Are You Ready? An In-depth Guide to Citizen Preparedness

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An In-depth Guide to Citizen Preparedness

FEMA

IS-22 August 2004

Preface

This guide has been prepared for direct dissemination to the general public and is based on the most reliable hazard awareness and emergency education information available at the time of publication, including advances in scientific knowledge, more accurate technical language, and the latest physical research on what happens in disasters.

This publication is, however, too brief to cover every factor, situation, or difference in buildings, infrastructure, or other environmental features that might be of interest. To help you explore your interest further, additional sources of information have been included.

The guide has been designed to help the citizens of this nation learn how to protect themselves and their families against all types of hazards. It can be used as a reference source or as a step-by-step manual. The focus of the content is on how to develop, practice, and maintain emergency plans that reflect what must be done before, during, and after a disaster to protect people and their property. Also included is information on how to assemble a disaster supplies kit that contains the food, water, and other supplies in sufficient quantity for individuals and their families to survive following a disaster in the event they must rely on their own resources.

Are You Ready? is just one of many resources the Department of Homeland Security provides the citizens of this nation to help them be prepared against all types of hazards. The Department of Homeland Security's Ready Campaign seeks to help America be better prepared for even unlikely emergency scenarios. Information on how the public can be ready in case of a national emergency – including a possible terrorism attack involving biological, chemical, or radiological weapons – can be found by logging on to the Department of Homeland Security's web site, www.ready.gov, or by calling 1-800-BE-READY for printed information.

CERT

Following a disaster, community members may be on their own for a period of time because of the size of the area affected, lost communications, and impassable roads.

The Community Emergency Response Team (CERT) program supports local response capability by training volunteers to organize themselves and spontaneous volunteers at the disaster site, to provide immediate assistance to victims, and to collect disaster intelligence to support responders' efforts when they arrive.

In the classroom, participants learn about the hazards they face and ways to prepare for them. CERT members are taught basic organizational skills that they can use to help themselves, their loved ones, and their neighbors until help arrives.

Local government, or one of its representatives, sponsor CERT training in the community. Training consists of 20 hours of instruction on topics that include disaster preparedness, fire safety, disaster medical operations, light search and rescue, team organization, and disaster psychology. Upon completion of the training, participants are encouraged to continue their involvement by participating in training activities and volunteering for projects that support their community's disaster preparedness efforts.

For additional information on CERT, visit training.fema.gov/EMIWeb/CERT or contact your local Citizen Corps Council.

Citizen Corps

Citizen Corps provides opportunities for people across the country to participate in a range of measures to make their families, their homes, and their communities safer from the threats of crime, terrorism, public health issues, and disasters of all kinds. Through public education, training opportunities, and volunteer programs, every American can do their part to be better prepared and better protected and to help their communities do the same.

Citizen Corps is managed at the local level by Citizen Corps Councils, which bring together leaders from law enforcement, fire, emergency medical and other emergency management, volunteer organizations, local elected officials, the private sector, and other community stakeholders. These Citizen Corps Councils will organize public education on disaster mitigation and preparedness, citizen training, and volunteer programs to give people of all ages and backgrounds the opportunity to support their community's emergency services and to safeguard themselves and their property.

By participating in Citizen Corps programs, you can make your home, your neighborhood and your community a safer place to live. To find out more, please visit the Citizen Corps Web site, *www.citizencorps.gov* or visit *www.fema.gov*.

Activities under Citizen Corps include existing and new federally sponsored programs administered by the Department of Justice (Neighborhood Watch and Volunteers in Police Service), FEMA (Community Emergency Response Teams - CERT), and Department of Health and Human Services (Medical Reserve Corps), as well as other activities through Citizen Corps affiliate programs that share the common goal of community and family safety.

