

AVALANCHE AWARENESS MONTH



November is Alaska's Avalanche Awareness Month to gear up for avalanche season later in the winter. February is the "primetime" for avalanches in Alaska, so the awareness month is a few months prior to allow winter recreationists to seek avalanche education **before** a danger is truly at hand.

Local avalanche specialists say avalanche danger is present only a small percentage of the time. Individuals can almost always go out and enjoy their sport of choice as long as they know how to avoid the danger. Education helps recreationists identify dangers and avoid trouble while still having a blast playing in the snow. Avalanche awareness courses frequently teach the basic skills necessary to stay clear of the potential snow danger.

In 90 percent of all avalanche incidents, the avalanche is triggered by the victim or someone in the victim's party. Natural avalanches occur because new or windblown snow overloads weak-layers or because of rapid warming. However, there are almost always obvious signs of instability by the time avalanches come down on their own.

National statistics show that avalanche victims are almost exclusively backcountry recreationalists – snowmachiners, climbers, snowboarders, snowshoers, skiers and hikers. Snowmachiners lead the list with twice the number of fatalities as any other activity.

Internationally, the likelihood of being killed by an avalanche goes from 23 percent in November, December and April to 73 percent in January, February and March. Fifty-five percent of avalanches are triggered by people on foot while 32 percent are triggered by snowmachines. In addition, avalanches are more likely to be triggered between the hours of noon and 2 p.m.

A common myth portrayed in films is that noise can trigger avalanches. This is rarely the case. Noise vibrations, by and large, do not have enough force to initiate an avalanche. On rare occasions, sonic booms or low flying helicopter triggered avalanches. However, it was in exceedingly unstable conditions in which natural avalanches would likely occur on their own.

Another common myth believed among recreationists is they can out run an avalanche. It is nearly impossible to out run an avalanche. The average dry avalanche dashes down a slope at approximately 80 mph. Even high-powered snowmachines have difficulty getting out of the way. The best avalanche rescue plan is to not get caught in one. If one does occur have a strategy already in place.

If an avalanche does occur, do not try to go for help. YOU ARE THE HELP. If you have a working radio or phone, notify others of the situations so back up can come as soon as possible. Most rescue teams take hours to get to the scene and a victim only has a 50 percent chance of survival if buried 30 minutes. The first 15 minutes are crucial in recovering an avalanche victim.

Some of the factors that increase the risk of being involved in an avalanche include poor trip preparation, lack of knowledge in recognizing avalanche terrain, inability to assess snow stability and unskilled backcountry search and rescue techniques. While avalanches can happen at any time under various conditions, listed below are the factors common to avalanches involving recreational avalanche incidents:

- Generally clear skies, little or no snowfall and light or calm winds
- Dry slab type avalanches, with an average thickness of less than 100 cm
- Triggered by victims or members of the victim's party
- The weak layer often consists of surface hoar, facets or depth hoar
- Starting above or near the tree-line on lee or cross-loaded slopes with rocky ground cover
- On 30-40° slopes, often at a convex part of the slope

Avoiding putting yourself at risk plays a large part in eliminating as many factors as possible that contribute to avalanche incidents. To this end, understanding the causes of being caught in an avalanche and anticipating them before and during the trip need to be considered. Steps that can be taken to do this include:

- Designating a leader to help ensure effective decision-making
- Putting people at front of pack who are skilled at assessing snow stability or selecting routes
- Ensuring that "back in the pack" people don't simply follow the track, but pay attention to the terrain or snowpack
- Don't fall into the "blue-sky" attitude that draws recreationists to upper slopes where unstable snow can remain days or weeks after a storm
- Don't focus on being goal oriented even after learning of unfavorable conditions such as rain, heavy snowfall, drifting snow, 0-degree C temperatures and poor visibility
- Knowing when you are tired so that fatigue doesn't cloud judgment and narrow the margin of safety
- Recognizing that a sense of "it won't happen to me" invincibility can be fatal

Weather, temperature, slope steepness, slope orientation, wind direction, terrain, vegetation and general snowpack conditions may all affect the odds of an avalanche. Different combinations of these factors can create low, moderate or extreme avalanche conditions. Awareness of these factors and others may help recreationists select terrain appropriate to the snowpack and weather conditions. Since the interaction between snowpack and terrain can be subtle, route selection and stability assessment remain crafts learned over many years.

Before you leave for a trip into the backcountry, have a plan. The Department of Public Safety has a [wilderness trip form](#) online. Print it off, fill it out and give it to someone who is not traveling with you and will call for help if you don't follow it. It is also a good idea to put a copy of the wilderness trip plan on the windshield of your car once you get to the area you plan to recreate at.

When selecting a route in the back country, analyze it as a group. Talk about which way is the best route and why. Take the time to get together during the trip for important decisions on assessing snow stability, the route, and possibly changing weather conditions. A simple question of "why do we think that slope is stable?" can prompt a careful re-assessment of the situation and lead to a sound decision. Also, involving less experienced people in route selection and stability assessment contributes to the experience of every person in the group.



Good communication among group members is essential. Make sure more than one person in your party carries the needed backcountry equipment: probe pole, avalanche beacon and a shovel. Don't just have the tools, but make it mandatory for everyone traveling with you to know how to use them. Training in the use and detection of avalanche transceivers, and most importantly wearing them in the backcountry, provides the most effective method of locating a buried victim.

Recreationists are strongly encouraged to report all avalanche incidents, including near misses and incidents that do not cause serious injury. Reporting all incidents is important for a variety of reasons:

- Allows avalanche groups to warn others about unexpected conditions through the Public Avalanche Bulletin and the online public discussion forum
- Supports incident prevention programs
- Supports the maintenance of search and rescue teams
- Focuses avalanche research on practical problems faced by recreationists

Before ever venturing into the backcountry you should educate yourself. You can learn to be avalanche aware in a number of different ways whether it's by reading books, web research or taking an avalanche awareness courses. Use avalanche advisories along with other snow and weather reports to plan your recreational outing. Below is a list of avalanche education specialists in Alaska:

Alaska Avalanche School: <http://www.alaskaavalanche.com> or contact them by phone at 564-8300.

Chugach National Forest: <http://www.fs.fed.us/r10/chugach/glacier/education.html> or call 783-3242 for more information.

Eagle River Nature Center: <http://www.ernc.org> or call 694-2108 for more information.

H2O Guides: <http://www.h2oguides.com> or call 831-1386 for more information.

North America Outdoor Institute: <http://www.naoiak.org> or call 376-2898 for more information.

SnowDynamics: [Http://snowdynamics.com](http://snowdynamics.com) or call 775-2600 for more information.

Statistics and information provided by:

<http://www.avalanche.ca/>, <http://www.avalanche.org/>, and <http://avalanche.state.co.us/>