# CONCUSSION GUIDELINES FOR THE COACH/TRAINER



#### WHAT IS A CONCUSSION?

A concussion is a brain injury that cannot be seen on routine x-rays, CT scans, or MRIs. It affects the way a person may think and remember things for a short time and can cause a variety of symptoms.

#### WHAT ARE THE SYMPTOMS AND SIGNS OF CONCUSSION?

AN ATHLETE DOES NOT NEED TO BE KNOCKED OUT (LOSE CONSCIOUSNESS) TO HAVE HAD A CONCUSSION.

THINKING PROBLEMS	AHLETE'S COMPLAINTS	OTHER PROBLEMS
<ul> <li>Does not know time, date, place, period of game, opposing team, score of game</li> <li>General confusion</li> </ul>	<ul> <li>Headache</li> <li>Dizziness</li> <li>Feels dazed</li> <li>Feels "dinged" or stunned; "having my bell rung"</li> <li>Sees stars, flashing lights</li> </ul>	<ul> <li>Poor coordination or balance</li> <li>Blank stare/glassy eyed</li> <li>Vomiting</li> <li>Slurred speech</li> <li>Slow to answer questions or follow directions</li> </ul>
<ul> <li>Cannot remember things that happened before and after</li> </ul>	<ul><li>Ringing in the ears</li><li>Sleepiness</li><li>Loss of vision</li></ul>	<ul><li> Easily distracted</li><li> Poor concentration</li><li> Strange or inappropriate</li></ul>
the injury  Knocked out	<ul> <li>Sees double or blurry</li> <li>Stomachache, stomach pain, nausea</li> </ul>	emotions (ie. laughing, crying, getting mad easily)  Not playing as well

#### WHAT CAUSES A CONCUSSION?

Any blow to the head, face or neck, or a blow to the body which causes a sudden jarring of the head may cause a concussion (ie. a ball to the head, being checked into the boards in hockey).

#### WHAT SHOULD YOU DO IF AN ATHLETE GETS A CONCUSSION?

THE ATHLETE SHOULD STOP PLAYING THE SPORT RIGHT AWAY. They should not be left alone and should be seen by a doctor as soon as possible that day. If an athlete is knocked out, call an ambulance to take them to a hospital immediately. Do not move the athlete or remove athletic equipment like a helmet as there may also be a cervical spine injury; wait for paramedics to arrive.

AN ATHLETE WITH A CONCUSSION SHOULD NOT GO BACK TO PLAY THAT DAY, EVEN IF THEY SAY THEY ARE FEELING BETTER. Problems caused by a head injury can get worse later that day or night. They should not return to sports until he/she has been seen by a doctor.

#### HOW LONG WILL IT TAKE FOR THE ATHLETE TO GET BETTER?

The signs and symptoms of a concussion often last for 7-10 days but may last much longer. In some cases, athletes may take many weeks or months to heal. Having had previous concussions may increase the chance that a person may take longer to heal.



## CONCUSSION GUIDELINES FOR THE COACH/TRAINER



#### **HOW IS A CONCUSSION TREATED?**

IT IS VERY IMPORTANT THAT AN ATHLETE DOES NOT GO BACK TO SPORTS IF THEY HAVE ANY CONCUSSION SYMPTOMS OR SIGNS.

Return to sport and activity must follow a step-wise approach:

- STEP 1) No activity, complete rest. Once back to normal and cleared by a doctor, go to step 2.
- STEP 2) Light exercise such as walking or stationary cycling, for 10-15 minutes.
- STEP 3) Sport specific aerobic activity (ie. skating in hockey, running in soccer), for 20-30 minutes. NO CONTACT.
- STEP 4) "On field" practice such as ball drills, shooting drills, and other activities with NO CONTACT (ie. no checking, no heading the ball, etc.).
- STEP 5) "On field" practice with body contact, once cleared by a doctor.
- STEP 6) Game play.

### NOTE: EACH STEP MUST TAKE A MINIMUM OF ONE DAY. If an athlete has any symptoms of a concussion (e.g. headache, feeling sick to his/her stomach) that come back either

of a concussion (e.g. headache, feeling sick to his/her stomach) that come back either with activity, or later that day, he/she should stop the activity immediately and rest until symptoms resolve, for a minimum of 24 hours. The athlete should be seen by a doctor and cleared before starting the step wise protocol again. This protocol must be individualized to the athlete, their injury and the sport they are returning to.

#### WHEN CAN AN ATHLETE WITH A CONCUSSION RETURN TO SPORT?

It is very important that an athlete not play any sports if they have any signs or symptoms of concussion. The athlete must rest until he/she is completely back to normal. When he/she is back to normal and has been seen by a doctor, he/she can then go through the steps of increasing activity described above. When the athlete has progressed through these steps with no symptoms or problems, and has received clearance from a doctor, he/she may return to play. If you are unsure if an athlete should play, remember...when in doubt, sit them out!



