

“KNOW BEFORE YOU GO”- AN AVALANCHE AWARENESS PROGRAM FOR TEENS WITH RAD GENES

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ABSTRACT: Basic avalanche education for young adults in Utah on a mass scale was non-existent for years. However, the rising numbers of young avalanche victims demonstrated an obvious need for fundamental avalanche awareness. Reviewing recent avalanche accidents, we felt that just like students in Hawaii learning about the dangers of rip tides and shore breaks at an early age, students in Utah needed to learn about avalanches.

With innovative partnering and outside funding, the Forest Service Utah Avalanche Center, in conjunction with their non-profit Friends organization, developed a highly successful avalanche education program for young adults in Utah.

During the winter of 2004-05, the “Know Before You Go” avalanche awareness program was introduced to Utah schools as an assembly style presentation, given by local avalanche professionals. In the two seasons since its inception, the program has been seen by nearly 31,000 Utah students. During this time, not one teen has died in an avalanche in Utah, a statistic directly contrasting years past.

We are working to make “Know Before You Go” a regular part of the curriculum in Utah’s junior high schools. We hope this blossoming program will inspire other avalanche professionals to introduce similar programs to their mountain communities.

KEYWORDS: avalanche, awareness, education

1. INTRODUCTION

The Know Before You Go avalanche awareness program was inspired by a tragic avalanche accident, killing three teenagers in Utah. It is the day after Christmas 2003 and the largest storm to hit Salt Lake City in nearly 30 years has been slamming the state for two days with about 46 cm (18”) of snow falling in the city itself. In the nearby Wasatch

Mountains, it is raging. Winds are strong and out of the southwest at speeds of 40-64 kph (25-40 mph), gusting to 96-112 kph (60-70 mph) along the exposed ridgelines. Since the 25th, 71 cm (28”) of snow with 6.35 cm (2.5”) of water has fallen. The Provo area mountains, 48 km (30 miles) southeast of Salt Lake, have received 56 cm (22”) of snow and 5.6 cm (2.2”) of water. By all accounts it is an epic storm, crippling cities and outlying rural areas. Throughout northern Utah trees are snapped, power lines down, and roads are barely passable. Most ski resorts struggle to keep their areas open, battling strong winds, blinding snow and occasional power outages.

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A small local ski resort near Provo, Utah, is busy with young riders enjoying their Christmas break; however, the resort closes early because so many factors are working against it. As a result, a number of snowboarders and skiers, in separate parties, decide to drive up the road to a popular trailhead for some powder riding. They come to the terminus of the road, and start ascending a popular hiking trail, Aspen Grove. Arriving at different times, but still within about a half an hour of each other, three groups find the visibility poor and decide to charge up the closest slope, a large north facing avalanche path, Elk Point. The slope rises to an elevation over 3291 m (10,800') with a base elevation at Aspen Grove of 2042 m (6700'), affording a vertical drop of 1250 m (4100'). No one is wearing avalanche rescue gear and communication among the parties, in total 14 people, is almost non-existent as they all head up the slope. The group never got to their destination. A series of four large natural avalanches release from above and pandemonium ensues. At the end of the day, three young men were buried and killed, and the last body was not recovered until April 8, nearly three months after the slide was triggered. Covered extensively by both local and national news, the event kept avalanche awareness in the spotlight for an unusually long time. The tight knit, family-oriented community is crushed.

Unfortunately, the story is one we've heard before. While the characters change each time, the theme remains the same and the outcome is devastating for the victim's family and friends alike. The bottom line in so many cases is frustratingly apparent -- technology far outpaces even basic avalanche awareness skills. In addition to high-tech gear, which riders quickly master and then look beyond the ski area boundary for "freshies," today's riders are also inundated with high-octane action sports videos, which can often give an unrealistic impression to the complexity of snow and avalanche safety. Throw in an unstable snowpack, some youth, a dose of testosterone, and mix well with a little lack of situational awareness and you have a potentially lethal combination.

Just two seasons prior to the Aspen Grove slide, I investigated a deadly avalanche in upper Big Cottonwood Canyon, approx 29 km (18 mi) southeast of Salt Lake City. A group of twelve young snowboarders, mostly

in their mid to late teens triggered a large avalanche, killing two males in the party. Much like the Aspen Grove slide in 2003, other than a few shovels used mainly to build backcountry kickers, no one had avalanche rescue gear or even rudimentary avalanche skills. The two events convinced me a teen-specific basic avalanche awareness program must be created. I thought if we could get this younger crowd thinking about avalanches, calling the hotline and wearing avalanche safety gear, lives would be saved. In the long run, a generation of riders would be educated on what to do before traveling in the backcountry.

