Factors Contributing to Backcountry Avalanche Fatalities in Canada and How these Events are Portrayed by the Media

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Backcountry Recreation

The participation in winter backcountry recreation has significantly increased in Canada. Despite this, backcountry avalanches still remain a considerable hazard that causes an average of 14 fatalities annually (Haegeli, Haider, Longland, Beardmore, 2010). The terrain, snowpack, climate, and human interaction combine to create a high degree of avalanche risk to those in this area (Parks Canada, Backcountry Avalanche Risk Review, 2003). It has been estimated that 85% of fatalities from human triggered avalanches occurred in high risk locations (Schweizer & Gemmell, 2001; McGung, 2002). This is because human error has been blamed for underestimating the degree of risk, resulting in poor decision making on the slopes. The interaction between humans and their environment has been neglected in avalanche research and needs to be addressed in order to correct the various errors being made when assessing risk in Canada's alpine backcountry. Research for this project includes a review of academic literature, fatality reports and Canadian media coverage of avalanche fatalities.

Avalanche Risk

Unlike other natural hazards, the exposure to avalanches when participating in backcountry recreation is entirely voluntary. Backcountry recreationalists are aware of the risk when entering these areas, although the degree of risk people are willing to take varies from person to person. The risk of a fatal avalanche is considered when making decisions (McCaughey, 2004). However, using these cues in the backcountry to assess avalanche risk is fundamentally dangerous. Conditions in these areas are constantly changing and decisions made one day cannot be deemed safe the next. People may gain an inaccurate perception of risk due to factors including unfamiliarity, presence of an experienced leader, and social facilitation. These heuristic traps may lead people to over emphasize their ability to identify and react to risk.

Types of Human Error

There are three types of human error that contribute to backcountry avalanche fatalities in Canada and how these events are portrayed by the media.

1. Lack of Education and Experience

The media is the public's main source of information on avalanche incidents, fatalities, and trends. How the media portrays these events will influence how the public perceives the severity of the situation. Conversation articles often range from focusing on human impacts, personal narratives, economic impacts, and calls for investigation and increased regulation (Parks Canada’s Backcountry Avalanche Risk Review, 2003). In a review of Canadian news articles from 1993-2010 on specific fatal avalanche fatalities, several key themes were noticed. By present it was rare for an article to successfully blame the victim. However, articles did mention that recreationalists knew the risks and that according to avalanche bulletins the areas were considered probable or certain for human triggered avalanches. Furthermore, the articles repeatedly report that experience and being prepared does not make you infallible to injury or death. In articles that took a more human centered approach to reporting mentioned the victim’s passion for the outdoors, almost giving justification for their actions or portraying them as a role model. In this case, media seems to take an empathetic approach in reporting, allowing the victims to relinquish responsibility for their death. Highly publicized avalanche events do occasionally call for change in policy, nonetheless most incidents seem viewed as an accepted part of Canadian winters.

Current Mitigation Methods

To reduce the risk of a fatal avalanche, the Government of Canada along with the Canadian Avalanche Association (CAA) work together to create an avalanche advisory that is updated daily on the conditions of different backcountry areas (Canadian Avalanche Association, n.d.). The Canadian Avalanche Danger Scale is consistent with international scales and contains five classifications ranging from low to extreme. The Backcountry Avalanche Advisory (CAA) provides a more simplified view of the avalanche conditions for amateur recreation and is related to the avalanche danger scale. This Scale is updated daily during the avalanche season to prepare users on how to act in the specific conditions.

Conclusion/Recommendations

Poor decision making in backcountry locations, as well as not heeding warnings posted about hazardous areas, can be (but usually are not) the cause for many avalanche fatalities in Canada. Since many fatalities are caused by self-regulated avalanche snow, more research needs to be done on how to improve human perception of risk and decision making. One recommendation would be to make registration for backcountry users mandatory, which includes promoting the completion of a backcountry avalanche education program. All users should be advised to sign in prior to entering the backcountry, indicating how long their trip will be, as well as, which area they will be entering. This will make rescue efforts more efficient and possibly help train recreationalists of risky conditions and terrain. Hopefully by pointing out high risk locations people will either postpone their trip or increase their vigilance on the slopes. Educational programs should also continue to be promoted, as well as travelling with commercial groups with a trained professional. Educational programs that include multiple trips to the backcountry will help transfer theoretical knowledge into practical and increase backcountry experience.

References


