






## European danger scale with recommendations and additions

Danger level	Title	European danger scale		Additional characteristics	Recommendations for back-country recreationists	Implications and recommendations for transportation routes and settlements	Forecasting frequency and percentage of deaths
		Snowpack stability	Avalanches: size, incidence, probability of release				
<b>5 very high</b> 	<b>Extraordinary avalanche situation</b>	The snowpack is poorly bonded and largely unstable in general.	Numerous very large and often extremely large natural avalanches can be expected.	Heavy snowfall	You are advised not to engage in winter sports beyond open ski runs and trails. Respect closures.	Avalanches can travel large distances, including beyond the extent of familiar paths. Transportation routes and settlements can be seriously endangered. Extensive safety measures are usually required.	Very rarely forecast. Around 1 % of avalanche fatalities.
<b>4 high</b> 	<b>Very critical avalanche situation</b>	The snowpack is poorly bonded on most steep slopes.	Triggering is likely even from low additional loads on many steep slopes. In some cases, numerous large and often very large natural avalanches can be expected.	Remote triggering is typical. Whumpf sounds and shooting cracks occur often. Critical amount of new snow exceeded or heightened likelihood of wet-snow avalanches.	Stay on moderately steep terrain. Heed runout zones of very large avalanches. Unexperienced persons should remain on open ski runs and trails.	Avalanches can travel large distances, in particular within familiar paths. Exposed objects (mostly sections of transportation routes, but in isolated cases also buildings) can be endangered. Consider taking safety measures.	Forecast only on a few days throughout the winter. Around 10 % of avalanche fatalities.

<p><b>3 consider-able</b></p> 	<p><b>Critical avalanche situation</b></p>	<p>The snowpack is moderately to poorly bonded on many steep slopes.</p>	<p>Triggering is possible even from low additional loads particularly on the indicated steep slopes. In certain situations some large, and in isolated cases very large natural avalanches are possible.</p>	<p>Whumpf sounds and glide cracks typically occur, but not in all cases. Remote triggering can occur. In many cases the critical amount of new snow is reached, fresh snowdrift accumulations exist over a wide area, or the snowpack is either prone to triggering due to persistent weak layers or is being weakened by water infiltration.</p>	<p>The most critical situation for backcountry recreationists. Select best possible route and take action to reduce risks. Avoid very steep slopes with the aspect and elevation indicated in the avalanche bulletin. Unexperienced persons are advised to remain on open ski runs and trails.</p>	<p>In individual cases exposed objects (mostly sections of transportation routes) can be endangered. Here, consideration should be given to taking safety measures.</p>	<p>Forecast for around 30 % of the winter season. Around 50 % of avalanche fatalities.</p>
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<p><b>2 moderate</b></p> 	<p><b>Mostly favourable avalanche situation</b></p>	<p>The snowpack is only moderately well bonded on some steep slopes; otherwise well bonded in general.</p>	<p>Triggering is possible primarily from high additional loads, particularly on the indicated steep slopes. Very large natural avalanches are unlikely.</p>	<p>Warning signs can occur in isolated cases. Weak layers in the snowpack are prone to triggering in some places. Fresh snowdrift accumulations are mostly shallow or cover only small areas.</p>	<p>Routes should be selected carefully, especially on slopes with the aspect and elevation indicated in the avalanche bulletin. Travel very steep slopes one person at a time. Pay attention to unfavourable snowpack structure (persistent weak layers, old snow problem).</p>	<p>Very little danger.</p>	<p>Forecast for around 50 % of the winter season. Around 30 % of avalanche fatalities.</p>
<p><b>1 low</b></p> 	<p><b>Generally favourable avalanche situation</b></p>	<p>The snowpack is generally well bonded (or entirely loosely packed) and stable.</p>	<p>Triggering is generally possible only from high additional loads in isolated areas of very steep, extreme terrain. Only small and medium natural avalanches are possible.</p>	<p>No warning signs present. Small fresh snowdrift accumulations can exist in isolated cases.</p>	<p>Travel extremely steep slopes one person at a time and be alert to the danger of falling.</p>	<p>No danger.</p>	<p>Forecast for around 20 % of the winter season. Around 5 % of avalanche fatalities.</p>

## Additional information and definitions

- The avalanche bulletin usually describes areas where the danger is most significant in greater detail (e.g. elevation zone, aspect, topography, etc.).
- Slope angles:
  - very steep, extreme terrain is especially unfavourable as regards the slope angle, topography, proximity to ridgelines or ground conditions
  - extremely steep: steeper than 40°
  - very steep: steeper than 35°
  - steep: steeper than 30°
  - moderately steep: less than 30°
- Additional load (artificial triggering):
  - high (e.g. group of skiers without spacing, snowmobile/groomer, avalanche blasting)
  - low (e.g. single skier, snowboarder or snowshoe hiker)
- Natural: without human influence
- For avalanche sizes, see <https://www.slf.ch/en/avalanche-bulletin-and-snow-situation/about-the-avalanche-bulletin/avalanche-sizes.html>
- Aspect: the compass direction which a downward slope faces
- Ski runs: marked pistes and descents
- Trails: marked snowshoe and winter hiking trails
- Experience: experience in assessing avalanche danger means the ability to obtain and correctly interpret external sources of information, e.g. the avalanche bulletin, and one's own observations with regard to avalanche danger, and to respond correctly in accordance with the situation.
- Warning signs include: recent avalanches, whumpf sounds or shooting cracks
- Critical amount of new snow: 10-20 cm when conditions are unfavourable, 20-30 cm when conditions are fair and 30-50 cm when conditions are favourable
- Exposed: especially exposed to danger, e.g. section of road in steep terrain within range of even medium avalanches