National Fire Fighter Near-Miss Reporting System
Reports Related to Fireground Decision Making

Report #	Synopsis	Page #
09-292	Flashover results in firefighter becoming disoriented.	2
09-295	Ceiling collapse narrowly misses firefighters.	3
09-300	Firefighters hardly escapes a flashover.	4-5
09-310	Firefighters in danger from an open power meter.	6
09-321	Personal Protective Equipment protects firefighter from serious injury during vehicle fire.	7-8
09-340	Incoming crew unaware of electrical hazard.	9
09-352	Falling chimney injures firefighter; command blamed.	10

Report Number: 09-292
Report Date: 03/14/2009 1132

Demographics
Department type: Volunteer
Job or rank: Assistant Chief
Department shift: Respond from home
Age: 43 - 51
Years of fire service experience: 17 - 20
Region: FEMA Region III
Service Area: Rural

Event Information
Event type: Fire emergency event: structure fire, vehicle fire, wildland fire, etc.
Event date and time: 05/22/2015 0230
Hours into the shift:
Event participation: Told of event, but neither involved nor witnessed event
Weather at time of event: Clear and Dry
Do you think this will happen again?
What were the contributing factors?

- Teamwork
- Decision Making
- Situational Awareness
- Protocol
- Fatigue

What do you believe is the loss potential?

- Minor injury
- Property damage

Event Description
Three firefighters were in a flashover. Two ran outside. One firefighter inside was disoriented.

Lessons Learned
Never leave your team.

Report Number: 09-295
Report Date: 03/16/2009 1857

Demographics
Department type: Volunteer
Job or rank: Lieutenant
Department shift: Respond from home
Age: 25 - 33
Years of fire service experience: 7 - 10
Region: FEMA Region III
Service Area: Rural

Event Information
Event type: Fire emergency event: structure fire, vehicle fire, wildland fire, etc.
Event date and time: 07/04/2004 0300
Hours into the shift:
Event participation: Witnessed event but not directly involved in the event
Weather at time of event: Clear and Dry
Do you think this will happen again?
What were the contributing factors?

- Human Error
- Decision Making

What do you believe is the loss potential?

- Life threatening injury
-

Event Description
After extinguishing a house fire, a crew of three firefighters was inside a room in Division 1 looking for hot spots. I had exited a room in the Alpha/Bravo sector where there was extensive fire damage. I had made my way out of the room into a hallway awaiting the rest of my crew. Within a few seconds, the two other firefighters in my crew walked out of the room into the hallway and the ceiling in the room we had just left caved in.

Lessons Learned
We should always be thinking safety first, whether the situation may be driving to the scene of an incident or wrapping up a scene. Danger always lurks when we're not thinking it will. We should always be evaluating our incidents and have a good safety ethic. Always critique when you go back into service.

Report Number: 09-300
Report Date: 03/18/2009 1239

Demographics
Department type: Combination, Mostly volunteer
Job or rank: Captain
Department shift: Straight days (8 hour)
Age: 25 - 33
Years of fire service experience: 4 - 6
Region: FEMA Region VII
Service Area: Suburban

Event Information
Event type: Fire emergency event: structure fire, vehicle fire, wildland fire, etc.
Event date and time: 03/17/2009 1415
Hours into the shift: 5 - 8
Event participation: Involved in the event
Weather at time of event: Clear and Dry
Do you think this will happen again? Yes
What were the contributing factors?

- Staffing
- Decision Making

What do you believe is the loss potential?

- Life threatening injury
- Lost time injury
- Minor injury

Event Description
Our department was dispatched to a residential structure fire. Upon arrival, light brown smoke and flames were showing from the B side of the structure, Entry was made into the structure via the A side with a 1-3/4 inch handline. One person was at the door feeding hose, a firefighter and I entered with a thermal imager, handline, and set of irons. The house was set up as an apartment style building, with a hallway and entry to the apartment directly to the right upon entry. Entry was forced into the apartment, and no noticeable smoke changes were noted. While progressing further into the living area, the temperature of the room, which was about 350 degrees F, rapidly climbed to approximately 800 degrees. Smoke conditions rapidly darkened, and we proceeded to immediately exit the structure. Heat conditions worsened and I began to feel burning on my arms, legs and neck. I turned around and noticed a wall of orange flame as the room began to flash. The firefighter and I made it to the hallway and rapidly exited the structure. Once outside, I noted that a layer of tar had covered my mask from the smoke, and my helmet had melt marks and bubbling in the paint. My SCBA had slight charring on the regulator, and my gloves had burned partially away.