# CONCUSSION GUIDELINES FOR THE ATHLETE



#### **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.** You should not exercise or do any activities that may make you worse, like driving a car, reading, working on the computer or playing video games. No snow shoveling, cutting the lawn, moving heavy objects, etc. If mental activities (eg: reading, concentrating, using the computer) worsen your symptoms, you may have to stay home from school. You may also have to miss work, depending on what type of job you have, and whether it worsens your symptoms. If you go back to activities before you are completely better, you are more likely to get worse, and to have symptoms last longer. Even though it is very hard for an active person to rest, this is the most important step.

Return to school should not happen until you feel better, and these activities do not aggravate your symptoms. It is best to return to school part-time at first, moving to full time if you have no problems. Once you are completely better at rest, you can start a step-wise increase in activities (see "When can I return to sport?") It is important that you are seen by a doctor before you begin the steps needed to return to activity, to make sure you are completely better. If possible, you should be seen by a doctor with experience in treating concussions.

#### WHEN SHOULD I GO TO THE DOCTOR?

Anyone who gets a head injury should be seen by a doctor as soon as possible. You should go back to the doctor IMMEDIATELY if, after being told you have a concussion, you have worsening of symptoms like:

- 1. being more confused
- 2. headache that is getting worse
- 3. vomiting more than twice
- 4. not waking up
- 5. having any trouble walking
- 6. having a seizure
- 7. strange behaviour

#### WHEN CAN I RETURN TO SPORT?

It is very important that you do not go back to sports if you have any concussion symptoms or signs. Return to sport and activity must follow a step-wise approach:

- STEP 1) No activity, complete rest. Once back to normal and cleared by a doctor, go to step 2.
- STEP 2) Light exercise such as walking or stationary cycling, for 10-15 minutes.
- STEP 3) Sport specific aerobic activity (ie. skating in hockey, running in soccer), for 20-30 minutes. NO CONTACT.
- STEP 4) "On field" practice such as ball drills, shooting drills, and other activities with NO CONTACT (ie. no checking, no heading the ball, etc.).
- STEP 5) "On field" practice with body contact, once cleared by a doctor.
- STEP 6) Game play.

## NOTE: EACH STEP MUST TAKE A MINIMUM OF ONE DAY. If you

have any symptoms of a concussion (e.g. headache, feeling sick to his/ her stomach) that come back either with activity, or later that day, stop the activity immediately and rest until symptoms resolve, for a minimum of 24 hours. See a doctor and be cleared before starting the step wise protocol again.

YOU SHOULD NOT GO BACK TO SPORT UNTIL YOU HAVE BEEN CLEARED TO DO SO BY A DOCTOR.



The ThinkFirst Canada Concussion resources were developed based on the Zurich Guidelines outlined in the Consensus Statement on Concussion in Sport and have been reviewed with great thanks to the ThinkFirst Concussion Education and Awareness Committee.

# CONCUSSION GUIDELINES FOR THE ATHLETE



#### WHAT IS A CONCUSSION?

A concussion is a brain injury that cannot be seen on routine x-rays, CT scans, or MRIs. It affects the way a person may think and remember things for a short time, and can cause a variety of symptoms.

#### WHAT ARE THE SYMPTOMS AND SIGNS OF CONCUSSION?

YOU DON'T NEED TO BE KNOCKED OUT (LOSE CONSCIOUSNESS) TO HAVE HAD A CONCUSSION.

THINKING PROBLEMS	AHLETE'S COMPLAINTS	OTHER PROBLEMS
<ul> <li>Does not know time, date, place, period of game, opposing team, score of game</li> </ul>	<ul> <li>Headache</li> <li>Dizziness</li> <li>Feels dazed</li> <li>Feels "dinged" or stunned; "having my bell rung"</li> <li>Sees stars, flashing lights</li> <li>Ringing in the ears</li> <li>Sleepiness</li> <li>Loss of vision</li> <li>Sees double or blurry</li> <li>Stomachache, stomach pain, nausea</li> </ul>	<ul> <li>Poor coordination or balance</li> <li>Blank stare/glassy eyed</li> <li>Vomiting</li> <li>Slurred speech</li> <li>Slow to answer questions or follow directions</li> <li>Easily distracted</li> <li>Poor concentration</li> <li>Strange or inappropriate emotions (ie. laughing, crying, getting mad easily)</li> <li>Not playing as well</li> </ul>
<ul> <li>General confusion</li> <li>Cannot remember things that happened before and after the injury</li> <li>Knocked out</li> </ul>		

#### WHAT CAUSES A CONCUSSION?

Any blow to the head, face or neck, or a blow to the body which causes a sudden jarring of the head may cause a concussion (ie. a ball to the head, being checked into the boards in hockey).

