

The high cost of home heating fuels and utilities has caused many Americans to search for alternative home heating sources such as wood burning stoves, space heaters, and fireplaces. Heating is one of the leading causes of residential fires. Over one-quarter of these fires result from improper maintenance of equipment, specifically the failure to clean the equipment.

Carbon monoxide (CO) poisoning is another danger when using heating equipment fueled by fossil fuel. It occurs most often when equipment is not vented properly. CO deaths have been on the rise since 1999. On average there were 181 unintentional non-fire deaths from CO poisoning associated with consumer products per year from 2004-2006 compared to 123 from 1999-2001 (Source: Consumer Product Safety Commission). Carbon monoxide poisoning is most fatal to adults age 65 or older.

### **Preventing Home Heating Fires**

In 2003-2006, the leading factor contributing to home heating fires (28 percent) and deaths (46 percent) was heating equipment too close to things that can burn, such as upholstered furniture, clothing, mattress, or bedding (Source: NFPA). Many heating fires can be prevented by following basic safety tips when dealing with any heating equipment:

- Keep or maintain a 3 foot clearance between all heating equipment and anything that can burn.
- Inspect and maintain heating equipment regularly for safety.
- Be sure to have fixed space heaters installed by a qualified technician, according to manufacturer's instructions or applicable codes. Or, make sure a qualified technician checks to see the unit has been properly installed.
- When buying a new, portable space heater, make sure it has the label showing it is listed by a recognized testing laboratory, such as Underwriters Laboratories (UL).
- Space heaters should be turned off every time you leave the room and before going to bed.
- Keep space heaters at least 3 feet away from anything that can burn - including furniture, blankets, curtains, and paper products.
- Choose space heaters that turn off automatically if they tip over.
- Never use a space heater to dry clothing.
- Do not use your oven to heat your home.
- Install smoke alarms in every bedroom, outside each sleeping area, and on every level of the home. For the best protection, interconnect all smoke alarms throughout the home. When one sounds, they all sound.
- Test smoke alarms monthly.
- Install and maintain carbon monoxide alarms to avoid risk of carbon monoxide poisoning.

## Wood Burning Stoves and Fireplaces

Be sure the fireplace or stove is installed properly. Wood stoves should have adequate clearance (3 feet) from combustible surfaces and proper floor support and protection.

- Wood stoves should be of good quality, solid construction and design, and should be evaluated by a nationally recognized laboratory, such as Underwriters Laboratories (UL).
- The stove should be burned hot twice a day for 15-30 minutes to reduce the amount of creosote buildup.
- Have your chimney inspected annually and cleaned if necessary, especially if it has not been used for some time.
- Don't use excessive amounts of paper to build fires in fireplaces. It is possible to ignite creosote in the chimney by overbuilding the fire.
- Make sure your fireplace has a sturdy screen to prevent sparks from flying into the room.
- Keep flammable materials away from your fireplace mantel. A spark from the fireplace could easily ignite these materials.
- Before you go to sleep, be sure your fireplace fire is out. NEVER close your damper with hot ashes in the fireplace. A closed damper will help the fire to heat up again and will force toxic carbon monoxide into the house.
- If synthetic logs are used, follow the directions on the package. NEVER break a synthetic log apart to quicken the fire or use more than one log at a time. They often burn unevenly, releasing higher levels of carbon monoxide.
- Do not use flammable liquids to start or accelerate any fire.
- Never burn charcoal indoors. Burning charcoal can give off lethal amounts of carbon monoxide.
- Allow fireplace and wood stove ashes to cool before disposing in a metal container.



Use a metal or glass fireplace screen to keep sparks from hitting nearby carpets or furniture.

## Kerosene Heaters

- Read and follow the procedure in the owner's manual before you attempt to operate or service the unit.
- Learn the safety and maintenance procedures necessary to safely operate the heating unit.
- Always use water clear K-1 grade kerosene.
- Never use gasoline or any other volatile fuels in the unit.
- Never refuel the heater indoors, when it is hot, or in use.
- Do not fill the fuel tank past the full mark. The space above the full mark is there to allow expansion of the fuel when it is operated.
- Always provide adequate ventilation for the unit. Burning kerosene consumes oxygen, and produces carbon monoxide and other dangerous gases which may cause you to suffocate or have other respiratory problems.
- Check with your local fire department to make sure kerosene heaters are allowed in your community.

## Electric Heaters

- Check to ensure the heater has a thermostat control mechanism.
- Choose a heater that will turn off automatically if it tips over.
- Never dry clothes or store objects on top of the heater.
- Never use extension cords with electric heaters.
- Keep anything that may burn at least 3 feet away from the heater.
- Never allow children to play with, or around, the heater.
- Never place anything inside the grill on the front of the heater.



Keep space heaters at least 3 feet away from anything that can burn - including furniture, blankets, curtains, and paper products.

## Carbon Monoxide Safety

Carbon monoxide is an odorless, colorless and toxic gas. Because it is impossible to see, taste, or smell the toxic fumes, CO can kill before you are aware it is in your home.

CO can come from several sources: gas-fired appliances, charcoal grills, wood-burning furnaces or fireplaces, and motor vehicles.

Each year unintentional carbon monoxide (CO) poisoning claims hundreds of lives and sends several thousands of people to the emergency room for treatment. At lower levels of exposure, CO causes mild effects that are often mistaken for the flu. These symptoms include headaches, dizziness, disorientation, nausea, and fatigue. The effects of CO exposure can vary greatly from person to person depending on age, overall health, and the concentration and length of exposure.

You can protect yourself and your family by following a few easy steps:

- Install at least one CO alarm with an audible warning signal evaluated by a nationally recognized laboratory, such as Underwriters Laboratories (UL), near sleeping areas and outside individual bedrooms. CO alarms measure levels of the gas over time and are designed to sound an alarm before an average, healthy adult would experience symptoms.
- Have your heating system, water heater, and any other gas, oil or coal burning appliances serviced by a qualified technician every year.
- Never use your range or oven to help heat your home and never use a charcoal grill or hibachi in your home or garage.
- Never keep a car running in a garage. Even if the garage door is open, normal circulation will not provide enough fresh air to reliably prevent a dangerous buildup of CO.

**Having a working smoke alarm dramatically increases your chances of surviving a fire. And remember to practice a home escape plan frequently with your family.**