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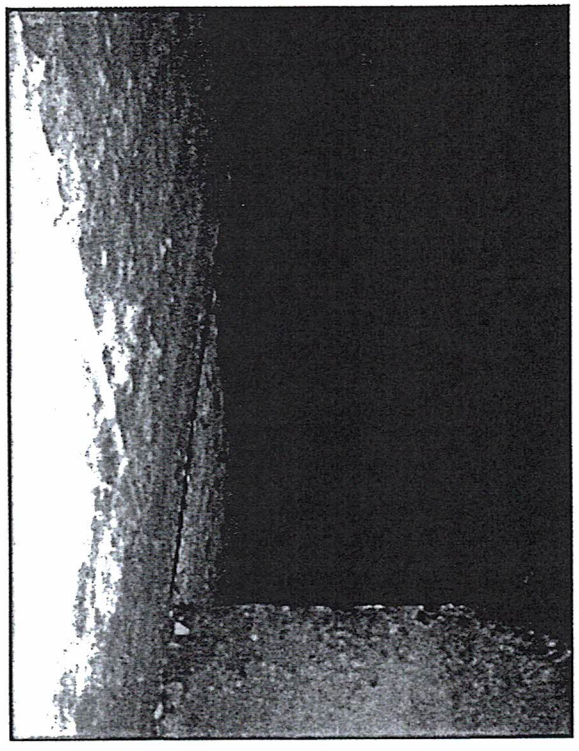
Death in the line of duty... NIOSH Fire Fighter Fatality Investigation and Prevention Program

A summary of a NIOSH fire fighter fatality investigation — *September 21, 2015*

Shift Safety Officer Falls through Hole in Floor into Basement of Vacant Row House and Dies from Smoke Inhalation – Maryland

Executive Summary



On November 12, 2014, a 62-year-old male career lieutenant, serving as the shift safety officer, died after falling through a hole in the floor of a vacant row house. At approximately 0019 hours, the career fire department was dispatched to a report of smoke in a vacant row house. Fire fighters began arriving on scene starting at 0022 hours and encountered a fire on the rear stairway that extended up the stairwell to the second floor. Battalion Chief 2 arrived on-scene at 0024 hours and assumed Incident Command. He quickly upgraded the dispatch to a working fire dispatch which sent additional engine and truck companies, an additional battalion chief, and the shift safety officer. The fire was quickly brought under control and the Incident Commander began releasing companies around 0046 hours. Remaining crews used ventilation fans to clear smoke from the fire structure and the vacant row house on side Delta.

Crews working inside the Delta exposure observed that the ground-level floor at the rear of the structure had been completely removed but did not report this hazard to Incident Command when they exited. Hole in floor at rear of vacant row house. The shift safety officer entered the Delta exposure alone

The victim fell approximately 7 feet onto and apparently fell through the hole, receiving face and **the basement floor.** head injuries. All remaining personnel cleared the incident ***(Photo NIOSH)*** scene by 0223 hours. The fire department dispatch center began receiving phone calls reporting the shift safety officer's unattended vehicle blocking traffic around 0647 hours. Fire department resources were dispatched at 0748 hours to investigate the unattended vehicle. The

shift safety officer was discovered in the basement of the Delta exposure at 0824 hours and was pronounced dead at the scene. The cause of death was determined to be smoke inhalation.

Contributing Factors

- *Floor system at rear of the Delta exposure completely removed prior to incident*
- *Hole in floor (fireground hazard) not reported to the incident commander*
- *Smoke accumulation in the unventilated basement of the Delta exposure*
- *Ventilation in the Delta exposure was not completed*
- *Shift safety officer entered Delta exposure alone*
- *Fireground accountability was ineffective*
- *Crew integrity was not maintained and single unit resources operated alone*
- *Fire Communications Bureau placed shift safety officer in service without verbal confirmation of his location.*

Key Recommendations

- *Fire departments should utilize a functional personal accountability system requiring a checkin and check-out procedure with the designated accountability officer or the incident commander*
- *Fire departments should ensure that the incident commander accounts for all resources before dissolving command*
- *Fire departments should train fire fighters on the principles of situational awareness*
- *Fire departments should train and empower all fire fighters to report unsafe conditions to Incident Command*
- *Fire departments should train all fire fighters and officers to report when tasks are completed or cannot be completed to their officer or the incident commander*
- *Fire departments should ensure that every fire fighter on the fire ground utilizes a Personal Alert Safety System (PASS) device including the ability to provide PASS devices for personnel operating in a potentially dangerous environment not requiring the use of self-contained breathing apparatus*
- *Fire departments should provide Battalion Chiefs and Chief Officers with a staff assistant or chief's aide to help manage information and communication*
- *Fire departments should ensure that single resource units (e.g. safety officers, fire investigators, etc.) do not function alone in IDLH environments at emergency scenes*
- *Fire departments should ensure that dispatch centers forward all reports of suspicious or unusual events to the appropriate authorities in a timely manner*
- *Fire departments should ensure that Mayday training program(s) are developed and implemented so that they adequately prepare fire fighters to call a Mayday.*