

## FREQUENTLY ASKED QUESTIONS

**QUESTION:** I have a CO Alarm in my house, shouldn't this warn me if there is a problem?

**ANSWER:** If you purchased your alarm from a store, it will usually only warn you of a life threatening condition. If you read the fine print on the product's UL listing, you'll find it offers little protection for children, the elderly, or persons with existing illnesses or CO sensitivity.

**QUESTION:** What level of carbon monoxide can be harmful?

**ANSWER:** According to the World Health Organization, 15-20 ppm is the first level of CO that can affect us. Levels as low as 30 ppm have been discovered to cause heart problems. Store CO alarms do not have to activate until they see 70 ppm for 3-1/2 hours!

**QUESTION:** What type of alarm should I have then?

**ANSWER:** Ask your contractor for a low-level monitor that alerts you at levels beginning at 15 ppm. Make sure it's battery operated and visually tells you it's working 24/7.

**QUESTION:** Can't I just call my gas company if I think I have a problem?

**ANSWER:** Would you call the gas station if you had a problem with your car? Gas companies are well versed in fuel leaks, but their main business is not appliance service and few of them are Certified CO/Combustion Analysts.

**QUESTION:** How do I know if my contractor is a Certified CO/Combustion Analyst?

**ANSWER:** You can ask to see his NCI wallet card, plus you will recognize his level of expertise and ability to explain to you what he is doing.



## Home Comfort Reports®

Home Comfort Reports® Consumer Information Series is a service of National Comfort Institute, Inc. NCI is the largest training and certification organization in the US in the areas of home comfort diagnostics, air balancing, indoor air quality (IAQ), combustion efficiency and carbon monoxide safety.

This information series was created to help consumers make informed decisions about their air conditioning and heating system purchases so they can achieve the comfort, safety and performance they desire.



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## Home Comfort Reports®



## Why Should I Demand A CO Test?

**Carbon Monoxide is the #1 cause of poisonings in the U.S. Yet less than 5% of all CO Poisonings are reported!**

The safe and efficient operation of your heating equipment and other combustion appliances **cannot be determined** without testing using a calibrated combustion analyzer.

Because the technology, instruments and training to do this testing correctly has only been available for a few years, odds are it's never been done.

Your service technician should be **certified** to properly test and diagnose potential CO exposure.

## What Should I Expect From My Heating Contractor?

As a consumer you should expect your contractor to be trained in current technology that makes sure you're heating system is safe, comfortable and efficient. These are probably things you may expect are mandatory, but unfortunately they're not. The number one benefit of having an NCI Certified CO/Combustion Analyst test your home and appliances for carbon monoxide is his extensive training and knowledge.



Your contractor should be trained to measure the safety and efficiency of all your combustion equipment, even appliances that he doesn't normally sell or service. Thorough testing can also verify that your equipment is operating at peak efficiency and provide the lowest operating costs. Finally, he should provide you with documentation that explains what he has found and what corrections have been or need to be performed. He should also provide you with material to better educate you about carbon monoxide sources and health effects.

## Why Should I Demand A CO Test?



### It's About Your Health, Safety and Comfort

Carbon monoxide, even in small quantities can cause serious health problems, particularly in children and the elderly. Millions of unsuspecting homeowners are exposed to low levels of CO and don't even know it. Unfortunately U.L. listed CO alarms don't go off until your family has been exposed to 70 ppm (parts per million) for over 3-1/2 hours! Most international limits for unsafe levels, including OSHA and the World Health Organization's guidelines are between 15-35 ppm. Carbon monoxide can come from additional sources in your home besides your heating equipment, and they should be checked. These sources include your Water Heater, Gas Range, Gas Logs, Space Heater, Boiler – even an attached garage.

### Even New Equipment Needs to Be Tested

Anytime equipment is installed, it's being exposed to conditions in which it has never been tested to perform. Venting systems, combustion air, duct systems, additional appliances in the building, building pressure etc., can all affect its operation. Besides that, after leaving the factory it's likely your equipment has been loaded and unloaded on trucks and transported several times. Vibration and shock can cause components to shift and move. The only way to truly know if your new equipment is operating safely and efficiently is to test it once it's been installed.



### Better Contractors Don't Guess - They Measure



If CO testing is part of your Contractor's normal protocols he will advise you of this prior to servicing or installing equipment. Odds are when the tech walks into your house he'll be carrying some type of CO Monitor to immediately check if unsafe CO levels are present. When working on the equipment, he will likely drill a hole in the flue of the appliance, and insert the probe of an electronic combustion analyzer to check actual burner performance. Additional performance testing might require holes to be drilled into the ductwork as well. Once he's finished testing he should provide documentation and review his results with you.