

Disaster Preparedness Handbook 2007

An emergency planning and response guide

Personal Preparedness

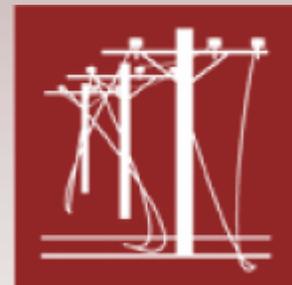
Prevention

Terrorism

In the Community

In the Home

Weather and Nature



This publication prepared jointly by

Houston Department Health and Human Services



Harris County
HCPHES
Public Health & Environmental Services



June 22, 2006

As part of our commitment to preparedness, the City of Houston Department of Health and Human Services (HDHHS) and Harris County Public Health and Environmental Services (HCPHES) have developed this disaster handbook. We recognize that while public health prepares for threats, ultimate preparedness must begin with personal preparedness. That is what this handbook aims to facilitate.

This handbook provides advice and guidance on planning that covers the spectrum from natural to man-made disasters. In the personal preparedness section, you will find helpful checklists and information specific to the safety of special needs populations.

The goal of this handbook is simple: to provide practical information on how to minimize the effects of a disaster on you and your family.

We encourage you to not only familiarize yourself with this handbook but share it with your friends and family.

If you would like more information or additional copies of this handbook, please see our websites:

www.houstonhealth.org/OSPHP

www.harriscountyhealth.com

Sincerely,


Stephen L. Williams, M.Ed., M.P.A.
Director
HDHHS

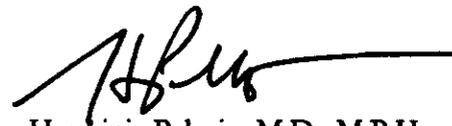

Herminia Palacio, M.D., M.P.H.
Executive Director
HCPHES

TABLE OF CONTENTS

Personal Preparedness

How to Use 9-1-1 , 3-1-1, 2-1-1	3
Preparing Your Household for Emergencies	4
Checklist of Emergency Supplies	5
Visual Disabilities	6
Hearing Impaired	7
Medical Needs	8
Mobility Disabilities	9
Pet Disaster Supply Kit	10
Helping Children After a Disaster	11
Accidental Poisoning	12

Prevention

Preventing the Spread of Germs	13
Cover Your Cough	14
Hand Washing	15

Terrorism

About Terrorism	16
Shelter-In-Place	17
Bomb Threats and Bomb Threat Checklist	18
Chemical Agents	19
Radioactive Materials	20

In the Home

Household Fires	21
Purifying Household Water	22
Power Outages	23
Securing Your Water Heater	24
Turning Off Utilities	25
Using a Generator During Power Outages	26

Weather and Nature

Hurricanes	27-29
Tornadoes	30
Floods	31
Hot Weather Precautions	32
West Nile Virus	33
Helpful Telephone Numbers	34
Informative Websites	35
Family Communication Plan	36-37



How to Use 9-1-1, 3-1-1, and 2-1-1

Call 9-1-1 only to report a life-threatening situation requiring police, medical or fire emergency assistance. Do not call 9-1-1 unnecessarily. 3-1-1 and 2-1-1 lines can be used to access non-emergency information.

When to call 9-1-1

- To get help for someone who is hurt.
- If you see someone hurt in an accident.
- If you see someone acting suspiciously, stealing, or breaking into a home or building.
- If you smell smoke or see a fire.
- If you see people fighting and hurting each other.
- If you see someone being robbed or beaten.
- If you believe emergency assistance may be needed but are not sure, call 9-1-1 and describe the situation.
- If you call 9-1-1 by accident, don't hang up. Explain what happened to the 9-1-1 call-taker.

When Not to call 9-1-1

- Never call 9-1-1 as a joke.
- Never call 9-1-1 to ask for information.
- Never call just to see if 9-1-1 is working.

What to say when you call 9-1-1

- Tell the person what is wrong.
- Tell the person your name, address and telephone number.
- Stay on the line until the operator tells you to hang up; they may have to ask you more questions.

Teach your children the correct use of 9-1-1

- Parents should use the information on this sheet to talk to children about how and when to use 9-1-1. Knowing the right thing to do can save lives.

Keep phone lines clear during emergencies

- During emergencies, telephone services become overloaded. You can help keep service available for those who need it most by making only calls that are critical. Also, limit fax machine, email, Internet and computer use as well; their use ties up phone lines.

Who do you call when you don't know who to call?

- The **3-1-1** Houston Service Center is a consolidated call center that provides citizens of Houston with one easy-to-remember telephone Number for quick, reliable access to city services, 7 days a week, from 6 AM to 12 Midnight.
- From outside the City of Houston, you must call **(713) 837-0311**.
- At **United Way's 2-1-1 HELPLINE**, there is someone at the other end of the line 24-hours a day, seven days a week, every day of the year. Whatever the need, trained call specialists have thousands of recourses at their fingertips. They are prepared to provide information and referrals to meet callers' needs.
 - Call the 2-1-1 number to register if you have special circumstances and need transportation during an evacuation.



Preparing Your Household for Emergencies

After a disaster, you and your family should be prepared to be on your own for at least seven days. Emergency response teams will be very busy and may not be able to provide immediate care to all who need it.

Before disaster strikes locally and distant

- Choose a place for your family to meet after a disaster.
- Choose a person outside the immediate area for family members to contact in case you get separated. This person should live far enough away so he or she won't be involved in the same emergency.
- Know how to contact your children at their school or daycare and how to pick them up after a disaster. Let the school know if someone else is authorized to pick them up. Keep your child's emergency release card up to date.
- Put together an emergency supply kit for your home and workplace. If your child's school or daycare stores personal emergency kits, make one for your child to keep there.
- Know where the nearest fire and police stations are.
- Learn first aid and CPR. Gather a first aid kit, a first aid manual and extra medicine for family members.
- Learn how to shut off your water, gas and electricity. Know where to find shut-off valves and switches.
- Keep a seven-day supply of cash. If the Power is out, ATM machines won't work.
- If you have family members who don't speak English, prepare emergency cards in English with their names, addresses and information about medications or allergies. Make sure they can find their cards at all times.
- Conduct hurricane and fire drills every six months.
- Make copies of your vital records and store them in a safe deposit box in another city or state. Store the originals safely. Keep photos and videotapes of your home and valuables in your safe deposit box.
- Make sure family members know all the possible ways to get out of your home. Keep all exits clear.
- Make sure all family members agree on an emergency plan. Give emergency information to babysitters or other caregivers.

During an emergency or disaster

- Keep calm and take time to think. Give assistance where needed.
- Listen to your radio or television for official information and instructions.
- Use the telephone for emergency calls only.
- If you are ordered to evacuate, take your emergency kit and follow official directions to a safe place or temporary shelter.

After the emergency or disaster is over

- Use caution in entering damaged buildings and homes.
- Stay away from damaged electrical wires and wet appliances.
- Check food and water supplies for contamination.
- Notify your relatives that you are safe, but don't tie up phone lines. They may be needed for emergency calls.
- If government disaster assistance is available, the news media will announce where to go to apply.



Checklist of Disaster Emergency Supplies

Government agencies will respond to community disasters, but citizens may be on their own for hours, seven days, after disaster strikes. You should be prepared to take care of yourself and your family for at least seven days.

Emergency survival kit

Store one of these at home, at work and at each child's school or daycare facility.

- Dry or canned food and drinking water for seven days (for each person)
- Manual can opener
- First aid supplies and first aid book
- Place copies of important documents (birth certificates, licenses, insurance policies, etc.) in a waterproof bag.
- "Special needs" items for family members (infant formula, eye glasses, medications, etc.)
- A change of clothing per person
- Sleeping bag or blanket per person
- Battery powered radio or television
- Flashlight and extra batteries
- Whistle
- Waterproof matches
- Toys, books, puzzles, games
- Extra house keys and car keys
- List of contact names and phone numbers

Additional items you can store at home for use during an emergency: Cooking supplies

- Barbecue, camp stove, chafing dish
- Fuel for cooking (charcoal, camp stove fuel, etc.)
- Plastic knives, forks, spoons
- Paper plates and cups
- Paper towels
- Heavy-duty aluminum foil

Sanitation Supplies

- Large plastic trash bags for trash and water protection
- Large trash cans
- Bar soap and liquid detergent
- Shampoo
- Toothpaste and toothbrushes
- Feminine and infant supplies
- Toilet paper
- Household bleach with no additives
- Newspaper — to wrap garbage and waste

Comfort

- Sturdy shoes
- Gloves for clearing debris
- Tent

Tools

- Ax, shovel, broom
- Crescent wrench for turning off gas
- Screwdriver, pliers, hammer
- Coil of one-half inch rope
- Plastic tape and sheeting
- Knife or razor blades
- Garden hose for siphoning and fire fighting



Disaster Tips for People with Visual Disabilities

The more you prepare for hurricanes or other disasters the more you will be able to protect yourself, your family and your belongings.

Canes

- If you use a cane, keep extras in strategic, consistent and secured locations at work, home, school, volunteer site, etc., to help you maneuver around obstacles and hazards.
- Keep a spare cane in your emergency kit.

Alternate mobility cues

- If you have some vision, place security lights in each room to light paths of travel. These lights plug into electric wall outlets and light up automatically if there is a loss of power. They will, depending on type, continue to operate automatically for 1 to 6 hours and can be turned off manually and used as a short lasting flashlight.
- Store high-powered flashlights with wide beams and extra batteries.
- Plan for loss of auditory clues you usually rely on after a major disaster.
- Service animals may become confused, panicked, frightened or disoriented during and after a disaster. Keep them confined or securely leashed or harnessed. A leash/harness is an important item for managing a nervous or upset animal. Be prepared to use alternative ways to negotiate your environment.

