

LESSONS LEARNED FROM BOULDER MOUNTAIN

Mary Clayton* Canadian Avalanche Centre
Revelstoke, BC

ABSTRACT: The largest recreational avalanche accident in Canadian history occurred on March 13, 2010, on Boulder Mountain, just outside of Revelstoke, BC. This incident involved between 100 and 200 people, parked directly below a well-known area called Turbo Hill, watching two riders on the slope above. A size 3 avalanche, triggered by two high-marking sledders, engulfed them all. Some 60 people were buried, over 30 were injured, and the two high-marking riders were killed.

For those of us at the Canadian Avalanche Centre (CAC), that accident showed us how much we have yet to learn about risk communication. The regional avalanche danger was rated “High” for that weekend, and we had issued the third Special Public Avalanche Warning in as many weeks. We had to ask ourselves: How could so many people be unaware of the risks? What do we need to do to improve communication with this user group? This paper examines some of the strategies the CAC has employed to improve the lines of communication and focus our accident prevention programs on this user group.

1. FATALITY TRENDS

Since incorporation of the CAC in 2004, snowmobiling avalanche safety has been a priority. We were fully aware of the accident statistics in the US, watching closely as sledding fatalities increased and then overtook skiing fatalities. We didn’t want that trend replicated in Canada but unfortunately that’s exactly what happened.

During the late 1990s and early 2000s, snowmobilers comprised about 25% of annual fatalities. Then we started to see the result of improved snowmobile technology—machines that can take riders with little or no riding experience, from a showroom floor one day to complex avalanche terrain the next day. Inexorably, snowmobile-related avalanche fatalities began to rise, matching and then overtaking skier fatalities in a few short years.

It was frustrating watching this trend emerge, especially as most of the fatal accidents followed a pattern—victims poorly prepared for travelling in avalanche terrain with neither proper safety equipment nor awareness of the risk. Then, in the winter of 2008-09, 26 people were killed in avalanches in Canada, 19 on snowmobiles. This was more than twice as many snowmobile-related avalanche fatalities we had ever seen in a season.

* *Corresponding author address:* Mary Clayton, Communications Director, Canadian Avalanche Centre, Revelstoke, BC V0E 2S0; tel: 250-837-2141 (ext 228); email: mclayton@avalanche.ca

2. DEATH REVIEW PANEL REPORT

The BC Coroners Service established a Death Review Panel to look at the factors contributing to the accidents of that winter. This panel was convened in November of 2009 and by January 2010 a report was published making 15 recommendations to a wide number of stakeholders, including the CAC. Other stakeholders involved included the provincial governments of BC and Alberta and a number of snowmobile associations.

That Death Review Panel report became our “road map” for moving forward on this issue. Eight of the recommendations were directed at the CAC, either solely or in conjunction with other agencies, and we worked hard to fulfill them and help other organizations fulfill theirs. Our hopes were high that the outcomes of this report would help us make the changes needed to improve communication with the snowmobiling community.

One of the outcomes of the Death Review Panel report was improved relationships with some key snowmobiling associations. Prior to the publication of the report, the CAC had already created a sledding committee, whose members represent the spectrum of the community. Many of them are often approached by media, where they are very effective at disseminating CAC key messages.

Although working through the report’s recommendations sparked even closer

relationships with the snowmobiling community, we felt we hadn't yet reached the "tipping point" in terms of a significant cultural shift in regards to avalanche safety. Unfortunately, the Boulder Mountain accident proved us correct.

3. BOULDER ACCIDENT

On the day of the Boulder Mountain accident, the hazard rating was "High." In addition, the CAC had issued our third Special Public Avalanche Warning in as many weeks. We knew an unsanctioned, public event was planned for the area and we had done a lot of media in the days leading up to the weekend in an attempt to get the word out.

Initial reports of the accident indicated an unprecedented, almost unbelievable catastrophe. Reports of tens of people, even hundreds, being swept away in an avalanche, had us all scrambling. Media attention was intense and all hands were on deck to deal with the many unanswerable questions.

It was certainly disheartening to be shown in such graphic fashion that our messages were not getting through.

4. COMMUNICATIONS IN THE AFTERMATH

Our primary communications focus after this accident has been addressing group management. We have taken this message to all our stakeholders and partners—groups cannot congregate in terrain that is obviously threatened from above, either in low or high danger. Safety messages are most effective when delivered peer-to-peer and we continue to aim at motivating snowmobilers to spread that message themselves.

Another important lesson from the Boulder Mountain accident was that search and rescue saves lives. Organized rescue was on scene just 35 minutes after the first radio call. In that short time, all of the many burials had been located and uncovered by their companions, undoubtedly saving lives. The organized rescue response was massive, perhaps the largest in decades, and depended largely on the dedication of neighbouring heli-ski companies. Their quick actions in extricating seriously injured victims prevented more loss of life.

The effectiveness of BC's safety net continues to be a communications focus for the CAC. The response to Boulder depended significantly on luck and the selfless spirit of the many rescuers involved. Highlighting the value of this system will help to ensure its sustainability.

One of the recommendations of the Death Review Panel report was to develop a one-day Companion Rescue course. We rolled that course out for the past season, focusing on best practices of transceiver search and shovelling as well as terrain selection and avalanche avoidance.

Our third communications focus is a point that we've been making for many years. Hill-climbing, or high-marking, is a high-end activity that can only take place when conditions permit. We are very careful with our language around this point, as there tends to be blanket condemnation of this activity in the public opinion. We often compare it to skiing steep chutes, an activity that doesn't seem to provoke the same vitriol in the public sphere, yet requires thoughtful preparation and patience for the right conditions.

5. CHANGE FROM WITHIN

Snowmobilers are a besieged group. Increasingly constrained by land use regulations and judged on many levels, we often found many of our efforts at risk communication were perceived as another attempt to restrict their freedoms. Key to our communication efforts was developing partnerships within the community, encouraging riders to effect the change they want to see.

One of the most significant and rewarding changes at the CAC after the Boulder Mountain accident was a tremendous increase in support from within the snowmobiling community. This was a marked shift in attitude, led by the Association of BC Snowmobile Clubs (ABCSC), one of two associations representing snowmobile clubs in BC.

In the winter of 2010-11, the ABCSC instituted the "Buck-a-Day" program, donating \$1 from every trail fee purchased at their participating member clubs to the CAC. Last year, that came to just over \$42,000, making the ABCSC one of our leading sponsors.

The ABCSC funding is just one aspect of an increase in support from across the snowmobiling community. In addition to financial support, there has also been a marked increase in in-kind support and interest in partnering on avalanche awareness initiatives.

Another metric we use to assess our progress is the number of Avalanche Skills Training courses aimed at snowmobilers delivered each year. Since 2010, there has been a marked increase in the amount of snowmobilers taking awareness courses. However, those numbers still lags significantly behind skiers.

6. THE ROAD AHEAD

While we are heartened by this increase in enthusiasm for our work, we also know that the clubs and associations we work with represent only a fraction of mountain riders. As we look to the future, we are now facing the challenge of reaching a wider spectrum of this audience—the mountain riders unaffiliated with any club or organization.

Currently we are investing in educating more snowmobilers to a professional level. Through empowering these individuals, and giving them the training so they can train others, we hope to help create a culture of avalanche awareness within the snowmobiling community.

A cultural shift of this magnitude cannot occur without leadership from the heart of the community. We now have a Snowmobile Program Coordinator on staff who is leading our interactions with snowmobilers. We have worked hard at establishing ourselves as proponents of all backcountry recreation winter activity, interested only in developing the best ways of keeping recreationists safe.