

CARBON MONOXIDE DETECTOR RESPONSE

PURPOSE

To establish safe operating procedures for responses to reports of carbon monoxide detector incidents.

PROCEDURE

1. Dispatch

- A. Upon receipt of a citizen call reporting a CO detector alarm, dispatch will attempt to determine if anyone at the location is exhibiting symptoms of CO poisoning.
- B. If there are indications of CO poisoning, a Code-3 medical response will be initiated. If there is no indication of CO poisoning, a Code-1 fire response will be initiated.

2. On-scene Initial Actions

- A. Determine if anyone is exhibiting any symptoms of CO poisoning. If so, immediately evacuate, ventilate and request EMS response.
- B. Verify the alarm is coming from a CO detector and determine cause of alarm (e.g., true alarm, low battery, etc.).
- C. It is not necessary to evacuate or ventilate the premises unless a level of 9 PPM or greater is detected, or there are indications of CO poisoning.

3. Carbon Monoxide Investigations

- A. Zero the air monitor in fresh air and comply with all start up procedures as recommended by the manufacturer.
- B. Initiate a survey of the premise to determine if there are any air monitor readings above 9 PPM. (Note: If readings are 35 PPM or greater, SCBA is required.)
- C. If meter readings are **under 9 PPM**:
 - i. Recommend occupant(s) check or reset their CO detector.
 - ii. Inform occupants of results of your investigation.
 - iii. Provide occupants with copy of your investigation report.
 - iv. Inform occupants to call 9-1-1 if "reset" detector sounds again.
- D. If meter readings are **9 PPM or greater**:
 - i. Inform occupant(s) you have detected a potentially dangerous level of carbon monoxide and evacuate occupant(s).
 - ii. Attempt to determine the source of the reading, if possible, turn off source.
 - iii. Attempt to determine source of readings if not an appliance.
 - iv. Ventilate premise wearing proper safety equipment (SCBA), if needed (35 PPM or greater).
 - v. Once the premises have been reduced to a safe level of CO, premises may be occupied at the occupant(s)' discretion.

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- vi. Provide occupant(s) with copy of your investigation report.
- vii. Inform occupant(s) to call 9-1-1 if "reset" detector sounds again.
- viii. Complete the **CARBON MONOXIDE INVESTIGATION NOTICE OF FINDINGS** report and send it to Fire Prevention.

KEY CONSIDERATIONS

- If patients are exhibiting symptoms, refer to the EMS Protocol, Poisoning and Overdose.
- Carbon monoxide is a colorless, odorless, tasteless, lighter-than-air gas that can be deadly. It is a by-product of a fuel burning process and can be produced from automobiles and appliances. Faulty and/or unusual conditions can increase the presence of carbon monoxide in a home or business.
- Carbon monoxide is FUEL and will burn in higher concentrations – 500 PPM and greater
- Carbon monoxide poisoning may be difficult to diagnose. Its symptoms are similar to the flu, which may include headache, nausea, fatigue, and dizzy spells.
- OSHA has established a maximum safe working level for carbon monoxide at 35 PPM (parts per million) over an 8-hour period in the general workplace. The United States EPA has established that residential levels should not exceed 9 PPM average over an 8-hour period.
- Northwest Natural Gas will respond to reports of leaks, odors or complaints of headaches, as requested. They will respond to fire department requests.

**MARION COUNTY FIRE DISTRICT #1
CARBON MONOXIDE INVESTIGATION
NOTICE OF FINDINGS**

Date: ___/___/___ Time Spent On Scene: _____ Address: _____
 Occupant / Owner: _____ Present: YES ___ NO ___ Entry: YES ___ NO ___
 Site Contact: (NAME) _____ Monitor/Operator: _____
 Was an alarm sounding upon arrival or reason for call: YES ___ NO ___
 If so, was the alarm a smoke detector or CO detector? SMOKE ___ CO ___ OTHER _____
 Was structure ventilated upon arrival: YES ___ NO ___
 Was a carbon monoxide detector present? YES ___ NO ___ (If yes, please complete next line)
 CO Detector: MAKE _____ MODEL _____
 Utility company contacted: YES ___ NO ___ Representative's Name: _____
 Company Name: _____

SOURCE CHECK:	LOCATION	(PPM)	CO Symptoms: <i>IS ANYONE EXPERIENCING ANY HEALTH EFFECTS</i>
FURNACE	_____	_____	CO SYMPTOMS CHECK LIST: HEADACHE YES___ NO ___ FATIGUE YES___ NO ___ NAUSEA YES___ NO ___ DIZZINESS YES___ NO ___ CONFUSION YES___ NO ___ VOMITING YES___ NO ___ FEELING ILL YES___ NO ___ SKIN COLOR Red cheeks YES___ NO ___
WATER HEATER	_____	_____	
FLUE / VENT PIPE	_____	_____	
CHIMNEY	_____	_____	
WOOD STOVE	_____	_____	
OPERATING FIREPLACE	_____	_____	
PORTABLE HEATER	_____	_____	
KITCHEN STOVE	_____	_____	
GAS REFRIGERATOR	_____	_____	
GAS DRYER	_____	_____	
OTHER GAS APPLIANCE	_____	_____	
CAR IN GARAGE	_____	_____	
BARBECUE GRILL	_____	_____	

Carbon Monoxide was () was not () found by our instruments. Our instrument found the highest interior level of CO to be _____ PPM.

WHAT DOES THIS READING MEAN?

_____ **9 PPM OR LESS:** Our instruments did not detect levels at this time. However, this does not mean that higher levels did not exist prior to our arrival nor that higher levels will not accumulate after our departure. Check your carbon monoxide detector per the manufacturer's recommendations. If any occupant(s) are experiencing headaches or flu-like symptoms, or your pets are acting in a strange manner, you are advised to seek medical help. Be advised that younger children (infants), pregnant women, older adults, and any person with respiratory or heart problems will be affected by carbon monoxide gas at significantly lower levels of exposure than the average adult. It is recommended that you have a reliable heating appliance contractor check the appliance(s).

_____ **MORE THAN 9 PPM:** Our instruments have detected potentially dangerous levels of carbon monoxide. We recommend that you leave this building immediately. We feel that it is unsafe to re-occupy this building until repairs are made and your detector is replaced or reset according to manufacturer's specifications.

_____ **100 PPM OR GREATER:** We have detected a potentially lethal level 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. Have the sources of carbon monoxide examined and, if necessary, repaired by a qualified repair technician. Replace or reset your detector according to manufacturer's specifications.

SCAN AND ATTACH TO ERS REPORT.
 INDIVIDUAL COMPLETING REPORT: _____
 SIGNATURE OF OWNER/OCCUPANT: _____