Companion rescue

The deciding factor in an avalanche accident

By Eric Knoff
EBS Contributor

Backcountry skiing and snowmobiling has exploded in popularity over the past 10 years. Every winter more skiers and riders hit the backcountry in pursuit of steep faces and untracked powder. This type of riding has increased the inherent risk of being caught in an avalanche and on average, 30 people die in avalanches every year in the United States.

As skiing and snowmobiling technology evolves, so does the gear required to travel safely in the mountains. Carrying an avalanche transceiver, shovel and probe continues to be the standard for avalanche safety gear. However, new technologies such as air bag packs are improving the chances for survival of those caught or buried in an avalanche.

Air bag packs are designed to help prevent deep burials, ultimately decreasing search and excavation time. If properly deployed, these packs improve the buried individual's chances of survival by nearly 15 percent. It must be noted that air bag packs are not designed to replace your avalanche beacon.

However, having the best rescue equipment does not guarantee a successful recovery, because one in four avalanche fatalities are a result of trauma. Despite the advancements of rescue technology, even if a person doesn't die from trauma, they still have less than a 50 percent chance of surviving if completely buried. The more quickly a buried individual is uncovered, the better chance they have of surviving.

Time is of the essence—recent research indicates that a fully buried victim without trauma has an 80 percent chance of survival if uncovered in less than 10 minutes. The chance of survival plummets from there: if buried for 12 minutes the chance of survival drops to 40 percent and after 30 minutes the likelihood of survival drops to 20 percent.

The best formula for surviving an avalanche burial is through companion rescue. For this strategy to work, each group member must have rescue gear and know how to use it.

Transceiver practice is essential, but it's also important that backcountry enthusiasts practice the other components of companion rescue. As new transceiver technologies speed up search times, attention is being focused on more efficient probing and shoveling techniques. Practicing strategic shoveling is now equally as important as practicing transceiver searches.

Strategic shoveling involves standing on the downhill side of the probe and using gravity to assist in the extrication process. Begin the excavation downhill of the probe strike about 1.5 times the burial depth. All excavations should begin by moving snow to the sides. If more than one shoveler is available, form a conveyer belt that moves snow downhill and forms an open space to remove the victim.

As technology improves, it's important that skiers and riders understand the capabilities of their gear, partners and rescue training. Take an avalanche class, practice with your gear and be sure your partners are knowledgeable in the latest rescue techniques. The hard truth is that if you get buried in a slide, it's going to be your partner's responsibility to save your life.

Be safe out there.

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