After the Hurricane

Know What to Do After a Hurricane Is Over:
- Keep listening to NOAA [www.noaa.gov] Weather Radio or local radio or TV stations for instructions.
- If you evacuated, return home when local officials tell you it is safe to do so.
- Inspect your home for damage.
- Use flashlights in the dark; do not use candles.

Flashlights: Top Safety Tips for a Blackout:
- Only use a flashlight for emergency lighting. Never use candles!
- Turn off any electrical equipment you were using when the power went out.
- Avoid opening the refrigerator and freezer.
- Do not run a generator inside a home or garage.
- If you use a generator, connect the equipment you want to power directly to the outlets on the generator. Do not connect a generator to a home’s electrical system.
- Listen to local radio and television for updated information.

Power Outage: How Can I Prepare Before a Blackout Happens?
Assemble essential supplies, including:
- Flashlight
- Batteries
- Portable radio
- At least one gallon of water
- A small supply of food
- Due to the extreme risk of fire, do not use candles during a power outage

If you have space in your refrigerator or freezer, consider filling plastic containers with water, leaving about an inch of space inside each one. (Remember, water expands as it freezes, so it is important to leave room in the container for the expanded water.) Place the containers in the refrigerator and freezer. This chilled or frozen water will help keep food cold if the power goes out by displacing air that can warm up quickly with water or ice that keeps cold for several hours without additional refrigeration.

If you use medication that requires refrigeration, most can be kept in a closed refrigerator for several hours without a problem. If unsure, check with your physician or pharmacist.

If you use a computer, keep files and operating systems backed up regularly. Consider buying extra batteries and a power converter if you use a laptop computer. A power converter allows most laptops (12 volts or less) to be operated from the cigarette lighter of a vehicle. Also, turn off all computers, monitors, printers, copiers, scanners, and other devices when they're not being used. That way, if the power goes out, this equipment will have already been safely shut down. Get a high quality surge protector for all of your computer equipment. If you use the computer a lot, such as for a home business, consider purchasing and installing an uninterruptible power
supply (UPS). Consult with your local computer equipment dealer about available equipment and costs.

If you have an electric garage door opener, find out where the manual release lever is located and learn how to operate it. Sometimes garage doors can be heavy, so get help to lift it. If you regularly use the garage as the primary means of entering your home upon return from work, be sure to keep a key to your house with you, in case the garage door will not open.

If you have a telephone instrument or system at home or at work that requires electricity to work (such as a cordless phone or an answering machine), plan for alternate communication, including having a standard telephone handset, cellular telephone, radio, or pager. Remember, too, that some voice mail systems and remote dial-up servers for computer networks may not operate when the power is out where these systems are located. So even if you have power, your access to remote technology may be interrupted if the power that serves those areas is disrupted.

Check with remote service providers to see if they have backup power systems, and how long those systems will operate.

Keep your car’s fuel tank at least half full because gas stations rely on electricity to power their pumps.

Follow energy conservation measures to keep the use of electricity as low as possible, which can help the power company avoid imposing rolling blackouts.

If you would like more information about rolling blackouts and how to deal with them, contact the power company that serves your area.

**Specific Information for People with Disabilities:**
If you use a battery-operated wheelchair, life-support system, or other power-dependent equipment, call your power company before rolling blackouts happen. Many utility companies keep a list and map of the locations of power-dependent customers in case of an emergency. Ask them what alternatives are available in your area. Contact the customer service department of your local utility company to learn if this service is available in your community.

If you use a motorized wheelchair or scooter, have an extra battery. A car battery also can be used with a wheelchair but will not last as long as a wheelchair’s deep-cycle battery. If available, store a lightweight manual wheelchair for backup.

If you are blind or have a visual disability, store a talking or Braille clock or large-print timepiece with extra batteries.

If you are deaf or have a hearing loss, consider getting a small portable battery-operated
After the Hurricane

television set. Emergency broadcasts may give information in American Sign Language (ASL) or open captioning.

Using a Generator:
If you are considering obtaining a generator, get advice from a licensed professional, such as an electrician, on the proper use. Make sure the generator is listed with Underwriter’s Laboratories or a similar organization. Some municipalities, Air Quality Districts, or states have “air quality permit” requirements. A licensed electrician will be able to give you more information.

Always plan to keep the generator outdoors – never operate it inside, including the basement or garage. Do not hook up a generator directly to your home’s wiring. The safest thing to do is to connect the equipment you want to power directly to the outlets on the generator. Connecting a cord from the generator to a point on the permanent wiring system and back-feeding power to your home is an unsafe method to supply a building during a power outage.

For more information about using generators safely, go to http://www.redcross.org/services/disaster/0,1082,0_563_,00.html.

What Do I Do During A Blackout?
Turn off or disconnect any appliances, equipment (like air conditioners) or electronics you were using when the power went out. When power comes back on, it may come back with momentary “surges” or “spikes” that can damage equipment such as computers and motors in appliances like the air conditioner, refrigerator, washer, or furnace.

