SNOW SAFETY

By Doug Chabot

GETTING IT TOGETHER

The first turns of the ski season can be dicey: the snowpack is thin, avalanche skills are rusty and we are itching to get out and play. This is a recipe for avalanches and injury, not success. Fortunately, our stoke and motivation can make us ready for better, deeper times. We wax skis, tune sleds and rip tags off new gear to get ready, but we are not done. What causes avalanches? You! More than 90 percent of fatal recreational avalanche are triggered by the people involved. To be safe and come back alive follow these five steps before loading up the vehicle, heading to the trailhead and entering avalanche terrain.

1. GET THE GEAR

Every person needs avalanche rescue gear: an avalanche transceiver, shovel and probe pole. These are not optional. Without them you cannot find and rescue your partner buried in an avalanche, nor, without the transceiver, can your partner find you. Put fresh batteries in the transceiver at the start of the season and check the power every time you strap it on. Then practice. While almost 80 percent of buried victims will survive the first 10 minutes, the odds quickly drop after that. By half an hour over 90 percent of buried victims have died. An avalanche airbag can increase these odds since it may keep you on top of the snow.

2. GET THE FORECAST

(www.mtavalanche.com; 587-6981)

Every morning by 7:30 a.m. the Gallatin National Forest Avalanche Center issues a daily avalanche advisory. You can read it online, hear it on the phone or receive it by email. It's full of valuable weather and snowpack information to keep you avalanche aware. The advisory tells you where it's safe and where it's not, where it snowed and how much fell and reports avalanche activity and the likelihood of triggering one. GNFAC forecasters are in the field most days and will explain what we saw along with advice on where and how to travel safely. The advisory includes recent photos and short video clips explaining the avalanche danger and real, tangible evidence of the state of the snowpack.

3. GET THE PICTURE

Every person needs a mental picture, or situational awareness, of the dangers they'll face. Based on the day's avalanche advisory, which includes danger rating and travel advice, a person at the trailhead will have a good idea of what to expect regarding avalanches. Gathering evidence about a slope's stability is ongoing and requires looking for obvious clues. Luckily, when the snow is unstable Mother Nature gives us ample warning. Recent avalanche activity is the number one sign that slopes are dangerously unstable. If avalanches have occurred within 48 hours you need to avoid similar terrain. Another red flag of instability are audible whumphs or shooting cracks. These indicate that the snowpack is collapsing from our weight and slopes are ripe to avalanche. Standing or moving below steep slopes is dangerous in these conditions because it is possible to trigger avalanches from below. No kidding: a person standing on flat ground but in highly unstable conditions can trigger an avalanche far above. In the last two years, three people have died in southwest Montana because they were under steep slopes when they avalanched. Another dangerous time is during a rain storm as water weakens the snowpack quickly and can produce widespread avalanche activity. A final warning sign of potentially dangerous conditions are rooster tails of snow blowing off ridges and peaks. Wind can move snow from one side of the mountain to the other incredibly fast, adding weight to the snowpack up to 10 times faster than heavy snowfall.

4. GET OUT OF HARM'S WAY

Avalanche slopes are any slope steeper than 30 degrees, including small slopes and those with trees. A hand held inclinometer is an essential tool to locate avalanche terrain. When there is avalanche danger staying off steep slopes may be the only safe option. However, even when we deemed a slope safe it's important to ski or ride one at a time. This way, if we made a mistake in stability assessment only one person will be caught, leaving the rest of the party as rescuers. It's also not a good idea to park or gather in the runout zone where the avalanche ends and piles up debris. People have died below slopes from being unable to get out of the way of an avalanche barreling down on them.

5. GET THE TRAINING

Staying alive in avalanche terrain requires making good decisions for and about yourself, the group, the weather and, most importantly, the snowpack. In order to learn about avalanches and get the skills to do stability tests and perform a rescue, it's essential to take an avalanche class with a field component. Books and online tutorials can supplement this learning but they cannot replace a good course. Luckily there are many classes in Bozeman. Check out our Education Calendar at mtavalanche.com for the latest listings. ◆

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A specialist with the Gallatin National Forest Avalanche Center examines an avalanche crown.