage 4 - Non contact training drills 48 hours  Progress to the next stage only if symptom free and off medication for concussion, for 48 hours.</td>
<td>Stage 5 - Full contact practice 48 hours  Progress to the next stage only if symptom free and off medication for concussion, for 48 hours.</td>
<td>Stage 6 - Return to play  Earliest return is the 23rd day after concussion, only if symptom free and off medication for concussion.</td>
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Additional safeguards are needed for repeat concussions. Any player with a second concussion within 12 months, a history of multiple concussions, a player with unusual presentations or prolonged recovery should be assessed and managed by a health care professional with expertise in sports-related concussion. Any recurrence of symptoms during GRTP must be referred for medical advice.

The Welsh Government recommends that, in all cases of suspected concussion, the player is referred to a health professional for diagnosis and guidance as well as return to play decisions, even if the symptoms resolve.

The Welsh Government extends its thanks to the International Rugby Board (IRB) and the Welsh Rugby Union (WRU) for their assistance in the development of the above table.

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