National Fire Fighter Near-Miss Reporting System
Reports Related to Seatbelts

Report Number: 05-0000279
Report Date: 05/31/2005 0856

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

Event Information
Event type: Vehicle event: responding to, returning from, routine driving, etc.
Event date and time: 11/22/2003 0645
Hours into the shift: 21 - 24
Event participation: Involved in the event
Weather at time of event:
Do you think this will happen again? Uncertain
What do you believe caused the event?

- Human Error
- Decision Making
- Individual Action
- Other

What do you believe is the loss potential?

- Property damage
- Life threatening injury
- Minor injury
- Lost time injury

Event Description
Our engine was dispatched to an ALS emergency at approx 0630, at the tail end of our shift. Prior to arriving on the scene the paramedic unit, already onscene, placed us in service. Another call was dispatched in our first due area and, as we were already on the road, I placed the responding suppression unit in service and picked up the call. Enroute, we had to traverse a series of tight S curves. My regular driver was off and a backup driver was driving the engine, a 2001 (manufacturer name deleted) w/ 750 gal. water tank. As I was reading the dispatch information on the MCT (mobile computer terminal), I heard gravel being thrown up in the wheel wells on the officer's side. The wheels had left the asphalt and were on the gravel shoulder. In the split second it took for me to look up the pumper was already careening sideways back on to the road surface. When it reached an attitude of approximately 45 degrees from straight, the wheels lifted of the ground on the driver's side. The pumper continued sliding sideways. When it was almost perpendicular to the roadway it flipped completely over on the officer's side, continued sliding down the roadway and rotating until it came to rest facing in the wrong direction, on the wrong side of the roadway. All 4 personnel were seat belted in. I ascertained that the crew was ok and we proceeded to free ourselves

from the wreckage. Myself and the driver went out through the front windshield, which had blown out on impact. The two crew members behind me climbed out through the driver side crew cab door, which was now on the top side. All sustained minor injuries including a mild concussion, cuts, bruises, neck and back injuries. According to the driver's account, a dump truck had rounded the curve from the opposite direction and crossed the double yellow line into our lane. When the driver moved the apparatus to the right to avoid a collision the right wheels dropped off the asphalt and onto the gravel shoulder. There was a couple of inches in height difference between the asphalt and the gravel. The driver overcorrected when attempting to bring the apparatus back onto the roadway which caused a "slingshot" effect when the wheels regained traction on the asphalt. He was unable to recover from this and the truck went sideways and flipped on to it's side. Luckily, the windows on the officer's side were rolled up and stayed intact, as both myself and the bucket person behind me had our full body weight on the window as the truck slid and rotated down the roadway. Had the windows broken, or had they been rolled down, both of us would have sustained serious injuries or been killed as we would have been pulled partially, or completely out of the cab and ground up underneath the sliding truck. While the seatbelts did in fact hold us in our seats, they did not prevent us from rolling sideways onto the windows. I believe a 4 point harness would have been the only thing to prevent this. As this accident occurred on a blind curve, at a time of the morning when there was heavy dump truck and passenger car traffic on the road, it was a stroke of luck that another truck or car did not round the curve when the engine was on it side, as the roof of the crew cab was fully in the opposite lane of travel when the vehicle flipped. Had another vehicle rounded the curve they would have impacted the roof of the apparatus, one of the weakest sections, and likely killed all 4 personnel. While we all must use back up drivers from time to time, it is my opinion that the best driver is the assigned driver, or at least one who always drives similar apparatus. Someone who drives occasionally may be a decent driver, but doesn't have the knowledge of how the apparatus reacts in critical situations. Data from the "black box" indicated the engine was traveling at 45 mph when it turned over. The speed limit on the roadway was 30mph. Our SOP's allow for driving 15mph over the posted speed when responding with lights and sirens. However, due to the curves, a reduced speed would have been more prudent.

