

# FOOD SAFETY DURING A WEATHER EMERGENCY

WISCONSIN FOOD CODE FACT SHEET #35

**D**ATCP and DHS are hopeful that this information will help minimize the potential for foodborne illnesses due to food spoilage from power outages and other problems that are often associated with severe weather events.

Without electricity or a cold source, foods stored in refrigerators and freezers can become unsafe. Bacteria in food grow rapidly at temperatures between 40 - 140 °F (4.4 - 60 °C) and if these foods are consumed, illness can occur.

## Steps to follow to prepare for a possible weather emergency:

- Institute food protection provisions especially if food storage areas are subject to high temperatures, humidity or flooding. Do not store paper or cardboard packaged food products in these conditions. Store all food products at least 12 inches above the floor in well ventilated cool areas (50 - 70 °F) and away from the walls, windows, plumbing, or furnaces in basements or other subsurface locations. Rearrange frozen products to avoid cross contamination during an anticipated thawing process. Provide collection receptacles for drainage of liquids from the melting process in freezers and refrigerators. Empty frequently.

- Store RTE foods in containers and over raw animal products.



- Keep an appliance thermometer in the warmest location in the refrigerator and freezer. It will indicate the air temperature in the unit and help to determine the safety of the food. Make sure it can be easily viewed. Provide an exterior digital/dial readable gauge, if possible, to avoid having to open the

refrigerator to determine the temperature.

- Maintain the frozen foods solid and at 0 °F or below and potentially hazardous foods at 40 °F or below.
- In advance, freeze and store containers of water for ice to help keep food cold in the freezer, refrigerator or Insulated Containers(IC) after the power is out.



- Have ICs on hand to keep refrigerated food cold if the power will be out for more than 4 hours.
- Purchase or make ice cubes and store in the freezer for use in the refrigerator or in an IC.
- Freeze gel packs ahead of time for use in ICs.

- Freeze refrigerated items such as leftovers, milk and fresh meats and poultry that may not be needed immediately. This helps keep them at a safe temperature longer.
- Plan ahead and know where dry ice and safe block ice can be purchased.



## Steps to follow after the weather emergency:

- If the refrigerator door is unopened, food can be maintained cold for about 4 hours. A full freezer will hold the temperature for approximately 48 hours (24 hours if it is half full) and the door remains closed.
- *After 4 hours without power*, discard refrigerated perishable food such as meat, poultry, fish, soft cheese, milk, eggs, leftovers, and deli items. Food may be safely refrozen if it still contains ice crystals or is at 40 °F or less when checked with a food thermometer.
- Never taste a food to determine its safety.

## DRY ICE USE

- Obtain dry or safe block ice to keep your refrigerator and freezer as cold as possible if the power is going to be out for a prolonged period of time.
- **WALK-IN FREEZER:** A 12'x12' walk-in freezer will use 150-250 pounds of DRY ICE per day. Place dry ice on top shelves directly on frozen foods. Leave door open when entering the freezer to prevent suffocation. Do not use dry ice in confined spaces with workers. **CHEST FREEZER:** 50 pounds of DRY ICE should hold an 18 cubic foot full freezer for two days.
- **WALK-IN REFRIGERATOR:** A 12'x12' walk-in refrigerator will use 50 to 100 pounds of dry ice per day. Place slabs on top



shelves without touching food. Monitor food product temperatures closely after several hours. Keep extra dry ice in an ice chest. Take personal precautions as identified above.

- If the power has been out for several days, check the temperature of the freezer

with an appliance thermometer. If the appliance thermometer reads 40 °F or below, the food is safe and can be refrozen.

- If a thermometer has not been kept in the freezer, check each package of food to determine its safety. If the food still contains ice crystals, the food is safe.
- Discard any food that is not in a waterproof container if there is any chance that it has come into contact with flood water/non-potable source. Discard affected wooden cutting boards, plastic single service utensils, porous utensils and especially infant food contact surfaces.
- Undamaged, commercial prepared foods in all-metal cans and retort pouches (ex. flexible, shelf-stable juice or seafood pouches) can be saved. Follow the Steps to Salvage All-Metal Cans and Retort Pouches in the publication " Keeping Food Safe During an Emergency" at [www.fsis.usda.gov/Fact\\_Sheets/keeping\\_food\\_Safe\\_during\\_an\\_emergency/index.asp](http://www.fsis.usda.gov/Fact_Sheets/keeping_food_Safe_during_an_emergency/index.asp)
- Thoroughly wash all metal pans, ceramic dishes and utensils that came into contact with flood water. Use safe hot soapy water, rinse and sanitize by boiling them in clean water or by immersing them for 15 minutes in a solution of 1 T. of unscented liquid chlorine bleach per gallon of drinking water.
- Drink only bottled water from safe sources if flooding has occurred.
- **When in doubt, throw it out!**

Video recommendations for consumers explaining the above are available at [http://www.fsis.usda.gov/news/Food\\_Safety\\_Videos/](http://www.fsis.usda.gov/news/Food_Safety_Videos/).

24 hour e-mail questions on food safety FSIS (USDA): [Askkaren.gov](mailto:Askkaren.gov)  
1-888-MPHotline (1-888-674-6854) Meat and Poultry Hotline English and Spanish. 10-4 EST, M-F.

References: USDA and Dry Ice Info.com