

# Hurricane Katrina / 28 & 29 August 2005

## Lessons Learned / Lessons Reinforced & Revisited

### That Can Be Applied To Most Emergencies

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## 1. Long Before The Event

A. Prepare a complete checklist of items to be accomplished prior to your departure from home.

B. Have a “72 hour kit” following the Church’s guidelines, paying particular attention to:

- Having on hand several filled containers of water, large enough for a 3-5 day supply of water (a minimum of five gallons for each person - 55 gallon drums or 5 gallon cans).

**Water, Water, Water - the Rhyme of the Ancient Mariner “Water, Water everywhere and nary a drop to drink, water, water everywhere and how the boards did shrink.....”** Remember among other things, no water = no flushing toilets.

- A 3-5 day supply of non-perishable food, preferably something like MRE’s.
- A first aid kit that you know how to use complete with a manual.
- **Back-up Battery Power or generator / You can never have too much Power - 3 weeks after Katrina there were still 250,000 + without power on the Gulf Coast.**
  - Electric Can Openers - nice to have during a normal times, however a manual is a must.
  - Sump Pumps - if you depend on your sump pump to keep your basement dry then you will need back up power - depending on where you live, critical.
  - Garage Door Openers - a convenience, till you can’t open the door because you haven’t practiced.
  - Portable TV, radios, lights, laptops, always have power to spare / flashlights.
- Dedicated sleeping bags or extra blankets - dedicated to your 72 hour preparedness.
- Prescription medicines and special medical needs. **Can you survive without your medications?** Do you need a 7 days, 14 day or 30 day supply on hand?
- Baby food and/or prepared formula, diapers, and other baby supplies and disposable cleaning cloths, such as “baby wipes” for the whole family to use in case bathing facilities are not available.
- **Rotate seasonal clothing in your 72 hour kit each General Conference week-end.**
- Personal hygiene supplies, such as soap, toothpaste, sanitary napkins, etc - make sure they are dedicated to the 72 hour kit.

- As appropriate, an emergency kit for your car with water, food, flares, booster cables, maps, tools, a first aid kit, fire extinguisher, sleeping bags, etc.
  - **Have money on hand** - plan on the ATM's being unavailable - maybe for an extended period of time - as well as credit card machines & gas card both at the pump and the gas station. Your bank may also be unavailable if their computers are down. Have your cash in small bills - nothing larger than \$5.00 - many gas stations and convince store will not make change.
  - **Have a weather radio** - know how to use it - practice using it - be able to listen to the watches / warnings / alerts from the National Weather Service.
  - **Have an anniversary, birthday or General Conference for an annual changing of all your batteries - discard them or give them to your children to use - DO THIS ANNUALLY AT A MINIMUM EVEN IF THEY REGISTER AS A FULL CHARGE !!!!**
  - Quarterly back-up you most important computer files on to a jump/flash drive that you keep in your 72 hour kit.
- C. Learn about your community's emergency plans, warning signals, evacuation routes, and locations of emergency shelters / a good FHE activity.
- Know your back roads / remember the 2004 & 2005 New Orleans / Houston evacuation debacle.
  - Practice an escape strategy / a good FHE activity.
  - Practice eating what you are carrying in your 72 hour kit / a good FHE activity
- D. Identify potential home hazards and know how to secure or protect yourself before the event. Be prepared to turn off electrical power when there is standing water or fallen power lines. Know how to turn off electricity, gas and water supplies **before** you evacuate. Be prepared to secure structurally unstable building materials, patio furniture and other potential projectiles.
- E. Buy a fire extinguisher and make sure your family knows where to find it and how to use it. Check it annually to make sure it is charged.
- F. **Have a complete, current written and photographic inventory of all your belongings to include serial numbers both at your house & outside the area** - have electronic backups for all your important papers - have duplicate copies outside the area for your insurance policies, wills, licenses, stocks, business records, shot records, school records, CD's with digital photos, copies of irreplaceable photographs, journals etc.
- G. Take important family heirlooms that are easily transportable.
- H. Keep all your **personal and family immunizations** current.

- I. Conduct an annual review of all your insurance policies.
- J. Post emergency phone numbers at every phone and carry a copy in your 72 hour kit and vehicle. See 5.C. below.
- K. Inform your Priesthood leaders and local authorities about any special needs, i.e., elderly or bedridden, or anyone with disabilities.
- L. **Don't wait till the storm is announced - buy ahead of time - remember the generator dilemma!!** When the storm arrives, if you don't have it, don't plan on buying it!! Shelves become bare very quickly and price gouging is a reality - have plywood and duct tape on hand before the event.
- M. Have chains and padlocks to chain down generators and other valuables - do NOT use the generator in the garage under any circumstances!! Use only in open, ventilated areas. Exercise **extreme caution** when refueling the generator.
- N. Determine ahead of time what you are going to do with livestock and family pets. Due to food and sanitation requirements, many emergency shelters will not accept animals.
- O. **Pack plenty of Patience, Patience, Patience!!**
- P. **At least annually on a birthday, anniversary or General Conference week-end review your emergency plans and supplies, checking to see if any items are missing or need to be updated or replaced paying particular attention to expiration dates on medicines.**
- Q. **Always, Always, Always, World's Without End, Maintain Your Automobile's Gas Tank At Half A Tank Or Better, Always. Practice mental emergency preparedness.**

