

THE SNOW SPORT SAFETY PYRAMID IN CALIFORNIA and The Opportunities for Improvement

Similar to automotive safety, snow sport safety has a pyramid of incrementally layered components that are interactive in their overall impact on the frequency of deaths and serious injuries. The four components are: (1) *public policy*; (2) *facility operations management*; (3) *personal equipment*; and (4) *participant preparedness and behavior*.

The foundation of the pyramid is public policy. Public policy is, in general, expressed through statutory law, regulation and case law or the absence thereof. Ideally, it represents a *balance* among the various interests involved that supports the greatest possible overall public benefit. It generally sets the parameters and incentives that guide and influence the focus and performance of the higher levels of the pyramid.

On the vehicular transportation safety pyramid, the public policy foundation is heavily weighted toward a public safety concern and strongly guides and supports the other layered components. It is defined by extensive federal and state statutes and regulations as well as the case law relating to the states' responsibilities and accountability for roadway maintenance and traffic management as well as individual driver's legal responsibilities and criminal/civil liability. The statutes and regulations are quite specific in setting requirements for uniform signage and hazard warnings, traffic management, vehicular construction and safety equipment, licensing drivers, liability protection requirements (e.g., insurance) and individual behavior management (speed limits, driving rules, use of safety equipment and alcohol consumption).

The public policy foundation of the snow sport safety pyramid is generally quite *laissez-faire* and currently is strongly weighted toward protecting and supporting the business interests of the industry by shielding resorts from liability. Approximately 35 states have some sort of "ski safety statute." The content and legislative intent of those statutes are not primarily centered on safety; rather they are principally intended to limit industry liability---most of them contain exhaustive lists of accident scenarios that fall within the definition of "assumed" or "inherent risk" for which the resorts cannot be held liable. The statutes impose very few and non-specific operational safety requirements on the resorts. For the most part, these statutes have been sponsored by the ski industry in states in which the courts have been more receptive to snow sport liability claims. Very few of the state statutes address the participant behavior in any way. A small number of state statutes have begun to define criminal, as well as civil, liabilities for some reckless behavior. Public policy is set primarily by regulation and case law in those states without ski safety statutes.

Regulation of snow sport resorts involves two government entities: the Department of Transportation at the state level and the United States Forest Service (USFS) at the federal level. After a number of high-profile tramway and lift accidents in the 1960s and 70s most tramways, cable cars and lifts now are considered public transportation vehicles and are inspected and regulated by the states' Departments of Transportation. Many resorts operate on leased USFS land. Those leases provide for Forest Service oversight of resort safety and also require the resorts to fully indemnify the USFS for liability. The Forest Service is most involved with resort boundary management, and by district, there are variably defined and enforced signage requirements for wilderness area borders. Although clearly empowered to do so for resorts that operate on leased federal land, the USFS sets no other significant safety standards or requirements, is grossly understaffed and pays very little, if any, attention to internal resort

operations. Although the industry publicly cites their regulation by the USFS, resort managers regard USFS oversight as ineffective and inconsequential within their resort boundaries.

Case law is the most important expression of public policy in states without ski safety statutes, including California. Product liability exposure for personal equipment design and manufacture is, for the most part, uniform across the country and most often dealt with in federal courts. Manufacturers can be held to a fairly high standard of ordinary negligence in design and manufacture. California has an elected state judiciary, and the snow sport resort industry has very effectively convinced the courts in the counties in which they operate to set a strong precedent for the enforcement of an extremely inclusive definition of “inherent” or “assumed risk.” In addition, season ski-pass holders are required to sign expansive, all-inclusive waivers of resort negligence, and, unlike in most states, the California courts have upheld the enforcement of these waivers. Very few lawsuits have made it past the *Summary Judgment* stage and, therefore, very few negligence claims are even initiated. The case law enforcement of these waivers and the broadly inclusive definition of “assumed risk” are far more protective of industry liability than would ever likely be achieved through a publicly debated statute. Therefore, the industry has actively lobbied against any attempts at ski safety legislation in California. The resultant public policy is that snow sports resorts in California, despite their public proclamations of the importance of safety, have no significant responsibility or accountability for the safety of their resorts beyond the operation of tramways and lifts. In most states with and without statutes, there is very little established case law on liability for reckless personal behavior on the slopes.

The effect of the absence of safety responsibility and accountability on resort operations clearly is clearly in the operational management of the resorts in California and other states. Despite the wide varieties of ages and skill levels to whom the resorts aggressively are marketing, there are no uniform industry-established or government regulatory safety standards, policies and procedures for:

- Signage
- Hazard marking or protection
- Terrain grading
- Patrol training and staffing
- Participant skill-level and equipment-type separation
- Traffic management

Practices vary widely from resort to resort leading to incorrect assumptions and misjudgments by patrons from many parts of the country and the world. The California resorts have little incentive to focus on their operational safety policies, practices and procedures. In fact, their legal advisers often actively discourage their clients from instituting more pervasive or consistent safety measures for fear they will create a perceived standard that some future court might be persuaded to consider in a plaintiff’s favor. The resorts also make it very difficult to acquire comprehensive and resort-specific accurate information on fatalities and serious injuries. The industry’s major focus in California and other states is on the personal responsibility of participants, keeping attention off the public policy and resort management operations. Although the tramway, lift and personal equipment manufacturers are actively involved with one or more of the international standards organizations like ASTM, ANSI or ISO, the ski resort operators have established no presence or active involvement in those organizations.

