best to use bottled water from approved sources, if possible.

If you have a well, it may be contaminated. Do not use water from the well until it has been tested. For information on how to have your water tested or how to disinfect your well, contact DHEC's Bureau of Water at 1-888-761-5989. If you have access to the Internet, go to <a href="http://www.scdhec.gov/administration/library/CR-003247.pdf">http://www.scdhec.gov/administration/library/CR-003247.pdf</a>

#### Food

Other than canned foods, which can be cleaned and sanitized, most foods exposed to floodwater will be unsafe to eat. If the food has been under floodwater or floodwater has seeped into a container of food, consider it unsafe. All foods or liquids in paper, cloth, fiber or cardboard containers should be thrown away.

Power outages can cause many food-related problems. Frozen and refrigerated foods can be contaminated with bacteria that thrive when temperatures rise into the "danger zone," between 45 and 130 degrees Fahrenheit. You can get very sick if you eat refrigerated or frozen foods stored at these temperatures. Do not taste food to check for safety. Bacteria may not be detectable by taste, smell or sight.

Keep your freezer door shut as much as possible. Foods can stay frozen one to three days. Frozen foods that have thawed completely and are at 45 degrees Fahrenheit or greater for more than two hours should be discarded. Partially thawed frozen foods that have ice crystals on them can be refrozen.

#### **Infant Formula**

If using canned milk to feed a baby, open a fresh can for each bottle. Mix concentrate and powdered formula with safe, preferably bottled, water only. Also, wash baby bottles with safe, clean water. When clean, safe water is not available, use ready-to-feed liquid formula. If your infant has diarrhea, seek medical attention immediately.

# Cleaning Up After a Storm

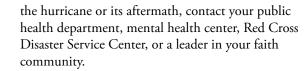
Few things are worse than damage to your home from a hurricane or flood. But you can get hurt trying to clean up in a hurry. Be careful. Before you begin, make a quick assessment and a list of damaged items and structures. Although some damaged materials will have to be discarded at a landfill, other materials may be suitable for recycling.

Find out what clean-up and recycling services are being provided in your community. For instance, some communities offer a special pickup to dispose of hazardous materials such as damaged containers of paint and solvents. Information on local services will be publicized in newspapers, on television and radio, and through fliers. Contact your county or city manager, recycling coordinator, public works or solid waste director or emergency response personnel. They will advise you on cleaning up quickly, safely and properly.

If you have to buy special cleaning products, buy only what you need and use the products as directed. You can also call DHEC's Office of Solid Waste Reduction and Recycling at 1-800-768-7348 to find out the names of local solid waste and recycling contacts.

# **Emotional Recovery**

The aftermath of a hurricane can prove tremendously stressful. You may wonder if you could have done anything differently to protect your possessions. You may have recurring thoughts, dreams, or nightmares about the storm or flooding. You might feel disconnected or numb, angry, hopeless or overwhelmed. You may also act overprotective of yourself or your family. You might have trouble sleeping and be irritable. If you or someone you know needs help coping with



# Helping your Children

It's important that parents and family members help children cope with storm-related stress. Keep your family together whenever possible, and simply explain what has happened and what you think will happen. Remain calm, and re-establish routines as much as possible. Encourage children to talk, ask questions, and describe their feelings. Include children in safe cleanup activities. Allow them to grieve over lost toys and other possessions.

## **Helping Yourself**

Take one day at a time. Take time to get organized and make "things to do" lists. Decide which tasks are most important and do those first. Check off tasks as you complete them. Eat a healthy, balanced diet, and avoid alcohol and caffeine. Give yourself permission to be sad about what you have lost. Keep a journal describing your experiences and feelings. Maintain your spirituality, and reach out to help a neighbor. Ask for help if you need it.

For more information please contact your local county public health department. You may also contact DHEC's Emergency Management Office at (803) 898-3709 or (803) 898-3734.



A Guide for
Shelter Residents
Staying Safe After the Storm







Recovering from a hurricane is difficult for everyone involved. In the aftermath, people are sometimes overwhelmed with fears about health and safety. The S.C. Department of Health and Environmental Control (DHEC) created this pamphlet to help you through the recovery process. The brochure outlines possible health and safety threats and tells you how you can protect yourself and your family.

