Coaches General Information

Concussion and coaching

Coaches probably have the most important role in the prevention and management of concussion. Research has shown that young players in particular rely on their coach to provide information on concussion and are influenced most in their behaviour towards concussion by their coach.

All coaches should be able to recognise suspected concussion and are in the best position to remove the player from play – **RECOGNISE & REMOVE**

Prevention

Ideally we all want to prevent concussions occurring and although it may not be possible to stop them happening altogether, there are some measures that can be taken during rugby training and games that have the potential to reduce the number of concussions that we see:

1. Ensure the playing or training area is safe, and the risk of serious head injury occurring is reduced:
   a. Check ground conditions - do not play or train if the ground is frozen solid or rock hard due to drought
   b. Ensure all posts and barriers on or close to the pitch are protected with appropriate padding

2. Ensure correct tackle technique is coached and performed consistently by all players. If the head of the tackler hits the ball carrier there is a significant risk of concussion and/or neck injury. Coaches should therefore ensure that all players are able to perform correct tackle technique consistently, and they should be corrected immediately if they do not. There are several resources that coaches can refer to, see [rfu.com/TakingPart/Coach/CoachDevelopmentProgrammes/FoundationCourses](http://rfu.com/TakingPart/Coach/CoachDevelopmentProgrammes/FoundationCourses)

3. Explain the dangers of high, tip and spear tackles, and penalise them immediately if they occur. Similarly with tackling players in the air, jumping to catch the ball from kicks or lineouts. Falling from height increases the risk of concussion and neck injuries. In young players in particular, a zero tolerance approach should be taken.
Some of this is drawn from our injury research in schools rugby. This has shown that the head is the most commonly injured body part in schools rugby:

<table>
<thead>
<tr>
<th>Body Region Injured (Top 5 only)</th>
<th>Percentage of injuries (Top 5 only)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head</td>
<td>24%</td>
</tr>
<tr>
<td>Hand</td>
<td>13%</td>
</tr>
<tr>
<td>Knee</td>
<td>11%</td>
</tr>
<tr>
<td>Shoulder</td>
<td>11%</td>
</tr>
<tr>
<td>Ankle/heel</td>
<td>7%</td>
</tr>
</tbody>
</table>

The focus on the coaching of the tackle is also drawn from research, and every study confirms the tackle as the most frequent phase of play in injury causation. The graph below is taken from our Youth Rugby Study which can be downloaded in full from the resources section of [rfu.com/concussion](http://rfu.com/concussion)

![Figure 5 Proportion of injuries arising from particular match events](image)

**Figure 5** Proportion of injuries arising from particular match events

**Protective Equipment**

Rugby head guards **DO NOT** protect against concussion. They do protect against superficial injuries to the head such as cuts and grazes. This has been demonstrated in a number of research studies now. There is some evidence to suggest that they may increase risk taking behaviours in some players.

Mouth guards/gum shields do not protect against concussion either although they are strongly recommended in all players as they do protect against dental and facial injuries.
RECOGNISE:

It is important to realise that a player does not need to be knocked out (lose consciousness) to have had a concussion. Players may experience a number of problems after a blow to the head, or you may notice certain things that arouse your suspicion.

Detailed information and guidance is given in the Assessment of Suspected Concussion Guidance which can be downloaded from the resources section of rfu.com/concussion

**Thinking problems that the player may experience:**
- Does not know time, date, place, period of game, opposing team, or the score in the game
- General confusion
- Cannot remember things that happened before and/or after the injury
- Seems slow to answer questions or follow directions
- Seems easily distracted
- Not playing as well as expected
- A blank stare/glassy eyed, “the lights are on but nobody is at home”

**Things that the player may complain of or you see:**
- Knocked out
- Headache
- Dizziness
- Feel dazed, “dinged” or stunned;
- Loss of vision, seeing double or blurred, seeing stars or flashing lights
- Ringing in the ears
- Sleepiness
- Stomach ache, stomach pain, nausea, vomiting
- Poor coordination or balance, staggering around or unsteady on feet
- Slurred speech
- Poor concentration
- Strange or inappropriate emotions (i.e. laughing, crying, getting angry easily)
- Feeling generally unwell

**If you suspect concussion YOU must REMOVE them from play right away.**

Continuing to play increases their risk of more severe, longer lasting concussion symptoms, as well as increases their risk of other injury:
- You should not let them return to play that day
- You should not let them be left alone
- You should make sure they are seen by a healthcare practitioner as soon as possible that day
- You should not let them drive
Can it be anything more serious?

