The City of Jacksonville, Fire Safety Advisory Board has prepared this workbook in conjunction with the Onslow County Chapter of the American Red Cross. It has been prepared for the residents and businesses of Jacksonville, N.C. and is designed to assist you in developing personal plans to cope with unforeseen emergencies and disasters.

Although the information in this book should help you to prepare for all types of emergencies, as you will see, we tend to focus most of our preparedness activities around the threat of a hurricane. This is because a hurricane is more likely to affect the citizens of Onslow County than most other natural disasters. A major hurricane could disrupt lifelines such as emergency services, utilities, and transportation routes. To cope and survive, citizens need to be self-sufficient for up to one week. Obviously, this requires some thought and planning.

Use this workbook as a guide. Not all of the information will pertain to you. If you haven’t done anything before, don’t get discouraged. You don’t have to accomplish everything in one day. Take it step by step. Make preparedness an ongoing family project.

The information in this workbook was compiled from many sources. The American Red Cross provided a large portion. They have several booklets and brochures available should you desire more detailed information. Other information was obtained from emergency preparedness information provided by various community disaster preparedness organizations on line.

The American Red Cross:
The American Red Cross is an excellent source for emergency preparedness information. Recommended further reading includes:

Preparing Your Home for a Hurricane,
Hurricane Preparedness – Before the Wind Blows
Hurricanes...Unleashing Nature’s Fury
Tornadoes... Nature’s Most Violent Storms
Against the Wind: Protecting Your Home From Hurricane Wind Damage
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Emergency Phone Numbers

For Further information or in an emergency situation contact:

Emergency Calls – Police, Fire, Rescue 911

City of Jacksonville:
Jacksonville Fire Department – Fire Emergency 911
Jacksonville Fire Department (Business) 455-8080
Jacksonville Police Department – Police Emergency 911
Jacksonville Police Department (Business) 455-1472
Jacksonville Police Department (Deaf TDD) 455-4140
Public Utilities 938-5233
Public Service Emergencies (nights, weekends) 455-1472
Water & Sewer Emergencies 938-5234
Onslow Memorial Hospital 577-2345

Onslow County Government:
Onslow County Emergency Management – Hurricane Info. 347-4270
Onslow County Hazardous Material/LEPC 347-4270
Onslow County Emergency Medical Services 346-6760
Onslow County Health Department
Onslow County Public Works Dept – Disaster Debris Removal 455-6911
Onslow County Water Department 455-0722
Sheriff’s Office (Emergency) 911
Sheriff’s Office (Business) 455-3113
American Red Cross – Onslow County 347-3581
Animal Shelter 455-0182 or 455-8277

Camp Lejeune Marine Base:
Naval Hospital – Camp Lejeune 450-4300 or 450-3079
Camp Lejeune Family Housing Maintenance (0800-1630) 451-2244
Camp Lejeune Family Housing Maintenance – Emergency 451-3001
Camp Lejeune Emergency Maintenance (24 hours) 451-3001
Camp Lejeune Telephone Trouble Calls 451-1114
American Red Cross – Camp Lejeune 451-2173 or 451-2182
Navy-Marine Corps Relief Society – Camp Lejeune 451-5346 or 451-5644

Utility Companies
CP&L Electric Emergency 800-419-6356
Jones Onslow Electric Emergency 353-1940 or 800-682-1515
Jones Onslow – Report Outage 353-1717 or 800-681-4146
Great Gas & Oil Company 347-7138
Jenkins Gas & Oil Company 455-1711
NC Natural Gas Corporation – Customer Service 800-275-6264
Suburban Propane 346-9892
Sprint Telephone – Report Outage 800-682-1034
Eztalk Telephone – Report Outage 800-804-6880
Teleconex Telephone – Report Outage 888-831-4300
1-800-Reconex – Report Outage 800-275-8223
## Local Emergency Broadcast Radio Stations

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<td>WANG</td>
<td>The Memory Station</td>
<td>FM</td>
<td>New Bern</td>
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<td>95.1</td>
<td>WRNS</td>
<td>Today’s country</td>
<td>FM</td>
<td>Kinston</td>
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<td>101.9</td>
<td>WIKS/WSFL</td>
<td>Kiss 102 FM</td>
<td>FM</td>
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<td>103.3</td>
<td>WMGV</td>
<td>V103</td>
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<td>106.5</td>
<td>WSFL</td>
<td>Home of Rock &amp; Roll</td>
<td>FM</td>
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<td>WNCT</td>
<td>Oldies 107.9</td>
<td>FM</td>
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<td>103.7</td>
<td>WCBZ</td>
<td>The Hot FM</td>
<td>FM</td>
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<td>The Sunny Beach Network</td>
<td>FM</td>
<td>Havelock</td>
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<td>WJCV</td>
<td>Religious</td>
<td>AM</td>
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<td>Religious</td>
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<td>WXQR</td>
<td>Star (Heavy Rock)</td>
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<td>WQSL</td>
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<td></td>
<td>FM</td>
<td>Wilmington</td>
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<td>102.7</td>
<td>WGNI</td>
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<td>FM</td>
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<td>WMNX</td>
<td>Coast</td>
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<td>The Talk Station</td>
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<td>WKOO</td>
<td>Kool</td>
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Preparing Yourself and Your Family for a Disaster

Important Individual and Family Information
Most people have a calendar that they mark with reminders of birthdays, anniversaries, and other special occasions. Use this same calendar to remind yourself to review your disaster plan, change the batteries in your smoke detector, check on supplies, etc. This should be done twice a year.

1st Date ___________________
2nd Date ___________________

After a major disaster such as an earthquake, hurricane, or tornado, you may need financial assistance and will want to document any property loss for insurance and income tax purposes. Having ready access to the documents necessary for completing application forms, as well as having those documents which could be difficult to replace, will eliminate undue delay and frustration.

Take a few minutes to record this vital family information. Keep copies in two safe places, fire resistant if possible. They can also be stored in watertight plastic bags in the freezer.

Store deeds, wills, tax records, birth certificates, insurance policies, and other vital documents.

Take photographs of all valuables for documentation for insurance claims. Photograph your entire house, room-by-room, drawer-by-drawer, including walls, ceilings, floors, outside landscaping, sheds, fences, and patios.

1. Names and social security numbers of all family members:
   Name                        SSAN
   _____________________________________________________________________
   _____________________________________________________________________
   _____________________________________________________________________
   _____________________________________________________________________
   _____________________________________________________________________
   _____________________________________________________________________

2. Name, address, and phone number of:
   Father’s employer: _________________________________________________________
   Address: _________________________________________________________________
   Phone: __________________________________________________________________
   Pager: ____________________________ Cell Phone _____________________________
   
   Mother’s employer: _________________________________________________________
   Address: _________________________________________________________________
   Phone: __________________________________________________________________
   Pager: ____________________________ Cell Phone _____________________________
   
   Child/Other’s employer: _________________________________________________
   Address: _________________________________________________________________
   Phone: __________________________________________________________________
   Pager: ____________________________ Cell Phone _____________________________
Child/Other’s employer: _____________________________________________________
Address: __________________________________________________________________
Phone: ___________________________________________________________________
Pager: ____________________________ Cell Phone _____________________________

Child/Other’s employer: _____________________________________________________
Address: __________________________________________________________________
Phone: ___________________________________________________________________
Pager: ____________________________ Cell Phone _____________________________

Child/Other’s employer: _____________________________________________________
Address: __________________________________________________________________
Phone: ___________________________________________________________________
Pager: ____________________________ Cell Phone _____________________________

Doctor: ___________________________________________________________________
Address: __________________________________________________________________
Phone: ___________________________________________________________________

Child’s Doctor: _____________________________________________________________
Address: __________________________________________________________________
Phone: ___________________________________________________________________

Hospital/Clinic: _____________________________________________________________
Address: __________________________________________________________________
Phone: ___________________________________________________________________

3. Name, address, and phone number of:
Child’s School: _____________________________________________________________
Address: __________________________________________________________________
Phone: ___________________________________________________________________

School policy is to hold / release (circle one) child.

