

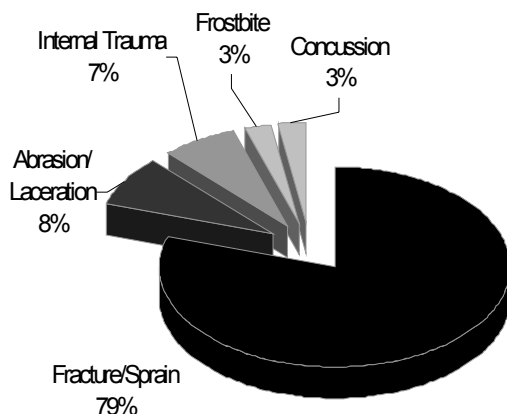
Ski smart, ski safe!

With our long winters and the abundance of snow in our mountains, Downhill skiing has become one of Canada's most popular sports. Skiing is not only fun, it's also a great way to keep healthy and fit. However if preventative measures are not taken, downhill skiing can carry a high risk of injury.

DOWNHILL SKIING INJURIES

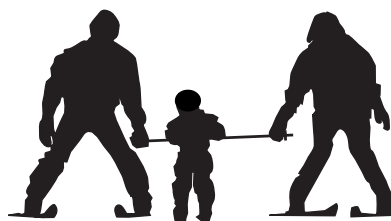
WHAT KINDS OF INJURIES OCCUR?

- The majority of injuries leading to hospitalization are fractures or sprains.
- Torn knee ligaments are the most common type of serious injury.



WHO IS AT RISK?

- Beginners
- More advanced skiers
- Women
- Children
- Skiers under the age of 17 are twice as likely to suffer head and neck injuries



WHAT BODY PARTS ARE INJURED?

- Leg 27%
- Knee 25%
- Arm 15%
- Trunk 13%
- Ankle/foot 12%
- Head/neck 8%

An out of control adult skier collided with a child. Both died.

A high-speed skier hit a five year-old girl waiting at a ski lift, causing severe injuries to both.

An eleven-year-old boy fell, slid into a post and subsequently died from his injuries.

Skiing too fast in icy conditions led to a skier losing control, falling, hitting a tree, and suffering fatal injuries.

A collision between two skiers resulted in a 14-year-old girl breaking her left leg.

A beginner skier was hit from behind as he was going down the mountain. The collision resulted in serious injury to both skiers.

**DOWNHILL
SKIING
INJURIES**

WHEN DO INJURIES OCCUR AND WHY?

Skiing Conditions

- Collisions can result from poor weather conditions with low visibility.
- Skiers can lose control of their speed and direction on an icy slope. Overestimating the skills to deal with these poor conditions can have unfortunate consequences.
- Choosing ski runs too difficult for the skier's abilities can lead to injury.

Equipment Problems

- Beginners, who have little experience, tend to rent equipment which may not suit their size and abilities and are therefore at higher risk for injury.*
- Improperly adjusted bindings or ill-fitting equipment greatly increase the risk of injury. This is especially the case with rented equipment.
- Children are at particular risk as they often use second hand or "hand-me-down" equipment that does not fit or has not been properly adjusted.

The Skier

- Speed is a major cause of injury. It is especially dangerous when the slope is overcrowded.
- More advanced skiers are at higher risk for injury because they tend to ski at high speed.

- Injuries tend to happen just before lunch and after 2 pm when energy levels are low and skiers start to become fatigued.
- Injuries are more common early in the ski season when skiers are out of practice.
- Women appear to be at a greater risk for injury because of a difference in muscle strength.
- "Get in shape to play your sport, don't play your sport to get in shape" applies to skiing; having a good level of fitness *before* hitting the slopes will lower the chance of injury.

