



## Annual Mountaineering Summary: 2024

## 2024 Quick Facts

- Climbers from the USA: 639 (64% of total of both Denali and Foraker registrants) US climbers came from all over with representation from 46 of the 50 states, plus the District of Columbia. Consistent with past years, most US climbers coming from the following four states: Washington State (95), Alaska (81), Colorado (79) and California (36).
- International climbers: 362 (36% of total) Denali National Park welcomed international climbers from 51 countries this year, once again the top was Canada (40), followed by the United Kingdom (38), Poland (20), and China, India, and Japan, each with 17.
- Average trip length The average trip length (regardless of outcome) for non-guided groups was 14 days, with guided Denali climbs averaging 17 days. Isolating just the climbers that reached the summit, the statistic increased to 20 days.
- Average age Submission of a climbers age is now optional when applying for a Denali permit. Based off the individuals that did disclose their age this season, the average age for male climbers was 39, while women averaged 36 years old. The youngest climber was 15, and the oldest was 75.
- Women climbers Women comprised 16% of climbers on Denali and Foraker, or a total of 161 individuals down from 2023 when 197 women (19% of the total) attempted Denali and Foraker.
- Volunteers-in-Parks Denali mountaineering rangers couldn't have pulled through the 2024 season without the help of 38 mountaineering Volunteers-in-Parks (https://www.nps.gov/dena/planyourvisit/ mountaineeringvips.htm) (VIP's) who contributed a total of 8,949 hours.

## 2024 Search and Rescue Summary

**Fatal Fall** (April 25) A two-person climbing team fell over 1,000 feet while climbing the Escalator Route on Mount Johnson's East Face. The fall was witnessed by another party on the route who alerted the NPS. The reporting party then descended to the accident victims, confirming that one of the climbers had died in the fall. The responders attended to the surviving climber throughout the night, though she remained unconscious with critical injuries. Mountaineering rangers first short-hauled then evacuated the patient via the NPS helicopter. The patient was transferred to LifeMed air ambulance in Talkeetna that morning for advanced care. The body of the deceased climber was recovered the following morning.

**Knee Injury** (May 11) A soloist descending from the 11,000-foot camp on skis caught an edge and fell below camp, twisting his knee. The climber was unable to bear weight or self-evacuate. Volunteer physicians on an NPS patrol performed an assessment and provided patient care for two days, awaiting flyable weather conditions for an evacuation from 11,000 feet.

**Frostbite** (May 15) Two frostbite victims walked into the 14,200-foot ranger medical tent in need of assistance after spending a couple cold windy nights near Kahiltna Pass. Upon medical assessment and treatment, it was determined both climbers could self-evacuate with the help of their teammates. The team was able to descend safely without incident.

**Fatal Fall** (May 19) On May 19, a family member notified the NPS that they had not received InReach communications from a solo climber since May 13. Mountaineering rangers began an investigation on Denali's upper mountain, first locating a vacant tent at 16,300 feet on the West Buttress. Interviews also indicated the climber was likely last seen on May 15 at 18,000 feet ascending to Denali Pass. On May 20, an NPS ranger at 17,200-foot camp used a spotting scope to locate a dark object at the bottom of a fall line from the route to Denali Pass. The ranger and a patrol volunteer then ascended to the location and confirmed that the soloist had died in a fall from Denali Pass. The climber's remains were recovered in a helicopter long line operation later that afternoon.

**Broken Ankle** (May 20) A climber with a broken ankle requested rescue assistance from below 'Zebra Rocks' at 18,600 feet on the West Buttress. The NPS helicopter was already in the Alaska Range to recover the remains of a fallen climber (see entry above). The patient with the broken ankle was short-hauled from the upper mountain in a rescue basket and flown to basecamp at 7,200 feet, then later flown to Talkeetna for further care.

**Frostbite** (May 26) Two climbers with frostbite walked into the NPS medical tent at 14,200 feet requesting medical assistance. Both team members were assessed and treated for HAPE and cold injuries (one with severe grade 4 frostbite to his nose and all 10 toes) following a prolonged summit bid. Unflyable weather kept both patients at the 14,200 camp for two days, with both patients evacuated to Talkeetna on May 28.

**Frostbite, Hypothermia, Exhaustion with One Fatality** (May 28) A climbing party of three sent an SOS to NPS rangers at 1:00 AM on May 28 requesting rescue assistance from the summit ridge of Denali at 20,310-feet. The team reported they were hypothermic and exhausted following a prolonged summit attempt in poor weather. Rangers responded via InReach encouraging the team to descend on their own accord, as rescue was not possible due to high winds and poor visibility. Overnight, one of the three climbers was able to descend to the 17,200 foot high camp with frostbite injuries, from where he was ultimately evacuated. The other two climbers were only able to descend to 19,600 on the Football Field. Later in the evening of May 28, multiple guided parties provided assistance to the two men, leaving them with food, water, and warmer gear, as well as attempting to buffer their bivy site from the wind. Weather deteriorated for multiple days, bringing more high winds and low visibility. Neither ground nor air resources could be deployed until May 31, more than three days after the initial SOS. The morning of May 31, the NPS helicopter was able to fly to the Football Field, where one of the two men was rescued via short-haul basket and then evacuated to an Anchorage hospital for treatment for hypothermia and frostbite. The rescued individual reported that his partner had died sometime during the three-day ordeal; the body of the deceased was recovered from 19,600 feet via longline short-haul operation.

