

# COLORADO AVALANCHE INFORMATION CENTER

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## ABSTRACT

Cold temperatures and a shallow snowcover often create dangerous avalanche conditions in Colorado. Since 1950 avalanches have killed 129 people in Colorado—one-third of the total killed in the United States (390), many more than any other state. To minimize the human and economic losses the Colorado Avalanche Information Center (CAIC) provides avalanche and mountain weather forecasting and educational training. In addition the CAIC conducts accident investigations and administers the U.S. Forest Service Westwide Data Network. This poster exhibit uses pictures, graphs, and the Center's educational materials to illustrate how the CAIC increases avalanche awareness.

During the 1950's less than 2 people died per year in avalanches, but the 5-year moving average peaked at 6.4 per year in the winter of 1984-85. Since then the average has fallen to 5.4 deaths per year. During this same time, use of the CAIC's services have soared. The number of avalanche education programs conducted by the CAIC has increased 132%; participation in programs increased 146%, and calls to the CAIC telephone hotlines increased 183% to 66,414 calls in 1991-92. Also last season 26,951 calls were made to a computer bulletin board to access the hotline message.

A study entitled *White Death: A Review of Fatal Avalanche Accidents in Colorado, 1950-92* by Dale Atkins was completed in the summer of 1992 and summarized the impact of snow avalanches over the last 42 years, 1950 to 1992, on the people who live, work, and recreate in the Colorado mountains. Described below is the typical victim.

The typical Colorado avalanche victim is a 30-year-old male, who is an advanced skier, either a tourer or out-of-bounds lift skier, and has had some avalanche training. The accident is most likely to occur in January, most likely in Summit or Pitkin counties. The accident happens as the skier is traveling on a north- to east-facing slope near or just above treeline. He triggers a slab avalanche on a 38° slope. The avalanche fractures 300 feet across, failing on a weak old snow layer 3 feet below the surface. The slide races down the mountain falling almost 700 vertical feet. Some victims survive the ride, and some do not. Most of those who do not are buried just over 4 feet deep in the debris.

Avalanche fatalities have been increasing over the last 42 years in Colorado, and the trend will likely persist into the future as better equipment enables—and the intoxication of the winter backcountry lures—more risk-taking people to venture into the mountains.