



Avalanches

Mountains & Snow = Avalanche.
Fresh Snow & Wind = Highest Avalanche Danger.

Avalanches are extremely difficult to forecast. However, experts have identified some key factors that will affect the likelihood of an avalanche.

Terrain

Avalanches occur most frequently on slopes between 30 and 45 degrees (e.g. the steepness of most flights of stairs!). But that doesn't mean that slopes either side of this will not avalanche, in fact slopes of a lesser degree can cause the most devastating avalanches due to greater accumulation of snow.

Snow Cover

The weight of new snow fall on top of old snow fall can create a type of ball bearing effect due to the different snow crystals within the two types of snow layers.

Temperature

In spring, for example, the danger of avalanches frequently increases during the day, as it warms up and radiation increases.

The avalanche danger can increase considerably when the snow becomes heavy and wet during the course of the day.

Types of Avalanche:

Loose, dry snow: - Single point release
 - Commonly occur up to 3 days after recent snow fall
 - Speed = about 40 mph (65-70 kph)

Airborne, powder avalanche:

- May start as a loose, dry snow avalanche and airborne motion occurs when speeds of +40 mph occur.
- The most spectacular to watch
- The expanding snow cloud created may reach up to 280 mph

Slab avalanche: - By far the greatest potential hazard in the mountains in winter
 - Characterised with big 'blocks' of snow sliding on 'old' layers of snow.

Wet avalanches: - Usually slower than previous types
 - High frequency in spring
 - Result from the thaw effect as the sun melts the snow and the water lubricates the slab.





What to do

- a) If you see an avalanche beginning try to get as far away from it as possible.
- b) If you can't, grab a fixed object (e.g. a tree) and hold tight.
- c) If you know you will be swept away by the avalanche, throw off all equipment (skis, rucksack...).
- d) Try to stay on the surface of the avalanche by swimming (it is said that backstroke is best!!!), flailing your arms and legs around, or rolling.
- e) Never give up. Don't Panic.
Somebody will have seen you and will have already sent for help.

Respecting and being aware of the mountain environment and its power are the key steps towards preventing yourself or your group from being caught in an avalanche.

Ski Patrols do most of the work for you. They tell you which runs are open or closed. Do not, under any circumstances, leave the marked and open runs.

