

Rapid Lesson Sharing

Event Type: Burn Injury

Date: May 31, 2026

Location: New Meadows Ranger District, Payette National Forest

The Story and Lessons from this Ash Pit Burn Injury Incident

On Sunday, May 31, 2026, a Payette National Forest West Zone Type 4 engine crew arrived to patrol a recent spring prescribed burn, the Railroad Prescribed Fire, on the Central Zone of the Forest.

The crew had met with the Central Zone Duty Officer the day prior to obtain maps of the unit along with various GPS points or “pins” dropped where hotspots existed, both on the fire’s perimeter and interior. The intent was to assess the hotspots, determine the potential to threaten control lines, and take suppression action if needed. At this point, the Railroad Prescribed Fire had been burning for approximately one month.

After some shuttling to the top of the unit, the engine crew had lunch and then divided up to go assess the hotspots. The Engine Boss plus one crewmember would check a few of the GPS point hotspots in the interior of the unit while the remaining crew would walk the handline along the south flank.

The Ground Below Fell Away . . .

As they were making their way through the black down the slope, the Engine Boss saw smoke on the downhill side of a mid-slope road in the unit that matched up with a GPS hotspot point they had been given. As the Engine Boss went to investigate the smoke, she stepped off the roadbed and the ground below her fell away as she tumbled into what she very quickly realized was a hot ash pit.

“Oh @\$%, get out . . .”

Engine Boss

The first thing she felt was landing on her tool handle in her hip area and then the high intensity of the heat. She understood that getting out immediately was a priority, so she scrambled out of the downhill side of this huge ash pit.

After gathering herself, she rinsed her hands with water from her canteen and used the crewmember’s hand tool to fish her hand tool and radio out of the ash. Being an EMT herself, she then began to perform a self-assessment on the burn injury which was located primarily on the back of her right hand.

She noticed a small quarter-inch spot there that appeared “melty.” But aside from some general pain, she self-assessed as a “Green” medical. During this self-assessment she also took note of some minor pain coming from above the boot/sock line on both legs, but—at that time—did not visually inspect the source.



Photos taken of the roadbed and other ash pits showing how the logging slash burned out under the road in a cornice-like drop off.

An IWI is Declared with an Incident Commander

After the initial self-assessment, the Engine Boss and crewmember continued their mission, even stopping to dig line around a tree. This continued movement began to aggravate the Engine Boss's legs. Therefore, once she saw the local Fire Operations Specialist's (FOS) truck on the road below her she decided to do a face-to-face and let him know that she had a Green medical.

After making contact, the Engine Boss did a more thorough inspection of her legs and found raised red burn marks on her calves above the sock line, that the FOS remarked "looked like whip marks."

At this time, the Engine Boss realized her self-assessment of a Green medical wasn't accurate. She knew she needed to get some medical attention.

The FOS then took over as the Incident Within an Incident (IWI) Incident Commander (IC) and began making notifications and arrangements for the Engine Boss to depart the unit for the hospital.

District Ranger Volunteers to be the Hospital Liaison

Upward notifications from the FOS to the Zone Duty Officer were completed using a cell phone. The DO then called Payette Interagency Dispatch and requested a Hospital Liaison to meet the injured firefighter at the hospital in McCall, Idaho, about a 45-minute drive from the prescribed fire unit.

As upward notifications continued, the injured firefighter's District Ranger was looped into the situation. Living in McCall only a short distance from the hospital, he volunteered to serve as a [Hospital Liaison](#). Even though he was not on the Forest roster of identified Hospital Liaisons, he believed he could fill the role with the remote assistance of the Forest Safety Officer, if needed.

ER Doctor Determines Referral to Burn Center is Unnecessary

Transported in the engine chase truck by the same crewmember who was present at the time of the injury, the Engine Boss arrived at the emergency room, followed shortly thereafter by the Hospital Liaison. The Hospital Liaison provided a copy of the Burn Injury Care Guidelines (found on page 3 of the [NWCG Burn Protocols](#)) to the ER doctor assessing the burns.

Following assessment of the burns, the ER doctor determined that referral to a burn center was unnecessary and released the employee with instructions on when and how to change the wound dressings. The ER doctor stated that unless her condition began deteriorating, a follow up would not be needed. The employee was then transported back to her home unit, an approximate two-hour drive from McCall.

Two Days Later . . .

Two days later, settling into a burn care routine, the Engine Boss noticed a large blister developing from the burn on her hand. While there were no signs of infection present, she elected to visit the local Urgent Care facility.

