

## Head-to-toe protection

**More than 2 million kids under age 18 play hockey in the United States each year. Overall, hockey is a relatively safe sport with the benefits of participation outweighing the risk of injury. But at more advanced levels, speed of the sport picks up and collisions between players, the rink, the ice and the puck are common. Injury can result.**

Research has concluded that many trips to the emergency room may be prevented through the appropriate use of properly fitted hockey protective equipment. Today's well-dressed hockey player wears head-to-toe protection including:

- Helmet with face shield and mouth guard
- Hip, shoulder and knee pads
- Chest protector
- Gloves
- Skates

Most hockey injuries occur to the head and face. Lacerations, concussions, mouth and jaw injuries can all be reduced by wearing a properly fitted helmet and facemask. It is estimated that hockey face protectors and eye shields alone save society more than \$10 million in related health care costs annually.

Helmets should fit snugly with an adjustable chinstrap that prevents side-to-side and back-and-forth motion. Look for a helmet approved by the Hockey Equipment Certification Council (HECC). Always wear a face shield or mask and a properly fitted mouth guard. You can purchase a boil-and-bite mouth guard or have one custom-made for you, by your dentist. The most effective mouth guards fit well, are comfortable, stay in place, are durable and easy to clean, and do not restrict speaking and breathing. Check your league or team regulations to learn what mouth guard is required.

Hockey shoulder pads generally fit over the head and include a chest and back protector to provide total protection for the shoulder joint, shoulder girdle, collarbone and chest. Properly fitted shoulder pads should allow the players to move their arms and shoulders freely and to have full range of motion while using the hockey stick. To be effective in preventing injury, shoulder pads need to be properly tied or latched.

Hard, plastic hockey elbow pads protect the elbow joint from impacts, falls and unnatural twisting movements. Hockey gloves should provide full protection for the hands and wrists without compromising a player's ability to grip the hockey stick. Thumb injuries are common in hockey. Be sure to buy gloves that have sufficient thumb protection. The glove's palm and cuff need to be flexible but protective.

Hockey pants today are manufactured with pads built inside to cover and protect the hips, thighs, kidneys and tailbone. Properly fitted pants can prevent your pads from sliding out of place and exposing an area to injury. You also need to protect your groin from taking a direct blow. Many hockey players invest in groin protection specifically designed for hockey. These cups are thicker and more padded than regular athletic cups and look a bit like groin protection used by boxers.

Equipment worn by hockey goaltenders is in a class by itself. Designed to stop slap shots in excess of 100 miles per hour, you may find some National Hockey League goalies wearing nearly 50 pounds of gear on the ice. In general, a complete set of hockey goalie gear weighs approximately one-fourth of the goalie's body weight.

A hockey goalie helmet with facemask is often made of fiberglass or Kevlar, and it includes a neck protector. Goalie leg pads not only protect the knees and shins, but they are designed, within restrictions, to give the goalie an additional blocking surface. Goalies also must wear a catching glove and a blocker to help stop the puck. A goalie stick completes the ensemble, with its larger blade to assist with blocking shots and deflecting flying pucks.

Most reputable retailers that sell certified protective hockey gear can assist you in making proper, well-fitting equipment choices. Make sure to examine your gear frequently for signs of wear and replace worn or ill-fitting equipment on a regular basis.

Remember, prevention is the most effective treatment for any type of sports-related injury.

Share comments or questions on this information. E-mail [sports.medicine@marshfieldclinic.org](mailto:sports.medicine@marshfieldclinic.org).