

## **SECTION 13. PERSONAL AND FAMILY PREPAREDNESS AND RESPONSE.**

### BEFORE THE HURRICANE SEASON

[www.noaa/hws/om/customer/pub/hur](http://www.noaa/hws/om/customer/pub/hur)

- Know the hurricane risks in your area.
- Learn safe routes inland.
- Learn location of official shelters.
- Ensure that enough non-perishable food and water supplies are on hand.
- Obtain and store materials, such as plywood, necessary to properly secure your home.
- Clear loose and clogged rain gutters and downspouts.
- Keep trees and shrubbery trimmed.
- Review your insurance policy.

Individuals with special needs or others requiring more information should contact their local National Weather Service office, emergency management office, or American Red Cross chapter.

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### FAMILY DISASTER PLAN

Families should be prepared for all hazards that could affect their area. NOAA's National Weather Service, the Federal Emergency Management Agency, and the American Red Cross urge every family to develop a family disaster plan.

Where will your family be when disaster strikes? They could be anywhere at work, at school, or in the car. How will you find each other? Will you know if your children are safe? Disaster may force you to evacuate your neighborhood or confine you to your home. What would you do if basic services such as water, gas, electricity or telephones were cut off?

Follow these basic steps to develop a family disaster plan:

- I. GATHER INFORMATION ABOUT HAZARDS.
  - Contact your local National Weather Service office, emergency management office, and American Red Cross chapter. Find out what type of disasters could occur and how you should respond. Learn your community's warning signals and evacuation plans.
- II. MEET WITH YOUR FAMILY TO CREATE A PLAN.
  - Discuss the information you have gathered. Pick two places to meet: a spot outside your home for an emergency, such as fire, and a place away from your neighborhood in case you can't return home. Choose an out-of-state friend as your "family check-in contact" for everyone to call if the family gets separated. Discuss what you would do if advised to evacuate.
- III. IMPLEMENT YOUR PLAN.
  - Post emergency telephone numbers by phones;
  - Install safety features in your house, such as smoke detectors and fire extinguishers;
  - Inspect your home for potential hazards (such as items that can move, fall, break, or catch fire) and correct them;
  - Have your family learn basic safety measures, such as CPR and first aid; how to use a fire extinguisher; and how and when to turn off water, gas, and electricity in your home;

- Teach children how and when to call 911 or your local Emergency Medical Services number;
- Keep enough supplies in your home to meet your needs for at least three days. Assemble a disaster supplies kit with items you may need in case of an evacuation. Store these supplies in sturdy, easy-to-carry containers, such as backpacks or duffle bags. Keep important family documents in a waterproof container. Keep a smaller disaster supplies kit in the trunk of your car.
  - o A DISASTER SUPPLIES KIT SHOULD INCLUDE
    - A 3-day supply of water (one gallon per person per day) and food that won't spoil;
    - One change of clothing and footwear per person; one blanket or sleeping bag per person; a first-aid kit, including prescription medicines;
    - Emergency tools, including a battery-powered NOAA Weather Radio and a portable radio, flashlight, and plenty of extra batteries;
    - An extra set of car keys and a credit card or cash; special items for infant, elderly, or disabled family members.

#### IV. PRACTICE AND MAINTAIN YOUR PLAN.

Ask questions to make sure your family remembers meeting places, phone numbers, and safety rules. Conduct drills. Test your smoke detectors monthly and change the batteries two times each year. Test and recharge your fire extinguisher(s) according to manufacturer's instructions. Replace stored water and food every 6 months. Contact your local National Weather Service office, American Red Cross chapter, or local office of emergency management for a copy of "Your Family Disaster Plan"

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#### Plan to evacuate if you:

Live in a mobile home. They are unsafe in high winds, no matter how well fastened to the ground.

- Live on the coastline, an offshore island, or near a river or a flood plain.
- Live in a high-rise. Hurricane winds are stronger at higher elevations.

