

## EMERGENCY PREPAREDNESS

The following information is intended to provide guidance regarding food, water, sewage, and waste disposal safety during an emergency or disaster.

### CONDITION: POWER OUTAGE

#### FOOD

Keep your refrigerator door closed. Opening the door will unnecessarily let cold air out. Avoid opening a refrigerator or freezer to “just to check on how the food is doing.” Your refrigerator should keep foods cool for about four (4) hours. If it looks like the electricity will be out for more than a few hours, add regular ice to the refrigerator if possible. The more ice you use, the longer the food will stay cold. You may also consider transferring refrigerated food to the freezer. The products already frozen will keep the refrigerated food cold longer. You may want to do this only as a last resort and if the power is going to be out for an extended or undetermined period of time.



A fully loaded freezer will keep foods frozen for two approximately two (2) days. A half full freezer will only keep food cold for approximately one (1) day.

Throw out the following foods **if kept more than two (2) hours above 40°F**:

- **Meats** — raw or cooked meats, poultry and seafood, meat topped pizza and lunch meats.
- **Dairy** — milk/cream, yogurt, soft cheese, custard, cream filled pastries.
- **Other** — open jars of baby food/infant formula, mayonnaise, tarter sauce, open jars of salad dressing, casseroles, stews or soups.

The following foods may be kept for **a few days at room temperature above 40°F**:

- **Dairy** — butter, margarine, hard and processed cheeses
- **Other** — fresh fruits and vegetables, dried fruits, coconut, fruit juices, fresh herbs and spices, flour and nuts, fruit pies, muffins, bread, rolls, cakes, peanut butter, jelly, mustard and ketchup



Foods may be refrozen if they contain ice crystals. If foods have thawed over a period of several days to a temperature of 60°F, **do not refreeze**. Meats, poultry and some prepared foods may become unsafe to consume relatively quickly.

**Remember!** You **cannot** rely on appearance or odor to distinguish whether food will make you sick. Spoilage is often difficult, if not impossible to detect. Never taste suspect meats, poultry or other foods. **If in doubt, throw it out!**

**NOTE:** These may not address all scenarios but may be used as a general guide when determining potential food spoilage.

### CONDITION: COMPROMISED WATER SUPPLY DUE TO POWER OUTAGE

#### WATER

If your water supply has been impaired and is suspect to contamination, you should attempt to obtain an alternative source of water supply such as bottled water or other beverages for drinking. If you are in a situation where it is necessary to continue to drink water from the suspect water supply, you must treat the water by one of the following methods:



1. Bring all water to a boil, boil for one (1) minute, and let it cool before using. If you are located in higher elevation more than 6,500 feet, you may need to boil the water for up to three (3) minutes.
2. Disinfect with unscented household chlorine bleach. Use two (2) drops of chlorine bleach per quart of water or eight (8) drops per gallon. For cloudy water, first strain through a clean cloth, then add four (4) drops of chlorine to each quart, or sixteen (16) drops to each gallon. Stir or shake the water after the chlorine has been added and let stand for thirty (30) minutes before consuming.

**NOTE:** Do **not** use contaminated water to make ice, brush your teeth or wash dishes.

If there is a scarce supply of water, alternative temporary sources may include hot water tanks, toilet tanks (if no chemical disinfectant is used), snow (if available—also good for refrigeration), canned fruit and vegetable juices, and liquid from other canned goods. Once again, be sure to disinfect all suspect sources.

#### Disinfection of Private Domestic Water wells

Disinfection of a well is recommended to eliminate organisms that lead to disease. A well should be disinfected following a repair, maintenance or replacement of the pump or if the power has been off for a significant period of time. Disinfecting a well after these incidents is important because the pressure tank can lose pressure and the distribution system can back siphon into the well, causing possible contamination. Disinfection generally involves five (5) steps:

1. Remove the threaded inspection plug from the cap on top of the well. Place a funnel in this entry port and pour one (1) to three (3) gallons of domestic 5.25% chlorine bleach into the well. Should you wish to be more precise in this effort, introduce one gallon of bleach per 1000 gallons of water. You may calculate this as follows:

A. Determine the amount of water in the well using the following formula

$$\text{TOTAL WELL DEPTH} - \text{STANDING WATER LEVEL} = \text{FEET}$$

\_\_\_\_\_ - \_\_\_\_\_ = \_\_\_\_\_.

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B. Take the gallons per foot (gpf) using the chart below times the number of feet to determine capacity.

- 4" Well has .65 gallons per foot
- 5" Well has 1.04 gallons per foot
- 6" Well has 1.47 gallons per foot
- 7" Well has 2.00 gallons per foot
- 8" Well has 2.61 gallons per foot

**WATER IN WELL x GALLON PER FOOT = TOTAL GALLONS**

\_\_\_\_\_ x \_\_\_\_\_ = \_\_\_\_\_.

C. Determine the amount of chlorine needed to disinfect the well. Remember, you only need to use one gallon of 5.25% bleach per thousand (1000) gallons of water!

2. Open all faucets until the odor of chlorine is detected at water outlets, including faucets or fittings, sprinklers, drip lines, irrigation lines, etc.
3. Close all outlets and allow water to remain in all water lines and well, preferably overnight or longer if possible. Be sure to limit water usage during these critical hours.
4. The next day or after a significant period of time, open all outlets until the odor of all chlorine has disappeared. The water supply should then be free of all chlorine.
5. Have the water sampled by a state certified laboratory for bacteriological quality.

**NOTE:** Disposal of chlorinated water should be done away from trees, shrubs, lawns, ponds and streams and into a sanitary sewer. It is important to avoid discharging highly chlorinated water in large volumes into septic tank systems.

## CONDITION: COMPROMISED WASTE WATER SYSTEM DUE TO POWER OUTAGE

### SEWAGE

Be sure to avoid skin contact with raw sewage should sewage systems fail (i.e. sanitary district pump failures and the like) leading to the spillage of sewage onto the surface of the ground. Areas contaminated with sewage should be thoroughly disinfected. Common household disinfectants such as bleach can be used. Mix two (2) teaspoons of household chlorine bleach to one (1) gallon of water and apply over the contaminated area. A limited amount of granulated chlorine may also be used and sprinkled over the affected area.

## CONDITION: INTERRUPTION OF SERVICES

### WASTE DISPOSAL



All food waste should be stored in properly sealed leak-proof containers to prevent the propagation, harborage, or attraction of flies, rodents or other vectors and the creation of nuisances. Containers best suited for this include non-absorbent, water tight, vector resistant, durable and easily cleanable containers. Plastic bags of sufficient strength and water tightness that are designed for containment of refuse may also be used.