The calculations indicate that about four fifths of the more than 100 landslides taken into account would not have occurred under optimal management. It is estimated that the corresponding care and maintenance of the affected forest areas would cost only a tenth of total cost of damages.  

(bki)

www.slf.ch/more/sostanab-en

**NATURAL HAZARDS**

**How great is the risk of avalanche fatalities on snow tours?**

‘Muotathal (SZ), 27 February 2016: Avalanche sweeps ski tourer to his death.’ Every winter, we read reports such as this in the press. An average of 23 people lose their lives to avalanches every year in Switzerland. The victims are almost always snow sports enthusiasts who have ventured off piste. We are used to hearing in the wake of an avalanche accident that snow sports enthusiasts run much greater risks than others. Are snow tours particularly dangerous, then? Until now, the lack of solid data meant that all one could do was speculate.

**Snow touring risks similar to those of road traffic**

The avalanche risk here denotes the likelihood that a tourer might lose their life to an avalanche during a day’s touring or over the course of a year. In order to assess the risk of snow touring, the number of fatalities is set against touring activity in its entirety in the mountains during winter. For many years, SLF has been recording the accidents in detail. The number of people heading out in the
backcountry, however, is significantly more difficult to determine. The Federal Office of Sport’s ‘Sport Switzerland’ studies are now delivering the first reliable data. About 23,000 people living in Switzerland were interviewed about their sporting habits. The survey showed, inter alia, how often members of the public go on snow tours.

Kurt Winkler, an avalanche forecaster at SLF, set these figures against the number of avalanche accidents and was thus able to calculate the risk of a deadly avalanche for the first time based on statistics. “The risk of an active tourer of dying on a tour in the backcountry within the period of one year is roughly equal to the risk of dying on the roads within the same timeframe,” Winkler explains. In any case, this risk is not evenly distributed: The risk to snowshoe walkers is six times smaller than the risk to ski tourers. Winkler suspects that this is primarily because the majority of snowshoe walkers stick to relatively straightforward and therefore less dangerous terrain. If snowshoe walkers are struck by an avalanche, though, their chances of surviving are significantly worse. “This shows that the process of companion rescue isn’t working well enough in these groups. This is something that should be practiced on rescue courses,” Winkler recommends.

It is worth noting that the risk to men is three and a half times greater than the risk to women. In other words, a woman who is out on the snow for an entire week has the same risk as a man who tours for only a weekend. The age group from 30 to 60 seems to run a somewhat higher risk than those on either side of this bracket. “In terms of prevention, we should be making an increased effort to address middle-aged men who go on ski tours,” says Winkler.

**Weaker old snow is critical**

Frank Techel, also an avalanche forecaster at SLF, compared the frequency of avalanche accidents in various regions against the number of entries on online portals where Alpinists document their tours. He was able to show that the risk of being caught in an avalanche increases not only with each level of the danger scale, but is also greater in the inner alpine regions of Valais and Grisons than in the rest of the Swiss Alps, because weaker old snow appears more frequently in these areas. However, neither the weather nor the day of the week had any bearing on the risk. (mhe)