



## INFORMATION SHEET: SPACE HEATERS

### ENERGY + HEALTH PROGRAM

The following information is from the DOE Energy Savers website. Visit <http://www.energysavers.gov/> for additional information.

#### Space Heater Types

Space heaters are classified as vented and unvented, or "vent free." Unvented combustion units are not recommended for use inside your home, as they introduce unwanted combustion products into the living space, including nitrogen oxides, carbon monoxide, and water vapor. The units also deplete the air in the space where they are located. Most states have banned unvented kerosene heaters for use in the home and at least five have banned the use of unvented natural gas heaters.

Electric space heaters are generally more expensive to operate than combustion space heaters, but they are the only unvented space heaters that are safe to operate inside your home. Although electric space heaters avoid indoor air quality concerns, they still carry hazards of potential burns and fires, and should be used with caution.

#### Carbon Monoxide (CO)

CO is a colorless, odorless gas that interferes with the delivery of oxygen throughout the body. At high concentrations can cause a range of symptoms from headaches, dizziness, weakness, nausea, confusion, and disorientation, to fatigue in healthy people and episodes of increased chest pain in people with chronic heart disease. The symptoms of carbon monoxide poisoning are sometimes confused with the flu or food poisoning.

CO is produced whenever any fuel such as gas, oil, kerosene, wood, or charcoal is burned. If appliances that burn fuel are maintained and used properly, the amount of CO produced is usually not hazardous. However, if appliances are not working properly or are used incorrectly, dangerous levels of CO can result. Hundreds of people die accidentally every year from CO poisoning caused by malfunctioning or improperly used fuel-burning appliances. Even more die from CO produced by idling cars.

#### Unvented Space Heater Alternatives

The best replacement option is a direct vent appliance which exhausts directly through an exterior wall near the appliance and brings in combustion air from the outside through the same vent assembly. Space along an exterior wall is necessary for installation of a direct vent heater. Numerous choices exist for direct vent heaters that are efficient and very compact. Although they need to be located along an exterior wall, they do not necessarily take up very much wall space. These direct vent appliances can also be vented up through a roof.

Another standard option is to install an electric baseboard heater. These are very compact and are available in many lengths.