Denali National Park & Preserve Alaska

Annual Mountaineering Summary: 2022

2022 Quick Facts

Rangers were grateful for a return to pre-pandemic levels of volunteerism on Denali, with 37 **mountaineering Volunteers-in-Parks** (https://www.nps.gov/dena/planyourvisit/mountaineeringvips.htm) (VIP's) contributing their passion and expertise to mountaineering operations in 2022.

- **Climbers from the USA: 743 (66% of total)** US climbers hailed from 46 of the 50 states, plus the District of Columbia, with most US climbers coming from the standard top four states: Washington State (117), Colorado (98), Alaska (92), and California (81).
- **International climbers: 389 (34% of total)** With just a few lingering international travel restrictions in place, Denali welcomed back climbers from 51 foreign nations. Almost a quarter of the international climbers hailed from the United Kingdom (89), followed by Canada (40), Poland (33), and Spain (25).
- **Average trip length** The average trip length on Denali was 16 days. The average guided team spent 17 days, while non-guided parties averaged 15 days. Climbs of Mount Foraker averaged 17 days.
- **Average age** Submitting one's age is now optional in the registration process, but based on 79% of climbers contributing this information, the average age of male climbers on Denali was 30 years old in 2022. Women averaged 28 years of age. The age range of climbers attempting an ascent of Denali was 14 to 68 years old.
- **Women climbers** Women comprised 16% of climbers on Denali, or a total of 178 individuals, with 63% of women reaching the summit of Denali. Two women attempted Mount Foraker, with no summits recorded.

Statistics compiled by Registration Supervisor Debbie Reiswig

2022 Search and Rescue Summary

Fatal Fall (April 30) A solo climber on the first expedition of the 2022 season was reported overdue for a

satellite phone check-in by a concerned friend. After multiple days of aerial searching on the upper mountain, the climber's body was spotted below Denali Pass in the 17,200-foot basin. The remains were recovered at a later date.

Avalanche (May 9) Two independent climbers were swept down the Chicken Couloir on the West Rib route of Denali. Both were rescued by the NPS helicopter that evening with non-life-threatening injuries and transferred to a ground ambulance in Talkeetna.

Cardiac (May 14) A client on a guided expedition was evacuated from the 7,800-foot camp via park helicopter and transferred to an air ambulance due to a suspected cardiac event.

High Altitude Retinal Hemorrhage (May 15) A client on a guided trip lost vision in his left eye while doing a carry from 11,000 to 12,000 feet. The patient was evacuated via park helicopter to Talkeetna, then transferred to ground ambulance for hospital transport. The patient was diagnosed with a high altitude retinal hemorrhage.

Fatal Crevasse Fall (May 17) One member of a three-person film crew took an un-roped crevasse fall below the North Buttress of Mount Hunter on the Southeast Fork of the Kahiltna. The fall resulted in full burial and fatal injuries. A team of five rangers and volunteers were able to excavate and recover the climber's remains from the crevasse.

Kidney Illness (May 20) A client on a guided expedition started experiencing acute abdominal pain and blood in his urine. The climber was evacuated by the park helicopter from the team's camp at 10,000 feet.

Frostbite (May 24) A ranger patrol at the 14,200-foot camp observed a team of two move very slowly from the base of the fixed lines back to camp at 14,200 feet. Once in camp, the injured climber was escorted to the NPS medical tent with full thickness frostbite on his left hand and right ear. The tissue was re-warmed overnight and the patient was evacuated the next day via park helicopter.

False InReach (May 26) Rangers at the 14,200 foot camp were notified of an InReach activation near camp went to investigate the coordinates, but did not find any climbers in distress. The InReach pings continued to move towards Windy Corner and then continued down to 11,000 camp. After determining it was an accidental activation, the independent party was located by a guide at 11,000 feet, and the climber was told to cancel the SOS on the InReach device.

Lipoma (May 28) A guide was suffering from acute back pain that had started at 11,000 feet, but intensified at high camp. An exam revealed an inflamed lipoma next to the patient's spine. When it was determined the patient could not descend from high camp on his own accord, he was evacuated via park helicopter back to Talkeetna.

