



FIELD TRIP GUIDELINES:

Downhill Skiing Or Snowboarding

OVERVIEW:

Downhill skiing and snowboarding have become very popular winter sports. Skiers and snowboarders can often reach very fast speeds on busy ski slopes. In general, ski injuries are the result of falls or collisions or overuse injuries.

Loose, heavy snow increases the risk of lower extremity injuries since skis can then get trapped in the snow and lead to knee and ankle injuries. Icy conditions may cause skis to slide out from under the skier, increasing the rate of upper extremity injuries.

KEY INJURIES ARE:

The most common injuries in downhill skiing are to the knee, shoulder and thumb. Regarding the knee, anterior cruciate ligament (**ACL**) and medial collateral ligament (**MCL**) tears are the most common injuries. The MCL will usually heal with bracing and rehabilitation. An **ACL** injury in active individuals often requires surgical treatment for optimal outcome. One of the more common signs of a ligament injury in a knee is an audible "**pop**" at the time of the injury. Swelling of the knee is also a common sign. The meniscus or cartilage padding of the knee can also be injured while skiing. This is usually caused in a twisting weight bearing injury to the knee.

Knee injuries are less common with snowboarding than in skiing because of the fixed position of the feet on the snowboard. However, most of the force in falling is taken on the upper limbs, and therefore wrist fractures, shoulder injuries, clavicle fractures and spine injuries are more common with snowboarding than downhill skiing.

Shoulder injuries can occur with tumbling falls causing either a shoulder dislocation or rotator cuff injuries. If a ski pole gets caught between the thumb and index fingers, a tear of one of the thumb ligaments may occur, and this is called a "skier's thumb."

Other injuries common to skiing include frostbite, hypothermia, dehydration, sunburn, and windburn. Fractures, concussions, and internal trauma may happen from collisions.

BEFORE THE TRIP:

1. Don't ski to "get in shape". Get in shape to ski.
2. Verify an adult/student ratio of 1:10. Have at least 3 adults, and someone other than the leader should be designated as the driver should a medical emergency occur.
3. Make sure you have recently been to the ski resort and are familiar with it.
4. Bring sunscreen, UV sunglasses, lip balm, a cell phone, and water.
5. Establish a buddy system.
6. Discuss with your students the hazards of skiing.
7. Have an awareness of the ski ability of your students.
8. Bring extra clothing. The mountain weather can be fickle.
9. Students should wear appropriate cold-weather outdoor clothing, and it should be waterproof. Jeans get wet easily and can result in hypothermia from substantial heat loss.
10. 80% of heat loss is through the head. Wear a hat and waterproof gloves.
11. Wearing of wrist guards when snowboarding is suggested.

DURING THE TRIP:

1. When renting equipment, boards, skis and poles of the proper length must be selected for each student. The edges and bases must be in good repair. Boots and bindings must be thoroughly compatible.
2. Only commercially operated ski facilities with suitable teaching areas (gentle slopes) should be used. The area should be patrolled by members of a recognized Ski Patrol.
3. Find out how to contact the Ski Patrol (by cell phone, if possible) before entering the mountain.
4. Define skiing area to the students so they are aware of the boundaries for activity. Students should be taught the importance of skiing/snowboarding in control at all times.
5. All students should be tested and grouped appropriately as determined by a qualified ski instructor. Those identified by the instructor as needing instruction must participate in a lesson. Students should ski in areas identified as appropriate by the qualified ski instructor.
6. Establish check-in times at established places throughout the day for all students.
7. Duties of the supervisors should be clearly outlined including circulating to all hills that students are using for skiing and snowboarding.
8. Acrobatics or stunts are dangerous and should not be allowed. Injuries are extremely likely during these activities. Snowboarding parks should be supervised to discourage “hot-dogging”.
9. Reinforce the buddy system throughout the day. Insist that buddies stay in sight of each other at all times, even if they have to stop and wait.
10. Stretch and warm up before skiing. Take the first few runs slowly.
11. Follow the Responsibility Code:
 - a. **Always stay in control.** You must be able to stop, or avoid other people or objects.
 - b. People ahead have the right-of-way. It is your responsibility to avoid them.
 - c. Do not stop where you obstruct a trail or are not visible from above.
 - d. Before starting downhill or merging onto a trail, look uphill and yield to others.
 - e. If you are involved in or witness a collision or accident, you must remain at the scene and identify yourself to the Ski Patrol.
 - f. Always use proper devices to help prevent runaway equipment.
 - g. Observe and obey all posted signs and warnings.
 - h. Keep off closed trails and closed areas.
 - i. You must not use lifts or terrain if your ability is impaired through use of drugs or alcohol.
 - j. You must have sufficient physical dexterity, ability and knowledge to safely load, ride and unload lifts. If in doubt, ask the lift attendant.
12. Be aware of changing snow conditions. A sudden icy patch can cause an injury.
13. Most injuries happen at the end of the day when skiers are tired. Take it easy.
14. Watch for frostbite (whitish or grey discoloration) and hypothermia (shivering). Get medical attention for any perceived injuries.
15. Watch for wet or tired skiers. Send them to the lodge. They are at greater risk for injury.

IF AN INJURY OCCURS:

Keep the victim from moving, if possible. Post a sentry uphill to guard against a collision. Send for the Ski Patrol, and then wait for them to arrive. Keep the victim as warm as possible while you are waiting for help. Administer first aid, if there is an obvious need for it (bleeding, breathing problems). Don't bend extremities “back to where they belong” unless you are sure that it will do no further damage. If the victim must be evacuated, send the designated adult with the student to the medical facility. If this creates a lack of adult supervision, the trip should end early.