



# 157<sup>th</sup> ARW Safety Savvy



According to the Center for Disease Control and Prevention (CDC) **more than 500** people accidentally **die** from carbon monoxide each year in the United States, more than from any other poison.

In the United States, an **estimated 10,000 people are treated annually for CO poisoning** in hospital emergency rooms, but it is believed that many more are misdiagnosed, or never seek medical care.

**At low concentrations, CO can go undetected and contribute to nagging illnesses.**

**Because CO poisoning symptoms are so similar to that of the flu, CO-related health problems are often misdiagnosed or ignored until it's too late.**

Exposure to CO happens most often within the home, a place families count on for safety and comfort. Exposure to CO can also happen when you are travelling.

Carbon monoxide poisoning is caused by inhaling combustion fumes. When there's too much carbon monoxide in the air, your body replaces the oxygen in the hemoglobin of your red blood cells with carbon monoxide. This keeps life-sustaining oxygen from reaching your tissues and organs.

Various appliances fueled by wood or gas produce carbon monoxide, including:

- ✚ Fuel-burning space heaters
- ✚ Furnaces
- ✚ Charcoal grills
- ✚ Cooking ranges
- ✚ Water heaters
- ✚ Fireplaces
- ✚ Portable generators, including those often used on houseboats
- ✚ Wood-burning stoves
- ✚ Car and truck engines

Normally the amount of carbon monoxide produced by these sources isn't cause for concern. **But if appliances aren't kept in good working order or if they're used in a closed or partially closed space** – such as using a charcoal grill indoors or running your car in a closed garage – the carbon monoxide can build to dangerous levels. Even swimming behind a motorboat or riding in the back of an enclosed pickup truck can be dangerous.



## Safety tips:

Install CO alarms (listed by an independent testing laboratory) inside your home to provide early warning of accumulating CO.

- ✓ CO alarms should be installed in a central location outside each separate sleeping area.
- ✓ After purchasing an alarm, call your local fire department's non-emergency telephone number to find out what number to call if the CO alarm sounds. Post that number by your telephone(s) and make sure everyone in the household knows the difference between the fire emergency and CO emergency numbers (if there is a difference).
- ✓ Test CO alarms at least once a month, and replace CO alarms according to the manufacturer's instructions.
- ✓ If you need to warm a vehicle, remove it from the garage immediately after starting it. Do not run a vehicle, generator, or other fueled engine or motor indoors, even if garage doors are open to the exterior. Never leave your vehicle running when it is parked or covered in snow.
- ✓ Have fuel-burning household heating equipment (fireplaces, furnaces, water heaters, wood and coal stoves, space or portable heaters) and chimneys inspected by a professional every year before cold weather sets in.
- ✓ When using a fireplace, open the flue for adequate ventilation.
- ✓ Open a window slightly whenever using a kerosene or gas heater. (Kerosene heaters are illegal in many states. Always check with local authorities before buying or using one.) Only refuel outside, after the device has cooled.
- ✓ Never use a gas oven to heat your home.
- ✓ Only use barbecue grills – which can produce CO – outside. Never use them in the home or garage.
- ✓ When purchasing new heating and cooking equipment, select products tested and labeled by an independent testing laboratory.
- ✓ When purchasing an existing home, have a qualified technician evaluate the integrity of the heating and cooking systems, as well as the sealed spaces between the garage and house.
- ✓ When camping, remember to use battery-powered heaters and flashlights in tents trailers, and motor homes.
- ✓ CO alarms are not substitutes for smoke alarms. Smoke alarms should be installed on every level of the home and in or outside all sleeping areas.
- ✓ Know the difference between the sound of the smoke alarms and the sound of the CO alarms.

**Symptoms of carbon monoxide poisoning may include:**

- ❖ Dull headache, the most common early symptom
- ❖ Weakness
- ❖ Dizziness
- ❖ Nausea
- ❖ Vomiting
- ❖ Chest pain
- ❖ Confusion
- ❖ Irritability
- ❖ Impaired judgment
- ❖ Loss of consciousness

Carbon monoxide poisoning can be especially dangerous for people who are sleeping or intoxicated. The fumes may be fatal before anyone realizes there's a problem.

**When to see a doctor**

If you suspect you've been exposed to carbon monoxide, get into fresh air immediately and seek emergency medical care. If possible, open windows and doors on the way out of the house.

**More Information on CO Poisoning:**

From the CDC: <http://www.cdc.gov/co/faqs.htm>

Alarm goes off:

[http://www.carbonmonoxidekills.com/detector\\_goes\\_off.htm](http://www.carbonmonoxidekills.com/detector_goes_off.htm)

Detectors and Alarms:

<http://www.detectorsandalarms.com/>

**More Articles of CO Poisoning:**

<http://www.newschannel9.com/news/firefighters-988757-carbon-monoxide.html>

[http://www.gazette.net/stories/02112010/collnew123630\\_32549.php](http://www.gazette.net/stories/02112010/collnew123630_32549.php)

<http://www.news8.net/news/stories/0210/703825.html>

[http://www.kansascity.com/news/breaking\\_news/story/1730914.html](http://www.kansascity.com/news/breaking_news/story/1730914.html)

## Carbon monoxide leak prompts NH hotel evacuation

Feb 15, 2010

PORTSMOUTH, N.H. – Eleven people were taken to the hospital Monday after being sickened by a carbon monoxide leak at a New Hampshire hotel.

The problem was traced to a leaking vent in the basement boiler room, said Scott Tranchemontagne, a spokesman for the Hilton Garden Inn in Portsmouth.

Two hotel workers were in a nearby laundry room and nine guests were in the pool area on the same level. They all were brought to the hospital, and all but one had been treated and released by Monday afternoon, Tranchemontagne said.

One of the two workers remained hospitalized but had been improving throughout the day, Tranchemontagne said. The woman, whose identity has not been released, had gone unconscious and was brought to the hospital in serious condition in the morning, he said.

Emergency crews were called to the hotel called at 9:40 a.m. after receiving a report of an unresponsive person. Assistant Fire Chief Steve Achilles said the unconscious woman was red-faced and had bloodshot eyes, symptoms of carbon monoxide poisoning.

Firefighters who went floor to floor with carbon monoxide detectors found unacceptable levels throughout the building. They knocked on doors and told people to leave the building.

Achilles said 600 parts per million of carbon monoxide were detected, far higher than the 35-45 parts per million considered normal. Authorities said the situation could have been worse if there had been high levels of carbon monoxide at night while people were sleeping.

Tranchemontagne said the hotel remained evacuated late Monday afternoon as workers repaired the leaking vent.



**This document was derived from multiple sources. Sources are available upon request in the 157 ARW/SE Office.**

**From Your Risk Management Staff**