

Food Safety During Power Outages in Food Establishments

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 Arkansas 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.

When in doubt, throw it out!

Food Safety During Power Outages in Food Establishments continued

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.



Arkansas Department of Health
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Restaurant and Grocers Opening After a Power Outage

Disposing of Contaminated or Spoiled Food

Decisions about disposing of food products are usually made by the owner of the product, along with the Arkansas Department of Health. In determining which contaminated food products should be disposed of, reconditioned or salvaged, the owners of the products must assess each product's quality, safety and condition.

- Destroy refrigerated and frozen foods, such as meat, poultry, shell eggs, egg products, and milk, which have not maintained a temperature of 41°F or below. Good advice is: If in doubt, throw it out.
- Complete proper and safe disposal of condemned food items in a manner consistent with federal, state, and local solid waste storage, transportation, and disposal regulations, to ensure these products do not reappear as damaged or salvaged merchandise for human consumption.

Employees

- Put fewer items on the menu when only a limited number of trained employees are available and working. A full menu may be offered when there is an adequate number of trained employees to staff each area of the operation during normal working hours.
- Soap and potable running, warm water (at least 100°F) should always be used to wash hands.
- Alcohol hand gels may only be used after handwashing. Alcohol hand gels are ineffective against germs on soiled hands and are therefore not a substitute for soap and water handwashing.
- Employees should avoid touching ready-to-eat foods with their bare hands by using tongs, deli paper, or single-use, disposable gloves.

Remember:

- Employees with open wounds should not work with hands-on preparation of foods or with cleaned and sanitized food contact surfaces or single-service/single-use utensils. If these infected wounds are covered with a double, water-proof barrier such as a finger cot or water-tight bandage and plastic gloves, the employee may continue to work with food.
- Employees sick with vomiting, diarrhea or jaundice should not be handling food in the establishment

Oversight

Arkansas Department of Health oversight ensures proper disposal so that contaminated products cannot be introduced into the food supply.



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FOOD: WHEN TO SAVE AND WHEN TO THROW AWAY

When to Save and When to Throw It Out

MEAT, POULTRY, SEAFOOD	Held above 40 °F for over 2 hours	DAIRY	Held above 40 °F for over 2 hours	BREAD, CAKES, COOKIES,PASTA, GRAINS	Held above 40 °F for over 2 hours
Raw or leftover cooked meat, poultry, fish, or seafood; soy meat substitutes	Discard	Milk, cream, sour cream, buttermilk, evaporated milk, yogurt, eggnog, soy milk	Discard	Bread, rolls, cakes, muffins, quick breads, tortillas	Safe
Thawing meat or poultry	Discard	Butter, margarine	Safe	Refrigerator biscuits, rolls, cookie dough	Discard
Meat, tuna, shrimp, chicken, or egg salad	Discard	Baby formula, opened	Discard	Cooked pasta, rice, potatoes	Discard
Gravy, stuffing, broth	Discard	EGGS		Pasta salads with mayonnaise or vinaigrette	Discard
Lunchmeats, hot dogs, bacon, sausage, dried beef	Discard	Fresh eggs, hard-cooked in shell, egg dishes, egg products	Discard	Fresh pasta	Discard
Pizza – with any topping	Discard	Custards and puddings	Discard	Cheesecake	Discard
Canned hams labeled "Keep Refrigerated"	Discard	CASSEROLES, SOUPS, STEWS	Discard	Breakfast foods – waffles, pancakes, bagels	Safe
Canned meats and fish, opened	Discard	FRUITS		VEGETABLES	
CHEESE		Fresh fruits, cut	Discard	Fresh mushrooms, herbs, spices	Safe
Soft Cheeses: blue/bleu, Roquefort, Brie, Camembert, cottage, cream, Edam, Monterey Jack, ricotta, mozzarella, Muenster, Neufchatel, queso blanco, queso fresco	Discard	Fruit juices, opened	Safe	Greens, pre-cut, pre-washed, packaged	Discard
Hard Cheeses: Cheddar, Colby, Swiss, Parmesan, provolone, Romano		Safe	Canned fruits, opened	Safe	Vegetables, raw
Processed Cheeses	Safe	Fresh fruits, coconut, raisins, dried fruits, candied fruits, dates	Safe	Vegetables, cooked; tofu	Discard
Shredded Cheeses	Discard	SAUCES, SPREADS, JAMS		Vegetable juice, opened	Discard
Low-fat Cheeses	Discard	Peanut butter	Safe	Baked potatoes	Discard
Grated Parmesan, Romano, or combination (in can or jar)	Safe	Opened mayonnaise, tartar sauce, horseradish	Discard if above 50 °F for over 8 hrs.	Commercial garlic in oil	Discard
PIES, PASTRY		Jelly, relish, taco sauce, mustard, catsup, olives, pickles	Safe	Potato Salad	Discard
Pastries, cream filled	Discard	Worcestershire, soy, barbecue, Hoisin sauces	Safe		
Pies – custard, cheese filled, or chiffon; quiche	Discard	Fish sauces (oyster sauce)	Discard		
Pies, fruit	Safe	Opened vinegar-based dressings	Safe		
		Opened creamy-based dressings	Discard		
		Spaghetti sauce, opened jar	Discard		



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FROZEN FOOD-WHEN TO SAVE AND THROW IT OUT		
MEAT, POULTRY, SEAFOOD	Still contains ice crystals and feels as cold as if refrigerated	Held above 40 °F for over 2 hours. Thawed
Beef, veal, lamb, pork, and ground meats	Refreeze	Discard
Poultry and ground poultry	Refreeze	Discard
Variety meats (liver, kidney, heart, chitterlings)	Refreeze	Discard
Casseroles, stews, soups	Refreeze	Discard
Fish, shellfish, breaded seafood products	Refreeze. However, there will be some texture and flavor loss.	Discard
DAIRY		
Milk	Refreeze. May lose some texture.	Discard
Eggs (out of shell) and egg products	Refreeze	Discard
Ice cream, frozen yogurt	Discard	Discard
Cheese (soft and semi-soft)	Refreeze. May lose some texture.	Discard
Hard cheeses	Refreeze	Refreeze
Shredded cheeses	Refreeze	Discard
Casseroles containing milk, cream, eggs, soft cheeses	Refreeze	Discard
Cheesecake	Refreeze	Discard
FRUITS		
Juices	Refreeze	Refreeze. Discard if mold, yeasty smell, or sliminess develops.
Home or commercially packaged	Refreeze. Will change texture and flavor.	Refreeze. Discard if mold, yeasty smell, or sliminess develops.
VEGETABLES		
Juices	Refreeze	Discard after held above 40 °F for 6 hours.
Home or commercially packaged or blanched	Refreeze. May suffer texture and flavor loss.	Discard after held above 40 °F for 6 hours.
BREADS, PASTRIES		
Breads, rolls, muffins, cakes (without custard fillings)	Refreeze	Refreeze
Cakes, pies, pastries with custard or cheese filling	Refreeze	Discard
Pie crusts, commercial and homemade bread dough	Refreeze. Some quality loss may occur.	Refreeze. Quality loss is considerable.
OTHER		
Casseroles – pasta, rice based	Refreeze	Discard
Flour, cornmeal, nuts	Refreeze	Refreeze
Breakfast items – waffles, pancakes, bagels	Refreeze	Refreeze
Frozen meal, entree, specialty items (pizza, sausage and biscuit, meat pie, convenience foods)	Refreeze	Discard

