# **Community Disaster Preparedness Manual**



# County of Henrico Division of Fire

## **Table of Contents**

Introduction	2
Four Steps to Safety	5
If Disaster Strikes	6
Disaster Supply Kit	7
Escape Plan	10
Chemical Emergencies	13
Hurricanes	19
Terrorism	22
Thunderstorms	25
Tornadoes	27
Winter Storms	31

## **Community Disaster Preparedness**

Disaster can strike quickly and without warning. It can force you to evacuate your neighborhood or confine you to your home. What would you do if basic services–water, gas, electricity or telephones–were cut off? Local officials and relief workers will be on the scene after a disaster, but they cannot reach everyone right away. Families can–and do–cope with disaster by preparing in advance and working together as a team. Follow the steps listed in this brochure to create your family's disaster plan. Knowing what to do is your best protection and your responsibility.

The following information is provided by the Federal Emergency Management Agency and the American Red Cross. Additional disaster preparedness information can be obtained at the following web sites:

www.henricofire.org

www.fema.gov

www.redcross.org

Questions or comments can be directed to:

County of Henrico Division of Fire Office of Emergency Services 804-501-5515

## 4 Steps to Safety

## 1. Find Out What Could Happen to You

- The disasters identified in the Henrico Emergency Operations Plan as most probable for our region are:
  - Chemical Emergency
  - Thunder Storm / Tornado
  - Winter Storm
  - Hurricane
- Information on how to prepare for each type of disaster is included in this document

- The community's warning system is primarily the Emergency Alert System accessed through local media.
- Find out how to help elderly or disabled persons, if needed.
- Ask about the disaster plans at your workplace, your children's school or daycare center and other places where your family spends time.

## 2. Create a Disaster Plan

Meet with your family and discuss why you need to prepare for disaster. Explain the dangers of fire, severe weather and chemical emergencies to children. Plan to share responsibilities and work together as a team.

Discuss the types of disasters that are most likely to happen. Explain what to do in each case.

- Pick two places to meet:
  - 1. Right outside your home in case of a sudden emergency, like a fire.
  - 2. Outside your neighborhood in case you can't return home.
- Everyone must know the address and phone number.
- Ask an out-of-state friend to be your "family contact." After a disaster, it's often easier to call long distance.
- Other family members should call this person and tell them where they are. Everyone must know your contact's phone number.
- Discuss what to do in an evacuation. Plan how to take care of your pets.

Family Disaster Plan		
Emergency Meeting Place:		
Meeting Place Phone:		
Address:		
Family Contact(s) 1.	2.	
Phone ( )	Phone ( )	

Post emergency telephone numbers by phones (fire, police, ambulance, etc.).

## **3. Complete This Checklist**

- □ Install smoke detectors on each level of your home, especially near bedrooms.
- Conduct a home hazard hunt.
- □ Stock emergency supplies and assemble a Disaster Supplies Kit.
- Take a first aid and CPR class.
- □ Find the safe spots in your home for each type of disaster.
- Test your smoke detectors monthly and change the batteries every six months when clocks are set for daylight savings time.
- Quiz your kids every six months so they remember what to do.
- Conduct fire and emergency evacuation drills.
- Replace stored water every three months and stored food every six months.
   Test and recharge your fire extinguisher(s) according to manufacturer's instructions.
- Teach children how and when to call 911 or your local Emergency Medical Services number for emergency help.
- Show each family member how and when to turn off the water, gas and electricity at the main switches.
- Check if you have adequate insurance coverage.
- Teach each family member how to use the fire extinguisher (ABC type), and show them where it's kept.
- Determine the best escape routes from your home. Find two ways out of each room.

## 4. Practice and Maintain Your Plan

Evacuate immediately if told to do so:

- Listen to your battery-powered radio and follow the instructions of local emergency officials.
- Wear protective clothing and sturdy shoes.
- Take your Disaster Supplies Kit.
- Lock your home.
- Use travel routes specified by local authorities don't use shortcuts because certain areas may be impassable or dangerous.

If you're sure you have time:

- Shut off water, gas and electricity before leaving, if instructed to do so.
- Post a note telling others when you left and where you are going.
- Make arrangements for your pets.

# If Disaster Strikes

Remain calm and patient. Put your plan into action.

## Check for injuries

Give first aid and get help for seriously injured people.

## Listen to your battery powered radio for news and instructions

Evacuate, if advised to do so. Wear

protective clothing and sturdy shoes.

## If you are sure you have time

- Shut off water, gas and electricity, if instructed to do so.
- Let others know when you left and where you are going.
- Make arrangements for pets. Animals may not be allowed in public shelters.

Check for damage in your

home...

- Use flashlights do not light matches or turn on electrical switches, if you suspect damage.
- Check for fires, fire hazards and other household hazards.
- Sniff for gas leaks, starting at the water heater. If you smell gas or suspect a leak, turn off the main gas valve, open windows, and get everyone outside quickly.
- Shut off any other damaged utilities.
- Clean up spilled medicines, bleach, or gasoline.

## Remember to...

- Confine or secure your pets.
- Call your family contact— do not use the telephone again unless it is a lifethreatening emergency.
- Check on your neighbors, especially elderly or disabled persons.
- Make sure you have an adequate water supply in case service is cut off.
- Stay away from downed power lines.

## Your Family Disaster Supplies Kit

After a disaster, local officials and relief workers will be on the scene, but they cannot reach everyone immediately. You could get help in minutes or it may take hours. Would your family be prepared to cope with the emergency until help arrives?

Your family will cope best by preparing for disaster before it strikes. One way to prepare is by assembling a Disaster Supplies Kit. Once disaster hits, you won't have time to shop or search for supplies. But if you've gathered supplies in advance, your family can endure an evacuation or home confinement.

### To prepare your kit

- Review the checklists in this document.
- Gather the supplies that are listed. You may need them if your family is confined at home.
- Place the supplies you'd most likely need for an evacuation in an easy-to-carry container.
   These supplies are listed with an asterisk (\*).
- Disasters happen anytime and anywhere. And when disaster strikes, you may not have much time to respond.
- A highway spill of hazardous material could mean instant evacuation.
- A winter storm could confine your family at home. A flood, tornado or any other disaster could cut off basic services--gas, water, electricity and telephones--for days.

