## Mitigating Avalanche Hazard

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There were 15 avalanche fatalities in the western United States in January, 2016, the deadliest January in over 20 years. Five of the fatalities were snowmobilers, one was a snowbiker, six were skiers, two were snowboarders and one was a climber. Avalanches are an equal opportunity killer and do not discriminate. To avoid becoming a statistic follow three simple rules of backcountry travel and learn to manage terrain and snowpack carefully.

The three simple rules of backcountry travel are: 1) Carry proper rescue gear and know how to use it. 2) Travel one at a time in avalanche terrain. 3) Watch your partner from a safe location. These simple sounding rules can be complicated and difficult to execute.

Carrying rescue gear is easy but using it efficiently can be challenging, especially when a friend or relative is buried. Taking time to practice with your avalanche rescue gear is necessary to conduct an effective rescue. Without practice, avalanche rescue is incredibly difficult, inefficient and slow. A growing, scary trend is skiers and riders wearing secondary pieces of rescue gear, such as avalungs and air bags, and thinking this equipment replaces the mandatory gear of a beacon, shovel and probe. Airbags are not designed to keep a person in an avalanche afloat like a lifejacket. They are designed to help prevent deep burials which speeds up the recovery process. In most cases, a beacon search is still required for buried victims with a deployed air bag.

Avalanche rescue is complicated, and more so when multiple people are buried. Traveling one at a time in avalanche terrain is the best way to avoid a multiple burial situation. Traveling one at a time means no highmarking on the same slope at the same time as a partner or riding up to help a stuck buddy. A trickier component of avalanche terrain is being aware of avalanche run out zones. It's not uncommon for riders to park and congregate under steep slopes. Knowing where to park and ride safely outside of avalanche run out zones is an important skill. If snowmobilers exposed only one rider at a time to avalanche terrain snowmobile avalanche fatalities would be cut in half.

Watching a partner from a safe location is as important as riding one at a time in avalanche terrain. Losing track of partners is not uncommon, especially when riding in a large group. This is less of a problem in low angle, safe terrain. However, when riding on steeper slopes, it's imperative to always have eyes on one another from a safe location. This means no parking in avalanche run out zones or in areas susceptible to sliding. Safe zones are not always obvious, so it's best to err on the side of caution and be conservative in parking locations.

No matter the conditions, the best way to stay safe is to avoid avalanches. Obvious signs of snowpack instability include cracking and collapsing and recent avalanche activity. When these clues are present avoid steep slopes altogether. Reading the current avalanche advisory for the area you plan to ride and knowing the local snow conditions lays the ground work for deciding what type of terrain is safe to ride. If conditions are unstable, stick to low angle terrain and avoid avalanche run out zones. When safe avalanche conditions exist it's more appropriate to ride on steeper slopes.

Avalanches pose a threat to all who recreate in the backcountry. Avalanches do not discriminate against activity and are not impressed by an expert or beginner skill set. Mitigating avalanche hazard starts by carefully assessing snowpack and terrain and following the three rules of backcountry travel. Becoming proficient at these skills takes time and practice, but if done correctly will ensure a safe and enjoyable day of backcountry riding.