



# Backcountry WINTER SEASON SAFETY

## PREPARATION FOR ADVENTURE

In the mountainous backcountry, especially above snowline, conditions can change suddenly, turning fun adventure into a struggle for survival. Here is some information that may help you be better prepared for any unexpected emergencies due to weather, equipment failure, getting lost, injured or ill.

Before you go, let friends or relatives know:

- **WHERE** you are going
- **WHO** is going with you (*never travel alone*)
- **WHEN** are you expected to return

You should know the weather forecast of where you plan to go. Weather in the mountains can change very rapidly and people get lost most often when visibility becomes poor.

### EQUIPMENT

Even for a day trip, carry at least a first aid kit, survival kit, avalanche rescue gear and other personal items in a comfortable pack. If riding a snowmobile, keep this pack on your person, not your machine. Check your equipment for loose or missing parts, or other mechanical problems.

#### Survival items should include:

- plastic whistle
- mirror
- duct tape for repairs
- 50 feet of utility cord
- a space blanket
- candle
- metal cup to melt snow
- hot beverage mix
- a sharp pocket knife or multi-tool
- matches in a waterproof container

A large plastic garbage bag can be used as an emergency poncho or shelter in bad weather. A short piece of closed-cell foam pad is a great insulator between you and the ground or snow.

#### Personal items should include:

- topographic map of the area
- compass
- water and food
- sunscreen
- lip balm
- sunglasses
- personal hygiene items
- cell phone or other emergency notification device

### CLOTHING

Prepare for changeable weather - pack more clothes than you think you will need. Wear clothing in layers. A wicking layer passes sweat away from your skin. Wear polypropylene or wool undergarments – **no cotton!** Cotton absorbs moisture and, when wet, rapidly conducts away body heat. An insulating layer made of polyester fleece, fiberfill, wool or down will keep you warm. Except for down, most of these materials dry quickly and provide some degree of warmth, even when damp. A protective layer is your outermost layer that sheds wind, rain and snow. This waterproof but breathable garment should be large enough to fit over all your other clothing and have a hood.

Have a wool or synthetic fiber cap that fully covers your ears and dark glasses or goggles (preferred). An exposed head is a major source of heat loss. Sunburned eyes produce snow blindness and blowing snow can also make vision impossible without goggles. Mittens or gloves are essential. Wicking glove liners add to their warmth. Pamper your feet. Start with wicking sock liners, then a thick pair of wool outer socks. Waterproofed boots should fit comfortably to prevent blisters. Gaiters help keep snow out of your boots.

### WATER AND FOOD

Carry at least a liter (quart) of water with you and a filter or other purification method for refills. Store it where readily accessible. Avoid alcoholic beverages! Alcohol impairs judgment and opens vessels at the extremities, allowing your blood to cool, making you more susceptible to frostbite and hypothermia.

Pack high-calorie, nutrient-dense food with a balance of complex carbohydrates, proteins and fats. This is no time to go on a diet. Sports nutrition bars provide longer-lasting energy than candy or energy gels.

### AVALANCHE DANGER

Anyone traveling into snow-covered backcountry should have completed at least a Level 1 (Fundamentals) avalanche safety and companion rescue course that meets American Avalanche Association guidelines. Always carry an avalanche transceiver, probe and shovel, and know how to use them. Check the latest avalanche advisory in your area carefully and heed its advice. These advisories describe general conditions over a wide area; certain slopes can be very dangerous even when overall danger is classified Low or Moderate. For snow travel advisories in Nevada, Placer and Sierra Counties visit [SierraAvalancheCenter.org](http://SierraAvalancheCenter.org).