Label supplies

- If helpful, mark emergency supplies with large print, fluorescent tape or Braille.

Secure computers

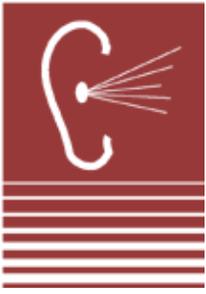
- Anchor special equipment and large pieces of furniture, such as computers and shelving. Create a computer back-up system for important data and store it off site.

Advocacy issues

- Advocate that TV news not only post important phone numbers, but also announce them slowly and repeat them frequently for people who cannot read the screen.

People who can help

- An important part of being prepared for a disaster is planning with family, friends and neighbors and develop a **Buddy System**. Know who could walk to your home to assist you if other means of transportation are unavailable.
- Discuss your disaster plans with your home health care provider.
- Ask your local fire department if they keep a list of people with special medical needs; ask to be included if they do maintain a list.
- Keep a list of people who can help and their phone numbers.



Disaster Tips for the Hearing Impaired

This checklist will assist people who are deaf or hearing impaired in be prepared when disasters strike.

Hearing Aids

- Store hearing aid(s) in a strategic, consistent and secured location so they can be found and used after a disaster. For example, consider storing them in a container by your bedside. Attach the container to a nightstand or bedpost using a string or Velcro. Missing or damaged hearing aids will be difficult to replace or fix immediately after a major disaster.

Batteries

- Store extra batteries for hearing aids and implants. If available, store an extra hearing aid with your emergency supplies.
- Maintain TTY batteries. Consult your manual for information.
- Store extra batteries for your TTY and light phone signaler. Check the owner's manual for proper battery maintenance.

Communication

- Determine how you will communicate with emergency personnel if there is no interpreter or if you don't have your hearing aids. Store paper and pens for this purpose.
- Consider carrying a pre-printed copy of important messages with you, such as: "I speak American Sign Language (ASL) and need an ASL interpreter," "I do not write or read English," and "If you make announcements, I will need to have them written or signed."
- If possible, obtain a battery-operated television that has a decoder chip for access to signed or captioned emergency reports.

- Determine which broadcasting systems will be accessible for news that will be captioned and/or signed.

Alarms

- Install both audible alarms and visual smoke alarms. At least one should be battery operated.

Advocacy

- Recruit interpreters to be Red Cross emergency volunteers.
- Advocate so that television stations have a plan to secure emergency interpreters for on-camera emergency duty.
- Maintain advocacy for TV stations to broadcast all news and emergency information in open caption format.
- When you travel, ensure that hotels have services for deaf and hearing-impaired persons, including audible alarms. Ask for them when you check in.

People who can help

- An important part of being prepared for a disaster is planning with family, friends and neighbors and develop a **Buddy System**. Know who could walk to your home to assist you if other means of transportation are unavailable.
- Discuss your disaster plans with your home health care provider.
- Ask your local fire department if they keep a list of people with special medical needs; ask to be included if they do maintain a list.
- Keep a list of people who can help and their phone numbers.



Disaster Tips for People with Medical Needs

In a disaster, people with special medical needs have extra concerns. This information will help you and your family prepare for a disaster.

Medications

- Always maintain at least a seven-day supply of all your medications.
- Store your medications in one location in their original containers.
- Maintain a list of all of your medications: name of medication, dose, frequency, and the name of the prescribing doctor.

Medical supplies

- Keep an extra seven-day supply of any medical supplies you use, such as bandages, ostomy bags, or syringes.

Electrically powered medical equipment

- For all medical equipment requiring electrical power — beds, breathing equipment, or infusion pumps — check with your medical supply company and get information regarding a back-up power source, such as a battery or generator.

Oxygen and breathing equipment

- If you use oxygen, maintain an emergency supply (enough for at least a seven-day period).
- Oxygen tanks should be securely braced so they do not fall over. Call your medical supply company regarding bracing instructions.
- If you use breathing equipment, keep a seven-day supply or more of tubing, solutions, medications, etc.

Intravenous (IV) and feeding tube equipment

- Know if your infusion pump has battery back-up and how long it would last in an emergency.
- Ask your home care provider about manual infusion techniques in case of a power outage.
- Attach written operating instructions to all equipment.

Emergency bag

- In the event that you have to leave your home, keep a bag packed at all times that contains:
 - A medication list;
 - Medical supplies for at least seven days;
 - Copies of vital medical papers such as insurance cards, power of attorney, etc.

People who can help

- An important part of being prepared for a disaster is planning with family, friends and neighbors and develop a **Buddy System**. Know who could walk to your home to assist you if other means of transportation are unavailable.
- Discuss your disaster plans with your home health care provider.
- Ask your local fire department if they keep a list of people with special medical needs; ask to be included if they do maintain a list.
- Keep a list of people who can help and their phone numbers.



Disaster Tips for People with Mobility Disabilities

The following information will assist people with mobility disabilities and will help make them more confident when disaster strikes.

Storage

- Store emergency supplies in a pack or backpack attached to a walker, wheelchair, scooter, etc.
- Store needed mobility aids (canes, crutches, walkers, wheelchairs) close to you in a consistent, convenient and secured location. Keep extra aids in several locations, if possible.

Emergency supply kit

- Keep a pair of heavy gloves in your supply kit to use while wheeling or making your way over glass or debris.
- If you use a motorized wheelchair or scooter, consider having an extra battery available. A car battery can be substituted for a wheelchair battery, but this type of battery will not last as long as a wheelchair's deep-cycle battery. Check with your vendor to see if you will be able to charge batteries by either connecting jumper cables to a vehicle battery or by connecting batteries to a specific type of converter that plugs into your vehicle's cigarette lighter in the event of loss of electricity.
- If your chair does not have puncture-proof tires, keep a patch kit or can of "seal-in-air product" to repair flat tires, or keep an extra supply of inner tubes.
- Store a lightweight manual wheelchair, if available.
- Arrange and secure furniture and other items to provide paths of travel and barrier-free passages.
- If you spend time above the first floor of a building with an elevator, plan and practice using alternative methods of evacuation. If needed, enlist the help of your personal support network.

- If you cannot use stairs, discuss lifting and carrying techniques that will work for you. There will be instances where wheelchair users will have to leave their chairs behind in order to safely evacuate a structure.
- Sometimes transporting someone down stairs is not a practical solution unless there are at least two strong people to control the chair. Therefore, it is very important to discuss the safest way to transport you if you need to be carried, and alert them to any areas of vulnerability. For example, the traditional "fire fighter's carry" may be hazardous for some people with respiratory weakness.

People who can help

- An important part of being prepared for a disaster is planning with family, friends and neighbors and develop a **Buddy System**. Know who could walk to your home to assist you if other means of transportation are unavailable.
- Discuss your disaster plans with your home health care provider.
- Ask your local fire department if they keep a list of people with special medical needs; ask to be included if they do maintain a list.
- Keep a list of people who can help and their phone numbers.



Pet Disaster Supply Kit

In the event of a disaster, if you must evacuate, then the most effective thing you can do to protect your pets is to evacuate them, too. Attach an identification tag to each pet. Identify locations to take your pets. Consider boarding facilities, veterinarians, or animal shelters in the direction of your evacuation.

Prepare a disaster supply kit for your pet that should include:

- Medications
- First aid kit
- Sturdy leashes and collars/harnesses
- Carriers to transport pets safely
- Current photos
- Food
- Water
- Bowls
- Litter/pan
- A muzzle
- Manual can opener
- Toys

Keep current information on:

- Feeding schedules
- Medical conditions and medical records
- Vaccination records
- Behavior problems
- Name and number of your vet



Helping Children After a Disaster

Remember that some children may never show distress, while others may not give evidence of being upset for several weeks or even months. Other children may not show a change in behavior, but may still need your help.

Children may exhibit the following behaviors after a disaster:

- Be upset over the loss of a favorite toy, blanket, etc., which is important to them.
- Change from being quiet, obedient and caring to loud, noisy and aggressive, or change from being outgoing to shy and afraid.
- Develop night-time fears (nightmares, fear of the dark or sleeping alone).
- Be afraid the event will reoccur.
- Lose trust in adults. After all, their adults were not able to control the disaster.
- Revert to younger behavior (bed wetting, thumb sucking).
- Want to stay close to parents. Refuse to go to school or day care.
- Feel they caused the disaster because of something they said or did.
- Become afraid of wind, rain or sudden loud noises.
- Have symptoms of illness, such as headaches, vomiting or fever.
- Worry about where they and their family will live.

Things parents can do to help their children:

- Stress safety in damaged areas i.e. nails, power wires, snakes, etc.
 - Talk with children about how they are feeling. Assure them that it's OK to have those feelings.
 - Help children learn to use words that express their feelings, such as "happy," "sad," "angry," etc.
- Children should not be expected to be brave or tough. Tell them it's OK to cry.
 - Don't give children more information than they need or can handle about the disaster.
 - Assure fearful children you will be there to care for them; consistently reassure them.
 - Go back to former routines as soon as possible. Maintain a regular schedule for children.
 - Reassure children that the disaster was not their fault.
 - Let children have some control, such as choosing clothing or what meal to have for dinner.
 - Re-establish contact with extended family.
 - Help your children learn to trust adults again by keeping promises you make.
 - Help your children regain faith in the future by making plans.
 - Get needed health care as soon as possible.
 - Spend extra time with children at bedtime.
 - Make sure children eat healthy meals and get enough rest.
 - Allow special privileges for a short period of time, such as leaving the light on when they go to bed.
 - Find ways to emphasize to children that you love them.
 - Allow children time to grieve losses.
 - Develop positive anniversary activities to commemorate the event. These may bring tears, but they are also a time to celebrate survival and the ability to get back to a normal life.
 - For more tips to help children, go to <http://www.ready.gov>



Accidental Poisoning

Poisons can be found in everyday items located in all areas of your home – kitchen, closets, bathrooms, attic, garage, dining room, laundry room, storage areas and basements. To help prevent accidental poisoning, follow these poison prevention tips.

