

Event Type: Tree Strike

Date: August 29, 2023

Location: Tamarack Springs Fire Umatilla National Forest

The Story and Lessons from this Tree Strike Incident

On the morning of Tuesday, August 29, a small lightning storm began to roll across the Pomeroy Ranger District of the Umatilla National Forest. Crew 404, with five members, was patrolling the Pomeroy Ranger District from Pomeroy, Washington. The morning briefing included discussion of lightning strike locations with resources departing to patrol the most likely areas for smokes.

At approximately 1030, Crew 404 was on the Iron Springs Road when they were notified by the Duty Officer of a smoke report to the west of Clearwater Lookout. Contact was made with Dispatch and drive time to the Clearwater Lookout was roughly 30 minutes. When Crew 404 arrived in the area, they found a single smoking snag in "reprod" (a stand of timber "reproduction"—more recently replanted trees after timber harvest) which was visible from Clearwater Lookout. Lookout.

The fire, a 40-foot snag, was located 100 yards above Road 196. The Incident Commander (IC) and IC Trainee flagged in the easiest/flattest route to the fire while the remainder of the crew began sawing out access via that route.

A 15-by-15-foot area was smoldering beneath the snag. The snag's lean was noticeably toward the road. To avoid being under the snag, the crew members sawing out the route from the road were told to bump-out and around the last part of the flagging.

At first, the injured crew member complained of not being able to feel anything. The IC was able to rule out spinal injury. While the crew member was unable to move their left arm, they could stand up with assistance and was helped to the clearing located farther away from the snag.

When the snag's top broke out, the saw team was thinning out some reprod. The IC Trainee was in a clearing above the snag. The IC and another crew member were above the snag watching it and simultaneously keeping an eye on the saw team. When the top broke off sideways into the green, this crew member had enough time to look up and hop to the side. The top glanced the side of their hardhat and impacted their shoulder. The IC heard the top break out and witnessed this impact to the crew member.

The IC got to the crew member and noticed they were obviously in pain, but were conscious. The IC took command of this medical incident while the IC Trainee kept command of fire. Contact with Dispatch was made immediately. An 8-Line Medical Incident Report with Dispatch was started for a "Red" medical (*"RED/PRIORITY 1 – Life or limb threatening injury or illness. Evacuation need is IMMEDIATE"*).

An ambulance and air ambulance were immediately requested to the Clearwater Lookout. The two saw team members arrived at the scene and helped to move material away from the crew member. Assistance was requested from Crew 405 and Engine 643 (EMT).

At first, the injured crew member complained of not being able to feel anything. The IC was able to rule out spinal injury. While the crew member was unable to move their left arm, they could stand up with assistance and was helped to the clearing located farther away from the snag. After resting for a few minutes, the IC and injured crew member made the decision to walk out to the pickup. The IC Trainee and saw team were left to monitor the fire.

The injured crew member and IC made their way to the pickup, then drove to Clearwater—a location on the Pomeroy Ranger District with a lookout tower, cabin, and helipad—where they met the ambulance. The air ambulance was cancelled because it was not able to fly due to weather. The ambulance transported the injured crew member to St. Joseph Regional Medical Center in Lewiston, Idaho, which was approximately 40 miles, or a one-hour drive.

The IC and Engine Boss returned to the fire to collect gear. Crew 405 took over command of the fire and Crew 404 and E-643 returned to the Pomeroy Ranger District. Crew 405 ordered a C-Faller, who later fell the snag, which was on fire. The fire was contained by Crew 405 and a Washington State Department of Natural Resources (DNR) Engine.

The Crew Member's Multiple Injuries – Including 3rd Degree Burn that Required Skin Graft at a Burn Center

and a Shoulder Nerve Transplant Due to Impact from the Tree Strike

At the hospital in Lewiston, it was determined that the injured crew member had a broken clavicle, impact shoulder injury and 3rd degree burn on the upper left back (size of a salad plate) and needed to be transported to the burn center at Harbor View Medical Center.

After a few days at the burn center, the injured employee received a skin graft and was released from the hospital approximately eight days later. The injured employee has followed up with physical therapy for the burn injury.

While the burn has since healed, the impact to the shoulder damaged the nerves in the shoulder. After two nerve tests, it was decided the employee would receive a nerve transplant. This occurred on January 16 and has been followed by hand therapy two to three days per week. It is expected that the employee will regain 80 to 90 percent function of their shoulder/arm within a six-month timeframe.

The employee is scheduled to return to work April 22, 2024. It is still unclear what their limitations will be at that time.

Lessons

What do folks now know that they wish they'd known before this event?

We were fortunate that we were close to Clearwater, with its already approved landing spot/helipad. Had this medical incident occurred in a different location, it could have added more complexity to the situation.

What would folks share with others who could be in a similar situation?

Avoid complacency while working. We work in an inherently dangerous environment—something unexpected could happen at any time. Throughout the season it is important to practice and discuss medical scenarios to be prepared for challenging situations. Establishing a medical IC prior to engaging could help smooth out response on scene to a medical incident.

What were some successes and challenges?

A challenging part of this incident was the initial "mechanism of injury" (MOI) diagnosis for a possible head/spine injury and, therefore, a need to take things slower to avoid causing further harm to the injured crew member. Head/spine injury was ruled out on scene, but this was initially stressful.

The injury and call to Dispatch happened very quickly. The IC Trainee assumed command of the fire and the IC ended up being the medical IC because they had the highest level of medical training. Because the medical IC was also the one doing the patient assessment, it felt at times communication wasn't necessarily thorough with Dispatch. In future similar situations, one person talking on the radio and another person doing patient assessment would be the preferred approach.

The timing of evacuation, arrival of EMTs, and then the ambulance was very good. The injured crew member was at Clearwater before the ambulance arrived and was being evaluated by an EMT. Any patient care was not feasible on scene. The transport to a hospital was imperative.

What actions can be taken moving forward?

- Expanding medical training beyond First Aid/CPR to more crew members.
- Having more people trained as Wilderness First Responders (WFR) and above would be beneficial during medical incidents on and off the District. The understanding of an 8-Line is much better when at or above the WFR level.
- Expanding medical/evac information in incident organizers and "handy-dandy's".

This RLS was submitted by: Umatilla National Forest Fire Management Do you have a Rapid Lesson to share? Click this button:

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