



## SKIING AND SNOWBOARDING INJURIES

**T**ens of thousands of skiers and snowboarders enjoy snowsports every year, however few prepare for the rigorous physical demands that these sports place on the body. Although they can be safe sports, unexpected injuries may occur with improper preparation, varied snow conditions, or poor judgment. Many injuries can be prevented by proper physical preparation, suitable and properly adjusted equipment, and common sense.

### What causes skiing and snowboarding injuries?

Most snowsport injuries are traumatic, caused by being on dangerous terrain, lift accidents, falls, and collisions. In many instances, fatigue after a long day on the slopes or poor judgment can be blamed for injuries. The most common issues that predispose people to injury are:

- Time skiing/snowboarding without rest
- Skiing/snowboarding above ability level
- Improper/faulty equipment
- Inadequate adjustment to altitude
- Dehydration/fatigue
- Skiing/snowboarding off trail or in closed areas
- Failure to observe posted warning signs by the mountain responsibility conduct code
- Poor skills or improper technique

### What are some of the most common skiing/snowboarding injuries?

The wide range of skiing and snowboarding injuries in the knee involves many areas of the body, including:

- Anterior cruciate or collateral (ACL) ligament injuries
- Shoulder dislocations or fractures
- Shoulder separations
- Lower extremity fractures
- Spinal injuries
- Closed head injuries
- Wrist, hand, or thumb injuries

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### How are skiing/snowboarding injuries treated?

Fortunately, most snowsport injuries are minor and can be treated with rest, bracing, nonsteroidal anti-inflammatory medication, and avoidance of secondary injury. However, some fractures and ligament injuries may require surgical intervention where recovery periods vary from 3 to 6 months or possibly more.

### How can snowsport injuries be prevented?

#### Proper Instruction and Equipment

Instruction prior to getting on the slopes is important in preventing injuries. Instructors can educate beginners on the importance of a good warm-up and cool-down, properly fitted equipment, and safe skiing techniques. These same principles hold true for snowboarders. They can also determine at what point it is appropriate for beginners to progress to more advanced levels of terrain.

Appropriate equipment is critical to being safe. Poorly functioning or improperly adjusted equipment is a frequent cause of injuries. Bindings that are too loose or too tight, as well as equipment that is improperly sized or used on improper terrain, can cause injury. Equipment should be professionally serviced and adjusted annually. Preventative equipment such as helmets can prevent disastrous and even fatal accidents, even though resorts do not universally require them. Only about 48% of U.S. skiers and snowboarders routinely wear helmets. In terrain parks, wrist guards and elbow and kneepads are also recommended. The use of protective equipment has been associated with a 43% decrease in the rate of head, neck, and face injuries.

#### Parental Oversight

Parents play an important role in educating their children about safe skiing and snowboarding practices. They should

help their children avoid terrain that is beyond their ability and encourage professional instruction and routine rest breaks with rehydration. It is also important to caution children against improper speeds and the risks of skiing/snowboarding out-of-bounds.

#### Common Sense Precautions

Most injuries occur after lunch and when fatigued. Be sure to stay adequately hydrated throughout the day and stop to rest every couple of hours. In addition, changing snow and ice conditions can dramatically increase the complexity of terrain quickly. Abiding by the signs and warnings are imperative for your safety and the safety of others.

Terrain parks and jumps have become common at most ski resorts: incorporate AASI guides for safety in the park.

#### Expert Consultants

Peter J. Millett, MD, MSc

Trevor R. Gaskill, MD

### National Ski Areas Association Responsibility Code for Reducing Risk

- Always stay in control.
- People ahead of you have the right-of-way.
- Stop in a safe place for you and others.
- Whenever starting downhill or merging, look uphill and yield.
- Use devices to help prevent runaway equipment.
- Observe signs and warnings, and keep off closed trails.
- Know how to use the lifts safely.