



Emergency Handbook for Food Service Establishments

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Introduction

This Emergency Handbook was created as a quick reference guide to provide step-by-step emergency information to Food Service Establishment

The handbook:

- Addresses both naturally occurring and man-made emergencies.
- Provides prompts for whom to call, first steps to take and subsequent recovery actions to follow after an emergency happens.
- Contains tips on managing long-term emergencies caused by disruption of utilities and municipal services.
- Offers ongoing food security and emergency preparedness advice.

In large-scale, widespread, and extremely terrible emergencies, they require real time (opinions about what could or should be done about a situation) to the specific situation. In such events, the Kane County Health Department will provide this handbook as a source of information.

Day in and day out, the responsibility of food managers and their staff is to maintain food safety in their establishments. Food operations must stop whenever food safety becomes an issue by an emergency event. The operation must remain closed until the Kane County Department of Health approves the reopen the food service establishment.

At some point, most food managers will meet the challenges presented by natural disasters and the later emergencies they can cause - among them are power outages, wind damage, flooding, and broken pipes.

This handbook will offer real-world help to food service establishments in all of these areas.

Bottom line: It's all about keeping our food supply safe.

Boil Order

Sometimes food service establishments may need to close due to contamination in the water supply. This may happen due to water main breaks, chemical contamination, or low water pressure due to a leak somewhere along the water line. A contaminated water supply may contain chemicals, toxins, bacteria, viruses, parasites, and other harmful microorganisms that cause human illnesses and could result in death. Without enough clean, hot water, employees cannot wash their hands, cook and prepare foods and clean equipment appropriately. Customers and employees must have access to proper rest room and hand washing facilities.

In most cases, your municipality and/or the health department will send a notification to the establishment. If your water service stops, one of the following choices must happen:

- Closing until the boil order has been lifted,
- Obtaining an alternate supply of potable water and/or ice, plus satisfactory methods for hand washing, food preparation, equipment cleaning, and sanitation.

If the food service establishment cannot get an alternate supply of drinkable water and/or ice, they will need to close until safe water service returns and the Kane County Health Department approves reopening. A water sample may need to be sent to the state laboratory to verify that the water supply is safe to consume. If the water sample result is positive for bacteria, the food service establishment will be able to reopen if the establishment can get bottled water and commercially packaged bagged ice and use until the water supply is safe.

Once water service is restored, the following items must be complete before re-opening:

- Flush pipes and faucets; run cold-water faucets for at least five minutes.
- Make sure equipment with water line connections (filters, post-mix beverage machines, spray misters, coffee/tea urns, ice machines, glass washers, dishwashers, etc.) are emptied, flushed, cleaned and sanitized according to manufacturers' instructions.
- Run water softeners through a regeneration cycle.
- Flush drinking fountains by running water continuously for at least five minutes.
- Contact Kane County Health Department for a pre-opening inspection

For step-by-step procedures during a boil order, see appendix A.



Fire

After a fire in a food service establishment, many foods may no longer be safe to serve due to contamination from chemical extinguishers, falling building materials, heat, smoke, soot, and water. If a fire happens in your establishment, close the establishment temporarily, and contact the Kane County Health Department to inspect the facility to see the damage of the establishment and food products. If your establishment decides to start cleaning up before the health department arrives, write down all the food items in the exact amount on a piece of paper (this comes in handy when the health department arrives for inspection) before throwing out. In most cases, the health department will ask you to throw out the following:

- Open food items;
- Cans dented and/or rusted;
- Single use items in opened liners or sleeves;
- Food items in paper or cardboard containers;
- Food in containers with screw-type lids;
- Refrigerated and/or frozen food items that have been 41°F or above for more than four hours;
- Ice in ice bins;
- Any other foods that have appeared to have damage.

For step-by-step procedures during a fire-related incident, see appendix B.



Flood

After a flood, the water supply in the affected area may be contaminated. This can affect the health of people living or working in the affected areas. All floodwater is considered contaminated. If your food service establishment receives water from a well:

- Don't use the water until disinfected;
- Check the condition of your well;
- Make sure there is no exposed or damaged wiring.

If you notice any damage, call a professional before the disinfection process. After the floodwater has receded contact a well contractor professional to properly disinfect your well and check for damage.

Food service establishments cannot re-open until the following:

- Safe water service is restored;
- All damaged food products have been written down and properly thrown out;
- The food service establishment (including ceilings, walls, floors, food equipment, and undamaged food products) have been completely cleaned and sanitized;
- Pest control has inspected the establishment;
- The Kane County Health Department approves re-opening of the establishment.