Poison Prevention Tips

- Use child-resistant containers (but remember: child-resistant containers are not completely childproof).
- Keep potentially poisonous products in their original containers (see below for product list).
- Place potentially poisonous products out of reach immediately after use.
- Put poison stickers on all poisonous products in and around your home, and teach children what the stickers mean.
- For more information on poison stickers and other educational materials, visit the **Poison Control Center** at <http://www.poisoncontrol.org/>
- Keep emergency numbers (including the **National Poison Center**) next to your phone.

Make sure these products are stored safely:

- Prescription and over-the-counter medications (including aspirin and vitamins).
- Disinfectants, deodorants and air fresheners.
- All kinds of sprays.
- Polishes and cleansing powder.
- Fertilizers and weed killers.
- Insect and rodent poison; slug bait.
- Paint remover and paint.
- Cosmetics.
- Soaps, detergents and shampoo.
- Toilet bowl and drain cleaners.
- Lye and bleach.
- Gasoline and lighter fluids.

- Insect repellent.
- Mothballs and pesticides.
- Note:** Special care should also be taken with house plants — many may be poisonous if eaten by humans or pets.

What to do when someone is poisoned:

If it is a life-threatening emergency, call **9-1-1**. If you suspect a possible poisoning—or for more information on potential poisons—call the **National Poison Center** at **1-800-222-1222**.

Be prepared to answer the following questions:

- What was taken? (Exact name of the product.) Bring product container to the phone if possible.
- When was it taken?
- How much was taken?
- Who took it? Body size makes a big difference in determining a poisonous dose.
- The name, condition, age and weight of the patient.
- Address and telephone number from where you are calling.

The nationwide toll-free number for poison control centers, 1-800-222-1222, is available 24 hours a day, 7 days a week. Call for assistance with poisoning emergencies, questions about a specific poison, or view the Poison Control Website for information about poison prevention, stickers, etc. at: <http://www.poisoncontrol.org>



Preventing the Spread of Germs

Here are some simple tips that will help keep respiratory infections and many other contagious diseases from spreading, especially during the cough, cold and “flu” season.

Respiratory infections affect the nose, throat and lungs; they include influenza (the “flu”), colds, pertussis (whooping cough) and severe acute respiratory syndrome (SARS). The germs (viruses and bacteria) that cause these infections are spread from person-to-person in droplets from the nose, throat and lungs of someone who is sick. You can help stop the spread of these germs by practicing “respiratory etiquette,” or good health manners. Cover your nose and mouth every time you sneeze, cough or blow your nose; put used tissues in the trash; wash your hands well and often whenever you or someone you are close to is sick. If you have a fever, cough or rash, clinics and hospitals may give you a face mask to wear in waiting areas and exam rooms, so be prepared.

Here are some tips to help prevent spreading your germs to others and to avoid catching someone else’s germs.

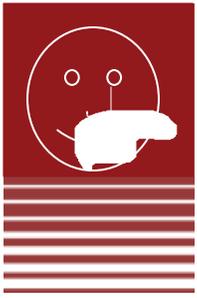
Keep your germs to yourself:

- Cover your nose and mouth with a tissue when sneezing, coughing or blowing your nose.
- Throw out used tissues in the trash as soon as you can.
- Always wash your hands after sneezing, blowing your nose, or coughing, or after touching used tissues or handkerchiefs. Wash hands often if you are sick.
- Use warm water and soap or alcohol-based hand sanitizers to wash your hands.
- Try to stay home if you have a cough and fever.
- See your doctor as soon as you can if you have a cough and fever, and follow their instructions. Take medicine as prescribed and get lots of rest.

- If asked to, use face masks provided in your doctor’s office or clinic’s waiting room; follow their instructions to help stop the spread of germs.

Keep the germs away:

- Wash your hands before eating, and before touching your eyes, nose or mouth.
- Wash your hands after touching anyone else who is sneezing, coughing, blowing their nose, or whose nose is running.
- Don’t share personal items, including: cigarettes, towels, lipstick, toys, or anything else that might be contaminated with respiratory germs.
- Don’t share food, utensils or beverage containers with others.
- Keep your family’s immunizations current.

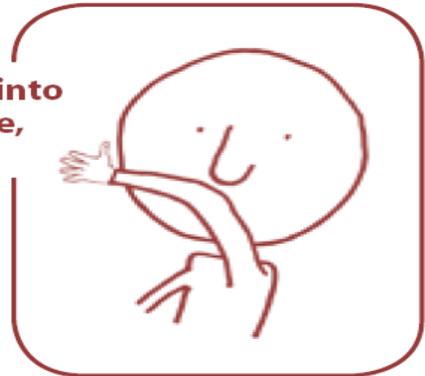


Cover Your Cough



Cover your mouth and nose with a tissue when you cough or sneeze

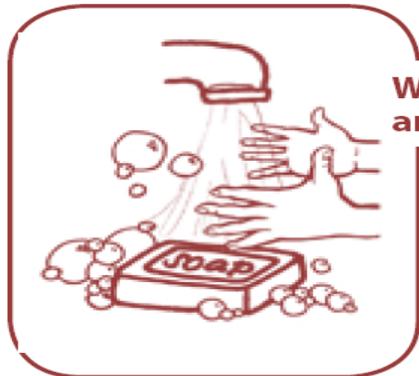
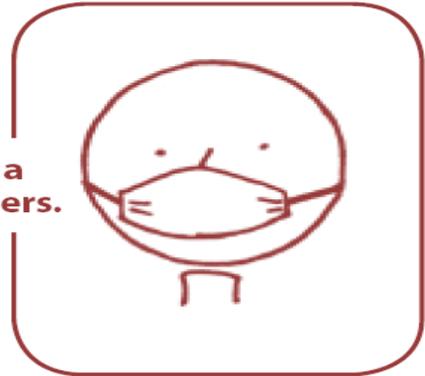
or
cough or sneeze into your upper sleeve, not your hands.



Put your used tissue in the waste basket.



You may be asked to put on a surgical mask to protect others.



Wash with soap and water

or
clean with alcohol-based hand cleaner.



Clean Your Hands

after coughing and sneezing.



Hand Washing

The best way to prevent the spread of infection

When should you wash your hands?

- When arriving at work.
- After using the bathroom.
- After smoking.
- After sneezing.
- After touching your hair, face, clothing.
- After eating or drinking.
- After taking off or before putting on a new pair of gloves.
- Before handling foods, especially ready-to-eat foods like salads and sandwiches.
- After handling garbage.
- After handling dirty equipment, dishes, or utensils.
- After touching raw meats, poultry and fish.
- Anytime you change tasks - go from one thing to another.
- At any opportunity

How should you wash your hands?

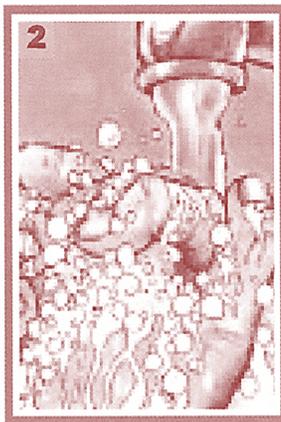
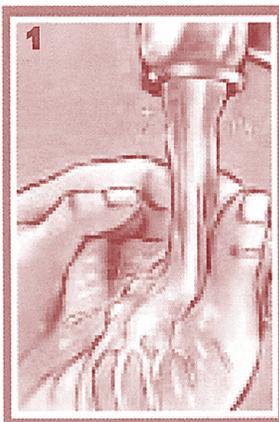
- Wet your hands with warm running water.
- Lather with soap and scrub between fingers, on the backs of your hands and under nails. Wash for at least 20 seconds, or as long as it takes to sing "Happy Birthday" to yourself twice.
- Dry hands. Use single-use paper towels or electric hand dryers.
- Use a paper towel when you turn off the tap.

Gloves should be changed

- Anytime you would need to wash your hands.
- When they are torn or soiled.

NOTE:

The reference to gloves apply to persons handling food or giving medical exams.



You're at work - you're busy. Your hands look clean - but, they're not. Your hands have germs on them that could make someone sick. You could get sick. Your family could get sick. Your customers could get sick. If you handle food, you must wash your hands often.



About Terrorism

Terrorists look for visible targets where they can avoid detection before or after an attack, such as international airports, large cities, major public events, resorts, and high-profile landmarks. Preparing for terrorism is critical, just as for other types of disasters.

- Be aware of your surroundings.
- If you see what appears to be a dangerous situation, call 9-1-1 and explain your concerns to a call-taker. The call-taker will help determine what actions should be taken.
- Take precautions when traveling. Be aware of conspicuous or unusual behavior. Do not accept packages from strangers. Do not leave your luggage unattended.
- Learn where emergency exits are located and how to quickly evacuate a building, transportation corridor, or congested public area.
- Stay clear of heavy or breakable objects that could move, fall or break in an explosion.

Prepare for building explosion

The use of explosives by terrorists can result in collapsed buildings and fires. People who live or work in a multi-level building should follow these guidelines.

