

Exercise Now to Prevent Ski Injuries

by

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Snow is starting to pile up on the slopes, so it's definitely not too soon to prepare for a season of skiing.

As a team doctor for the U.S. Alpine Ski Team and a skier myself, I understand the motivation and drive to stay on the slopes. Every season I work with all types of skiers to reduce their risk of injuries and help them recover when they do get hurt.

What I've found over the years is that many skiers do very little to get in shape over the first two or three weeks of the ski season. Like "weekend warriors," these recreational skiers condition solely by skiing.

Unfortunately, this reduces their initial skiing performance and puts them at risk for injury because their bodies aren't conditioned to withstand the inevitable mishaps.

But there is hope. Often you can prevent, or at least decrease, the risk and severity of injury overall through conditioning, training and a bit of common sense.

Conditioning is basically getting in shape for your sport. Do you and others in your family have your reflexes at a maximum, your stamina at a maximum, your power, endurance and strength at a maximum?

If so, congratulations. You have undoubtedly improved your first-run performance, reduced your chances of injury and minimized the degree of injury that you could sustain. If not, please continue reading.

Skiing requires aerobic power as well as strength and endurance. Here, the techniques used for conditioning athletes at an Olympic level also translate well for recreational skiers. The key is to maximize the performance of a number of muscle groups, including your quadriceps, hamstrings, abdominals and back.

Strength training of the legs and trunk will not only improve your skiing performance but also help your reaction time and control. Some of the best exercises include:

- Leg press (stay away from leg extensions as they can may your knees sore)
- Squats
- Hamstring curls & stretches
- Lateral leg raises
- Crunches and sit-ups
- Side bends

Because most ski injuries occur at the end of the day, when muscles become tired, improving your aerobic capability will help prevent fatigue and allow you to comfortably ski all day long.

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Some of the more useful endurance exercises are:

- Cycling (seat high, RPM>80/min.)
- Running
- Swimming
- Jump rope
- Ski machines
- Stairmaster (4" step) or elliptical trainer
- Nordic Track

You can also maximize your balance, reflexes and coordination by cross training with in-line skating, working on a trampoline, or running downhill in a dry-land slalom. You can even practice balancing on the edge of a step or a street curb as you go through your daily routines.

In addition, technical training through instruction or coaching can improve your body position and specific skiing skills to help further reduce the risk of injury.

Remembering these simple tips can help make this ski season a fun and injury-free experience. Get In shape, have fun out there, and think "snow!"

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