#### <u>Water</u>

Store water in plastic containers such as soft drink bottles. Avoid using containers that will decompose or break, such as milk cartons or glass bottles. A normally active person needs to drink at least two quarts of water each day. Hot environments and intense physical activity can double that amount. Children, nursing mothers and ill people will need more.

- Store one gallon of water per person per day (two quarts for drinking, two quarts for food preparation/sanitation)\*
- Keep at least a three-day supply of water for each person in your household.

### <u>Food</u>

Store at least a three-day supply of non-perishable food. Select foods that require no refrigeration, preparation or cooking and little or no water. If you must heat food, pack a can of sterno. Select food items that are compact and lightweight.

Include a selection of the following foods in your Disaster Supplies Kit:

- Ready-to-eat canned meats, fruits and vegetables
- Canned juices, milk, soup (if powdered, store extra water)
- Staples--sugar, salt, pepper
- High energy foods--peanut butter, jelly, crackers, granola bars, trail mix
- Vitamins

- Foods for infants, elderly persons or persons on special diets
- Comfort/stress foods--cookies, hard candy, sweetened cereals, lollipops, instant coffee, tea bags

## First Aid Kit

Assemble a first aid kit for your home and one for each car. A first aid kit\* should include:

- Sterile adhesive bandages in assorted sizes
- 2-inch sterile gauze pads (4-6)
- 4-inch sterile gauze pads (4-6)
- Hypoallergenic adhesive tape
- Triangular bandages (3)
- 2-inch sterile roller bandages (3 rolls)
- 3-inch sterile roller bandages (3 rolls)
- Scissors
- Tweezers
- Needle
- Moistened towelettes
- Antiseptic
- Thermometer

- Tongue blades (2)
- Tube of petroleum jelly or other lubricant
- Assorted sizes of safety pins
- Cleansing agent/soap
- Latex gloves (2 pair)
- Sunscreen
- Non-prescription drugs
- Aspirin or nonaspirin pain reliever
- Anti-diarrhea medication
- Antacid (for stomach upset)
- Syrup of Ipecac (use to induce vomiting if advised by the Poison Control Center)
- Activated charcoal (use if advised by the Poison Control Center

## **SUPPLIES**

- Mess kits, or paper cups, plates and plastic utensils\*
- Emergency first aid manual\*
- Battery-operated radio and extra batteries\*
- Flashlight and extra batteries\*
- Cash or traveler's checks, change\*
- Nonelectric can opener, utility knife\*
- Fire extinguisher: small canister, ABC type
- Tube tent
- Pliers
- Tape
- Compass

- Matches in a waterproof container
- Aluminum foil
- Plastic storage containers
- Signal flare
- Paper, pencil
- Needles, thread
- Medicine dropper
- Shut-off wrench, to turn off household gas and water
- Whistle
- Plastic sheeting
- Map of the area (for locating shelters)
- Sanitation
- Toilet paper, towelettes\*

- Soap, liquid detergent\*
- Feminine supplies\*
- Personal hygiene items\*
- Plastic garbage bags, ties (for personal sanitation uses)
- Plastic bucket with tight lid
- Disinfectant
- Household chlorine bleach
- Clothing and Bedding
- \*Include at least one complete change of clothing and footwear per person.
- Sturdy shoes or work boots\*

- Hat and gloves
- Rain gear\*
- Thermal underwear
- Blankets or sleeping bags\*
- Sunglasses
- Special Items
- For Baby\*
- Formula
- Diapers
- Bottles
- Powdered milk
- Entertainment--games and books.

#### **Medications**

Insulin

 Heart and high blood pressure medication

- Denture needs
- Contact lenses and supplies
- Extra eye glasses

Prescription drugs

### **Important Family Documents**

Keep these records in a waterproof, portable container.

- Will, insurance policies, contracts, deeds, stocks and bonds
- Passports, social security cards, immunization records
- Bank account numbers
- Credit card account numbers and companies
- Inventory of valuable household goods, important telephone numbers
- Family records (birth, marriage, death certificates)

## **Suggestions and Recommendations**

- Store your kit in a convenient place known to all family members. Keep a smaller version of the Disaster Supplies Kit in the trunk of your car.
- Keep items in air-tight plastic bags.
- Change your stored water supply every six months so it stays fresh.
- Rotate your stored food every six months.
- Re-think your kit and family needs at least once a year. Replace batteries, update clothes, etc.
- Ask your physician or pharmacist about storing prescription medications.

## <u>Escape Plan</u>

In a fire or other emergency, you may need to evacuate your house, apartment or mobile home on a moment's notice. You should be ready to get out fast.

Develop an escape plan by drawing a floor plan of your residence. Using a black or blue pen, show the location of doors, windows, stairways, and large furniture. Indicate the location of emergency supplies (Disaster Supplies Kit), fire extinguishers, smoke detectors, collapsible ladders, first aid kits and utility shut off points. Next, use a colored pen to draw a broken line charting at least two escape routes from each room.

Finally, mark a place outside of the home where household members should meet in case of fire. Be sure to include important points outside such as garages, patios, stairways, elevators, driveways and porches. If your home has more than two floors, use an additional sheet of paper. Practice emergency evacuation drills with all household members at least two times each year.