Lessons Learned
We learned to be prepared. Even in the most routine of structure fires the situation can rapidly change. A RIT team was not in place in this event, and had something happened, we may have been trapped in that room with no outside assistance. Even with automatic mutual

aid agreements, we were still short handed on this call. Smoke conditions gave no indication that a flashover was imminent, and when cues did indicate flashover was coming, it happened rapidly. Had we not been paying attention or had "tunnel vision," we may have been badly burned or worse.

Report Number: 09-310
Report Date: 03/24/2009 1029

Demographics
Department type: Paid Municipal
Job or rank: Captain
Department shift: 24 hours on - 48 hours off
Age: 25 - 33
Years of fire service experience: 7 - 10
Region: FEMA Region IV
Service Area: Suburban

Event Information
Event type: Fire emergency event: structure fire, vehicle fire, wildland fire, etc.
Event date and time: 11/01/2008 0000
Hours into the shift:
Event participation: Witnessed event but not directly involved in the event
Weather at time of event: Clear and Dry
Do you think this will happen again?
What were the contributing factors?

- Communication
- Decision Making
- Individual Action

What do you believe is the loss potential?

Event Description
A captain was given the task of securing power to a house and there was an offensive attack being conducted. The captain went to the power meter and snatch the meter from the base. The power meter was on the outside wall from which the fire was seated. This act created a huge hazard for everyone on the scene. Especially, those conducting fire suppression next to the meter box. Many firefighters came close to touching the open power source.

Lessons Learned
Never remove the meter from the box.

Report Number: 09-321
Report Date: 03/27/2009 1010

Demographics
Department type: Combination, Mostly paid
Job or rank: Captain
Department shift: 24 hours on - 24 hours off (4s & 6s)
Age: 34 - 42
Years of fire service experience: 17 - 20
Region: FEMA Region VII
Service Area: Suburban

Event Information
Event type: Fire emergency event: structure fire, vehicle fire, wildland fire, etc.
Event date and time: 03/12/2009 1832
Hours into the shift:
Event participation: Involved in the event
Weather at time of event: Clear with Wet Surfaces
Do you think this will happen again?
What were the contributing factors?

- Situational Awareness
- Decision Making

What do you believe is the loss potential?

- Life threatening injury
- Lost time injury

Event Description
My engine company was operating at a commercial vehicle fire. The vehicle involved was a tractor-trailer pulling a standard 53 feet cargo box. The trailer was loaded with plastic shipping pallets and empty aluminum barrel containers. The forward third of the cargo box was heavily involved with fire upon our arrival. Approximately one hour into the incident the fire was brought under control and confined to the front portion of the cargo box. A tactical decision was made to cut holes in the side of the cargo box in order to extinguish the remaining deep seated fire. A pneumatic air chisel with a sheet metal bit was assembled on the driver's side of the vehicle, approximately 25 feet from the front of the cargo box. The other firefighter assigned to my engine manned a 1 ¾" handline for protection and fire extinguishment. The first hole that was made was two feet in diameter. The firefighter handling the hose moved into position to attack the fire coming from the hole. I then moved forward about five feet and started cutting a second hole. As I moved the air chisel up the side of the trailer wall, I fully extended my right arm to finish the first half of the cut. At the top of the cut I turned my head attempting to extend my reach. At this time I felt the air chisel go through the side of the cargo box and bind itself between the metal. Before I could turn to look, I felt intense heat on the right side of my head. I immediately stop cutting. When I turned to look at the cut I saw the molten plastic forcing itself from the hole. I quickly pulled the air chisel from the cut. As I pulled away, the molten plastic started to cover the right side of my upper body. Before I could pull my arm away from the liquid, it briefly auto-ignited. I slung my right arm downward, which extinguished the fire. I turned and walked away from the trailer, where I was assisted by two other firefighters who removed my coat

and SCBA. After removing my turnout gear, I noticed my entire right arm looked swollen and appeared to have first and some small second degree steam burns.

