

SPORT-RELATED CONCUSSION

Concussion, also known as mild traumatic brain injury, is a type of head injury that can result from a forceful impact to the head, neck, or body, which causes the brain to move within the skull.

The nerve cells and blood vessels in the brain can be damaged and change normal brain function.

Concussion may also damage the vision and balance systems; make

a person feel physically unwell; and/or experience changes in thinking, mood, and sleeping patterns.

Contact and non-contact sports can result in concussion.



A person can experience a sport-related concussion during training or competition due to:

- collision with another athlete, such as a teammate or an opponent
- contact with a piece of equipment (e.g. ball, goal post)
- impact with the playing surface
- falls or wipe-outs, particularly those occurring from a height or involving speed.

Recognising a Concussion

Suspect a concussion if the person reports, or has been witnessed to have received a direct impact to the head or body that has caused the head to move rapidly.

Remove the individual from activity, training or play immediately and assess for signs and symptoms of concussion.

Look out for Red Flags.

The signs and symptoms of concussion may appear at the time of injury **OR** may develop and/or get worse in the hours or days that follow.

Signs are things that can be observed.

Symptoms are things that a person says they are feeling or experiencing.

If the person has any signs, symptoms or red flags it's important to see a doctor or seek medical advice immediately.

If in doubt, sit them out.

Common Signs and Symptoms of Concussion

| Immediate | | Delayed |
|---|--|---|
| Signs | Symptoms | Symptoms |
| <p>Immediate signs of concussion include:</p> <ul style="list-style-type: none">• No protective action when falling• Lying motionless• Slow to get up• Stumbling• Balance problems or poor coordination <p>You may see the person:</p> <ul style="list-style-type: none">• Grab or hold their head• Look dazed or vacant• Appear confused or drowsy• Slurred or incoherent speech• Repeat questions | <p>Immediately after a concussion, a person may report experiencing:</p> <ul style="list-style-type: none">• Headache or pressure in their head• Dizziness• Changes in vision (e.g., double vision, blurred vision, worsening vision or "seeing stars")• Confusion• Memory loss (amnesia)• Increased irritability, frustration• Feeling tired or drowsy• Not feeling right• Nausea | <p>Examples of delayed symptoms include:</p> <ul style="list-style-type: none">• Persistent headaches• Difficulties remembering or concentrating• Sensitivity to light or noise• Feelings of sadness or anxiety• Changes in sleep patterns• Fatigue or tiring easily |

Each concussion is unique. The signs and symptoms of concussion can vary between individuals, even if they have had a concussion before.



Connectivity
Traumatic Brain Injury Australia

A person does not have to lose consciousness to have a concussion. In fact, more than 90% of concussions do not involve a loss of consciousness.

Red Flags

Red flags are signs or symptoms that may indicate more severe injury to the brain. If someone who you witness or suspect has had a concussion shows any of the following, **seek medical attention immediately**.

Go to your doctor, nearest hospital, or telephone an ambulance

- Severe or increasing headache
- Loss of consciousness or deteriorating conscious state
- Seizure or convulsion
- Repeated vomiting
- Blurred, double or changes in vision
- Neck pain or tenderness
- Weakness or inability to move the body as usual
- Feelings of numbness, tingling, or burning in arms or legs
- Increased confusion, agitation, or restlessness
- Continual bleeding or clear fluid from ear or nose

Concussion Management

The first 24 - 48 hours following a concussion should be a period of relative (not strict) rest. Make sure to follow all advice given to you by the doctor.

| Area/Activity | Suggested action |
|-----------------------------|--|
| Red flags | You should be observed by a responsible adult for the first 24 - 48 hours. Seek immediate medical attention if you develop any red flags. |
| Driving | Do not drive for at least 24 hours. You should not drive until all your symptoms have resolved, or you have been cleared by a medical professional to return to driving and/or operating machinery. |
| Sleeping | If possible, check for red flags during the night. |
| Cognitive activity | You may partake in light cognitive activity, but limit screen time in the first 48 hours following your injury. |
| Alcohol/drugs | Do not drink alcohol, take sleeping pills or recreational drugs for the first 48 hours. These can make your symptoms worse. They can also make it difficult for other people to tell whether your injury is affecting you or not. |
| Pain relief | Use Paracetamol or Paracetamol/Codeine for headaches. Do not use Aspirin or other anti-inflammatory pain medications such as Ibuprofen or Naproxen (NSAIDs), which may increase the risk of complications. Check with your doctor about taking any other prescription medications. Codeine should only be used if approved by a medical doctor as it may cause sedation. |
| Sport and physical activity | As long as it does not make your symptoms more than mildly or briefly worse, you may return to light physical activity during this time (e.g. walking / stationary bike riding). |

A graded return to activity can help recovery.
To learn more, see the **Connectivity Return To Sport Fact Sheet**



Recovery

Some people will experience concussion symptoms for longer than expected. See your doctor if symptoms continue. Your doctor may refer you to one of a range of specialists if you do not improve.

More information

Connectivity Traumatic Brain Injury Australia is an Australia-wide not-for-profit organisation working to raise awareness of concussion and traumatic brain injury in the community. For more information on concussion, you can speak to your doctor, healthcare professional, or visit the Connectivity website at www.connectivity.org.au

DISCLAIMER: This flyer and the Connectivity website does not offer medical advice for individuals. If you have suffered a concussion, please seek medical advice. **ACKNOWLEDGEMENTS:** This flyer features content that has been adapted from the Government of Western Australia North Metropolitan Health Service Mild Head Injury Advice <https://www.nmhs.health.wa.gov.au/concussion> and the Safer Care Victoria Mild Traumatic Brain Injury Patient Fact Sheet <https://www.bettersafecare.vic.gov.au/clinical-guidance/emergency/mild-traumatic-brain-injury>.