Lessons Learned

Rather than use a "back-up" driver if the regular, assigned driver is off, pay overtime to recall another regular driver to fill the position. Keep all tools and equipment secured or out of the crew cab compartment. We did, and it saved us. Had a haligan, axe or some other item been thrown around in the rollover and broken one of the officer side windows serious injury would have occurred as the personnel next to that window would have been pulled out of the cab and under the truck. All drivers must understand the importance of not falling prey to the knee jerk reaction to pull the steering wheel back in the other direction if the apparatus leaves the asphalt. Slow down, keep it in the dirt or on the shoulder and do not bring it back up on the roadway until the vehicle has slowed almost to a stop. Once these trucks go sideways, and the weight of the tank water shifts, you will not be able to keep it from overturning. WEAR YOUR SEATBELTS ALL THE TIME !!

Report Number: 05-0000586
Report Date: 10/25/2005 0817

Demographics
Department type: Combination, Mostly volunteer
Job or rank: Fire Chief
Department shift: 24 hours on - 24 hours off
Age: 34 - 42
Years of fire service experience: 24 - 26
Region: FEMA Region IV
Service Area: Rural

Event Information
Event type: Vehicle event: responding to, returning from, routine driving, etc.
Event date and time: 10/24/2005 1923
Hours into the shift: 9 - 12
Event participation: Involved in the event
Weather at time of event:
Do you think this will happen again? Uncertain
What do you believe caused the event?

- Decision Making
- Individual Action

What do you believe is the loss potential?

- Property damage
- Life threatening injury

Event Description
I was responding to a residential fire alarm activation in our rural response district. I was driving a 2005 Chevrolet 4x4 Tahoe, which is my issued Chief's vehicle. Our department was having a bi-monthly training meeting, so I responded from the station. This occurred at night with misty rain and windy conditions. Our department Chaplain was riding with me, and we both were wearing our seatbelts. While traveling on a straight stretch of a 2-lane rural highway, I approached a vehicle with only my emergency lights operating. When leaving the station, I had discovered that my siren was inoperable due to a blown fuse. I was traveling at a speed of approximately 65 mph and was having a conversation with my passenger. The vehicle I approached applied its brakes and I assumed he/she was yielding to my approach. I pulled into the passing lane and began to accelerate. The driver of the vehicle immediately turned to the left into a driveway. My immediate reaction was to jerk the steering on my vehicle to the right to keep from hitting this vehicle. My vehicle went into a sideways skid in which I steered into it. My vehicle then went into a skid into the opposite direction. To the best of my recollection, my vehicle skidded sideways approximately 6 times before I regained control. There is no doubt that this vehicle would have flipped on dry pavement.

Lessons Learned
Lessons Learned: Always anticipate what the driver of the vehicles in front of you MAY do. NEVER ASSUME! Drive accordingly to weather conditions and type of call in which you are

