

The Child Brain Injury Trust is a national charity supporting anyone affected by childhood acquired brain injury. The following information has been developed to help the reader understand more about brain injury and some of the associated issues. Every effort has been taken to ensure the information is accurate and up to date. If you require more immediate support or assistance please contact our **Helpline 0303 3032248** or email helpline@cbituk.org where we will be able to respond to your specific enquiry and offer support.

Concussions (including sports concussions)

This Factsheet provides some basic information about concussions (including sports concussions) and acquired brain injury (ABI); if you have any concerns about a child or young person you should refer to your GP or the local hospital or telephone 111.

Common signs of concussion:



Dizziness



Nausea



Headaches



**Light
Sensitivity**



Confusion

- Concussions can occur during general play in a playground or at home as well as during sports such as football or hockey.
- A child or young person does not have to have been unconscious, or “knocked out” for concussion to occur.
- Concussions can occur from a blow to the body that causes the head to move rapidly back and forth; it is not necessarily as a result of a direct blow to the head.
- Any kind of concussion is classified as a head injury or traumatic brain injury (TBI); both are ABIs.
- Concussion can be described as “a temporary injury to the brain that cannot be seen on routine X-rays or CT scans. It affects the way a person may think and remember things for a short time.” ⁽¹⁾

Most people with a concussion recover quickly and fully. But for some people, symptoms can last for days, weeks, or longer. In general, recovery may be slower among young children and teenagers. Those who have had a concussion in the past are also at risk of having another one and may find that it takes longer to recover if they have another concussion.

If the young person has been playing a sport the following questions should be asked to determine if a concussion may have occurred:

- Where are we now?
- Is it before or after lunch?
- Who scored last in this match? *(if appropriate)*
- What did you have last lesson/class?
- What is your teacher's name?

Failure to answer any of these questions correctly may suggest a concussion ⁽²⁾

What should happen immediately following the concussion?

In the case of sports concussion the child or young person should **immediately be withdrawn from the field of play** and not be permitted to continue. It cannot be stressed enough that it is **NOT advisable to continue playing**.

Many children and young people will however feel that they are letting their team down and will say they feel fine and to play on - adults should reassure them that it is OK to stop and also important that they stop.

Symptoms to check for

It is important to observe the child or young person after a concussion and to check for the following symptoms ⁽²⁾. If the young person has any of these symptoms they should be checked by a medical professional.

- Is dazed or stunned
- Moves clumsily
- Answers questions slowly
- Forgets events prior to the hit or fall
- Forgets events after the hit or fall
- Has trouble sustaining attention
- Is easily distracted
- Has difficulty concentrating
- Has problems remembering what he/she is told
- Has difficulty following directions
- Tends to daydream
- Gets confused
- Is forgetful
- Has difficulty completing tasks
- Has poor problem solving skills
- Has problems learning
- Has headaches
- Feels dizzy
- Has a feeling that the room is spinning
- Feels faint
- Has blurred vision
- Has double vision
- Experiences nausea
- Gets tired a lot
- Gets tired easily

The child or young person may report the following symptoms ⁽²⁾. Again, if any of these symptoms are reported the young person should be assessed by a medical professional.

- I have headaches
- I feel sick
- I feel dizzy
- I feel like the room is spinning
- I see double
- Things are blurry when I look at them
- I feel like I am going to faint
- I have trouble figuring things out
- I have problems remembering what people tell me
- I get confused
- I have problems finishing things
- I get distracted easily
- I get tired a lot
- I get tired easily
- It is hard for me to learn new things
- I have a hard time concentrating

Any child or young person with signs of a concussion should ideally receive medical evaluation as soon as possible

What actually happens when a child or young person is concussed?

In very simple terms, following a concussion/ knock to the head there is a disruption in the normal connections within the brain which means that messages cannot travel to and from the brain and around the body. The connections are similar to elastic bands that can snap if they are stretched too far. This is why rest (physical and mental) is so important following any form of concussion.

Some of the effects after concussion are short term, however, some can be long term. Repetitive concussions increase the risk of damage to the brain which is why it is important to stop playing if a concussion occurs.

What should happen following a concussion?

Once the child or young person has been removed from the current activity or game, they should be given **COMPLETE REST** until **all of their symptoms have cleared** - this means they should avoid:

- PLAYING ANY CONTACT SPORTS
- STRENUOUS PHYSICAL EXERCISE/ACTIVITY
- COMPUTER/MOBILE PHONE GAMES
- BRIGHT LIGHTS/LOUD NOISES

How long should the child or young person abstain from the activities above?

Each child is different and the time it takes for symptoms to dissipate will depend on the individual – there is no set time frame. The child or young person should abstain from the activities until such time as they are clear of ALL observations and symptoms mentioned above. If in doubt at ANY point you should seek urgent medical advice.

Should the child or young person be at school?

As long as the symptoms and observations continue, the child or young person should also remain at home and off school for a period of time following their concussion; it is not possible to say how long they should be off school for as each child is different. It is useful if a graded return to school can be arranged. Speak to your child's teachers and explain that there has been a concussion. For example, if fatigue is a problem, the child or young person should return to school for half a day to start with, gradually building up to a full return to school. If there are physical or cognitive problems after the concussion, the school should take account of these and it may be able to provide help. See other Child Brain Injury Trust factsheets on related topics such as behaviour, sleep, and education: <http://childbraininjurytrust.org.uk/how-we-help/parent-and-professionals/factsheets/>

How soon should a child return to activity/sports following concussion?

Children/young people should not return to any physical sport or activity until they are completely symptom free, which could mean days or weeks. Additionally, there should be a period of no contact sports to avoid the risk of a second concussion. The National Institute for Health and Care Excellence recommends that children and young people do not play contact sports for at least 3 weeks after a concussion or head injury⁽³⁾.

What can be done to prevent concussion?

It is not possible to prevent concussion in sports or in general play, and we would not recommend stopping these activities to reduce risk of concussion – sports and play are part of growing up. However as parents we can make sure that children and young people wear suitable protective headgear and equipment at all times, that is correctly fitted and suitable for the activity.

Further Information

Applications are available for Smart Phones and Tablets which provide concussion checklists. Having this information to hand could be useful when a concussion occurs at a game or match.

The Child Brain Injury Trust has other Factsheets in this series which will help provide more detailed information should you require it.

References:

1. Helmy, A., Agarwal, M., Hutchinson, P.J. (2013) Concussion and sport. British Medical Journal. 13:347:f5748.
2. Concussion in Sport Group (2013) Sport Concussion Assessment Tool 3 (SCAT3).
3. National Institute for Health and Care Excellence (2014) Head injury: Triage, assessment, investigation and early management of head injury in children, young people and adults. CG176.

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