 Anyone with a suspected concussion should be seen by a healthcare practitioner. They will usually give instructions to them to go back to them or go to hospital IMMEDIATELY if they have worsening of symptoms such as:

- Drowsiness when normally awake or cannot be awoken
- A headache that is getting worse
- Weakness, numbness or decreases in coordination and balance
- Repeated vomiting or prolonged nausea
- Slurred speech, difficulty speaking or understanding
- Increasing confusion, restlessness or agitation
- Loss of consciousness
- Convulsions
- Clear fluid coming out of ears or nose
- Deafness in one or both ears
- Problems with eyesight

How is a concussion treated?

 Concussion symptoms are made worse by exertion, both physical and mental. The most important treatment for a concussion is REST:

- The player should not exercise or do any activities that may make them worse, like driving a car, reading, working on the computer or playing video games.
- If mental activities (eg: reading, concentrating, using the computer) worsen their symptoms, they may have to stay home from work, college or school.
- If they go back to activities before they are completely better, they are more likely to get worse, and to have symptoms last longer.

Once they are completely better at rest, and cleared to do so by a doctor they can start a step-wise increase in activities (see next section: “When can a concussed player return to rugby?)
If possible, they should be seen by a doctor with experience in treating concussions.
RETURN - When can a concussed player return to rugby?

It is very important that the player does not go back to rugby or any other sport, if they have any concussion symptoms or signs. Return to sport and activity must follow a step-wise Graduated Return to Play (GRTP) which can be downloaded in full from the resources section of rfu.com/concussion.

They should not go back to rugby/sport until they have been cleared to do so by a doctor.

How long will it take to get better?

The signs and symptoms of a concussion often last for 7-10 days in adults but may last much longer, especially in younger players and children. Also, because children’s brains are still developing a much more conservative approach must be taken in returning them to play – it is essential that they have recovered completely before starting their GRTP. In some cases, players may take many weeks or months to recover. Having had previous concussions may increase the time that the person takes to recover.

Repeated Concussions

If a player has repeated concussions, it is recommended that they are seen by a doctor specialising in concussion management. Each concussion should be considered on its own but a more conservative approach to or directed rehabilitation may be recommended especially if each time the force required to cause the concussion is less and/or the symptoms are prolonged.

Resources

IRB Concussion education (www.irbplayerwelfare.com/concussion)
Return to Play Guide (rfu.com/concussion)
Pocket SCAT (rfu.com/concussion)
Summary

There are some general principles that run through all the above and should be applied by all involved in rugby:

1. Concussion must be taken extremely seriously to safeguard the safety and long term health of players.
2. Know how to **RECOGNISE** concussion.
3. Players suspected of having concussion must be **REMOVEd** from play and must not resume play in the same match, and until cleared to do so (See below).
4. All players suspected of having concussion must be assessed by a healthcare practitioner.
5. Players suspected of having concussion or diagnosed with concussion must **RECOVER**
6. Players must go through a graduated **RETURN** to play protocol (GRTP) and receive medical clearance from a doctor before returning to play.

**Remember the 4 R’s:**

**RECOGNISE**

**REMOVE**

**RECOVER**

**RETURN**

*These RFU Concussion resources have been developed based on the Zurich Guidelines published in the Consensus Statement on Concussion in Sport, and adapted for rugby by the International Rugby Board.*

The information contained in this resource is intended for educational purposes only and is not meant to be a substitute for appropriate medical advice or care. If you believe that you or someone under your care has sustained a concussion we strongly recommend that you contact a qualified health care professional for appropriate diagnosis and treatment. The authors have made responsible efforts to include accurate and timely information. However they make no representations or warranties regarding the accuracy of the information contained and specifically disclaim any liability in connection with the content on this site.*