

Event Type: Helicopter Missions and COVID-19 Mitigations

Date: August 2, 2020

Location: Bridger-Teton National Forest, Wyoming



Bridger-Teton Forest's Interagency Fire Helicopter and COVID-19 Mitigations

Narrative

On August 2 the Bridger-Teton National Forest's Interagency Fire Helicopter flew on a county assist SAR with Jenny Lake Rangers, a full-time mountain rescue group based out of Grand Teton National Park. A patient in the Teton Wilderness who was a client on an outfitted trip was unable to stand, with shortness of breath, mimicking altitude sickness.

The Teton Interagency Fire Helicopter and its pilot departed Teton Interagency Helibase and flew to Lupine Meadows Rescue Cache. The helicopter shut down at Lupine and the mission was briefed. Two Jenny Lake Rangers loaded the helicopter and departed to the scene, located approximately nine miles north/northwest of the Togwotee Pass area.

Patient Assessment and COVID-19 Precautions

The helicopter landed in a meadow to configure for patient extraction operations, at which point the patient was loaded onto horseback and lead to the meadow. The Jenny Lake Rangers directed the horses to stop downwind of the helicopter. Ranger 1 approached the patient wearing an N-95 mask.

The patient was put on a nasal cannula vs a non-rebreather mask—to reduce the risk of aerosolization (the process or act of converting some physical substance into the form of particles small and light enough to be carried on the air)—and was administered low-flow oxygen. Patient assessment was conducted downwind of the aircraft and only by Ranger 1. The pilot stayed at the aircraft and put on an N-95 mask.



The patient was loaded in the rear left seat of the aircraft with the nasal cannula and N-95 mask on. Ranger 1 rode in the rear right seat with an N-95 mask on, the pilot flew the aircraft in an N-95 mask. Ranger 2 rode in the front left seat of the aircraft wearing a Nomex neck tube.

Patient's Spouse Informs She and Daughter Tested COVID-19 Positive

The Teton Interagency Fire Helicopter returned to Lupine meadows—an approximate 20-minute flight—with the windows open and the ventilation scoops in full extension to maximize cabin airflow. The patient was transferred to a waiting medical unit for transport to St. John's Medical Center in Jackson, Wyoming.

The aircraft was refueled and cleaned in preparation for returning to Teton Helibase. The mission was to be debriefed after a call was placed to the patient's spouse to inform that the patient was enroute to St John's. During this discussion, the spouse informed Ranger 2 that her and her daughter had just received their COVID-19 test results and they were positive, along with one additional family member.

The transporting medical unit was notified of this information as well as the receiving hospital.

Second SAR Mission

Due to this new COVID-19 information, the mission's debriefing was held outside at appropriate social distancing. During the debriefing, an additional call came in for a very sick individual located in Death Canyon. A discussion then took place about accepting this next mission. It was decided to utilize the same participants. Due to the time lag of incubation this second mission could be undertaken. There was an additional cleaning of the aircraft and the second SAR began.

It was determined that the Interagency Fire Helicopter was not able to land at the patient's location. The aircrew discussed utilizing short-haul cable/basket to reduce exposure to the aircrew from the patient. This was deemed to be the best option for all concerned.

The patient was short-hauled to White Grass Meadows were they were met by their spouse and self-transported to St John's for a diagnosis of severe kidney stone issues.

The Interagency Fire Helicopter returned to Lupine Meadows, was refueled and cleaned. A second debriefing was then held covering both missions. Afterward, the Interagency Fire Helicopter returned to Teton Helibase and was secured for the evening.

Teton Wilderness Patient Tests COVID-19 Positive

During the second SAR mission, the Teton Wilderness patient was admitted into the St. John's Emergency Department and was tested for COVID-19. The results were back before the Interagency Fire Helicopter landed at Teton Helibase: the Teton Wilderness patient had tested positive for COVID-19.

It was determined that because the pilot and mechanic were the only individuals in the crew house, they would overnight in their own rooms and clean the house on the way out the next morning, August 3.

On the morning of August 3, Jenny Lake Ranger 2 called Teton Helibase and spoke with Helitack Crew members. Ranger 2 had discussions overnight and early morning with:

- Chief Ranger of Grand Teton National Park
- National Park Service Medical Liaison
- Medical Controller for both Grand Teton National Park as well as the Bridger-Teton National Forest EMS Programs
- Grand Teton National Park Safety Officer
- Teton County Public Health Officer

During these discussions, the amount of time in the cabin of the aircraft, the wearing of N-95 masks by Ranger 1, pilot, and the patient, and the maximization of airflow in the cabin, all contributed to an agreed upon recommendation to have Ranger 2, Ranger 1, and the pilot: adhere to strict mask wearing when in the vicinity of others, a strong adherence to maintaining at least a six-foot space between themselves and all others, as well as an honest daily self-evolution of symptoms for the next 14 days. Cleaning would also occur at housing facilities upon departure of the exposed employees.

For the following day (August 3), the helicopter was available for SAR in the preservation of life and as a bucket ship in the support of wildland fire suppression with a delayed response of pilot from quarters.

In addition, the Helitack Crew was available as two four-person IA mods with both sawyers and ICs. The ship was allowed to bake in the sun for the day to increase cabin temperature as well allow UV light to sterilize the aircraft. It was cleaned again in the evening and normal operations resumed on August 4.

Lessons

- For any medical this year, treat the patient as if they may have COVID-19.
- Incorporate precautions to be taken by EMTs/responders in conversations <u>before</u> the incident happens.

Flexible use of a "potentially exposed" pilot should be considered while COVID-19 tests are being done.