Provided with a copy of the Burn Injury Care Guidelines, the Urgent Care doctor remarked that, personally, they would have referred the patient to telehealth resources from a burn specialist, unlike the ER doctor in McCall.

Given that the burn recovery was progressing normally, albeit blistered, the main concern was that it was her dominant hand and it covered multiple joints. The patient was therefore referred to a local wound specialist for



Top left, the Engine Boss's left leg; top right, her right leg. Bottom, the blistering on her hand. All photos taken two days after the burn injury incident.

continued outpatient recovery.

After three weeks of recovery, and wound care following the incident, the Engine Boss has nearly fully recovered and has been returned to full duty.

Takeaways and Lessons Learned

Ash Pits—An Inherent and Hidden Risk to Wildland Firefighters

Ash pits are an inherent and hidden risk to wildland firefighters that can cause severe burns and injuries. One of the major environmental factors that increase the risk of ash pit formation is landscapes that have once been cultivated or manipulated by heavy equipment, old dozer piles, sawmills, timber sale yards, or decking areas. In the case of the Railroad Prescribed Fire, the unit had many large slash piles and an abundance of masticated material mixed with dirt along the reopened skid roads which created large ash pits that had been burning for weeks prior to this incident. Time was also a factor in this hazard. The longer things burn, the higher the risk.

NWCG has Updated Burn Protocol Recommendations

Due to recent changes in both technology and the American Burn Association referral guidelines, NWCG has updated their burn protocol recommendations which can be found on the [NWCG website](#) and in the current [Interagency Standards for Fire & Fire Aviation Operations \(Red Book\)](#).

A burn injury that is beyond basic first aid treatment should be sent to the **nearest emergency department** for evaluation. Any life-threatening issues such as airway, pain control, and **need for fluid resuscitation** can—and should be—treated at a local emergency department. Bypassing local emergency departments to go directly to regional burn centers can put the patient at risk, delay initial treatment, and result in unnecessary travel and risk to both the patient and others. In the emergency department, a licensed independent provider will determine what care should be initiated. This may include any of these:

- ❖ Immediate transfer to a burn center after stabilization
- ❖ Remote (tele) consultation with a burn center
- ❖ Treatment and referral to local primary care or wound care

While these updated protocols allow for different options, treatment does not end after the initial emergency department visit. It is imperative to follow the directions from the emergency department and attend all follow-up appointments. All burn patients being discharged from an emergency department should receive/request a follow-up referral. The same burn can change severity, depending on where it is on the body and what anatomy it is impacting.

The Importance of the Hospital Liaison

The patient remarked during interviews that having someone be there in the role of Hospital Liaison was comforting. Even though the person acting in this role had no formal Hospital Liaison training, they were able to be present with the patient and let them know that they were not alone—that they had technical assistance coming remotely from the Forest Safety Manager and the Forest Hospital Liaison guidance document.



Machinery pulling apart the ash pit that the Engine Boss had stepped into three weeks after this injury incident occurred. Note the steam cloud rising from the ash pit, illustrating how hot it still was.

Make sure to follow up with the employee’s supervisor to close any loops on initiating CA-1/CA-16 paperwork, which can be tricky when an incident happens over the weekend like this one did. If you order a Hospital Liaison as a Duty Officer or IC and none are available, who will do it?

Beware: How Leaders Can Become ‘Difficult’ Medical Patients

The choice to keep this incident off the radio was less about not wanting to make it a “big deal” and more about the Engine Boss being at capacity. She remarked that she was effectively in four roles at that time: the patient, the EMT, the IWI IC, and still the supervisor for her crew. She thought that as soon as anything went over the radio she would have a ton of radio traffic to manage and the remainder of her very inexperienced crew to reassure and redirect. She remarked at how sometimes leaders can make “difficult medical patients” in this regard.

How bad does it need to be for you to call for help on the radio?

How can you better train for situations in which you might have to fill multiple roles (be the supervisor/patient/IC and/or EMT for example) in an IWI?

Before Helping a Crewmember Injured in an Ash Pit—Assess the Scene

The crewmember with the Engine Boss made an attempt to help her get out of the ash pit before the Engine Boss yelled at him to stop so he wouldn’t fall in, too. Don't make yourself another patient. Make sure to assess the scene before trying to help.

This RLS was submitted by:

Nick Bohnstedt

Payette Safety and Occupational Health Manager

and

Katrina Mohr

**Payette Central Zone Supervisory Engine
Operator**

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