**Knee Injury** (May 28) A climber with a twisted knee contacted NPS rangers from the base of the Rescue Gully, requesting assistance. The climber's partner was able to assist the injured party down to the 14,200 foot camp, and then set up their camp. The following day, volunteer medics at the 14,200-foot camp assessed the injury, confirmed the need for evacuation. The patient was flown from 14,200-foot camp on May 30.

**Ankle Injury** (May 29) A climber injured her ankle at the base of the fixed lines. An NPS ranger and three volunteer patrol members ascended to the injured party, then lowered them in a rescue sled back to the 14,200-foot camp. The patient

was evacuated on May 30.

**HAPE/HACE** (June 1) A climber alerted NPS rangers at 14,200 feet with concerns that a solo climber in camp was exhibiting signs and symptoms of altitude illness. NPS patrol members located the individual and performed a medical assessment, confirming the patient had signs of both HAPE and HACE. Favorable weather allowed the sick patient to be evacuated from 14,200 feet that same afternoon.

**HAPE/HACE** (June 1) Another climber contacted rangers at the 14,200-foot camp with health concerns on June 1. After getting treated for possible altitude illness (HAPE/HACE), the patient was released (against medical advice) on June 2, when the climber descended the mountain with his teammates.

**HACE** (June 3) A patient with moderate signs and symptoms of HACE walked into the 14,200-foot medical tent seeking assistance. The climber was assessed, treated, and evacuated the following day via park helicopter from 14,200-feet.

Altitude Complications to Pre-existing Medical Condition (June 4) A client on a guided expedition required medical assistance at 14,200-feet due to a compromised airway and difficulty swallowing, symptoms related to a pre-existing health condition aggravated by altitude. The patient was evacuated to Talkeetna in the park helicopter.

**Frostbite** (June 4) A climber walked into the 14,200-foot ranger camp complaining of frostbitten hands after spending a prolonged period without gloves while repairing a malfunctioning camp stove four days prior. During medical evaluation by the ranger patrol medics, it was determined the climber had frostbite on all ten fingers and all ten toes. The patient was evacuated to Talkeetna for further care.

**Frostbite** (June 4) Also on June 4, a climber from another expedition sought medical assistance for frostbitten toes. The ranger patrol's medical assessment indicated grade 2 frostbite on all ten toes. The patient was also evacuated from 14,200 feet on June 7.

**Ischemic Foot** (June 7) A client on a guided expedition was immobilized by likely ischemia, or a loss of blood flow to one foot, a medical emergency. In order to save the limb, the patient was evacuated to Talkeetna for advanced care.

**Flank Pain** (June 8) A solo climber at 17,200 feet was complaining of extreme pain in his right flank. A medical assessment indicated the patient was non-ambulatory. The following day, the patient was short-hauled in a rescue basket from high camp and subsequently frown internally from 14,200-foot camp to Talkeetna.

Altitude Complications to Pre-existing Medical Conditions (June 12) A sick climber was assisted to the 14,200-foot medical tent by his partner, presenting with malaise, weakness, dizziness, and pain. The patient's medical history included Lyme's Disease, as well as POTS, or Postural Orthostatic Tachycardia Syndrome, conditions that had been growing progressive worse since leaving basecamp. The patient received treatment at the 14,200-foot camp for two days waiting for flyable weather to enable an evacuation.

**AMS/HACE** (June 13) An expedition's assistant guide began exhibiting signs and symptoms of AMS/HACE upon ascent to the 17,200-foot high camp on the evening of June 9. The patient was treated with altitude medications by the team's lead guide overnight. Although symptoms improved, they did not fully resolve. In radio conversation with NPS rangers at the medical tent, the patient was advised to boost medications as well as initiate supplemental oxygen. High winds kept

the patient at high camp an additional night, but he was assisted down to the 14,200-foot camp on June 11 by a fellow guide. Following multiple days at 14,200 feet with variable symptoms, the patient was ultimately evacuated via helicopter to Talkeetna on June 14.

**Syncope** (June 22) A guide temporarily lost consciousness mid-conversation at the top of the fixed lines, falling about 15 meters towards the Peters Glacier. Once regaining consciousness, the guide and his team self-evacuated down to the 14,200-foot camp. A volunteer ranger physician performed an assessment and advised the guide to fly out and seek specialized care when weather permitted. The guide was evacuated the following day.

