Terrain and Traumatic Injury in US Avalanche Accidents
Ian Mccammon 1 Michael Ditolla 2 Scott Mcintosh 2

1 SnowPit Technologies, Salt Lake City, UT, USA; 2 University of Utah, Salt Lake City, UT, USA

Previous studies have investigated the incidence of traumatic injury in avalanche victims. But the relationship between these injuries and the terrain that produces them remains largely unknown. The goal of this study was to examine the prevalence of traumatic injury among historical avalanche victims and to evaluate the correlation with terrain features generally regarded to be traps. An analysis was conducted of 22 years of historical avalanche incidents in the United States that was compared to detailed terrain and injury data for avalanche incidents in Utah. The analysis showed that traumatic injury is common among avalanche victims, although it is less commonly listed as an official cause of death. Trees, cliffs and rock bands appear to produce the most frequent trauma in avalanche accidents. These results emphasize the importance of prudent route selection and first aid skills in addition to the use of current avalanche rescue technologies.