## **2. Preparing to Evacuate**

- A. Review your checklist and complete all action items.
- B. **Expect the need to evacuate and be prepared for it, both mentally, emotionally and temporally - each time you leave your house, for trips across town or across the country, say "good bye," that way if the real event occurs it will not be as traumatic.**
- C. Secure any items outside which may damage property in a storm, such as bicycles, grills, propane tanks, patio furniture and other potential projectiles, etc.

- D. **Weather radio - heed the Warnings from the National Weather Service** - and listen to the local radio or television for weather updates - if possible listen to multiple sources.
- E. Listen for disaster sirens and warning signals.
- F. If possible, for weather related events cover windows and doors with plywood or boards or place large strips of masking tape or adhesive tape on the windows to reduce the risk of breakage and flying glass.
- G. Livestock - put them in a safe area. Family pets take them at your own risk or put them in a safe area. Again, due to food and sanitation requirements, most emergency shelters will not accept animals.
- H. Place vehicles not used in the evacuation under cover, if at all possible. Weakest part of the house? Usually the garage door is the weakest part of a house!! Park up close to the door from the inside for more strength.
- I. Fill sinks, bathtubs even the washing machine with water as an extra supply for water.
- J. If appropriate, adjust the thermostat on refrigerators and freezers to the coolest possible temperature.
- K. Do **NOT** take a weapon of any kind unless you are mentally and physically prepared to use it - there is a reason police departments conduct quarterly re-qualification with weapons!!

### **3. If You are Ordered to Evacuate**

- A. Review your checklist one more time!!
- B. Because of the destructive power of nature or the threat of danger, you should never ignore an evacuation order. If you are ordered to evacuate the area:
- Take only essential items with you - double check your checklist.
  - If possible take a cooler full of water and ice
  - If you don't take them, leave pets indoors in a safe, covered area with **ample** food and water.
  - When appropriate, turn off the electricity, gas, and water.
  - Make sure your automobile's emergency kit is in the car.
  - Follow the designated evacuation routes - others may be blocked - and expect very heavy traffic even gridlock / follow your own evacuation routes only if you know for sure they are passable.

- C. Shelter Living - be prepared for filthy, unsanitary conditions. Be prepared for close quarters. Be prepared for short tempers. Be prepared for uncomfortable confrontations. Be prepared for minimal food and water. Do not take anything you can not afford to lose!! Most shelters do not allow pets - don't be surprised when they say no to yours.

#### **4. If You Are Ordered NOT to Evacuate**

- A. The great majority of injuries during a natural event are cuts caused by flying glass or other debris. Other injuries include puncture wounds resulting from exposed nails, metal, or glass, and bone fractures - be extra cautious, medical help may not be available.
- B. Do not go outside, even if the weather appears to have calmed!! Stay indoors until the authorities declare the storm / event over.
- C. Stay away from all windows and exterior doors, seek shelter in the basement or a bathroom. Bathtubs can provide some shelter only if you cover yourself with plywood or other materials.
- D. Be prepared at a moments notice to evacuate to a shelter or to a neighbor's home if your home is damaged, or if you are instructed to do so by emergency personnel.

#### **5. After The Event**

- A. **Plan to be on your own for at least 72 hours - plan on being your own doctor, dentist, search and rescue team, etc.**
- Remember, there will be nothing fresh on the shelves, nothing requiring refrigeration will be available for upwards of 72 hours at a minimum and more than likely for much, much longer.
  - **Follow good food safety practices** - see the "Virginia Beach Cooperative Extension Service" listing for more details - page 7
  - How will you cook & boil water? If it goes a week how will you cook & boil water? Two weeks?
  - Be prepared to practice basic hygiene principles including:
    - Always washing your hands with soap and water that has been boiled or disinfected:
      - before preparing or eating
      - after toilet use
      - after participating in cleanup activities; and
      - after handling articles contaminated with floodwater which will contain sewage.

