



www.firefighternearmiss.com

Report of the Week

"Dealing with the Silent Killer."

2/9/2012

Report Number: 08-0000613

Report Date: 11/23/2008 13:18

Synopsis

CO detector alerts rescuers to hazardous situation.

Event Description

The engine and a paramedic unit were dispatched to a report of a subject fallen. Further information was that the patient was now unconscious. Upon arrival, the crews entered the house and found a male patient unconscious in the kitchen. There was no immediate obvious cause for the patient's presenting symptoms. In the process of questioning the patient's son (who was awakened when he heard his father fall), the son offered that his father spent most of his time in an enclosed work room where a furnace was located. The officer assigned to the engine sent the apparatus operator to retrieve the carbon monoxide detector. As the operator entered the front door with the detector, it went into alarm mode. (This indicates a CO level of at least 35 PPM.) By the time the operator reached the patient and crew, the CO level was over 100 PPM. The crews and patients (the son is now a patient) were immediately evacuated from the house. Upon further investigation, it was found that there was over 1000 PPM CO at the entrance to the work room. This is when the CO detector became inoperable due to the extremely high level of CO destroying the sensors.

Lessons Learned

1. Maintain situational awareness.
2. Be aware that the sudden onset of cold weather could signal an increase in CO related incidents.
3. Consider CO exposure when there is no obvious cause for the patient's presenting symptoms.
4. Utilize CO detectors. Consider the new personal CO detectors to protect personnel.

Realize that even a simple EMS call can turn into a dangerous situation when unknown hazards are encountered.

Demographics

Department type: Combination, Mostly paid
Job or rank: Lieutenant
Department shift: 24 hours on - 72 hours off
Age: 52 - 60
Years of fire service experience: 30+
Region: FEMA Region III
Service Area: Suburban

Event Information

Event type: Non-fire emergency event: auto extrication, technical rescue,

emergency medical call, service calls, etc

Event date and time: 11/20/2008 00:39

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?

- Equipment
- Situational Awareness
- Weather

What do you believe is the loss potential?

- Life threatening injury

Report of the Week

This week's Report of the Week stresses the importance of maintaining a high level of situational awareness on all incidents. It is imperative to avoid complacency on the incidents that we perceive as "routine" calls. Although many of the EMS calls we respond to for "falls" are high frequency and low risk, we must still be careful to not let our guard down. Report [08-613](#) reinforces this concept:

"The engine and a paramedic unit were dispatched to a report of a subject fallen. Further information was that the patient was now unconscious. Upon arrival, the crews entered the house and found a male patient unconscious in the kitchen. There was no immediate obvious cause for the patient's presenting symptoms. In the process of questioning the patient's son (who was awakened when he heard his father fall) offered that his father spent most of his time in an enclosed work room where a furnace was located. The officer assigned to the engine sent the apparatus operator to retrieve the carbon monoxide detector. As the operator entered the front door with the detector, it went into alarm mode..."

Situational awareness is an important factor on every call we respond to as emergency responders. This awareness begins as we receive an alarm from the dispatch center. The information we initially receive is often very limited. As we approach the scene and enter the residence we should be using all of our senses and those of our entire crew to assess the situation. The safety of our crew should be our first priority. Has it been cold recently? Is there a chance residents have been using space heaters, stoves, fireplaces, or other forms of gas or wood-fueled appliances to heat the home? Does it appear that appliances have been properly maintained, properly installed, and serviced; or are they missing pieces, improperly vented, or covered with dust? Is there an attached garage where a vehicle or generator may be in use? Is the patient complaining of flu symptoms, light headedness, or headache? Are other family members experiencing similar symptoms? These are all signs that may point to carbon monoxide (CO) exposure.

Review Report [08-613](#) and the related reports and consider the following:

1. What steps should be taken if carbon monoxide exposure is confirmed? For our crew? For the patient(s)? For the scene?
2. What are the signs and symptoms of CO exposure?

3. What is your department's policy in dealing with calls to investigate residential carbon monoxide alarms?
4. Does your agency carry gas monitors on the apparatus? Are they properly maintained and are personnel proficient in their use?
5. Does your local jurisdiction require or promote the installation of carbon monoxide detectors in residences? Does your department educate the public in the importance of their use?

Carbon monoxide is a colorless, odorless gas that is a product of incomplete combustion. It is not always obvious when someone has been exposed. A keen sense of situational awareness is critical to avoid walking into an incident that could be hazardous to you and your crew. A [Carbon Monoxide Training Package](#) was produced by the National Hazardous Materials Fusion Center and is a great training resource for responders. Also, review the following near-miss reports so you can learn from others who have dealt with these types of incidents.

Related Reports – Topical Relation: EMS Assessments/ Hazardous Atmospheres, Carbon Monoxide Exposure

[10-1174](#) [06-312](#) [10-166](#) [09-913](#) [08-066](#)

Have you experienced a near miss from carbon monoxide exposure? Submit your report to www.firefighternearmiss.com today so everyone goes home tomorrow.

Note: The questions posed by the reviewers are designed to generate discussion and thought in the name of promoting firefighter safety. They are not intended to pass judgment on the actions and performance of individuals in the reports.

If you would like to subscribe to the ROTW please e-mail ROTW@firefighternearmiss.com with "Subscribe" in the subject line.

Firefighternearmiss.com is funded by a grant from the U.S. Department of Homeland Security's Assistance to Firefighters Grant program. Founding dollars were also provided by [Fireman's Fund Insurance Company](#). The project is managed by the International Association of Fire Chiefs and supported by [FireFighterCloseCalls.com](#) in mutual dedication to firefighter safety and survival.

National Fire Fighter Near-Miss Reporting System
4025 Fair Ridge Drive
Fairfax, VA 22033
P: 571-238-8287
F: 703-273-0920
info@firefighternearmiss.com
www.firefighternearmiss.com