

## Highway Accident Scene Safety

### BACKGROUND

An EMT and firefighter are treated for injuries related to a motor vehicle accident on a limited access highway while attending to an accident scene. The local fire department holds the R-1 and a commercial vendor provides the transportation services in this community. One of the two travel lanes were blocked to protect the accident scene while emergency personnel worked on scene. A vehicle traveling at a moderate rate of speed was unable to merge into the single file traffic pattern and struck the "blocking" apparatus forcing it into the work area and striking the two emergency personnel.

### INCIDENT

The emergency call was received by a central communications dispatch for a multi-vehicle accident on a limited access two lane highway. A normal fire response and EMS response from the covering services responded. While in route, dispatch advised all responding units that the accident was in the high speed lane and appeared to be minor with all occupants out of the vehicles. State Police was not on scene at this time. The first arriving unit was an ambulance from the private service and was positioned in the high speed and shoulder portion of the road pulled just past the scene. The two medical personnel began assessing the occupants of three vehicles involved. It was at this time that the first piece of fire apparatus arrived on scene.

The fire department response was three pieces of equipment. The first out was an F-550 mini-pumper manned by two in-station career personnel. The second piece was a heavy rescue truck staffed by a career driver who waited until three additional volunteers arrived in quarters. The third was a Class A pumper responding with two additional volunteers from a substation. All three vehicles responded in emergency mode to the location.

First to arrive on scene was the mini-pumper and their vehicle was placed in the high speed lane just prior to the accident scene by approximately 25 feet. With emergency warning devices activated, the two personnel exited the vehicle. They placed three cones across the rear of their apparatus in a staggered pattern approximately 2 feet, 6 feet and 10 feet from the vehicle rear bumper of the apparatus to indicate that the lane was closed. They then proceeded to assist EMS personnel and begin to make the vehicles safe.

The firefighter acting in the command position called off other responding apparatus that was in route as the accident appeared to be minor in nature. All three vehicles were off in the shoulder and there were no fluids down or hazards at this time. The State Police had one vehicle on scene and it was placed past the accident scene in front of the ambulance.

As EMS personnel were completing their paperwork and the firefighters were insuring that the vehicles are made safe, there was a loud collision and the mini-pumper was thrown into the work area tossing an EMT to the ground with a right shoulder and arm injury and the fire fighter into one of the stationary vehicles causing significant head trauma. The acting commander summoned for additional ambulances and also requested the return of the two cleared fire units to the scene. State Police also requested additional units and closed the highway.

The subsequent investigation revealed that the run off lane for merging vehicles from the high speed to low speed lane was not sufficient enough for drivers to reduce speed and effectively merge traffic into a single file pattern. Firefighters on scene were not wearing any personal protective equipment (PPE) and were dressed in their "station ware" as opposed to reflective items and proper helmets. The two EMS personnel were wearing vests and were not provided helmets for their own safety.

### DAMAGES

The EMT's were covered by their own private firm's Workers' Compensation program and are not considered as part of the claim. The firefighter received significant head trauma, loss of consciousness and required significant rehabilitation with a partial disability rating.

### LIABILITY

The liability is 100% based on the statements and reports that were released for review.



## KEY RECOMMENDATIONS

- All personnel who respond on limited access highways should receive training on highway safety and apparatus placement for scene protection measures.
- A Standard Operational Procedure (SOP) should be developed and put in place regarding proper lane closure procedure.
- Within that SOP there should be definitions as to when to take a lane and proper apparatus placement between the accident scene and the first warning vehicle for blocking.
- Within that SOP, proper type and size of apparatus should be specified to be used for blocking.
- All personnel should be in appropriate PPE for personnel safety at ALL times when operating at any emergency scene.

Questions on this topic? Ask your Supervisor or CIRMA Risk Management Consultant at (203) 946-3700.