

TEN CONTRIBUTORY FACTORS LEADING TO DIRECT ACTION  
SLAB AVALANCHE FORMATION

- (1) Old Snow Depth
  - a. Need sufficient snow to cover terrain irregularities.
  - b. Big snow years can produce avalanches extending wider than their normal boundaries.
  
- (2) Old Snow Surface
  - a. Need to look at top several layers, not just immediate surface layer.
  - b. How will this surface affect stability with the next snowfall?
  - c. Crusts, T.G. and surface hoar are inherent danger signs.
  
- (3) New Snow Depth

Need 10-12" with wind to produce significant hazard.
  
- (4) New Snow Type
  - a. How will new snow type interact with old snow surface?
  - b. Degree of riming affects slab formation.
  
- (5) Density
  - a. 10% or greater = increased hazard.
  - b. Watch for density trends during storm; decreasing density = generally stable, increasing density = generally unstable.
  
- (6) Snowfall Intensity
  - a. 1" per hour for 12 hours with above critical wind = hazard.
  - b. Watch intensity trend during storm, rapid intensity increase = rapid instability.
  
- (7) Precipitation Intensity
  - a. .10" per hour or greater continuously for 10 hours = hazard.
  - b. Watch precipitation intensity trends during storm.