For step-by-step procedures during a flood-related incident, see appendix C.



Power Outage

When a food service establishment loses power, the establishment must close immediately because it is not safe to operate without refrigeration, lights, ventilation, or hot water. It is advised to document the time when the power outage happened. As soon as the power goes out, your food “time clock” for all refrigeration/freezer units starts ticking, and you don’t have much time before the food spoils. This depends on the seal of the refrigeration/freezer door (the better the condition, the longer your food will last).

The loss of mechanical refrigeration can negatively affect the quality and wholesomeness of food and perishable medications (retail stores). The food service establishment staff must assess the temperature of the products, the length of time the product has been exposed to improper temperatures, and the nature of the product. These items should be recorded in a log for every refrigeration/freezer unit in the establishment.

If any food items are being cooked when the power went out and power is out for more than one hour, throw out the food items. If the power is out for under an hour, re-cook the food items to 165°F or above when power returns.

If any food items are being held cold, check the temperature of the food items once power is restored. If the food items are above 41°F, the food items must be thrown out and written down per Food Code. If any food items were frozen before power outage and have thawed, throw out the food item. Once power is restored to the food service establishment and procedures are complete, contact the Kane County Health Department for clearance to re-open to the public.

For step-by-step procedures during a flood-related incident, see appendix D.



Appendix A: Boil Order Procedures for Food Establishments



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Boil Order Procedures for Food Establishments

- I. Ceasing of operations until the boil order has been lifted OR
- II. Obtaining an alternate supply of potable water and/or ice, plus satisfactory methods for hand washing, food preparation, equipment cleaning, and sanitation.
 - A. Hand washing (Food handlers and/or public)
 1. Use potable water from an alternate approved source i.e. potable bottled water OR
 2. Wash hands normally at sink FOLLOWED by use of waterless hand sanitizer or a chlorine dip of hands for 20 seconds in a bucket of sanitizer water at 50-100ppm Cl₂.
 - B. Food Preparation
 1. Produce
 - Use prewashed and packaged produce OR
 - Use frozen/canned produce OR
 - Wash fresh produce with potable water from an alternate approved source.
 2. Preparation and cooking requiring water, including reconstitution of liquid concentrates and dried foods.
 - Discontinue sale of prepared foods requiring water OR
 - Obtain prepared foods from alternate source OR
 - Use potable water from an alternate approved source OR
 - Boil water vigorously (rolling and bubbling) for 1 minute (EPA – 11/14/12) prior to use
 3. Carbonated and other beverages
 - Substitute with bottled or canned beverages and turn off water lines to beverage dispensers (soda, tea, coffee). Such dispensers shall be completely flushed and sanitized before being returned to service after boil order has been lifted OR
 - Use potable water from an alternate approved source
 - Discontinue the use of ice machines and use ice from an approved source
 4. Utensils and food contact equipment
 - Use only single service tableware and kitchenware OR
 - Use potable water from an alternate approved source OR
 - Store food-dispensing utensil in the food products
 - Use waterless cleaning for floors and other non-food contact surfaces
 - Use dish machines or 3-comp sink with proper wash, rinse, sanitize setup verify sanitization effectiveness by using test kits frequently.

C. After the boil order is lifted.

- Clean faucet screens and flush the building water lines for one minute.
- Clean water line strainers on mechanical dishwashing machines and run three complete cycles prior to using dish machine, verify sanitization by using test kits.
- Purge all water using fixtures and appliances, such as ice machines, beverage makers, hot water heaters, etc. for 10-15 minutes. Clean and sanitize all fixtures, sinks and equipment connected to water lines.
- Replace all ice machine/ beverage dispenser filters after water lines have been flushed.

Appendix B: Fire Procedures for Food Establishments



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Fire Procedures for Food Establishments

SMOKE DAMAGE

If the damage to containers was smoke and soot (a black substance formed by combustion, chiefly formed of carbon), the following items must be thrown out since they absorb the smoke, odor and taste:

1. Many insoluble tars, plastic by-products, and chemical compounds can become part of the smoke. These compounds can then become stuck in seals and crevices, which do not lend themselves to cleaning and using;
2. All fresh produce that are wrapped or unwrapped.
3. All food items in paper bags that do not have a sealed plastic on the inside or a laminated liner. These items would absorb the smoke odor and taste;
4. All alcoholic beverage, which have a cork closure or are enclosed in a porous container; i.e. wood barrel. Contact the Illinois Department of Revenue for wholesale distributors of alcoholic beverages or liquor involved in an accident while in transit (not in a retail facility);
5. All dairy products, both frozen and refrigerator (not canned);
6. Nuts, which were not enclosed in a jar, can, or tightly sealed container. Nuts in burlap or paper bags, self-service bulk containers, barrels, or open to the air in some other manner are to be thrown out (both in shell and shelled nuts);
7. Fresh eggs;
8. All meats and poultry, except canned, may be salvageable under Department of Agriculture salvage regulations. Contact the Department of Agriculture for information;
9. All containers with a screw-type, crimped, press-on, or pull-tab closure must be destroyed. This includes soft drinks, beer, wine, and similar articles. It does not include canned items with a key-type opening such as canned ham, sardines, and similar containers.