## **Emergency Plan**

## **Out-of-State Contact**

Name <u>:</u>	
City	
Telephone (Day)	(Evening)

### Local Contact

Name	
Telephone (Day)	(Evening)

### **Nearest Relative**

Name	
City	
Telephone (Day)	(Evening)

## **Family Work Numbers**

Father	Mother	
Other		

### **Emergency Telephone Numbers**

#### In a life-threatening emergency dial 9-1-1.

Henrico Division of Police: non-emergency 501-5000

Henrico Division of Fire: non-emergency 501-5000

## **Family Physicians**

Name	Telephone
Name	Telephone
Name	Telephone

## **Reunion Locations**

- 1. Right outside your home:
- 2. Away from the neighborhood, in case you cannot return home

Address
Telephone
Route to try first
Your Local Contact is:

## Chemical Emergencies

## **Chemicals Are an Important Part of Life**

Chemicals are a natural and important part of our environment. Even though we often don't think about it, we use chemicals every day. Chemicals help keep our food fresh and our bodies clean. They help our plants grow and fuel our cars. And chemicals make it possible for us to live longer, healthier lives.

Under certain conditions, chemicals can be poisonous or have a harmful effect on your health. Some chemicals that are safe, and even helpful in small amounts, can be harmful in larger quantities or under certain conditions.

Chemical accidents do happen . . . at home and in the community, and the American Red Cross wants you to be prepared.

## How You May Be Exposed to a Chemical

You may be exposed to a chemical in three ways:

- 1. Breathing the chemical
- 2. Swallowing contaminated food, water, or medication
- 3. Touching the chemical, or coming into contact with clothing or things that have touched the chemical.

Remember that you may be exposed to chemicals even though you may not be able to see or smell anything unusual.

## **Chemical Accidents Can Be Prevented**

Many people think of chemicals as only those substances used in manufacturing processes. But chemicals are found everywhere--in our kitchens, medicine cabinets, basements, and garages. In fact, most chemical accidents occur in our own homes. And they can be prevented.

## **Children and Poisoning**

The most common home chemical emergencies involve small children eating medicines. Experts in the field of chemical manufacturing suggest taking hazardous materials out of sight could eliminate up to 75 percent of all poisoning of small children.

Keep all medicines, cosmetics, cleaning products, and other household chemicals out of sight and out of reach of children. If your child should eat or drink a non-food substance, find any containers immediately and take them to the phone. Call the Poison Control Center or Emergency Medical Services (EMS), or 9-1-1, if you have it in your area, or call the operator giving this information. Follow their instructions carefully. Often the first aid advice found on containers may not be appropriate. So, do not give anything by mouth until medical professionals have advised you.

#### **Home Product Precautions**

Other home accidents can result from trying to improve the way a product works by adding one substance to another, not following directions for use of a product, or by improper storage or disposal of a chemical.

The first precaution you can take is to avoid mixing common household chemical products. Some combinations of these products, such as ammonia and bleach, can create toxic gases.

A second important precaution is to always read the directions before using a new product. Some products should not be used in a small confined space to avoid inhaling dangerous vapors. Other products should not be used without gloves and eye protection to help prevent the chemical from touching your body. Read and follow the directions.

Another effective way to protect yourself and your family is to store chemical products properly. Non-food products should be stored tightly closed in their original containers so you can always identify the contents of each container and how to properly use the product.

Never smoke while using household chemicals. Don't use hair spray, cleaning solutions, paint products, or pesticides near the open flame of an appliance, pilot light, lighted candle, fireplace, wood burning stove, etc. Although you may not be able to see or smell them, vapor particles in the air could catch fire or explode.

If you should spill a chemical, clean it up immediately with some rags, being careful to protect your eyes and skin. Allow the fumes in the rags to evaporate outdoors in a safe place, then dispose of them by wrapping them in a newspaper and then placing them in a sealed plastic bag. Dispose of these materials with your trash. If you don't already have one, buy a fire extinguisher that is labeled for A, B, and C class fires and keep it handy.

Buy only as much of a chemical as you think you will use. If you have product left over, try to give it to someone who will use it. Take care to dispose of it properly. Improper disposal can result in harm to yourself or members of your family, accidentally contaminate our local water supply, or harm other people.

It is also important to dispose of products properly to preserve our environment and protect wildlife. Plus, some products can be recycled and further protect our environment.

Many household chemicals can be taken to your local household hazardous waste collection facility. Many facilities accept pesticides, fertilizers, household cleaners, oil-based paints, drain and pool cleaners, antifreeze, and brake fluid. If you have questions about how to dispose of a chemical, call the facility or the environmental or recycling agency to learn the proper method of disposal.

### **Major Chemical Emergencies**

A major chemical emergency is an accident that releases a hazardous amount of a chemical into the environment. Accidents can happen underground, on railroad tracks or highways, and at manufacturing plants. These accidents sometimes result in a fire or explosion, but many times you cannot see or smell anything unusual.

## How You May Be Notified of a Major Chemical Emergency

In the event of a major chemical emergency, the authorities will notify you. To get your attention, the emergency alert system will be activated, or emergency personnel may drive by and give instructions over a loudspeaker. Officials could even come to your door.

Listen carefully to radio or television emergency alert stations (EAS), and strictly follow instructions. Your life could depend on it.

#### You Will Be Told:

- The type of health hazard
- The area affected
- How to protect yourself
- Evacuation routes (if necessary)
- Shelter locations
- Type and location of medical facilities
- And the phone numbers to call if you need extra help.

Do not call the telephone company, and do not call EMS, 9-1-1, or the operator for information. Dial these numbers only for a possible life-threatening emergency.

## **Shelter in Place**

One of the basic instructions you may be given in a chemical emergency is to "shelter in place". This is a precaution aimed to keep you and your family safe while remaining in your home. If you are told to shelter in place, take your children and pets indoors immediately.

- Close all windows in your home.
- Turn off all fans, heating and air conditioning systems
- Close the fireplace damper
- Go to an aboveground room (not the basement) with the fewest windows and doors.
- Take your Family Disaster Supplies Kit with you.
- Wet some towels and jam them in the crack under the doors.
- If you are told there is danger of explosion, close the window shades, blinds, or curtains. To avoid injury, stay away from the windows.
- Stay in the room and listen to your radio until you are told all is safe or you are told to evacuate.

#### **Evacuation**

Authorities may decide to evacuate an area for your protection. Again, it is important to stay calm, listen carefully and follow all instructions.

If you are told to evacuate, listen to your radio to make sure the evacuation order applies to you and to understand if you are to evacuate immediately or if you have time to pack some essentials.

