

## **CONCUSSION: NOT JUST A BUMP ON THE HEAD**

### **What is concussion?**

A concussion is an injury to the brain which occurs when the brain moves or twists and hits the inside of the skull. Concussion causes a change in how the brain functions rather than to the brain's structure. For this reason, doctors usually diagnose a concussion from the history or injury to the head and the symptoms that follow it.

### **How can you get a concussion?**

- Sport and recreating activities that involve a blow to the head, face or whiplash motion to the neck
- Vehicle crashes
- Falls that involve head and face impact
- Heavy object landing on head
- Head/face impact from heavy object such as car door or trunk

### **Signs and symptoms of a concussion can be hard to notice. They may start hours or, rarely, days later and may include:**

- headache
- feeling slowed down
- personality changes
- nausea and /or vomiting
- confusion
- emotional change
- dizziness
- poor balance or coordination
- change in the way child plays
- seeing stars
- poor concentration
- inappropriate behaviour
- sensitivity to light
- irritability
- ringing in ears
- blank stare
- tiredness/sleep problems
- slow to answer questions

Along with the above, a very young child:

- may have lost a learned skill (for example, toilet training)
- may have a high-pitched cry or change in their cry
- may not want to eat or nurse

### **Should concussions be checked by a doctor?**

It is recommended that all individuals who suffer a head injury be checked by a doctor. Since emergency departments are very busy, other places to get a medical assessment include: Urgent Care Centre, Family Doctor, or Sports Doctor.

Most individuals with a concussion do not need X-rays or CT scan. Doctors have criteria for evaluating concussions and for deciding if these tests are necessary.

Information medical personnel will want to know:

What happened? Was there a loss of consciousness? How long? Does the individual have problems remembering what happened or what they did that day before the head injury? Protective equipment worn (helmet, mouth guard)? Past history of concussions?

### **What if I check out okay and then things get worse?**

Even if the head injury may initially seem minor, indications of a more serious situation could develop. If any of the following signs or symptoms develops, an individual should go to the emergency department:

- sudden increase in confusion
- trouble being woken up
- uncontrollable or forceful vomiting within 2 days after the concussion
- increased drowsiness even with resting and sleeping
- sudden weakness on one side of the body
- sudden inability to walk or speak

- seizures
- blood or fluid coming from nose or ears
- slow or slurred speech

#### **General guidelines for recovery after concussion:**

- Rest is very important
- Return to work and school activities and sport on a gradual basis
- Follow advice of your doctor
- Risk of second concussion is high if return to activity, especially sport, is too quick. Athletes, returning to sport after concussion, should follow more specific guidelines.

#### **When can we return to play after concussion?**

**Athletes should not return to play the same day of injury.** When returning athletes to play, they should follow a stepwise symptom-limited program, with stages of progression. For example:

1. rest until free of symptoms without medication
2. light aerobic exercise(e.g. stationary cycle)
3. sport-specific exercise
4. non-contact training drills(start light resistance training)
5. full contact training after medical clearance
6. return to competition (game play)

There should be approximately 24 hours (or longer) for each stage and the athlete should return to state 1 if symptoms recur. Resistance training should only be added in the later stages.

**Medical clearance should be given before return to play.**

#### **What are the ways to prevent head injuries and concussion?**

**Take the smart risk approach.** Wear the gear to prevent concussion:

- Approved helmet/head gear for the activity
- Make sure helmet fits correctly and is secured on the head throughout the activity
- Replace helmet after impact or as instructed by manufacturer
- Wear face protection/mouth guard for activities that have higher risk or facial impact (e.g. hockey, ringette, football)

#### **Where can I get more information?**

- Think First Canada has information specifically for parents, coaches, athletes and doctors [www.thinkfirst.ca](http://www.thinkfirst.ca)
- Free resources for concussion education in schools, “Heads Up” Tool kit for concussion for high school coaches [www.cdc.gov/ncipe/tbi/Coaches\\_Tool\\_Kit.htm](http://www.cdc.gov/ncipe/tbi/Coaches_Tool_Kit.htm) “Heads up” Tool Kit for concussion in youth sports [www.cdc.gov/ConcussionInYouthSports/default.htm](http://www.cdc.gov/ConcussionInYouthSports/default.htm)
- Information from Consumer Product Safety Commission on which helmet to use for which activity [www.cpsc.gov/cpsc/pub/pubs/349.pdf](http://www.cpsc.gov/cpsc/pub/pubs/349.pdf)
- Information on community education and support for concussion management and recovery, contact your doctor or speak to a nurse 24 hours a day, seven days a week by calling: Alberta Health Link toll free at 1-866-408-LINK (5465). Mandarin Health Link Calgary at 403-943-1554, Cantonese Health Link Calgary at 403-943-1556

Source: Calgary Health Region, Concussion in the Adult and Child Discharge Instructions  
Safer Calgary, Safety in the Community, [www.safercalgary.ca](http://www.safercalgary.ca)

If you want to read any of the previous ‘Road To Healthy Living’ series articles, please go to [http://www.calgaryhealthregion.ca/programs/diversity/multilingual\\_health\\_services.htm](http://www.calgaryhealthregion.ca/programs/diversity/multilingual_health_services.htm) and get health information in your own language