

# Head injury (concussion) prevention

By Steve Olson

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**C**oncussion injuries are on the rise in all sports, but it may be the worst in ice hockey.

There are a number of valid theories as to why we are seeing more concussions such as:

- Coaches are recognizing and reporting concussion injuries.
- The game is being played at a faster pace at all levels resulting in more intense collisions.

• The rapid growth of the game has produced more inexperienced players that are not able to protect themselves.

Organizations such as HECC (Hockey Equipment Certification Council) and CSA (Canadian Standards Association) as well as equipment manufacturers are putting forth diligent efforts to develop safer equipment. Unfortunately, in many situations, these efforts are limited to the understanding that participants will utilize the equipment as recommended. We as medical personnel, coaches, parents and officials need to take a stronger stand to enforce these guidelines when it comes to equipment.

Many players are allowed to wear helmets that are not properly fit, are damaged, or have been altered.

Some guidelines to follow regarding helmets are:

- A properly fit helmet should sit just above the eyebrows (2-3cm).
- It should fit tight enough to stay still in that position without movement. It should not slide forward obstructing vision or back to where it can come off. Side to side motion should be minimal as well.
- The chinstrap should be fastened so that only one finger moves between the strap and the chin.
- The helmet or face mask should not be altered in any way.
- The face mask or visor must be proper for the helmet it is being used with.
- Consider changes in hairstyles. Kid's hair can range from bushy and long to short and shaved in the same season. This



## ASK THE DOCTOR

By Dr. Jeff S. Pierce



will affect the fit of the helmet.

Things to check for on a regular basis include:

- Cracks or chips. A helmet with these defects must be replaced.
- Check the liners. Sweat, hairspray, gel, etc. will deteriorate liners.
- Check all rivets and snaps and replace if necessary.

Research has shown that a properly fit mouth guard can be valuable in preventing/reducing concussion injuries. There are many different types of mouth guards from those that you purchase and form in hot water to those that are custom fit by a dentist. It is important that one be worn at all times as recommended by the manufacturer without alterations in order to be effective.

Concussion injuries are becoming more prevalent in ice hockey. One can speculate as to why, but it is difficult to argue that as medical personnel, coaches, parents and officials we are doing all we can do to prevent these injuries. I challenge all adults that are involved in the sport to check the fit of their young player's helmets. Check the helmets for damage and look at the mouth guards.

I have seen instances where parents are willing to spend a small fortune on hockey sticks and bought a helmet a size too large in hopes to get a "few" seasons out of it. Officials and coaches need to enforce the rules that are part of the game regarding mouth guards. All too often players are allowed to alter their mouth guards, rendering them ineffective or even not wear them at all.

Concussions are never going to be totally eliminated from hockey. But by

following the guidelines that currently exist and enforcing equipment regulations, I am certain that we will see a reduction of concussion injuries.

If you have any questions regarding this topic or any others, please feel free to contact Michigan Sports & Spine Center at 248-680-9000.

Steve Olson works with Dr. Jeff S. Pierce, founder of the Michigan Sports and Spine Center (MSSC). The center focuses on treating all types of athletes, with proper examination, which leads to the correct diagnosis. An appropriate therapy program is established based on the results of the evaluation.

Dr. Pierce is a Sports Medicine Rehab Specialist and is the founder of the MSSC. He has been taking care of Little Caesars AAA Midget teams for four years and continues to help out with all AAA Travel teams.

He also takes care of all of U-M Dearborn athletes and the ABA Dogs players.

He is a board member of the Governor's Council on Physical Fitness. MSSC's main office is located in the Troy Sports Center in coordination with the Training Room, the Official Training Center for the Detroit Red Wings. Our other locations are in Farmington Hills and Garden City.

Pre-season physicals are always available for all ages at Michigan Sports and Spine Center. Write us at 1819 E. Big Beaver, Suite 210, Troy, MI 48083; call 248-680-9000 or visit our website at [www.michigansportsandspinecenter.com](http://www.michigansportsandspinecenter.com). Good luck to all our competitors. We look forward to hearing from you.