High Altitude Pulmonary Edema (HAPE) (May 29) A client on a guided expedition initially developed a cough on the upper mountain, but after summiting the mountain, his condition deteriorated into high altitude pulmonary edema. The client was evacuated via park helicopter from high camp the following day.

Frostbite (May 31) After a summit push on a windy day, an independent climber noticed the tips of all ten fingers were white and 'wooden' feeling after getting back to high camp late at night. The following morning, he sought assistance from an NPS patrol at high camp with blebs on all ten fingers. The climber was evacuated from 17,200-foot camp via park helicopter.

Suspected Stroke (June 20) A guide called for assistance when a client showed signs and symptoms of stroke, including one-sided weakness, slurred speech, and facial droop. The NPS patrol at the 14,200-foot camp sent a ground team to the patient at 15,000 feet at the base of the fixed lines. Due to the steep terrain on scene, a 'toe-in' helicopter evacuation was performed. The patient was flown direct to Mat-Su Regional Hospital for immediate care.

Medical Fatality (June 3) A client on a guided expedition collapsed near 19,000 feet on the West Buttress route. When the team guides reached him, the climber was unresponsive and pulseless, so they initiated CPR. After 30 minutes with no response, CPR was suspended and the patient was pronounced deceased. The climber's remains were recovered via the park helicopter using a short-haul rescue basket, with the assistance of the team's guides.

HAPE/COVID-19 (June 8) A client presenting with extreme fatigue, shortness of breath, and a consistent cough on a guided expedition was escorted by guides to the 14,200-foot ranger camp. A medical assessment was performed by the NPS patrol, with two COVID-19 tests returning positive results. The assessment also indicated the patient was presenting with mild HAPE. An NPS tent was provided to the team for the patient to isolate and be monitored overnight by the patient's guides. When the patient did not improve, the decision was made to evacuate the patient.**H**

igh Altitude Cerebral Edema (HACE) / Frostbite (June 10) A team of two independent climbers triggered an SOS via InReach, requesting help descending from Denali Pass to high camp after an exhausting 24-hour summit push. As the nearest NPS ranger patrol had just begun their ascent to high camp, a team of guides camped at 17,200 feet responded and assisted the exhausted team down to camp and got them settled in a tent. By that point, the NPS patrol had arrived in high camp and performed a patient assessment indicating extreme fatigue, altered mental status, ataxia, headache, and minor frostbite to 5 fingers. The patrol provided initial treatment until the patient was evacuated from high camp in the park helicopter.

Consecutive Climbing Falls (June 11) A skier on an independent team fell just below the summit at

19,500 feet, sustaining a possible head injury. Weather prevented the NPS helicopter from launching that night. A guide who witnessed the fall loaned the team survival gear (bivy sack, stove) to use while awaiting rescue. Later that evening, the team decided to attempt a descent on their own. Impaired from the earlier fall and prolonged period at high elevation, the same injured individual fell once again while descending from Denali Pass to high camp, sustaining further serious injuries. A ranger patrol ascended to the patient to provide medical care on scene. Meanwhile, with assistance from an Air National Guard C-130 crew providing weather observations, the NPS helicopter pilot was able to fly to high camp and evacuate the injured skier along with a volunteer paramedic from the NPS patrol. The patient was transferred to an air ambulance in Talkeetna for further care.

Gastrointestinal Illness (June 15) A guide was camped for several days at the Polo Field near 12,500-feet with severe GI distress. Based on her weakened condition and inability to keep food or water down, the patient was evacuated via park helicopter and released to her guide company's care.

High Altitude Cerebral Edema / Possible Stroke (June 16) An independent climber was experiencing signs and symptoms of HACE and possible stroke at Washburn's Thumb at 16,700-feet, including facial droop, arm drift, and slurred speech. The climber was also ataxic and non-ambulatory. The patient was evacuated by short-haul basket to the 7,200-foot basecamp, then flown internally in the park helicopter to Talkeetna, then transferred to an air ambulance.