**REMINDER! IF YOU ARE TOLD TO LEAVE, DO SO IMMEDIATELY!**

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### DURING THE STORM

#### WHEN IN A WATCH AREA...

- Frequently listen to radio, TV, or NOAA Weather Radio for official bulletins of the storm's progress.
- Fuel and service family vehicles.
- Inspect and secure mobile home tie downs.
- Prepare to cover all window and door openings with shutters or other shielding materials.
- Check batteries and stock up on canned food, first aid supplies, drinking water, and medications.
- Prepare to bring inside lawn furniture and other loose, light-weight objects, such as garbage cans, garden tools, etc.
- Have on hand an extra supply of cash.

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### WHEN IN A WARNING AREA

- Closely monitor radio, TV, or NOAA Weather Radio for official bulletins.
- Complete preparation activities, such as putting up storm shutters, storing loose objects, etc.
- Follow instructions issued by local officials. Leave immediately if told to do so!
- If evacuating, leave early (if possible, in daylight). Stay with friends or relatives, at a low-rise inland hotel/motel, or go to a pre-designated public shelter outside a flood zone.
- Leave mobile homes in any case.
- Notify neighbors and a family member outside of the warned area of your evacuation plans.
- Put food and water out for a pet if you cannot take it with you. Public health regulations do not allow pets in public shelters, nor do most hotels/motels allow them.

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### WHAT TO BRING TO A SHELTER... (THERE ARE NO SHELTERS IN DARE COUNTY)

- First-aid kit; medicine;
- Baby food and diapers;
- Cards, games, books;
- Toiletries;
- Battery-powered radio;
- Flashlight (one per person); extra batteries;
- Blankets or sleeping bags;
- Identification, valuable papers (insurance), and cash.

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### IF STAYING IN A HOME

Only stay in a home if you have NOT been ordered to leave. Stay inside a well constructed building. In structures, such as a home, examine the building and plan in advance what you will do if winds become strong. Strong winds can produce deadly missiles and structural failure.

- Turn refrigerator to maximum cold and open only when necessary.
- Turn off utilities if told to do so by authorities.
- Turn off propane tanks.
- Unplug small appliances.
- Fill bathtub and large containers with water for sanitary purposes.

### IF WINDS BECOME STRONG

- Stay away from windows and doors even if they are covered. Take refuge in a small interior room, closet, or hallway.
- Close all interior doors. Secure and brace external doors.
- If you are in a two-story house, go to an interior first-floor room, such as a bathroom or closet.
- If you are in a multiple-story building and away from the water, go to the first or second floors and take refuge in the halls or other interior rooms away from windows.
- Lie on the floor under a table or other sturdy object.

### BE ALERT FOR

- TORNADOES that often are spawned by hurricanes.
- The calm "EYE" of the storm. After the eye passes, the winds will change direction and quickly return to hurricane force.

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### AFTER THE STORM

- Keep listening to radio, TV, or NOAA Weather Radio.
- Wait until an area is declared safe before entering.
- Roads may be closed for your protection. If you come upon a barricade or a flooded road, turn around and go another way!
- Avoid weakened bridges and washed out roads. Do not drive into flooded areas.
- Stay on firm ground. Moving water only 6 inches deep can sweep you off your feet. Standing water may be electrically charged from under-ground or downed power lines.
- Check gas, water, and electrical lines and appliances for damage.
- Do not drink or prepare food with tap water until you are certain it is not contaminated.
- Avoid using candles and other open flames indoors. Use a flashlight to inspect for damage.
- Use the telephone to report life-threatening emergencies only.
- Be especially cautious if using a chainsaw to cut fallen trees.

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I have provided for myself, my family, and my home:

**A. Emergency Lights and Accessories**

Flashlight	_____
Batteries	_____
Lanterns	_____
Candles	_____
Matches	_____
Portable Radio	_____

**B. First Aid Kits**

Band-aids	_____
Bandage rolls	_____
Local antiseptic	_____
Aspirin/Ibuprofen, Tylenol, etc.	_____
Prescribed medications	_____

**C. Baby Supplies**

Food	_____
Canned milk	_____
Formula	_____
Disposable diapers	_____
Hygiene supplies, soap, etc.	_____
Blankets and bedding	_____
Plastic bags	_____

