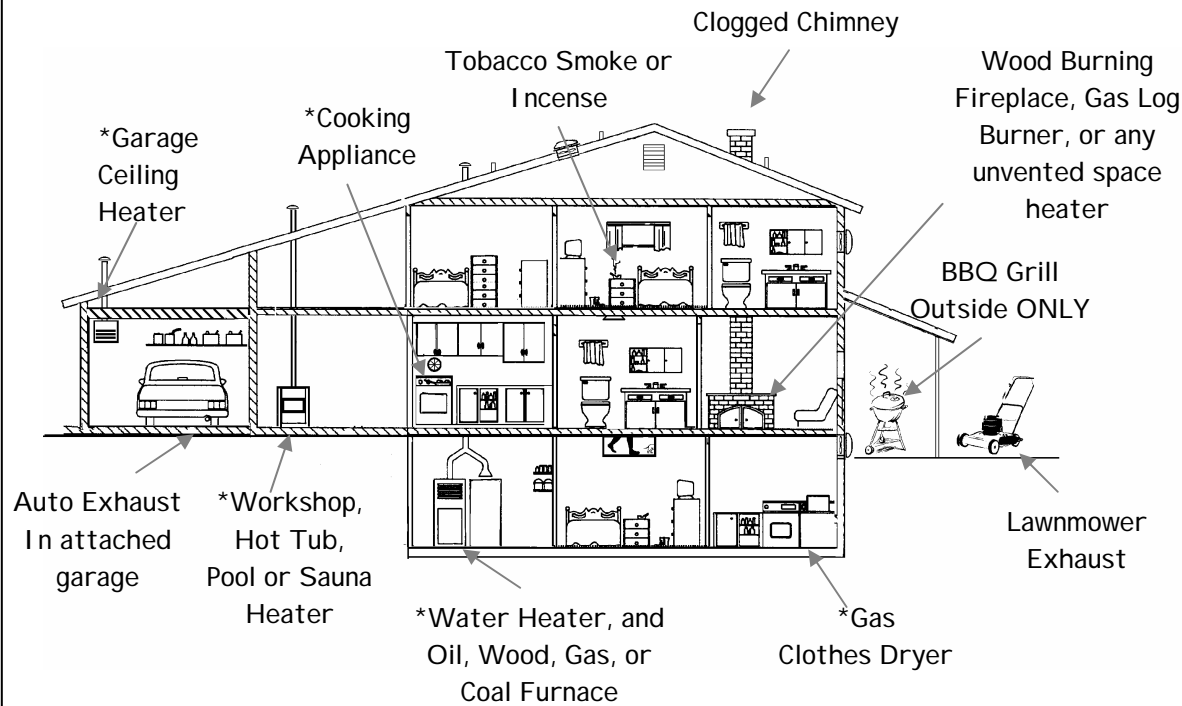


## WHAT ARE THE SOURCES OF CARBON MONOXIDE?



Remember there are many more possible sources & causes of Carbon Monoxide:

- Appliances in cabins or campers
- Recreational Vehicles, Tents
- Lack of adequate ventilation
- Space Heaters, Boats
- Bathroom & clothes dryer exhausts vented to outside in an airtight home can interfere with other vented appliances & create CO.

\*Common household appliances should not normally produce Carbon Monoxide, but CO production is possible if they are malfunctioning or not vented properly. Have all combustion appliances tested yearly.

**IF YOU DON'T TEST, YOU DON'T KNOW!**

## Community Awareness Project CARBON MONOXIDE SAFETY

This educational brochure is part of a community service effort intended to provide information to consumers about the hazards of Carbon Monoxide poisoning and suggestions for prevention.

For more information contact:



If you would like your business or association shown on this brochure or, IF YOU WANT TO REGISTER AND PARTICIPATE IN THIS COMMUNITY EFFORT  
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## What you should know to protect your family from **CARBON MONOXIDE**



Presented by



AND

BACHARACH INSTITUTE  
OF  
TECHNICAL TRAINING

**COSA**  
Carbon Monoxide Safety Association  
APPROVED TRAINING

## Carbon Monoxide is dangerous!

“CO poisoning from the use of fuel burning appliances kills at least 200 people each year and sends more than 5,000 to hospital emergency rooms for treatment. Others die from CO produced while burning charcoal inside a home, garage, vehicle or tent. Still others die from CO produced by cars unintentionally left running in attached garages. “

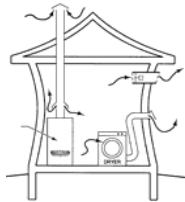
\*CPSC 1997

## What is Carbon Monoxide?

Carbon monoxide (CO) is an odorless and colorless gas which could be created whenever a fuel (such as wood, gasoline, coal, natural gas, kerosene, etc.) is burning.