responding. This fire alarm was set off due to a power glitch. With no operable siren, I would have been at fault if I had hit this vehicle. I should have responded in routine mode until the siren was repaired. Our Department SOG on Emergency Response 1. It is the responsibility of the driver of each fire department apparatus to drive safely and prudently at all times. 2. Fire department apparatus shall be operated in compliance with the (state deleted) Motor Vehicle Laws, which provide specific legal exceptions to regular traffic regulations for fire department apparatus when responding to an emergency incident. 3. Emergency response does not release the driver of any responsibility of driving with due caution. 4. When the fire apparatus is responding in the emergency response mode, emergency lights and sirens shall be used to warn drivers of other vehicles. The use of emergency lights and sirens does not automatically give the right-of-way to the fire apparatus, only simply requests the right-of-way from other drivers based upon their awareness of the fire apparatus. 5. Drivers of the fire apparatus must make every possible effort to make their presence and intended actions known to other drivers and must drive defensively and be prepared, anticipate, for the unexpected inappropriate actions of others. 6. Fire apparatus are allowed to exceed 10 mph over the posted speed limits only when responding in the emergency mode under favorable conditions. Favorable conditions include light traffic, good roads, good visibility, and dry pavement. 7. When conditions are less than favorable, the posted speed limit is the absolute maximum permitted. 8. When the fire apparatus must travel in center traffic lanes, the maximum permitted speed shall be the posted speed limit except when within 250 of a street intersection. At this point, the fire apparatus shall slow to maximum of 20 mph. 9. When the fire apparatus is approaching or crossing an intersection with the right-of-way, green traffic light or no stop sign, drivers shall not exceed the posted speed limit. 10. When the fire apparatus must travel in the center or oncoming traffic lanes to approach controlled intersections, the driver shall come to a complete stop before proceeding through the intersection. 11. When the fire apparatus approaches negative right-of-way, red traffic light or stop sign intersections, the driver shall come to a complete stop and shall only proceed when all oncoming traffic in all lanes are accounted for. 12. When the first arriving fire apparatus arrives on the scene and the officer reports “Nothing Showing” or if the “Brief Initial Report” indicates a minor incident, all other responding fire apparatus shall slow to non-emergency response. 13. The Incident Commander shall slow all fire apparatus down to non-emergency response as soon as possible. 14. Fire apparatus drivers shall avoid backing whenever possible. When backing is unavoidable, a spotter shall be used. If no spotter is available, the fire apparatus driver shall dismount the fire apparatus and complete a 360-degree walk around before backing. 15. ALL PERSONNEL ON-BOARD ANY MOVING FIRE APPARATUS SHALL BE REQUIRED TO WEAR SEAT SELTS AT ALL TIMES WHILE THE FIRE APPARATUS IS IN MOTION. THE DRIVER OF THE FIRE APPARATUS SHALL ENSURE THAT ALL PASSENGERS ARE SEATED AND SEAT-BELTED BEFORE MOVING THE FIRE APPARATUS AND WHILE THE FIRE APPARATUS IS IN MOTION. 16. NO MEMBER OF THE TOWN OF (name deleted) FIRE DEPARTMENT SHALL EVER RIDE THE TAILBOARD OF ANY FIRE APPARATUS. 17. No fire apparatus shall pass another emergency vehicle during emergency response unless permission is obtained/granted by the drivers through radio communications. Passing shall be completed under extreme caution. 18. The unique hazards of driving on or near an emergency incident required the fire apparatus drivers to use extreme caution and be alert and prepared to react unexpectedly. Fire department personnel and spectators may be pre-occupied with the emergency and may inadvertently step in front of or behind a fire apparatus. 19. The Town of (name deleted) Fire Department apparatus shall be operated in a manner that provides the utmost of safety for all persons and property. Safe arrival shall always have priority over unnecessary speed and reckless driving. PROMPT

AND SAFE RESPONSE CAN BE ATTAINED BY 1. Being Prepared 2. Quickly Mounting the Apparatus 3. All Fire Department Personnel On-Board, Seated, and Belted 4. Knowing Location and Direction of Travel 5. Driving Defensively and Professionally at Reasonable Speeds 6. Using Warning Devices to Move Around Traffic 7. Requesting the Right-Of-Way in a Safe and Predictable Manner

Report Number: 06-0000151
Report Date: 03/09/2006 1403

Demographics
Department type: Paid Municipal
Job or rank: Fire Fighter
Department shift: 48 hours on - 96 hours off
Age: 16 - 24
Years of fire service experience: 4 - 6
Region: FEMA Region V
Service Area: Suburban

Event Information
Event type: Vehicle event: responding to, returning from, routine driving, etc.
Event date and time: 09/15/2005 1700
Hours into the shift: 9 - 12
Event participation: Involved in the event
Weather at time of event:
Do you think this will happen again?
What do you believe caused the event?

- Decision Making
- Human Error

What do you believe is the loss potential?

- Minor injury
- Property damage
- Lost time injury
- Life threatening injury

Event Description
I was riding officer when my engine company, staffed with 4 FF's, was dispatched on Automatic Mutual Aid to a possible structure fire in a large hotel. Returning from a training drill, we were in the area of the hotel. Wearing only my bunkers from training, I unhooked my seatbelt to slide my coat on figuring I could belt in real quick again. Just as I slid my right arm into my coat, I noticed a car exiting the interstate directly into our travel path. We had the green light. I yelled to my driver and he slammed on the brakes just in time. I went sliding forward nearly striking the dash.

