RIDIN' HIGH

The dos and don'ts of HIGH avalanche danger.

By: Eric Knoff

Gallatin National Forest Avalanche Center

Since 1997 forty one snowmobilers have died in avalanches in Montana, the most of any state in the nation. Twenty of these fatalities occurred in the Gallatin National Forest of southwest Montana, and thirteen occurred during HIGH avalanche danger.

A HIGH danger rating may be issued by the forecast center when substantial amounts of snow accumulate on a well developed and widespread weak layer. The North American Public Avalanche Danger Scale defines HIGH danger as:

Very dangerous avalanche conditions. Travel in avalanche terrain not recommended. Natural avalanches likely; human triggered avalanches very likely. Large avalanches in many areas; very large avalanches in specific areas.

Avalanche incident reports reveal that most people killed in avalanches during a HIGH avalanche danger knew there was a significant hazard. A statement heard over and over again in these situations is, "We knew conditions were dangerous and had no intention of riding in avalanche terrain." Yet, someone still managed to perish in an avalanche.

The ONLY proven way to stay out of an avalanche during a HIGH danger is to avoid avalanche terrain. Alternatives like pasture riding or going to the movies are easy ways to accomplish this goal. Snowmobilers do not need steep slopes to recreate in fresh snow. Open meadows and low angle terrain can make for a safe and enjoyable day of riding.

Even if you've made the right choice to ride in low angle terrain, it is still possible to trigger an avalanche from the flats. When conditions are highly unstable, it's critical to understand that large avalanches can be triggered from the bottom of the slope. During unstable conditions, this occurrence can catch riders off guard. If a flat or low angle slope is connected to a steeper slope above, then that slope is considered avalanche terrain.

In HIGH danger it can also be easy to overlook the potential hazard of small and unassuming slopes such as creek beds or road cuts. Riders often feel they are avoiding avalanche terrain by sticking to small slopes, but slopes less than one hundred vertical feet are just as capable as a longer slope of burying a rider. Small slopes are most dangerous when they are connected to terrain traps such as gullies, creek bottoms or abrupt transitions.

A less common but equally dangerous situation is being caught in an avalanche triggered by another party. During unstable conditions, it is possible for avalanches to propagate long distances. Avalanche crowns up to a mile long are not out of the question when the snowpack is unstable. Although this situation is unlikely, it's something to consider when riding during a HIGH avalanche danger.

The bottom line is: Avoiding avalanche terrain entirely is the ONLY surefire way to stay safe when riding during HIGH avalanche danger. This means that every rider in the group knows exactly what is avalanche terrain and every rider in the group avoids these areas.