- Know the emergency evacuation procedures that are in place.
- Know where the fire exits are located, and be able to find them in the dark.
- Keep fire extinguishers in working order. Know where they are located and know how to use them.
- Learn first aid and CPR.
- Keep and maintain a disaster supply kit on each floor of the building.
- Stay away from windows.

If an explosion occurs

- Immediately get under a sturdy table or desk if things are falling around you.
- Heavy smoke and poisonous gases collect first along the ceiling. Stay below the smoke at all times.

If trapped in debris

- If you have a flashlight, use it to help rescuers locate you.
- Stay in your area so that you don't kick up dust.
- Cover your mouth with a handkerchief or clothing.
- Tap on a pipe or wall so that rescuers can locate you. Use a whistle if one is available. Shout only as a last resort — shouting can cause a person to inhale dangerous amounts of dust.

If there is a fire, observe these procedures

- Stay low to the floor and exit the building as quickly and calmly as possible.
- Cover your nose and mouth with a wet cloth, if possible.
- Test closed doors for heat with the palm of your hand and forearm on the lower and upper portions of the door. If it is not hot, brace yourself against the door and open it slowly. If it is hot or warm to the touch, do not open the door. Seek an alternate escape route.

Biological agents

- Biological agents are organisms or toxins that may harm people, livestock or crops. Because biological agents cannot necessarily be detected and may take time to grow and cause disease, it is almost impossible to know that a biological attack has occurred.
- If the government were to become aware of a biological attack through an informant or warning by terrorists, they would most likely instruct people to either seek shelter where they are and seal the premises (shelter-in-place), or evacuate immediately.



Shelter-in-Place

Chemical agents are poisonous gases, liquids, or solids that have toxic effects on people, animals and plants. Most chemical agents cause serious injuries or death. Severity of injury depends on the type and amount of the chemical agent used, and the duration of exposure.

Were a chemical agent attack to occur, authorities would instruct people to either seek shelter where they are and seal the premises (shelter-in-place), or evacuate immediately. If the order is to remain in your home, office or school, you will need to follow these directions for “shelter-in-place.”



Stay inside.



Close all windows and doors.



Go into a room with the fewest doors and windows and seal the room.



Turn off ventilation systems (heating, air-conditioning, stove vents, fireplace dampers, etc.).



Stay in the room until told by the authorities that it is safe to come out.

How to shelter-in-place

- Dampen towels and place over the crack under the door.
- Cut plastic sheeting to fit over the windows and vents. Secure the plastic with duct tape.
- Tape around the door.
- Turn on the radio.
- Don't ventilate (air out) or leave your sealed shelter until you are told to do so.

Remember

- If ordered to evacuate, do so immediately and carefully follow directions. Do not wander about; know where you are going and how to get there.
- Avoiding chemical exposure should be your primary goal. Leaving your sheltered area to rescue or assist victims can be a deadly decision.
- Monitor local “Houston Area Emergency Alert Stations: **KTRH 740 AM and KUHF 88.7 FM** for news and updates

- In a chemical emergency, there is very little an untrained volunteer can do to help victims. Stay in your sheltered area until authorities determine it is safe to come out.
- If you were outside before taking shelter and think you may have been exposed to a chemical agent, there are several things you can do.
 - If you are in a sealed shelter, take off at least your outer clothes, put them in a plastic bag and seal the bag.
 - If water is available, wash or take a cool to warm (not hot) shower, using lots of soap and water.
 - Do not put the soap in your eyes, just lots of water.
 - If you leave the area, tell emergency responders or medical staff at your destination you may have been exposed.
 - Tell the emergency responders about the sealed bag so that they can arrange for its safe removal after the emergency.
- If you have symptoms of exposure, call 9-1-1.



Bomb Threats

Bomb threats are usually received by telephone, but they may also be received by note, letter or email. All bomb threats should be taken very seriously and handled as though an explosive were in the building.

Your place of employment should have a plan in place instructing what to do when a bomb threat is received.

- If you receive a bomb threat, get as much information from the caller as possible.
- Take good notes when talking to the person on the telephone. Keep the caller on the line, and write down everything that is said.
- Be aware of background noise, special voice characteristics, music, machinery, etc.
- If you are at work, have a coworker call 9-1-1 and building security immediately. Plan how you are going to alert your coworker.
- If you receive a bomb threat, do not touch any suspicious packages.
- Clear the area around the suspicious package, and notify police immediately.
- While evacuating a building, avoid standing in front of windows or other potentially hazardous areas.
- Do not restrict sidewalks or other areas used by emergency officials.
- If you find a bomb, don't touch it or attempt to move it. Call for help and evacuate the area immediately.

Bomb Threat Checklist

Exact time of call: _____

Exact words of caller: _____

QUESTIONS TO ASK:

1. When is the bomb going to explode? _____
2. Where is the bomb? _____
3. What does it look like? _____
4. What kind of bomb is it? _____
5. What will cause it to explode? _____
6. Did you place the bomb? _____
7. Why? _____
8. Where are you calling from? _____
9. What is your address? _____
10. What is your name? _____

CALLER'S VOICE (circle all that apply)

Calm	Slow	Crying	Slurred	If voice is familiar, whom did it sound like?
Stutter	Deep	Loud	Broken	
Giggling	Accent	Angry	Rapid	Were there any background noises?
Stressed	Nasal	Lisp	Excited	
Disguised	Sincere	Squeaky	Normal	

Remarks: _____

Person receiving call: _____

Telephone number where call was received: _____

Date: _____



Chemical Agents

Chemical warfare agents are gases, liquids, or solids that can poison people, animals, and plants. Chemical warfare agents can cause injuries and death. How serious the injuries are depends on the type of chemical, the amount and the length of exposure.

What are chemical agents?

- The main chemical warfare agents are sulfur mustard (mustard gas) and nerve agents such as Sarin and VX. These agents are typically released as a vapor or liquid. During a chemical attack, the greatest danger would come from breathing the vapors. If a large amount of chemical were released as an aerosol, people's skin might be exposed to the agent as droplets.

Blister Agents (Sulfur Mustard): Symptoms and treatment

- Sulfur mustard can cause skin to become red and irritated. Larger amounts will make the skin blister.
- Sulfur mustard can damage your eyes causing irritation, redness and swelling of the lids.
- Breathing in sulfur mustard can cause throat irritation, sinus pain and coughing. Breathing in large amounts will damage the lungs.
- If you are exposed to sulfur mustard, it may take four to eight hours before you feel symptoms. However, after a relatively small exposure, symptoms may take up to 24 hours to develop.
- Medical staff can treat you with soothing lotions, eye drops and pain medication. If infections develop, you may be given antibiotics.

Nerve agents (Sarin and VX): symptoms and treatment

- A small amount of vapor can make pupils smaller, dim or blur vision, and cause eye pain, a runny nose or shortness of breath.
- Moderate amounts of vapor can cause muscle weakness, nausea, vomiting and diarrhea.
- Exposure to large amounts of vapor can cause interruption of breathing, muscle weakness, loss of consciousness, convulsions and death.

- Effects usually appear seconds to minutes after breathing the vapor of a nerve agent.
- Exposure to small amounts of vapor may cause only smaller than normal pupils and may take an hour to appear.
- If you are exposed to a large amount of a nerve agent and have a runny nose, difficulty breathing, or nausea and vomiting, you may be treated with the medicines *atropine* or *pralidoxime*.

What you should do if there is a chemical attack

- If there is a chemical attack, authorities will tell you either to evacuate the area immediately, or to seek shelter. See "How to shelter-in-place" refer to page 17.
- If you have symptoms of exposure, call 9-1-1 immediately.
- If you were outside before taking shelter and think you may have been exposed to a chemical agent:
 - Take off your outer clothes, put them in a plastic bag and seal the bag. Tell emergency staff about the sealed bag so that they can remove it safely.
 - Wash or take a cool shower. Avoid using hot water to prevent further absorption and injury. Use lots of soap. Do not put soap in your eyes.
 - If you leave the area, tell emergency or medical staff at your new location that you may have been exposed.



Radioactive Materials

One possible source of radiation exposure is a “dirty bomb.” A dirty bomb is a small explosive device packaged with radioactive materials. The explosion of this type of bomb is more dangerous than the radioactive materials it might spread. During any event that releases radiation, your best protection is to follow the recommendations of authorities.

Reduce possible exposure with time, distance and shielding

- Minimize time near radioactive material source.
- Maximize distance from radioactive material source.
- Keep large, heavy objects between you and radioactivity source.

Stay inside

- Stay inside your home or office unless instructed by authorities to leave. Close the windows, turn off the heating or air conditioning and stay near the center of the building. Once the initial blast is over, radioactive materials can be spread in the smoke and debris in the air. By staying inside you will reduce any potential exposure to airborne radioactive material. If there is a basement, go there.

Listen to the radio

- When you learn that radioactive materials have been released in an area near you—either accidentally or intentionally—tune your radio to the emergency broadcasting network for instructions. “Houston Area Emergency Alert Stations: **KTRH 740 AM** and **KUHF 88.7 FM**”. Government agencies will let you know how to protect yourself. Keep a battery-powered radio handy in case electrical power goes out in your area.

Follow instructions

- The best way to avoid exposure to radiation is to do what experts advise. If told to evacuate, do so promptly. Take items you will need for an extended absence, such as prescription medicines and clothing. Listen for news about the location of the radioactive cloud.

Even if it has already passed, radioactive contamination may have fallen on the ground and experts will recommend the best ways to safely leave the area.

