Title:	Carbon Monoxide Incident		
Section:	400 Fire Operations		
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Authorized By:	Fox River Fire District Chiefs		



## A. PURPOSE

The purpose of this guideline is to establish a standard response to alarms of suspected elevated levels of carbon monoxide (CO).

## **B. SCOPE**

This guideline applies to incidents at which elevated levels CO gas is suspected.

## C. TERMS AND DEFINITIONS

1) Carbon Monoxide (CO): A colorless, odorless, tasteless gas that is a byproduct of the fuel burning process. Effects of exposure to CO are dependent on the concentration and length of the exposure. Symptoms of CO poisoning include headache, nausea, fatigue, and dizziness. Death may result at high levels of exposure.

## D. GUIDELINE

- 1) SCBA shall be used in any atmosphere in excess of 35 parts per million (PPM).
- 2) Portable gas monitoring and detection devices.
  - a) Each engine company is equipped with a 4 gas detector. These devices should be used to detect and/or confirm CO levels.
  - b) Each ambulance is equipped with a CO detector. This device can be used as an initial detection device when a CO problem is suspected during a medical incident.
- 3) Incident scene operations.
  - a) The first arriving fire company shall establish command.
  - b) Attempt to determine whether a smoke alarm or CO alarm is sounding.
    - i) Smoke alarm.
      - (a) Investigate the cause of the alarm.
      - (b) Take action to mitigate the situation.

- (c) Advise the dispatcher of the situation found.
- ii) Carbon Monoxide alarm.
  - (a) If any person is exhibiting any symptoms of CO poisoning:
    - (i) Evacuate the premises.
    - (ii) Request any additional resources.
    - (iii) Obtain instrument readings of CO levels.
    - (iv) Ventilate the premises.
    - (v) Begin the process of investigating the cause.
  - (b) If no persons exhibit symptoms of CO poisoning and the level of CO detected is 9 PPM or less, it is not necessary to evacuate or ventilate.
- c) The Incident Commander may request that the gas utility respond if:
  - i) A CO level of 10 PPM or greater is detected.
  - ii) The responding companies have shut off a gas appliance.
  - iii) Any person on scene has symptoms of CO poisoning.
  - iv) The incident commander feels a response by the gas utility is necessary.
- 5) Carbon Monoxide investigation process.
  - a) Zero the monitoring instrument in fresh air and comply with all startup procedures as recommended by the instrument manufacturer.
  - b) Initiate a survey of the premises to determine CO levels. All members shall wear SCBA in a CO atmosphere of 35 PPM or greater per NIOSH guidelines.
  - c) Carbon Monoxide levels less **than 10 ppm** notify the occupants that our instruments did not detect <u>elevated levels</u> of Carbon Monoxide at this time. However, this does not mean that higher levels did not exist prior to our arrival or that higher levels will not accumulate after our departure. Check your carbon monoxide detector per manufacturer's recommendations.
  - b) Carbon Monoxide levels **10 ppm and greater** notify the occupants that our instruments have detected <u>potentially dangerous levels</u> of carbon monoxide. We recommend that you leave the building immediately. It is not safe to re-occupy this building until the Carbon Monoxide source is identified and corrections are made.

- c) Carbon Monoxide levels of **100 ppm or greater** notify the occupants that our instruments have detected <u>potentially lethal levels</u> of carbon monoxide in your home. Leave your building IMMEDIATELY! It is not safe until repairs are made or the source is found and corrected. The building will be posted "NOT SUITABLE FOR OCCUPANCY" Consider notifying Wisconsin Public Service and the Building Inspection Department.
- 6) If the situation exists that a CO alarm has sounded, but no level of CO has been detected by fire department instruments, a CO detector may be left at the scene until the occupant can repair or replace there CO alarm.
- 7) The Carbon Monoxide module in NFIRS shall be completed by the officer for all CO incidents.