4. Name, address, and phone number of:
Insurance Agent: ____________________________________________________________
Address: __________________________________________________________________
Phone: ___________________________________________________________________

Policy type: # _______________________________________________________________
Policy type: # _______________________________________________________________
Policy type: # _______________________________________________________________
Policy type: # _______________________________________________________________

5. Important Telephone Numbers:
Public Safety (Police and Fire)  911
Paramedics:  911
Poison Control Center: ____________________________________________________________
Electric Company: _____________________________________________________________
Gas Company: _______________________________________________________________
Water Company: _____________________________________________________________

If you and your family become separated before or during a disaster, it is a good idea to identify at least one local and one out-of-town friend or relative who everyone knows to contact after the disaster.
Emergency Contact: (Local) ____________________________________________________
Phone: _________________________________________________________________

7
Emergency Contact: (out-of-town) ________________________________________________
Address: ____________________________________________________________________
Phone: _____________________________________________________________________

6. Pertinent Medical Information: (include grandparents and other family members)
   Name: _______________________________________________________________________
   Regular Medications: ___________________________________________________________
   Regular Medications: ___________________________________________________________
   Regular Medications: ___________________________________________________________
   Allergies: _____________________________________________________________________
   Other (on dialysis, confined to wheelchair, etc.) _______________________________________

   Name: _______________________________________________________________________
   Regular Medications: ___________________________________________________________
   Regular Medications: ___________________________________________________________
   Regular Medications: ___________________________________________________________
   Allergies: _____________________________________________________________________
   Other (on dialysis, confined to wheelchair, etc.) _______________________________________

   Name: _______________________________________________________________________
   Regular Medications: ___________________________________________________________
   Regular Medications: ___________________________________________________________
   Regular Medications: ___________________________________________________________
   Allergies: _____________________________________________________________________
   Other (on dialysis, confined to wheelchair, etc.) _______________________________________

7. Car, boat, RV, etc. license and vehicle identification (ID) number:
   Kind: License #: ________________________________________________________________
   ID #: _________________________________________________________________________
   Kind: License #: ________________________________________________________________
   ID #: _________________________________________________________________________
   Kind: License #: ________________________________________________________________
   ID #: _________________________________________________________________________

8. Account type and number:
   Bank: ________________________________________________________________________
   Account type: #: ________________________________________________________________
   Bank: ________________________________________________________________________
   Account type: #: ________________________________________________________________
   Bank: ________________________________________________________________________
   Account type: #: ________________________________________________________________
   Other: _________________________________________________________________________
   Account type: #: ________________________________________________________________
9. To Obtain Emergency Information
Tune to one of the emergency broadcast stations listed in the front of this booklet. Any radio station still on the air should be broadcasting information about shelters, where water can be obtained, where food can be obtained, and where you can go to get help. There are several local Emergency Broadcast System Radio Stations in Onslow County. Enter one or more of these radio stations on the automatic buttons on the radio in your car. During major emergencies, it will be broadcasting information supplied to them by the Office of Disaster Preparedness and other local, state, and federal agencies.

If you are a cable TV subscriber, the cable providers scroll emergency messages across the bottom of the TV screen.

Coping with Your Child’s Fears
In the aftermath of a disaster, the immediate concern of most parents is the health and well being of their children. Finding a warm place to sleep and food to eat is only the first step in caring for a child in these circumstances. Disasters are particularly traumatic for children, so adults must be extra sensitive to their emotional needs and make a special effort to reassure them that the situation is under control.

Children depend on daily routines: They wake up, eat breakfast, go to school, and play with friends. When emergencies or disasters interrupt this routine, children may become anxious. In a disaster, they'll look to you and other adults for help. How you react to an emergency gives them clues on how to act. If you react with alarm, a child may become more scared. They see fear as proof that the danger is real. If you seem overcome with a sense of loss, a child may feel his/her losses more strongly.

Children’s fears also may stem from their imagination, and you should take these feelings seriously. A child who feels afraid is afraid. Your words and actions can provide reassurance. When talking with your child, be sure to present a realistic picture that is both honest and manageable.

Your child is less likely to experience prolonged fear or anxiety if he/she knows what to expect before, during, and after the disaster. Talk about your own experiences and/or read aloud about disasters, such as hurricanes. Local libraries have a number of good books on hurricanes. Ask the staff at your child’s school about the school’s disaster plan and discuss it with your children.

Disasters such as a hurricane or tornado have a good chance of occurring when your family is not all together. Develop a reunion plan. This plan will help you to get back together, or if that is not possible, let each other know that you are okay. Provide your child with the name and phone number of two relatives, neighbors or friends who will care for him/her until the family can be reunited should you become separated during the disaster. If he/she cannot locate any of the prearranged local contact, he should then try to reach the out of town emergency contact listed above in item 5.

A. Name: ____________________________________________
   Phone: ____________________________________________

B. Name: ____________________________________________
   Phone: ____________________________________________

Is this person listed with your child’s school as being authorized to pick up your child? Make certain that the school has accurate information regarding any medical condition, prescriptions, allergies, etc.

Feelings of fear are healthy and natural for adults and children. But as an adult, you need to keep control of the situation. When you're sure that the danger has passed, concentrate on your child’s emotional needs by asking the child what’s uppermost in his or her mind. Having children participate in the family’s recovery activities will help them feel that their life will return to “normal.”
Your response during this time may have a lasting impact. Your child may need both verbal and physical reassurance that everything will be all right. Hug him/her a lot.

Be aware that after a disaster, children are most afraid that:
- The event will happen again.
- Someone will be injured or killed.
- They will be separated from the family.
- They will be left alone.

Tips for the Elderly or the Disabled
Many elderly people live in retirement communities or manufactured and mobile homes. It is dangerous to remain in these dwellings during a tornado or hurricane, and evacuation is recommended. Consult your community leaders for emergency procedures and shelter information.

Other older and disabled citizens live in nursing homes or other types of health care facilities. These residents are dependent on others for daily needs, and those care-providers must be prepared to cope with disaster conditions. Ask about emergency plans for the facility before a disaster threatens.

If your community has no set disaster plan, meet with other residents, facility managers and emergency officials to discuss shared responsibilities and resources before, during and after a disaster. As many elderly people are on fixed incomes, it is important to stock and buy supplies throughout the year when the supply of emergency items are high and the prices are low. If community members all contribute to the emergency supply pool, the expense will be even less.

If you are physically unable to drive yourself from a risk area or to secure your home, ask your neighbors or family members for help. If further aid is needed, contact your local emergency management or civil defense office at the beginning of the hurricane season (June 1) to locate outside sources of assistance.

Make a list of all the special health and dietary products, medicines and equipment you need daily. Keep this list in a safe spot with other important papers. When you have to evacuate, make sure you have a 2-week supply of the items on the list.

Ask your pharmacist or physician about storage of prescription medicine. It is important to have all medications with you through evacuation or home confinement, as the local pharmacies may be knocked out by the storm for several days.

If you wear glasses, contact lenses or hearing aids, make sure you have spare accessories (cleaning solution, batteries) with you when you evacuate. Talk all walkers, wheelchairs, extra oxygen, and other special health care necessities with you.

People who are blind should keep an extra cane at home and at work. After the disaster, your seeing eye dog may be injured or too frightened to help you.

Know where the safer places are in each room of your home, such as: under a sturdy desk or table or in the corner of an inside wall.

Figure out how you can get out of each room if the doorway is blocked.

During the disaster move to one of the areas of safety you have previously identified. Stay away from heavy objects, tall furniture, and glass doors as they may fall, move, or break. If you are in a wheelchair, stay in it. Move to a doorway, or other area of safety. Lock the wheels and cover your head with your arms to protect yourself should the structure begin to break up.
If you are trapped inside after the disaster, make as much noise as possible to attract attention to yourself.

Hurricane Information

What is a Hurricane?
Hurricanes are a type of tropical cyclone. Tropical cyclone is a term used for all circulating weather system over tropical waters. In the northern hemisphere, all tropical cyclones rotate counterclockwise around a low-pressure eye or center. There are three categories of tropical cyclones:

Tropical Depressions are an organized system of clouds and thunderstorms which a defined circulation and maximum sustained winds of 38 mph or less.

Tropical Storms are similar to tropical depressions except that their sustained winds fall between 39 and 73 mph.

Hurricanes are more intense tropical systems with sustained winds of 74 mph or higher. These storms bring large amounts of rainfall which many times cause flooding in low-lying areas. The storm winds may reach as much as 200 mph as far out as 20-30 miles from the center. In the Pacific, hurricanes are called typhoons.

Hurricanes are born as small tropical cyclones moving off the coast of Africa in a west or northwesterly direction. The heat from the warm tropical waters increases their strength and velocity. Some hurricanes may grow to be 500 miles across. On average, there are ten tropical storms developed over the Atlantic Ocean each year of which six become hurricanes. Many remain at sea, but about five hurricanes strike the US Coast every three years. Of these five, two will become major hurricanes.