If you suspect you are contaminated

- If you believe you have been exposed to radioactive materials, you should carefully remove your outer layer of clothing and put it in a plastic bag; then take a warm shower to rinse off any radioactive materials. Place the sealed bag in a room away from people.

Seek help if needed

- Special assistance centers will be set up as soon as possible. If this hasn't happened yet, go to a police or fire station located outside of the affected area. If you were near the explosion or believe you were in the path of the cloud, tell the staff at the assistance center.

Watch what you eat

- Avoid drinking fresh milk or eating fruits and vegetables grown in the affected area. Wait until the Department of Health announces that produce and dairy products are safe to eat and drink. Milk, fruit and vegetables are okay to eat if they were bought or picked before the radiation was released and were stored indoors. Food stored in cans or bags is also safe to eat. Be sure to thoroughly rinse off containers before opening.



Household Fires

Fires in homes are most often caused by cooking accidents, smoking and unsafe use of woodstoves or space heaters. Here are some things you can do to avoid a home fire or protect yourself during a fire.

Protecting against fires

- Install smoke detectors in or near all sleeping areas and on every level of your home, including the basement. Check smoke detectors on a regular basis and replace the batteries twice yearly.
- Obtain **A-B-C** type fire extinguishers. Teach family members how to use them.
- Know the location of all exits including windows. If you live in an apartment, count the number of doorways between your apartment and the two nearest exits.
- Know two ways out of every room in case smoke or flames block your primary exit.
- Choose a meeting place outside the home, and be sure all family members are accounted for. If someone is missing, let the fire department know.
- Develop an escape plan and practice it with your family. This will help ensure you can get out quickly when there is no time for mistakes.
- Keep folding or chain style ladders stored in each upstairs bedroom.
- Use alternative heat sources, such as woodstoves or space heaters, safely.
- Before using an alternative heat source, read the manufacturer's instructions.
- Never use gas ovens, gas ranges, barbecues, or most portable or propane heaters for indoor heating.
- Have fire-fighting materials available: dry powder, fire extinguisher, heavy tarp or blanket, and water.

- Do not smoke in the bedroom, on the couch or anywhere you might fall asleep while smoking.

- Sleep with your bedroom door closed.
- Make sure your house number is clearly visible from the street and that fire trucks can reach your home.

If fire strikes

- If there is a fire — evacuate. Do not go back inside. Call **9-1-1** from a neighbor's house.
- Never use water on an electrical fire.
- Smother oil and grease fires in the kitchen with baking soda or salt, or put a lid over the flame if it is burning in a pan.
- If caught in smoke — drop to your hands and knees and crawl; breathe shallowly through your nose and use your blouse, shirt or jacket as a filter.
- If you must move through flames — hold your breath, move quickly, cover your head and hair, keep your head down and close your eyes as much as possible.
- If your clothes catch fire, “stop, drop and roll” until the fire is out.
- If you are in a room and cannot escape, leave the door closed, stay low to the floor and hang a white or light-colored sheet outside the window.



Purifying Household Water

The treatments described below work only in situations where the water is unsafe because of the presence of bacteria. If you suspect the water is unsafe because of chemicals, oils, poisonous substances, sewage, etc., do not use the water for drinking.

Storing water safely

- Store one gallon of water per person per day.
- Store at least a seven-day supply of water per person.
- Collect the water from a safe supply.
- Store water in thoroughly washed plastic, fiberglass or metal containers that are lined with enamel.
- Never reuse a container that contained toxic materials such as pesticides, solvents, chemicals, oil, antifreeze, etc.
- Plastic containers such as soft drink bottles are best. You can also purchase food-grade plastic buckets or drums.
- Seal water containers tightly, label with date, and store in a cool, dark place.
- Replace water every six months.

Water purification

There are two primary ways of treating water: boiling and adding bleach. If the supply has been made unsafe because of untreated surface water (from floods, streams or lakes), boiling is the best method.

- Cloudy water should be filtered before boiling or adding bleach.

- Filter water using coffee filters, paper towels, cheese cloth, or a cotton plug in a funnel.

Boiling

- Boiling is the safest method of purifying water.
- Bring the water to a rolling boil for 3-5 minutes.
- Let the water cool before drinking.

Purifying by adding liquid chlorine bleach

- If boiling is not possible, water can be made safe for drinking by treating with liquid household chlorine bleach, such as Clorox, Purex, etc. Household bleach is typically between 5 percent and 6 percent chlorine. Avoid using bleaches that contain perfumes, dyes, and other additives. Be sure to read the label.
- Place the water (filtered, if necessary) in a clean container. Add the amount of bleach according to the table below. Mix thoroughly and allow to stand for at least 30 minutes before using (60 minutes if the water is cloudy or very cold).
- Purifying tablets or chemicals designed for use when camping or backpacking can also be an effective way to treat water.

Treating Water with a 5-6 Percent Liquid Chlorine Bleach Solution		
Volume of Water to be Treated	Treating Clear Water: Bleach Solution to Add	Treating Cloudy, Very Cold, or Surface Water: Bleach Solution to Add
1 quart/1 liter	3 drops	5 drops
1/2 gallon/2 quarts/2 liters	5 drops	10 drops or 1/8 tsp
1 gallon	10 drops or 1/8 tsp	20 drops or 1/4 tsp
5 gallons	50 drops or 2.5 ml or 1/2 tsp	5 ml or 1 tsp
10 gallons	5 ml or 1 tsp	10 ml or 2 tsp
tsp = teaspoon; ml = milliliter		



Power Outages

Power outages can cause a number of safety concerns. Knowing the following information can help.

Before a power outage

- Register life-sustaining and medical equipment with your utility company.
- Consider buying a generator. When installing a generator, follow the instructions carefully. Keep your generator outside and run a cord inside. Don't connect your generator to main service panels—it's dangerous!
- Make sure your disaster preparedness kit contains light sticks, flashlights, a battery-powered radio with extra batteries, and a wind-up clock.
- Have a corded telephone available — cordless phones will not work when the power is out.
- Have an alternative heat source and supply of fuel.
- If you own an electric garage door opener, know how to open the door without power.

During a power outage

- Turn off lights and electrical appliances except for the refrigerator and freezer. Even if it is dark, turn light switches and buttons on lamps or appliances to the "off" position. Leave one lamp on so you will know when power is restored. Wait at least 15 minutes after power is restored before turning on other appliances.
- Unplug computers and other sensitive equipment to protect them from possible surges when the power is restored.
- Conserve water, especially if you use well water.
- Never use gas ovens, gas ranges, barbecues or portable or propane heaters for indoor heating—they use oxygen and create carbon monoxide that can cause suffocation.

- Candles can cause a fire. It's far better to use battery-operated flashlights or glow sticks for lighting.
- Using a kerosene heater, gas lantern or stove inside the house can be dangerous. Maintain proper ventilation at all times to avoid a build-up of toxic fumes.
- Stay away from downed power lines and sagging trees with broken limbs.

Keep food safe

- Use and store food carefully to prevent food-borne illness when power outages make refrigeration unavailable.
- Use foods first that can spoil most rapidly.
- Keep doors to refrigerators and freezers closed. Your refrigerator's freezer will keep food frozen for up to a day. A separate fully-loaded freezer will keep food frozen for two days.
- Use an ice chest packed with ice to keep food cold. Buy dry ice to save frozen food. Do not handle dry ice with your bare hands. Use blocks or bags of ice to save refrigerator foods.
- Use caution if storing food outside during winter to keep it cold. The outside temperature varies, especially in the sun. Frozen food may thaw and refrigerator food may become warm enough to grow bacteria. Food stored outside must be secured from contamination by animals.
- If in doubt, throw it out. Throw out meat, seafood, dairy products and cooked food that does not feel cold.
- Never taste suspect food. Even if food looks and smells fine, illness-causing bacteria may be present.

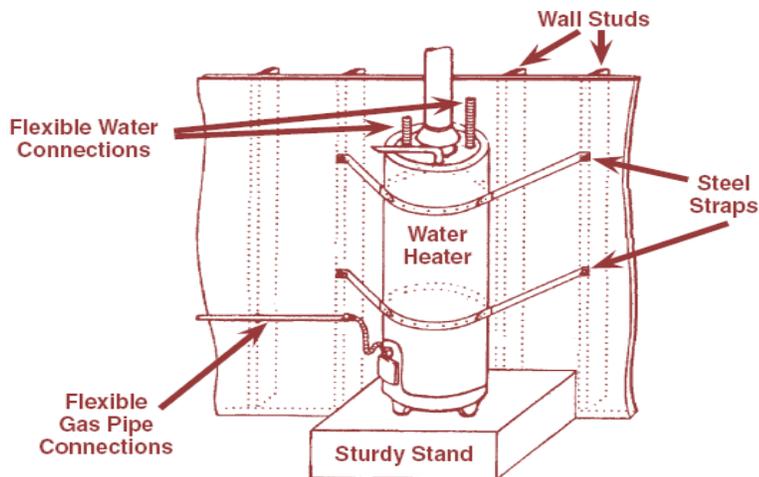


Securing Your Water Heater

Secure your water heater to minimize damage during a disaster.

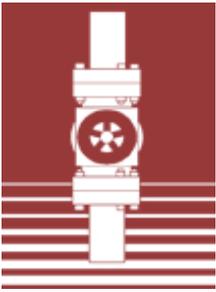
Securing a water heater

- Mark your water heater at the front center, about one-third of the way down from the top and approximately one-third of the way up from the bottom.
- Be sure that the bottom mark is at least 4 inches above the water controls.
- Secure the water heater with two 16- to 20-gauge, pre-drilled steel straps at the points you've marked (see diagram).
- If you place the water heater on a pedestal, you must secure the pedestal to the wall or floor to keep it from moving out from under the water heater.
- For more information on securing your water heater, contact your local emergency management office or utility.



