

Loss Control Insights

Portable Heaters

With the cost of heating continually on the rise, many are investing in portable heaters to help lower their energy bills. But while portable heaters can be both efficient and economical, there are also a number of important safety concerns.

According to the U.S. Consumer Product Safety Commission, more than 25,000 residential fires, 300 deaths, and 6,000 burn injuries every year are associated with the use of portable space heaters. To help choose a portable heater wisely and use it safely during the upcoming winter season, the following are tips for space heater safety:

- **Select the right size heater for the right size space.** When you purchase a portable heater, be sure to buy one that is rated for the approximate square-footage of the room or space you plan to use it in. A portable gas heater that is too large for a particular space, for example, might exhaust an excessive amount of unhealthy air pollutants. On the contrary, buying a portable gas or electric heater rated for a small space and expecting it to cover a large area increases the risk that the unit will overheat. It will have to work harder to heat the space.
- **Opt for heaters with tip-over and overheat protection.** Portable heater models include a variety of safety features that help take some of the worry out of operation. A heater equipped with a tip-over switch will automatically shut off if it is tipped over accidentally. Portable heaters with overheat protection switches function in nearly the same manner. This switch acts as a temperature sensor, detecting when a heater's internal components become too hot. When an unsafe temperature is detected, the switch automatically shuts off the unit to prevent overheating.
- **Shop for a heater with a safety certification.** Portable space heaters that are listed by Nationally Recognized Testing Laboratories (NRTLs) have been tested, proven, and certified to meet specific safety standards. The manufacturers of these heaters are also required to provide consumers with important information about the safe usage and care of the units. Some common testing laboratory certifications to look for include UL (Underwriters Laboratories), ETL (Intertek Group), and AGA (American Gas Association).
- **Use portable gas heaters only with proper ventilation.** Portable gas heaters should only be used in areas with ample ventilation. These units, which heat by burning kerosene, natural gas, butane, or propane, can produce dangerous and unhealthy amounts of carbon monoxide, nitrogen oxide, and water vapor if not vented properly. Vented units are designed to be placed next to an outside wall, with a flue gas vent installed to exhaust gaseous fumes outside.
- **Give heaters their space.** Position a portable space heater at least 3 ft. away from furniture, window treatments, bedding, clothing, rugs, and other combustibles. These items could easily catch fire if they come into contact with a unit's electric heating element, open flame, or too-hot surface. Never sit or drape anything on top of a portable heater. In addition, be sure that the heater is placed on a hard, level surface that is non-flammable.
- **Plug the heater directly into an outlet.** As a rule of thumb, plug a portable electric heater directly into an outlet with sufficient power capacity. Attaching an extension cord to the unit increases the chance of overheating, fires, and electrical shock injuries. If an extension cord must be attached, use one that is properly rated and sized for the portable heater appliance.
- **Inspect and clean the heater regularly.** Both portable gas and electric heaters should be inspected on an annual basis and cleaned frequently to ensure that they are in safe working condition. Seek out a qualified worker to perform any repairs. Never use a defective heater.

- **Shut off and unplug the heater when leaving it unattended.** Upon leaving an area, turn off the portable space heater and unplug it. Many heaters feature programmable timers that can be used to program automatic on and off times.
- **Keep the heater away from water and out of damp locations.** Unless it is specifically designed for use in damp spaces, refrain from running a heater in a bathroom or a humid basement. Moreover, do not touch the heater if you are wet or have wet hands, as this increases the risk of electrical shock.

Educating your organization about the safety hazards that come with the improper use of portable heaters will help you achieve better peace of mind as you keep your home or office warm, comfortable, and fire hazard-free this winter.