Topic #1: Seatbelts

Report Number: 08-0000134
Report Date: 03/08/2008 1610

Demographics
Department type: Combination, Mostly volunteer
Job or rank: Fire Chief
Department shift: Stand-by (in-station)
Age: 52 - 60
Years of fire service experience: 30+
Region: FEMA Region VIII
Service Area: Suburban

Event Information
Event type: Vehicle event: responding to, returning from, routine driving, etc.
Event date and time: 03/05/2008 1500
Hours into the shift:
Event participation: Told of event, but neither involved nor witnessed event
Do you think this will happen again?
What do you believe caused the event?

- Equipment

What do you believe is the loss potential?

- Property damage

Event Description
Our fire mechanic was conducting a survey of seat belt condition of all apparatus in the department fleet. His investigation revealed that nine seat belts or retracting mechanisms were damaged beyond a safe operating condition. The biggest problem is damage occurring to belts caught in apparatus doors causing cuts and abrasions to the belts. Based on this inspection it was determined that nine seat belts and mechanisms would be immediately replaced. This replacement of nine belts indicated that we were replacing at least one belt in 50% of our apparatus. Of course, this was a non budgeted item but what price do we put on safety of our crews. The area apparatus vendor was extremely helpful in getting replacements ordered and shipped within 24 hours. Whether or not this classifies as a near miss or not, I am not sure but when it came to our knowledge, we were not going to take a chance. I certainly do not think we are alone in this dilemma.

Lessons Learned
Regular inspections of apparatus occur on a daily, weekly, and monthly basis. Verifying the working and proper condition of the seat belts should be a daily requirement as well. Inspect your belts. We all have or should have a mandated policy concerning the wearing the seat belt and should indicate what the

consequences of not wearing seat belts are. Every week we read about another firefighter death or serious injury from the lack of wearing a belt. This week was no exception. However, we must also take the responsibility of ensuring that those belts comply with standards and operate correctly. Replace defective or worn out seat belts, be cautious about shutting seat belts in doors, and enforce your policy of mandated wearing of the belt.

Report Number: 05-0000255
Report Date: 05/27/2005 1410

Demographics
Department type: Combination, Mostly paid
Job or rank: Captain
Department shift: 24 hours on - 48 hours off
Age: 43 - 51
Years of fire service experience: 24 - 26
Region: FEMA Region III
Service Area: Urban

Event Information
Event type: Vehicle event: responding to, returning from, routine driving, etc.
Event date and time: 04/04/1985 0800
Hours into the shift: 0 - 4
Event participation: Involved in the event
Do you think this will happen again? Uncertain
What do you believe caused the event?

- Individual Action
- Communication
- Equipment

What do you believe is the loss potential?

- Other

Event Description
This incident occurred while I was riding in the open jump seat area of a 1974 Class A pumper responding to a reported auto fire on the interstate. This 8am morning it was raining and there was some fog in the area. Myself and the E4 position firefighter were dressed in our complete PPE and trying to put on our SCBA, a bad move. The pumper made a hard right turn to enter the interstate and bumped the curb. This made the pumper move very hard to the right then left and then straight. The pumper did not have seat belts in the jump seat area. My body was pushed so hard to the right side of the cab I almost fell out onto the roadway. This unit did have the yellow padded safety bars on each side. That was the only thing that kept me from falling out. At that point we notified the OIC in the front seat as to what just happened. He had the driver slow down until we reached the location.

Lessons Learned
The station fire chief was advised of the event. Three days later the 1974 pumper was outfitted with make-shift seat belts in the E3 and E4 positions. A station

memo went out to all personnel, career and volunteer, to use seat belts while riding in the '74 pumper jump seats.
Report Number: 06-0000029
Report Date: 01/22/2006 1044

Demographics
Department type: Combination, Mostly paid
Job or rank: Fire Fighter
Department shift: 24 hours on - 48 hours off
Age: 25 - 33
Years of fire service experience: 4 - 6
Region: FEMA Region III
Service Area: Suburban

Event Information
Event type: Vehicle event: responding to, returning from, routine driving, etc.
Event date and time: 10/10/2005 1800
Hours into the shift: 9 - 12
Event participation: Involved in the event
Do you think this will happen again? Uncertain
What do you believe caused the event?

- Equipment

What do you believe is the loss potential?

- Life threatening injury
- Lost time injury

Event Description
The date and time of the event may not be completely accurate but it's the best approximate guess that I can recall. I was assigned to ride 3rd on the truck, which is the firefighter position. Our seating arrangement at that time allowed the firefighter to sit with their back to the officer or to use a fold down seat and face forward while responding. Both seats have seat belts, which may have saved my life or in the least, prevented serious injury. During a response to a call I sat in the forward facing fold down seat, applied my seat belt. We left the station house and took an immediate left hand turn. My body slid in the seat, my hip striking the handle of the door. This door handle is lever actuated, releasing the latch if turned up at a 90 degree or down at 90 degrees. When my hip struck the handle, the door opened and the upper half of my body ended up leaning out of the apparatus while the vehicle continued to move. The apparatus is an older model with no headsets and no emergency indicator to notify the driver when a door is open. I was able to grasp the door jamb and bring myself back into the vehicle, close the door, and made sure my hip didn't touch the door again. The driver and officer were completely unaware of the event. If not for my seat belt, there is no doubt in my mind that I would have been tossed out onto the street. Since this

event the door handles have been repaired to be only opened when the handle is lifted up. The fold down seats have also been removed. We don't have extra personnel riding in those positions, so there is no justification for those seats. I feel my department acted appropriately to prevent this occurrence from happening again. I only mention this now to perhaps prevent a similar event happening elsewhere.