The cargo box was double wall construction, with foam insulation between the sheets of metal. Apparently the inside wall of the cargo box had already been breached by the fire, allowing the molten plastic to flow freely from the cut. At the time I came into contact with the molten plastic, I was wearing full PPE (Turnout coat, pants, boots, helmet, hood, leather structural gloves and SCBA with facepiece). Before operating the air chisel I had briefly thought about putting on a pair of extrication gloves and dropping my SCBA to obtain a better grip and reach. I do not believe anyone on the scene, including me, thought there could be a possibility of coming into contact with the molten plastic during the cutting operation.

Lessons Learned

We found that our PPE and training actually do work. If the Captain involved had removed or reduced the level of protection of his PPE he would have sustained life threatening burn injuries.

We must continue to hold our staff accountable for adhering to our SOG's and policies. Allowing ourselves to slack off, even for a second, in this particular case could have had devastating results.

Report Number: 09-340
Report Date: 03/31/2009 2120

Demographics
Department type: Paid Municipal
Job or rank: Lieutenant
Department shift: 24 hours on - 48 hours off
Age: 43 - 51
Years of fire service experience: 21 - 23
Region: FEMA Region IV
Service Area: Urban

Event Information
Event type: Fire emergency event: structure fire, vehicle fire, wildland fire, etc.
Event date and time: 02/22/2009 0130
Hours into the shift:
Event participation: Involved in the event
Weather at time of event: Clear and Dry
Do you think this will happen again?
What were the contributing factors?

- Decision Making
- Communication
- Individual Action
- Human Error

What do you believe is the loss potential?

- Life threatening injury

Event Description
This event happened on an actual fire call. Units responded to a single family dwelling fire with 30% involvement. Units on scene were: a ladder company with 3 men, 2 pumper companies with 3 men each, and an assistant chief (IC) with one man. The IC arrived on the scene first and established command. He set up strategies and tactics to be performed. While looking over the fire scene, he saw an arcing power line that was on the ground. He notified the first arriving units of the power line issue. He used a secondary channel so the initial units were aware of the line in the front yard. Several minutes later, a third pumper arrived on scene with an assignment of exposure group. An additional line was pulled from the truck and stretched over the arcing line. No one told the third pumper crew or set-up a hazard area around the downed power line. Luckily, no one stepped on the line and the power company arrived shortly after to cut power to the electrically charged line.

Lessons Learned
1. All communication should be made over all channels on the fireground.
2. This fire was at night and no lighting was provided until later in the incident. There should be an SOP about fireground lighting.
3. Initial objective is safety and to mark hazards clearly.
4. Don't get tunnel vision through better education and awareness.
5. Preach scene safety.

Report Number: 09-352
Report Date: 04/03/2009 1308

Demographics
Department type: Volunteer
Job or rank: Captain
Department shift: Respond from home
Age: 16 - 24
Years of fire service experience: 7 - 10
Region: FEMA Region III
Service Area: Suburban

Event Information
Event type: Fire emergency event: structure fire, vehicle fire, wildland fire, etc.
Event date and time: 02/01/2005 1300
Hours into the shift:
Event participation: Told of event, but neither involved nor witnessed event
Weather at time of event: Clear with Frozen Surfaces
Do you think this will happen again?
What were the contributing factors?

- Training Issue
- Command
- Human Error
- Decision Making
- Communication

What do you believe is the loss potential?

- Life threatening injury

Event Description
While on the scene of a residential structure fire, a chimney was hit with a master stream while crews were inside the structure. It subsequently collapsed, landing on a firefighter in the structure. RIT was activated and he was pulled from the structure by his team and RIT members. I was the paramedic that transported the firefighter. He initially had paralysis to his lower extremities. This cleared up after a day or two. Poor command, decision making, and lack of training are what greatly contributed to this injury. All mentioned aspects were in direct result of command and all pertained to command.

Lessons Learned
More required state training is necessary.