

CABINET FOR HEALTH AND FAMILY SERVICES DEPARTMENT FOR PUBLIC HEALTH

Steven L. Beshear Governor

FOOD SAFETY BRANCH 275 East Main Street, HS1C-F Frankfort, Kentucky 40621 (502) 564-7181 (502) 564-0398 www.chfs.ky.gov Janie Miller Secretary

What to do about your food if the POWER goes out!

Do not open the refrigerator or freezer. Tell your little ones not to open the door. An unopened refrigerator will keep foods safely cold for about 4 hours. A full freezer will hold the temperature for approximately 48 hours, 24 hours if it is half full. If it looks like the power outage will be for more than 2-4 hours, pack refrigerated food items such as milk, dairy products, meats, eggs, and left-overs into a cooler surrounded by ice. **Try to obtain block or dry ice to keep your refrigerator as cold as possible.** If it looks like the power outage will last for several days, 50 pound of dry ice should hold an 18-cubic foot full freezer for 2 days. Plan ahead and know where you can buy block ice or dry ice.

CAUTION: You must be careful when handling dry ice. **Never** touch dry ice with bare hands or breathe its vapors in an enclosed area. Dry ice is frozen carbon dioxide, a gas.

What do I need if the power will be out?

- Coolers: One or more coolers. Styrofoam coolers can do an excellent job as well.
- Ice: Placing ice around your food in a cooler will ensure that it will stay cold.
- **Thermometer**: A digital, dial, or instant-read food thermometer or appliance thermometers will help you know if the food is at safe temperatures. Keep appliance thermometers in the refrigerator and freezer no matter how long the power has been out. The refrigerator temperature should be 40°F or below: the freezer, 0°F or lower. If you are not sure a particular food is cold enough, take its temperature with a food thermometer.

Follow these steps to help keep food safe during power outages or when the freezer or refrigerator is not working:

If the appliance will be working again within a couple of hours, just minimize the opening of the freezer and refrigerator doors. If the freezer is not full, quickly group packages and poultry items from other foods. If the raw meat and poultry begin to thaw this will prevent their juices from getting onto other foods. When the refrigerator and/or freezer is operating again, follow these guidelines to decide what to do with foods:

- Refrigerated foods should be safe as long as power is out no more than 4 hours.
- Throw out any perishable food in your refrigerator, such as meat, poultry, lunchmeats, fish, dairy products, eggs, and any prepared or cooked foods that have been above 40°F for 2 hours, because bacteria can multiply to unsafe levels under these conditions.
- Fresh fruits and vegetables are safe as long as they are still firm and there is no evidence of mold, or sliminess.
 If an appliance thermometer was kept in the freezer, read the temperature when power comes back on. If the appliance
- If an appliance thermometer was kept in the neezer, read the temperature when power comes thermometer stored in the freezer reads 40°F or below, the food is safe and may be refrozen.
- If a thermometer has not been kept in the freezer, check each package of food to determine the safety.
- If the food still contains ice crystals or is 40°F or below, it is safe to refreeze.
- Raw meats, and poultry, cheese, juices, breads and pastries can be refrozen without losing too much food quality.
- Prepared foods, fish, vegetables and fruits in the freezer, can be refrozen safely, but food quality may suffer.
- Remember, you can't rely on appearance or odor of the food to determine if it is safe. Food that has thawed or was help above 40°F for more than 2 hours should be thrown out because bacteria may multiply to unsafe levels.
- To remove spills and freshen the freezer and refrigerator, wash them with a solution of 2 tablespoons of baking soda dissolved in 1 quart of warm water.
- To absorb any lingering odors, place an open box or dish of baking soda in the appliance.

Questions and Answers

What if I go to bed and the power is still not on?

Before you go to bed, pack your perishables into your coolers if you haven't already done so and put in as much ice as you can. When you go to bed, leave a bedroom light switched on. When the power goes back on, it will wake you, so you can check the condition of your foods in the refrigerator and freezer.

What if the power goes out while I'm at work or out of the house and it has been more than a few hours before I get home?

Try to determine how long the power has been out. Check the internal temperature of the food in your refrigerator with your thermometer. A liquid such as milk or juice is easy to check. Spot check other items like steaks or left-overs also. If the internal temperature of the food is above 40°F, it should be thrown out. (Check the chart on the back) If the food in the freezer is below 40°F and there are still ice crystals, you can usually refreeze. (Check the chart on the back)

What if the power goes out and comes back while I am out?

If your freezer is fairly full and you know it was not longer than 24 hours, the food should be OK. There will be loss of quality with refreezing, but the food will be safe. If the refrigerator was out for more than 2-4 hours, you should check the perishable food items to determine if the food has been above 40°F.



POWER OUTAGE! What food can I save?