Do not use your telephone.

#### If you are told to evacuate immediately:

- Take your Family Disaster Supplies Kit and medications
- Close and lock your windows
- Shut off all vents
- Lock the door
- Move quickly and calmly
- Do not assume that a shelter will have everything you need. In most cases, the shelters will
  provide only emergency items such as meals, cots, and blankets.

You don't need to turn off your refrigerator or freezer, but you should turn off all other appliances and lights before locking your home as you leave.

Check on neighbors to make sure they have been notified, and offer help to those with disabilities or other special needs. If you need a ride, ask a neighbor. If no neighbor is available to help you, listen to the emergency broadcast station for further instructions.

Take only one car to the evacuation site.

Close your car windows and air vents and turn off the heater or air conditioner.

Don't take shortcuts because a shortcut may put you in the path of danger. For your safety, follow the exact route you are told to take.

#### Emergency Procedures for School Children

In an emergency, your children may be sheltered in place or evacuated from school. If protective actions are being taken at your children's school, do not go to the school. School personnel are trained to handle emergencies.

- Do not call your child's school. You could tie up a phone line that is needed for emergency communications.
- For further information, listen to local emergency radio and TV stations to learn when and where you can pick up your children.

#### If you think you have been exposed to a toxic chemical, call 9-1-1.

If you see or smell something that you think may be dangerous, or find someone who has been overcome with toxic vapors, your first job is to make sure that you don't become a victim. If you remain in a dangerous area and become injured or unconscious, you cannot help yourself or any victims.

Because chemical poisoning can be a life-threatening emergency:

- 1. Send someone to call EMS, immediately.
- 2. Tell the operator the location of the emergency and the phone number from where you are calling.
- 3. Describe what has happened, how many people are involved, and what is being done to help.
- 4. Stay on the phone until the operator tells you to hang up.

If you are trained in CPR or first aid, and feel confident that you are not in danger, check the person for life-threatening injuries. Administer appropriate treatment, and then deal with the chemical injuries.

#### First Aid Treatment for Chemical Burns

- A chemical burn can be minor or life threatening, but proper treatment can reduce the chance of infection and the damage caused by contact with the chemical.
- Remove any affected clothing or jewelry from the injury. Use lots of cool running water to
  flush the chemical from the skin until emergency help arrives. The running water will dilute
  the chemical fast enough to prevent the injury from getting worse.
- Use the same treatment for eye burns and remove any contact lenses. Be careful to flush the eye from the nose outward.
- If no large amount of clean water is available, gently brush the chemical off the skin and away from the victim and you.
- If the chemical is on the face, neck, or shoulders, ask the victim to close his or her eyes before brushing off the chemical.
- Cover the wound very loosely with a dry, sterile or clean cloth so that the cloth will not stick to the wound. Do not put any medication on the wound. Seek medical attention immediately.

If you believe you have been contaminated with a chemical, call the Poison Control Center, EMS, 9-1-1, or the operator immediately. If medical help is not immediately available, remove your clothing starting from the top and working your way down to your socks. Take care not to touch your contaminated clothing to your bare skin. Place your clothing in a plastic bag so it cannot contaminate other people or things. Take a thorough shower to wash any chemical away. Re-dress in clean clothing and go for medical help at your first opportunity

#### Important Points To Remember

- 1. Chemicals are everywhere. They are an important part of life.
- 2. The most common chemical accidents occur in our own homes and can be prevented.
- 3. The best ways to avoid chemical accidents are to read and follow the directions for use, storage, and disposal of the product.
- 4. Don't mix products, especially household cleaning products.
- 5. Develop a Family Disaster Plan and pack a Family Disaster Supplies Kit.
- 6. In the event of an emergency, follow the instructions of the authorities carefully. Listen to your emergency broadcast stations on radio and TV.
- 7. Use your phone only in life-threatening emergencies, and then call the Poison Control Center, EMS, 9-1-1, or the operator immediately.
- 8. If you are told to "shelter in place", go inside, close all windows and vents and turn off all fans, heating or cooling systems. Take family members and pets to a safe room, seal windows and doors, and listen to emergency broadcast stations for instructions.
- 9. If you are told to evacuate immediately, take your Family Disaster Supplies Kit. Pack only the bare essentials, such as medications, and leave your home quickly. Follow the traffic route authorities recommend. Don't take short cuts on the way to the shelter.
- 10. If you find someone who appears to have been injured from chemical exposure, make sure you are not in danger before administering first aid.
- 11. And lastly, remember, the best way to protect yourself and your family is to be prepared.

# HURRICANES

Hurricanes can be dangerous killers. Learning the hurricane warning messages and planning ahead can reduce the chances of injury or major property damage.

#### Before a Hurricane

- Plan an evacuation route.
- Learn safe routes inland.
- Be ready to drive 20 to 50 miles to locate a safe place.
- Have disaster supplies on hand.
- Make arrangements for pets.
  - Pets may not be allowed into emergency shelters for health and space reasons. Contact your local humane society for information on local animal shelters.
- Make sure that all family members know how to respond after a hurricane.
- Teach family members how and when to turn off gas, electricity, and water.
- Teach children how and when to call 9-1-1, police, or fire department and which radio station to tune to for emergency information.
- Protect your windows.
  - Permanent shutters are the best protection. A lower-cost approach is to put up plywood panels. Use 1/2-inch plywood--marine plywood is best--cut to fit each window.
     Remember to mark which board fits which window. Pre-drill holes every 18 inches for screws. Do this long before the storm.
- Trim back dead or weak branches from trees.
- Check into flood insurance.
  - You can find out about the National Flood Insurance Program through your local insurance agent or emergency management office. There is normally a 30-day waiting period before a new policy becomes effective. Homeowners polices do not cover damage from the flooding that accompanies a hurricane.
- Develop an emergency communication plan.
- In case family members are separated from one another during a disaster (a real possibility during the day when adults are at work and children are at school), have a plan for getting back together.
- Ask an out-of-state relative or friend to serve as the "family contact."
- After a disaster, it's often easier to call long distance. Make sure everyone in the family knows the name, address, and phone number of the contact person.

