Skiing and Snowboarding

As winter sports are gaining in popularity, young children are hitting the slopes to learn skiing and snowboarding. However, not every young child may be prepared for the experience. Your child's age, strength, and ability to cooperate are a few factors to consider. Qualified instructors can often help parents determine if their child is ready for these sports. Most resorts begin ski school at 4 years old. Although snowboards are made for children as young as 4 years, some resorts will not teach snowboarding to children younger than 7 years.

With the growing popularity of skiing and snowboarding comes a greater number of injuries. However, the risk of injury can be reduced.

The following is information from the American Academy of Pediatrics about how to prevent skiing and snowboarding injuries. Also included is a list of common injuries.

Injury prevention and safety tips

- **Fitness.** All athletes need to develop and maintain a good general fitness level. Being physically fit will make these sports more enjoyable and help avoid injury from fatigue. Specific exercises to build muscle, strength, and endurance will also help.
- **Technique.** The key to successful skiing and snowboarding is control. To exercise control, one must learn proper skills, be aware of others on the slopes, and be able to adjust to changing snow conditions. It's also important to learn how to fall safely. Qualified instructors can help children learn the proper skills to participate safely and avoid injury. Age-specific classes can enhance the child's experience.
- **Skills.** If a slope is too difficult for skiers or snowboarders, they should remove their equipment and side-step down the slope.
- **Supervision.** Children need to have adult supervision, and teens or young adults need to have a buddy.
- **Equipment.** Practicing with the proper gear inside the home and in the backyard can make the transition to the slopes easier. Safety gear should fit properly and be well maintained.
  - **Skis and snowboards.** The binding setting should be properly adjusted. Rental or sales professionals can help choose equipment that is the proper size and fit.
  - **Helmets.** Use only helmets that are specifically designed for skiing or snowboarding. They should be professionally fitted to the child.
  - **Protective eyewear.** Eye protection is important to reduce glare from the reflection off the snow. Goggles should fit with the helmet being used. They should be made with polycarbonate or a similar material. The material should conform to the standards of the American Society for Testing and Materials (ASTM).
  - **Wrist guards and knee pads.** Snowboarders may also benefit from wrist guards and knee pads to prevent bruises and fractures.
  - **Clothing.** Winter clothing needs to be worn in layers with synthetic inner layers for wicking moisture and a waterproof outer layer, or shell.
  - **Sun protection** (sunscreen, lip balm with sunblock). Altitude and glare from snow make sun damage more likely.
- **Environment.** Weather conditions can change rapidly. Bring extra clothing, and plan to quit early if conditions become hazardous.
- **Fatigue and nutrition.** Skiing and snowboarding are hard work and require rest and adequate nourishment. Fatigue and dehydration can lead to poor control and injury.

Rules of the slope

The National Ski Areas Association endorses a responsibility code for skiers and snowboarders. Athletes should know the code or "rules of the slope" to help prevent accidents and injury. The code is prominently displayed at ski resorts. The 7 safety rules of the code are

1. Always stay in control and be able to stop or avoid other people or objects.
2. People ahead of you have the right of way. It is your responsibility to avoid them.
3. You must not stop where you obstruct a trail or are not visible from above.
4. Whenever starting downhill or merging into a trail, look uphill and yield to others.
5. Always use devices to help prevent runaway equipment.
6. Observe all posted signs and warnings. Keep off closed trails and out of closed areas.
7. Prior to using any lift, you must have the knowledge and ability to load, ride, and unload safely.

Common injuries

Because skiing and snowboarding involve rapid speeds, serious injuries can occur. Although rare, life-threatening injuries are possible, sprains and broken bones are the most common types of injuries from these downhill winter sports. The upper parts of the body are more likely to get injured in snowboarding than in skiing because of how the legs are attached to the snowboard.

Upper extremity injuries

Falling on an outstretched hand or shoulder is common for a snowboarder. Acute, severe pain that limits the ability to continue skiing or riding may be a sign of a broken bone. Treatment should include rest, ice, compression, and elevation (RICE). If pain does not go away, or there is deformity or problems with circulation to the arm, see a doctor right away.

Lower extremity injuries

Accidents when using the lift or collisions with other skiers or objects can result in a sprain or a broken leg. Injuries can also happen if bindings do not release when a skier falls. This is why it is important that bindings be adjusted properly so that they release in case of a fall. Anyone with severe pain or who cannot stand should call the ski patrol for help.

Knee injuries

Twisting injuries to the knee can result from skiing out of control or falling off the lift. Serious injuries, such as a tear in the anterior cruciate ligament, usually require transport by the ski patrol to a medical facility. More minor sprains, like the medial collateral ligament, can be treated with RICE. Skiers or snowboarders with severe swelling, persistent pain, and difficulty walking and moving the knee should see a doctor as soon as possible.

Head injuries

Collisions at high speeds can cause serious head injuries. While helmets are helpful at preventing head injuries, they need to be the right size and properly fitted to be protective.

A concussion is any injury to the brain that disrupts normal brain function on a temporary or permanent basis. The signs and symptoms of a concussion range from subtle to obvious and usually happen right after the injury but may take hours to days to show up. Athletes who have had concussions may report feeling normal before their brain has fully recovered. With most concussions, the athlete is not knocked out or unconscious.

Prematurely returning to play after a concussion can lead to another concussion or even death. An athlete with a history of concussion is more susceptible to another injury than an athlete with no history of concussion. Once a concussion has occurred, it is important to make sure the helmet is fitted properly.

All concussions are serious, and all athletes with suspected concussions should not return to play until they see a doctor.

Remember

Skiing and snowboarding injuries can be prevented when athletes use the appropriate safety equipment and safety guidelines are followed.

Notes

The information contained in this publication should not be used as a substitute for the medical care and advice of your health care professional. There may be variations in treatment that your health care professional may recommend based on individual facts and circumstances.

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