Leave one light turned on so you will know when your power returns.

Leave the doors of your refrigerator and freezer closed to keep your food as fresh as possible. If you must eat food that was refrigerated or frozen, check it carefully for signs of spoilage.

Use the phone for emergencies only. Listening to a portable radio can provide the latest information. Do not call 9-1-1 for information – only call to report a life-threatening emergency.

Eliminate unnecessary travel, especially by car. Traffic signals will stop working during an outage, creating traffic congestion.

Remember that equipment such as automated teller machines (ATMs) and elevators may not work during a power outage.

If it is hot outside, take steps to remain cool. Move to the lowest level of your home, as cool air falls. Wear lightweight, light-colored clothing. Drink plenty of water, even if you do not feel thirsty. If the heat is intense and the power may be off for a long time, consider going to a movie theater, shopping mall, or “cooling shelter” that may be opened in your community.
After the Hurricane

Listen to local radio or television for more information. Get more tips on preparing for a heat wave, visit: http://www.redcross.org/services/prepare/0,1082,0_243_,00.html.

Remember to provide plenty of fresh, cool water for your pets.

If it is cold outside, put on layers of warm clothing. You should never burn charcoal for heating or cooking purposes indoors. Never use your oven as a source of heat. If the power may be out for a prolonged period, plan to go to another location (relative, friend, or public facility) that has heat to keep warm.

**Energy Conservation Recommendations:**
To conserve power to help avoid a blackout, the power industry recommends:

- In heating season, set the furnace thermostat at 68 degrees or lower. In cooling season, set the thermostat at 78 degrees or higher. Consider installing a programmable thermostat that you can set to have the furnace or air conditioning run only when you are at home. Most power is used by heating and cooling, so adjusting the temperatures on your thermostat is the biggest energy conservation measure you can take.
- Turn off lights and computers when not in use. This is especially true for computer monitors – avoid using a "screen saver" and just simply turn the monitor off when you won’t be using the computer for a while. Turn the computer off completely each evening. It is no longer true that computer equipment is damaged from turning it off and on.
- Close windows when the heating or cooling system is on.
- Caulk windows and doors to keep air from leaking out, and replace old windows with new, energy-efficient windows.
- Clean or replace furnace and air-conditioner filters regularly.
- When buying new appliances be sure to purchase energy-efficient models.
- Wrap the water heater with an insulation jacket, available at most building supply retailers.
- If you have to wash clothes, wash only full loads and clean the dryer’s lint trap after each use.
- When using a dishwasher, wash full loads and use the “light” cycle. If possible, use the “rinse only” cycle and turn off the “high temperature” rinse option. When the regular wash cycle is done, just open the dishwasher door to allow the dishes to air dry.
- Replace incandescent light bulbs with energy-efficient compact fluorescent lights.
- Use one large light bulb rather than several smaller ones.

**Water Treatment:**
In addition to having a bad odor, and taste, water from questionable sources may be contaminated by a variety of microorganisms, including bacteria and parasites that cause diseases such as dysentery, cholera, typhoid, and hepatitis. All water of uncertain purity should be treated before use.

To treat water, follow these steps:
1. Filter the water using a piece of cloth or coffee filter to remove solid particles.
After the Hurricane

2. Bring it to a rolling boil for about one full minute.
3. Let it cool at least 30 minutes. Water must be cool or the chlorine treatment described below will be useless.
4. Add 16 drop of liquid chlorine bleach per gallon of water, or 8 drops per 2-liter bottle of water. Stir to mix. Sodium hypochlorite of the concentration of 5.25% to 6% should be the only active ingredient in the bleach. There should not be any added soap or fragrances. A major bleach manufacturer has also added Sodium Hydroxide as an active ingredient, which they state does not pose a health risk for water treatment.
5. Let stand 30 minutes.
6. If it smells of chlorine. You can use it. If it does not smell of chlorine, add 16 more drop of chlorine bleach per gallon of water (or 8 drops per 2-liter bottle of water), let stand 30 minutes, and smell it again. If it smells of chlorine, you can use it. If it does not smell of chlorine, discard it and find another source of water.

For additional information visit:
http://www.redcross.org/services/disaster/0,1082,0_563_,00.html

Food Safety:
Sudden power outages can be frustrating and troublesome, especially when they are prolonged. Perishable foods should not be held above 40 degrees for more than 2 hours. If a power outage is 2 hours or less, you need not be concerned, but how do you save your food when the refrigerator is out for longer periods of time? Being prepared can help. By planning ahead, you can save your perishables.

What do I need?
- One or more coolers. Inexpensive Styrofoam coolers can do an excellent job as well.
- Shelf-stable foods, such as canned goods and powdered or boxed milk. These can be eaten cold or heated on the grill.
- A digital quick-response thermometer. A digital thermometer should be a necessity in your kitchen anyway. With these thermometers you can quickly check the internal temperatures of food for doneness and safety.