In January 2004, I proposed the idea to Bruce Tremper, the director of the Forest Service Utah Avalanche Center (FSUAC). I expressed the need to develop a program specific to young adults in the state of Utah. This course would be unique, going right to the source—junior highs, high schools, and colleges—preaching the avalanche gospel to the masses. The program would be an enormous undertaking, because as with most federal agencies the FSUAC gets by on minimal funding and personnel.

Bruce and I worked on a business plan and decided early on, the program would last for about an hour. To keep teens' attention it needed to be fast paced and energetic. The presentation would be given in three parts. An avalanche professional would go to a school assembly and start with a 15-minute, narrated video that would show avalanches, people triggering avalanches, and the destructive power of avalanches. Next, they would tell a dynamic story about a close call they had and what they have learned over the years. The presenter would follow this up with a 15-minute PowerPoint presentation about avalanche basics. A question and answer session would wrap up the assembly. We wanted to create a successful program for all user groups, administered by the Friends of the FSUAC, a nonprofit 501c3 organization, which could be shared with all snow professionals and regional avalanche centers across the United States.

1.1 Video creation

Creating the video turned out to be the most time consuming of all the tasks and I started researching footage avenues with funds provided by the Friends. It took about two months of persistent phone calls to dig up

contacts and get the rights to exciting, state-of-the-art, high quality avalanche footage. In an unprecedented show of support, all of the footage was donated to the project. The video was a smashing success not only with students, faculty and administrators, but with other avalanche professionals. After premiering a rough-cut version at the 2004 Jackson Hole ISSW, every regional avalanche center wanted a copy. A finished version was available in November and about 150 copies were issued to snow professionals not only in the US, but also in Canada, New Zealand, France, and the Netherlands. Our videos debut was an international hit!

Original high quality footage came from TGR, Steve Kroschel, Steve Winter, and Richard Cheski. I also had some good rescue footage donated by KTVX News 4 Utah and KSTU Fox 13 News Utah. Jim Phelan, David Craig and Greg Painter chipped in with some amazing snowmobile footage that is always a crowd pleaser.

2. PARTNERSHIPS AND FUNDING

The first outside funding came from backcountry.com as they planted the seed money for this innovative new project. They trusted the reputation of the FSUAC and thought we had the expertise to give this program the attention to detail it deserved. Little by little, donations started to come in as people began to hear about this exciting new program. R.E.I., who has been a partner with the FSUAC for many years, were next to come on board with another generous donation.

As an avalanche forecaster dealing mostly with snowmobilers, I developed a great working relationship with the Utah Snowmobile Association (USA) and wanted to get them involved. Bridging the gap between motorized and non-motorized users, the USA stepped up to the plate and applied for an education grant from the International Snowmobile Manufacturers Association (ISMA). The organization represents the four major snowmobile manufacturers and has two grant cycles each year, in which they donate monies for certain projects, usually education or safety related. This was the first avalanche project of its kind to ever receive grant monies from the association. This unto itself was a major breakthrough for the program because it showed the strong commitment the snowmobile community has to avalanche

safety and the well-developed partnership the FSUAC has with the USA.

Finally, in the fall, the Utah Division of State Parks and Recreation came on board as a partner and donated more money than all the other contributors combined! Utah State Parks is a strong partner with the FSUAC and this donation was key to the longevity of the program and all the hard work that went into it.

After a phenomenally successful first year and Utah's deadliest avalanche season in 50 years, a number of ski areas joined to help sponsor the program in the spring of 2005. Brighton Ski Resort, Deer Valley, The Canyons, and Ski Utah had the progressive foresight to want to get involved and we look forward to their continued support. In-kind donations from Wasatch Backcountry Rescue (WBR) facilitated the program on the road. WBR contributed a PowerPoint projector in 2004 and purchased a laptop computer for the 2005 season. Finally, contributions from the Park City Chamber of Commerce and Kennecott Copper helped defray video re-editing costs in the summer of 2005.

In addition to partnerships and in-kind donations, an annual fundraiser in February held in conjunction with Utah's "Backcountry Awareness Week" takes place at Snowbird Ski Resort. The second annual event highlights the program's important role in our community and keynote speakers include Utah Governor Jon Huntsman, Everest climbers Apa Sherpa and Pemba Donna, and world-renowned mountaineer Conrad Anker. The event raises close to \$15,000 which helps subsidize the program's \$20,000 a year operating costs.

