As the mountain-climbing season begins, a review of an occupational death may provide a cautionary lesson to this year's mountaineers. Over the past 61 years (1932-1992), 75 climbers have been known to have lost their lives on Mt. McKinley. Last year eleven persons died while attempting to climb the mountain, the highest annual death toll since record-keeping began in 1932 -- a fatality rate of 10.3 deaths per 1,000 climbers.

As an increasing number of mountaineers challenge Mt. McKinley, injury prevention information becomes more critical than ever.

On the afternoon of May 21, 1992, a 41-year-old guide was leading a party of two non-professional climbers down the mountain after an aborted attempt to reach the summit. As the guide approached the lip of a crevasse to decide on an alternative route, one of the climbers heard the sound of "soft snow falling" and was suddenly pulled off his feet as the guide fell into the crevasse. The climber was dragged about 15-20 feet toward the crevasse as the guide fell, but stopped when the rope line became slack (the rope was possibly engulfed in an ice mass or broke). The two climbers traced the rope line into the crevasse and found that it was buried in a mass of snow and ice.

The victim is believed to have been buried in the large snow/ice mass or to have fallen to the bottom of the crevasse, a distance of about 85 feet.

Staff of the Section of Epidemiology's Occupational Injury Prevention Program conducted an investigation. Below is a summary of our findings and recommendations.

Summary of Findings

1. The guide moved directly forward toward the crevasse from the rear of the climbing party, allowing substantial slack in the ropes between the climbers. This slack may have allowed him to fall much farther than would have been the case if he had maintained taut lines. Approaching a crevasse using an arcing or circular movement to maintain taut lines between roped climbers, or using a separate belaying system are standard practices in mountaineering.

2. The survivors reported great concern about safely descending the mountain after the loss of the guide. They had become almost totally dependent on the guide, and relied on the guide to plan their descent route. Less experienced climbers might well have perished due to this circumstance. Also, because the hand-held radio transceiver had been lost with the guide, it was not possible for the survivors to call for assistance. Although minimizing the weight of supplies is a major concern for mountain climbers, an additional 2- to 3-pound back-up radio could be a life saver in future expeditions.

3. Although the guide and one climber came within 100 yards of the summit, a decision to abort the climb was made because of hazardous weather conditions and a frostbite injury suffered by one climber. This was a wise decision. Too many climbers exceed their limitations and attempt to make the summit at all costs. More than once, this has resulted in death or serious injury to a climber.

Recommendations

1. Ensure that standard mountaineering safety practices are strictly followed.

2. Ensure that all expedition members are aware of mountain escape routes in the event that the expedition leader is incapacitated.

3. Ensure that expeditions have a back-up radio communications system in the event that the expedition leader and/or critical equipment is lost.

4. Climbers should never exceed standard safety margins in their zeal to attain the summit of Mt. McKinley or other mountains.

References

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