- B. **Be very, very cautious of wild or stray animals. They may be disoriented and dangerous. Even neighbors pets can be a serious potential problem. Instill this in your children who might be outside playing!!** Trying to confine the animal puts you at risk of being bitten. If possible, call the animal control agency in your county. Do NOT put yourself in harms way even for your own or neighbors pets!!
- C. **Keep in touch with your family - many times you can make long distance calls when you cannot make local calls - use your imagination - land lines, cell phones, satellite phones, payphones, faxes, e-mails, text messaging, alpha-numeric pagers, two-way pagers, Amateur Radio, military personnel, police officers, DEA agents, OnStar, someone leaving the area - send multiple messages - get the message thru using multiple creative resources!!** Keep sending messages!! Hope for, but don't plan on a response. Have multiple cell phones with different area codes.
- No power = no cordless phones / speaker phones / answer machine phones / anything with a wall wart, but if you have an old phone that does not require wall power you may still have phone service!! **Have at least one "old style" phone on hand!!**
- D. Mosquitoes - Rain and flooding may lead to an increase in mosquitoes. Mosquitoes are most active at sunrise and sunset. In most cases, the mosquitoes will be pests but will not carry communicable diseases. It is unlikely that diseases which were not present in the area prior to the event would be of concern. To protect yourself from mosquitoes, use screens on dwellings, wear clothes with long sleeves and long pants and use insect repellents that contain DEET .
- E. **Wear Protective Gear - For most work wear hard hats, goggles, heavy work gloves, and boots with steel toe and insole** (not just steel shank) to protect from nails which will be everywhere. Wear earplugs or protective hearing devices to reduce risk from equipment noise. Equipment such as chain saws and backhoes may cause ringing in the ears and subsequent hearing damage.
- F. Review and update your checklist based on the experience.

## **6. Emergency Preparedness**

- A. **How much gas is there in your car's gas tank?**
- B. **How much gas is there in your "mental preparedness" tank?**

# Food Safety & Heat Prevention Tips

## A. Food Safety

- The "**golden rule**" of food safety is, "**If you have any doubt, throw it out.**" Food-safety guidelines from the Virginia Beach Cooperative Extension Service:
  - **From the freezer:** Without power, a full freezer will keep foods frozen for about two days. A half-full freezer will keep food frozen for about one day. You can make the food last as long as possible by keeping the freezer door shut. When power returns, you can refreeze foods that still contain ice crystals.
  - **From the refrigerator:** The refrigerator will stay cool for four to six hours without power, depending on the temperature in your kitchen.
  - **Discard the following items** if they are kept for more two hours at above 40 degrees: raw or cooked meat, poultry or seafood, lunch meats, milk, cream, yogurt, custard, soft cheese, eggs, egg substitutes, cooked pasta, salads, stews, soups, casseroles, mayonnaise, tartar sauce, refrigerator cookie dough, cream-filled pastries, chiffon or cheese pies, meat-topped pizza.
  - **At room temperature:** Throw out anything that turns moldy or has an unusual odor or appearance. Otherwise, **these foods will keep at room temperature** for a few days: butter, margarine, fresh fruits, vegetables, dried fruits, opened peanut butter, jelly, relish, taco sauce, barbecue sauce, mustard, ketchup, olives, pickles, hard and processed cheeses, fruit juices, fruit pies, bread, rolls, cakes and muffins.

## B. Heat Prevention Tips:

- Drink plenty of nonalcoholic fluids (both in winter and summer), regardless of your activity level. Don't wait until you're thirsty to drink.
- Don't drink liquids that contain caffeine, alcohol, or large amounts of sugar - these actually cause you to lose more body fluid. Also, avoid very cold drinks, because they can cause stomach cramps.
- Stay indoors and, if at all possible, stay in an temperature controlled place. If your home does not have air conditioning, go to the shopping mall or public library - even a few hours spent in air conditioning can help your body stay cooler when you go back into the heat. Call your local health department to see if there are any heat-relief shelters in your area.
- Electric fans may provide comfort, but when the temperature is in the high 90s, fans will not prevent heat-related illness. Taking a cool shower or bath, or moving to an air-conditioned place is a much better way to cool off.
- Wear lightweight, light-colored, loose-fitting clothing.
- NEVER leave any living thing in a closed, parked vehicle.
- Although any one at any time can suffer from heat-related illness, some people are at greater risk than others. Check regularly on:

- Infants and young children
- People aged 65 or older
- People who have a mental illness
- Those who are physically ill, especially with heart disease or high blood pressure
- Visit adults at risk at least twice a day and closely watch them for signs of heat exhaustion or heat stroke. Infants and young children, of course, need much more frequent watching.
- Limit your outdoor activity to morning and evening hours.
- Cut down on exercise. If you must exercise, drink two to four glasses of cool, nonalcoholic fluids each hour. A sports beverage can replace the salt and minerals you lose in sweat. Warning: If you are on a low-salt diet, talk with your doctor before drinking a sports beverage.
- Try to rest often in shady areas.
- Protect yourself from the sun by wearing a wide-brimmed hat (also keeps you cooler) and sunglasses and by putting on sunscreen of SPF 15 or higher (the most effective products say “broad spectrum” or “UVA/UVB protection” on their labels).