





Head injuries in sport continue to be a major concern. This concern has led the Scottish Football Association to announce that they are set to introduce a ban on children under the age of 12 heading the ball in training sessions.

The ban has resulted from research demonstrating a proven correlation between football and dementia. A report has shown that former professional footballers are 3.5 times more likely to die with dementia and other serious neurological diseases.

The Scottish FAs are quick to emphasise that their ban on under-12s heading the ball in training should not lead people to assume it is therefore safe for older children. Repeated head injuries are not good for our brains! Angus Hunter from Stirling University stated that when young people head the ball it causes electrical disturbances in the brain, disruption to muscles and a reduction in memory recall. When children head the ball in training, they are repeating the event multiple times and this can adversely affect their brains.

A similar ban was put in place in the US since 2015. But Scotland would become the first European country to impose a restriction on head contact.

Dr Angus Hunter suggested that a softer lighter ball could cause less potential damage. This would reduce rates of concussions, which is far greater in children, and improve memory recall.

Old style leather footballs were particularly damaging, especially when wet.



## **Head injuries**

When people bang their heads, it can be difficult to tell whether they have done any serious damage. Most head injuries are not serious and simply result on a bump or bruise. However severe, or repeated head injuries can cause damage to the brain.

Fortunately, the majority of falls or blows to the head result in injury to the scalp only and this is more frightening than life threatening. As the head and face are served by numerous blood vessels, these injuries bleed profusely and can be very scary!

It is very important to look out for anything unusual following a head injury as a severe bang on the head could cause swelling and damage to the brain and it is vitally important that you recognise any early and worrying signs of increased pressure on the brain.

Head Injuries: When are They Serious?

Not sure what the signs are? We'll tell you now.

## First steps in the event of a head injury

For a **child**, look out for:

Loss of consciousness

- Intense crying
- Trouble walking
- Complains of head and neck pain

If you see these signs, call 999 or 112.

If the casualty is **not** an infant, has **not** lost consciousness, and is alert and behaving normally after the fall or blow:

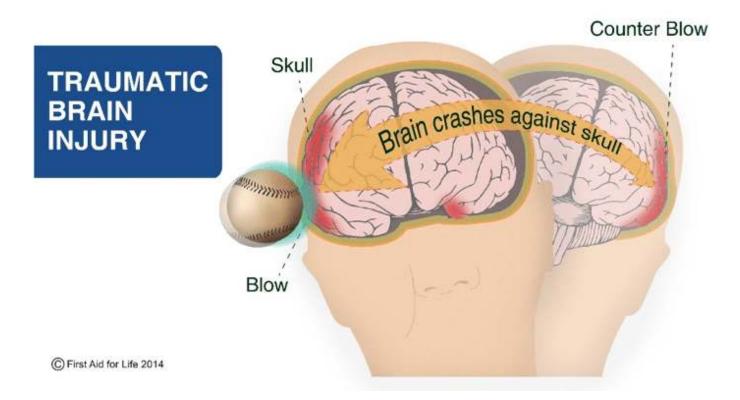
- Apply a wrapped ice pack or instant cold pack to the injured area for 10 minutes.
- Observe them carefully for the next 48 hours. No one should go home to an empty house for the 48 hours following a severe head injury. If you notice any of the signs of brain injury (see below), phone an ambulance immediately.
- If the casualty is unusually drowsy or can't be woken, or they show any symptoms of a brain injury (see below) call an ambulance immediately. People can go to sleep following a head injury, but only if they appear to be completely alert and showing no signs of confusion, losing consciousness or any other symptoms. If worried seek medical attention immediately.

# **Suspected brain injury**

The brain is cushioned by cerebrospinal fluid, however a severe blow to the head may knock the brain into the side of the skull or tear blood vessels.

It can be difficult to determine the level of injury, so it's always wise to discuss a head injury with your doctor. A clear indicator of a more serious injury is when someone loses consciousness or has signs of confusion. These symptoms can come on at any time from immediately after the accident to a couple of days later. If it is a child that is injured it is sensible for them to sleep in the same room as you for a couple of nights following a head injury.





# Signs of a serious head injury

Call an ambulance if someone shows any of these symptoms:

- unconsciousness
- abnormal breathing
- obvious serious wound or suspected skull fracture
- bleeding or clear fluid from the nose, ear, or mouth
- disturbance of speech or vision
- pupils of unequal size
- weakness or paralysis
- dizziness
- neck pain or stiffness
- fitting
- vomiting more than two to three times (it is not unusual for children to vomit immediately after an accident as a response to pain, so do not panic if an injured child is sick just once after a head injury).

## What to do if someone is unconscious:

- If they are breathing roll them into the recovery position (on their side so that their tongue falls forward in their mouth and any vomit can drain away), trying not to twist their neck or spine at all. Any head injury could have caused spinal damage as the head recoils from the blow.
- If they are not breathing start CPR.
- Call for an ambulance.