## You may be exposed to Carbon Monoxide when:

- You leave your car, truck, or van running
- You burn charcoal, alcohol, or gasoline in an enclosed tent, camper, or room
- You smoke a cigar, cigarette, or pipe
- Your home contains an incorrectly vented or malfunctioning hot water heater, furnace, space heater, fireplace, or stove



## How does

## Carbon Monoxide harm you?

Quite simply, carbon monoxide prevents oxygen from being used by your body. Carbon monoxide is poisonous and can harm your central nervous system.

## Who is at risk?

Everyone is at risk of being poisoned by carbon monoxide. However, individuals with existing health problems such as heart and lung disease and the elderly are especially vulnerable. Infants, children and pregnant women are also at risk.

## HOW MUCH IS TOO MUCH?

These levels should be referenced to the effects on healthy people. Health effects can vary significantly based on age, sex, weight, and overall state of health.

12,000 PPM*	Death within 1 - 3 minutes
1600 PPM*	Nausea within 20 minutes, death within 1 hour
800 PPM*	Nausea and convulsions - death within 2 hours
400 PPM*	Frontal headaches 1-2 hours life threatening within 3 hours
50 PPM*	Maximum level for continuous exposure in an 8 hour workday. Health alert for vulnerable populations.
10-35 PPM*	Marginal - Small children, elderly, and those suffering respiratory or heart problems cautioned. Prolonged exposure may cause drowsiness.
9 PPM*	The concentration often found on busy city streets
1 - 9 PPM*	Any increase of CO from outside warrants further investigation though may not be an immediate health risk

\*PPM = parts per million molecules of air.

## Take These Precautions

Make a list of combustion systems you may have in your home, building, recreational dwelling or device (even boats with gasoline engines). This list would include auto influences where garages, car ports and other building components are in use. Be aware that CO may be a greater risk in these settings. How much CO is inside your car when you are in it?

Have a certified technician with calibrated test instrumentation document the performance of your furnace, water heater, fireplace, barbeque and whatever else may be in side or close to inside buildings.

Utilize a CO alarming device with a sensor capable of protecting people to the maximum technology. It is not recommended to use marginally accurate CO alarms.

## What are the symptoms of carbon monoxide poisoning?

Carbon monoxide (CO) poisoning mimics many common illnesses, such as the flu and food poisoning.

### Common symptoms associated with carbon monoxide poisoning:

- headaches
- dizziness
- weakness
- nausea
- rapid heartbeat
- loss of consciousness
- cardiac arrest
- loss of hearing
- blurry vision
- vomiting
- disorientation
- seizures
- coma
- respiratory failure

This list is not meant to serve as a diagnosis of carbon monoxide poisoning, but it is meant to provide information on carbon monoxide poisoning symptoms. Always check with your doctor.

### Long term exposure

Health effects are related to the level of CO concentration and length of exposure. New studies indicate that chronic, low level exposure can have serious health consequences.

## What can I do to protect myself and my family?

- Use non-electrical space heaters only in well-ventilated areas.
- Don't start or leave running cars, trucks, or other vehicles in an enclosed area.
- Every home, building or recreational device should have at least one carbon monoxide detector accurate enough to protect all.
- Have your furnace and other fuel burning appliances cleaned and inspected by a qualified professional once a year or before each heating season.
- Make sure your service professional tests each appliance using a testing instrument that can detect carbon monoxide.
- Don't wait until symptoms occur! **BE SAFE!**

## CO detectors & properly maintained combustion appliances can save lives!

Carbon monoxide (CO) detectors can help alert you to increased levels of carbon monoxide in your home, **but they are not foolproof! CALL A PROFESSIONAL!**

## What to do if you suspect Carbon Monoxide is present in your home:

- **Call**  
If your detector **alarm sounds** and you are **experiencing symptoms** of carbon monoxide poisoning, leave your home immediately and call your local emergency services number or 911 if it is available in your area.
- **CHECK**  
If your detector **alarm sounds** and no one has **symptoms** of carbon monoxide poisoning: **First check the detector**, push the reset button or the “Peak” reading button. **Get fresh air** to the building, and check for sources of carbon monoxide. Turn off any suspicious or obviously malfunctioning appliances or other sources of combustion. Levels of CO higher than those measured outside warrants further investigation, though may not be an immediate health risk. **Contact** a certified service or repair company **who can test for CO with proper test instruments.**
- **ALWAYS**  
**If you think you have symptoms of carbon monoxide poisoning and you do not have a detector, leave your home, and call your emergency services number or 911 immediately!**

**BE SAFE!**

**IF YOU DON'T TEST, YOU DON'T KNOW.**