The major damage area is generally confined to the center of the storm, which generally measures 30-100 miles in diameter. Due to their circular airflow, many times the center of these storms may hit the North American coast anywhere from Florida to North Carolina. Frequently they travel up the coast parallel to shore causing damage all along the eastern seaboard.

Rating a Hurricane
Hurricanes vary in power and speed. The Saffir-Simpson scale breaks them into categories based on wind speeds:

- Category 1: 74-95 mph
- Category 2: 96-110 mph
- Category 3: 111-130 mph
- Category 4: 131-155 mph
- Category 5: greater than 155 mph

All hurricanes are dangerous and should not be treated lightly. Category one and two hurricanes generally do not create major damage to stable building structures. They can cause major damage to mobile homes, vegetation and piers. They will cause flooding in low-lying coastal areas.

Category three hurricanes cause some structural damage to small residences and utility buildings. Mobile homes may be destroyed. Flooding along the coast destroys smaller structures and larger structures may be damaged by floating debris. Terrain lower than five feet above sea level may be flooded inland up to eight miles.
Category four and five hurricanes are extremely deadly and destructive. They can create complete roof failure and building collapse of residences and industrial buildings. Massive beach erosion is caused by storm surge. Flooding occurs in areas fifteen feet above sea level along the coastline, requiring massive evacuation of residential areas.

Some of the hurricanes that have hit the coast of North America over the past 10-12 years are as follows:

<table>
<thead>
<tr>
<th>Hurricane Name</th>
<th>Year</th>
<th>Rating</th>
<th>Damage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emily</td>
<td>1993</td>
<td>3</td>
<td>Outer Banks of NC</td>
</tr>
<tr>
<td>Andrew</td>
<td>1992</td>
<td>4</td>
<td>Southern Florida</td>
</tr>
<tr>
<td>Hugo</td>
<td>1989</td>
<td>4</td>
<td>South Carolina</td>
</tr>
<tr>
<td>Camille</td>
<td>1969</td>
<td>5</td>
<td>LA/MS</td>
</tr>
</tbody>
</table>

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 are expected within 24 hours.

Depending on your proximity to water, you may need to take shelter or evacuate well in advance of hurricane watches or warnings. As soon as you are aware of the threat of a hurricane, you should collect your emergency supplies and make your plans for possible evacuation. Stay tuned in to your local emergency broadcast system radio station and/or TV station and keep informed as more information becomes available. Look at the checklists sections of this publication to see what to do during a hurricane watch and hurricane warning.

Storm Fury

Storm Surge

Storm surge is a large dome of water often 50-100 miles wide that sweeps across the coastline near where a hurricane makes landfall. The surge of high water topped by waves is devastating. The stronger the hurricane and the more shallow the offshore water, the higher the surge will be. Along the immediate coast, storm surge is the greatest threat to life and property.

Storm Tide

If the storm surge arrives at the same time as the high tide, the water height will be even greater. The storm tide is the combination of the storm surge and the normal astronomical tide. Over 6,000 people were killed in the Galveston Hurricane of 1900 – most by the storm tide. Hurricane Camille in 1969 produced a 25-foot storm tide in Mississippi. Hurricane Hugo in 1989 generated a 20-foot storm tide in South Carolina.

Winds

Hurricane-force winds, 74 mph or more, can destroy poorly constructed buildings and mobile homes. Debris, such as signs, roofing material, siding, and small items left outside, become flying missiles in hurricanes. Winds often stay above hurricane strength well inland. Hurricane Hugo (1989) battered Charlotte, NC which is 175 miles inland, with gusts to near 100 mph, downing trees and power lines and causing massive disruption.

Heavy Rains/Floods

Widespread torrential rains often in excess of 6 inches can produce deadly and destructive floods. This is the major threat to areas well inland.

Tropical Storm Claudette (1979) brought 45 inches of rain to an area near Alvin, Texas, contributing to more than $600 million in damage.
Long after the winds of Hurricane Diane (1955) subsided, the storm brought floods to Pennsylvania, New York and New England that contributed to nearly 200 deaths and $4.2 billion in damage.

Hurricane Agnes (1972) fused with another storm system, producing floods in the Northeast United States, which contributed to 122 deaths and $6.4 billion in damage.

In 1999, the Jacksonville area and eastern coast of North Carolina experienced flooding higher than the previous 100 years due to hurricane rains and storm surge produced by Hurricane Floyd.

Tornadoes
Hurricanes also produce tornadoes, which add to the hurricane’s destructive power. These tornadoes most often occur in the thunderstorms embedded in rain bands well away from the center of the hurricane. However, they can also occur near the eye wall.

**Tornadoes**

**What is a Tornado?**
A tornado is a violently rotating column of air in contact with the ground. A tornado in contact with a water surface is called a waterspout. Tornadoes that do not reach the ground are referred to as funnel clouds.

Thunderstorms develop in warm, moist air in advance of eastward-moving cold fronts. These thunderstorms often produce large hail, strong wind, and tornadoes. Tornadoes are not restricted to the Central Plains and the Central United States. They can develop anytime the conditions are right in any of the continental United States. Due to the fact that they generally develop in conjunction with eastward-moving cold fronts, there may be several tornadoes and thunderstorms spread over one or several states at the same time.

Tornadoes occasionally accompany tropical storms and hurricanes that move over land. Tornadoes are most common to the right and ahead of the path of the storm center as it comes onshore.

Their time on earth is short, and their destructive paths are rather small. Yet, when a tornado hits a populated area, it leaves a path of almost total destruction. In seconds, a tornado can reduce a thriving community to rubble.

**Tornado Sizes and Ratings**

**Weak Tornadoes**
- 69% of all tornadoes
- Less than 5% of the tornado deaths
- Lifetime of 1-10 minutes
- Winds less than 110 mph

**Strong Tornadoes**
- 29% of all tornadoes
- Nearly 30% of all tornado deaths
- May last 20 minutes or longer
- Winds 110-205 mph

**Violent Tornadoes**
- Only 2% of all tornadoes
- 70% of all tornado deaths
- Lifetime can exceed 1 hour
- Winds greater than 205 mph
Tornado Myths:
Myth: Areas near rivers, lakes, and mountains are safe from tornadoes.
Fact: No place is safe from tornadoes. In the late 1980’s, a tornado swept through Yellowstone National Park leaving a path of destruction up and down a 10,000-foot mountain.

Myth: The low pressure associated with a tornado causes buildings to “explode” as the tornado passes overhead.
Fact: Violent winds and debris slamming into buildings cause most structural damage.

Myth: Windows should be opened before a tornado approaches to equalize pressure and minimize damage.
Fact: Opening windows allows damaging winds to enter the structure. Leave the windows alone; instead, immediately go to a safe place.

Myth: Tornadoes rarely occur in North Carolina and when they do, they are always small causing little damage.
Fact: FALSE. On March 28, 1984 we experienced an outbreak of 22 tornadoes in eastern North and South Carolina. They resulted in 57 deaths and 1,248 injuries. The total damage was over $200 million. 37% of the fatalities were in mobile homes.

Tornado Watches and Warnings
Tornado Watch: Tornadoes are possible in your area. Remain alert for approaching storms.
Tornado Warning: 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.

Questions & Answers During Hurricanes & Tornadoes

Who should evacuate?
Residents of coastal, low-lying areas,
Mobile homes (inland or coastal)
Manufactured homes (inland or coastal)
Others in areas ordered to evacuate by officials
Modular homes (inland or coastal)
Sub-standard homes (inland or coastal)

Where will I go when a hurricane or tornado comes my way?
There are several options. Only you can decide what is right for you. Your best bet is a location far inland, so plan to leave well ahead of a storm to avoid traffic and flooded roads.

How will I get to this safe destination?
Learn at least one evacuation route. Stick to safe, emergency management-approved routes and do not attempt to drive on flooded or blocked off roadways. Pack and fill your car’s gas tank during the Hurricane Watch period, and be prepared to leave upon official evacuation notices for your area. The longer you wait, the worse traffic and weather conditions will be for driving.

When can I return home?
This depends on the extent of storm damage to your area. Always wait for official permission before returning home, as downed power lines, eroded buildings, and other storm-related hazards present danger to your family. Expect to be at your shelter for at least three days. However, it is often weeks before some areas are safe enough for return.

What are the safe zones in my home? Where is it unsafe to stay?
The safest places in your home are small, enclosed rooms away from windows. These include lowest floors, hallways, bathrooms and closets. Unsafe spots include garages, top floors, spacious rooms and areas around windows, sliding glass doors and other entrances.
How long will the calm period (eye) last?
This varies from storm to storm. The eye may pass in seconds, minutes or up to ½ hour, depending on the size and strength of the storm, and how close you are to the storm’s center. In more severe storms, where the winds are more concentrated around the eye, the calmness usually lasts only a few minutes.