3. PROGRAM IMPLEMENTATION

Know Before You Go was a tough sell to the Utah school system. After all, we were up against some stiff competition. The only programs welcomed by Utah schools on a massive scale were those teaching drug, alcohol and tobacco avoidance. This was a different type of presentation, which did not teach abstinence. In fact, the proactive message was, "If you're riding in the backcountry, here's how you can do it safely!" In order to make the program credible, I felt it should only be presented by avalanche professionals. I worked on building a staff of highly qualified working snow professionals, involved with snow safety operations from the local ski resorts.

Timing is everything, and the very active 2004-05 avalanche season was a great year to launch the program. The dynamic message coupled with an overall willingness by the media to aggressively cover avalanche-related stories, helped propel the program into the Utah schools spotlight. The first year we spoke to nearly 13,000 students statewide. While the season will be remembered for the loss of eight lives in avalanches, doubling our state's yearly average, I'm proud to say not one teen was killed in an avalanche during this extremely dangerous year when we piloted Know Before You Go.

3.1 *First season program analysis*

After the first winter season, we regrouped. We saw what worked and what didn't and made the necessary tweaks to the original PowerPoint presentation, while still keeping the same basic avalanche curriculum message. In addition, the original video was re-edited over the summer of '05. New footage came from Ben DeJong, Andy Jacobsen, Tahoe Films, and Canadian Mountain Holidays. I also saw the need to fill in some gaps and over the summer conducted interviews with some of the world's top riders—Kasha Rigby and Jeremy Nobis—world renowned extreme skiers, and Doug Andersen a radical snowmobiler featured in a number of popular action sports films. In addition to some exciting new footage, I interviewed two young avalanche survivors, putting a local face to a near catastrophic event. All the new footage helped to round out the original video. While re-editing started late in the summer, the time consuming final version was not ready until early January. We do not foresee any additional edits in the near future.

3.2 *Second season program analysis*

Like a rock star with a hit album wondering if they could be as successful the second time around, we set our 2005-06 season sights on just trying to tie the watermark set the year before. Over the summer and fall, I lined up a host of new schools to visit and a number of schools we spoke to last year invited us back to present to a whole new audience. By season's end we were able to eclipse last year's wildly successful start by giving 109 presentations, reaching out to over 18,500 students.

4. CONCLUSIONS

Two years of avalanche awareness talks designed for teens has yielded some interesting observational data. First, teens are a hypercritical audience who know when they're being duped. The "coolness" message of a safety-oriented presentation, frankly, often times, is not cool. However, Know Before You Go was designed to give young audiences a fast-paced, simple message through a dynamic, bullet-pointed, MTV-esque approach. It is not "dummed down" snow science, rather a way to get critical information to a wide array of young users, while utilizing a subliminal safety message. The program not only receives the common, "dude that was the coolest assembly ever" pat on the back from students. Educators and administrators see the need for us to share this vital information as well. While the presentation was designed for just about any age group from sixth graders to seniors in high school, we found our best results are in the middle schools, where the average age for students in seventh and eighth grade is between 12 and 14 years old. They seem to respond well to authority and tend to be more attentive and well behaved than older students who can sometimes have a, "been there done that" attitude. In a group of 500-1000 students, a few disruptive ones can be a challenge to even the most skilled presenter. Fortunately, our well-rounded staff can handle these situations with expertise and a tactful approach.

For the 2006-07 season, Know Before You Go will continue to be presented to schools by avalanche professionals and we hope to reach out to even more students in the upcoming year.

I plan to revamp the video in the summer of 2007 and turn the PowerPoint segment into a dynamic video presentation. FAQ's would be included at the end of the video and students could reference our website which hosts an avalanche dictionary and other tutorials. The package will go to outlying areas for use in a classroom setting in schools that we cannot get to because of financial or staffing limitations. Working with Utah's Board of Education (BOE), I hope to make this an elective program available for Utah's schools, specifically eighth grade physical education and health classes, in the

2007-08 school year. After a review by the BOE, we plan to set our sights on implementing the program in the eighth grade Physical Education and Health curriculums for 2008-09, making Utah the first state to have such a program on a broad based scale.

Since its inception two years ago, we have talked to nearly 31,000 students statewide and in this time, not one teen has been killed in an avalanche. While we need to look at a larger set of years and the overall effect over time, I'm proud of the program's promising start and look forward to its bright future.