#### WHAT SHOULD YOU DO IF YOU GET A CONCUSSION?

YOU SHOULD STOP PLAYING THE SPORT RIGHT AWAY. Continuing to play increases your risk of more severe, longer lasting concussion symptoms, as well as increases your risk of other injury. You should tell your coach, trainer, parent or other responsible person that you are concerned you have had a concussion, and should not return to play that day. You should not be left alone and should be seen by a doctor as soon as possible that day. You should not drive. If someone is knocked out, call an ambulance to take them to a hospital immediately. Do not move them or remove athletic equipment such as a helmet until the paramedics arrive.

#### HOW LONG WILL IT TAKE TO GET BETTER?

The signs and symptoms of a concussion often last for 7-10 days but may last much longer. In some cases, athletes may take many weeks or months to heal. Having had previous concussions may increase the chance that a person may take longer to heal.



### **RETURN TO PLAY GUIDELINES**



A concussion is a serious event, but you can recover fully from such an injury if the brain is given enough time to rest and recuperate. Returning to normal activities, including sport participation, is a step-wise process that requires patience, attention, and caution.

#### STEP 1: NO ACTIVITY, ONLY COMPLETE REST.

Limit school, work and tasks requiring concentration. Refrain from physical activity until symptoms are gone. Once symptoms are gone, a physician, preferably one with experience managing concussions, should be consulted before beginning a step wise return to play process.

#### STEP 2: LIGHT AEROBIC EXERCISE.

Activities such as walking or stationary cycling. The player should be supervised by someone who can help monitor for symptoms and signs. No resistance training or weight lifting. The duration and intensity of the aerobic exercise can be gradually increased over time if no symptoms or signs return during the exercise or the next day.

SYMPTOMS? Return to rest until symptoms have resolved.

If symptoms persist, consult a physician.

NO SYMPTOMS? Proceed to Step 3 the next day.

#### **STEP 3: SPORT SPECIFIC ACTIVITIES.**

Activities such as skating or throwing can begin at step 3. There should be no body contact or other jarring motions such as high speed stops or hitting a baseball with a bat.

**SYMPTOMS?** Return to rest until symptoms have resolved. If symptoms persist, consult a physician.

NO SYMPTOMS? Proceed to Step 4 the next day.

#### STEP 4: BEGIN DRILLS WITHOUT BODY CONTACT.

**SYMPTOMS?** Return to rest until symptoms have resolved. If symptoms persist, consult a physician.

NO SYMPTOMS? The time needed to progress from non-contact exercise will vary with

the severity of the concussion and with the player. Proceed to Step 5

only after medical clearance.

#### **STEP 5: BEGIN DRILLS WITH BODY CONTACT.**

Return to rest until symptoms have resolved. If symptoms persist, consult a physician.

NO SYMPTOMS? Proceed to Step 6 the next day.

STEP 6: GAME PLAY.



The ThinkFirst Canada Concussion resources were developed based on the Zurich Guidelines outlined in the Consensus Statement on Concussion in Sport and have been reviewed with great thanks to the ThinkFirst Concussion Education and Awareness Committee.

### **RETURN TO PLAY GUIDELINES**



### **NEVER RETURN TO PLAY IF YOU STILL HAVE SYMPTOMS!**

A player who returns to active play before full recovery from the first concussion is at high risk of sustaining another concussion, with symptoms that may be increased and prolonged.

#### **HOW LONG DOES THIS PROCESS TAKE?**

These steps do not correspond to days! It may take many days to progress through one step, especially if the concussion is severe. As soon as symptoms appear, the player should return to rest until symptoms have resolved and wait at least one more day before attempting any activity. The only way to heal a brain is to rest it.

#### **HOW DO I FIND THE RIGHT DOCTOR?**

When dealing with concussions, it is important to see a doctor who is knowledgeable in concussion management. This might include your physician or someone such as a sports medicine specialist. Your family doctor maybe required to submit a referal to see a specialist. Contact the Canadian Academy of Sport and Exercise Medicine (CASEM) to find a sports medical physician in your area. Visit www.casm-acms.org for more information. You can also refer your doctor to the concussion pages of thinkfirst.ca for more information.

#### WHO DO THESE GUIDELINES APPLY TO?

These guidelines were developed for children over the age of 10; those younger may require special guidelines, and more conservative treatment and care. Return to Play Guidelines should be at the discretion of the physician.

#### WHAT IF MY SYMPTOMS RETURN DURING THIS PROCESS?

Sometimes these steps can cause symptoms of a concussion to return. This means that the brain has not yet healed, and needs more rest. If any signs or symptoms return during the Return To Play process, they should stop the activity and rest until symptoms have resolved. The player must be re-evaluated by a physician before trying any activity again. Remember, symptoms may return later that day or the next, not necessarily during the activity!

