

We hope you never have to use our equipment in a real avalanche. Please take an avalanche course and remember the following tips.

## Planning and Preparation

### Route Options

Have appropriate objectives and options in place prior to the trip. Discuss your ideal, safer, and safest trip options.

### Time Plan

Evaluate time required to get to various points on your trip. Assess hazards that increase with time and adjust your start time accordingly.

### Rescue Plans

Discuss who has training in rescue in your group and who doesn't. Appoint a leader.

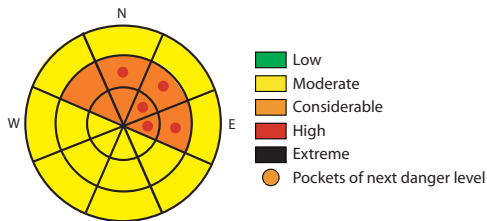
### Emergency Gear

Beacon (checked at the trailhead), extra batteries, shovel, probe, avalanche airbag, cell phone, map/compass, headlamp, along with basic winter gear.

### Know the Hazard

Check your local avalanche forecast before heading out and know what the avalanche danger scale means.

U.S. [www.avalanche.org](http://www.avalanche.org)  
 Canada [www.avalanche.ca](http://www.avalanche.ca)  
 Europe [www.lawinen.org](http://www.lawinen.org)



### Terrain Selection

- Is the terrain appropriate for the group and the conditions?
- Stay away from terrain traps like gullies and steep cliffs.
- Remember that avalanches mainly happen on slopes between 30 and 45 degrees.

### Proper Travel Techniques

- Cross potentially dangerous terrain one at a time.
- Identify and practice stopping in safe zones.
- Have an escape route in mind if the slope does avalanche.
- Communicate with your partners before moving on to the slope.

### Human Factors: Avoid the errors groups often make

- Recreating at an area that's been visited without incident before and feeling confident in its stability.
- Not speaking out or communicating concerns about a route or slope, fearing conflict.
- Being overconfident in the group's abilities.
- Determination to reach a destination without re-evaluating terrain and conditions

## Observations

### Be aware of these five "red flags" for instability:

1. Recent or current avalanche activity.
2. Whoompfing noises or shooting cracks while traveling on moderately angled slopes.
3. Recent or current heavy snowfall.
4. High winds depositing wind slabs on lee slopes.
5. Rapid warming temperatures or rainfall.

## What if I'm Caught in an Avalanche?

1. Yell so other people hear and see you.
2. If possible, stay on your sled and ride to the side of the moving snow.
3. Fight with all of your effort to stay on the surface.
4. As the snow slows, try to thrust a hand upward above the snow surface.
5. Before the snow stops, try to clear an air space in front of your face.
6. If buried, do not panic! Stay calm and try to relax.

## Transceiver Searching

### 1. Signal Search

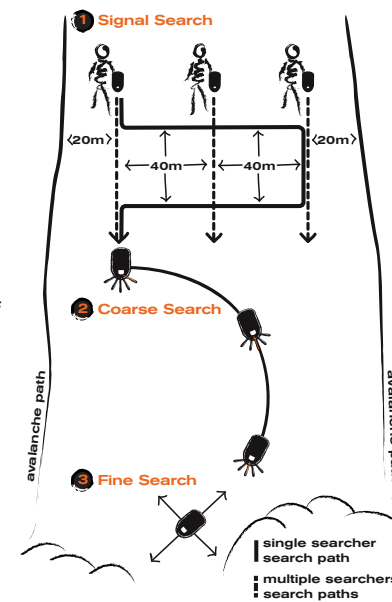
Performed when no signal has been detected, starting at the last-seen-area. If there is no last-seen-area, search the entire debris pile for the victim. With multiple searchers, spread out no more than 40 meters apart. If alone, make switchbacks no more than 40 meters apart, 20 meters from each side. Move fast, always looking for clues on the surface.

### 2. Coarse Search

Once the signal is detected, use your directional lights and distance display to follow the victim's signal. This will often be curved. Move as fast as possible until you reach a distance of about three meters from the victim.

### 3. Fine Search

Slow down and pay close attention to your distance readings; directional arrows are less important. Get your beacon as close as possible to the snow surface. Once the lowest distance reading is found, search along the perpendicular axis for an even lower reading. When the lowest reading is confirmed, don't hesitate. Start probing!

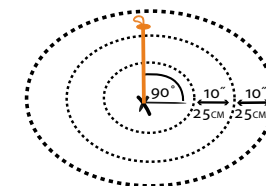


### Multiple Burial Search

Complex multiple burials are quite rare in recreational settings and usually can be treated as a series of single burials. For more information on multiple burial statistics and technique, see [www.backcountryaccess.com/education](http://www.backcountryaccess.com/education).

## Probing

From your lowest distance reading, probe 10 inches (25 cm) apart in concentric circles. Probe should be perpendicular to the snow surface. After striking the victim, leave probe in place and start shoveling just downhill.



## Shoveling

Shoveling is exhausting and consumes the majority of time during an avalanche rescue. For best results, make the hole about one "wingspan" wide and excavate downhill from the probe. If the burial depth is less than 1 meter, start digging just below the probe. If the burial depth is 1 meter or greater, begin excavating about 1.5 times the burial depth (note depth marking on probe to determine this distance). In deep burials ( $\geq 2$  meters) extra shovelers should be used to remove snow from the hole.

