Concussion Management Protocol and Requirements



A great tool for educating associations, coaches, players, and parents!

AUTHORED BY

Jacob Mars

USA Hockey Level 5 - Master Coach Thesis: Concussions in Hockey jmars@showdownsportsinc.com

Hal Tearse

Coach-in-Chief Chairman, Safety Committee Minnesota Hockey halt@minnesotahockey.org

Dr. Michael Stuart

USA Hockey Chief Medical Officer Mayo Clinic: Rochester, MN

You would rather miss one game than an entire season!



Concussions in Youth Hockey Important Information

SYHA mandates that a youth athlete exhibiting any signs or symptoms of a concussion be removed from play immediately. In order to return to play, the athlete must be evaluated by and given written permission from a health care professional.

What is a Concussion?

A concussion is a brain injury. Concussions are caused by a bump or blow to the head. Even a "ding," "getting your bell run", or what seems to be a mild bump or blow to the head can be serious.

You cannot see a concussion. Signs and symptoms of a concussion can show up right after the injury or may not appear or be noticed until days or weeks following the injury.

Interesting Facts

- 75% of concussions occur when players do not have possession of the puck.
- A small blow to the head can cause a concussion; it does not take a big hit for a player to be concussed.
- If a player receives a second concussion while recovering from another concussion, the risk of long term damage greatly increases.
- Helmets and mouth guards alone do not prevent concussions. A combination of equipment, safe play, and proper hockey training will prevent concussions.
- Concussions occur at all levels of hockey to both male and female players.

Concussion Prevention

- Teach proper skating technique (head up to see surroundings, knee bend for proper balance) and how to correctly give and receive a hit (see USAHockey.com for material). This is applicable for both boys and girls.
- Helmets must fit securely around the head and be fastened tightly.
- Perform neck strengthening exercises.
- Do not allow players to play in a dangerous manner. The attitude of the coach and parent plays a role in a player's aggressiveness.
- Teach your players about the prevention, management, and treatment of concussions.

Untreated concussions may result in depression, anxiety, memory loss, and possible suicidal thoughts and behavior. It is very important that players be properly cared for after suffering a concussion in order to ensure their long term safety.

If you believe your child or athlete has sustained a concussion... take him/her out of play and seek the advice of a health care professional experienced in evaluating for a concussion.

You would rather miss one game than an entire season!

For more information, please visit www.CDC.gov/ConcussionInYouthSports

Association Education for Proper Concussion Care



These tools are suggestions for associations in properly educating coaches, parents, and players on the seriousness of concussions. Associations play a vital role in the safety of their players.

Coaching Education

Associations should educate their coaches about the seriousness of concussions. Reiterate that although you cannot "see" the injury, it does not mean the injury does not exist. An informational webinar educating coaches about concussion prevention, management, and treatment is available at at CDC.gov.

Make all the concussion related resources available to coaches, such as the "Coaches Fact Sheet", "Return to Play Guidelines", and options for player testing (i.e., neuropsychological test).

Emphasize to the coaches that the safety of players is more important than winning a hockey game. Improperly treated concussions may cause long term damage unnoticeable for many years.

Parental Involvement

Parents need to be involved whenever a player is injured. In order for that to happen, parents must know the signs and symptoms of a concussion, both on injury-date and post injury, and should be aware of possible resources for more information.

Associations must remind parents that coaches have the final say about return to play in a game if the coach suspects a concussion. Coaches are legally obligated to take a player out of play if they suspect a concussion. Parents must have their child seen by an informed health care professional, and provide the coach with a return to play note from the health care professional before the player may play.

Make the "Return to Play" guidelines available for all parents if their child sustains and concussion. Keep the dialogue open between the association, coaches, and parents while a player is recovering.

Player's Own Safety

Young hockey players tend to believe they are invincible. It is important they understand how severe head injuries are, and that it is their job to properly protect themselves. Players should securely fasten their helmet and always wear their mouth quard properly.

When skating, players should have correct body stance and keep their head up. This will help them balance themselves for contact and also be aware of their surroundings.

Players must be able to communicate effectively with their coaches and parents. Players must be educated on the signs and symptoms of a concussion; not just for their own safety, but for the safety of their friends.

You would rather miss one game than an entire season!



Concussions In Hockey Coaches Fact Sheet

Possible Signs and Symptoms

OBSERVED BY COACHING STAFF

Appears dazed or stunned

Is confused about assignment or position

Forgets general hockey plays (breakout, etc...)

Is unsure of game, score, or opponent

Moves clumsily

Answers questions slowly

Loses consciousness (even briefly)

Shows behavior or personality changes

Can't recall events prior to or after hit or fall

SYMPTOMS REPORTED BY ATHLETE

Headache or "pressure" in head

Nausea or vomiting

Balance problems or dizziness

Double or blurry vision

Sensitivity to light and/or noise

Feeling sluggish, hazy, foggy, or groggy

Concentration or memory problems

Confusion

Does not "feel right"

If you believe your athlete has sustained a concussion... take him/her out of play, and seek the advice of a health care professional experienced in evaluating for a concussion.

On-Bench Assessment

The following are ways to assess a player if you suspect a concussion. This is not a diagnostic tool, and the player should still be seen by a health care professional.

MEMORY: Ask the player questions they should know the answer to, such as date, period, opponent.

FOCUS: Talk with the player, are they focusing on the conversation? Able to speak with coherent sentences?

PHYSICAL TEST: Ask the player to touch their finger to their nose numerous times, is the player able to do this properly?

