

OPTIMAL HEALTH UNIVERSITY™

Presented by Dr. Edwin Lau

Preventing Ice Hockey Injuries

Ice hockey is a wildly popular sport among adults and children alike. And it's not just for cold-weather climates anymore; indoor ice rinks have created hockey players in all parts of the world. Part of ice hockey's appeal is its speed, but that speed also contributes to the sport's high injury rate. In fact, "an estimated 32,750 individuals with ice hockey-related injuries were treated in US emergency departments in 2001-2002." (Pediatrics 2004;114:e661-6.)



There are ways to prevent ice hockey injuries, including chiropractic care with Dr. Lau, which helps hockey players prevent and quickly recover from injuries. With a few preventive measures, the benefits of ice hockey can outweigh the risks. As a recent study concludes: "Children and adults alike can reap the physical fitness and social benefits from ice hockey, when they are able to avoid predictable and preventable injuries." (Pediatrics 2004;114:e661-6.)

Visit the Chiropractor Before Hitting the Ice

A thorough exam by a doctor of chiropractic is an important step before starting to play hockey or beginning a new season. Dr. Lau will ensure that you don't have any conditions that would put you at higher risk for injury — and will also share tips for playing safe and injury-free.

One ailment Dr. Lau will check for is *vertebral subluxations* — or mis-

aligned spinal bones (vertebrae). These dysfunctional areas affect not only the spine, but can also lead to conditions throughout the body, including problems that could affect a player's hockey game or boost the chances of injury.

And if you do sustain a hockey injury, chiropractic is proven as a highly effective solution for many common hockey injuries. Read on for details.

Chiropractic Care for Shoulder Injuries

A recent study of 71 youth hockey teams found that "concussion, shoulder sprain/dislocation, and knee sprain were the most common injuries." (Am J Sports Med 2006;34:1960-9.)

Research also reveals that chiropractic is a safe, effective, nonsurgical option for shoulder instability in hockey players. A recent case study followed a professional hockey player who "had two previous unsuccessful shoulder operations to correct the instability. He reported that the shoulder 'slips out' in positions of abduction and external rotation or when the left arm is moved suddenly above shoulder height."

Following chiropractic care and rehabilitative exercises, his symptoms greatly decreased. The study concludes: "This case demonstrates the potential benefit of chiropractic management and proprioceptive exercises

to decrease the symptoms of recurrent shoulder instability." (J Manipulative Physiol Ther 2001;24:425-30.)

Chiropractic Care for Knee Sprains

A 2007 review of 16 years of National Collegiate Athletic Association (NCAA) injury data for men's ice hockey found that "knee internal derangement (13.5%) was the most common lower extremity injury reported for games, whereas pelvis and hip muscle strains (13.1%) were the most common injury reported during practices. Player-to-player contact was the most frequent game mechanism of injury (50.0%)." The study concluded that "clinicians and researchers should identify risk factors and interventions for muscle strains at the pelvis and hip region." (J Athl Train 2007;42:241-8.)



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Fortunately, chiropractic care is proven effective in healing hip strain and the related knee complications.

When the knee becomes strained, chiropractic adjustment of the knee and hip (sacroiliac joint) will lessen leg muscle inhibition, and encourage healing and recovery (*J Manipulative Physiol Ther* 2000;23:76-80). Chiropractors also teach guided exercises, which will reduce pain and enhance muscle balance after injury (*Clin J Sport Med* 2000;10:22-8).

Preventing Groin Injuries

A recent study found that adductor (groin) strains are among the most common injuries in ice hockey and that hip adductor weakness is a strong risk factor.

The researchers concluded that “A therapeutic intervention of strengthening the adductor muscle group appears to be an effective method for preventing adductor strains in professional ice hockey players.” (*Am J Sports Med* 2002;30:680-3.)

The Importance of Proper Ice Hockey Safety Gear

One scientific study concluded that “The links between causes and mechanisms of the different kinds of injuries make it clear that a marked tightening of the rules and an improvement in protective clothing would serve to reduce the incidence of injuries in ice hockey.” (*J Sports Sci* 1987;5:327-36.)

Hockey players can prevent many injuries by wearing all their safety gear properly. Parents should take care that their children wear all recommended safety gear every time they play and practice, whether it is in a formal setting or an informal practice with friends. All youth, high school and college ice hockey leagues require players to wear the following gear: a helmet with foam lining and full face mask; a mouth guard; pads for the shoulders, knees, elbows and shins; and gloves. Some leagues recommend neck guards.

Also make sure that your child’s equipment fits properly. The helmet should fit snugly with a strap that gently cradles the chin when it’s fastened.

Full Facial Protection

Youth hockey players are now required to wear full face masks. This is an essential safety precaution. A half mask is **not** an appropriate substitute.

A 2005 study published in the journal *Medicine and Sport Science* found that “the frequency of catastrophic eye injuries has been significantly reduced with the world-wide mandation of full facial protection for all Minor hockey players.” (*Med Sport Sci* 2005;49:86-119.)

Another recent study of 226 patients with ice-hockey-related head, neck or facial injuries found that “full facial protection reduced the chance of upper facial injury, but the risk of such injury while wearing a half-visor was the same as while wearing no facial protection at all.” (*Clin J Sport Med* 1997;7:162-7.)

The Dangers of Checking

Doctors of chiropractic are especially concerned about the practice of body checking in ice hockey, particularly among younger players. Many youth leagues prohibit checking, but not all do. Body checking, or using the hip and shoulder to slow or stop an opponent who has the puck, is the most commonly reported cause of injury. It’s also associated with the more severe injuries. “Previous studies conducted worldwide have shown that the rate of injury increases as the size and the speed of players increase, as well as when checking is allowed.” (*Pediatrics* 2004;114:e661-6.)

In 2002, Hockey Canada changed the age classifications for minor ice hockey, thereby allowing children as young as 11 to body check. A 2006 study in the *Canadian Medical Association Journal* examined the effect of this policy change and concluded: “The introduction of bodychecking to 11-year-old players was associated with a large increase in injury rates.

From a public health perspective, the age at which bodychecking is introduced in minor hockey should be raised.” (*CMAJ* 2006;175:155-60.)

In the March 2000 edition of the journal *Pediatrics*, the American Academy of Pediatrics published the following recommendations regarding youth ice hockey:

- ✓ “Body checking in youth hockey should not be allowed for children 15 years or younger.
- ✓ Programs that promote good sportsmanship, such as the fair-play concept, have been shown to reduce injury and penalty rates and should be adopted for all levels of youth hockey.
- ✓ Youth hockey players, parents and coaches should be educated about the importance of knowing and following the rules, as well as the dangers of body checking another player from behind.” (*Pediatrics* 2000;105:657-8.)



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