Lessons Learned
Wear your belt no matter what. I normally gear up, belt in, and wait to get on the scene before I pack up. I realized it wasn't worth saving 10 seconds to put my coat on by un-belting and risk flying through the windshield. Officer or not, if you are lucky enough to be sitting in that seat, the guys on that rig are your responsibility. Make sure they are all belted. If you are wearing just your station uniform and a run comes in while you are on the rig, just wait until to you get there to dress. It doesn't take that much longer and it may save your life.

Report Number: 06-0000397
Report Date: 08/01/2006 1714

Demographics
Department type: Combination, Mostly paid
Job or rank: Fire Fighter
Department shift: 24 hours on - 48 hours off
Age: 16 - 24
Years of fire service experience: 4 - 6
Region: FEMA Region V
Service Area: Urban

Event Information
Event type: Vehicle event: responding to, returning from, routine driving, etc.
Event date and time: 07/21/2006 1300
Hours into the shift: 5 - 8
Event participation: Involved in the event
Weather at time of event:
Do you think this will happen again? Yes
What do you believe caused the event?

- Unknown

What do you believe is the loss potential?

- Property damage
- Lost time injury
- Minor injury
- Life threatening injury

Event Description
I was assigned the back of the medic unit that day. We had a full-time experienced driver operating the medic unit and a squad leader in the passenger seat. We got called to a possible heat stroke in the lower part of the township. The weather was clear and hot. The particular station we were responding from is the farthest north in our fire district. We began to make our emergency run. Our SOP/SOG's require us to stop completely at each intersection, which was followed. We had gone about 3 miles and came upon a divided 4 lane road with a concrete shoulder and a concrete divider in the middle. Traffic was moderate that day, like normal. The cars in the far right lane began to pull over for us. We were behind a person in the left lane when all of a sudden; the driver slammed on his brakes, causing us to lock our brakes and almost rear end him. The driver of the car in front of us had an open lane next to them but chose not to veer right. The same event happened again on the same call just about 2 miles farther toward our destination. The second occurrence was just as close and was almost the same condition.

Lessons Learned
There were a lot of lessons learned that day. Do not take for granted that people will pull over to the right even if they have plenty of room. Our SOP/SOG's require us to always wear our seatbelts while we are in any apparatus. While on that call, we had to lock up our brakes.

Wearing seatbelts helped us keep our heads and knees out of the dash. Another important lesson to take with you is to always view your surroundings. Have a safe escape route to get around drivers who do the unexpected. And always remember to maintain a safe following distance to cars you are coming up on. Drivers do crazy things when they see lights or hear sirens.

Report Number: 07-0000899
Report Date: 05/04/2007 1912

Demographics
Department type: Combination, Mostly volunteer
Job or rank: Fire Fighter
Department shift: Respond from home
Age: 16 - 24
Years of fire service experience: 0 - 3
Region: FEMA Region II
Service Area: Suburban

Event Information
Event type: Vehicle event: responding to, returning from, routine driving, etc.
Event date and time: 04/27/2007 1900
Hours into the shift:
Event participation: Involved in the event
Weather at time of event: Cloudy and Rain
Do you think this will happen again?
What do you believe caused the event?

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

What do you believe is the loss potential?

