

## University of Missouri Extension

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# For the Unprepared: Home Heating in an Emergency

Adapted by MU Extension specialists from material prepared by Cooperative Extension Service, University of New Hampshire, Durham.

Your home heat is gone. You've just discovered your heating system may be off for several days. It's cold outside; the inside temperature is dropping, and you have a first class emergency on your hands. What can you do?

Your first concern should be to conserve body heat. Keep your household warm while you provide emergency heat. The simplest solution to this problem is to dress warm or perhaps get in bed.

Safety is of paramount importance in a heating emergency. Few (if any) Americans have frozen to death in their homes in recent times. Many have perished from burns, smoke inhalation or carbon monoxide poisoning. Loss of home heat constitutes an emergency, but it needn't result in tragedy.

Handling a heating emergency, once immediate requirements for body heat are met, can be broken down into five steps:

- Finding a heat source or improvising one.
- Obtaining fuel.
- Selecting a room or area to be heated.
- Setting up, testing and operating an emergency system.
- Dealing with related problems caused by heat loss.

## Selecting an alternate heat source

What kinds of heating devices do you have that can use readily-available fuel such as wood, coal, electricity, gas or oil? Perhaps you have a space heater; perhaps a stove or an electric, gas or oil heater. Do you have a camp stove? Don't overlook the oven in your gas or electric range. If the fuel is available, turn the range on and open the oven door.

Stoves should be connected to a chimney flue if at all possible. Many older homes have capped stovepipe thimbles in rooms once heated by stoves. You can also remove the nonfunctioning furnace pipe from its flue entrance and hook up your stove or heater in its place. Sometimes a stove pipe can be extended through a window to provide proper venting of gases.

### Note

Be sure no heated surfaces are close to the sash or other flammable materials

- When setting up emergency stove piping, be careful about running it too close to flammable materials. This is particularly true when using a window-mounted flue. The wood sash is flammable as are curtains or shades that might normally be on the window.
- Flues and piping for gas-burning appliances primarily vent vapors and may be unsafe for use with higher temperature oil, coal or wood smoke.
- A damper in your emergency flue will help facilitate satisfactory burning and regulation of the heat. Cutting down an excessive draft helps keep the heat in the room and prevents the flue from over-heating. Close the damper as far as possible without reducing combustion or forcing smoke into the room.
- Natural gas appliances will not burn bottled gas without a mechanical conversion. Your local gas supplier has the materials needed for conversion.
- If you use a catalytic or unvented heater, provide plenty of ventilation. Keep a nearby window open at least one

inch whenever the device is in use.

The least desirable solution is to rely on a makeshift heater, including charcoal burning grills, camp-stoves, stackless kerosene space heaters or industrial-type oil or kerosene jet heaters. If you must use them, do so only with plenty of ventilation.

Depending on the weather severity and the available resources, there may be other options. A camping family might have a catalytic heater (a gas or oil-fueled heater which provides heat with no flame. ) One of these units can keep a room livable in cold weather. A travel trailer or camper can be inhabited in the winter if it has a heater. More than one farm family has taken refuge in the relative warmth of a livestock barn under extreme conditions. For shorter periods, there is the family car, a last resort which will be dangerous without proper ventilation.

Bed may be the safest, warmest place for short periods. Use of adequate blankets and coverings will trap and conserve vital body heat, and two or more people in the same bed can share heat. This is an especially good way to keep children warm.

Don't overlook the possibility of solar heat. An appreciable amount of heat can be gained through large windows on the southern side of the house.

## Providing fuel for heating

Many combustibles can be considered for fuel. Some of the common ones include:

- Furnace or cannel coal
- Kerosene or gasoline
- Straw
- Furnace oil
- Firewood and scrap wood
- Wood chips
- Motor oil
- Campstove fuel
- Fats, grease
- Alcohol
- Corncobs
- Newspapers or magazines
- Charcoal briquettes
- Charcoal fluid lighter
  - Coal can be burned in a fireplace or stove if a grate is fashioned to hold it, allowing air to circulate underneath. "Hardware cloth" screening a placed on a standard wood grate will keep coal from falling through.
  - Paper "logs" can be made by rolling newspapers or magazines tightly into small log-sized bundles, which can be burned if they are stacked to allow proper air circulation.
  - There may be plenty of burnable wood around, including lumber and furniture if the situation is critical.

Store fuels in a handy place but not in the heated area. This is particularly true for highly combustible items such as gasoline, kerosene and papers.

## Which room should be heated?

The location of a fireplace, stove or chimney flue may dictate the decision. Use the following guidelines:

- Confine emergency heat to a small area.
- Try to select a room on the "warm" side of the house away from prevailing cold winds. Avoid rooms with large windows or uninsulated walls. Interior bathrooms probably have the lowest air leakage and heat loss. Your

basement may be a good place in cold weather because of the heat gain from the earth.

- Isolate the room from the rest of the house by keeping doors closed, hanging bedding or heavy drapes over entryways or erecting temporary partitions of cardboard or plywood.
- Hang drapes, bedding, shower curtains, etc., over doors and windows, especially at night.

## Check your efforts for safety

As soon as emergency heating is working and the room protected against exterior cold, stop and appraise the safety of your situation. If there is any hazard or question of safety posed by the emergency heating, make changes immediately. Check carefully for fire hazards.

All heaters except electric heaters should be vented to provide oxygen for complete combustion and to safely remove exhaust gases and smoke.

### Note

Do not attempt to burn anything larger than candles in your home without providing adequate ventilation to the outside

Asphyxiation from lack of oxygen or poisonous gases is a great danger when there is not enough ventilation. There is no simple rule for determining how much ventilation you need. For safety, provide cross ventilation by opening a window an inch on each side of a room. It is better to let in some cold air than to take a chance of not having enough air.

As an additional safety factor, you should have a firewatch whenever emergency heat is being used. One person should stay awake to watch for fire and to detect the possibility of inadequate ventilation. Drowsiness is one sign of carbon monoxide poisoning. If the firewatch feels sleepy, it may be a sign poor ventilation.

If you have not already done so, set up some firefighting items near your emergency heating device. Dry powder fire extinguishers will put out most types of burning materials. Sand, salt, baking soda or water can be used on most non-oil materials. A tarpaulin or heavy blanket can be used for smothering flames. Post your local fire department's telephone number near your telephone. Finally, discuss safety, firefighting techniques and a home evacuation plan with all members of your family. Be prepared for the worst.

## Related MU Extension publications

- GH5117, Preparing for an Emergency: Home Heating in an Emergency  
<http://extension.missouri.edu/p/GH5117>

Order publications online at <http://extension.missouri.edu/explore/shop/> or call toll-free 800-292-0969.



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