# **Disease Prevention**

Long after the wind stops blowing, health risks associated with hurricanes remain high. Many hurricane-related deaths due to drowning, injury, fire and electrocution occur in the days following the actual storm. Post-hurricane deaths and illnesses from carbon monoxide poisoning occur because people mistakenly use gas-powered generators inside their homes or use gas ovens as a heating source. Depending on the temperature, heat exhaustion and hypothermia kill and sicken people in extended power outages. Hospitals frequently report a surge in dog bites after storms. This happens largely because irresponsible people leave their pets behind in an evacuation, and the traumatized, lost, hungry, and sometimes injured animals grow uncharacteristically aggressive, Finally, communicable diseases can threaten health in the aftermath of a hurricane. Flood-tainted food and water supplies, crowded shelters, overburdened sewage systems, and increases in the mosquito population contribute to the spread of various illnesses. Diseases sometimes seen after hurricanes include:

## **Encephalitis**

Encephalitis is a disease people can get after being bitten by a mosquito that carries the virus. Symptoms may include headache, high fever, neck stiffness, confusion and convulsions. Encephalitis caused by mosquitoes is rare in South Carolina. The best way to avoid the disease is to avoid mosquito bites. To keep mosquitoes from breeding near your home, empty old tires, pots or containers of standing water. Wear light colored long sleeve shirts and long pants and use mosquito repellent according to package directions.

#### Gastrointestinal Illnesses

Water contaminated with sewage can expose people to germs that cause various gastrointestinal (stomach) illnesses. The best way to keep from getting these illnesses is to WASH HANDS OFTEN with clean, treated water and soap for at least 10 seconds. If you don't have soap and water, you can use hand cleansing gel containing ethyl alcohol or antiseptic wipes. Try not to put your hands around your face if you have touched anything that may be contaminated.

### Always wash your hands:

- Before preparing or eating food;
- After toilet use;
- After participating in flood cleanup activities; and
- After handling articles contaminated with floodwater or sewage.

Do not allow children to play in areas possibly contaminated by floodwater or play with floodwater-exposed toys that have not been disinfected. Make sure children wash their hands often.

## Hepatitis A

The flooding of sewage treatment facilities and septic tanks can expose people to Hepatitis A. Symptoms include jaundice, fatigue, abdominal pain, loss of appetite, nausea, diarrhea and fever. The Centers for Disease Control (CDC) and DHEC do not recommend that people exposed to sewage-contaminated floodwaters get a Hepatitis A vaccine. Rather, they urge people to follow official guidelines for protecting food and drinking water and maintaining proper hygiene and sanitation during and after floods. (See below.) Such preventive

measures offer the best protection from all food and waterborne diseases.

#### **Tetanus**

People who help clean up debris after a flood may sustain injuries that put them at risk for tetanus infections if their tetanus vaccinations are not up to date. Early symptoms can include lockjaw, stiffness in the neck and abdomen, and difficulty swallowing. The bacteria that causes tetanus is present in many environmental sources. Any new wound or old sore, even if it is minor, can result in a tetanus infection in unprotected individuals. While most children are protected thanks to childhood vaccinations, most adults are not. About 95 percent of tetanus cases reported in recent years occurred among adults over 20. Everyone should have a tetanus booster every 10 years. If you need a tetanus shot, you can go to the nearest public health department.

#### Rabies

Nearly always fatal if not treated, the rabies virus can be spread to humans through wounds inflicted by animals. Often disoriented, traumatized and hungry after a hurricane, wild or stray domestic animals can bite or scratch when cornered. If you see a wild animal or an injured domestic animal, don't panic, and don't allow anyone to hurt or kill the animal even if there is a rabies outbreak in your area. Instead, merely remain a safe distance from the animal. Be especially cautious around raccoons, foxes, skunks and bats. Often, rabid wild animals wander around in daylight and seem tame. Don't go near them, even when they seem friendly. If you are bitten or scratched by an animal, wash the wound with soap and water, see a doctor immediately, and report the incident to your local animal control office.

# Cleaning After Flooding Reduces Risk of Disease

One of the best ways to prevent the spread of disease following a hurricane and flooding is to properly wash and sanitize household items.

- Wash items in a strong detergent solution.
- To sanitize items, soak them in a chlorine

- solution (1 tablespoon of plain household bleach for every 1 gallon of water) for 15 minutes.
- Rinse with clean, safe water.
- Let items air dry.

Walls, hard-surfaced floors and many other household surfaces should be cleaned with soap and water and disinfected with a solution of 1 cup bleach to 5 gallons water. Be particularly careful with surfaces that may come in contact with food and areas where children play. Wash all clothing and linens in hot water or dry clean them. Either discard or steam clean all carpet and upholstery. Discard flood-damaged mattresses. Discard porous household items that cannot be disinfected such as bottle nipples, pacifiers, wooden bowls, plastic storage containers and plastic ware.

# Food and Water Safety

Flooding after a hurricane can cause many problems. Water, food and utensils can be contaminated with bacteria, sewage and chemical wastes. People can get very sick if they drink contaminated water or eat foods exposed to contaminated water. To reduce the risk of contamination, the following tips are provided.

#### Water

All water sources should be considered unsafe until tested or until public health authorities issue an "all clear." Until then, water used for drinking, cooking, brushing teeth, washing dishes, or production should be treated.

Water can be treated to reduce biological contamination by boiling. To treat water, pour it into a clean pot. Bring the water to a full boil, and continue boiling for at least two minutes. Keep the water covered while boiling. Water suspected of chemical contamination should not be used. It's

