

WHAT ARE STANDARDS?

Standards are descriptions of devices or processes that vary in precision from “classifications to “guides”, “practices” and “specifications”

http://www.astm.org/toolkit/images/ASTM%20Information/Sample_Standards_English/Sample_Standards_with_Cover_Sheet.pdf

Quality (or safety) is defined by the variability in a desired outcome. Standards improve quality by reducing the variability around the outcomes desired by use of a device or process. The absence of standards or diligence in their application will result in significant variability. The absence of standards will also significantly impede performance improvement since there is no established baseline against which to measure experimental or controlled deviation.

A simple example of a standard applicable to snowsport safety are safety bars on ski lifts. Safety bars on lifts are intended to prevent falls from the lifts. The measure of their quality or effectiveness is the inverse of number of falls (the fewer falls the better the quality). The use of the bars and their design, including the materials it is made of, impact its effectiveness. Standards for lift bars can include guidelines for when they are used to the practice (how they are installed, operated and maintained) to the specific materials they are made of.

Reduction in the severity of injury from impacts with fixed obstacles within skiers potential ski and slide paths is another example of the use of safety standards in resort operations (*Standard Methods and Materials for Mitigating Injuries from Impacts with Fixed Obstacles at US Ski Areas*). The classification is impact reduction. The guide is devices that either serve as barriers to contact with the fixed obstacle or cushion the impact. There are a number of specific practices that meet the guide from hay bales or fencing to padding of various types. The specifications of the materials and the performance characteristics of each of the practices is the most detailed level of a standard. Those specifications are critical to effectiveness. As documented in the *California Mountain Resort Safety Report*, most resorts use padding on lift poles. However, the padding most of them utilize effectively cushions an impact of only 5 to 7 mph. Skiers and Snowboarders travel at an average of 24 to 27 mph (http://www.astm.org/DIGITAL_LIBRARY/JOURNALS/JAI/PAGES/JAI12092.htm) There are a number of different available materials which will cushion an impact of up to 25mph or greater The specifications and testing standard should be part of the safety practice.