

SAFETY for the slopes

New studies on slope safety

Ski and Boarding injuries decreased in last 40 years.

excerpted from saminfo.com

Three new safety-related studies commissioned by the National Ski Areas Association (NSAA) suggest that

- Terrain parks have not led to an increase in catastrophic injuries
- Ski and snowboard injuries overall are trending downward
- Helmets reduce head injuries.



photo courtesy Park City, UT

In the three studies, based on data supplied by NSAA, trauma-related catastrophic and fatal injuries incurred by people while skiing and snowboarding were used to compute the rate of injury per million visits from 1990 to 2010.

Data from selected resorts was used to estimate the overall incident rate based on ski patrol reports of serious injuries per 1,000 days of operation at 10-year intervals for 1990, 2000, and 2010.

Terrain Park Injuries

Ski areas first started building terrain parks in the early 1990s, so researchers were able to compare data from a time when none of the ski areas in the study had a terrain park.

During the past 20 years, the rate of fatal and catastrophic injury and the overall incidence of any injury have not changed.

In fact, the authors say that providing

specifically designed jumping features that are tested before being opened may reduce the incidence and severity of injuries to jumpers. Segregating jumping may also reduce the incidence of individuals being struck by jumpers, the study states.

Snowsport Injuries Trend

In a second study, commissioned by NSAA, researchers found that skiing and snowboarding injury rates are decreasing, and the prevalence of collision incidents with fixed objects and other persons on the slope is also trending downward.

13,145 incident reports and 4,618,194 visitation days at selected ski areas over a 40-year period were examined. The skiing incident rate was 3.1 per 1,000 visits in 1980, 2.66 in 1990, 2.63 in 2000 and 2.5 for 2010.

The snowboard incident rate is a bit higher than for skiers. It has decreased by nearly 1 percentage point since 2000. There were 6.1 snowboard incidents per 1,000 visits in 2010 compared to 6.97 in 2000. There were 3.3 snowboard incidents per 1,000 visits in 1990, when snowboards first began showing up on

the slopes in significant numbers.

Helmets Injury Reduction

Finally, a third study shows increased helmet usage has led to a decrease in the prevalence of head injuries.

The study showed that during a period when helmet use increased from 8 percent to 84 percent, the prevalence of head injuries compared to all injuries decreased from 8.4 percent to 6.8 percent.

The prevalence of potentially serious head injuries declined from 4.2 percent to 3.0 percent during the same time period.

Further, the occurrence of serious head injuries declined from 1 in 4,200 days of skiing or snowboarding to 1 in 11,000 days of skiing or snowboarding. The incidence of any head injury declined from 1 in 8,600 days of activity to 1 in 26,000 days of activity.

Helmets offer mitigation for head injuries such as skull fractures and scalp lacerations. Increased utilization of helmets was associated with significant reductions in potentially serious head injuries. ■