When is it safe to come out from our safe zones?
Radio weather updates will let you know when the storm has “officially” passed. Take special care when moving about your storm-damaged home, as supports and foundations may be weakened by storm damage.

After the storm, how will I make contact with my family?
The Red Cross will register your name and location on a national disaster welfare inquiry (DWI) data bank, so relatives and friends will be able to locate you after the storm if your phone system is not working. DO NOT CALL 911 UNLESS IT IS AN ABSOLUTE EMERGENCY . . . fire, injury, gas leak or downed power line.

How effective is masking or duct tape for protecting windows?
Duct tape is not enough to keep hundreds of pounds of wind pressure from forcing its way inside your home. Plan in advance of hurricane season to cover your windows with plywood or heavy storm shutters. The use of masking or duct tape is not recommended.

Why should garage doors be braced?
Again, the pressure outside your home by the hurricane carries incredible force. A great deal of the building failure of Hurricane Andrew was attributed to the collapse of unsupported garage doors.

There are many steel, aluminum and wood bracing products on the market specifically made to withstand hurricane winds. If you garage door is not well supported, you may want to investigate those products for future usage.

How can I make my gabled roof more resistant to hurricane winds?
If your gabled roof and end walls are of wood construction, make sure braces are attached to trusses and rafters at each end to other trusses.

If your triangular gable end walls are stuccoed, check in the attic to see that there is wood sheathing (planks or plywood) behind the stucco. Braces should connect all the trusses or rafters together below the level of the roof sheathing, to keep the roof from collapsing if some or all of the sheathing is blown away.

If your roof is supported by wood trusses or rafters, make sure there are hurricane straps/ties along the outside perimeter wall attachments. Each rafter should be strapped at both ends. Make sure straps are adequately nailed to rafters and walls, with a nail through each strap hole into the wood.

Why should underground pools be filled?
When a hurricane floods an area, underground natural water systems may rise and push an unfilled pool above ground level. Even concrete pools of durable construction can be “floated” when not filled, as the water adds the extra weight needed to withstand the pressure beneath the pool’s surface.

Should I leave my pets outside?
Small animals, such as cats and dogs, should be brought inside for shelter from debris, high water, and other hurricane hazards. Larger animals, such as livestock, should be let out of barns and livestock enclosures, as those roofs and walls are more likely to collapse during a hurricane.
Checklists

Before a Hurricane

1. Plan a flood-free evacuation route. Shelters can become crowded quickly in Host Areas. If possible, plan to go to a place of your choosing such as the home of a friend or relative that lives outside the reach of the hurricane. Learn how to get there. Discuss your plans with your family.
2. Learn safe routes inland. Be ready to drive 100 to 150 miles inland to locate a safe place. Expect the drive to take longer than usual.
3. Have emergency supplies on hand.
   a. Supplies of food and water.
   b. Portable battery-operated or manual can opener.
   c. Flashlights and extra batteries.
   d. Portable battery-operated radio and television and extra batteries.
   e. Essential medicines.
   f. First aid kit.
   g. Cash and credit cards.
4. Trim back dead wood from trees.
5. Install storm shutters or precut plywood panels to protect windows, sliding glass, double and French doors.
6. Precut wood or metal beams and prepare brace to protect garage door.
7. Mount slide bolts to the inside and outside of single doors.
8. Check your flood insurance to see that your policy is in effect.
9. Know the difference between a “hurricane watch” and a “hurricane warning.”

During a Hurricane Watch you should:

1. Tune in a battery-operated radio to get the latest emergency information.
2. Fuel you car.
3. Check emergency supplies.
4. Bring in outdoor objects such a lawn furniture, toys, and garden tools.
5. Close all storm shutters and/or cover all windows with plywood panels.
6. Secure garage and entry doors.
7. Review your evacuation plan.
8. Moor boats securely or move them to a designated safe place.
9. Use rope or chain to secure your boat to it’s trailer.
10. Use tie-downs to anchor trailers to the ground or house.

During a Hurricane Warning you should:

1. Listen constantly to the radio or television for official instructions.
2. If in a mobile home, check tie-downs and evacuate immediately.
3. Store valuables and personal papers in a waterproof container in the highest possible spot in your house.
4. Stay out of elevators.
5. If staying at home (not ordered to evacuate):
   a. Stay inside, away from windows, skylights & glass doors.
   b. Store drinking water in clean bathtubs, jugs, bottles, cooking utensils.
   c. Keep flashlights and battery-operated lanterns handy. If electricity is lost, turn off major appliances to reduce power surge when electricity is restored.
6. If ordered to evacuate:
   a. If possible, leave in the daylight.
   b. If instructed to do so by officials, turn off electricity, gas appliances and water.
   c. Take blankets and sleeping bags to shelter. Take pre-assembled emergency supplies and warm protective clothing. If time permits, elevate furniture to protect from flooding.
d. Call an out-of-town friend or relative to let them know you are leaving and where you are going.
e. Lock-up home and leave.

After a Hurricane
1. Return home only when authorities advise it is safe to do so.
2. Stay turned to the radio for information about available emergency assistance.
3. Drive only if absolutely necessary. Avoid sightseeing.
4. Beware of snakes, insects, or animals driven to higher ground by floodwater.
5. Enter home with caution.
6. Open windows and doors to ventilate and dry home.
7. SHUT OFF UTILITIES ONLY IF INSTRUCTED TO DO SO BY LOCAL OFFICIALS. ALWAYS HAVE UTILITIES TURNED BACK ON BY A PROFESSIONAL.
8. Inspect utilities
   a. Check the gas, electrical and water lines for damage. Wear heavy shoes or boots for protection.
   b. Check for fires.
   c. Check utility lines and appliances for damage. If electrical wiring appears to be shorting out, open the switch at the main meter box or disconnect the main fuse.
   d. Open windows and leave the building if gas appears to be leaking. Call the fire department or gas company.
   e. Plug bathtub and sink drains to prevent backup.
   f. If water pipes are damaged, contact the water company. Do not use water from the tap. Obtain emergency water from hot water tanks, toilet tank (not bowls) and melted ice cubes.

In the Aftermath
Following a major hurricane, it may take several weeks to restore services and clear roads and several months to remove all the debris from the neighborhoods. Be patient and also keep in mind that the better prepared you are, the less inconvenienced you will be.

Individual and Family Evacuation Plans

In the event of a fire, flood, or disaster, you will need to be prepared to quickly and efficiently evacuate. By planning and practicing what to do before you need to, you will help yourself and your family to react correctly and spontaneously at the first sign of danger.

Planning to Evacuate
Sketch the floor plan of the place where you live. Show a second way to exit from each room. If you need special equipment, such as a rope ladder, mark where it is located.

Mark where your emergency food, water, first-aid kits, and fire extinguishers are kept. Mark where the utility (gas, water, and electric) shutoff valves are located.

Indicate the location of your family’s emergency outdoor meeting place. Practice your evacuation plan during your semiannual emergency drills. Decide and agree upon a meeting place and what action is necessary for your pets.

Evacuation Priority List
If you are told that you need to immediately evacuate, you will have little time to think about what to do. To help you be prepared to respond before the disaster strikes, take a few minutes to complete this list.

List the most important items to be taken with you. List only those that can be hand carried. List other items in order of importance.
List items to be removed by care or truck if one is available.
Make a list of things to do if time permits: for example, locking the doors and windows, turning off the utilities, etc.
Make a disaster supply kit. (Reference later section of this booklet)
Keep emergency numbers readily available to all family members.
Locate area maps with the recommended disaster routes marked in advance.
Designate two contact persons: one local and one out-of-town. Teach children how to dial long-distance and help them memorize the names and numbers of your local and out-of-town emergency contact.

If You Must Evacuate Your Home

Post a message indicating where you have gone.
Close all windows and doors.
Turn off LP Gas at bottle or tank.
Disable all unnecessary breakers – leave freezer and refrigerator breakers on.
Take vital documents, emergency supplies and equipment, and extra medications (include prescription medication) with you.

Pet Evacuations

If you are a pet owner, your disaster plan must include your pets. During an evacuation, leaving a pet behind could result in loss, injury, or worse. Confine pets in the back yard, garage or bathroom only as a last resort. If you do, make sure that they have plenty of water.