Lessons Learned

Lessons learned would be to ensure you wear your seat belt all the time, every time. The importance of buckling the buckle before the apparatus moves is clearly indicated here. Actions were taken by the department in repair of a faulty door handle, warning light for the driver, and situational awareness for the personnel.

Report Number: 06-0000357
Report Date: 07/09/2006 1448

Demographics
Department type: Combination, Mostly volunteer
Job or rank: Fire Chief
Department shift: Other
Age: 43 - 51
Years of fire service experience: 27 - 30
Region: FEMA Region I
Service Area: Rural

Event Information
Event type: Vehicle event: responding to, returning from, routine driving, etc.
Event date and time: 07/04/2006 1100
Hours into the shift: 0 - 4
Event participation: Told of event, but neither involved nor witnessed event
Do you think this will happen again? No
What do you believe caused the event?

- Individual Action
- Decision Making
- Situational Awareness
- Human Error

What do you believe is the loss potential?

- Life threatening injury

Event Description
On the 4th of July, a ladder company and engine company were traveling to two neighboring communities for parades. One parade was at 0900 and the other parade was at 1100. Enroute to the first parade two members of the six member ladder company rode a distance of 6 miles to the next town standing on top of the aerial turntable. They had to duck under a railroad bridge and many tree branches. The engine company following the ladder company witnessed the behavior and took no action. Two hours later, while traveling about 9 miles to the next parade, the three members of the ladder company rode standing on the aerial ladder turntable. On this trip, the engine company did not witness the events because they took a different route. An off-duty firefighter who saw the ladder truck driving down the state highway with the crew on top called the Fire Chief by phone to report the problem. The department has a written SOG requiring all personnel to ride in the cab and wear seat belts whenever the truck is in motion. The officer of the ladder company was in charge of the parade detail. The officer, driver and members of the ladder company (a volunteer lieutenant, a

career firefighter and three volunteer firefighters) who rode the exterior of the truck have all been suspended. One member of the ladder company who rode in the cab was formally reprimanded for not speaking up and conveying concerns to the officer or driver. The officer and driver of the engine company were formally reprimanded for failing to take any action when they witnessed the original offense.

Lessons Learned

I'm not sure what lessons have been learned. All of the offending parties said they knew what they did was wrong, but they "just didn't think" or they got caught up in the fun of the day. Three members who didn't directly participate - a firefighter on the ladder who rode in the cab, the officer of the following engine company and the driver of the engine - all said that at the time they didn't feel it was their place to tell the ladder officer what to do or they felt their concerns would have been ignored. While I don't think this very event will occur again, I worry about what other obvious lapse of safety will go unnoticed or ignored in the future. Only two weeks prior to the event, on Firefighter Safety Stand Down Day, the department did an extensive driving safety program that involved a review of the safe riding procedures. We had also recently reviewed a department line of duty death from a driving incident 20 years ago as part of a month long focus on safety. Much of June was devoted to driving safety. To have this event occur is frustrating and makes me wonder what I'm doing wrong as Chief and how to prevent these types of events in the future. Reviewer's note: All personnel must be reminded it is their responsibility to point out unsafe acts. It is important to promote a "safety culture" that is supported from the Fire Chief at the top of the organization, down to the newest firefighter. Crews need to know to watch out for each other at ALL times.

Report Number: 07-0000865
Report Date: 04/14/2007 1622

Demographics
Department type: Combination, Mostly paid
Job or rank: Captain
Department shift: 24 hours on - 48 hours off
Age: 34 - 42
Years of fire service experience: 17 - 20
Region: FEMA Region IV
Service Area: Suburban

Event Information
Event type: Vehicle event: responding to, returning from, routine driving, etc.
Event date and time: 04/14/2007 1130
Hours into the shift: 5 - 8
Event participation: Involved in the event
Do you think this will happen again? Yes
What do you believe caused the event?
What do you believe is the loss potential?

Event Description
While transporting a patient, lights and siren, to the emergency room, a vehicle in front of the medic unit made a left turn in the fast lane of the highway due to the fact that they missed their exit. The driver of the medic unit had sufficient distance to react, but had to make an emergency stop. The hard braking shifted me, the paramedic, and patient. All personnel in the back of the medic unit and including the driver had their seat belts on. If not for the use of the seat belts, all personnel in the back of the unit would have lost their balance and may have possibly sustained injuries to themselves as well as further harm to the patient.

Lessons Learned
Our department insures that all driver / engineers take a driving and road course annually. All personnel are to be seat belted, but it is at the discretion of the medic in the back of the unit to have his seat belt on. If not for the driver maintaining a "Safe Driving Distance" the medic unit would have been in a major MVA.