## **Hurricane Watches and Warnings**

A hurricane watch is issued when there is a threat of hurricane conditions within 24-36 hours. A hurricane warning is issued when hurricane conditions (winds of 74 miles per hour or greater, or dangerously high water and rough seas) are expected in 24 hours or less.

#### **During a Hurricane Watch**

- Listen to a battery-operated radio or television for hurricane progress reports.
- Check emergency supplies.
- Fuel car.
- Bring in outdoor objects such as lawn furniture, toys, and garden tools and anchor objects that cannot be brought inside.
- Secure buildings by closing and boarding up windows. Remove outside antennas.
- Turn refrigerator and freezer to coldest settings. Open only when absolutely necessary and close quickly.
- Store drinking water in clean bathtubs, jugs, bottles, and cooking utensils.
- Review evacuation plan.

#### During a Hurricane Warning

- Listen constantly to a battery-operated radio or television for official instructions.
- If in a mobile home, check tiedowns and evacuate immediately.
- Store valuables and personal papers in a waterproof container on the highest level of your home.
- Avoid elevators.

If at home:

- Stay inside, away from windows, skylights, and glass doors.
- Keep a supply of flashlights and extra batteries handy. Avoid open flames, such as candles and kerosene lamps, as a source of light.
- If power is lost, turn off major appliances to reduce power "surge" when electricity is restored.

## If officials indicate evacuation is necessary

- Leave as soon as possible. Avoid flooded roads and watch for washed-out bridges.
- Secure your home by unplugging appliances and turning off electricity and the main water valve.
- Tell someone outside of the storm area where you are going. If time permits, and you live in an identified surge zone, elevate furniture to protect it from flooding or better yet, move it to a higher floor.
- Bring pre-assembled emergency supplies and warm protective clothing.
- Take blankets and sleeping bags to shelter.
- Lock up homes and leave.

#### After a Hurricane

- Stay tuned to local radio for information.
- Help injured or trapped persons.
- Give first aid where appropriate.
- Do not move seriously injured persons unless they are in immediate danger of further injury. Call for help.
- Return home only after authorities advise that it is safe to do so.
- Avoid loose or dangling power lines and report them immediately to the power company.
- Enter your home with caution.
- Beware of snakes, insects, and animals driven to higher ground by
- flood water.
- Open windows and doors to ventilate and dry your home.
- Check refrigerated foods for spoilage.
- Take pictures of the damage, both to the house and its contents and for insurance claims.
- Drive only if absolutely necessary and avoid flooded roads and washed-out bridges.
- Use telephone only for emergency calls.

#### **INSPECTING UTILITIES IN A DAMAGED HOME**

Check for gas leaks:

If you smell gas or hear blowing or hissing noise, open a window and quickly leave the building. Turn off the gas at the outside main valve if you can and call the gas company from a neighbor's home. If you turn off the gas for any reason, it must be turned back on by a professional.

Look for electrical system damage:

If you see sparks or broken or frayed wires, or if you smell hot insulation, turn off the electricity at the main fuse box or circuit breaker. If you have to step in water to get to the fuse box or circuit breaker, call an electrician first for advice.

Check for sewage and water lines damage:

If you suspect sewage lines are damaged avoid using the toilets and call a plumber. If water pipes are damaged, contact the water company and avoid the water from the tap. You can obtain safe water by melting ice cubes.

# <u>Terrorism—Preparing for the</u> <u>Unexpected</u>

Devastating acts, such as the terrorist attacks on the World Trade Center and the Pentagon, have left many concerned about the possibility of future incidents in the United States and their potential impact. They have raised uncertainty about what might happen next, increasing stress levels. Nevertheless, there are things you can do to prepare for the unexpected and reduce the stress that you may feel now and later should another emergency arise. Taking preparatory action can reassure you and your children that you can exert a measure of control even in the face of such events.

## What You Can Do to Prepare

#### 1. Create an emergency communications plan.

Choose an out-of-town contact your family or household will call or e-mail to check on each other should a disaster occur. Your selected contact should live far enough away that they would be unlikely to be directly affected by the same event, and they should know they are the chosen contact. Make sure every household member has that contact's, and each other's, e-mail addresses and telephone numbers (home, work, pager and cell). Leave these contact numbers at your children's schools, if you have children, and at your workplace. Your family should know that if telephones are not working, they need to be patient and try again later or try e-mail. Many people flood the telephone lines when emergencies happen but e-mail can sometimes get through when calls don't.

#### 2. Establish a meeting place.

Having a predetermined meeting place away from your home will save time and minimize confusion should your home be affected or the area evacuated. You may even want to make arrangements to stay with a family member or friend in case of an emergency. Be sure to include any pets in these plans, since pets are not permitted in shelters and some hotels will not accept them.

#### 3. Assemble a disaster supplies kit.

If you need to evacuate your home or are asked to "shelter in place," having some essential supplies on hand will make you and your family more comfortable. Prepare a disaster supplies kit in an easy-to-carry container such as a duffel bag or small plastic trash can. Include "special need" items for any member of your household (infant formula or items for people with disabilities or older people), first aid supplies (including prescription medications), a change of clothing for each household member, a sleeping bag or bedroll for each, a battery powered radio or television and extra batteries, food and water and tools. It is also a good idea to include some cash and copies of important family documents (birth certificates, passports and licenses) in your kit.

Copies of essential documents-like powers of attorney, birth and marriage certificates, insurance policies, life insurance beneficiary designations and a copy of your will-should also be kept in a safe location outside your home. A safe deposit box or the home of a friend or family member who lives out of town qualifies.

#### 4. Check on the school emergency plan of any school-age children you may have.

You need to know if they will they keep children at school until a parent or designated adult can pick them up or send them home on their own. Be sure that the school has updated information about how to reach parents and responsible caregivers to arrange for pick up. And, ask what type of authorization the school may require to release a child to someone you designate, if you are not able to pick up your child. During times of emergency the school telephones may be overwhelmed with calls.

