

Backcountry Avalanche Safety

Every winter skiers and snowboarders head out in search of untracked snow and adventure. Backcountry terrain is neither patrolled nor controlled by professionals, so it's important to be well-trained in avalanche safety and search and rescue techniques.

The goal of all avalanche safety instruction is to help you get on to great snow, assess an acceptable level of risk, and know what to do in the event an avalanche occurs.

Before you leave home

1. **Get on an avalanche safety course.** Ask questions and get hands-on techniques from trained and experienced avalanche professionals.
2. **Gather information on avalanches.** There are many books on avalanches, from beginner to quite technical levels. There are good videos, and sites on the Web.
3. **Practice transceiver searches.** Train till your group feel confident about their ability to locate avalanche transceivers buried in snow.
4. **Check for more information.** Ask others about your planned route, snow conditions, current and forecasted weather. Adjust plans or routes accordingly.
4. **Anticipate the "Human Factor,"** that is, the fact that what you want to do often overrides your better judgement, particularly in a group situation.

In the mountains

1. **Be aware of your surroundings.** Look for recent avalanche activity, and changes in terrain, snowpack, and the weather. What is the avalanche hazard above you? Are there hollows, rocks, or cliffs below you?
2. **Learn to recognise avalanche terrain.** This is the single most important skill to develop. To make an informed assessment of avalanche danger, it's essential to understand the significance of various terrain features, particularly changes in aspect, elevation and angle.
3. **Analyse the snowpack stability.** As with studying terrain features, a good understanding of the snowpack takes years of experience. Current tests (taught on avalanche courses), can help you assess the risks involved with unstable snow.
4. **Carry avalanche equipment,** including avalanche transceivers, probes, and metal-blade shovels, and know how to use them.
5. **Cross potential avalanche slopes one at a time.** If you doubt a slope's stability but still have to cross it, minimise the number of people who might get caught, maximise the number available for rescue, and reduce stress on the snowpack.

Additional Resources

Websites:

www.avalanche.net.nz	(Avalanche information exchange)
www.sunrockice.co.nz/GetFreeStuff.htm	(download free avalanche articles)
www.sunrockice.co.nz/WeatherReports.htm	(weather maps, satellite pictures)

Books:

<i>The New Zealand Weather Book</i>	Erick Brenstrum, 1998
<i>Avalanche Handbook</i>	Dave McClung and Peter Schaerer, 1997
<i>Snow Sense</i>	Jill Fredston and Doug Fesler, 1994
<i>Avalanche Safety for Climbers and Skiers</i>	Tony Daffern, 1992
<i>The ABC of Avalanche Safety</i>	E.R. LaChapelle, 1985

Avalanche courses:

Otago Polytechnic Professional Avalanche courses. Level 1 and 2. Seven days.	Barbara Emmitt bemmitt@tekotago.ac.nz 03-445-1572, 025-392-860, 0800-765-9276
New Zealand Mountain Safety Council Avalanche awareness courses. Two days.	info@mountainsafety.org.nz 04-385-7162, 04-385-7366 (fax)www.mountainsafety.org.nz

Authors:

Steve Schreiber	Mt Hutt Heliguide	mthuttheliguide@xtra.co.nz
Bill Atkinson	Sunrockice Mountain Guides	bill@sunrockice.co.nz