When to save and when to throw away! Use this chart to see what should be thrown away and what can be kept. Food held above **Refrigerator Foods** 40°F for over 2 hours Dairy, Eggs, Cheese Dairy, Eggs, Cheese Milk, cream, sour cream, buttermilk, evaporated milk, yogurt Throw away Butter, margarine Keep Baby formula, opened Throw away Fresh eggs, hard-cooked in shell, egg dishes, egg products, custards, puddings Throw away Hard cheeses: Cheddar, Colby, Swiss, parmesan, provolone, Romano Keep Soft cheeses: blue/bleu, Roquefort, Brie, Camembert, cottage, cream, Edam, Monterey Jack, ricotta, Throw away mozzarella, Muenster Processed cheeses Keep Shredded cheeses, low-fat cheeses Throw away Grated Parmesan, Romano, or combination (in can or jar) Fruits and Vegetables Keep Fruits and Vegetables Fresh fruits, cut Throw away Fresh fruits; not cut, fruit juices; opened, canned fruits; opened, coconut, raisins, dried fruits, candied fruits, Keep dates Vegetables; raw Keep Fresh mushrooms, herbs, spices Keep Vegetables; cooked, vegetable juice; opened, greens; pre-cut, pre-washed, packaged Throw away Baked potatoes, potato salad, commercial garlic in oil or butter Throw away Meat, Poultry, Seafood Meat, Poultry, Seafood Throw away Fresh or leftover meat, poultry, fish, or seafood, thawing meat or poultry Throw away Lunchmeats, hotdogs, bacon, sausage, dried beef Throw away Canned meats; opened Canned hams (labeled "Keep Refrigerated") Throw away **Mixed Dishes, Side Dishes** Mixed Dishes, Side Dishes Throw away Casseroles, soups, stews, pizza with any topping Meat, tuna, shrimp, chicken, egg salad Throw away Fresh pasta, cooked pasta, spaghetti, pasta salads with mayonnaise or vinegar base Throw away Throw away Gravy, stuffing Breads, Cakes, Cookie, Pastries, Pies Breads, Cakes, Cookie, Pastries, Pies Bread, rolls, cakes, muffins, quick breads, Cream or cheese filled pastries and pies Keep Breakfast foods-waffles, pancakes, bagels Keep Refrigerator biscuits, rolls, cookie dough Throw away Pastries; cream filled, Pies-custard, cheese filled, or chiffon, cheesecake Throw away Pastries, pies; fruit filled Keep Sauces, Spreads, Jams Sauces, Spreads, Jams Throw away if above Opened mayonnaise, tartar sauce, horseradish 50°F for over 8 hours Peanut butter, jelly, relish, taco, barbecue & soy sauce; mustard; catsup; olives, opened vinegar-based Keep dressings Throw away Worcestershire sauce, fish sauces, oyster sauces, Hoisin sauces, opened spaghetti sauce; opened creamy based dressings

Frozen Foods	Still contains ice crystals, and feels as cold as if refrigerated: food below 40°F	Food thawed, food held above 40°F for over 2 Hours
Meat and Mixed Dishes		
Beef, veal, lamb, pork, ground meats, poultry, ground poultry	Refreeze	Throw away
Variety meats (liver, kidney, heart, chitterlings)	Refreeze	Throw away
Casseroles, stews, soups	Refreeze	Throw away
Fish, shellfish, breaded seafood products	Refreeze, may be some texture & flavor loss	Throw away
Dairy, Eggs, Cheese		-
Milk	Refreeze, may be lose some texture	Throw away
Eggs (out of shell), egg products	Refreeze	Throw away
Ice cream, frozen yogurt	Throw away	Throw away
Cheese (soft and semi soft), cream cheese, ricotta	Refreeze, may lose some texture	Throw away
Hard cheese (cheddar, Swiss, parmesan)	Refreeze	Refreeze
Shredded cheeses	Refreeze	Throw away
Casseroles containing milk, cream, eggs, soft cheeses	Refreeze	Throw away
Cheesecake	Refreeze	Throw away
Fruits and Vegetables		
Fruit Juices	Refreeze	Refreeze, throw away if moldy, yeasty smell or sliminess develops
Home or commercially packaged fruit	Refreeze, will change texture & flavor	Refreeze, throw away if moldy, yeasty smell or sliminess develops
Vegetable Juices	Refreeze	Throw away after held above 40°F for 6 hrs.
Home or commercially packaged or blanched vegetables	Refreeze, will change texture & flavor	Throw away after held above 40°F for 6 hrs.
Breads, Pastries, Baking Ingredients		
Breads, rolls, muffins, cakes (without custard filling)	Refreeze	Refreeze
Pie crusts, commercial and homemade bread dough	Refreeze, some loss of quality	Refreeze, some loss of quality
Cakes, pies, pastries with custards or cheese filling	Refreeze	Throw away
Other Other Other		
Casseroles—pasta, rice based	Refreeze	Throw away
Flour, cornmeal, nuts	Refreeze	Refreeze
Breakfast items—waffles, pancakes, bagels	Refreeze	Refreeze
Frozen meal, entrée, specialty items (pizza, sausage, and biscuit, meat pie, convenience foods)	Refreeze	Throw away