

Winter Storms: Safety Tips for Heating Your Home

Now is a good time, as winter approaches, to start thinking about alternative ways for heating your home in case of a winter weather emergency. Severe winter storms can cause power outages for days or even weeks. How will you heat your home if this happens? Some popular alternative sources of home heating are fireplaces, space heaters, wood-burning stoves, and kerosene heaters. Safety factors should be taken into consideration before attempting to purchase or operate any of these home-heating appliances. While chances of freezing to death in your home are small, there's a greater risk of death by fire or carbon monoxide poisoning. Fortunately, most tragedies are preventable; all it takes is a little education and some common sense. By following the safety tips outlined below, you can learn to identify potential hazards associated with the use of home-heating equipment during an emergency.

Safety Comes First

Safety is crucial in a heating emergency. The following is a list of general guidelines related to alternative heating resources.

- **Children should not have access to portable heaters**, electric or fuel powered.
- Do not burn anything larger than candles inside your home without providing good ventilation such as opening windows, doors and fireplace flues.
- All heaters that run on fuel (natural gas, kerosene, butane, oil) should be vented. The only exception to this rule is electric heaters.
- Do not use the kitchen oven or stove top to heat your home. This can be a fire hazard as well as a source of toxic fumes.
- “Space” heaters need their space. Keep anything combustible at least three feet away.
- If you are using supplemental portable electric heaters, never use an extension cord. Plug them directly into the electrical outlet.
- Before purchasing a portable heater, make sure it has “tip switches.” These switches are designed to automatically shut off the heating unit in the event it tips over.
- Never refill a space heater while it is in operation or is still hot.
- **ONLY** refuel heaters outdoors! Use the type of fuel recommended by the manufacturer, and follow instructions carefully.
- Glass doors or a metal screen should be placed in front of your fireplace to prevent sparks or hot ash from igniting carpets, furniture, or other combustible items.
- **Do not** burn charcoal designed for barbecues indoors—not even in a fireplace or wood-burning stove. It releases odorless, but toxic, carbon monoxide fumes and can cause death!
- Install **smoke alarms** that are equipped with a battery back up in your home. Make sure that smoke alarms are on every level of the home as well as near every bedroom in the home. Test the alarms monthly, and change the batteries at least once a year
- Purchase and install a **carbon monoxide alarm** for your home. Make sure it is marked with the Underwriter's Laboratory (UL) safety listing. Follow the manufacturer's recommendations for placement in your home.

Inspect Heating Sources

Play it safe! Always perform a thorough safety inspection of heating sources in your home. Outdated, poorly maintained, misused, or damaged heating equipment can lead to a deadly disaster. You can reduce the chance of becoming a fire casualty by following the steps below.

Wood Stoves. According to the U.S. Fire Administration, wood stoves cause over 9,000 residential fires every year. Before firing up your wood-burning stove this winter, make sure to check the following:



- Make sure it is constructed of solid material, such as plate steel or cast iron.
- Check legs, hinges, and door seals for smooth joints and seams. Make sure there are no cracks.
- On an annual basis, inspect and clean the pipes and chimney.
- Use only seasoned hardwood for fuel. Do not use green wood, artificial logs, or trash.
- Combustible objects should be kept at least three feet away from your wood stove.



Electric Space Heaters. Even though electric space heaters don't have an open flame, the heating elements of some types of electric heaters are hot enough to ignite nearby combustibles like draperies, paper, clothing, furniture, and flammable liquids. Take the following into consideration before purchasing or using an electric space heater:

- Purchase only heaters with the UL safety listing.
- Purchase a heater that is equipped with a thermostat control mechanism and will switch off automatically if the heater falls over.
- Space heaters are not intended for drying clothing or any other type of item. Keep combustibles at least three feet away from the heater.
- Always unplug your heater when not in use.

Portable Kerosene Heaters. Some of the major hazards associated with portable kerosene heaters are carelessness while refueling the heater, improper storage of combustible liquids, and the accumulation of indoor pollutants from un-vented systems. Kerosene heaters are not always the best alternative choice for home heating. However, each situation is different. The following tips can help you make an educated decision as to whether a kerosene heater is right for your home:



- Before purchasing a kerosene heater, check with your local fire department and building inspector to determine if building and fire codes permit its use in residential structures.
- Check with your insurance carrier to determine if your homeowners insurance will cover fire damage caused by a kerosene heater.
- Purchase only UL-approved heaters.
- Only use crystal clear K-1 kerosene.
- **Never** fill your heater with gasoline or camp stove fuel. These flare up very easily.
- **Never** overfill your portable heater.
- Kerosene heaters should be used only in a well-ventilated room.



Fireplaces. Fireplaces inside of your home provide a good source of warmth, relaxation, and enjoyment for the family. Like any other home appliance, safety comes first. To ensure your family's safety, the fireplace should be safely used and properly maintained. The following tips should be taken into consideration before, during, and after the fireplace is in use:

- Have your fireplace and chimney inspected and cleaned annually. Check for obstructions and cracks, which will help to prevent deadly chimney and roof fires.
- Make sure the damper is open before lighting a fire.
- Never burn trash, paper, or green wood in your fireplace. These materials cause heavy creosote buildup and are difficult to control. Creosote is a dark brown or black flammable tar deposited from wood smoke onto the walls of a chimney.
- Glass doors or a metal screen should be placed in front of the fireplace to prevent sparks or burning logs from leaving the fireplace and causing a home fire.
- Extinguish the fire completely before going to bed.

Generators. Portable generators are often used to restore electricity to some home appliances during a power outage. Power from a generator can be a lifesaver, but it can also be very dangerous if not used properly. If you choose this option to restore power, please take the following safety tips into consideration:



- **NEVER** use a generator indoors! Generators must be set up outdoors in a completely open and dry area.
- Position the generator away from vents, windows, and doors to prevent carbon monoxide from building up and entering the home.
- Do not use a generator in rain or wet conditions.
- It's best to plug appliances directly into the generator, or a heavy-duty, outdoor-rated extension cord may also be used. Make sure that the cord is free of cuts or tears, and the plug has all three prongs—especially a grounding pin.
- NEVER try to power the house wiring by plugging the generator into a wall outlet. This practice, known as “backfeeding,” is extremely dangerous as it presents an electrocution risk to utility workers and neighbors served by the same utility transformer. It also bypasses some of the built-in household circuit protection devices.
- Turn the generator off and let it cool down before refueling. Gasoline spilled on hot engine parts could cause a fire.
- Always follow the manufacturer's instructions for your generator. Give special attention to how much wattage your generator can accommodate so that it does not overload and malfunction.

Adapted from:

Check Your Hotspots, Department of Homeland Security United States Fire Administration.

<http://www.usfa.fema.gov/safety/tips/hotspot.shtm>

Staying Warm in an Unheated House, University of Maine Cooperative Extension.

<http://www.umext.maine.edu/emergency/9022.htm>

Winter Storm Fire Safety, Department of Homeland Security United States Fire Administration.

<http://www.usfa.fema.gov/safety/tips/winter.shtm>

Portable Generator Hazards, Consumer Product Safety Commission.

<http://www.cpsc.gov/cpscpub/pubs/portgen.html>