Space Heater Safety

To save money in the winter, it’s tempting to use a space heater to heat a room rather than to heat the entire house. But it’s important to be cautious with this option. The U.S. Consumer Product Safety Commission estimates that more than 25,000 residential fires every year are associated with the use of room (space) heaters. More than 300 people die in these fires. An estimated 6,000 more receive hospital emergency room care for burn injuries associated with contacting hot surfaces of room heaters, mostly in non-fire situations.

Setup and Use

When setting up a space heater, remember to keep it at least 30 inches from any flammable materials and set it up on the floor, unless it is designed otherwise.

Areas where space heaters are used should be free of combustible materials like wood, paper, rags and flammable liquids. Do not set them up on easily ignited or flammable surfaces, such as rugs or carpets or use them to dry wet clothing.

When using a space heater in an enclosed area, it is a good idea to leave a window or door partially open to allow for fresh air to enter. This will prevent carbon monoxide (CO) buildup or a depletion of oxygen. Never take a gas-fired or kerosene heater into a confined space. The results could be deadly.

All unvented heaters manufactured after 1983 should be equipped with an oxygen depletion sensor (ODS). The ODS will shut off a heater if it detects a reduced level of oxygen in the area where the heater is being used.

All gas heaters should be equipped with a pilot safety valve. This device will shut off the gas to the heater if the pilot light should go out, preventing the risk of explosion by not allowing the accumulation of gas.

If the pilot light goes out, remember the following safety tips:

- If you smell gas, do not attempt to light the pilot. Turn off all controls, open a window or door and leave the area.
- Remember that propane is heavier than air and does not dissipate rapidly. If you smell gas, do not touch any electrical switches or use a radio or telephone in the area where you smell gas. Do not smoke. A spark could ignite the gas.

It also is a good idea to light a match before you turn on the gas to the pilot. This avoids the risk of flashback, which could occur if gas is allowed to accumulate before lighting the pilot.

Electric heaters should be kept out of wet or moist places like bathrooms. Water or corrosion could lead to a fire or shock hazard.

Maintenance and Inspection

All gas and kerosene heaters should be inspected annually by a qualified person to ensure that they are properly adjusted and clean.

Maintenance and inspections should include checking the following items:

- Condition of safety devices
- Exhaust ducting and flues
- Efficiency of burners
- Exhaust flow
- Condition of fuel lines, vents, gaskets, tanks, electrical cords and guards
Hazards

You should be aware of the following hazards when using propane, kerosene or space heaters:

1. Fires and burns caused by contact with or close proximity to the flame, heating element or hot surfaces.
2. Fire and explosion caused by flammable fuels or defective wiring.
3. Indoor air pollutants caused by improper ventilation or incomplete combustion of fuels.
4. High humidity released by propane-fired heaters that can lend to mold growth within buildings under construction.

Carbon Monoxide

CO is colorless, orderless gas produced by the incomplete burning of any carbon-containing material, including gasoline, natural gas, propane, coal or wood. CO is dangerous because it replaces oxygen in the blood and interferes with the transport of needed oxygen to cells in the body.

Symptoms of CO Poisoning

Symptoms of CO poisoning can mimic those of the flue or food poisoning. Early exposure symptoms may include:

- Dizziness
- Nausea
- Headache
- Weakness
- Inattention
- Fatigue

Prolonged exposure can lead to the following symptoms:

- Increasing fatigue
- Lack of coordination
- Confusion
- Extreme weakness
- Loss of consciousness
- Death

Because CO poisoning symptoms mimic the flue or food poisoning, it is important to inform medical responders of the possibility of exposure to excessive amounts of CO. Poisoning can be reversed if caught in time, but acute poisoning may result in permanent damage to the heart and brain.

Emergency Treatment

1. Get the victim into the open air as quickly as possible.
2. Check for respiration and pulse. If both are absent, begin CPR.
3. If breathing is absent, but there is a pulse, begin mouth-to-mouth resuscitation and continue until the victim begins breathing or help arrives. Have an up-to-date CPR kit with mouth protector available due to exposure to bodily fluids.
4. Begin administering oxygen as soon as one is available and if you are trained to do so.
5. Get the victim to a hospital as soon as possible.