

Disasters and Food Safety

Power Outages



Long-term power outages lasting hours to weeks can be much more inconvenient than short-term outages lasting seconds or minutes. Knowing what to do with perishable foods is important when long-term outages happen.

How Long Has the Power Been Out?

Sometimes, power outages happen while away from home, such as at work or on vacation.

When power comes back on, refrigerators and freezers will work to cool everything down again.

While power was out, food may have been at unsafe temperatures long enough to spoil or allow harmful bacteria and microorganisms to grow.

To help detect if the power was off for a long time, try this tip from University of Nebraska Extension:

“Store an ice cube or two in a sealed plastic bag or small container in the freezer; a sealed bag or container is important so the ice cube doesn’t

evaporate and disappear. If the ice cube has melted down from its original shape, you’ll know the power was off for an extended period.”

A melted ice cube means power has been out long enough that throwing out all the food is the safest option.

Thermometers

Invest in refrigerator and freezer thermometers to help you identify food temperatures during a power outage.

- Freezer temperature should be at or below 0 F.
- Refrigerator temperature should be at or below 40 F.

Refrigerators

During a power outage, refrigerated foods are safe for up to 4 hours. Remember to keep the refrigerator door closed as much as possible.

At the start of a power outage, plan to use perishable foods before they become unsafe. Plan your next meal around these foods and share with a neighbor.

After 4 hours, throw out perishable foods, such as raw meat, milk, and leftovers.

Freezers

During a power outage, foods in a half-full freezer are safe for up to 24 hours. Remember to keep the freezer door closed as much as possible, like the refrigerator. Food can stay safe for up to 48 hours if the freezer is full.

Refreezing

Once the power returns, foods with ice crystals or at 40 F or colder can be refrozen. Be aware that the food quality may go down during this slight thaw and refreeze.

Using Ice in Freezers and Refrigerators

If available, add bags of ice, ice packs, or ice blocks to refrigerators and freezers to keep foods cold longer.

Group foods close together, but keep raw meat separate from other foods.



Keep Foods at Safe Temperatures Longer

- Move perishable refrigerated foods, such as milk and raw meat, to the freezer.
- Group refrigerated foods together.
- If a refrigerator or freezer has door storage, move foods into the body of the fridge or freezer where it is colder.
- Use coolers with lids and ice, ice packs, or ice blocks to store foods.

When Power Returns

Check the temperature on the thermometer in refrigerators and freezers.

- If freezer thermometers read 40 F or colder, the food is safe and may be refrozen.
- If refrigerator thermometers read 40 F or warmer, and power has been out for 4 hours or more, throw out all perishable foods.

If there is NOT a thermometer:

- Feel for ice crystals on freezer packages or place a food thermometer — not a freezer thermometer

References

- [What To Do With Perishable Food During a Power Outage](#), University of Nebraska-Lincoln.
- [Food and Water Safety During Power Outages and Floods](#), U.S. Food and Drug Administration.
- [Keep Your Food Safe During Emergencies: Power Outages, Floods & Fires](#), U.S. Department of Agriculture.
- [Food Safety During a Power Outage](#), FoodSafety.gov.

Modified March 2025

— between packages to see that foods are 40 F or colder. In these cases, foods are safe to refreeze.

- Perishable foods, such as milk, juice, and meats that are above 40 F for 2 hours or more, should be thrown out.

Power Outages in Winter

When power goes out in winter, do not place perishable food outside. Outside air temperatures may not be cold enough to keep foods at safe temperatures, and as the sun moves throughout the day, it can heat up previously shaded areas.

Avoid sticking food in snow, as this can expose the food to dirt, microorganisms, and animals, which can contaminate the food. Do not use snow to fill coolers, refrigerators, or freezers. This can also expose food to contamination.

If the outage is expected to be short, keep food in the refrigerator and freezer using ice, ice packs, or ice blocks. Remember, full freezers can keep food safe for around 48 hours.

Insurance

A homeowner's insurance policy may cover and reimburse the cost of food lost during an outage.



Illinois Extension
UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN

extension.illinois.edu