**D. Food and Water (Non-Perishable)**

Canned meats	_____
Canned vegetables	_____
Canned fruits	_____
Canned juices	_____
Containers of water *	_____
Manual can opener	_____

\*Plan on one quart of water per person, per day, minimum

**E. Personal Items**

Change of clothes for up to three days \_\_\_\_\_  
Supply of toiletries, shaving equipment, Health care necessities \_\_\_\_\_

**F. Security of Residence**

Window areas boarded \_\_\_\_\_  
Doors braced \_\_\_\_\_  
Power shut off \_\_\_\_\_  
Drapes or curtains closed \_\_\_\_\_  
Bath tub clean/filled w/water \_\_\_\_\_  
Water supply to house cut off \_\_\_\_\_  
Loose yard items secured \_\_\_\_\_  
Boats/vehicles secured \_\_\_\_\_  
Tools/materials for damage control \_\_\_\_\_  
Waterproof container for documents and valuables \_\_\_\_\_  
Checked with insurance agent about damage \_\_\_\_\_

**G. Pet Disaster Kit**

Proper identification including immunization records \_\_\_\_\_  
Ample supply of food and water \_\_\_\_\_  
A carrier or cage \_\_\_\_\_  
Medications \_\_\_\_\_  
Muzzle, collar and leash \_\_\_\_\_

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### Getting Your House Ready

#### When preparing your home for a hurricane:

- Make sure your homeowners windstorm and flood insurance policies are in effect.
- You may want to talk with your neighbors to coordinate preparation plans and help each other out.
- Develop an evacuation plan so everyone in your family will know where to go if they have to leave.
- The greatest threat to your home in most hurricanes is not the wind itself but wind-blown debris that can break windows and doors. Bring in anything from the yard that could become wind-borne, and ask your neighbors to do the same.
- Tape will not protect your windows. If you don't have impact-resistant windows, then get shutters. Plywood panels should be a last-resort option and should be prepared and fitted beforehand. Plywood that is not properly attached to your house can rip off during high winds and become a projectile that can cause serious harm to your property.
- If you buy shutters, check to make sure they meet Miami-Dade County wind-resistance standards. Standards to look for include the SBCCI Test Standard for Determining Impact Resistance from Windborne Debris (SSTD 12-97) or the ASTM Standard Specification for Performance of Exterior Windows, Glazed Curtain Walls, Doors and Storm Shutters Impacted by Windborne Debris in Hurricanes (ASTM E 1996-00).
- When shopping for shutters, ask about the weight gauge or thickness. The greater the thickness (for aluminum), the stronger the shutter. However, don't buy shutters that are too heavy to be installed efficiently before a storm.
- Reinforce the garage door and tracks with center supports.
- Consider buying shutters for doors. Be sure to shutter any door containing a substantial amount of glass, and be prepared to wedge sliding glass doors and windows. In addition, pick one door – such as a side door to the garage – as an entry and exit point for the house. Ideally, that would be a steel door. If you have large attic wall vents, put shutters over them, and don't forget skylights. Remember, any window or door being breeched by hurricane forces can contribute to roof failure, so shutter up.

- Bring inside objects that can blow away, such as your mailbox, garbage cans, and lawn furniture. What you can't move, anchor. If you have window unit air conditions, secure them tightly.
- Take "before" pictures of your home and store them in a secure place where you can access them after the storm.
- Cover valuable indoor furniture with plastic. If you lose shingles and the roof starts leaking, you may save something. Remember, a can of roofing tar and a roll of heavy plastic could be priceless after a storm.

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### AFTER THE STORM

- Before returning to your home and starting the cleanup process, develop a recovery plan of how you will approach problems and make the best use of your time and money. Here are some suggestions from the American Red Cross to cope with life after the storm:
- Seek medical care for injured people.
- Don't drive in flooded areas.
- Be careful outdoors. Power lines can be down and trees damaged.
- Report any damaged utility lines.
- Inspect gas, water and electrical lines before restoring power to your home or business. Check for structural hazards.
- Watch for wildlife, such as snakes, disturbed during the storm.
- If you evacuated, be patient because you might not be able to return to your home immediately.
- Limit telephone calls to avoid tying up lines that may be needed for emergency communications.
- Use generators in well-ventilated areas.
- Take photos of damages for insurance purposes.
- Make temporary repairs to protect your home from the elements and looters. Keep your receipts for insurance purposes.
- Don't use the water until local water sources have been declared safe. Use only bottled water or disinfected water for drinking or cooking.
- To prevent diseases and food poisoning, wash hands frequently (you may use sanitized waterless hand cleaner).
- Use water stored in a bathtub, from the pool or from the tap to flush the toilet. Don't drink pool water.