## **If Disaster Strikes**

- Remain calm and be patient.
- Follow the advice of local emergency officials.
- Listen to your radio or television for news and instructions.
- If the disaster occurs near you, check for injuries. Give first aid and get help for seriously injured people.
- If the disaster occurs near your home while you are there, check for damage using a flashlight. Do not light matches or candles or turn on electrical switches. Check for fires, fire hazards and other household hazards. Sniff for gas leaks, starting at the water heater. If you smell gas or suspect a leak, turn off the main gas valve, open windows, and get everyone outside quickly.
- Shut off any other damaged utilities.
- Confine or secure your pets.
- Call your family contact—do not use the telephone again unless it is a life-threatening emergency.
- Check on your neighbors, especially those who are elderly or disabled.

#### A Word on What Could Happen

There can be significant numbers of casualties and/or damage to buildings and the infrastructure. So employers need up-to-date information about any medical needs you may have and on how to contact your designated beneficiaries. Heavy law enforcement involvement at local, state and federal levels follows a terrorist attack due to the event's criminal nature. Health and mental health resources in the affected communities can be strained to their limits, maybe even overwhelmed. Extensive media coverage, strong public fears and international implications and consequences can continue for a prolonged period. Workplaces and schools may be closed, and there may be restrictions on domestic and international travel. You and your family or household may have to evacuate an area, avoiding roads blocked for your safety. Clean up may take many months.

#### **Evacuation**

If local authorities ask you to leave your home, they have a good reason to make this request, and you should heed the advice immediately. Listen to your radio or television and follow the instructions of local emergency officials and keep these simple tips in mind-

- Wear long-sleeved shirts, long pants and sturdy shoes so you can be as protected as much as possible.
- Take your disaster supplies kit.
- Lock your home.
- Use travel routes specified by local authorities—don't use shortcuts because certain areas may be impassable or dangerous.

Listen to local authorities. Your local authorities will provide you with the most accurate information specific to an event in your area. Staying tuned to local radio and television, and following their instructions is your safest choice.

#### If you're sure you have time

- Call your family contact to tell them where you are going and when you expect to arrive.
- Plan to take your pets with you; do not leave them behind. Because pets are not permitted in public shelters, follow your plan to go to a relative or friend's home, or find a "pet-friendly" hotel.
- Shut off water and electricity before leaving, if instructed to do so. Leave natural gas service ON unless local officials advise you otherwise. You may need gas for heating and cooking, and only a professional can restore gas service in your home once it's been turned off. In a disaster situation it could take weeks for a professional to respond.
- Stay away from downed power lines.

#### Shelter in place

If you are advised by local officials to "shelter in place," what they mean is for you to remain inside your home or office and protect yourself there. Close and lock all windows and exterior doors. Turn off all fans, heating and air conditioning systems. Close the fireplace damper. Get your disaster supplies kit, and make sure the radio is working. Go to an interior room without windows that's above ground level. In the case of a chemical threat, an aboveground location is preferable because some chemicals are heavier than air, and may seep into basements even if the windows are closed. Using duct tape, seal all cracks around the door and any vents into the room. Stay listening to your radio or television until you are told all is safe or you are told to evacuate. Local officials may call for evacuation in specific areas at greatest risk in your community.

#### Be Aware of Biological/Radiological Exposure

Listen to local radio and television reports for the most accurate information from responsible governmental and medical authorities on what's happening and what actions you will need to take.

# THUNDERSTORMS AND LIGHTNING

Some thunderstorms can be seen approaching, while others hit without warning. It is important to learn and recognize the danger signs and to plan ahead.

## **Before a Thunderstorm**

- Learn the thunderstorm danger signs.
  - Dark, towering, or threatening clouds.
  - Distant lightning and thunder.
- Have disaster supplies on hand
- Check for hazards in the yard.
- Dead or rotting trees and branches can fall during a severe thunderstorm and cause injury and damage.
- Make sure that all family members know how to respond after a thunderstorm.
- Teach family members how and when to turn off gas, electricity and water.
- Teach children how and when to call 9-1-1, police, fire department, and which radio station to tune for emergency information.

#### Severe Thunderstorm Watches and Warnings

A severe thunderstorm watch is issued by the National Weather Service when the weather conditions are such that a severe thunderstorm (damaging winds 58 miles per hour or more, or hail three-fourths of an inch in diameter or greater) is likely to develop. This is the time to locate a safe place in the home and tell family members to watch the sky and listen to the radio or television for more information.

A severe thunderstorm warning is issued when a severe thunderstorm has been sighted or indicated by weather radar. At this point, the danger is very serious and everyone should go to a safe place, turn on a battery-operated radio or television, and wait for the "all clear" by the authorities.

#### Develop an emergency communication plan.

In case family members are separated from one another during a thunderstorm (a real possibility during the day when adults are at work and children are at school), have a plan for getting back together.

#### Ask an out-of-state relative or friend to serve as the "family contact".

After a disaster, it's often easier to call long distance. Make sure everyone knows the name, address, and phone number of the contact person.

## **During a Thunderstorm**

If indoors:

- Secure outdoor objects such as lawn furniture that could blow away or cause damage or injury. Take light objects inside.
- Shutter windows securely and brace outside doors.
- Listen to a battery operated radio or television for the latest storm information.
- Do not handle any electrical equipment or telephones because lightning could follow the wire. Television sets are particularlydangerous at this time.
- Avoid bathtubs, water faucets, and sinks because metal pipes can transmit electricity.

#### If outdoors:

- Attempt to get into a building or car.
- If no structure is available, get to an open space an squat low to the ground as quickly as possible. (If in the woods, find an area protected by low clump of trees--never stand underneath a single large tree in the open.)
- Be aware of the potential for flooding in low-lying areas. crouch with hands on knees.
- Avoid tall structures such as towers, tall trees, fences, telephone lines, or power lines.
- Stay away from natural lightning rods such as golf clubs, tractors, fishing rods, bicycles, or camping equipment.
- Stay from rivers, lakes, or other bodies of water.
- If you are isolated in a level field or prairie and you feel your hair stand on end (which indicates that lightning is about to strike), bend forward, putting your hands on your knees. A position with feet together and crouching while removing all metal objects is recommended. Do not lie flat on the ground.