What to do:
- Do not open the refrigerator or freezer. Tell your little ones not to open the door. An unopened refrigerator will keep foods cold enough for a couple of hours at least. A freezer that is half full will hold for up to 24 hours and a full freezer for 48 hours.
- If it looks like the power outage will last for more than 2-4 hours, pack refrigerated milk, dairy products, meats, fish, poultry, eggs, gravy, stuffing and left-overs into your cooler surrounded by ice.
- If it looks like the power outage will be prolonged, prepare a cooler with ice for your freezer items.
After the Hurricane

Q’s and A’s:

What should be discarded after a power outage?  As soon as the power returns, check temperatures.  If the food in the freezer has ice crystals and is not above 40 degrees you can refreeze.  Perishable foods in the refrigerator should not be above 40 degrees F for more than two hours.  Use the chart below to see what has to be discarded and what can be kept.

What if I go to bed and the power is still not on?  Before you go to bed, pack your perishables into your coolers if you haven’t already done so and put in as much ice as you can.  Also, when you go to bed, leave a bedroom light switched on.  When the power goes back on, it will wake you, so you can check the condition of your foods in the freezer.

What if the power goes out while I’m at work or out of the house and it has been more than a few hours before I get home?  Try to determine how long the power has been out.  Check the internal temperature of the food in your refrigerator with your quick-response thermometer.  A liquid such as milk or juice is easy to check.  Spot check other items like steaks or left-overs also.  If the internal temperature is above 40 degrees, it is best to throw it out.

What if the power goes out and comes back on while I am out?  If your freezer is fairly full and you know the power was off not longer than 24 hours, the food should be OK.  There will be loss of quality with refreezing, but the food will be safe.  If the refrigerator was out for more than 2-4 hours, you are best to discard the perishables.

<table>
<thead>
<tr>
<th>Meat and Mixed Dishes:</th>
<th>Still Contains Ice Crystals. Not Above 40° F</th>
<th>Thawed, Held Above 40° F For Over 2 Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beef, veal, lamb, pork, poultry, ground meat and poultry</td>
<td>Refreeze</td>
<td>Discard</td>
</tr>
<tr>
<td>Casseroles with meat, pasta, rice, egg or cheese base, stews, soups, convenience foods, pizza</td>
<td>Refreeze</td>
<td>Discard</td>
</tr>
<tr>
<td>Fish, shellfish, breaded seafood products</td>
<td>Refreeze</td>
<td>Discard</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dairy:</th>
<th>Still Contains Ice Crystals. Not Above 40° F</th>
<th>Thawed, Held Above 40° F For Over 2 Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milk</td>
<td>Refreeze</td>
<td>Discard</td>
</tr>
<tr>
<td>Eggs (out of shell) egg products</td>
<td>Refreeze</td>
<td>Discard</td>
</tr>
<tr>
<td>Ice cream, frozen yogurt</td>
<td>Discard</td>
<td>Discard</td>
</tr>
<tr>
<td>Cheese (soft and semi soft) cream cheese ricotta</td>
<td>Refreeze</td>
<td>Discard</td>
</tr>
<tr>
<td>Hard cheese (cheddar Swiss parmesan)</td>
<td>Refreeze</td>
<td>Refreeze</td>
</tr>
</tbody>
</table>
### After the Hurricane

<table>
<thead>
<tr>
<th>Fruits and Vegetables:</th>
<th>Still Contains Ice Crystals. Not Above 40° F</th>
<th>Thawed, Held Above 40° F For Over 2 Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fruit Juices</td>
<td>Refreeze</td>
<td>Refreeze. Discard if mold, yeasty smell or sliminess develops.</td>
</tr>
<tr>
<td>Home or commercially packaged fruit</td>
<td>Refreeze</td>
<td>Refreeze. Discard if mold, yeasty smell or sliminess develops.</td>
</tr>
<tr>
<td>Vegetable Juices</td>
<td>Refreeze</td>
<td>Discard if above 50° for over 8 hours.</td>
</tr>
<tr>
<td>Home or commercially packaged or blanched vegetables</td>
<td>Refreeze</td>
<td>Discard if above 50° for over 8 hours.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Baked Goods Baking Ingredients:</th>
<th>Still Contains Ice Crystals. Not Above 40° F</th>
<th>Thawed, Held Above 40° F For Over 2 Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fruit Juices</td>
<td>Refreeze</td>
<td>Refreeze</td>
</tr>
<tr>
<td>Flour, cornmeal, nuts</td>
<td>Refreeze</td>
<td>Refreeze</td>
</tr>
<tr>
<td>Pie Crusts, Breads, rolls, muffins, cakes (no custard fillings)</td>
<td>Refreeze</td>
<td>Discard if above 50° for over 8 hours.</td>
</tr>
<tr>
<td>Cakes, pies, pastries with custard or cheese filling, cheesecake</td>
<td>Refreeze</td>
<td>Discard if above 50° for over 8 hours.</td>
</tr>
</tbody>
</table>