- Bathing is OK but keep the water out of your ears. If you use it to shave, dab cuts with antiseptic.

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### DEALING WITH THE STRESS

A natural disaster can destroy mental balance along with possessions. Natural disasters can be traumatic events that, for many people, can be so powerful that it goes beyond normal coping mechanisms. Natural disasters are perceived through all bodily senses: sight, sound, touch, smell and taste.

People with traumatic stress have normal and expected sets of symptoms. Many reactions are predictable and common:

- Physical changes: fatigue, heartburn, headaches, changes in appetite, changes in sleeping patterns, psychosomatic complaints/disorders and irritability.
- Emotional changes: numbness/denial, confusion, panic or anxiety attacks, fear, despair, depression, grief, withdrawal, flashbacks, nightmares, and feelings of isolation, loneliness, helplessness and/or vulnerability.
- Behavioral changes: increased alcohol/drug use, family tension and stress, changes in “energy level,” poor concentration/unattractiveness, low morale and productivity, anger and rage.
- In helping children deal with the stress, be extra patient. Reassure children and be realistic about the situation. Offer a hug and let them know they are not responsible for the stress in any way and that you will be with them.
- Don’t expect things to go back to normal right away.
- It is a natural reaction for anyone who has suffered loss to express disbelief, anger, sadness, anxiety and depression afterward. Their moods also might change unexpectedly.
- In a crisis situation, a supportive network is essential. Talk with friends, family, counselors, or your minister.
- When evacuating, allow children to pick out a couple of items they value to take along with their necessities.

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### CLEANING UP

- Wash all linens in hot water. Steam clean carpeting.
- Clean walls, wood, vinyl or ceramic floors, countertops, cabinets and other surfaces with soap and water. Disinfect with a bleach product if they've been exposed to floodwater. Dilute disinfectant at a rate of one cup of bleach to five gallons of water.
- Place mattresses and upholstered furniture outdoors to air in the sun, then spray with a disinfectant.
- Wear rubber gloves when cleaning and watch for broken glass or other hazards.

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### DON'T FORGET YOUR PETS WHEN MAKING AN EMERGENCY PLAN

([www.noaa.gov](http://www.noaa.gov))

Contact your veterinarian or local humane society for information on preparing your pets for an emergency.

#### BEFORE THE DISASTER

- Make sure that your pets are current on their vaccinations.
- Pet shelters may require proof of vaccines.
- Have a current photograph.
- Keep a collar with identification on your pet and have a leash on hand to control your pet.
- Have a properly-sized pet carrier for each animal - carriers should be large enough for the animal to stand and turn around.
- Plan your evacuation strategy and don't forget your pet!
- Specialized pet shelters, animal control shelters, veterinary clinics and friends and relatives out of harm's way are ALL potential refuges for your pet during a disaster.
- If you plan to shelter your pet - work it into your evacuation route planning.

#### DURING THE DISASTER

Animals brought to a pet shelter are required to have:

- Proper identification collar and rabies tag, proper identification on all belongings, a carrier or cage, a leash, an ample supply of food, water and food bowls, any necessary medications, specific care instructions and news papers or trash bags for clean-up.
- Bring pets indoor well in advance of a storm - reassure them and remain calm.
- Pet shelters will be filled on first come, first served basis. Call ahead and determine availability.