#### If in a car:

- Pull safely onto the shoulder of the road away from any trees that could fall on the vehicle.
- Stay in the car and turn on the emergency flashers until the heavy rains subside.
- Avoid flooded roadways.

## After a Thunderstorm

- Check for injuries.
- A person who has been struck by lightning does not carry an electrical charge that can shock other people. Provide first aid CPR as needed and call emergency medical assistance immediately. Remember to help your neighbors who may require special assistance--infants, elderly people, and people with disabilities.
- Report downed utility wires to local utility companies.
- Drive only if necessary. Debris and washed-out roads may make driving dangerous.

# TORNADOES

When a tornado is coming, you have very little time to make life -or-death decisions. Advance planning and quick response are the keys to surviving a tornado.

#### TORNADO FACTS

- A tornado is a violently rotating column of air extending from a thunderstorm to the ground.
- Tornadoes are capable of destroying homes and vehicles and can cause fatalities.
- Tornadoes may appear nearly transparent until dust and debris are picked up or a cloud forms in the funnel. The average tornado moves SW to NE but have been known to move in any direction.
- The average forward speed is 30 mph but may vary from stationary to 70 mph and have rotating winds in excess of 250 mph.
- Tornadoes can accompany tropical storms and hurricanes as they move onto land.
- Waterspouts are tornadoes that form over water.

#### WHERE and WHEN

- Tornadoes can occur at any time of the year.
- Tornadoes have occurred in every state, but they are most frequent east of the Rocky Mountains during spring and summer months.
- In the southern states, peak tornado occurrence is March through May, while peak months in the northern states are during the late spring and early summer.
- Tornadoes are most likely to occur between 3 and 9 p.m. but can happen at any time.

## **HOW TO PREPARE**

- Develop a plan for you and your family at home, work, school and when outdoors.
- Identify a safe place to take shelter
- Conduct frequent tornado drills each tornado season.
- Keep a highway map nearby to follow storm movement from weather bulletins.
- Have a NOAA Weather Radio with a warning alarm tone and battery backup to receive watches and warnings.
- Listen to radio and television for weather information.
- Check the weather forecast before leaving for extended periods outdoors. Watch for signs of approaching storms.
- If severe weather threatens, check on people who are elderly, very young, or physically or mentally disabled.

- Practice having everyone in your family go to your designated safe place in response to a tornado threat.
- Contact your local emergency management office and NOAA for more information on tornadoes.

#### Develop a communications plan

- Pick two places to meet: a spot outside your home for an emergency and a place away from your neighborhood in case you can't return home.
- Choose an out-of-state friend as your "family check-in contact" for everyone to call if the family gets separated. Discuss what you would do if advised to evacuate.

#### Prepare a Disaster Supply Kit

- A 3-day supply of water (one gallon per person per day) and food that won't spoil.
- One change of clothing and footwear per person.
- One blanket or sleeping bag per person.
- A first aid kit including prescription medicines.
- Emergency tools, including a battery powered NOAA Weather Radio and portable radio, flashlight, and extra batteries.
- An extra set of car keys and a credit card or cash.
- Special items for infant, elderly, or disabled family members.
- Copies of ID cards or driver's licenses for all family members.

#### Tornado Watches and Warnings

- The National Weather Service issues a tornado watch when tornadoes are possible in your area. Remain alert for approaching storms.
- This is the time to remind family members where the safest places within your home are located, and listen to the radio or television for further developments.
- A tornado warning is issued, by NWS, when a tornado has been sighted or indicated by weather radar. If a tornado warning is issued for your area and the sky becomes threatening, move to your pre-designated place of safety.
- Turn on a battery-operated radio and wait for further instructions.

## **TORNADO DANGER SIGNS**

#### Occasionally, tornadoes develop so rapidly that advance warning is not possible. Look out for:

- Dark, often greenish sky
- Large hail
- Wall cloud
- Loud roar, similar to a freight train

#### Caution:

- Some tornadoes are clearly visible, while rain or nearby low-hanging clouds obscure others.
- Before a tornado hits, the wind may die down and the air may become very still.
- A cloud of debris can mark the location of a tornado even if a funnel is not visible.
- Tornadoes generally occur near the trailing edge of a thunderstorm. It is not uncommon to see clear, sunlit skies behind a tornado.

## **Safety Rules During a Tornado**

- Do not get under an overpass or bridge. You are safer in a low, flat location.
- In a home or building, move to a predesignated shelter, such as a basement (under a sturdy piece of furniture) or a Safe Room.
- If an underground shelter is not available, move to a small interior room or hallway on the lowest floor and get under a sturdy piece of furniture. Put as many walls as possible between you and the outside.
- Stay away from windows. Go to the center of the room. Stay away from corners because they attract debris.
- Get out of automobiles immediately and seek shelter in a nearby building. If a building is
  unavailable or there is no time, get out of the car and lie in a ditch or lowlying area away from
  the car. Be aware of potential for flooding. In urban or congested areas, never try to outrun a
  tornado in a car or truck; instead, leave it immediately for safe shelter. Tornadoes can change
  direction quickly and can lift up a car or truck and toss it in the air.
- If caught outside, lie flat in a nearby ditch or depression and cover your head with your hands. Be aware of potential for flooding.
- Be aware of flying debris. Flying debris from tornadoes causes most fatalities and injuries.
- Mobile homes, even if tied down, offer little protection from tornadoes. You should leave a mobile home and go to the lowest floor of a sturdy nearby building or a storm shelter.
- Avoid places with wide-span roofs such as auditoriums, cafeterias, large hallways, or shopping malls.
- Do not open windows, use time to seek shelter.
- Use arms to protect head and neck.