Ski Runs

- Choose ski runs that suit the abilities of the least experienced skier in the group.
- Most ski-slopes use the following system to classify their ski-runs:

- Green circle: *Suitable for Beginners*
- Blue square: *Intermediate level slope*
- ◆ Black diamond: *Advanced skiers only*
- ◆◆ Double black diamond: *Experts only*



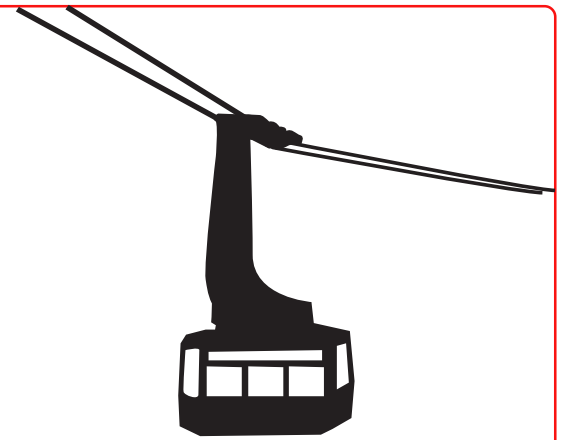
WHAT CAN BE DONE TO PREVENT SKIING INJURIES?

Equipment

- Younger skiers should wear helmets. Studies have shown that the rate for head and neck injuries among younger skiers is twice as high relative to the general population.
- Parents should purchase new helmets and other equipment for growing children regularly .
- Choose front entry boots as rear-entry boots put a skier at greater risk of injury.
- Have ski bindings adjusted by a professional at the beginning of the season*.
- Learn how to 'self-test' bindings, and do this at the start of each day.*
- Wear warm clothing, including ski gloves and a warm waterproof ski jacket.

Fitness

- Participate in a year-round conditioning program to improve strength, flexibility and endurance.
- Enhance general level of fitness at least 6 weeks before skiing by doing 10 minutes of physical exercise both morning and evening.
- Warm-up and stretch before skiing, and following any breaks.
- Take breaks when feeling tired.



Technique

- Invest in a few ski lessons. Lessons improve skills for skiers at all ski levels- beginner to advanced.
- Parents: enroll your children in lessons and restrict them to beginner level ski - runs until they have achieved the necessary skills to move on to more difficult challenges.
- Adjust speed and movement according to ability, weather, terrain and snow conditions. Ski in control at all times.

Clear Head?

- Beware of altitude sickness. High altitudes can lead to headaches, irritability, sleeplessness and an upset stomach. Not feeling well? it's time for a break!
- Performance enhancing and recreational drugs greatly increase the risk of injury. Though drinking may not be restricted on a ski slope, don't forget that skiing is a high-speed sport requiring full attention. Don't drink and ski!

** Supported by extensive review of research on sports injury prevention strategies (BCIRPU, Plan-it Safe, 2000)*



SKI SMART! SKI SAFE!

By preparing, getting the right equipment and paying attention to the rules, downhill skiing can be a safe and fun for all. Preventing injuries before they happen is your responsibility! For further information on how you can prevent injuries, contact your local health unit or the BC Injury Research and Prevention Unit.

On the slope

- Ski with a friend and stay within sight of each other.
- Children, and beginners in general, should always be well supervised and restricted to appropriate terrain.
- Take note of all signs, markers and warnings. Ski-slopes have rules that must be followed.
- When approaching another skier from behind, pass carefully and in such a way as not to endanger him or her. The skier in front always has the right-of-way.
- A stopped or fallen skier should move to the side of the run as quickly as possible.

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B.C. Injury Research
A N D • P R E V E N T I O N • U N I T

The British Columbia Injury Research and Prevention Unit (BCIRPU) is committed to meeting the challenge of making BC a safe place to live and work by coordinating efforts that will prevent or reduce injuries, their consequences, and costs.

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DID YOU KNOW:

While training for a high-speed alpine competition a 17 year-old boy fell, slid off the course and collided with a tree. Severe injuries resulted, including permanent blindness in both the boys' eyes.

A 41 year-old advanced skier lost control and skied off the side of a trail into a group of trees, sustaining fatal injuries.

A 15-year-old girl died when she fell off a chair lift. She had chosen not to use the safety bar.

It is estimated that if helmets were used, 11 skiing and snow-boarding-related deaths would be prevented annually in the U.S.

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