Pets will not be allowed in designated Red Cross shelters. Plan ahead for where you can take them. Check for a pet motel or kennel outside of your area. Contact hotels/motels outside your immediate area to determine if they accept pets or will accept pets during an emergency. Talk to friends and relatives outside of the area. Prepare a list of boarding facilities and veterinarians who could shelter your animals in an emergency. (Include 24-hour phone numbers). Ask local animal shelters if they provide emergency shelter or foster care for pets during a disaster.

Portable Pet Disaster Supply Kit

Keep items in an accessible place and store them in sturdy containers that can be carried easily. The Kit should include:

Your pet’s license numbers (if appropriate).
A first aid kit, medications, and medical records.
Sturdy leashes, harnesses, and/or carriers to transport pets safely.
Current photos of your pets in case they get lost.
Food (Minimum 2 days supply), potable water, bowls, cat litter/pan, and a can opener.
Information on feeding schedules, medical conditions, behavior problems, and the name and number of your veterinarian in case you have to board your pets.
Pet beds and toys (if easily transportable).
Newspapers or plastic trash bags for waste disposal.

Other Pet/Animal Concerns

Birds and lizards should be transported in a secure travel cage or carrier. Snakes can be transported in a pillowcase. Small mammals (hamsters, gerbils, etc.) should be transported in secure carriers.

As the disaster approaches, call ahead to confirm emergency shelter arrangements. Check to be sure that your pet disaster supplies are ready. Bring the pets into the house so that you won’t have to search for them. Make sure your pets are wearing collars and up-to-date information. Attach the phone number and address of your temporary shelter to their collar (if you know it.) Otherwise, attach the name and phone number of a friend or relative outside the disaster area.
Evacuate larger animals at least 72 hours before the storm is scheduled to hit when possible. Horses or livestock maintained in stables, barns or in pastures of less than one acre may be exposed to debris and collapsing buildings. If you cannot evacuate the animals, let the livestock out of enclosures, as they have a better chance of survival in open pasture.

Secure livestock trailers and other vehicles with mobile home tie downs in open areas away from trees. Inventory all livestock and equipment on video, and store with insurance information.

After the storm has passed, take caution in allowing your pet outdoors. Many animals, snakes and insects will be seeking higher ground, and downed power lines pose another hazard. Familiar landmarks and scents may be altered, and your pet can easily become confused and lost. Water and food exposed to the storm may be contaminated.

**Disaster Shelters**

What are the best options if I find I do have to evacuate?

1. **Homes of friends or relatives:** Evacuating to personal homes is cost-efficient, less traumatic to children and much more comfortable than remaining in emergency shelters. People who know and care for you personally provide food, water, modern conveniences and much needed privacy. The Red Cross strongly recommends this option, as personal acquaintances provide a network of support and encouragement to disaster victims. Talk to your family or friends inland and see how this arrangement might work for you.

2. **Hotels/Motels:** Evacuating to hotels, motels or other rental units is an excellent option if you can afford to do so. Plan ahead and choose a safe area on higher ground. When choosing a rental unit, consider how many rooms you will need, how much you can afford to spend, do you need cooking facilities or will you buy meals, will the renter allow pets. Etc. Also, ask the manager of the facility about room reservations and rental agreements. Make sure you keep the name and number of the facility with you emergency numbers.

3. **Red Cross Emergency Shelters:** Red Cross shelters may be crowded and uncomfortable. Families should take their Disaster Supplies Kit, and include quiet games for children, and books and other materials to help pass the time. Space for play and privacy is often limited to a few feet per person. Meals and first aid care are provided at these shelters, but it’s important to bring special dietary items and prescription medicines with you.

Local health department regulations do not allow pets to be in areas where meals are served. Therefore, pets are not allowed inside shelter facilities. Firearms and alcohol are not permitted in shelters at any time.

**Water and Food Reserves**

**Water**
Water is one of the most important survival necessities after a hurricane or other major disaster. A person can survive weeks without food, but only a few days without water.

**Amount**
Store one gallons of water per person per day (two quarts for drinking, two quarts for food preparation and sanitation.) Hot environments and intense physical activity can double that amount. Children, nursing mothers and ill people will need more.
Keep at least a three-day supply of water for each person in your household. Don’t forget water for pets and other animals.

**Water Storage**

Water should be stored in sturdy plastic bottle, preferably opaque. Chlorine bleach bottles work well. Plastic juice and milk containers are less desirable as they tend to crack and leak more readily. Use containers with screw on lids. Avoid glass bottles.

Avoid placing water containers in areas where toxic substances, such as gasoline and pesticides are present. These vapors penetrate the plastic after time. Refill or replace containers of water every six months.

**Water Sources**

If you did not plan for water storage before the disaster, there are several sources of “safe” water located in your home.

- Water drained from the water heater faucet. (Water will drain easier if a faucet in the home is on.)
- Water dipped from the flush tank of the toilet. Purify this water before using. Use the bowl water for pets. Do not use chemically treated “Blue” water.
- Melted ice cubes.
- Canned fruit or vegetable juice and liquids from other canned goods.

**Do Not Use Water From:**

- Hot water boilers (Home heating systems)
- Radiators
- Water beds (fungicides added to the water or chemical substances in the vinyl may cause the water to become undrinkable)
- Fire sprinkler systems

**Purification of Water**

There are many ways to purify water. None is perfect. Often the best solution is a combination of methods. The following methods will kill most microbes but will not remove other contaminates such as heavy metals, salts, and most other chemicals. Before purifying, let any suspended particles settle to the bottom or strain them through layers of paper towels or clean cloths.

- Boil the water for 3-5 minutes. (Boiled or stored water will taste better if you put oxygen back into it by pouring the water back and forth between two clean containers.)
- Add household liquid bleach (with 5.25 percent sodium hypo chlorite) to kill microorganism. Do not use bleaches that are scented, color safe, or with added cleaners. Add 16 drops of bleach per gallon of water, stir, and let stand for 30 minutes. If the water does not have a slight bleach odor, repeat the dosage and let stand for another 15 minutes. Purchase an eyedropper to add bleach. Keep it for this purpose only. Iodine and water treatment products that do not contain a 5.25 percent sodium hypo chlorite as the only active ingredient are not recommended and should not be used.
- Distillation involves boiling water and collecting the vapor that condenses back to water. Fill a pot halfway with water. Tie a cup to the handle of the lid of the pot so that the cup will hang right side up when the lid is upside-down and boil the water for 20 minutes. The water that drips from the lid into the cup is distilled.
- Water purification tablets are available though many camping supply stores. Follow the directions that are supplied with the tablets when using.
Emergency Food
A disaster can easily disrupt the food supply at any time, so plan to have at least a three to five
day supply of food above your normal requirements. You may have plenty of food on hand right
not, but check your supplies to make sure.

Types of Foods
When selecting food, it is not necessary to buy dehydrated or other types of emergency food.
Canned foods, dry mixes and other supplies you already have on hand are good for a number of
reasons: They do not require cooking or water for preparation; they can be kept with your regular
supply; and, with proper storage, they will remain fresh for about two years.

If you keep emergency food supplies separate from your normal stock, remember to date each
package and tin so you will know when to rotate them into your normal food supply. This should
be done once or twice a year.

Choose foods that:
Your family will enjoy, especially the kids. It is best to serve familiar foods in stressful times.
Require little or no cooking or refrigeration in case the utilities are disrupted.
Come in cans or package sizes that contain portions small enough for one meal so the food will
not be wasted.
Have a long storage life.
Need little or no water for preparation in case water service is disrupted.
Will not increase thirst (low salt content).
Will meet the needs of the family members who are on a special diet. (infants or elderly persons)
Select ready-to-eat canned meats, fruits, and vegetables
Select canned juices, milk, and soup (if powdered, store extra water).
Select staples - sugar, flour, salt, and pepper
Select high energy foods - peanut butter, jelly, crackers, granola bars, trail mixes.
Select some comfort/stress foods - cookies, hard candy, sweetened cereals, lollipops, instant
coffee, and tea bags.

Storage of Foods
How long food lasts depends on how it is stored. The ideal location is a cool, dry, dark place. The
best temperature is 40-60 degrees F. High temperatures contribute to the spoiling of most types
of food. In very high temperatures, it is not a good idea to store food in the house. Outside
storage areas or burying the food are alternatives at these times.

Keep food away from petroleum products such as gasoline and oil. Some food products absorb
their smell.

Protect food from rodents and insects. Items that come in boxes or in paper cartons will keep
longer if they are heavily wrapped or stored in plastic or metal containers.

