

# Keeping warm in a winter weather emergency

*For when there is no electricity or gas due to a utility shut-off or natural or man-made disaster.*

If the electricity or natural gas goes out during the winter, you must take action to protect your family. Depending on the weather, lack of heat can be life threatening!

**Bundle up your body!** Wear several loose layers of clothes. Clean clothes keep you warm better than dirty clothes. Don't forget a hat, even when you are indoors! If you must go outside, beware of wind and wet. Keep dry. Wet clothing loses its ability to insulate, and can suck heat right out of you. Stay out of the wind as much as possible. Make sure your head, hands, and feet are protected.

**Don't try to heat the entire house in a winter emergency.** Gather everybody in the household into one or two rooms and don't forget your pets. The kitchen and an adjacent room are usually good choices for this. Close doors and hang blankets over doorways and use plastic sheets, blankets, quilts, aluminum foil & newspapers over windows. Blankets can insulate floors without carpets. Don't seal the room so tight that no fresh air can get in. Even if it is cold, you need fresh air to stay alive. Neighbors may want to gather together in one house – each human body is radiating about the same amount of heat as a 100 Watt lightbulb. We're all familiar with the way a crowded room gets warm, so put that to work for you to stay warm during a winter emergency.

## **Safety Issues for Open-flame Heating**

If you will use back-up heat that involves an open flame (such as kerosene or propane), ventilation is required. Always place the propane or kerosene heater in front of the ventilation opening (such as a window open 1/4 inch). If you place it away from the ventilation, the fumes will first fill the room before they exit from the window. It is a life-saving idea to have a carbon monoxide and smoke detector in rooms where you use open-flame heaters.

**Never use charcoal briquets or Coleman fuel camp stoves inside a house or garage for cooking or keeping warm in a winter weather emergency.** People die every year from carbon monoxide poisoning when they fire up charcoal briquets inside the house to keep warm.

**Never run an electrical generator inside a house or a garage.** Always put it outside. Make sure it stays dry and let it cool down before re-fueling it.

**Carbon monoxide poisoning is always a risk if using open-flame heating indoors.** When using any kind of inside heat with an open flame, if the room seems "stuffy" and you begin to feel headachy and lethargic and/or your vision gets blurry, get everyone out of the room and ventilate it with fresh air immediately. **Pregnant women, children, and unborn babies are particularly at risk of carbon monoxide poisoning.**

With all forms of alternative open flame heating, **beware of the fire danger.** Place a fire extinguisher where it can be quickly used. If you don't have a fire extinguisher, get a couple of large boxes of baking soda and a bucket of sand.

In a power outage, many people with natural gas stoves will use them for emergency heat. However, **don't keep a gas stove burning 24 hours a day for heat because they aren't designed for that.** Turn the burners on to warm things up for an hour or so and then turn the burners off, as if you were cooking a meal. Turn the oven on, at a moderate temperature, for 2 or 3 hours and then turn it off for a while. Don't leave the oven door open if you use it to provide heat, that will burn out the thermostat and then the stove won't light. The warmth will still move through the room with the door closed. While you have the oven on, make some biscuits, a cake, a nice casserole, or something else good to eat to help you stay warm.

If you are in a winter emergency without any backup heat, you can use candles or "canned heat" like sterno or chafing dish fuel. Even the flame of one candle can generate enough heat to keep a person from freezing to death. However, **never leave candles burning unattended or while you are sleeping.** Make sure there is nothing burnable close to the candles, and that they are secure in a candle holder that can't be knocked over onto a burnable surface. Keep them away from small children.

## Refrigerator and freezer issues

If it is freezing cold outside, and the power fails, take the food from your refrigerator and freezer and put it in an ice chest or other box that you can seal tightly shut and put it outside in a covered place, such as a porch or shed. During the day, make sure the sun doesn't shine on the ice chests. If the temperature is at 40 degrees or below, the food will stay safe. If it is below freezing most of the day, the frozen food will stay solidly frozen too.

## Lighting and alternative power

When the power goes out, turn off all lights except one and unplug all electrical appliances. Turn off the central heating system. When the power comes back on, there may be power surges that could damage electric equipment. Leave one light on so you will know if the power comes back.

Emergency lighting can be candles, flashlights, and lanterns. Putting a light in front of a mirror increases the illumination. If using candles, kerosene, or propane lanterns, take appropriate fire safety precautions. **DO NOT** go to sleep with an open flame light burning. Store fuels like propane and kerosene safely outside of the house or apartment.

You can get power for lights and radios from a car battery. People familiar with electricity can rig emergency lights from car batteries, brake lights and electric wire. This kind of utilization will cause a car battery to deteriorate faster, but in an emergency, sometimes such trade-offs have to be made.

You can also use a power inverter to convert the DC battery power to AC power that will operate electric lights, radio, or a small television or CD player. The inverter typically has clamps that attach it to the battery and a place to plug in electrical equipment. A 300 watt inverter will run 300 watts of electrics, such as two 100 watt light bulbs and a small radio. A 600 watt inverter could run the equivalent of six 100 watt light bulbs. It's best to use fluorescent lights with an inverter because they use less power. Marine, RV, or golf cart batteries are better choices for emergency power, as they are designed to be drained slowly and recharged. You can recharge a battery with jumper cables and a running automobile. If you are using this indoors, remember that batteries are filled with toxic, corrosive acid, so make sure the kids can't get to it.

## Miscellaneous Useful Ideas in Winter Emergencies:

**Take advantage of the sun.** During the day, if the sun is shining, open the curtains covering windows when the sun is shining directly through them. As the sun moves in the sky, and light no longer shines directly through the windows, cover them with curtains and extra blankets. "Store" daytime sunlight by placing bottles of water in direct sunlight coming through your windows. This will warm the water and later, when the sun is no longer shining on them, that heat will be slowly released. If the windows are dirty, clean them – more light will enter and thus you will have more heat from the sun.

**To keep warm at night,** use extra sleeping insulation such as blankets, newspapers, sleeping bags, rugs, curtains, layered clothing, and have everyone sleep together. Wear a cap to bed. If you have no heat, pitch a tent in the middle of a room, and gather the family inside. If you don't have a tent, improvise one from sheets, blankets, newspapers and furniture. **DO NOT** use open flame heating inside a tent.

**The best place for babies** is on their mother's bodies, in their arms or using one of the many ways of carrying a baby and still having your hands free.

Drink a lot of water, and eat frequent meals with lots of carbohydrates.

Be creative when thinking about ways to keep warm. You can use newspapers for emergency insulation. They can be wrapped around legs, arms, torso, taped over windows, laid on the floor. More layers = more insulation. Auto sun shades can be hung over the inside of windows to reflect heat back into the room.

Besides natural gas stoves (which will work if the power is out), you can cook inside with propane camp stoves (with ventilation), a wood burning stove or fireplace, or you can warm food over candles or cans of sterno or chafing dish fuel. You can cook outside on a gas grill. **Never cook inside using charcoal briquets or Coleman or white gas fuel stoves.**

If the weather is such that a power failure is likely, keep your house warmer than usual to store heat in the thermal mass of the house and furniture.

Beware of the tendency to resort to bad habits when under stress.

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