**Shortness of Breath, Elevated Glucose Levels** (June 17) A guided client experiencing shortness of breath and difficulty breathing at 17,200 feet, was assisted down to the 14,200-foot medical camp by the team guides for medical evaluation. The patient was evacuated by NPS helicopter after treatment for respiratory distress and elevated blood glucose levels.

**Blisters** (June 17) A guided team sought NPS assistance for a client with large open foot wounds on the bottom of both feet. Due to the severity of the wounds and the climbers inability to walk, the patient was evacuated from the 11,200-foot camp.

**Head Injury** (June 24) A guide slipped and hit his head while in 14,200-foot camp. While there was no loss of consciousness, the patient experienced a sharp headache, light sensitivity, nausea, and vomiting. Upon minimal improvement with medication, the patient was evacuated to Talkeetna.

**Frostbite** (June 28) A guided client sustained full thickness frostbite to all 10 fingers on a summit attempt from 17,200 feet. Two NPS volunteer patrol members at high camp assessed the fingers and determined the patient warranted an air evacuation from high camp.

**Possible Kidney Infection** (June 30) Rangers at the 14,200-foot camp were notified of a guided client with right flank pain. A suspected kidney infection and concern for sepsis lead to an air evacuation later that afternoon. The patient was transferred to local EMS in Talkeetna.

**HAPE** (July 2) A guided client presented with signs and symptoms of HAPE near Denali Pass during a summit bid. The client was accompanied back to high camp with a team guide, who requested assistance from NPS rangers on arrival back in camp. The patient was evacuated from 17,200 feet to basecamp, where symptoms improved.

**Aircraft Incident** (July 12) A Talkeetna-based aircraft on a flightseeing tour lost power near the toe of the Tokositna Glacier and the pilot was forced to make an emergency landing. Neither the pilot nor any of the eight passengers were injured in the hard landing. All nine were evacuated from the scene in a combination of the NPS helicopter, military HH-60 helicopter, and a Talkeetna Air Taxi helicopter. The damaged aircraft was removed from the site several days later.

## 2024 Medical Summary

Denali mountaineering rangers and patrol volunteers assessed a total of 34 patients during the 2024 season. 27 of these patients were treated by the Park Service, with 25 requiring NPS evacuation. 2 were treated and self-evacuated.

- Traumatic Injuries 18 cases (includes 2 extremity fractures, 2 head injuries, 2 knee injuries, 2 cases of blisters, and 1 patient with serious multi-systems trauma)
- Frostbite 9 cases. This year saw some very serious cases of frostbite, several of which resulted in multiple digit amputations.
- Medical 8 cases. This year saw an interesting mix of medical cases, including: arterial thrombosis, mesenteric ischemia, Lyme disease, kidney stones, syncope, and two minor infections.
- High Altitude Cerebral Edema and High Altitude Pulmonary Edema-5 cases, in addition to one case of minor AMS.
- Fatalities-3

\*Some patients had multiple diagnoses resulting in a higher number of diagnoses than the total number of patients.

Of the patients treated, 22 were independent climbers or park visitors. Eleven were guides or their clients, and one was an NPS employee with a minor facial laceration. The patients treated by our teams exhibited a total of 18 traumatic injuries (including 9 cases of frostbite) and 13 medical complaints (including high-altitude illness). The NPS took 17 patients under our care at the 14,200' camp, which, as usual, is the most common place we see patients. We assessed 9 patients who did not require NPS care, and with advice and direction, were able to either continue their trip in a safe manner or descend under their own power. Unfortunately, there were three fatalities in the park this season.

- The first was an early season fatality in late April with an experienced climber exploring parts of the Alaska Range off the beaten path. This occurred after over 1,000-foot fall on Mt Johnson in the Ruth Gorge with two climbers. One climber survived with multi-systems trauma, and one did not survive the fall. This is the third year since 2020 that our first fatality of the season has been in technical terrain off the typical West Buttress route.
- The second was a solo climber, early season, falling from Denali Pass. This was the second early-season West Buttress climber to perish from a Denali Pass fall since 2020.
- Finally, a climber died from exposure after their team pushed to the summit without proper acclimatization and rest and was unable to descend under their own power. Underestimating the time needed for acclimatization and the strength needed for descent after a successful summit is a common theme among incidents seen on Denali.

Notable this season was the severity of the frostbite we saw on several patients. Frostbite is an entirely preventable injury associated with decision-making about when and where to climb. Climbers often underestimate the long healing process and often life-changing effects that frostbite can have in favor of a summit bid or achieving a goal. Read more about the prevention, recognition, and treatment of common mountain medicine maladies (https://www.nps.gov/dena/planyourvisit/part2medicalissues.htm).