Other items to store include:
Paper plates and cups
Plastic eating utensils
A manual can and bottle opener
Dishpan and scrub pads

How to Use and Prepare Emergency Foods
Use perishable food in your refrigerator or freezer before using food in your emergency kit. Be
sure any food you eat that has been stored for long periods of time is safe to eat. Discard cans
that bulge at the end or are leaking. Do not eat or drink anything from open containers near
shattered glass.
Quantity and Types of Foods
Using the chart below as a guideline, keep a three to five day supply of the following food groups for each family member.

<table>
<thead>
<tr>
<th>Type of Food</th>
<th>72-hour (3 day) Supply</th>
<th>Two-Week Supply</th>
<th>Useful Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canned meat, fish, poultry</td>
<td>6 Servings</td>
<td>28 Servings</td>
<td>One serving equals:</td>
</tr>
<tr>
<td>Canned Soup</td>
<td></td>
<td></td>
<td>2-3 oz. Meat, poultry, fish</td>
</tr>
<tr>
<td>Nuts/peanut butter</td>
<td></td>
<td></td>
<td>3/4 oz. Dried meat</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5 oz. Condensed soup</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1/2 cup nuts</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4 lbs. Peanut butter</td>
</tr>
<tr>
<td>Fruits and vegetables</td>
<td>10-1/2 cup servings</td>
<td>46 Servings</td>
<td>One serving equals:</td>
</tr>
<tr>
<td>Crackers</td>
<td></td>
<td></td>
<td>4 oz. Canned fruit or vegetables</td>
</tr>
<tr>
<td></td>
<td>6 graham crackers</td>
<td></td>
<td>1/2 oz. Dried fruit</td>
</tr>
<tr>
<td></td>
<td>squares</td>
<td></td>
<td>4-8 oz. Canned juices</td>
</tr>
<tr>
<td></td>
<td>10-12 servings</td>
<td></td>
<td>One serving equals:</td>
</tr>
<tr>
<td>Baked goods</td>
<td></td>
<td></td>
<td>1 slice of bread, roll, pancake</td>
</tr>
<tr>
<td></td>
<td>One serving equals:</td>
<td></td>
<td>1/2 -1 oz. Dry cereal</td>
</tr>
<tr>
<td></td>
<td>1 slice bread</td>
<td></td>
<td>1 oz. Quick-cook cereal</td>
</tr>
<tr>
<td></td>
<td>1/2 cup cooked</td>
<td></td>
<td>1 oz. Crackers</td>
</tr>
<tr>
<td></td>
<td>cereal or pasta</td>
<td></td>
<td>1 oz. Cookies</td>
</tr>
<tr>
<td></td>
<td>2/3 cup cooked</td>
<td></td>
<td>¾ oz. Uncooked pasta</td>
</tr>
<tr>
<td></td>
<td>rice</td>
<td></td>
<td>6 oz. Cooked pasta</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>¾ oz. rice</td>
</tr>
<tr>
<td>Fats, oils, &amp; lard</td>
<td>N/A</td>
<td>Up to 1 pound</td>
<td>Choose types that do not require refrigeration</td>
</tr>
<tr>
<td></td>
<td></td>
<td>or 1 pint per</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>person</td>
<td></td>
</tr>
</tbody>
</table>

Shelf Life of Common Foods

<table>
<thead>
<tr>
<th>Food</th>
<th>Shelf Life In Months</th>
<th>Food</th>
<th>Shelf Life In Months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beverages – powdered</td>
<td>24</td>
<td>Milk – evaporated &amp; dry</td>
<td>6</td>
</tr>
<tr>
<td>Biscuit, brownie, muffin mixes</td>
<td>9</td>
<td>Mustard – unopened</td>
<td>24</td>
</tr>
<tr>
<td>Bouillon cubes or granules</td>
<td>24</td>
<td>Nuts – canned</td>
<td>12</td>
</tr>
<tr>
<td>Cake mixes</td>
<td>1-2</td>
<td>Pancake mix</td>
<td>6-9</td>
</tr>
<tr>
<td>Catsup – unopened</td>
<td>12</td>
<td>Pasta – tightly covered</td>
<td>24+</td>
</tr>
<tr>
<td>Cereals – Ready to eat</td>
<td>6-12</td>
<td>Peanut butter</td>
<td>9</td>
</tr>
<tr>
<td>Cereals – Uncooked in orig. package</td>
<td>12</td>
<td>Pudding mix</td>
<td>12</td>
</tr>
<tr>
<td>Cereals – Uncooked in metal can</td>
<td>24</td>
<td>Rice mixes</td>
<td>6</td>
</tr>
<tr>
<td>Cocoa mixes</td>
<td>12</td>
<td>Rice – white – tightly covered</td>
<td>24+</td>
</tr>
<tr>
<td>Coffee, tea</td>
<td>12</td>
<td>Salad dressings – unopened</td>
<td>18</td>
</tr>
<tr>
<td>Canned citrus fruits &amp; juices</td>
<td>12</td>
<td>Salad oil – unopened</td>
<td>6</td>
</tr>
<tr>
<td>Other canned fruits &amp; juices</td>
<td>18</td>
<td>Sauce &amp; gravy mixes</td>
<td>6-12</td>
</tr>
<tr>
<td>Dried fruit in metal container</td>
<td>18</td>
<td>Condensed meat &amp; vegetable soup</td>
<td>12</td>
</tr>
<tr>
<td>Gelatin</td>
<td>18</td>
<td>Soup – Dry mix</td>
<td>12</td>
</tr>
<tr>
<td>Hard candy and gum</td>
<td>18</td>
<td>Tuna &amp; other canned fish</td>
<td>12</td>
</tr>
<tr>
<td>Honey – tightly covered</td>
<td>12</td>
<td>Canned tomatoes &amp; sauerkraut</td>
<td>12</td>
</tr>
<tr>
<td>Jams &amp; syrups – tightly covered</td>
<td>12</td>
<td>Other canned vegetables</td>
<td>18</td>
</tr>
<tr>
<td>Meat, poultry – canned (except fish)</td>
<td>18</td>
<td>Instant potatoes</td>
<td>18</td>
</tr>
</tbody>
</table>
Emergency Sanitation

Following a major disaster, sanitation facilities may not be available if water and sewage lines have been disrupted. Because cleanliness is essential to maintaining good health, it is important to know how to improvise emergency sanitation facilities.

Emergency Sanitation Supplies
Keep the following supplies on hand:
- Medium size plastic bucket with a tight lid
- Plastic garbage bags and ties (heavy duty)
- Household chlorine bleach
- Small shovel (for digging an expedient latrine)
- Soap, liquid detergent
- Toilet paper
- Towelettes

Building Makeshift Toilet
Line a medium size plastic bucket with a garbage bag. (If the sewage lines are broken but the toilet bowl is usable, place the plastic garbage bag around the bowl.) Make a toilet seat out of two boards placed parallel to each other across the bucket. An old toilet seat will also work.

Sanitizing Waste
After each use, pour a disinfectant such a bleach into the container to avoid infection and spreading of disease. Cover the container tightly when not in use.

Disposing of Waste
Bury garbage and human wastes in the ground to avoid the spread of disease by rats and insects. Dig a pit two to three feet deep and at least fifty feet from any well, spring or water supply. LOCAL REGULATIONS MAY PROHIBIT YOU FROM BURYING HUMAN WASTES. LISTEN TO THE RADIO FOR INSTRUCTIONS, OR CHECK WITH YOUR LOCAL HEALTH DEPARTMENT.

If the garbage cannot be buried immediately, strain the liquids into the emergency toilet, wrap the residue in several layers of newspapers and store it in a large can with a tight-fitting lid. After two or three days, place the can outside until it can be buried.

Disinfectants
The best choice is a solution of one part liquid chlorine bleach to ten parts of water. Other commercial disinfectants include calcium hypo chloride which is available at swimming pool supply stores, portable toilet chemicals which are available through recreational vehicle supply stores and powdered chlorinated lime which is available at building supply stores.

Keeping Your Body Clean
Keeping clean is essential to good health. Because water is so precious and should be reserved for drinking purposes, consider alternatives to water for cleansing the body.

Water Substitutes for Cleansing
- Rubbing alcohol
- Lotions containing alcohol
- Shaving lotions
- Face creams and hand lotions
- Towelettes

Wet Wash Cloth
- Use a wet wash cloth to brush teeth, wash faces, comb hair and wash the body.
Makeshift Shower
Use a spray bottle to shower

Makeshift Bathtub
Create a bathtub by digging a trench in the ground, lining it with newspapers and thick plastic sheeting, then filling it with water. If possible, heat the water by the fireplace.

