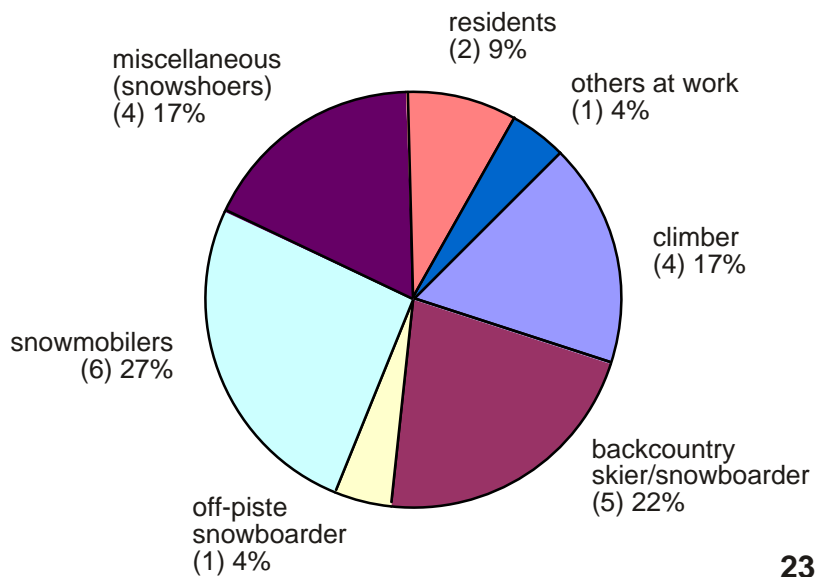


US Avalanche Fatalities by Activity, 2003-2004



23 killed
See page 2 for details.

Details:

date	location	state	description	rescue method	rescue technique
Dec 12	Mt. Baker	Washington	1 snowshoer killed	organized	object out
Dec. 13	Snoqualamie Pass	Washington	1 snowshoer killed	organized	probeline
Dec. 17	Blewett Pass	Washington	1 snowshoer killed	organized	dog
Dec. 26	Provo Canyon	Utah	3 backcountry snowboarders killed	organized*	probeline/melt out
Jan. 1	Donner Pass	California	1 backcountry skier killed	organized	probeline
Jan. 2	Fairfield	Idaho	2 residents killed	organized	digging
Jan. 22	Portage	Alaska	1 worker killed	companion	digging
Jan. 31	Jackson	Wyoming	1 backcountry skier killed	companions	transceiver
Feb. 26	Park City	Utah	1 snowshoer killed	organized	dog
Feb. 27	Portage	Alaska	1 climber killed	organized	object out
Feb. 28	Ketchum	Idaho	1 snowmobiler killed	companion	transceiver
Mar. 5	Snoqualamie Pass	Washington	1 snowmobiler killed	companion	transceiver
Mar. 6	Sandpoint	Idaho	1 snowmobiler killed	companion	transceiver
Mar. 10	Breckenridge	Colorado	1 snowmobiler killed	organized	spot probe
Mar. 20	Sawatch Range	Colorado	1 climber killed	organized	probeline
Apr. 9	Sawatch Range	Colorado	1 snowshoer killed	organized	dog
Apr. 10	Paxson	Alaska	1 snowmobiler killed	companion	transceiver
Apr. 26	Mt. Baker	Washington	1 out-of-bounds snowboarder killed	organized	object out
Jun. 13(?)	Mt. Rainier	Washington	2 climbers killed	organized	object out

News — Rescue



In early December three snowshoers were buried in a small avalanche near Mt. Baker, Washington. After more than 22 hours one victim was able to dig free and go for help. Rescuers from a nearby ski area reached the site and started searching for the other two missing snowshoers. A probeline found one victim dead, but a second victim was found alive after a burial of just over 24 hours. The victim made a complete recovery.

At the recent International Snow Science Workshop (ISSW): Results of a research project involving ground penetrating radar (GPR) and the locating of a buried pig was presented. The research used 450 and 900 MHz units was very promising. A pig (69.9 kg) was euthanized and quickly buried under 1 m of high density snow. He found the GPR could uniquely identify the pig and especially after a 2-cm airspace formed around the pig's body. Incidentally, it took 110 hours for the pig's body to freeze (38C to 0C with a snow temperature of -6C).

Also from the ISSW: Three Colorado rescuers (including this writer) developed a computer program (PROBE) to calculate the probability of detection of a simulated human body with different probe patterns. We found the actual probability of detection (POD) for the 75x70cm grid spacing to be much less than stated by Schild (1963) and Perla (1976) (see Table 1). Though our results were similar to the Canadians Jamieson and Auger, we did find the POD of a victim on their side to also be much less.

	POD Schild/Perla (1963/1976)	POD J-A method (1995)	POD PROBE (2004)
orientation			
vertical	20	19	22
probe/supine	95	75	74
side	75	63	49

Table 1. Comparing the probability of detection for different targets using a 75x70 cm grid spacing.

Our computer program found the best combination of POD and search speed to be a 50x50 cm grid done by each rescuer probing three holes per step. We also found that probe poles should be inserted vertically.