#### After the Tornado

- Help injured or trapped persons. Give first aid when appropriate. Don't try to move the seriously injured unless they are in immediate danger of further injury. Call for help.
- Stay out of damaged buildings. Return home when authorities say it is safe.

- Turn on radio or television to get the latest emergency information. Use the phone only for emergency calls.
- Clean up spilled flammable liquids immediately. Leave the building if you smell gas or chemical fumes.
- Take pictures of the damage both the house and contents for insurance purposes.
- Inspect Utilities in a Damaged Home
- Check for gas leaks If you smell gas or hear a blowing or hissing noise, open a window and quickly leave the building. Turn off the gas at the outside main valve if you can and call the gas company from a neighbor's home.
- If you turn off the gas, a professional must turn it back on.
- Look for electrical damage If you see sparks or broken or frayed wires, or if you smell hot
  insulation, turn off the electricity at the main fuse box or circuit breaker. If you have to step in
  water to get to the fuse box or circuit breaker, call an electrician for advice.
- Check for sewage and water line damage If you suspect sewage lines are damaged, avoid using the toilets and call a plumber. If water pipes are damaged, contact the water company and avoid using water from the tap. Melt ice cubes for safe water.

## Winter Preparedness

Timely preparation, including structural and non-structural mitigation measures to avoid the impacts of severe winter weather, can avert heavy personal, business and government expenditures. Experts agree that the following measures can be effective in dealing with the challenges of severe winter weather:

#### **Before Severe Weather Arrives**

- Store drinking water, first aid kit, canned/no-cook food, non-electric can opener, radio, flashlight and extra batteries where you can get them easily, even in the dark.
- Keep cars and other vehicles fueled and in good repair, with a winter emergency kit in each.
- Get a NOAA Weather Radio to monitor severe weather.
- Know how the public is warned (siren, radio, TV, etc.) and the warning terms for each kind of disaster in your community; e.g.:
- "Winter storm watch" --- Be alert, a storm is likely
- "Winter storm warning" --- Take action, the storm is in or entering the area
- "Blizzard warning" --- Snow and strong winds combined will produce blinding snow, near zero visibility, deep drifts, and life-threatening wind chill--seek refuge immediately!
- "Winter weather advisory" --- Winter weather conditions are expected to cause significant inconveniences and may be hazardous, especially to motorists
- "Frost/freeze warning" --- Below freezing temperatures are expected and may cause damage to plants, crops, or fruit trees
- "Flash flood or flood watch" --- Be alert to signs of flash flooding and be ready to evacuate on a moment's notice
- "flash flood warning" --- A flash flood is imminent--act quickly to save yourself because you
  may have only seconds
- "Flood warning" --- Flooding has been reported or is imminent--take necessary precautions at once
- Know safe routes from home, work and school to high ground.
- Know how to contact other household members through a common out-of-state contact in the event you and have to evacuate and become separated.
- Know how to turn off gas, electric power and water before evacuating.
- Know ahead of time what you should do to help elderly or disabled friends, neighbors or employees.
- Keep plywood, plastic sheeting, lumber, sandbags and hand tools on hand and accessible.
- Winterize your house, barn, shed or any other structure that may provide shelter for your family, neighbors, livestock or equipment. Install storm shutters, doors and windows; clear

rain gutters; repair roof leaks; and check the structural ability of the roof to sustain unusually heavy weight from the accumulation of snow--or water, if drains on flat roofs do not work.

## **During Any Storm or Emergency**

- Monitor your NOAA Weather Radio or keep a local radio and/or TV station on for information and emergency instructions.
- Have your emergency survival kit ready to go if told to evacuate.
- If you go outside for any reason, dress for the season and expected conditions:
- For cold weather, wear several layers of loose-fitting, lightweight, warm clothing rather than one layer of heavy clothing. Outer garments should be tightly woven and water-repellent. Mittens are warmer than gloves. Wear a hat. Cover your mouth with a scarf to protect your lungs from extremely cold air. Wear sturdy, waterproof boots in snow or flooding conditions.
- If advised to evacuate, tell others where you are going, turn off utilities if told to, then leave immediately, following routes designated by local officials.

#### During a Winter Storm

- Conserve fuel, if necessary, by keeping your house cooler than normal. Temporarily shut off heat to less-used rooms.
- If using kerosene heaters, maintain ventilation to avoid build-up of toxic fumes. Keep heaters at least three feet from flammable objects. Refuel kerosene heaters outside.
- Avoid travel if possible. If you must travel, do so during daylight. Don't travel alone. Stay on main roads, and keep others informed of your schedule.

#### Vehicle Safety During Winter Storms

- Pull off the road, set hazard lights to flashing, and hang a distress flag from the radio aerial or window. Remain in your vehicle; rescuers are most likely to find you there.
- Conserve fuel, but run the engine and heater about ten minutes each hour to keep warm, cracking a downwind window slightly to prevent carbon monoxide poisoning. Exercise to maintain body heat but don't overexert. Huddle with other passengers and use your coat for a blanket.
- In extreme cold use road maps, seat covers, floor mats, newspapers or extra clothing for covering--anything to provide additional insulation and warmth.
- Turn on the inside dome light so rescue teams can see you at night, but be careful not to run the battery down. In remote areas, spread a large cloth over the snow to attract the attention of rescue planes.

- Do not set out on foot unless you see a building close by where you know you can take shelter.
- Once the blizzard is over, you may need to leave the car and proceed on foot. Follow the road if possible. If you need to walk across open country, use distant points as landmarks to help maintain your sense of direction.

#### After the Storm

- Report downed power lines and broken gas lines to local utility companies immediately.
- After blizzards, heavy snows or extreme cold, check to see that no physical damage has occurred and that water pipes are functioning. If there are no other problems, wait for streets and roads to be opened before you attempt to drive anywhere.
- Check on neighbors, especially any who might need help.
- Beware of overexertion and exhaustion. Shoveling snow in extreme cold causes many heart attacks. Set your priorities and pace yourself after any disaster that leaves you with a mess to clean up. The natural tendency is to do too much too soon.