Intestinal Ailments
Consuming contaminated water and food can cause diarrhea, food poisoning and other intestinal diseases. Take steps to protect against these diseases.
Keep body and hands clean.
Use paper plates or eat from the original food containers if water is not available for washing dishes.
Wash and peel all fruits and vegetables.
Keep all food in covered containers.
Prepare only as much food as will be eaten at each meal.
Keep cooking and eating utensils clean.

First Aid

Make First Aid Kits for your home, your car, and your work place if there is not one available there. The items suggested below should be tailored to meet your individual needs.

First Aid Supplies for Home
Drugs: Iodine (tablets)
Benadryl for allergic reactions
Hydrogen peroxide to wash and disinfect wounds
Antibiotic ointment for dressing wounds
Individually wrapped alcohol swabs (available at drugstores)
Antacids
Aspirin (to reduce swelling) and non-aspirin tablets
Prescriptions from doctor for any long-term medications (keep these current)
Diarrhea medicine
Laxatives
Syrup of Ipecac (to induce vomiting)
Vitamin supplements
Eye Drops and eye wash cup
Activate charcoal (Use if advised by the Poison Control Center)
Tube of Petroleum jelly or other lubricant

When buying drug items, check the expiration dates. Buy only fresh supplies for the longest shelf life. Important medical information and prescriptions can be stored in the refrigerator. This provides excellent protection from fires.

Dressings:
Sterile adhesive bandages in assorted sizes (Band Aids)
2 inch sterile gauze pads (4-6)
4 inch sterile gauze pads (4-6)
1 inch sterile roller bandages (1 roll)
2 inch sterile roller bandages (3 rolls)
3 inch sterile roller bandages (3 rolls)
Triangular bandages 36 x 36 x 50 (3)
Ace bandages
Butterfly bandages
Cotton tipped swabs
Adhesive tape roll 1/2” or 1” wide (Hypoallergenic)
Other Supplies:

- First aid book (An excellent choice is “Standard First Aid and Personal Safety” from the American Red Cross)
- Writing materials (pen, pencil, and paper)
- Scissors
- Tweezers
- Thermometer
- Tissues
- Cleansing agent/soap
- Sunscreen
- Skin Lotion
- Insect Repellant
- Paper Cups
- Plastic Bags
- Plastic Spoons
- Waterproof matches
- Safety Pins
- Needle and thread
- Instant cold packs for sprains and burns
- Sanitary napkins
- Ammonia inhalant (smelling salts)
- Mylar space blankets
- Pocket knife
- Pre-moistened Towelettes
- Splinting materials
- Snake bite kit
- Tongue blades/depressors (2)
- Latex gloves (2 pair)

Bandages can be made from clean rags, disposable diapers, and sanitary napkins. Dressings can be held in place by men’s ties, plastic bags, and nylon stockings. Clean sheets torn into strips may be used as bandages or slings.

First Aid Supplies for Car

Additional items may be added for your Car Kit including:
- Fire Extinguisher (ABC type)
- Duct Tape
- Basic Tools (Pliers, screwdriver, etc.)
- Signal flare
- Plastic sheeting
- Map of the area

First Aid Supplies for Work

Most employers have group first aid kits available for employee use. Some may even have trained employees such as doctors or nurses. If your employer does not have a group first aid kit available, ask them to consider it a wise investment. If no one is properly trained to give immediate first aid, see if someone wants to volunteer to take a Red Cross Basic First Aid Course. If your workplace has special hazards, consider what special equipment you might need in an emergency.
A Guide to First Aid
After a major hurricane or tornado there will be injured people needing attention. The following guide gives information on administering basic first aid until emergency medical treatment is available. This guide should not be considered as a substitute for a Red Cross Basic First Aid Manual.

Check For Injuries
Look for Medic Alert or similar bracelets, necklaces, etc. They describe emergency medical requirements.

In anyone has stopped breathing, give mouth-to-mouth Rescue Breathing.

Stop any bleeding by applying direct pressure over the site of the wound.

Do not attempt to move seriously injured persons unless they are in immediate danger of further injury.

Cover injured persons with blankets to keep them warm. Be reassuring and calm.

Wear shoes in all areas near debris and broken glass.

Get emergency medical help as soon as possible.

Learn Rescue Breathing and CPR
Cardiopulmonary resuscitation is a way of forcing the heart to continue pumping blood through the lungs and out to the rest of the body. The American Heart Association and the American Red Cross offer courses on proper techniques.

Heart Attack
Warning signs include:
Severe squeezing pains in the chest.
Pain that radiates from the chest into the arm, the neck or jaw.
Sweating/weakness, nausea, or vomiting.
Pain that extends across the shoulders to the back.

Two critical life-threatening symptoms occur:
Breathing slows down or stops.
The heart may slow down or stop pumping blood.

If the victim is not breathing, give Rescue Breathing immediately.
If you cannot detect a heart beat by taking a pulse at the carotid artery (can be felt on either side of the neck slightly below and forward of the base of the jaw), CPR and Rescue Breathing should be given to the victim by a properly trained and certified person.

Bleeding
The best way to control bleeding is with direct pressure over the site of the wound. If a pad or sterile gauze is not available, use a sanitary napkin, disposable diaper, clean handkerchief, or bare hand.
Apply firm, steady pressure for 5 to 15 minutes. Most bleeding will stop within a few minutes.
If the bleeding is from a foot, hand, leg, or arm, use gravity to help slow the flow of blood. Elevate the limb so that it is higher off the ground than the victim’s heart.

Head Injuries
Bleeding from an ear can indicate a skull fracture. Always suspect a neck injury when there is a serious head injury. Immobilize the head and neck. Bleeding from the scalp can be very heavy even when the injury is not too serious. Don’t press too hard. Be extremely careful when applying
pressure over the wound so that bone chips from a possible fracture will not be pressed into the brain. Call for emergency help. Let a professional medical person clean the wound and stitch it, if necessary. Do not give alcohol, cigarettes, or other drugs, which mask important symptoms.

**Broken Bones**
Do not move the victim unless the victim is in immediate danger of further injury.

Check for:
- **Breathing**: Give Rescue Breathing if needed.
- **Bleeding**: Apply direct pressure over the site.
- **Shock**: Keep the victim calm and warm.

Do not try to straighten out a fracture or push a broken bone back into place if it is sticking out of the skin. Do apply a moist dressing to prevent drying out. Do not permit the victim to walk. Splint fractures to prevent motion.

**Burns or Flame Burns**
- Flush with cool water
- Remove garments/jewelry
- Cover victim with clean sheets or towels

**Emergency Supplies**

A major disaster such as a hurricane or tornado almost always causes a disruption in normal life. Services may not be available, transportation can be cut off and roads may be blocked, and in some cases, you may be forced to evacuate. Be ready to respond quickly to any situation by assembling and maintaining a Disaster Supplies Kit before disaster strikes. Emergency or Disaster Supplies Kits include six basic types of supplies – Water; Food; First Aid Supplies; Tools and Emergency Supplies; Clothing and Bedding; and Special Items. We have already discussed Water, Food, and First Aid Supplies.

Keep the items that you would most likely need during an evacuation in an easy-to-carry container. Possible containers include a large, covered trash container, a camping backpack, or a duffle bag.

**Basic Supplies**
Make sure that you have at least one of each of the following on hand:

**Lighting:**
CAUTION: Do not use matches, candles, lamps, or an open flame until you are sure there are no gas leaks. When using an open flame always post a fire watch and have plenty of fire wood.

Flashlights are safe for use immediately after a hurricane. Store extra batteries and light bulbs. (Batteries will stay fresh longer if they are stored in the refrigerator.)

Light sticks are short-term safety lights. They need no source of ignition, and are convenient to store with emergency supplies.

Camping lanterns provide an excellent source of light. Remember to store extra fuel, matches, wicks, and mantles. (Kerosene is less volatile).

**Cooking Devices:**
Matches can be stored in a waterproof, airtight tin.

Camp stoves, barbecues, and hibachis are useful. Remember to store propane or charcoal if you plan on using them. CAUTION: Never burn charcoal or gas grills indoors. An inadequately
ventilated site may cause carbon monoxide poisoning. If you do plan to use these devices inside, purchase and install a carbon monoxide detector.

Note: Do not use your fireplace for cooking until the chimney has been inspected for cracks and damages. Sparks may escape into your attic through an undetected crack and start a fire.

Emergency Information:
Obtain a battery-powered transistor radio. Store extra batteries or purchase a solar battery charger.

