## Head injury and concussion

Reviewed by SickKids Staff Last updated: February 21st 2019

# Learn how to recognize a concussion after a head injury and when to see a doctor or seek emergency care.

#### Key points

- Most head injuries are minor.
- Any head injury puts your child at risk for concussion.
- If you think that your child has had a concussion, they should see a doctor on the same day that the head injury occurs.
- If your child has signs of a concussion during a sports activity, they should stop participating immediately and see a doctor.
- A doctor will examine your child and may recommend further tests or, if concussion is diagnosed, provide a post-concussion management plan and prescribe rest.
- Watch your child after a head injury. If you see signs that your child is getting worse, take them to the nearest emergency department or call 911 right away.

A head injury can happen when a child hits their head or when there is a blow to another part of the body that causes the head to spin or jolt. Head injuries caused by falls are especially common when children are learning to walk or ride a bike or are taking part in recreational or competitive activities.



Most head injuries are minor and result in no symptoms or physical changes, but sometimes they can result in bumps, bruises or swelling to the scalp.

Sometimes, what seems to be a mild bump or blow to the head can be serious and cause a concussion. This is a risk with any head injury.

A concussion may result from a:

www.aboutkidshealth.ca/concussion

## SickKids | AboutKidsHealth

- direct impact to the head, neck or face
- fall
- blow to the body that causes the head and brain to move back and forth

A concussion is an "invisible" brain injury that affects the way your child thinks and remembers. It cannot be seen on X-rays, MRIs or other forms of brain imaging.

### Signs and symptoms of a concussion

Your child does not need to lose consciousness to have a concussion. In younger children, symptoms may not be clear and may be difficult for them to explain.

After a concussion, your child may experience some of the signs and symptoms below.

#### Physical changes

- <u>Headache</u>
- Nausea or <u>vomiting</u>
- Vision changes
- Loss of consciousness
- Irritation from light or sound
- Loss of balance, poor co-ordination
- Decreased playing ability

#### Changes in behaviour

- Irritability
- Sadness
- <u>Anxiety</u>
- Inappropriate emotions

#### Thinking problems

- Slowed reaction times
- Confusion
- Memory loss or difficulty concentrating
- Feeling dazed

#### Trouble with sleep

- Drowsiness
- Trouble falling asleep

www.aboutkidshealth.ca/concussion



page 2 of 4

- Sleeping more than usual
- Sleeping less than usual

Some symptoms may appear right away. However, in some cases, signs and symptoms evolve over a number of minutes to hours. In addition, symptoms may change over time. Your child may look fine even though they are acting or feeling differently.

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 older adults, young children and teens. If the symptoms of a concussion do not go away after 21 days, your child will need to be reassessed by a doctor.

Those who have had a concussion in the past are also at risk of having another one and may take longer to recover from a second or further concussion.

## Taking care of your child after a head injury

#### Wound care

If your child has cut themselves, clean the wound with warm water and soap. To control any bleeding, gently press down on the wound with sterile gauze or a clean cloth. If the cut is large or deep, your child will need to see a doctor as they may require stitches.

If there is swelling over the injured area, wrap some ice in a cloth and hold it over the swelling for 20 minutes.

#### Concussion

If you think that your child has had a concussion, take them to a doctor on the same day that the head injury occurs. If the concussion occurs during a sporting activity, your child should stop the activity immediately; if they continue, they are at greater risk for another injury.

### When to see a doctor for a head injury

See a doctor if your child has a deep cut that requires stitches or if you suspect that your child has a concussion.

Your child's doctor will assess your child for any physical, cognitive and neurological symptoms, for example any swelling, concentration difficulties or problems with vision or co-ordination. Your child may need to have a brain scan or be admitted to hospital if their symptoms are getting worse or are not improving.

www.aboutkidshealth.ca/concussion

## SickKids | AboutKidsHealth

If your doctor diagnoses your child with a concussion, they will prescribe rest from physical and cognitive (for example problem-solving or memory-based) activities. Your child's doctor should also give you a post-concussion management plan for your child.

### When to seek emergency care for a head injury

Take your child to the nearest emergency department, or call 911, if your child is showing signs of a more serious brain injury.

#### Signs and symptoms of a serious brain injury in babies

- Poor feeding
- Repeated vomiting (throwing up) after a head injury
- Being unable to stop crying or be consoled
- Appearing very drowsy and unable to be awakened
- Seizures
- Tense bulging of the fontanelle (soft spot on top of head)

#### Signs and symptoms of a serious brain injury in children and teenagers

- A headache that does not go away or gets worse
- Repeated vomiting (throwing up)
- Confusion, agitation or unusual behaviour
- Trouble seeing, speaking or walking
- Weakness, numbness or decreased co-ordination of an arm or leg
- Drowsiness (sleepiness) or decreased consciousness
- Seizures (convulsions)

### Virtual care services for children

Boomerang Health was opened by SickKids to provide communities in Ontario with greater access to community-based services for children and adolescents. For more information on virtual care services in Ontario to support head injuries, visit <u>Boomerang Health</u> powered by SickKids.

Please visit AboutKidsHealth.ca for more child health information. ©2022 The Hospital for Sick Children

www.aboutkidshealth.ca/concussion

## SickKids | AboutKidsHealth