EDITORS' NOTE

Risk Reanalysis

Risk is a puzzling proposition. We make tremendous efforts to mitigate risk while working and playing in the wilderness, but without it, our adventures would be, well - unadventurous. A number of articles in this issue of *Wilderness & Environmental Medicine* examine risk.

An Editorial by David Weber, a climbing ranger on Denali, looks at the high number of fatalities during the 2011 season on North America's highest mountain. After all of the efforts by mountaineers and the park service to improve safety on the mountain, the 2011 season marked the second highest number of fatalities in history. Did the weather simply increase the risk, overwhelming mountaineers who were otherwise prepared? Or are people letting their guard down? How can mountaineers improve safety in the future?

Several publications have recently attempted to predict an individual climber's risk of acute mountain sickness. Prediction of risk would be a great tool for both climbers and guides, but alas, study results using pulse oximetry have not yielded the magic bullet that we hoped for. Jeremy Windsor in his Editorial asks certain relevant questions: Are we using the correct research tools? Or should we abandon the approach of predicting illness in the mountains altogether?

Perhaps our susceptibility to these maladies is contained only under the surface—in our genetic makeup. Over the past few years, researchers have found a number of genotypes in Tibetans that are advantageous at high altitude. On the other side of the spectrum in this issue of *WEM*, Luo et al report genotypic findings that increase risk for high altitude pulmonary edema, the deadliest form of high altitude illness in the mountains.

Researchers are now beginning to take steps in the direction of examining genetic factors that increase risk of mountain sicknesses in Westerners as well.

Several other articles in this issue explore the risks involved in particular outdoor pursuits, for example the epidemiology of mountain biking injuries and the types of injuries associated with long distance canoeing. Understanding injury patterns unique to particular activities can help participants mitigate their risk by avoiding common pitfalls and directing preventive measures toward the most common injuries.

Some might argue that psychological factors, for example one's willingness to accept (or not accept) high-risk circumstances, are more important than physiological ones in the wilderness. Some personality types are more risk taking than others. George Rodway describes how physiologic factors, in this case hypoxia, can interact with psychological factors and impact decision making at altitude, and how this might increase risk in the mountains. Unfortunately, no one is immune to the risk and challenges of the outdoors. By examining and understanding the elements of risk in our wilderness pursuits we may better prevent harm without losing the thrill of adventure that takes us there in the first place.

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