Hygiene Supplies:
Refer to the section above on Sanitation Methods. Other hygiene supplies include soap, shampoo, toothpaste, deodorant, diapers, wipes, and sanitary napkins.

Tools and Equipment
Mess kits or paper cups, plates and plastic utensils.
Non-electric can opener, utility knife
Compass
Aluminum foil
Plastic storage containers
Signal flare
Medicine dropper
Whistle
Plastic sheeting
Clean up equipment includes:
   Axe
   Shovel (flat and round)
   Rake/broom
   Wrench (For gas shutoff)

Clothing & Bedding
Clothing and bedding needs include:
   Tent
   Waterproof tarp
   Sleeping bags and blankets
   Newspapers
   Rain gear
   Hat and gloves
   Thermal underwear

Special Items
Each family may have special needs. Items to be considered include:
Pets:
   Pet food
   Leashes
   Bedding
   Cage for transportation
Personal Items:
   Eyeglasses (Store an extra pair)
   Sturdy shoes (Keep a pair near the bed. They will protect you from broken glass.)
   Work gloves for all family members. They will be invaluable as you begin cleanup activities.
   Cash – Keep $50-100 in small bills.

Remember family members who may need special items such as infants and elderly or disabled persons.
Babies:
- Formula
- Diapers
- Bottles
- Powdered milk
- Medications

Elderly or Disabled Adults:
- Heart and high blood pressure medication
- Insulin
- Prescription drugs
- Denture needs
- Contact lenses and supplies
- Extra eyeglasses

Remember to plan for entertainment items such as games and books.
Remember to keep family documents and records in a waterproof container as outlined above.

Recreational Vehicles
Today many families have recreational vehicles or SUV's. If you do, plan how you might use them in an emergency situation. Don't run low on fuel. Fill your tank when it reaches the half way mark. Service stations will be unable to use their pumps if there is no power.

Recreational vehicles and camping trailers make good hurricane emergency units. Many recreational vehicles and trailers offer the following: Bathrooms, Cooking Facilities, Food Storage, Medical Supplies, Extra Clothing, Water, Generator for Electric Power, Shelter, Radios, Bedding.

Almost every household has a freezer of some type. Supply the recreational vehicles that have generators with hundred foot extension cords to plug in freezers at least one hour per day or as required to maintain a frozen state. One unit could supply power for a neighborhood block. Stock extra fuel for the generator and butane for cooking. Prepare your recreational vehicle for an emergency.

NOTE: NEVER PLUG A GENERATOR INTO A BUILDING'S ELECTRICAL SOCKET. You could send electricity back through the lines and injure a lineman making repairs, etc. Plug lights or appliances directly into the generator.

Car Mini-survival Kit
Most people spend many hours in their cars each week. A major disaster could force you to rely on your car for short-term shelter and survival. Assemble a survival kit for your car with some or all of the following items. Storing these supplies in a small day or backpack will make them convenient to carry if you need to walk home.

- Snack-type, nutritious foods – dried fruits, nuts, granola bars, crackers, seeds, jerky, etc.
- Comfortable shoes
- Bottled water
- Small first aid kit (with personal medications)
- Fire extinguisher: ABC type
- Flares
- Blanket
- Local maps and compass
- Flashlight and batteries
- Tools – screwdriver and pliers
- Heavy work gloves
- Ziploc bags, toilet tissue, and newspapers
- Good book
- Disposable lighters
Plastic sheet (Minimum 10'x10')
Ground pad for insulation from cold (carpet padding works well)

Storage Suggestions:
Store your kit in a convenient place known to all family members. If possible, it should be in a cool, dry, dark location. 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 and rotate your 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.

Fire Protection

Fires are frequently started during disasters. Emergency Generators not used properly may start a fire. LP Gas leaks from broken gas lines may create dangerous situations. Many people are forced to use candles causing another concern for fire due to accidents. Damage to homes and automobiles may cause electrical shorts resulting in fires.

At this same time Fire Departments will be very busy. Telephone service may be out so notification via 911 may not be possible. Water may be hard to come by and drinking water will have a priority. It is important that each home and automobile have a fire extinguisher and that each member of the family is trained in how to use it. Fire extinguishers should be located in the kitchen area of the home near a door but not too close to the stove or oven. When a fire breaks out, the extinguisher is of no use if it cannot be reached. You should consider having additional extinguishers in your garage or in the family room if you have a fireplace.

Should you have to fight a fire, remember to follow the instructions on the extinguisher. Aim at the base of the fire and sweep the nozzle back and forth from left to right. Intermittent short burst from the extinguisher are effective and will make the extinguisher last longer. Cooking fires in pots and pans are best handled by putting a lid on the pan. Never try to pick up a burning pan and move it outside or under a water faucet.

Home Preparation

There are specific instructions in what to do before, during, and after a hurricane or tornado in the Checklist section of this booklet. However, there are things that you can do long before hurricane season to make your home more “hurricane proof.” The true key to preparing your home for hurricanes is to START NOW. Whether or not you are ordered to evacuate, you should plan to make your home as strong as possible against wind, water and debris damage.

Hurricane season runs from June through November, but supplies should be routinely checked year-round. Also, the off season is a good time to practice your hurricane plan, install storm shutters, and speak with your insurance agent about how well you are covered for storm damage.

Help your family practice home preparedness for hurricanes. This includes assessing your home’s strong and weak points, collecting and storing supplies for your home’s protection, and assigning tasks to each family member to prepare your home for an actual storm.

Outside specialists such as architects, insurance appraisers, or construction experts can analyze your home’s structural strengths and weaknesses. They can also recommend specific ways to make your home more resistant to wind and water damage.
The Roof:
During a hurricane, the force of the wind pushes against the outside of your home. That force is passed along from your roof to the exterior walls and finally to the foundation. Homes can be damaged or destroyed when the energy from the wind is not properly transferred to the ground.

First you should determine your home’s roof type. Gabled roofs are more likely to suffer from hurricane damage. The end wall of a home with a gabled roof feels the extraordinary force of the storm. Those that are not properly braced can collapse.

In most homes, gabled roofs are built using manufactured trusses. Sheets of roof sheathing, often plywood, are fastened to the trusses with nails or staples, and roofing material is fastened to the sheathing. In many cases, the plywood is the only thing keeping the trusses in place, which leaves the roof more vulnerable to hurricane wind damage. Installing additional truss bracing makes your roof’s support system much stronger.

Also, when checking your sheathing, notice how the plywood is attached to the truss system. If most of the large nails or staples have missed the trusses, consider having the sheathing properly installed.

Hurricane Straps:
There are many roof design types, but all can benefit from the use of hurricane straps. Hurricane straps are designed to help hold your roof to your walls, and many regional building regulations require them in new structures. Hurricane straps may be difficult for homeowners to install. For assistance, contact a professional to retrofit your home with these straps.

For more information on storm shutters, protecting and bracing garage door openings and double-entry doors, ask your local Red Cross for a copy of “Against the Wind: Protecting Your Home From Hurricane Wind Damage.”

Additional Tips:
Purchase materials to secure your home (plywood, shutters, plastic sheeting, nails, etc.) Cut and label plywood to fit all windows and sliding glass doors.

When landscaping your home, use plant life that is native to hurricane areas, and more likely to stay rooted through winds and rains.

Keep trees and shrubbery trimmed throughout the entire season. Do not attempt to do your trimming after a watch has been announced as trash pick up will be delayed.

Make sure all family members have “hurricane duties,” even children. Assign someone to prepare the inside of the house, to board up the outside, and to secure yard and porch furniture. Show each family member how and when to turn off the water, gas and electricity at the main switches.
SUSPICIOUS MAIL ALERT

If you receive a suspicious letter or package:

1. Handle with care. Don't shake or bump.
2. Isolate it immediately.
3. Don't open, smell, touch or taste.
4. Treat it as suspect. Call local law enforcement authorities.

If a parcel is open and/or a threat is identified . . .

For a Bomb:
- Evacuate immediately
- Call Police
- Contact Postal Inspectors
- Call Local Fire Department/HAZMAT Unit

For Radiological:
- Limit Exposure - Don't Handle
- Evacuate Area
- Shield Yourself From Object
- Call Police
- Contact Postal Inspectors
- Call Local Fire Department/HAZMAT Unit

For Biological or Chemical:
- Isolate - Don't Handle
- Evacuate Immediate Area
- Wash Your Hands With Soap and Warm Water
- Call Police
- Contact Postal Inspectors
- Call Local Fire Department/HAZMAT Unit