SMOKE AND WATER DAMAGE

If the damage to the containers was restricted to smoke and water damage, the following items are to be thrown out:

1. All items listed under “*Smoke Damage*”;
2. All infant formulas and rubber or plastic items which are exposed to the infant’s body or food supply (i.e., nipples, plastic bottles, etc.);
3. All food items contained in a laminated or flexible plastic, cellophane, or similar container;
4. All food items in glass containers;

5. All drugs – contact the Drug Program Manager of the Illinois Department of Public Health. If controlled substances are involved, contact Illinois Department of Professional and Financial Regulation;
6. All soft rubber, latex, or plastic articles, which are not readily reconditioned; i.e., condoms, syringes.

CHEMICAL DAMAGE

If the damage to the product includes chemicals, additional care must be taken in looking at the nature of the chemical, the extent of its spread, and if it's toxic to humans. Chemicals may be present from incomplete burning of plastics, fire-fighting chemicals, ruptured chemical containers, etc. The specific chemical may not be apparent. Contact chemical and fire experts and obtain at least two expert opinions as to the suitability of salvaging items, which were exposed to the chemicals. If the experts do not agree on their findings, keep the articles under embargo (on hold and don't use) until laboratory analysis and results are received. The only items, which may salvageable, are items enclosed in a hermetically sealed container. Even this might be thrown out because some chemicals may not be removed by traditional cleaning methods.

HEAT DAMAGE

No food, drug, medical devices, and cosmetics exposed to heat damage may be used except in certain conditions under the supervision of the agency, which regulates the item's production. Extreme heat can affect all items. This includes canned goods exposed to a lot of heat that reheats the contents.

(Source from Policy and Procedures: Kane County Health Department)

Appendix C: After the Flood: Cleaning and Re-opening Procedures for Food Service Establishments



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Cleaning and Re-opening Procedures for Food Service Establishments

Once floodwaters have receded and it is safe to enter your facility:

1. Assess the situation:
 - Check the safety of structure (follow instructions on any warning sign placed by the building department).
 - Check the safety and availability of electrical, natural gas, and power supplies.
 - Check for potable water (water that is safe to drink) supply and sewer system.
 - Contact your pest control company to inspect the establishment for presence of rodents, snakes, or insects.
 - Contact your insurance company for possible recovery of loss.

2. Removal of Damaged food products by making a detailed list before discarding the following:
 - Food exposed to flood water or debris.
 - Any food that has an unusual odor, color or texture.
 - Potentially hazardous foods at temperatures in the danger zone (between 41°F and 135°F).
 - Perishable foods (including meat, milk, poultry, fish, eggs and leftovers) that have been above 41°F for more than four hours due to an electrical outage.
 - Canned foods contaminated by flood or wastewater. You cannot ensure that all contaminants can be removed by washing and sanitizing.
 - Food containers with screw caps, snap-lids, crimped caps (soda pop bottles), twist caps, caps that snap-open and home-canned foods that have been contaminated by the flood or wastewater.
 - Water and ice in icemakers, coffee makers and soda pop dispensers.
 - Water filters, purifiers, and beverage cartridges attached to equipment — replace with new filters after the cleanup and before beginning operation (this includes coffee makers, ice machines, carbonated beverage machines, etc.).
 - Damaged building items that are contaminated or porous and cannot be cleaned.
 - Frozen food that contains ice crystals and is 41°F or below can be refrozen or cooked unless contaminated by flood or wastewater.

3. Flush and Clear lines:
 - All water lines and equipment connected to the main water supply for at least 5 minutes (including all sink faucets – both hot and cold water, drink dispensers, ice makers, drinking fountains, hose bibs, etc.).
 - Any blockage of floor sinks and drains.
 - Equipment drain lines (flush from the interior of the equipment).

