Use your head on the ski slopes

Don't just rely on your helmet

By Fletcher Doyle -- News Sports Reporter
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When Leon Carr of Grand Island suffered fatal injuries while snowboarding in mid-February at Holiday Valley, he was wearing a helmet.

That is not surprising. There is only so much helmets can do, and one thing they don’t do is reduce deaths on the slopes.

“There is no evidence they reduce fatalities,” said Dr. Jasper Shealy, a professor from Rochester Institute of Technology who has been studying skiing and snowboarding injuries for more than 30 years. “We are up to 40 percent usage [this is the percentage of people on the slopes wearing helmets, a number that has increased about 5 percent a year for several years] but there has been no change in fatalities in a 10-year period.”

Shealy said that when considering all fatalities, two-thirds of those not wearing helmets die of head injuries but only one-third of those wearing helmets do. He added that fatalities have multiple causes but “there is no change in the overall trend.”

According to the National Ski Areas Association Web site (www.nsaa.org), “Most fatalities occur in the same population that engages in high-risk behavior. Victims are predominantly male (85 percent) from their late teens to late 30s (70 percent). . . . Most of those fatally injured are usually above-average skiers and snowboarders who are going at high rates of speed on the margins of intermediate trails. This is the same population that suffers the majority of unintentional deaths from injury.” That eerily describes Carr and his circumstances. He was 29 and an experienced rider. A friend who was boarding with him said Carr passed him at a high rate of speed on Cindy’s Run, which is an intermediate trail. Carr reportedly hit a tree, which means he was on the margin of the trail.

“The reality is there is a limited amount of protection a helmet can provide,” Shealy said.

ASTM International, a standards development organization, says that helmets provide protection at speeds up to 12 to 13 mph. Shealy said those standards are arbitrary but that “27 mph is the speed at which people die,” which
is well above the standard.

None of this means that Shealy, or groups such as the NSAA, discourage helmet use. Shealy was in an airport, returning to Western New York from a ski trip to Park City, Utah, when he did this interview. He wore his helmet in Utah as he always does.

“The helmet is a great thing. I wouldn’t go skiing without it,” he said. Helmets do reduce the incidence of head injuries by 40 percent, he said. According to a story in the Burlington (Vt.) Free Press in January, the Consumer Product Safety Commission in 2004 said that more than 17,000 head injuries a year would be eliminated if all skiers and snowboarders wore helmets.

The majority of the injuries that are eliminated are the less serious ones such as scalp lacerations and contusions and mild concussions rather than skull fractures and closed head injuries. However, they can limit your injury in some cases.

“When you are skiing on a hard surface and hit your head, it will make a serious difference between a minor head injury and a serious head injury,” Shealy said. “It won’t help the other [hitting a fixed object such as a tree at a high rate of speed] scenario.”

That other scenario usually occurs when someone is involved in risky behavior, such as skiing or riding in the trees. There are those who believe helmets encourage such behavior.

Clyde Soles, an outdoors equipment tester, wrote this on a Couloir Magazine forum: “If you wear a helmet and believe it works, you are a greater danger to yourself and others than without. Helmet wearers typically take bigger risks than they would without the imagined protection.”

Shealy agrees, although his belief is not backed up by hard data.

“Nothing I have done can definitely say yes or no [that it increases such behavior], but I couldn’t believe it wouldn’t. If you add a safety device there is offsetting behavior. It happens in every other human endeavor. It encourages behavior you otherwise wouldn’t engage in. I just can’t figure out a scientifically valid way to determine it.”

The overall rate of injuries to skiers has dropped by 50 percent since the early 1970s and the rate of on-hill collisions is unchanged in that same period, but the rate of injury for snowboarders has gone up. In the 10 years ending with the 2000-01 season, that rate has increased to 6.97 from 3.37 per 1,000 boarder visits. Shealy added that this might be because of the X-Games effect but he has no proof of that.

He cautioned riders in terrain parks that if you “fall on your head it will cause a spine injury. Wear a helmet but don’t expect it to do anything to help you if you’re upside down.”

The key to avoiding injury is to use your head.

The NSAA advises that you wear a helmet and make sure it fits right. Don’t buy one that a child has to grow into. Take your goggles to a fitting to make sure they work with the helmet.

Stay away from the trees even though by late afternoon that might be where the fresher snow is located. Slow down at the end of the day when you may be tired (Carr’s accident occurred at about 8 p.m. after he had been on the slopes for hours) and, according to Shealy, “Continue to ski with caution because a helmet has a limited benefit.”

Bill Marx, from Holiday Valley’s award-winning ski patrol, told this to the Web site www.lidsonkids.org: “I think helmets provide significant protection when skiing or riding as they can reduce the severity or discomfort from some types of falls. But skiing in control is the most important aspect of skiing safety. It’s a good idea to get kids into the habit of wearing a helmet and that way they’ll think of it as part of their standard equipment.”
Carr told friends before his accident that the day had been perfect. Skiing in control and following the Code of Responsibility can help your day on the slopes end that way.

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