### AFTER THE DISASTER

- Walk pets on a leash until they become re-oriented to their home - often familiar scents and landmarks may be altered and pets could easily be confused and become lost.
- Also, downed power lines, reptiles brought in with high water and debris can all pose a threat for animals after a disaster.
- If pets cannot be found after a disaster, contact the local animal control office to find out where lost animals can be recovered.
- Bring along a picture of your pet if possible.
- After a disaster, animals can become aggressive or defensive - monitor their behavior.

### PET DISASTER SUPPLY KIT

- Proper identification including immunization records.
- Ample supply of food and water.
- A carrier or cage.
- Medications.
- Muzzle, collar and leash.

## **SECTION 13. PERSONAL AND FAMILY PREPAREDNESS AND RESPONSE.**

### EMERGENCY SALVAGE OF FLOOD DAMAGED FAMILY PAPERS

#### NATIONAL ARCHIVES AND RECORDS ADMINISTRATION. AUGUST 1993.

As the national repository of the records of the Federal government, the National Archives & Records Administration recognizes the importance of family records. During the mid-west floods of 1993, the staff of the National Archives developed some technical tips to guide individuals in emergency stabilization and salvage of damaged documents, photographs, books, and other personal papers. It is important to note that flood damage to some items may be irreversible. The treatment of objects of high monetary, historic, or sentimental value should only be performed in consultation with a conservator.

#### MOLD

Many people are sensitive to mold. Also, some mold species are toxic. If any health effects are observed when treating mold consult a doctor or mycologist (the local extension service may be able to help) before proceeding.

The best way to prevent or stop an outbreak of mold is to remove items from environmental conditions that encourage mold growth: high temperature, high relative humidity, stagnant air, and darkness. The first priority is to dry moldy items (see instructions for drying below). If wet and moldy materials cannot be dried immediately freezing may stabilize them. Placing damaged items in a personal or commercial freezer will not kill mold. It will, however, put the mold in a dormant state until time and an appropriate treatment environment are available. Manageable quantities of frozen items may then be defrosted and treated at leisure.

Active mold looks fuzzy or slimy. Dormant mold is dry and powdery. Do not attempt to remove active mold; it may only spread or smear. Mold which remains active after freezing or after the host material appears dry may be treated with brief (1-2 hours) exposure to ultraviolet radiation from the sun. Extreme caution must be exercised when treating materials outdoors: too much radiation will accelerate deterioration and may cause fading; wind may cause physical damage if items are blown about; and high relative humidity or condensation caused by quick temperature changes may actually exacerbate mold growth.

Dormant mold spores will reactivate as soon as conditions are favorable. They should, therefore, be removed from items and may be brushed or vacuumed away. This treatment should be performed outdoors where other materials and spaces will not be "infected." When brushing mold use a soft, clean, light-colored brush and a gentle pushing motion. Change soiled brushes often to prevent spreading mold from one

object to another. When vacuuming, screening material placed over the nozzle of a low suction vacuum will capture loose bits of the item that may inadvertently dislodge.

### CLEANING AND DRYING

Paper is very fragile when it is wet. Handle it carefully. In some cases it may be desirable to remove caked on mud and dirt. Dirt left by receding floodwaters may be contaminated. Precautions such as the use of rubber gloves should be taken. If items are still wet, agitating them in a bath of clear water will remove excess dirt. This treatment should never be attempted for images that are blurred, feathered, or faded as a result of flood damage.

### AIR DRYING

Wet books, documents, or photographs which cannot be air dried within two days should be frozen to inhibit mold growth. Circulating air will effectively dry most items. Physical distortions may result, but document information will be saved. To provide optimal air drying conditions, fans should be positioned for maximum air circulation (do not aim air flow directly at drying materials). Blotting material for air drying should be clean and absorbent. Options include: blotter paper, unprinted newsprint paper, paper towels, rags, mattress pads, etc. Screening material (such as window screens) well supported and stacked with space between them provide an excellent compact drying surface. The porous surface assists air circulation and promotes drying.

Without intervention glossy materials such as paperback book covers, magazines, art books, etc. are likely to stick together. If they are highly valued, these items should be the first priority for salvage. Loose glossy materials should be spread out in one layer for air drying. Bound glossy materials must be interleaved between every page to prevent sticking. Wax paper should be used as interleaving material. Volumes of glossy paper dried in this way may suffer considerable physical distortion.