- Life threatening injury
- Property damage

Event Description
This happened off-duty. There were three of us in the pick-up. I was sitting in the back of the truck behind the driver with my seatbelt on. The driver and passenger, who were both sitting in the front, were not wearing their seatbelts. We were heading down the road and the driver was going too fast for conditions. The road was rain-slick. He went to make a left bend in the road when the back end of the truck came around. As soon as I saw that we were going to get into an accident, I shut my eyes and held on for dear life. When the truck stopped moving, I finally opened my eyes. The back window was popped out, all the windows on both sides of the truck were broken out and the windshield was shattered and a third of the way out already. I was told later that the truck flipped, landing on its passenger side, slid and then flipped to land on its driver side where it stayed. All three of us were conscious, alert and oriented. I was lying on the left side with the seatbelt supporting me slightly. I unbuckled my seatbelt, stood up and walked out the back the truck. The driver got himself out the back of the truck as well. The passenger attempted get out through the back as well, but stopped because his shoulder was bothering him. The fire department that responded to our accident ended up cutting through the posts on the passenger side to fold down the roof to get the passenger out. Spinal precautions were taken and they were transported by helicopter to the

trauma center. The truck was totaled. The driver got a bump on the head and a scrape on the knee, and the passenger wound up with a dislocated shoulder, broken shoulder blade and broken facial bone, as well as bruises all over his face and upper torso. I wound up with just bruises on my right hip and left shoulder and was very sore. I was very lucky to have survived the accident with just bruises and muscle soreness. If I hadn't been wearing my seatbelt, things might have turned out a lot differently. You won't have to tell me to put my seatbelt on, even in the apparatus. Seatbelts save lives, it saved mine.

Lessons Learned

If the driver and passenger had been wearing their seatbelts, the passenger wouldn't have received the types of injuries he received. Also, the driver should have slowed down for conditions.

Report Number: 07-0001142
Report Date: 12/01/2007 2153

Demographics
Department type: Paid Municipal
Job or rank: Fire Fighter
Department shift: Other: 24 on, 24 off, 24 on, 120 off
Age: 25 - 33
Years of fire service experience: 11 - 13
Region: FEMA Region I
Service Area: Suburban

Event Information
Event type: Vehicle event: responding to, returning from, routine driving, etc.
Event date and time: 12/01/2007 0900
Hours into the shift:
Event participation: Involved in the event
Weather at time of event: Cloudy and Dry
Do you think this will happen again?
What do you believe caused the event?

- Human Error
- Individual Action
- Accountability
- Training Issue
- Decision Making

What do you believe is the loss potential?

- Life threatening injury
- Lost time injury
- Property damage

Event Description
On the morning of December 1, 2007, our department was dispatched to an EMS call for a report of a patient in cardiac arrest. I was in the station on an unrelated detail and responded on the engine company as an extra member due to the nature of the call. Upon leaving quarters the firefighter riding the right jump seat was standing in the rear of the enclosed cab moving equipment around the cab. The firefighter proceeded to remove the first in bag and airway bag from an enclosed interior compartment and placed them on the floor of the cab. He then sat down, but did not fasten his seatbelt. Upon taking a seat he proceeded to open the airway bag and removed the portable oxygen cylinder from the bag in order to check the cylinder and regulator. He proceeded to remove the suction unit from its position on top of the engine cover to check that unit as well. Throughout the entire response he was either standing or seated without a seat belt and moving equipment from compartments to an unrestrained position within the crew cab. Additionally, throughout the response the officer either did not realize this was taking place or took no action to stop the unsafe behavior. On several occasions throughout the response I indicated to the firefighter that his actions were extremely unsafe and that I felt he was putting my personal safety in jeopardy. I made these

comments on the apparatus intercom system, and at no point did I receive any comments or interaction from the officer. On several points during the response I felt that the driver was traveling at an excessive speed for the traffic conditions encountered, and I do know that we made a "rolling stop" at a fairly busy intersection with a red traffic light in our direction. The actions that took place during the response were frightening to say the least, but the general lack of concern on the part of the other three members on the apparatus was even more startling. I can appreciate the concern for being prepared for such a potentially serious call. However, no amount of preparation should take precedent over our own personal safety.

