

HEALTH AND SAFETY ISSUES DURING DISASTERS

ELECTRICAL POWER OUTAGES

Power outages may occur from a number of natural disasters (tornadoes, ice storms, power demands during high heat periods) as well as from man-made emergencies (accidents, equipment failures, fuel shortages).

The following recommendations are provided to avoid potential safety and health concerns that may occur as a result of an electrical power outage or interruption to your home.

1. An electrical power outage or interruption may cause operational problems with your furnace. If your furnace is not operating be careful of hazards which can occur from alternative heating sources. **Do not** use alternative heating sources such as fuel burning space heaters, grills, and other appliances that can give off dangerous gases. **Carbon Monoxide is formed when you burn any fuel or run an engine and it can kill you. Do not use a portable power generator indoors or in any enclosed space.**
2. Check on your neighbors.
3. If you use electrical heaters powered by portable generators be careful where you place the heater and never leave the heater unattended.
4. If you use your fireplace for heating be sure that flues are open as required. Do not overload your fireplace.
5. If you leave your house for an alternative shelter due to lack of heat consider how to protect your water pipes from freezing or remove the water from your pipes, drains and toilets.
6. If you leave your house remember to take your cell phone, any medications or special diet supplements and pets with you.
7. If you know of people that are out of town, please contact the local authorities. These homes should be checked for pets, etc.
8. If you leave your house be sure and let relatives know where you are going and how you may be contacted.
9. Make sure that any stoves supplied by natural gas or propane are turned off before you leave.
10. When you return to your home be careful restarting appliances. If in doubt, call your local gas utility.

Bacteria, viruses, mold, fungi etc. must be killed in the clean-up process. The most widely accepted, safe, and effective sanitizing agent is hypochlorite in the form of household bleach. For all following procedures the bleach solution referred to is one cup of bleach to one gallon of water. This will give a sufficient strength to kill organisms. Quaternary Ammonium based sanitizers - usually advertised as non-chlorine bleach sanitizers - are very effective in sanitizing and will not stain like bleach. Time is an important consideration in clean up. Organisms to be killed will not become airborne as long as they remain wet. As long as surfaces remain wet, the only way organisms can enter the body and cause disease is by splashing into the mouth, eyes, open cuts, etc. Once dried, organisms can be spread on dust particles by air movement. Therefore it is important to bring the bleach solution in contact with contaminated surfaces as soon as possible after rinsing off heavy soil. In order to prevent decomposition and rotting of wet items, immediate drying after disinfection is necessary.

FOOD SAFETY

When flooding has occurred, food safety begins. Never take a chance with food that may have been contaminated. Foodborne bacteria often cannot be detected by taste, smell, or appearance. If in doubt - throw it out! Flood water often contains sewage from municipal systems, septic tanks, lagoons and pastures. It may not be easy to determine if the water in your home is tainted. Therefore, it is best to assume that the water contains sewage and take the proper precautions. Without power, with the appliance door closed tightly, a fully packed freezer can only keep food properly cooled for two days, and a half-full freezer for one day. **Discard all foods that may have been contaminated by flood waters or by raw meat juices.** Foods kept over 4 hours at temperatures above 41 degrees F should be discarded. These include: raw or cooked meat, poultry and seafood, milk and dairy products, cooked pasta and pasta salads and eggs. In emergency conditions, the following foods should keep at room temperatures for a few days: butter and margarine, dried fruits, opened jars of salad dressing, peanut butter, jelly, relish, taco sauce, barbecue sauce, mustard, ketchup, olives, hard and processed cheese. When power has been restored, check the freezer for uncontaminated foods which still contain ice crystals (indicating that they are still partially frozen). These foods can usually be refrozen.

FLOOD CLEAN-UP

It must be assumed during cleanup operations that all surfaces have been contaminated with disease-causing organisms. This important assumption must be considered in decisions involving personal safety of clean-up personnel as well as what items may be salvaged and what must be discarded.