Knee Injury (June 20) A client on a guided expedition injured her knee at the bottom of the fixed lines while plunge stepping downhill in soft snow. The NPS ranger patrol at 14,200 feet assessed her condition over the next couple days. Based on her unstable knee and medical history, it was determined that the climber would be unable to walk down safely carrying a heavy pack and sled. The patient was evacuated by park helicopter to Talkeetna.

HAPE (June 24) A client on a guided expedition began to experience signs and symptoms of HAPE at 19,000 feet on summit day. One of the trip guides descended to the 17,200-foot camp with the sick climber, at which point they decided to continue down to the 14,200-foot camp. When they reached Washburn's Thumb on the descent, the patient became slightly disoriented and ataxic. The guide alerted the NPS team at 14,200-foot camp, who mobilized two patrol members and an available guide from another company. Meanwhile, the guide and sick climber continued their short-roped descent down the fixed lines, meeting up with the ground team at the bottom of the fixed lines. Once the patient was treated with oxygen and medications, the NPS ground team lowered the patient three rope lengths in the rescue litter, then skied the patient down to the 14,200-foot camp. The climber received further treatment at 14,200-foot camp, then evacuated via park helicopter to Talkeetna.

HAPE (June 30) A client on a guided expedition was experiencing symptoms of altitude sickness at the 14,200-foot camp, including cough, fatigue, and shortness of breath. Medical volunteers on the NPS

patrol found all vital signs within normal limits with the notable exception of oxygen saturation. Even after the patient was treated with supplemental oxygen, when taken off O2, his saturation was ranging in the 50's when seated, dropping to the 30's when walking. The decision was made to evacuate the patient that evening.

2022 Medical Summary

During the 2022 climbing season, Denali mountaineering rangers and patrol volunteers treated a total of 23 patients that met our life, limb or eyesight-threatened threshold. Patients not meeting this treatment guideline are advised to self-treat and evacuate. The following list provides a breakdown of the diagnoses from this past rescue season:

- Traumatic Injury – 7 cases (includes 2 fatalities)
- Frostbite – 4 cases
- Medical – 8 cases (includes 1 fatality)
- High Altitude Cerebral Edema – 2 cases
- High Altitude Pulmonary Edema – 3 cases

(NOTE: the number of patients and diagnoses does not directly match the information presented in the previous SAR Summary; not all patient care is considered a SAR incident, and some patients may have received multiple diagnoses.)

Of the patients treated, 11 were independent climbers or park visitors. 12 were guides or their clients. This was unusual, as over the last 11 years, guided trips account for about a quarter of major SARs. The patients treated by our teams exhibited a total of 12 traumatic injuries (including 4 cases of frostbite) and 7 medical complaints. 7 of these patients were treated at 14,200-foot camp on the West Buttress route, 7 were treated at 17,200-foot base camp, 2 were treated at 11,200' camp, 1 at 7,800', and the remaining 5 from the West Buttress occurred at various elevations between camps. We responded to 2 patients and 1 recovery in other areas of the Alaska Range. In total, 22 of these patients required helicopter evacuation from Denali National Park. One patient was evacuated by ground from the 14,200' base camp. One major SAR was over a false InReach SOS that resulted in the helicopter being put on standby, with no patients.

There were three fatalities this season. One fatality occurred when a solo climber was reported overdue and was found below Denali Pass, presumably after a fall. The second fatality was due to injuries sustained from an unroped crevasse fall by a film crew in the Southeast Fork of the Kahiltna. The final fatality was a guided client at 19,000' who most likely experienced sudden cardiac arrest.

The patient care reports from this past climbing season describe ailments commonly associated with mountaineering in the Alaska Range. Many of these medical illnesses and traumatic injuries are preventable with prudent decision-making and a reasonable ascent profile during climbing expeditions. Additional information regarding the prevention, recognition, and treatment of common mountain medicine maladies can be found online in the Denali mountaineering handbook:

https://www.nps.gov/dena/planyourvisit/part2medicalissues.htm (https://www.nps.gov/dena/planyourvisit/part2medicalissues.htm)