

This bulletin replaces Michigan State University (MSU) Extension bulletin *Meal Preparation and Food Safety During and After a Flood* (WO1033), June 2006.

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When a natural disaster such as a flood strikes a community, the risk of getting a foodborne illness increases. Sewage or other harmful substances from the floodwaters may contaminate food in the home or environment. Take the proper precautions before and after a flood to ensure the safety of your food.

## At all times

- Plan your food storage on shelves that will be safely out of the way of contaminated water.
- Keep coolers and frozen gel packs for food storage in case the power is out for more than 4 hours.
- Keep an appliance thermometer in the refrigerator and freezer at all times to know your food is at safe temperatures. The refrigerator should be at 40 °F or below and the freezer at 0 °F or below.

## Before a flood

- Raise refrigerators and freezers with cement blocks under each corner.
- Move canned goods and other foods out of reach of floodwaters.

# After a flood

### Food

Throw out:

• All foods that have come in contact with floodwaters, if not in waterproof containers.

- Cutting boards, plastic utensils, wooden spoons, baby bottle nipples and pacifiers. (There is no way to clean these items after they have come in contact with floodwaters.)
- Damaged canned items (those with swelling, leakage, punctures, holes, fractures, rusting, and crushing or denting that would not allow opening with a manual can opener).
- Twist-top packages with damaged seams or unopened jars with waxed cardboard seals.
- Fresh produce.
- Home-canned foods.
- Refrigerators or freezers that were under the floodwaters.

Save:

• Undamaged canned goods and commercial glass containers of food untouched by floodwaters.



Remove labels that can harbor dangerous bacteria. Using permanent marker, label the containers with contents and expiration date. Rinse the canned goods and commercial glass containers with potable, safe water. Sanitize one of two ways:

• Place in water and allow the water to come to a boil. Continue boiling for 2 minutes. Air-dry before opening.

#### Or

Immerse in a fresh solution of 1 tablespoon unscented regular-strength (6%) bleach or 1 teaspoon concentrated (8.25%) bleach per gallon of clean room-temperature water. Soak for 15 minutes. Air-dry before opening.

#### Pots, pans, dishes and utensils

- Thoroughly wash with soap and water, using hot water if available.
- Rinse and sanitize by:
- Boiling in clean water for 10 minutes.
- Or
- Immersing in a fresh solution of 1 tablespoon unscented regular-strength (6%) bleach or 1 teaspoon concentrated (8.25%) bleach per gallon of clean room-temperature water for 15 minutes.

#### Countertops

- Thoroughly wash countertops with soap and water, using hot water if available.
- Rinse and sanitize in a fresh solution of 1 tablespoon unscented regular-strength (6%) bleach or 1 teaspoon concentrated (8.25%) bleach per gallon of clean room-temperature water for 15 minutes.
- Allow to air-dry.

#### Water

- Use bottled water that has not been exposed to floodwaters if available.
- Boil water to make sure it is safe. Boil for 1 minute. Let cool and store in clean, covered containers.
- If you cannot boil water, you can disinfect by adding 1/8 teaspoon (or 8 drops) of regular, unscented chlorine (6%) bleach to each gallon of water. Stir well. Let stand for 30 minutes and store in clean, covered containers.
- Consider all wells, cisterns and other delivery systems in the disaster area unsafe until tested.

## **References and resources**

Godwin, S. L., Coppings, R., Speller-Henderson,L., & Stone, R. W. (2012). What will you do whena disaster strikes? *Cooperative Extension FacultyResearch*. (Paper 23). Tennessee State University.

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