

Avalanche accidents in the Italian Alps 1985-2009

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Avalanche accidents show a very high mortality rate that ranges from 60 % to 70%, i.e. much higher than that of traffic accidents (3% of casualties every 100 accidents). The study of avalanche accidents thus offers a basis to understand the dynamics of the event and search for necessary prevention strategies in a field that ranges from anthropised zones subject to preventive control to recreational and sports activities in leisure time. In Italy, the most exhaustive database is managed by AINEVA (the snow and avalanche interregional association), whose activities also include gathering of data and information on avalanche accidents, in order to determine, from the analysis of events, behavioral lines and useful actions aimed at reducing risk. This work follows the one carried out in 2003 by Valt et al. which analysed twenty years of data (1984- 2003) and, from one hand it is an update of the previous one, and from the other provides new viewpoints of the problem. Therefore the work illustrates the results of the analyses carried out on more than 950 avalanche accidents included in the information archives of AINEVA and compared with the results from similar works carried out abroad. The period considered goes from the winter season 1984-85 to 2008-09 (25 years). For the analyses of the morphological features of avalanches, the sample of data available is more limited (roughly 500 accidents), but is well-distributed within the period considered. For the analysis of the number of casualties the sample available is more comprehensive, going from 1967 to 2009 (41 years).