4. Cleaning and Sanitizing throughout the Food Service Establishment (Remember to wear rubber boots, gloves, goggles, coveralls, and appropriate respiratory protection during this process):
 - All sinks before using them.
 - Food contact surfaces, workstations, and dining tables.
 - Run the empty dishwasher through the wash-rinse-sanitize cycle at least three times before washing dishes and utensils in it.
 - Consult manufacturer instructions or contact the product representative if further instructions are needed.
 - For chemical sanitizing machines, use approved test kit to ensure appropriate sanitizer strength has been reached.
 - For high temperature machines, the hot water temperature must reach 180°F.
 - Contact your service technician for the proper flushing and sanitizing of equipment such as dishwashers, water softeners, beverage dispensers, and ice machines.
 - After completing above step, use the dishwasher to wash and sanitize utensils, dishes, silverware, and glassware.
 - Exterior surfaces of equipment and furniture.
 - Interior surfaces of equipment such as refrigerators, sinks, trash containers, etc.
 - All floors, sinks, and walls.
 - Run water softeners through a generation cycle.

5. Final Checks:
 - Toilets and hand washing stations with soap and paper towels are available.
 - Refrigeration and/or freezer units are capable of maintaining food temperatures at or below 41°F.
 - Hot holding units are capable of maintain food temperatures at or above 135°F.
 - Damaged food has been removed from establishment.
 - All food is protected from contamination.
 - Rodent and insect infestations do not exist

HOW TO MAKE A SANITIZING SOLUTION

To make a bleach-water solution of 100 parts-per-million (ppm) chlorine which is suitable for sanitizing all food contact surfaces, canned foods, and equipment:

- Use 1 tablespoon (5.25% sodium hypochlorite) bleach for every gallon of water
 - 1 tablespoon = 3 teaspoons or ½ fluid ounce
- Check the solution concentration with your test kit
- When sanitizing food contact surfaces, canned food containers, and equipment, allow solution to air dry after application.

(Sources from IDPH, FEMA, and CDC)

Appendix C: Power Outage Procedures for Food Establishments



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Power Outage Procedures for Food Establishments

- I. General Facts
 - Keep your refrigerator and freezer doors closed as much as possible.
 - A closed refrigerator should keep your food cool for 4 to 6 hours.
 - A closed, full freezer should keep your food frozen for up to 48 hours, while a half full freezer should keep your food frozen for up to 24 hours
 - If food is warm for longer than 4 hours, throw the food out.

- II. What To Do During A Power Outage
 - Record the time the power outage starts, so you know how long your food has been without refrigeration.
 - Keep your refrigeration and freezer doors closed as much possible. Only open fridge and freezer doors when absolutely necessary- this will keep the food and air temperature colder for longer.
 - Place refrigerated food together to keep food cool/colder longer.
 - Place meat, poultry or fish in the coldest section of your refrigerator, making sure it doesn't drip onto fresh fruit and vegetables or other ready to eat foods.
 - If necessary, use ice to help keep the food cold.

- III. How Long Will My Food Stay Cold?
 - A closed refrigerator should keep your food cool for 4-6 hours.
 - Kept closed, a full freezer should keep your food frozen for up to 48 hours, while a half full freezer should keep your food frozen for up to 24 hours.
 - The rate of thawing depends on the:
 - Amount of food in the freezer. A full freezer stays colder than one that is partially full.
 - Temperature of food. The colder the food, the longer it will stay frozen.
 - Size and insulation of the freezer.

- IV. If Cooking Was Interrupted by Power Failure
 - Discard food that was being cooked when the power outage started.
 - In the case of properly cooled hot food, eat it within 4 hours or throw it out.
 - Do not put hot food in your refrigerator or freezer. Without power, this will cause the refrigerator or freezer to warm up much faster.

- V. What To Do When The Power Comes Back On
- If the power is restored within 4-6 hours and your refrigerator/freezer doors have remained closed, some of your food may still be suitable for use. You should use a thermometer to check whether:
 - The temperature of food in the freezer is frozen, or if ice crystals are visible in the food. If so the food can be refrozen, otherwise throw it out.
- VI. If The Food In The Fridge Is Above 41°F:
- For less than two hours, you can re-refrigerate or use the food immediately
 - For between 2 and 4 hours, the food can be used, but you must use it immediately
 - For longer than 4 hours, you must throw the food out
 - Appearance or smell is not a reliable indicator of food safety. Some foods may look and smell fine, but if they have been warm too long, they may contain enough bacteria to make people ill. You should discard any food that has an obvious strange color or odor.
 - If raw food-especially meat, poultry and fish thaw and drip juices, clean and disinfect all affected areas in the fridge or freezer, as well as any countertops, cutting boards and utensils that have been affected.

(Sources from IDPH, FEMA, and CDC)