National Fire Fighter Near-Miss Reporting System
Reports Related to Personal Protective Equipment (PPE)

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08-302

Event Description
Our VFD was called out for an unauthorized controlled burn after dark that was threatening nearby wooded areas. The brush truck, booster truck, and engine responded. First vehicle on scene was our brush truck staffed by one active firefighter and a probationary member. The chief and assistant chief arrived on scene with the booster truck and our squad vehicle. Upon arrival of the booster, the 2 man crew from the brush truck had brought one large pile of brush under control. They were cooling the pile down to reduce the amount of embers being blown by the wind. Firefighters from the brush truck were dismounted from the vehicle, one running the pump, the other on the line cooling the pile. None of them were wearing any PPE. The assistant chief inquired to the firefighter that was on the line as to where his PPE was but did not require the firefighter to don PPE before continuing suppression activities. The firefighter then proceeded to climb a 5 to 8 foot berm surrounding the brush pile. While at the top of the berm, the downhill slop of the berm gave away causing the firefighter to fall into the burn pit. Though the fire was controlled and only embers and large piles of timber remained burning, the ground temperature was well above 200 degrees F.

The firefighter involved was dressed in jeans, tennis shoes, and a t-shirt. He suffered second and third degree burns on his legs, ankles, feet, hands and arms. The firefighter was pulled up off the ground within 10 seconds of the fall but still was significantly injured.

Lessons Learned
Given the nature of the call, complacency was the largest contributing factor to this accident. Our department responds to a large amount grass and brush fires within our district and the general attitude was that this was just another routine event. The firefighter involved has been with the department for a little less than one year. Multiple personnel, including the assistant chief, were aware that the firefighter was not wearing any PPE but took no steps to correct the situation. Any firefighter on the scene, regardless of their rank or position in the department, should have stopped the firefighter and required them to don their PPE before continuing with suppression activities. The firefighter knew better. He has been in the department for some time and completed the prerequisite training. A conscious decision was made by the firefighter involved not to wear their PPE. He felt that this was just another simple brush fire and that PPE would not be required. A lack of enforcement from the officers on scene led to this injury.

10-497

Event Description
Our engine company was dispatched to a reported gas leak. While arriving on scene, we passed the alley where the leak was occurring. I was able to briefly catch a glimpse of a vehicle with it's headlights on and was able to hear what might have been a gas leak. I also began to smell gas before we came to a stop in front of the house. The first thing I

noticed when getting out of the engine was a very strong odor of gas in the air (not the normal faint whiff of gas).

I was the first person of my crew to contact the resident of the house, who was standing outside to meet us. He informed us that he had backed into the gas meter in the alley. I asked whether or not the vehicle was still running and the resident replied "yes." I informed the residents of the house to stay in front of the house.

My captain (wearing only helmet, bunker coat, bunker pants and boots) and I (wearing SCBA, helmet, hood, coat, bunker pants and boots) walked around the side of the house to the alley where we noticed the running vehicle sitting in the driveway about 3 feet from the gas meter. As we walked down the alley, I asked my captain if he wanted me to mask up. He did not respond and instead continued toward the vehicle. I briefly paused as I asked the question and then decided to continue with him. About four feet from the meter we determined that the line had sheared off below the meter, but above the shutoff valve. The gas was so strong that my eyes were watering. I used the crescent wrench that I carry in my gear and shut off the gas. The vehicle was then turned off.

I consider this event a near miss because had the gas ignited, it would have burned all unprotected areas including my airway, face, neck and hands. All elements necessary for ignition were present.

Our department SOP does not mention the use of PPE when FD personnel attempt to shut off a gas leak. Our personal protective equipment SOP states proper PPE must be worn "when inspecting damaged natural gas meters or lines, when plugging broken lines or when manning hose lines in hazard areas as utility employees repair a broken line." Our SCBA SOP states "all personnel shall fully don and utilize SCBA when engaging in operations where IDLH (Immediate Danger to Life and Health) atmospheres may be encountered, or where the atmosphere is unknown, or where hazardous conditions for fire or other emergencies exist or where the potential for such exposure exists."

Obviously our SOP clearly states that we should have been wearing all of our PPE.

