Explore Big Sky

BACCKZLD For Explore Big Sky, the Back 40 is a resource: a place where we can delve into subjects and ask experts to share their knowledge.

Noun: wild or rough terrain adjacent to a developed area Origin: shortened form of "back 40 acres"

Impulse decision-making A contributor to avalanche accidents?

BY ERIC KNOFF EBS CONTRIBUTOR

Impulse decision-making may lead backcountry travelers into harm's way, because when riding in the backcountry, one bad decision can offset multiple good ones. Looking at avalanche accidents through this lens, a question arises: Were the decisions that contributed to an avalanche accident made with thought and measurable information, or were they made impulsively?

In avalanche accidents, it's well documented that the victim, or victim's party, often observed red flags such as new snow and wind, cracking or collapsing of the snowpack, or recent avalanche activity prior to triggering a slide. If obvious clues of instability are present, especially for those educated in avalanches, why are decisions made to proceed in avalanche terrain?

We are all susceptible to impulse decision-making. I recall a personal impulse decision in the backcountry that resulted in a close call. My partner and I were standing on a steep rollover that appeared to be wind loaded. I watched my partner avoid the steep rollover and ski poor conditions down a safe, lower angle slope.

Instead of following my partner, I made a spur-of-the moment decision, jumped into the wind-loaded zone, saw cracks shoot all around me and was quickly caught in the avalanche. Fortunately, I was not buried or injured and skied out of the debris. This incident easily could have ended worse than it did.



This slide was human triggered, but fortunately nobody was caught. Numerous tracks were on the slope before it avalanched. It's easy to get lured into avalanche terrain when multiple tracks are visible on a slope, but it's important to remember that tracks don't always equal stability.

Fresh snow and the freedom to make our own decisions are two dominant reasons we venture into the backcountry. These factors also have a substantial influence on impulse decision-making. The power and temptations of the backcountry can make us act spontaneously, sometimes with dire consequences.

When someone gets hurt or killed in an avalanche as the result of a spur-of-themoment decision, all good

decisions previously made are moot. Controlling your impulses in a dynamic environment such as the backcountry is difficult but not impossible. Gordon Graham, a risk-management professional, found that many accidents occur during high risk/ low frequency events or, in avalanche terms, low probability/high consequence conditions.



Steep slopes and fresh powder can facilitate impulse decision-making in the mountains. Before jumping into avalanche terrain, communicate with your partners and take the time to make a safe and informed decision. PHOTOS COURTESY OF THE GALLATIN NATIONAL FOREST AVALANCHE CENTER

Once you turn the corner and act impulsively your only safety net is luck, which does not ensure a long and safe career in the mountains. Communication with your partners and conscious observations of your surroundings are good ways to mitigate impulsive actions. Digging a snow pit is also a great way to slow down, communicate, and base your decisions on actual data. The action of digging and doing a stability test helps us to avoid impulse decision-making.

Next time you venture into avalanche terrain, ask yourself: Have I taken the discretionary time to make an informed decision or is my next decision impulsive? Just asking that question might help eliminate impulsive actions and reduce the potential for a hazardous situation.

Eric Knoff is an avalanche forecaster for the Gallatin National Forest Avalanche Center. He's been a public forecaster the past eight winters, and also spent four seasons as an avalanche forecaster for the Going-to-the-Sun Road plowing operation in Glacier National Park.

Visit mtavalanche.com to view the daily avalanche advisory for southwest Montana and send your snowpack observations to mtavalanche@gmail.com.



Graham breaks the low probability/high consequence category into two subcategories—discretionary time and non-discretionary time. During a trip to the backcountry, very few decisions need to be made in the spur-of-the-moment. We almost always have the discretionary time to dig a snow pit, observe our surroundings, communicate with our partners and make educated, thoughtful decisions. This can help reduce risk exposure during low probability/high consequence events.

We know however, that unplanned events such as avalanches take place in the backcountry. Nobody wants to be caught in an avalanche, yet hundreds of people get caught every year, resulting in numerous fatalities. If we have the discretionary time to make educated decisions in the backcountry, why do so many people get caught and killed? Is it because of acting impulsively and not taking the time to make educated decisions?

Good decisions require gathering available information. Many times I planned to ski in avalanche terrain, but turned around due to unstable results in stability tests or clues of instability such as cracking and collapsing. Taking the time to process this information and fully discuss it with your partners is critically important.

Digging a snow pit is the best way to assess snowpack structure and stability—it also slows things down and brings the group together. Communication between group members is a great way to combat impulse decision-making in the backcountry.