

Rapid Lesson Sharing

Event Type: ATV Backing Incident

Date: March 26, 2019

Location: Midewin National Tallgrass Prairie,
Eastern Region

As the Firing Boss Trainee's right lower leg came off the ATV, it made contact with the right front tire, sucking the leg under the tire—like a piece of paper being pulled through a printer.

Background

Local, Regional, and other resources were at Midewin National Tallgrass Prairie to conduct a series of prescribed burns. The resources had been burning for a few days and had developed a good working rhythm and rapport.

On Tuesday March 26, the Burn Boss noticed a stringer of Osage orange trees on the burn unit's flank. Osage orange trees can burn hot and complicate mop-up. It was therefore decided to adjust the unit's boundary to exclude these trees from the burn.

Unnoticed Branch Pushes into ATV Driver During Back-Up

Pat, the Firing Boss Trainee, who was not familiar with the area, went to scout ahead of the Firing Team to determine the best place to hold the fire along the burn unit's northeast corner.

While scouting on an ATV, Pat came to a pinch-point between a fence and a hedgerow of Osage orange trees which required Pat to turn around. While looking back toward the open field and maneuvering the ATV in reverse, an unnoticed branch started to bow, pushing Pat forward and to the right.

As Pat was pushed forward into the handlebars, a sudden throttle acceleration pushed Pat off the ATV. As Pat's right lower leg came off the ATV, it made contact with the right front tire, pulling Pat's leg under the tire—like a piece of paper being run through a printer.

Pat remained conscious and was able to radio for help. Several people remember hearing Pat calling for help over the radio and thinking: *"Is this for real—or are we running a scenario?"*

No Medical Incident Report Form

The first person on scene was Nick, the Holding Boss Trainee, who had heard Pat's call for assistance over the radio. Nick found Pat on the ground beside the ATV. Pat's helmet was still on. Nick initiated emergency traffic on the radio and additional resources started arriving on scene. Nick remembered that they didn't have a Medical



Photo shows the branch that pushed into the ATV driver when backing up—triggering this medical emergency.

Incident Report form (from the IRPG). Nick was therefore trying to remember all that needed to be reported. At about this time, one of the prescribed fire's EMTs arrived and began the medical assessment and care.

Once on scene, the Holding Boss took over as the Incident Commander of this medical Incident-Within an-Incident. One of the EMTs provided the Holding Boss with a Medical Incident Report form.

The IC was trying to use the radio to call in and remembered that the radio was having an issue transmitting to Dispatch. It was suggested to call Dispatch by cell phone.

The first EMT on scene conducted an initial assessment. Pat believed, and clearly stated, that Pat had a broken leg. A deformity was obvious. Two other EMTs arrived and began stabilizing the leg and packaging Pat for transport.

Transportation Plan Discussed

Meanwhile, a transportation plan for Pat was discussed. Do they use an ambulance or transport themselves? Pat wanted to keep things "low key" and did not want an ambulance. Ultimately, the decision was made to transport via ambulance due to the serious nature of the injury and the potential for circulation and pain issues developing during transport.

The crew needed to transport Pat to the road, which was approximately 200 yards away. Three options were discussed to transport the patient to the road: 1) Transport inside the dump bed of 6-Wheel ATV; 2) Transport inside UTV; 3) Carry out by hand.

Ultimately, the 6-Wheel ATV was chosen because it allowed Pat's leg to be kept straight. Had the UTV been used, the injured leg would have to be outside the UTV and, therefore, would be vulnerable to further injury.

The ambulance arrived shortly after Pat arrived at the road. Pat's supervisor followed the ambulance to the hospital to serve as Hospital Liaison. At the hospital it was determined that Pat had a broken fibula and was put in a cast and had surgery later to repair the break.

At the end of shift, an After Action Review was conducted. Several notable lessons learned were identified and discussed.

Lessons Learned

Medical Response

It is important to highlight that this medical incident was handled professionally and rapidly. All crewmembers on the prescribed fire anticipated needs and initiated actions that contributed to the success of the medical operations and getting the patient to a higher level of care.

One example of anticipating needs was when several crew members prepared a truck so Pat's supervisor could follow the ambulance to the hospital. This action allowed the supervisor to go directly to the hospital instead of having to return to the workstation to get a different vehicle.

What and How Much Do We Retain in a Briefing?

A few of the outside resources were not familiar or did not recall the medical response protocols used by the local unit. All acknowledged that they remember going over the Medical Plans in the morning at briefing, but really did not retain all that information.



While several personnel had Incident Action Plans for the burn, they noted that things happened so fast, they didn't have time to locate them.

It is important that individuals remember that the Medical Plan details incident medical protocols and that the Medical Incident Report form is a tool developed to aid in passing information about the injury to the Dispatch Center.

The Dispatch Center should also have a copy of the Medical Incident Report form. The Dispatch Center is ultimately there to assist the medical incident and, if needed, will coach the Incident-Within an-Incident IC/Radio Person if they don't have the Medical Incident Report form, for the needed information.

Firefighters should not be distracted by "fear of non-compliance" in starting a medical incident if they don't have a copy of a Medical Incident Report form.

Correct Issues with Radios as Soon as They are Identified

Some personnel (both local and outside) encountered radio problems with the new digital repeater. This was a known problem that had been identified the day before. However, not everyone addressed these radio issues prior to burn operations on the day of the ATV incident.

Extra Care and Training Needed for Backing ATVs/UTVs

It is recommended to spend time going over backing on these machines with the operators. ATV training from the ATV Safety Institute (ASI) and the U.S. Forest Service supplement does not address backing in training. Some other ATV trainings do.

Plenty of EMTs Onsite

The local unit actively recruits and supports firefighters to be Emergency Medical Technicians (EMT). On this prescribed fire, several of the outside resources were also EMT qualified.

EMTs Have Different Experience Levels

You should be aware that while some EMTs have gone through extensive training, they might have limited exposure in the field.

Know Exactly What Type and Where the Hospital is Located

With today's consolidation of hospitals into larger "Health Care Organizations", hospital names can change and can also be duplicated. In fact, sometimes only the city or town in which the hospital resides is the only difference in name.

In this incident, the supervisor followed the ambulance. They didn't go to the hospital he thought they were going to. Both hospitals had the same overall name, only their locations were different.

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