The personal equipment layer of the safety pyramid already has been sufficiently referenced in the above discussion. It is important only to note that, like all areas of our society, the impact of

rapidly changing technology is significant. The increasing speed and maneuverability new technology enables, as well as the variety of snow sport vehicles (e.g., snow bikes, sit skis, etc.) on the slopes, presents new challenges in physical preparedness, personal skills and traffic management. Distinct, vehicle-specific safety practices also are needed. For instance, unlike skiers, snow boarders often must get off their boards to ascend even modest inclines, and without a straight edge, are much more at risk for slipping on their flat-bottomed, rounded-edge boots.

The top level of the pyramid is *participant preparedness and behavior*. There is no question that it is a major, if not the major, contributor to accidents and injuries. The major causes of injuries and deaths appear to be collisions between participants or with fixed objects. In the current environment, all ages, skill levels and different types of equipment merge together on the same slopes, often in high numbers on weekends and holidays. They are expected to rely on their own assessment of their skills and abilities as well as their own judgment regarding speed, direction and alcohol consumption (alcohol often is sold at the base lodge and at restaurant facilities at the top of the slopes).

In the vehicular safety pyramid, the three lower levels strongly guide and support the capstone layer. There are established driving-skill requirements, designated vehicle-access limitations, uniform driving conventions, uniform signage, manufacturer safety requirements and strong behavioral safety enforcement. On the third level of the ski safety pyramid, technology is enabling the equipment manufacturers continually to offer safety improvements on the one hand while increasing speed and maneuverability on the other. The first two levels of the snow sport safety pyramid, however, are, at best, only weakly supporting the capstone of the pyramid.

As noted above, some ski safety statutes are beginning to create legally defined liability for reckless behavior on the slopes, and many resorts are beginning to implement traffic management and enforcement policies. Some resorts are beginning to segregate facilities for certain types of equipment (e.g., snowboards). A few are considering helmet requirements, although the data on effectiveness is surprisingly equivocal. Almost all of the resorts are attempting to inform participants of their risks and setting expectations for personal responsibility. However, there is no readily accessible data on the rate and causes of deaths and severe injuries, particularly on a resort-by-resort basis, nor any inter-resort, accident peer-review process. There are very few objective skill-assessment requirements and limited skill-level segregation. Often, this results in skiers on advanced slopes intersecting at high speeds with participants from the beginners' slopes at the bottom of a mountain.

Imagine the deaths and injuries on our roads if signage varied widely from community to community; there was no consistency to the use of traffic lights and stop or yield signs at busy intersections; any one of any age could drive on any road or in any vehicle type; there were no skill-assessment processes or limitations; drivers could go as fast as they choose, cross lanes and sides of the road at will; and there were no limitations on driving under the influence of alcohol or drugs.

Opportunities for Improvement

Although there is very little public or even legislator awareness, the current public policy balance in California relating to snow sport safety is heavily weighted to the industry's liability concerns. During much of the 20th century, ski resorts in the Sierras served primarily a rugged outdoors population who were purposefully seeking the risk and challenge of an unmanaged back-country ski experience. In order to keep the industry financially viable in today's world, the resorts now are marketing broadly and aggressively to a less well prepared (in terms of knowledge, skills and

physical fitness) international population primarily seeking a recreational experience. Industry concerns about the threat of unlimited liability to the viability of their business are valid. However, resorts should not be granted blanket liability protection without some significant responsibility and accountability for the ongoing identification, documentation and consistent deployment of standardized, best practice, operational safety policies, systems and procedures as well as safety-education programs, skill-assessment services and behavioral enforcement that support participant preparedness and responsible behavior. The industry can and should do much to improve its safety-management practices. A statute that provides significant liability protection contingent on the documented implementation, maintenance and continuous improvement of safety practices would create a more appropriate balance of the public interest. Transparency and easy access to information on deaths and serious injuries by resort will be an important first step both to better inform the public about their risks and choice of facilities and provide a metric to guide the safety-improvement efforts of the industry and individual resorts.

There is a major opportunity for the industry in California, perhaps with the support of an independent research and accreditation organization, to undertake the initiatives outlined above. However, without some statutory liability protections, such an initiative would undoubtedly raise the very same liability concerns that have caused the industry's past resistance to operational standardization. Therefore, it appears a simultaneous effort to develop a model, balanced statute and begin the process of identifying best practice, operational safety standards may be necessary.

Legal liability for product design and manufacture of personal equipment appears to be providing significant safety incentives without excessive business risk, and the manufacturers appear to actively be pursuing appropriate standardization and improvement initiatives. However, as safety issues are identified by the mountain operation safety initiatives discussed above, collaboration between the industry and manufacturers on equipment-safety enhancements will almost certainly occur more often.

Finally, there are great opportunities to improve safety through improvements in participant safety education about mountain conditions, rules of the road, signage, equipment choices and personal physical condition. The industry, which is already focused on doing this work, is best positioned and currently has a business incentive to do so. That incentive and related efforts can be further enhanced and supported by statutory behavioral enforcement provisions. Individual participants need to be informed of the risks and educated about their responsibilities, but they also need guidance and support in assessing those risks and some behavioral accountability for the safety of others on the slopes.