Getting water from a water heater

- The water heater, if strapped properly, can be used as a backup source of drinking water in addition to the water you have already stored for emergencies.
- To get water out of your water heater when the water is turned off, you will need to turn off the gas or electric supply to the heater.
- Open a faucet located in the highest point of your home and then open the faucet at the bottom of the water heater. This allows the water to gravity-feed from the tank.
- The water that first comes from the tank may be full of rust and other deposits. This is normal for a water heater that has been in a home for a few years. Discard the discolored water. When the water becomes clear, it should be safe to drink.
- If there is any question as to water purity — purify it.



Turning Off the Utilities

When disaster strikes, it often affects one or more of the utility systems in your home. Therefore, it is important to know where the main controls are located and when and how to turn them off.

Electricity

- Locate your main electrical switch or fuse panel, and learn how to turn off the electrical power system.
- If a generator is used as a backup power supply, remember to follow the manufacturer's instructions. Connect lights and appliances directly to the generator and not to the electrical system.

Water

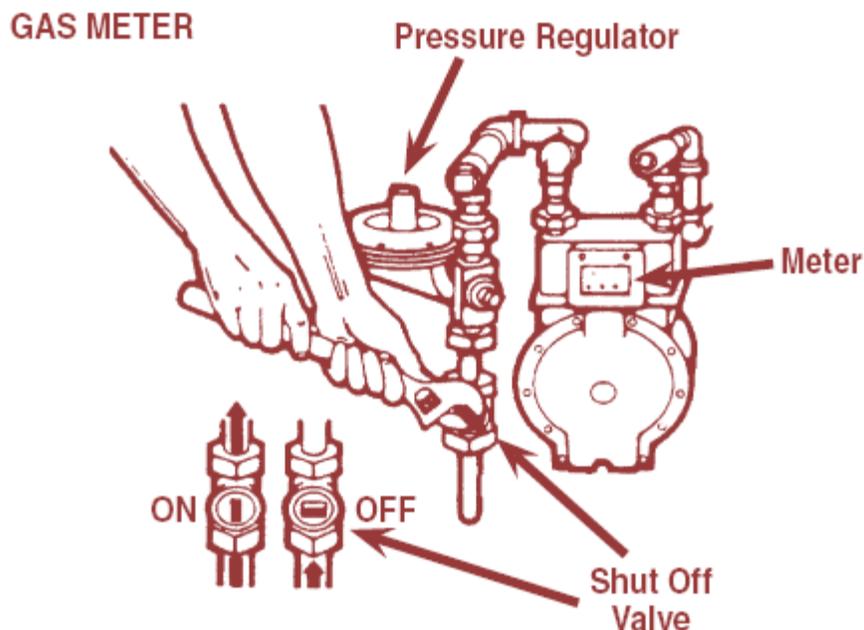
- Turn off water at the main meter or at the water main leading into the house. This will prevent contaminated water from entering your water heater and plumbing.
- Turn off the valve — turn to the right. This will require a special valve wrench, available from a hardware store. Make sure you have the tool readily available.

Sewer system

- Make sure your sewer system is functioning properly before using it. This will prevent the contamination of your home and possibly the drinking water supply.

Gas meter (illustration below)

- Locate your gas meter and valve.
- Have a wrench immediately available for turning off the gas supply.
- If you smell natural gas, evacuate immediately. Do not use matches, lighters, open flame appliances, or operate electrical switches. Sparks could ignite gas causing an explosion.
- Shut off gas ONLY if you smell gas or hear a hissing noise. Contact the gas company to turn the gas back on.





Using a Generator During Power Outages

When purchasing a generator make sure you get one listed with the Underwriter's certification Laboratory (UL) or Factory Mutual (FM)

- **Read the labels** on lighting, appliances, and equipment you plan to connect to the generator to determine the amount of power that will be needed to operate the equipment. For lighting, the wattage of the light bulb indicates the power needed. Appliances and equipment usually have labels indicating power requirements on them. Choose a generator that produces more power than will be drawn by the combination of lighting, appliances, and equipment you plan to connect to the generator, including the initial surge when it is turned on.

If your equipment draws more power than the generator can produce, you may blow a fuse on the generator or damage the connected equipment.

- **Follow the directions** supplied with your generator. Never use portable generators indoors, including inside a garage. Adequate ventilation is necessary when running the generator. Proper refueling measures, outlined in the owner's manual, must be carefully followed. Make sure you have properly working carbon monoxide (CO) alarms inside your home.
- **Let your generator cool down** before refueling. You must store extra generator fuel in an approved safety can. Store fuel for the generator out of doors in a locked shed or other protected area. Do not store fuel in a garage, basement, or anywhere inside a home, as vapors can be released that may cause illness and are a potential fire or explosion hazard.
- **Connect the equipment** you want to power directly to the outlets on the generator. Do not hook up a generator to your home's electrical service. Home use (non-industrial) generators do not supply enough amperage to supply sufficient power for today's homes (that is, to run a furnace, lighting, appliances, and other electronic equipment). Unless your home's power supply was installed with a disconnect to the main power

feeding lines, power you put into your home from a generator could "back feed" into the main line and cause problems for the electrical utility company, your neighbors, or yourself. "Backfeeding" is supplying electrical power from a generator at the residence into the incoming utility lines. This occurs when the necessary equipment used to isolate the generator from the incoming power lines is not installed.

- **The 1999 National Electrical Code (NEC)**, published by the National Fire Protection Association, is a nationally recognized standard for safe electrical installations. The NEC does permit an interface between the normal power source (generally the electric utility) and an alternate power source (such as a standby or portable generator) provided that the proper transfer equipment that prevents "backfeeding" is used. Simply connecting a cord from the generator to a point on the permanent wiring system and "backfeeding" power is an unsafe method to supply a building during a utility outage.
- **Improper connection methods** not only endanger the building occupants, but pose a serious hazard to electric utility workers as well. There are a number of products available that will provide either an automatic or manual transfer between two power sources in a manner prescribed by the NEC. When selecting a product for this function, it should be one that has been evaluated for safe performance by a nationally recognized testing organization such as Underwriters Laboratories. The product must be installed according to the NEC, all applicable state and local codes, and the manufacturer's instructions. Homeowners should only attempt to install such products if they have a thorough knowledge of safe electrical installation practices for this type of equipment. Otherwise, a qualified electrician should be contacted.



Hurricanes

Before a Hurricane

A hurricane **WATCH** is issued by the National Weather Service about 36 hours prior to hurricane conditions threatening the coastal area.

- Monitor the emergency broadcasting networks for updates (“Houston Area Emergency Alert Stations: **KTRH 740 AM and KUHF 88.7 FM**”).
- Check supplies, especially water (at least 5 gallons per person).
- Fuel vehicles and generators.
- Cover windows with plywood.
- Bring in ALL outdoor furniture, toys and tools.
- Moor any boats securely or move boats to a safe place.

A hurricane **WARNING** is issued when hurricane winds of 74 miles per hour or higher or dangerously high water and rough seas are expected within 24 hours in your area.

- Continue to monitor the emergency broadcasting network for updates (“Houston Area Emergency Alert Stations: **KTRH 740 AM and KUHF 88.7 FM**”).
- Move out of coastal low-lying areas early at the request of officials.
- Check tie-downs if living in a mobile home. **Leave immediately.**
- Fill bathtubs and all available containers with extra water.
- Turn off utilities, if requested.
- Stay away from windows, doors and openings.

During a Hurricane

- Remain indoors in an interior hallway, bathroom or closet on the lowest level of your house well away from windows.
- Cover yourself and family members with a mattress or seek shelter under something sturdy, such as a well constructed dining room table which could protect you from possible debris.

After a Hurricane

- Beware of unsafe food and/or water. Boil tap water before drinking unless you are told it is unnecessary.
- Utilities could be off. Treat all downed power lines as live wires and don’t approach. If you smell gas, leave the area immediately and notify the proper authorities.
- Make temporary repairs, without taking unnecessary risks, to protect your property from further damage.
- Inform your insurance agent of any damage, and leave word where you can be reached. Take pictures of damages.

The **Saffir-Simpson** scale divides hurricanes into five categories. They are:

Category	Wind speed	Damage
1	74-95	Minimal
2	96-110	Moderate
3	111-130	Extensive
4	131-155	Extreme
5	Greater than 155	Catastrophic

EVACUATION ZONES

Evacuation **Zones A** through **C** have been identified for **Houston/Harris/Galveston/Brazoria/Chambers Counties** and assigned letters that correspond to hurricane categories. **Zone A** includes categories **1-2** hurricanes, **Zone B** includes a category **3** hurricane and **Zone C** includes categories **4-5** hurricanes. These areas reflect how far inland the storm surge is expected, depending on the hurricane category.

