# concussion [kuhn-kuhsh-uhn]

noun

- 1 *Pathology*. injury to the brain or spinal cord due to jarring from a blow, fall, or the like.
- <sup>2</sup> shock caused by the impact of a collision, blow, etc.
- <sup>3</sup> the act of violently shaking or jarring.

# concussion awareness presentation hockeyalberta.ca





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## CONCUSSION 101

A concussion is an injury, one that you cannot see.

A concussion is a traumatic brain injury caused by a blow to the head, face, neck, or body that transmits a force to the head.

A concussion does not discriminate among age, skill level, experience, or any other factors.

A concussion can be caused by accidental contact or collision between players or boards, hitting the ice, being hit with a stick or puck, legal or illegal body contact.

A concussion results in short term impairment.

## 2 RED FLAGS

If you see ANY of the following, REMOVE the player immediately, and SEEK medical attention:

- Neck pain or tenderness
- Double vision
- Weakness, tingling or burning in arms or legs
- Severe, or an increasingly severe headache
- Seizure, convulsion, loss of consciousness, or deteriorating state of consciousness
- Vomiting
- Increasing agitation, aggressiveness, or restlessness

### SIGNS & SYMPTOMS

Visible signs a concussion may have occurred:

- Lying motionless or slow to get up
- Balance and/or coordination issues, stumbling, slow or labored movements
- Blank or vacant look, disoriented, confusion, inability to respond appropriately
- Facial injury



Symptoms of a concussion include:

- Dizziness, vertigo, ringing in the ears
- Light sensitivity, blurred or double vision
- Fatigue, trouble falling asleep
- Nausea and/or vomiting
- Loss of consciousness, amnesia
- Irritability, depression, or mood swings
- Cognitive impairment
- Slowed reaction time and feeling "in a fog"

#### What to consider:

Only one sign needs to be visible to think about a possible concussion.

Symptoms and signs may evolve in minutes or several hours later.

Players may not tell you what happened or how they feel, so you may need to observe what is out of character or not normal for the player.

Context is important too, ask yourself is the player tired because of a long shift or because there was just a collision.

Trust your gut, if it is out of character, it is better to be cautious, suspect a concussion has happened and be proven otherwise.

When in doubt REMOVE THE PLAYER and DO NOT LEAVE the player alone.

Players may downplay the impact or hide signs for fear of being removed, missing opportunities, or letting down their teammates, coaches, or parents.

Coaches or parents may pressure a player to tough it out because it is a big game or miss being seen.

A concussion effects a person's ability to play the game, therefore a player is less effective and contributes less to the team.

Proper recognition and removal will get the player back preforming at a high level sooner.

Remember, a concussion is an injury and just like any injury proper recovery is key.

It is easier to miss a game now than forget words when you are an adult, returning to life is the priority.



## 4 RECOVERY

Six step progression designed to gradually increase cognitive and physical exercise until the player is fully recovered. As part of Hockey Canada's Return to Play policy it is expected that all steps are completed.

Only when a player is sign and symptom free does the player progress to the next step, if signs or symptoms return or are aggravated then he or she MUST return to the previous step.

Each step takes twenty-four hours, minimum completion is seven days.

It is not black and while, each person navigates the process differently, allow the player to navigate through the process at his or her own pace this means.

Players: Listen to what your body is saying, if it does not feel right, listen to it, and do not be afraid to communicate it.

Parents: listen to what your child is saying and do not dismiss the concern.

A player should not be participating in contact drills BEFORE a full return to school has occurred.

## 5

### FIRST 24 TO 48 HOURS

Keep an eye on the player but does not need to be watched 24/7.

The player is resting, but not all the time.

Rest does not mean sitting in a dark room, it means take it easy and do not overwork the brain.

The player is not turning his or her life off and is not sedentary.

Minor screen time and light activity are ok in moderation, common sense can be a helpful guide.

- if it makes the player feel worse or aggravates a symptom then stop doing it
- If the player is fatigued, then let him or her take a nap
- If the player feels the need to move, then allow him or her walk around the house

Step 1 – Light Cognitive Activity

Light activities of daily living that do not aggravate or make symptoms worse.

The goal is not to provoke symptoms further, some symptoms are ok if the action is not making the symptom worse.

If the player needs to take a step back, that does not mean the player stops everything.



Step 2 – Light Physical Activity

Light aerobic exercise, school type work, but **NO** resistance training or weightlifting.

Step 3 – Returning to school and sport specific training

Start to integrate the participant back to specific activities such as longer cognitive activities, partial return to school, running, skating, and off ice stickhandling and passing drills.

The less stimuli the better, as you add stimuli it becomes more difficult for the brain to process them all.

Monitor for symptoms during and after activities.

Step 4 - Return to School and Non-Contact Drills

The goal is to be at near normal cognitive activities, a routine school workload as tolerated, light resistance training, progressive weight training, and no body contact drills that would "jar" the head.

Be aware of what is going on in a drill, as intensity increases nonintentional contact may occur.

If there is significant time between ice times, try drills in a monitored environment like an outdoor rink.

Step 5 – Body Contact

Physician approval needed and the participant has fully returned to school.

Goal is to reacclimate to on ice situations and protect the player's head.

Focus on getting the player into:

- Physical game shape: on ice condition and up to game speed
- Mental game shape: comfortable in the environment and can think and react properly

#### Step 6 – Return to Gameplay

It is GRADUAL return to normal play, especially if it has been a longer layoff.

Make sure the player is fit for gameplay:

- Mentally comfortable and not anxious
- Physically skill and conditioning
- Cognitively comfortable with the stimuli of fans, other participants, and noise

Continue to monitor for signs and symptoms.



### ROLES & RESPONSIBILITIES

Everyone has a role in the recognition and recovery of a concussion.

- Parents support the recognition, removal, and recovery from a concussion or concussion like symptoms
- Coaches ensure the safety of all participants by teaching proper technique, communicating respect, and supporting the recognition and removal of an injured player
- Team Safety Person recognize the signs and symptoms of a concussion, remove a player when injured, and ensure the player has gone through a proper return to play process
- Teammates recognize when a teammate has suffered an injury and provide your support throughout the recovery process
- Players recognize when something is not right, tell someone about what you are feeling, and have patience during the recovery process

Just because a concussion has happened it does not mean a person should be isolated from his or her social network, by not feeling alone or left out of activities the player will feel better emotionally and less likely to fast track a return for fear of missing out.

For more information on concussions visit hockeyalberta.ca

