

# Food Safety During Power Outages in Food Establishments

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The following are recommendations that apply to food safety during an extended power outage (more than two hours).

Appropriate decision making before, during, and immediately after a power outage is necessary to protect consumers from unsafe food and minimize product loss.

The Minnesota Department of Health recommends that food establishments develop a power outage plan before the need arises.

## When there is a Power Outage

- Note the time the power outage begins.
- Discontinue all cooking operations.
- Do not place hot food in refrigerators or freezers, as this will rapidly raise the temperature inside the refrigerator or freezer and may make more food unusable.
- Discard food products that are in the process of being cooked, but which have not yet reached the final cooking temperature.
- Maintain hot potentially hazardous food at 140° F or above. Food that has reached final cooking temperature may be kept hot (140° F) by use of canned heat in chaffing dishes.
- Use ice or/ice baths to rapidly cool small batches of hot food.

## Food Safety

### Potentially Hazardous Foods

Potentially hazardous foods are those foods such as high protein foods (meat, eggs, dairy) and cooked vegetables that support the rapid and progressive growth of disease-causing

bacteria. Foodborne illnesses can be caused by bacteria that can multiply rapidly in foods when the food is held in the temperature danger zone (41° to 140° F).

### Keep foods at safe temperatures

Refrigerated potentially hazardous foods must be stored at or below 41° F. Frozen foods must be maintained frozen. Hot cooked potentially hazardous food must be maintained at 140° F or above.

### Freezers

Leave the freezer door closed. A full freezer should keep food safe about two days – a half-full freezer, about one day. Add bags of ice or dry ice to the freezer if it appears the power will be off for an extended time. You can safely re-freeze thawed foods that still contain ice crystals and are 41° F or less.

*Caution: the use of dry ice may result in the unsafe build-up of carbon dioxide.*

### Refrigerators

Food in refrigerators should be safe as long as the power is out no more than about four to six hours. Leave the door closed; every time you open it, needed cold air escapes, causing the foods inside to reach unsafe temperatures. Discard any potentially hazardous food that has been above 41° F for four hours or more, reached a temperature of 45° F or higher for any length of time, or has an unusual color, odor, or texture.



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## **When in doubt, throw it out!**

If it appears the power will be off for more than six hours, ice, dry ice, or frozen gel packs can be used to keep potentially hazardous foods at 41° F or below. Moving refrigerated food to a walk-in freezer or obtaining a refrigerated truck are other options to keep food safe. Food should not be transferred to private homes.

### **What to Discard**

The following are examples of foods that can be discarded or saved once power is restored.

#### **Discard**

The following foods in refrigerators and freezers should be discarded if kept over four hours at above 41° F, or if the temperature exceeds 45° F for any length of time.

- Meat, poultry, fish, eggs and egg substitutes - raw or cooked
- Milk, cream and soft cheese
- Casseroles, stews or soups
- Lunch meats and hot dogs
- Creamy-based foods made on-site
- Custard, chiffon, pumpkin or cheese pies
- Cream-filled pastries
- Cookie dough made with eggs
- Whipped butter
- Cut Melons
- Cooked vegetables

#### **Save**

The following foods may be kept at room temperature a few days although food quality may be affected.

- Butter or margarine
- Hard and processed cheeses
- Fresh uncut fruits and vegetables
- Dried fruits and coconut
- Opened jars of vinegar-based salad dressings, jelly, relish, taco sauce, barbecue

sauce, mustard, ketchup, olives and peanut butter

- Fruit juices
- Fresh herbs and spices
- Fruit pies, breads, rolls, and muffins
- Cakes, except cream cheese frosted or cream-filled
- Flour and nuts

### **When Power is Restored**

- Identify and discard potentially hazardous foods that may have been above 41° F or below 140° F for four or more hours or above 45° F for any length of time.
- Check the internal food temperatures using a food thermometer and record the temperature.
- If practical, separate packages of food in refrigeration units and freezers to allow for faster re-cooling.

For Further Information Contact the Following MDH District Offices

Bemidji	◆	(218) 308-2100
Duluth	◆	(218) 302-6166
Fergus Falls	◆	(218) 332-5150
Mankato	◆	(507) 344-2700
Marshall	◆	(507) 537-7151
Metro	◆	(651) 201-4500
Rochester	◆	(507) 206-2700
St. Cloud	◆	(320) 223-7300

To request this document in another format, call 651-201-4500 or TTY 651-201-5797.