Hurricane (Continued)

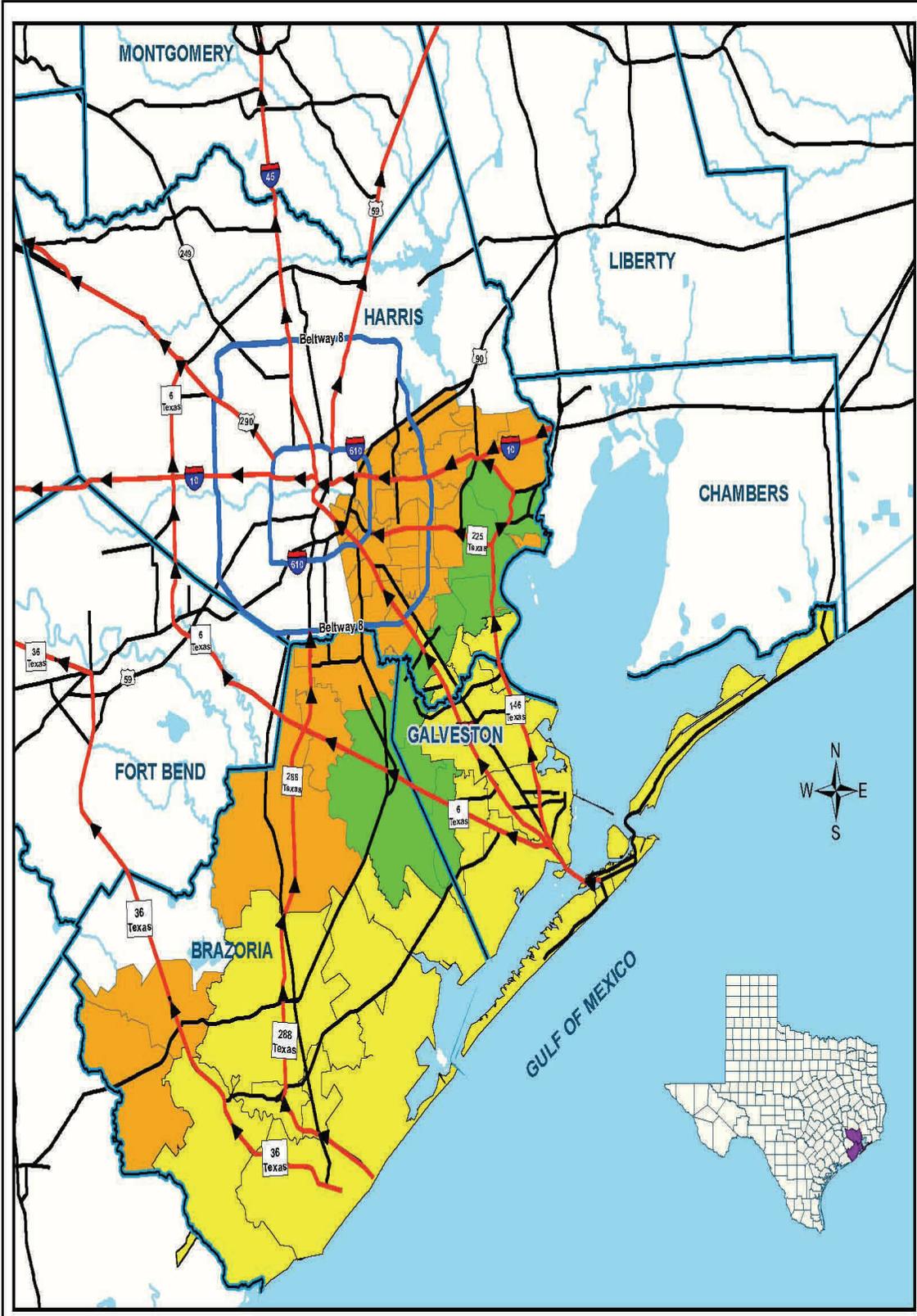
If you are unable to determine which risk area you live in, it is best to err on the side of caution and assume you live in the area nearest the coast.

The map on page 29 depicts by color, the three evacuation zones within **Houston/Harris/Galveston/Brazoria/Chambers Counties**. Major state and federal highways are identified on the map.

Should an evacuation be recommended, use electronic media, Highway Alert Radio and free-way changeable message signs to get updates on important evacuation information. This will be coordinated by the **Emergency Operations Center** through **Houston Tran Star**.

Brazoria/Galveston/Chambers/Harris County Hurricane Evacuation Map

ZIP CODES affected by the 3 Evacuation Zones



**Brazoria/Galveston/Harris County
Hurricane Evacuation
Zones A, B and C
Route Designation**

- Evacuation Corridors
- Feeder to the Evacuation

Saffir Simpson Scale

Evacuation Zone	Hurricane Category	Windspeed (MPH)
A	1	74-95
	2	96-110
B	3	111-130
C	4	131-155
	5	> 155

Zip-Zone A

77058	77422	77510	77515	77518
77531	77534	77539	77541	77550
77551	77554	77563	77565	77566
77568	77573	77577	77586	77590
77591	77598	77650		

Zip-Zone B

77058	77059	77062	77422	77507
77510	77511	77515	77517	77518
77520	77531	77534	77539	77541
77546	77550	77551	77554	77563
77565	77566	77568	77571	77573
77577	77586	77590	77591	77598
77650				

Zip-Zone C

77011	77012	77013	77015	77017
77023	77029	77034	77049	77058
77059	77061	77062	77075	77087
77089	77422	77480	77486	77502
77503	77504	77505	77506	77507
77510	77511	77515	77517	77518
77520	77521	77530	77531	77534
77536	77539	77541	77546	77547
77550	77551	77554	77562	77563
77565	77566	77568	77571	77573
77577	77578	77581	77583	77584
77586	77587	77590	77591	77598
77650				





Tornadoes

**When a tornado is sighted, go to your shelter immediately.
Stay away from windows, doors and outside walls.**

Tornadoes strike with little or no warning. Each family should develop a tornado plan and designate a safety shelter. Practice the plan you and your family developed.

How to prepare for tornadoes

Know the meaning of terms used to describe tornado threats:

- Tornado Watch**—tornadoes are possible
- Tornado Warning**—take shelter; tornado sighted
- Severe Thunderstorm Watch**—severe thunderstorms are possible
- Severe Thunderstorm Warning**—severe thunderstorms are occurring
- Purchase a **NOAA Weather Radio**, and a battery— powered commercial radio, along With extra batteries for each.
- Keep emergency supplies on hand.
- Inventory your possessions. Keep important papers in a safe deposit box.

What to do during a tornado

- In a house or small building, go to an interior room or lower level.
- In a school, nursing home, hospital, factory, or shopping center, go to pre-designated shelter areas or interior halls on the lowest level.
- In a high-rise building, go to a small, interior room or hallway on the lowest floor possible.
- Get under a sturdy piece of furniture—a table or desk.
- Use your arms to protect head and neck.
- Do not stay in a mobile home, trailer or vehicle, get out immediately and go to a substantial structure. A ditch, ravine, or culvert could be used if no structure is available. Do not attempt to out drive a tornado.
- Do not seek shelter under a highway underpass.

Tornado shelters should be stocked with at least the following supplies:

- Flashlight and extra batteries
- First-aid kit
- Emergency food and water
- Manual can opener
- Essential medicines
- Cash and credit cards
- Sturdy shoes, gloves

What to do after a tornado

- Be aware of broken glass and downed power lines.
- Check for injuries. Move seriously injured persons only if they are in immediate danger or if their life is threatened.
- Use caution entering a damaged building.



Floods

Floods are the most common and widespread of all natural disasters.

What to do before a flood

- Plan for evacuation. Know where you are going and how to get there.
- Prepare your home for a flood. Find out if your property is in a flood plain. Call your local building department or office of emergency management for information.
- Purchase flood insurance.
- Keep all insurance policies and a list of valuable items in a safe place.
- Take photos or a videotape of the valuables you keep in your home.
- Listen to your radio or television for reports of flood danger.
- Keep your car filled with gas.

What to do during a flood

- Do **NOT** try to walk or drive through flooded areas. Water can be deeper than it appears and water levels can rise quickly. Follow official emergency evacuation routes. If your car stalls in floodwater, get out quickly and move to higher ground.
- Stay away from moving water; moving water six inches deep can sweep you off your feet. Cars are easily swept away in just two feet of water.
- Stay away from disaster areas unless authorities ask for volunteers.
- Stay away from downed power lines.
- If your home is flooded, turn the utilities off until emergency officials tell you it is safe to turn them on. Avoid weakened floors, walls and rooftops.
- Wash your hands frequently with soap and clean water if you come in contact with floodwaters.

What to do after a flood

- Wear gloves and boots when cleaning up.
- Open all doors and windows. Use fans if possible to air out the building.
- Wash all clothes and linens in hot water.
- Discard mattresses and stuffed furniture. They can't be adequately cleaned.
- Wash dirt and mud from walls, counters and hard surfaced floors with soap and water. Then disinfect by wiping surfaces with a solution of one cup bleach per gallon of water.
- Discard all food that has come into contact with floodwater. Canned food is all right, but thoroughly wash the can before opening.
- If your well is flooded, your tap water is probably unsafe. If you have public water, the health department will let you know—through radio and television—if your water is not safe to drink. Until your water is safe, use clean bottled water or purify your water. See page 22.
- Learn how to purify water. If you have a well, learn how to decontaminate it.
- Do not use your septic system when water is standing on the ground around it. The ground below will not absorb water from sinks or toilets. When the soil has dried, it is probably safe to again use your septic system. To be sure, contact your local health department.
- When floodwaters have receded watch out for weakened road surfaces.



Hot Weather Precautions

Severe heat may cause illness or even death. When temperatures rise to extreme highs, reduce risks by taking the following precautions.