Two points I feel worth noting:
-I had a compelling urge to don my SCBA / rest of my PPE before shutting off the gas. This thought was with me the whole time I approached the meter and while I was shutting the gas off. I was telling myself "I should be on air." I constantly denied the voice inside telling me the right thing to do. There was no life safety issue at this point except the one that was brought to the scene on the red fire engine.
-I am a very strong proponent for proper FD response to gas leaks. At my current and past department I have sent several requests for four gas meters so that we can be adequately prepared for gas leak calls. It is important for us to know if we are in a flammable or explosive atmosphere. It is also important for us to take proper precautions to protect ourselves and utility workers who respond to these leaks.

With that being said...I have to pose this question:
How could I, being such an advocate for firefighter safety and proper response of gas leaks, make this mistake?
I don't know the answer...I can't find one.

Fortunately this was a near miss...and I will take the lessons learned here with me in the future. Next time I will have the courage to do the right thing.

Lessons Learned
My lesson learned was that even though I am very passionate about safety when it relates to gas emergencies, at times I still need to find the courage to do the right thing especially when it matters the most (on the street).

In order to prevent this from occurring again, I have discussed this situation with my captain. I have also begun doing research with several utility companies to ascertain FD's appropriate response to gas emergencies, which I will use to put together a training presentation that I hope to present to my station and then pass it up the chain-of-command.

08-499

Event Description
While participating in auto extrication training, I was struck on the inner thigh by the base of our [extrication tool] spreader. The tool weighs approximately 53 pounds. The event occurred as I was removing the front passenger door of a sedan. When the door latch separated from the Nader bolt, it popped the door, which popped the tool back into my thigh.

My leg was not seriously injured, with no bruising showing until five days after the event. I was wearing full PPE during this exercise.

Lessons Learned
I believe there are two lessons to be learned from this incident. First, there is no substitute for full PPE. I truly believe that the padded lining of my PPE lessened the seriousness of the injury. Second, be aware of how you are operating the extrication tool. I normally keep the tool against my leg to maintain control and absorb any jumps, instead of being struck, as in this incident.

10-404

Event Description
Our shift was called out to a two car MVC with ejection, entrapment and injuries. We arrived on the scene and started our size up. There was a language barrier. There were a total of six patients; three patients in one vehicle entrapped, one in the other vehicle and two ejected on the edge of the roadway. Triage was the best option. After patient assessment of the two ejected victims, they were pronounced deceased. Out of the three

patients entrapped, two were red tagged. The other two patients had minor injuries. After extrication ended, I assisted loading one of the critical patients and stayed in the ambulance with him and the medics to help with secondary survey. The patient had serious facial injuries and was fighting the O2 mask on him. I leaned over his head to adjust it, and suddenly he coughed up blood and it got into my eyes. I very quickly rinsed my eyes out and told my officer what had happened. We started our department blood borne pathogen procedure. I am happy to say after several tests (for me and my patient) there was no blood borne pathogens present.

Lessons Learned

Don't put yourself in an easy position to be exposed to blood or other bodily fluids. Wear gloves, mask and gown if there is a high exposure risk. Always be aware of patient's injuries and be prepared for what they may do.

10-322

Event Description

We were operating on a working fire on the first and second floors, on the "C" and "D" sides of a two-story wood-frame structure. Approximately thirty to forty-five minutes into operations, the fire was knocked down and we were in the overhaul stage. The second floor crew was preparing to remove ceiling and wall debris out through a second floor window. While waiting for the all clear to do so, one member of the second floor crew threw one piece of window wood trim out the window, which struck a firefighter that was exiting the first floor. The firefighter who was stuck did not have a helmet on. The firefighter was injured and was transported for treatment. Staffing was a total of nine personnel; the shift was at the minimum staffing allowed. Off duty personnel were called back to assist.

Lessons Learned

Miscommunication with my crew on the second floor was a problem. One member thought the outside was clear to remove debris. A second issue, and a more serious one, was the lack of complete PPE use; i.e. no helmet. The firefighter involved has had past problems with losing or forgetting to use a helmet. The injury would not have occurred if a helmet would have been in use. A recommendation was made to the shift captain to strongly counsel this firefighter on PPE use.