### BOOKS

Place interleaving material between the text block and the front and back covers. If time and supplies allow interleaving material should be placed intermittently throughout the text as well. Fan volumes open and stand them on edge with the interleaving paper extending beyond the edges of the book. Evaporation of water as it wicks into the interleaving paper will enhance drying. Replace interleaving paper as it becomes soaked and invert the volume each time to insure even drying.

## DOCUMENTS

Air dry flat in small piles (1/2 inch) or individually if possible. Change blotting material beneath the materials as it becomes soaked.

## PHOTOGRAPHS, NEGATIVES, MOTION PICTURE FILM

Several classes of photographs are highly susceptible to water damage and the recovery rate will be very low. Avoid touching the surface of photographic prints and negatives. If an old photographic process cannot be identified, observe the item carefully and contact a conservator for advice. Never freeze old photographs or negatives.

Most prints, negatives, and slides may successfully be individually air dried face up. Change blotting material beneath the photographs as it becomes soaked. Contemporary photographic prints and negatives that are still wet and have stuck together may separate after soaking in cold water. However, this type of treatment could cause irreversible damage. Highly valued items, especially prints for which there is no longer a negative, should be referred to a conservator immediately.

## FRAMED ITEMS

Remove the backing material from the frame. If the item is not stuck to the glass, carefully remove it from the frame and air dry. If the object appears to be stuck to the glass, do not attempt to remove it from the frame. Dry intact with the glass side down.

## When damage is irreversible

Occasionally object damage is irreversible. The treatment of items of high monetary, historic, or sentimental value should only be performed in consultation with a conservator. The American Institute for Conservation (202.452.9545) maintains a referral list of conservators who will be able to provide guidance for treating private collections.

## **A Consumer's Guide to Food Safety:**

### **Severe Storms and Hurricanes**

#### **FOOD SAFETY DURING AN EMERGENCY**

Did you know that a flood, fire, national disaster, or the loss of power from high winds, snow, or ice could jeopardize the safety of your food? Knowing how to determine if food is safe and how to keep food safe will help minimize the potential loss of food and reduce the risk of food-borne illness. This Consumer's Guide will help you make the right decisions for keeping your family safe during an emergency.

#### **POWER OUTAGES**

We practice basic safe food handling in our daily lives, but obtaining and storing food safely becomes more challenging during a power outage or natural disasters such as hurricanes and floods.

#### **Steps to Follow to Prepare for a Possible Weather Emergency:**

- Keep an appliance thermometer in the refrigerator and freezer. An appliance thermometer will indicate the temperature in the refrigerator and freezer in case of a power outage and help determine the safety of the food.
- Make sure the freezer is at 0 °F (Fahrenheit) or below and the refrigerator is at 40 °F or below.
- Freeze containers of water for ice to help keep food cold in the freezer, refrigerator, or coolers after the power is out.
- Freeze refrigerated items such as leftovers, milk, and fresh meat and poultry that you may not need immediately - this helps keep them at a safe temperature longer.
- Plan ahead and know where dry ice and block ice can be purchased.
- Store food on shelves that will be safely out of the way of contaminated water in case of flooding.
- Have coolers on hand to keep refrigerator food cold if the power will be out for more than 4 hours. Purchase or make ice cubes and store in the freezer for use in the refrigerator or in a cooler. Freeze gel packs ahead of time for use in coolers.

- Group food together in the freezer—this helps the food stay cold longer.

### **Steps to Follow During and After the Weather Emergency:**

- Never taste a food to determine its safety!
- Keep the refrigerator and freezer doors closed as much as possible to maintain the cold temperature.
- The refrigerator will keep food safely cold for about 4 hours if it is unopened. A full freezer will hold the temperature for approximately 48 hours (24 hours if it is half full and the door remains closed).
- Food may be safely refrozen if it still contains ice crystals or is at 40 °F or below.
- Obtain block ice or dry ice to keep your refrigerator and freezer as cold as possible if the power is going to be out for a prolonged period of time. Fifty pounds of dry ice should hold an 18-cubic-foot full freezer for 2 days.
- If the power has been out for several days, then check the temperature of the freezer with an appliance thermometer or food thermometer. If the food still contains ice crystals or is at 40 °F or below, the food is safe. If a thermometer has not been kept in the freezer, then check each package of food to determine its safety. If the food still contains ice crystals, the food is safe.
- Discard refrigerated perishable food such as meat, poultry, fish, soft cheeses, milk, eggs, leftovers, and deli items after 4 hours without power.
- Drink only bottled water if flooding has occurred.

### **When in Doubt, Throw it Out!**

## **SAFETY OF FOOD IN CONTAINERS EXPOSED TO FLOOD WATERS**

### **How to Determine What Food to Keep or Discard**

- Do not eat any food that may have come into contact with flood water.
- Discard any food that is not in a waterproof container if there is any chance that it has come into contact with flood water. Food containers that are not waterproof include those with screw-caps, snap lids, pull tops, and crimped caps. Also, discard cardboard juice/milk/baby formula boxes and home canned foods if they have come in contact with flood water, because they cannot be effectively cleaned and sanitized.

- Inspect canned foods and discard any food in damaged cans. Can damage is shown by swelling, leakage, punctures, holes, fractures, extensive deep rusting, or crushing/denting severe enough to prevent normal stacking or opening with a manual, wheel-type can opener.
- Thoroughly wash metal pans, ceramic dishes, and utensils (including can openers) with soap and water, using hot water if available. Rinse and then sanitize them by boiling in clean water or immersing them for 15 minutes in a solution of 1 tablespoon of unscented, liquid chlorine bleach per gallon of drinking water (or the cleanest, clearest water available).
- Thoroughly wash countertops with soap and water, using hot water if available. Rinse and then sanitize them by applying a solution of 1 tablespoon of unscented, liquid chlorine bleach per gallon of drinking water (or the cleanest, clearest water available). Allow to air-dry.

### **Steps to Salvage All-Metal Cans and Retort Pouches**

- Undamaged, commercially prepared foods in all-metal cans and retort pouches (for example, flexible, shelf-stable juice or seafood pouches) can be saved if you do the following:
  - Remove the labels, if they are the removable kind, since they can harbor dirt and bacteria.
  - Thoroughly wash the cans or retort pouches with soap and water, using hot water if it is available.
  - Brush or wipe away any dirt or silt.
  - Rinse the cans or retort pouches with water that is safe for drinking, if available, since dirt or residual soap will reduce the effectiveness of chlorine sanitation. Then, sanitize them by immersion in one of the two following ways:
    - o Place in water and allow the water to come to a boil and continue boiling for 2 minutes, or
    - o Place in a freshly made solution consisting of 1 tablespoon of unscented, liquid chlorine bleach per gallon of drinking water (or the cleanest, clearest water available) for 15 minutes.
  - Air-dry cans or retort pouches for a minimum of 1 hour before opening or storing. If the labels were removable, then re-label your cans or retort pouches, including the expiration date (if available), with a marker.

- Food in reconditioned cans or retort pouches should be used as soon as possible, thereafter.
- Any concentrated baby formula in reconditioned, all-metal containers must be diluted with clean, drinking water.

## **FOOD SAFETY: REMOVING ODORS FROM REFRIGERATORS AND FREEZERS**

Refrigerators and freezers are two of the most important pieces of equipment in the kitchen for keeping food safe. We are instantly reminded of their importance when the power goes off, flooding occurs, or the unit fails, causing food to become unsafe and spoil. The odors that develop when food spoils can be difficult to remove. Use this information to learn how to remove odors from units or how to safely discard an affected unit.

### **To Remove Odors from Refrigerators and Freezers**

If food has spoiled in a refrigerator or freezer and odors from the food remain, they may be difficult to remove. The following procedures may help but may have to be repeated several times.