Hot weather precautions to reduce the risk of heat exhaustion and heat stroke

- Stay indoors and in an air-conditioned environment as much as possible unless you're sure your body has a high tolerance for heat.
- Drink plenty of fluids but avoid beverages that contain alcohol, caffeine or a lot of sugar.
- Eat more frequently but make sure meals are balanced and light.
- Never leave any person or pet in a closed, parked vehicle.
- Avoid dressing babies in heavy clothing or wrapping them in warm blankets.
- Check frequently on people who are elderly, ill or may need help. If you might need help, arrange to have family, friends or neighbors check in with you at least twice a day throughout warm weather periods.
- Make sure pets have plenty of water.
- Salt tablets should only be taken if specified by your doctor. If you are on a salt-restrictive diet, check with a doctor before increasing salt intake.
- If you take prescription diuretics, antihistamines, mood-altering or antispasmodic drugs, check with a doctor about the effects of sun and heat exposure.
- Cover windows that receive morning or afternoon sun. Awnings or louvers can reduce the heat entering a house by as much as 80 percent.

If you go outside

- Plan strenuous outdoor activities for early or late in the day when temperatures are cooler; then gradually build up tolerance for warmer conditions.
- Take frequent breaks when working outdoors.
- Wear a wide-brimmed hat, sun block and light-colored, loose-fitting clothes when outdoors.
- At first signs of heat illness (dizziness, nausea, headaches, muscle cramps), move to a cooler location, rest for a few minutes and slowly drink a cool beverage. Seek medical attention immediately if you do not feel better.
- Avoid sunburn: it slows the skin's ability to cool itself. Use a sunscreen lotion with a high SPF (sun protection factor) rating.
- Avoid extreme temperature changes. A cool shower immediately after coming in from hot temperatures can result in hypothermia, particularly for elderly or very young people.
- Arrange to have family, friends, neighbors or designated BUDDY to check in with you at least twice a day throughout warm weather periods.

If the power goes out or air conditioning is not available

- If air conditioning is not available, stay on the lowest floor out of the sunshine.
- Consider spending time in a cooling center if available .
- Ask your doctor about any prescription medicine you keep refrigerated. (If the power goes out, most medicine will be fine to leave in a closed refrigerator for at least 3 hours.)
- Keep a few bottles of water in your freezer; if the power goes out, move them to your refrigerator and keep the doors shut.



West Nile Virus

What is West Nile Virus?

- West Nile virus is a flavivirus commonly found in Africa, West Asia and the Middle East. It can be a serious, even fatal, illness that can affect people, horses, certain types of birds and other animals. West Nile virus first appeared in the United States in 1999.

How is it spread?

- West Nile virus is almost always spread to people by the bite of an infected mosquito. Mosquitoes become infected after feeding on birds that carry the virus. There is no evidence that West Nile virus can be spread by direct contact with infected people or animals.

Who is at risk?

- The risk of getting West Nile virus is very low, but anyone can become infected. People over 50 years of age have the highest risk of serious illness.

What are the symptoms?

- Most people who are infected with West Nile virus will not get sick. About 1 in 5 people infected will have mild symptoms such as fever, headache and body aches. Even fewer, about 1 in 150 people infected, will have more severe symptoms. Severe symptoms may include headache, high fever, neck stiffness, stupor, disorientation, tremors, convulsions, muscle weakness, paralysis and coma. If you have any of these symptoms, contact your health care provider.

How can I protect myself?

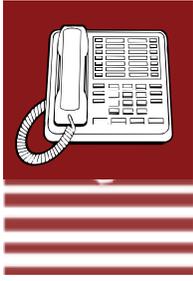
- There is no human vaccine for West Nile virus. The best way to protect yourself and your family is to avoid mosquito bites and reduce the places mosquitoes live and breed around your home. Take these steps:

Avoid mosquito bites

- Make sure windows and doors are “bug-tight.” Repair or replace torn screens.
- Stay indoors at dawn and dusk when mosquitoes are the most active.
- Wear a long sleeve shirt, long pants and a hat when going into mosquito-infested areas, such as wetlands or woods.
- Use mosquito repellent when necessary. Read the label and carefully follow instructions. Take special care when using repellent on children.
- Use an insect repellent that contains DEET. DEET is the most effective repellent available. Products containing DEET must be used properly. Carefully read and follow instructions on the label.

Don't give mosquitoes a home

- Empty or throw away anything that holds standing water—bottles, cans, old tires, buckets, plastic covers and toys.
- Change water in your birdbaths, pet bowls, fountains, wading pools and animal troughs at least twice each week.
- Make sure roof gutters drain properly; and clean clogged gutters in the spring and fall.
- Fix leaky outdoor faucets and sprinklers.



HELPFUL TELEPHONE NUMBERS

City of Houston

Emergency Response	911
Non-Emergency Response	311
Local Information Referral	211
Office of Emergency Management (OEM)	713-884-4500
OEM Fax	713-884-4545
Telecommunication Device for Deaf (TDD)	713-884-4518
Mayor's Citizens Assistance Office	713-247-2907
Police Department	713-884-3131
Fire Department	713-247-5000
Department of Health & Human Services	713-794-9320

Harris County

Harris County Public Health & Environmental Services	713-439-6000
Harris County Hospital District	713-873-2200
Harris County Sheriff's Office	713-221-6000
Harris County Fire & Emergency Services.....	281-931-1085
Emergency Management Office	713-881-3100

Metropolitan Transit

Metropolitan Transit Authority	713-739-4000
METRO Police (224-COPS)	713-224-2677
METRO Lift	713-225-0119
METRO Assistance Center	713-658-0180
Customer Service/Motorist Assistance Program (Call MAP)	713-225-5627

State of Texas

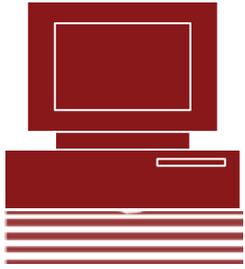
Department of Public Safety	281-517-1300
Department of Transportation	713-802-5000
Local Road Conditions & Closures	713-802-5074
Commission on Environmental Quality (TCEQ)	713-767-3500

Service Agencies

American Red Cross, Greater Houston Area	713-526-8300
Red Cross Night and Weekend Number	713-526-8300
Salvation Army	713-752-0677
United Way	713-685-2300

Federal Agencies

National Weather Service (NWS)	281-337-5074
Marine Information (recording)	281-337-7895
US Coast Guard-Marine Safety Office	713-671-5100



Informative Websites

Department of Health and Human Services
<http://www.houstontx.gov/health/OSPHP>

City of Houston Emergency Management
<http://www.houstontx.gov/oem>

Harris County Public Health & Environmental Services
<http://www.harriscountyhealth.com>

**Harris County Office of Homeland Security & Emergency
Management**
<http://www.hcoem.org>

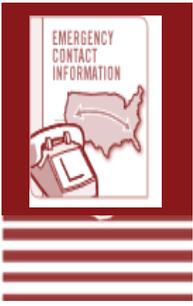
Governor's Division of Emergency Management
<http://www.txdps.state.tx.us/dem/>

U.S. Department of Homeland Security
<http://www.ready.gov>

Centers for Disease Control and Prevention
<http://www.bt.cdc.gov>

Federal Emergency Management Agency
<http://www.fema.gov>

Houston Metropolitan Medical Response System
<http://www.hmmrs.net>



Family Communications Plan

Your family may not be together when disaster strikes, so plan how you will contact one another and review what you will do in different situations.

Out-of-Town Contact Name: _____ Telephone Number: _____

Email: _____ Telephone Number: _____

FILL OUT THE FOLLOWING INFORMATION FOR EACH FAMILY MEMBER AND KEEP IT UP

Name: _____ Social Security Number: _____

Date of Birth: _____ Important Medical Information: _____

Name: _____ Social Security Number: _____

Date of Birth: _____ Important Medical Information: _____

Name: _____ Social Security Number: _____

Date of Birth: _____ Important Medical Information: _____

Name: _____ Social Security Number: _____

Date of Birth: _____ Important Medical Information: _____

Name: _____ Social Security Number: _____

Date of Birth: _____ Important Medical Information: _____

Name: _____ Social Security Number: _____

Date of Birth: _____ Important Medical Information: _____

Where to go in an Emergency : Write down where your family spends the most time: work, school and other places you frequent. Schools, daycare providers, workplaces and apartment buildings should all have site-specific emergency plans.

Home

Address: _____

Phone Number: _____

Neighborhood Meeting Place: _____

Regional Meeting Place: _____

School

Address: _____

Phone Number: _____

Evacuation Location: _____

School

Address: _____

Phone Number: _____

Evacuation Location: _____

Work

Address: _____

Phone Number: _____

Evacuation Location: _____

Work

Address: _____

Phone Number: _____

Evacuation Location: _____

Other place you frequent:

Address: _____

Phone Number: _____

Evacuation Location: _____

Family Communications Plan Continued

Important Information	Name	Telephone	Policy #
Doctor(s):			
Other:			
Pharmacist:			
Medical Insurance:			
Homeowners/Rental Insurance			
Veterinarian/Kennel (for pets):			

Every family member should carry a copy of this important information: ✂ Cut along the broken lines.

Contact Name: _____
 Telephone: _____
 Out-of-Town Contact: _____
 Telephone: _____
 Neighborhood Meeting Place:

 Meeting Place Telephone:

 Special Notes:

Contact Name: _____
 Telephone: _____
 Out-of-Town Contact: _____
 Telephone: _____
 Neighborhood Meeting Place:

 Meeting Place Telephone:

 Special Notes:

Contact Name: _____
 Telephone: _____
 Out-of-Town Contact: _____
 Telephone: _____
 Neighborhood Meeting Place:

 Meeting Place Telephone:

 Special Notes:

Contact Name: _____
 Telephone: _____
 Out-of-Town Contact: _____
 Telephone: _____
 Neighborhood Meeting Place:

 Meeting Place Telephone:

 Special Notes:

