



Sports Shorts

GUIDELINES FOR PARENTS

Winter Sports Injuries

Authors: Danielle Greco, DO and
Chris Liebig, MD – Akron Children's Hospital

The winter months bring more than just snow. As winter sports gain more and more popularity, people are spending more time participating in various recreational activities throughout the winter season. Winter sports injuries are getting a great deal of attention at hospital emergency rooms, doctor's offices, and clinics.

SKIING

- Lower extremity injuries are the most commonly reported and outweigh upper extremity injuries by a ratio of 2:1.
- The majority of these injuries are to the knee.
 - Teaching skiers to fall forward instead of leaning back or squatting can help prevent knee injury.
- Head injuries account for a small portion of injuries, however, they represent the majority of severe injuries sustained.
 - Concussions are common, especially in adolescents.
- Upper extremity injuries do occur with the most common being called a "skier's thumb" or "gamekeeper's thumb."
 - Occurs when a child falls on a planted ski pole or when the child's thumb is caught in a strap causing the thumb to be bent awkwardly away from hand.

ICE SKATING

- Many injuries in ice skating are the result of overuse or improperly fitting skates.
- Friction from the skate against the inside and outside ankle bones may result in swelling and irritation.
- A painful enlargement on the back of the heel or "pump bump" occurs when the back of the skate fits improperly and causes repeated friction.

SLEDDING

- Many items are used to perform this activity, ranging from sleds with runners and toboggans to inner tubes and cardboard boxes. All share common design flaws such as little to no steering and no restraint system.
- Collisions with stationary objects account for at least half of major injuries.
- Head injuries are common, particularly in "head-first riding" and carry an increased risk for poor outcomes.
- Children younger than 6 have three times the number of head injuries as compared to those older than 12 years.
- Icy conditions increase both the speed of the sled and the number of injuries.
- Adult supervision has a profound effect on safety when sledding, as it prevents hill overcrowding and collisions.
- Ensure a proper run-out area (an area of sledding course that allows for deceleration and safe stopping) away from roads and frozen water
- Proper lighting should be provided for evening sledding to avoid collisions with stationary objects or other sledders.
- Sledding should be done in open, well-groomed areas that are free of obstacles.
- The safest sledding position is sitting while facing forward.

SNOWBOARDING

- Snowboarding is one of the fastest growing sports worldwide.
- Compared with skiing, there is a higher incidence of upper extremity injuries.
 - Wrist injuries are the most common, making up 20% of all snowboarding injuries.
- Head injury rates are three times higher in snowboarders than in skiers.
- Lower extremity injuries do occur with a unique fracture known as "snowboarder's ankle/fracture" occurring while landing jumps.

MEDICAL ISSUES

- 85% of ultraviolet waves reflect off the snow surface, increasing the effect of sun on exposed areas of skin and eyes.
- Cold injuries such as frostnip (redness, numbness, and burning pain of outermost skin) and frostbite are best treated with prevention by minimizing exposure of skin to cold environmental conditions.
 - If concerned about frostbite, place area in warm water or cover with warm washcloth. If numbness continues, call your pediatrician.
- There is a known increased prevalence of exercise-induced airway narrowing or "bronchospasm" in winter sport athletes.
 - The prevalence ranges from 11-50% and is thought to be due to the cold and dry air associated with most winter sports/recreation.
 - 90% of asthmatics will have exercise-induced bronchospasm (EIB).
 - If a child is diagnosed with asthma, **wearing a face mask or breathing through the nose** will help moisten and warm the air to prevent symptoms.
 - Follow your pediatrician's recommendations for proper use and timing of prescribed inhalers.

Preventing winter sports injuries and medical issues

Injuries vary from sprains and strains to fractures and dislocations. Furthermore, medical issues may arise with exposure to the cold environment. Taking the proper precautions prior to participation may prevent many of these concerns.

• Helmets should be encouraged for all snowboarders and skiers.

- Children should wear a properly fitted helmet and not one that they will "grow into."
- Children younger than 12 years should wear a fitted helmet while sledding.
- **Protective equipment** is always recommended.
 - Wrist guards are useful especially for snowboarders.
- Allow children to skate only on approved surfaces.

This information is available on the Ohio AAP website www.ohioaap.org Sports Shorts is provided by the Home and School Health Committee.