Lessons Learned

Unfortunately, I'm not convinced that any lessons were learned by the other members on the apparatus. I am well aware of the hazards that were present, but the general lack of concern demonstrated by the other members is extremely concerning. Although we came away from the response unharmed and uninjured, the potential for injury, serious injury and even death was extreme. Members of the fire service, perhaps even members within my department, do not do a good enough job of staying informed and educated to be looking at incidents such as this response from the perspective that it was a near miss and not just another response. As far as preventing a similar situation from occurring, I think there are several factors that need to be addressed. First, our department has a mandatory seat belt policy that was not followed. The firefighter violating the policy has a responsibility to know the policy as well as follow the policy for his own safety as well as the safety of the other members riding within the apparatus. The officer has the responsibility to ensure that the policy is strictly followed. Secondly, we need to treat all unsecured items within the cab as potential missiles that will kill us if we are involved in a motor vehicle collision. In turn, the firefighter has the responsibility to leave equipment secured and/or within compartments until the apparatus arrives on scene and the officer has the responsibility to make certain that the crew is following those safe work practices and habits. The driver has the responsibility to drive with due regard and for the conditions encountered, and the officer must see that those actions are taken and that the driver is driving safely. As a department we need to take better steps and measures to secure EMS equipment, and all loose equipment for that matter, within the cab of the apparatus. Most importantly we all need to develop a better safety culture and take personal steps to make certain that we all are operating as safely as possible on each and every call. It concerns me that we read and hear of apparatus accidents, and injuries and deaths caused by members not wearing seatbelts or following safe, sound work practices, yet incidents such as this one continue to occur in departments throughout the country. My department needs to do a better job of switching from a business as usual mindset to a safer culture in which we take a pessimistic approach and treat each and every incident as something that could potentially hurt of kill us. We need to believe that the brotherhood isn't just getting along and being friends with each other but making certain that we take care of each other, even if it means hurting feelings along the way.

Report Number: 08-0000010
Report Date: 01/04/2008 1554

Demographics
Department type: Paid Municipal
Job or rank: Assistant Chief
Department shift: 10 hour days, 14 hour nights (2-2-4)
Age: 34 - 42
Years of fire service experience: 17 - 20
Region: FEMA Region I
Service Area: Suburban
Event Information
Event type: Vehicle event: responding to, returning from, routine driving, etc.
Event date and time: 12/03/2007 0500
Hours into the shift:
Event participation: Told of event, but neither involved nor witnessed event
Weather at time of event: Cloudy and Snow
Do you think this will happen again?
What do you believe caused the event?

- SOP / SOG
- Decision Making

What do you believe is the loss potential?

- Life threatening injury

Event Description
An on-duty member was plowing the front apron of the firehouse with a FD pickup truck. He was not wearing a seat belt. The operator struck a granite curb with the plow blade. The impact threw him forward into the windshield and cracked the windshield. The member was transported to the emergency room where he was treated and fortunately released.

Lessons Learned
Policies are in place to wear seatbelts. Members need to be vigilant about following the safety policies. Poor decision making could have resulted in a very serious head injury.

Report Number: 08-0000312
Report Date: 06/26/2008 1711

Demographics
Department type: Paid Municipal
Job or rank: Fire Fighter
Department shift: 24 hours on - 24 hours off
Age: 34 - 42
Years of fire service experience**:** 7 - 10
Region: FEMA Region IX
Service Area: Urban

Event Information
Event type: Vehicle event: responding to, returning from, routine driving, etc.
Event date and time: 08/28/2007 1500
Hours into the shift:
Event participation: Told to and submitted by safety officer
Weather at time of event: Clear and Dry
Do you think this will happen again?
What do you believe caused the event?

- Human Error
- Equipment
- Training Issue
- Situational Awareness
- Decision Making

What do you believe is the loss potential?