# Most important advice following a head injury:

**Initial symptoms of concussion** – in football and rugby the most common symptoms that you may see on the pitch are the following:

- headache
- confusion
- blurred vision
- nausea
- difficulty concentrating
- fatigue
- drowsiness
- dizziness
- memory impairment

Concussion can also affect someone's mood, balance, sleep, thinking, concentration and senses. Most symptoms resolve in 7-10 days and many much sooner.

- Don't make things worse important to take seriously and rest
- Do not risk injury again
- Rest your brain = lots of sleep, avoid reading, screens and sports for at least 24 hours / 48 hours

**Children and adolescents** may need one or 2 days off school and a gradual return to academic study. They can start light reading and small amounts of screen time but should monitor and stop if there are signs of any recurrence of symptoms.

At least 2 weeks with no training to give the brain a chance to fully recover.

If there are no symptoms players can then start the gradual return to play or GRTP –

- 24 hours per stage (48 hours for children and adolescents) go back a stage if symptoms occur
- Light aerobic exercise
- Sport specific exercise
- Non-contact training
- Full contact practice

19 days is the earliest that an adult can return to play

23 days is the earliest that a child or adolescent can return to play

#### Coaches and first aiders should be confident to:

**Remove** – any player who has experienced a head injury and shows any of the above symptoms should be removed from play immediately.

**Recognise** – learn the signs of concussion. Only about 10% of people experiencing concussion will actually be unconscious, therefore the other 90% of people who have experienced concussion will remain conscious. Look out for the more obvious signs such as a dazed or blank expression or tonic arm extension following the blow to the head; along with the symptoms listed above.

Applying a wrapped ice pack will reduce superficial bruising and swelling – but has no effect on any brain recovery.

If a severe head injury has been sustained and you are concerned about the casualty's spine; they should only be removed from the field by someone appropriately trained to do so. If worried and no one appropriate to help; reassure the casualty, support their head in a neutral position, stop the game – or move to another pitch and await removal of the casualty by paramedics.

**Rest** – for at least 24 hours for an adult and 48 for a child or adolescent (see above)

**Recover** – Ensure the player remains completely symptom free before contemplating any form of return to play.

**Return** – return to play using the gradual return to play GRTP method.



#### **Recovery time is vital**

It may take 4-6 weeks before a player is fully fit and back to competitive play. This may seem a long time away from the game. However, it is comparable to the recovery time following a soft tissue injury and your brain is so important to every aspect of life, that it is vital we take head injuries seriously.

The RFU have a superb online training course specific to parents, players, teachers and coaches. http://www.englandrugby.com/my-rugby/players/player-health/concussion-headcase/

The Football Association have the following:

#### http://www.thefa.com/get-involved/coach/concussion

It is strongly advised that you attend a Practical First Aid course to understand what to do in a medical emergency. Please visit firstaidforlife.org.uk or call 0208 675 4036 for more information about our courses.

Onlinefirstaid.com have developed unique on-line first aid training to allow you to learn these vital skills at a time and place that suits you.

First Aid for life provides this information for guidance and it is not in any way a substitute for medical advice. First Aid for Life is not responsible or liable for any diagnosis made, or actions taken based on this information.

# **Graduated Return to Play**

# Following a head injury Always check for concussion



- if in doubt, sit them out!



# **Recognise & remove**

Anyone with a suspected concussion must be immediately removed from play

#### A player should stop playing/training and not return if they:

- Lose consciousness or responsiveness
- Are slow to get up
- Are unsteady on their feet
- Olutch their head
- Have a blank or vacant look
- O Look dazed/ Confused

#### One or more of the following symptoms are present:

- ⊘ Headache
- Seizure or convulsion
- Dizziness or balance problems
- Onfusion
- Difficulty concentrating
- Nausea or repeated vomiting
- ⊘ Weakness, tingling/burning in arms or legs

- Blurred vision, sensitivity to light
- Irritable or change in mood
- Difficulty remembering or amnesia
- Neck Pain
- 🕑 "Don't feel right"
- Orowsiness / fatigue

# Red Flags 🏴

If ANY of the following are reported or develop, medical attention should be sought as a priority (e.g., consider calling an ambulance)

- Deteriorating conscious state
- Severe or increasing headache
- Unusual behaviour change
- Double vision or deafness
- Increasing confusion or irritability
- Repeated vomiting
  - Seizure or convulsion
  - Weakness or tingling/burning in arms or legs
  - Severe neck pain



Players suspected of having concussion should be removed from play and should not participate any further in the match or training session



England Rugby All players suspected of having concussion should be assessed by a Healthcare Professional.

The above advice is in accordance with the concussion alliance from the following sports organizations



### You can book an in person course here: https://firstaidforlife.org.uk/