

Safe Handling of Food and Utensils after a Flood

from: AFDO Food Emergency Pocket Guide (9-2011)

Flood waters may carry silt, raw sewage, oil or chemical waste that can make storm-damaged foods unsafe to eat. If you have a question about the safety of any item, dispose of it. Otherwise, keep the following points in mind.

Discard the following foods if floodwater has covered, dripped on, or seeped into the package:

- Fresh produce; meat, poultry, fish and eggs;
- Paper, cloth or fiber;
- Cardboard boxes, even if the contents seem dry, including cereals, pasta, products, rice, salt;
- Any “sealed” packages of crackers, cookies or mixes within a larger paper box;
- Foods with cardboard seals, such as mayonnaise and salad dressing, or foil or cellophane packages;
- Food in glass jars, including unopened jars with waxed paper, foil, cellophane or cloth covers;
- Home-canned foods for personal use (some tightly sealed home-canned foods may be safe depending on conditions. Contact a food preservation specialist or local health department for advice.)
- Spices, seasoning, and extracts;
- Foods, liquids or beverages in crown-capped bottles or containers with pull-tab tops, corks or screw caps;
- All opened containers and packages; foods in bags or canisters;
- Cans that are dented, leaking, bulging or rusted; and
- Cans that have been tossed about and are far from their normal storage spot.

Destroy all foods that were covered by water that may have been contaminated with industrial or sanitary waste, including foods sealed in unopened cans.

Cans of food that do not have dents or rust can be saved if they are handled properly before they are opened. Be sure to wash and sanitize undamaged containers before opening the can. For added safety, boil food before eating it.

Disinfecting Food Cans (Permitted food establishments should seek [additional regulatory](#) guidance.)

To disinfect undamaged cans (damaged cans should be discarded)

- Remove paper labels (paper can harbor bacteria) and re-label with a permanent marker.
- Wash the containers in a strong detergent solution.
- Use a brush to remove any dirt and silt.
- Rinse the scrubbed containers. Removing dirt and silt and rinsing is very important because the chlorine solution won't work well if cans are dirty.
- Wear rubber gloves to protect your hands during the disinfection process. Strong detergent and bleach solutions can be hard on bare hands.
- Immerse the clean, rinsed containers in a lukewarm (75 – 120 °F) solution of chlorine for two minutes. Use two (2) tablespoons of five percent chlorine bleach per gallon of water. Chlorine loses its effectiveness when it is in a solution and open to the air or when it comes in contact with unclean materials.

- Change this disinfecting solution frequently. Dump it out and mix fresh solution if the water gets cloudy.
- Take cans out and air dry before opening or storing.
- Use foods from disinfected containers as soon as possible because cans may rust.

Disinfecting Dishes and Utensils

- Wash all dishes and utensils in hot, soapy water with a brush to remove dirt.
- Sanitize glass, ceramic and china dishes, glass baby bottles, and empty canning jars in the same way as for undamaged cans.
- Dishes with deep cracks should be thrown away.
- Metal pans and utensils can be disinfected by immersing them in water and boiling for 10 minutes.
- Kitchen utensils made of iron will probably be rusted. Remove the rust by scouring with steel wool.
- Disinfect with a bleach solution and re-season. To do this, apply a light coat of unsalted fat or oil and place in a 350°F oven for about an hour.

Disinfecting Food Preparation and Serving Areas

- All food preparation and service areas should be cleaned and sanitized prior to use.
- Use a chlorine solution equivalent to 100 ppm (1/2 tablespoon of household bleach (5.25% sodium hypochlorite solution) in 1 gallon of potable water to sanitize.
- Use chlorine test strips to insure adequate concentration of sanitizing solution.

Cleaning Automatic Ice Making Equipment after Floods or Water Contamination Events

If an ice-making machine has been contaminated by flood waters or the water supply to the machine has been contaminated, the ice-making machine should be emptied, cleaned and sanitized before returning it to production. Permitted food establishments may contact the [local health department](#) for guidance or have the unit professionally serviced prior to resuming ice making for use in food or beverages.

(Note: In all cases, the manufacturer's recommended cleaning procedures should be followed if available.)