Action Plan

If you suspect a player has a concussion, you should take the following steps:

- 1) Remove athlete from play, keep him/her supervised, and alert the athletes parents of their signs and symptoms.
- 2) Ensure athlete is evaluated by an informed health care professional. Do not try to judge the seriousness of the injury yourself.
- 3) Inform athlete's parents of MN Hockey suggested "Return to Play" guidelines, and give athlete's parents the "Parents Fact Sheet".

Source: Center for Disease Control



Concussions In Hockey Parents Fact Sheet

What is a Concussion?

A concussion is a brain injury. Concussions are caused by a bump or blow to the head. Even a "ding," "getting your bell run, " or what seems to be a mild bump or blow to the head can be serious.

You can't see a concussion. Signs and symptoms of concussion can show up right after the injury or may not appear or be noticed until days or weeks after the injury. If your child reports any symptoms of concussion, or if you notice the symptoms yourself, seek medical attention right away.

What to do if you think your child sustained a concussion

If you suspect your child has a concussion, you should take the following steps:

- 1) Remove athlete from play and alert their coaches of any prior concussions.
- 2) Have athlete evaluated by a health care professional. Do not try to judge the seriousness of the injury yourself.
- 3) Review the "Return to Play" guidelines with your doctor and devise a plan for your child to return to play.

Possible Signs and Symptoms

OBSERVED BY PARENTS or GUARDIANS

Appears dazed or stunned

Is confused about assignment or position

Forgets general hockey plays (breakout, etc...)

Is unsure of game, score, or opponent

Moves clumsily

Answers questions slowly

Loses consciousness (even briefly)

Shows behavior or personality changes

Can't recall events prior to or after hit or fall

SYMPTOMS REPORTED BY ATHLETE

> Headache or "pressure" in head

> > Nausea or vomiting

Balance problems or dizziness

Double or blurry vision

Sensitivity to light and/or noise

Feeling sluggish, hazy, foggy, or groggy

Concentration or memory problems

Confusion

Does not "feel right"

If you believe your child has sustained a concussion... take him/her out of play, and seek the advice of a health care professional experienced in evaluating for a concussion.

You would rather miss one game than an entire season!

Source: Center for Disease Control



Concussions in Youth Hockey Players Fact Sheet

What is a Concussion?

A concussion is a brain injury. Concussions are caused by getting hit in your head. Even a "ding," "getting your bell run," or what might be a little bump or blow to the head can be very bad.

You can't see a concussion. Signs of concussion can show up right after the injury or might be a few days or weeks after the hit. If you or a friend have any of the signs and symptoms, tell an adult right away so you or your friend can seek help.

Signs of a Concussion

WHAT TO LOOK FOR

Looking confused

Not remembering position, even for a few seconds

Forgets hockey plays (breakout, etc...)

Does not remember game, score, or other team

Moves clumsily

Answers questions slowly

Loses consciousness/ is "knocked out" (even briefly)

Acts differently

What remember what happened before or after the hit

THEY MAY REPORT

Headache or MCFIE "pressure" in head

Getting sick or throwing up

Balance problems or dizziness

Double or blurry vision

Hard to look at light or hurts to hear loud sounds

Feeling sluggish, hazy, foggy, or groggy

Can't concentrate or does not remember

Confusion

Does not "feel right"

Keep Yourself Safe

- Have your knees bent and head up while skating. Balance and knowing what is happening around you is very important to staying safe!
- Have your helmet buckled and tight around your head and always wear your mouthquard.
- Neck strengthening exercises.
- Do not play in a way that would hurt another player.
 Follow all the rules of hockey!
- Learn about the prevention, management, and treatment of concussions.

You would rather miss one game than an entire season!

If you think a friend has had a concussion, remove them from play and find an adult. Tell the adult what happened, and the signs of a concussion they show.

For more information, please visit www.CDC.gov/ConcussionInYouthSports

Source: Center for Disease Control



Return to Play Guidelines After a Concussion

These guidelines are meant to act as a suggestion for players after they suffer a concussion. The length of each phase varies depending on the severity of the concussion, and should be decided based on consultation with a health care professional. Variables include past medical history, age, weight, severity of symptoms, return of symptoms, etc... There is no exact return to play time line, however, it may vary from one-week to not being able to play again.

Phase #1: Rest Period

Player should be taken out of play and referred to a health care professional. A concussed player needs to get plenty of rest. They should refrain from all physical and brain intense activity, including text messaging and video games. Parents are urged to speak with the player's school and teachers. Depending on the severity, players may need to stay home from school or limit homework and exams.

Players should continue to the next phase only if all the signs and symptoms of a concussion are gone. Please consult an informed health care professional if the signs and symptoms continue throughout the return to play protocol.

Phase #2: Light Exercise

If the player does not have any symptoms, begin light aerobic exercise (5-10 min) that does not drastically increase heart rate. Walk, light jog and stationary bike are suggested. No weights, jumping, or skating. Add activity that increases heart rate & limited body and head movement. May return to school part-time with a limited workload and watch some TV.

Phase #4: Non-Contact Training Drills

Begin heavy non-contact physical activity, such as running, stationary bike and resistance training. Player is allowed back on the ice, including practice, but without contact. Continue to increase school workload.

Phase #3: Sports Specific Exercise

If the player has been evaluated by an informed health care professional, the player may resume skating, but not participate in practice. May return to school full-time, gradually increase reading and homework, but avoid video games.

Phase #5: Full Contact Practice

Reintegrate back into full practices, including contact drills and scrimmage. Participate in all academic school activities.

Phase #6: Return to Competition

Return to game competition, after cleared by an informed health care professional

Source: Mayo Clinic; Dr. Michael Stuart