Report Number: 05-0000608
Report Date: 11/15/2005 0011

Demographics
Department type: Combination, Mostly paid
Job or rank: Lieutenant
Department shift: 24 hours on - 48 hours off
Age: 43 - 51
Years of fire service experience: 27 - 30
Region: FEMA Region III
Service Area: Rural

Event Information
Event type: Vehicle event: responding to, returning from, routine driving, etc.
Event date and time: 05/31/1987 1600
Hours into the shift: 9 - 12
Event participation: Involved in the event
Do you think this will happen again? Yes
What do you believe caused the event?

- Situational Awareness
- Human Error
- Decision Making
- Individual Action

What do you believe is the loss potential?

- Life threatening injury
- Lost time injury
- Minor injury

Event Description
We were responding with lights and siren mutual aid to another county for an automatic alarm. I was riding as the officer. We were approaching an intersection approximately one mile from the station. The light was red in our direction. My driver noticed a car approaching from the north and began to slow the pumper by taking his foot off the accelerator. The car did not look like it was going to stop for us so he applied the brakes harder. I was donning my turnout coat and had not yet buckled my seat belt. When the driver hit the brakes, I had both arms in my coat and was pulling it up over my shoulders. The sudden deceleration of the pumper threw me head first into the windshield. I managed to turn my head at the last minute, but still struck the windshield with a significant force, causing me to see stars. The weather was clear and the road was dry. We were a three man pumper.

Lessons Learned

Wearing seat belts is not an option. I wore them in my car every day to and from work then, and still do, but didn't buckle up until I was dressed when I ran calls. Don your turnout gear before getting on the rig. Consider cold responses for automatic alarms. 99% of automatic alarms in our jurisdiction are false. Drivers should not move rigs until all crew members are seated and buckled.

Report Number: 08-0000072
Report Date: 02/07/2008 1300

Demographics
Department type: Combination, Mostly paid
Job or rank: Fire Chief
Department shift: 24 hours on - 48 hours off
Age: 52 - 60
Years of fire service experience: 30+
Region: FEMA Region V
Service Area: Suburban

Event Information
Event type: Vehicle event: responding to, returning from, routine driving, etc.
Event date and time: 09/15/2007 1100
Hours into the shift:
Event participation: Witnessed event but not directly involved in the event
Do you think this will happen again?
What do you believe caused the event?
What do you believe is the loss potential?

Event Description
We were responding to a fire alarm with [name deleted] Engine #1. We responded with 4 along with a duty Chief. I am sitting in parking lot leaving to attend a meeting when Engine #1 passes me with 2 men standing up in the back jump area - guess what 'not seat-belted in'. This is a policy infraction. The response was a distance of less than 1 mile and there was nothing showing at fire alarm. Alarm was reset by duty Chief. I took a ride to follow the engine and talked with duty the Chief and then met with the duty crew. Embarrassed and upset that we took for granted a short trip and that nothing can happen. Outcome: I met with crew and discussed the incident. There will be retraining on policy plus a look at Near-miss site and FF Close Calls site. Can this happen again – yes. I am sad to say yes but we always talk about the things that can happen and will happen. This was a learning experience that will not be forgotten. Training, teamwork, and the reliance of all are to keep things on track when it comes to safety of our own. Brackets [ ] denote identifying information removed by the reviewer.

Lessons Learned
Do not take for granted that the rules/SOG's are always followed. Hold officers accountable. Hold the engineer and the crew accountable. As a measure to prevent this, we preach daily to use seat belts! Sit down, belt in!!!!! [Department name deleted] has taken pride in protecting our own. Training, safety and policies by the membership are for the membership. We will continue with this. Brackets [ ] denote identifying information removed by the reviewer.

Report Number: 07-0000649
Report Date: 01/05/2007 1558

Demographics
Department type: Combination, Mostly paid
Job or rank: Battalion Chief / District Chief
Department shift: 24 hours on - 48 hours off
Age: 34 - 42
Years of fire service experience: 21 - 23
Region: FEMA Region III
Service Area: Suburban

Event Information
Event type: Vehicle event: responding to, returning from, routine driving, etc.
Event date and time: 06/01/1997 1900
Hours into the shift: 9 - 12
Event participation: Witnessed event but not directly involved in the event
Do you think this will happen again? Yes
What do you believe caused the event?

- Individual Action
- Equipment

What do you believe is the loss potential?

- Lost time injury
- Minor injury
- Life threatening injury

Event Description
We were responding to an automatic alarm. It was evening, clear conditions, dry roads. I was the officer on the ladder truck, following behind the engine. We entered an on ramp to a state road when I noticed the passenger door on the officer's side of the engine in front of us come open, then close. Both the engine and truck were placed in service while responding and returned to quarters. Once back at the station, I asked the firefighter who was riding in the seat what happened. He said as the truck rounded the curve of the on ramp, the door popped open and then slammed shut on its own. He stated it startled him but he considered himself fortunate because he was wearing his seat belt.

Lessons Learned
Wear your seat belt at all times.