# ice hockey injury prevention

Ice hockey has one of the highest sports injury rates for children. However, many injuries can be prevented by increasing the level of awareness and knowledge among players, parents and coaches. A high proportion of ice hockey injuries result from intentional body contact or body checking. Using strategies such as the fair play concept can also help decrease injuries that result from penalties or unnecessary contact. Head and neck injuries account for 23 percent of the total number of injuries, while body checking accounts for 86 percent of injuries during games.

#### common injuries

- Head and neck injuries
- Concussions
- Face injuries
- Avulsions/fractures/growth plate injuries of arms and legs
- Sprains
- Strains
- Lacerations
- Abrasions/bruises

### preventing ice hockey injuries

- Players should keep their head up during falls and not duck during collisions.
- Play by the rules and promote good sportsmanship.
- Establish a good stretching program for hip flexors (front of hips), groin (hip adductors, inside of leg), I-T band (outside of thighs), quadriceps (front of thighs), hamstrings (back of thighs), gastrocnemius/soleus (calves), rotator cuff/shoulders (muscles around the shoulders), upper and lower back and neck.
- Establish a good strengthening program for hip flexors, hip abductors (inside of legs), quadriceps, hamstrings, gastrocnemius/ soleus, upper and lower back, neck, core, rotator cuff/shoulders, biceps and triceps (upper arms).
- Establish a strengthening program to help the upper body better absorb impacts associated with giving and receiving checks. Players should not do body checks until 16 years of age.
- Establish off-the-ice activities that promote balance reactions, proprioception and body awareness.
- Establish an off-the-ice plyometric and agility program.



- Use safety equipment including a helmet with face mask, mouth guard, shoulder pads, elbow pads, gloves, groin protection, padded shorts and shin pads. Replace the helmet if it takes a significant blow
- Have proper-fitting skates and equipment and wear them correctly.
   Stick length should be three inches below the chin while wearing skates.
- Tape or brace joints if they are unstable or have a history of repetitive injuries.
- Be proactive in learning correct ice hockey techniques.
- Understanding of sport-specific patterns of injury should assist coaches and certified athletic trainers in developing preventive programs.
- Hydrate 30 minutes prior to practice/game and drink a combination of water/sports drinks during activities. Sports drinks are only recommended if practice/game lasts longer than one and a half hours.
- Take plenty of rest breaks and stop when athlete is tired.
- Do not play through pain.

# preseason conditioning programs

It is recommended to have a preseason, progressive conditioning program in place for young athletes to prepare their bodies for the sport. It is beneficial to start the program at least two to four weeks prior to the season to address flexibility, strength, balance/coordination, endurance, agility and ice hockey-specific techniques.

# warm-up guidelines

Research shows that cold muscles are more prone to injury, so always take time to warm-up and stretch. A comprehensive warm-up will take approximately 30 minutes.

- Start with five minutes of light aerobic activity, including skating and non-cutting linear drills to gradually raise the heart rate and increase blood flow to muscles.
- Spend at least 15 minutes stretching, following the guidelines listed above.
- Spend five minutes on ice hockey-specific drills .
- Finish with five minutes of high-intensity and multi-directional activities.



Sports Performance Orthopedic Rehab Team Specialists SPORTS
1-866-205-7270

This handout is for information purposes only. It does not replace medical advice from a qualified physician or physical therapist. Cook Children's Healthcare System will not be responsible for any harm or injury resulting from interpretation of the materials.