- Dispose of any spoiled or questionable food.
- Remove shelves, crispers, and ice trays. Wash them thoroughly with hot water and detergent. Then rinse with a sanitizing solution (1 tablespoon unscented, liquid chlorine bleach per gallon of water).
- Wash the interior of the refrigerator, including the door and gasket, with hot water and baking soda. Rinse with sanitizing solution as above.
- Leave the door open for about 15 minutes to allow free air circulation.
- If odor remains, try any or all of the following:
  - Wipe inside of unit with equal parts vinegar and water. Vinegar provides acid which destroys mildew.
  - Leave the door open and allow to air out for several days.
  - Stuff both the refrigerator and freezer with rolled newspapers. Close the door and leave for several days. Remove paper and clean with vinegar and water.
  - Sprinkle fresh coffee grounds or baking soda loosely in a large, shallow container in the bottom of the unit.

- Place a cotton swab soaked with vanilla inside the freezer. Close door for 24 hours. Check for odors.
- Use a commercial product available at hardware and housewares stores. Follow the manufacturer's instructions.

If odors cannot be removed, then the refrigerator or freezer may need to be discarded. If you need to discard the refrigerator or freezer, discard it in a safe manner:

### **Other Precautions and Information**

- "Childproof" old refrigerators so children do not get trapped inside. The surest way is to take the door off.
- If the door will not come off, close it tightly and chain and padlock it, or remove or disable the latch completely so the door will no longer lock when closed.
- It is unlawful in many jurisdictions to discard old refrigerators without first removing the door.

## **FOOD SAFETY CONTACTS FOR AREAS AFFECTED BY SEVERE STORMS AND HURRICANES**

### **FSIS: USDA's Food Safety and Inspection Service**

Consumers with food safety questions can phone the toll-free **USDA Meat and Poultry Hotline at 1-888-MPHotline** (1-888-674-6854); TTY, 1-800-256-7072.

The Hotline is available in English and Spanish and can be reached from 10 a.m. to 4 p.m. (ET) Monday through Friday. Recorded food safety messages are available 24 hours a day.

Consumers may also ask safe food handling questions by logging on to FSIS' online automated response system called "[Ask Karen,](#)" on the Food Safety and Inspection Service's Web site: [www.fsis.usda.gov](http://www.fsis.usda.gov)

E-mail inquiries can be directed to [mphonenumber.fsis@usda.gov](mailto:mphonenumber.fsis@usda.gov)

Additional information about USDA's food safety efforts can be accessed on the FSIS Web site at [www.fsis.usda.gov](http://www.fsis.usda.gov)

### **CDC: Centers for Disease Control and Prevention**

Call 1-800-CDC-INFO or 1-800-232-4636, TTY 1-888-232-6348, for information on hazards, safe clean up, and preventing illness and injury.

Available in English and Spanish, 24 hours a day, 7 days a week.  
[www.cdc.gov](http://www.cdc.gov)

**FDA: Food and Drug Administration**

For information on safe food handling for foods other than meat, poultry, or egg products, call FDA's toll-free information line at 1-888-SAFEFOOD or 1-888-723-3366.  
[www.cfsan.fda.gov](http://www.cfsan.fda.gov)

FDA emergency number, staffed 24 hours a day, (301) 443-1240

**Other**

**Environmental Protection Agency - EPA's Safe Drinking Water Hotline: 1-800-426-4791**

[www.epa.gov](http://www.epa.gov)

**Federal Emergency Management Agency (FEMA): Food and Water in an Emergency**

[www.fema.gov](http://www.fema.gov)

**General Disaster Assistance Site: [www.foodsafety.gov](http://www.foodsafety.gov)**

**Food Safety  
Questions? Ask  
Karen**

The FSIS automated  
response system  
can provide food  
safety information  
24/7

Visit us at  
[www.fsis.usda.gov](http://www.fsis.usda.gov)

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US Department of Homeland Security. Preparing Makes Sense. Get Ready Now.

[www.ready.gov](http://www.ready.gov)

The likelihood of you and your family surviving a house fire depends as much on having a working smoke detector and an exit strategy, as on a well-trained fire department. The same is true for surviving a terrorist attack or other emergency. We must have the tools and plans in place to make it on our own, at least for a period of time, no matter where we are when disaster strikes. Just like having a working smoke detector, preparing for the unexpected makes sense. Get ready now.