- Life threatening injury
- Lost time injury

Event Description
The crew of 4 was seated and restrained when they left the fire station enroute code-3 to a "working fire" when the Engineer "slowed the apparatus to approximately 10-15 M.P.H. to make a controlled right hand turn. It was at this moment when the #4 door unexpectedly swung open during the right turn. Immediately prior to the right turn, FF #4 made a decision to unfasten his seatbelt and exit his seat. FF #4 states: "After securing my SCBA shoulder straps I decided to put on the rest of my equipment in a kneeling position because I felt it would be faster and easier to get ready this way." FF #4 is unknowingly leaning backwards towards the open door due to the momentum of the right turn. FF #3 yells to the Engineer over the headset intercom that "the door was open and to STOP!" FF #3 grabbed FF#4 and assisted him to the center of the floor of the moving apparatus. The Engineer stopped the vehicle, the door was shut, and the Engine Company continued their response without further incident. The apparatus involved in this incident was a 2005 (8 passenger) enclosed cab pumper. The FF #4 position seatbelt was the original factory equipment and noted to be in working order. The open door alarm was also observed to be in full working order with the ignition/batteries ON and the parking brake disengaged. It was discovered however, that the alarm volume had been turned down to its lowest setting and would be difficult to hear even

under ideal conditions (vehicle stationary, engine not running, no outside traffic, road noise or sirens). Factors normally present during emergency response (headsets, radio traffic, etc.) would make it virtually impossible to hear the audible open door alarm. Upon investigation, the FF #4 door appeared to be in full working order without any malfunctions noted before the incident. Statements given by FF #4 and the Engineer indicate the door appeared to be closed when leaving the fire station. Both indicated the retractable stairs were in the stowed position with no audible alarms sounding. Closer examination of the #4 door revealed a 2-position latching mechanism that marries a door latch to a Nader pin. In the primary position, the latch barely catches the Nader pin and only latches securely in the secondary position. While the door is only partially secured in the primary position, it was observed that there is still sufficient pressure applied to a pressure switch that retracts the stairs and deactivates the open door alarm. The forward location of the pressure switch in the door jam may contribute to the false reading.

Lessons Learned

The chain of a potentially tragic event was broken due to following factors: The attentiveness of FF #3 (watching out for each other) The controlled driving of the fire apparatus as demonstrated by the Engineer Both firefighters credit the Engineer's driving habits as a key factor in avoiding a tragic outcome, commenting; due to the experience, skill and controlled driving demonstrated by the Engineer when making the right turn, -we averted disaster. 1. The Fire Department REQUIRES that ALL fire fighters who ride on ANY moving emergency fire apparatus are seated and secured by seat belts. [Policy number deleted] Discussion: The Fire Department has been aggressively addressing the issue of seat belt compliance. A SCBA & Seatbelt Awareness presentation was presented to ALL Firefighters during the 2007 2nd quarter company training. The training boldly stated that the Fire Department was taking a ZERO TOLERANCE view on the adherence of the seat belt policy. This ZERO TOLERANCE campaign was further reinforced during the 2007 National Safety Stand-down Day for ALL shifts in June 2007. The training echoed the same concepts of the Seat Belt Awareness Presentation as well as addressing, safe methods of donning turnout gear and SCBA's during code 3 responses while using the seat belt restraint system. The Safety Stand Down also addressed the use of seat belts in the back of ambulances. 2. Revision to SOP [# deleted] to include that emergency apparatus will NOT move without personnel seated and in seat belt restraints, including a verbal confirmation of the seat assignment with a "READY". A "READY" meaning that the person in that assigned position is seated and belted. Personnel will NOT don personal protective equipment (turnout gear and SCBA) in ANY moving fire apparatus, PPE must be donned while the apparatus is in a stationary position prior to initiating a response OR upon arrival on scene. Personnel will NEVER be onboard a moving fire apparatus while not seated and unrestrained under ANY circumstances. 3. Incorporate the available audible/visual warning device technology indicating when a fire fighter is un-restrained or not seated. 4. Update SOP's to address tampering with or disabling warning devices. 5. Make fire apparatus manufacturer aware of the potential design flaw that exist with the present location of the pressure switch (door alarm). Recommend that the pressure switch be relocated towards the aft end of the door jam. 6. Advocate for participation of compliance with the National Fire Fighter Safety Seat Belt Pledge department wide. 7. Truly adopt and enforce a "ZERO TOLERANCE POLICY" within department SOP's and policy. Squared brackets [] indicate reviewer added/changed content

Report Number: 08-0000506
10/07/2008 2216

Demographics
Department type: Combination, Mostly paid
Job or rank: Driver / Engineer
Department shift: 24 hours on - 48 hours off
Age: 52 - 60
Years of fire service experience: 21 - 23
Region: FEMA Region III
Service Area: Urban

Event Information
Event type: Vehicle event: responding to, returning from, routine driving, etc.
Event date and time: 04/22/2008 2230
Hours into the shift:
Event participation: Involved in the event
Weather at time of event:
Do you think this will happen again?
What do you believe caused the event?

- Human Error

What do you believe is the loss potential?

- Lost time injury

Event Description
The brackets [] denote reviewer de-identification. While returning from an incident, I was driving E [1] back to the station. I was driving due to the fact, that I had lost my driver who had upgraded an ambulance for a transport. I had been the unit officer for the shift on E [1]. We were returning back to the station understaffed because I had no qualified unit officer or third. I had 2 volunteers with me. I was traveling back to the station and had exited off at the ramp for [name deleted]. Approaching the road, we had a red light. I stopped well before the intersection at the first white stripe indicating the proper stopping area. While awaiting the change of the light to proceed, I had observed a blue compact in the lane to turn left. He was stopped at the same stopping point as E [1]. He was in the inside left turn lane (to my left) and I was in the outside left turn lane of the 2 lanes to make the left turn. This intersection has 2 left turn lanes with green arrows for westbound [name deleted]. When the left turn green was indicated, the blue compact immediately proceeded through the intersection without incident. I hesitated, checking intersection clearance before proceeding through. The intersection was clear and I proceeded into the intersection with green arrow active. A bus was traveling at a high rate of speed eastbound on [name deleted]. The bus immediately slammed into E [1] after running the red light. I was hit at the driver's compartment side. The engine was rocked and pushed a distance from impact point. I looked over at the driver and raised my arms up to indicate what are you doing? The driver said (I could read her lips) "it wouldn't stop." At impact, I observed the passengers on the bus thrown to the floor. I also looked back up and our green arrow was still active and she still had a clear red. I called our communication center, requested an assignment, and advised them of our location. I told

them that we had been smeared by a bus that ran a red light. I was initially stunned and shocked and remained in the driver's seat before climbing over the engine cowl and exiting out of officer's door to evaluate the situation. There were no skid marks from the bus indicating any brake activation. Units were on scene immediately. The bus occupants and my crew were attended too. My crew and I were transported to the emergency room for evaluations. I did have neck and back pains. In regards to the blue compact, if he had not immediately proceeded through the intersection he would have been struck first and pushed into us. In my opinion, we definitely would have had a fatality. There was nothing different I would have or could have done to avoid this collision. I exercised all possible safety procedures. There are traffic cameras at this intersection and all of my personnel were belted at the time of the collision.

Lessons Learned

I have always been an advocate of seat belt use both on and off the job. I always make sure that all of my crew is belted, whether I am driving or the OIC of the apparatus. If they are not belted, then we go nowhere until they are. I always verbally check with my crew for an acknowledgement that they are belted and ready. In this incident, there was nothing else that I could have or would have done differently. This was an unavoidable incident on my part. This incident would have been much more serious with possibly fatal repercussions, if my crew and I were not belted. I feel that if we all were not belted, then someone may have been ejected at impact when we were hit by the bus. I can say to all who have hesitations or just blatantly ignore seat belt use, if you are involved in a similar incident it would make you a believer. Where seat belts for your safety. To give you an indication of what non belted passenger's experience, all of the passengers on the bus that struck us were forcefully thrown to the bus floor upon impact. I witnessed this with my own eyes. In summation, I would urge drivers and passengers to use your seat belt. It does not matter what your job may be. Also, wear a seat belt in your personal vehicle. If you care about yourself or your loved ones, you will wear your seat belt at all times when in a moving vehicle. It makes no difference if it's a law or department policy, wear it. Don't feel that an incident such as this could not happen to you. It can at any time. Belts are there. Wear them!