Certificate of Completion

As an option, credit can be provided to those who successfully complete the entire guide and score at least 75 percent on a final examination. To take the final examination, log on to training.fema.gov/emiweb/ishome.htm and follow the links for *Are You Ready? An In-depth Guide to Citizen Preparedness* IS-22. Those who pass the examination can expect to receive a certificate of completion within two weeks from the date the examination is received at FEMA. Questions about this option should be directed to the FEMA Independent Study Program by calling 1-800-238-2258 and asking for the Independent Study Office or writing to:

FEMA Independent Study Program
Emergency Management Institute
16825 South Seton Avenue
Emmitsburg, MD 21727

Facilitator Guide

Teaching others about disaster preparedness is a rewarding experience that results from knowing you have helped your fellow citizens be ready in the event a disaster should strike. As a tool to aid those who want to deliver such training, FEMA developed a Facilitator Guide with an accompanying CD-ROM for use with this *Are You Ready?* guide. The materials are appropriate for use in training groups such as school children, community organizations, scouts, social groups, and many others.

The Facilitator Guide includes guidelines on how to deliver training to various audiences, generic lesson plans for teaching disaster preparedness, and information on how to obtain other resources that can be used to augment the material in the *Are You Ready?* guide. The CD-ROM contains teaching aids such as electronic visuals that reflect key information and handouts that can be printed and distributed to reinforce what is being presented. To obtain a copy of the Facilitator Guide and CD-ROM, call the FEMA Distribution Center at (800) 480-2520 or request it by writing to:

Federal Emergency Management Agency
P.O. Box 2012
Jessup, MD 20794-2012

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Why Prepare

There are real benefits to being prepared.

- Being prepared can reduce fear, anxiety, and losses that accompany disasters. Communities, families, and individuals should know what to do in the event of a fire and where to seek shelter during a tornado. They should be ready to evacuate their homes and take refuge in public shelters and know how to care for their basic medical needs.
- People also can reduce the impact of disasters (flood proofing, elevating a home or moving a home out of harm's way, and securing items that could shake loose in an earthquake) and sometimes avoid the danger completely.

The need to prepare is real.

- Disasters disrupt hundreds of thousands of lives every year. Each disaster has lasting effects, both to people and property.
- If a disaster occurs in your community, local government and disaster-relief organizations will try to help you, but you need to be ready as well. Local responders may not be able to reach you immediately, or they may need to focus their efforts elsewhere.
- You should know how to respond to severe weather or any disaster that could occur in your area—hurricanes, earthquakes, extreme cold, flooding, or terrorism.
- You should also be ready to be self-sufficient for at least three days. This may mean providing for your own shelter, first aid, food, water, and sanitation.

Using this guide makes preparation practical.

- This guide was developed by the Federal Emergency Management Agency (FEMA), which is the agency responsible for responding to national disasters and for helping state and local governments and individuals prepare for emergencies. It contains step-by-step advice on how to prepare for, respond to, and recover from disasters.
- Used in conjunction with information and instructions from local emergency management offices and the American Red Cross, *Are You Ready?* will give you what you need to be prepared.

Using Are You Ready? to Prepare

The main reason to use this guide is to help protect yourself and your family in the event of an emergency. Through applying what you have learned in this guide, you are taking the necessary steps to be ready when an event occurs.

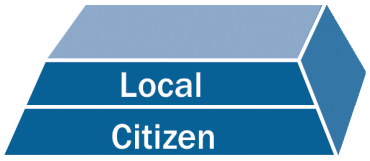
Every citizen in this country is part of a national emergency management system that is all about protection–protecting people and property from all types of hazards. Think of the national emergency management system as a pyramid with you, the citizen, forming the base of the structure. At this level, you have a responsibility to protect yourself and your family by knowing what to do before, during, and after an event. Some examples of what you can do follow:

Before
- Know the risks and danger signs.
- Purchase insurance, including flood insurance, which is not part of your homeowner's policy.
- Develop plans for what to do.
- Assemble a disaster supplies kit.
- Volunteer to help others.

During
- Put your plan into action.
- Help others.
- Follow the advice and guidance of officials in charge of the event.

After
- Repair damaged property.
- Take steps to prevent or reduce future loss.

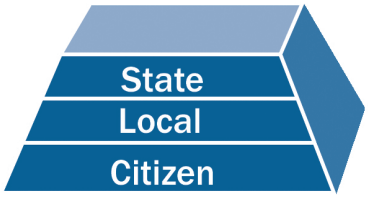
You will learn more about these and other actions you should take as you progress through this guide.



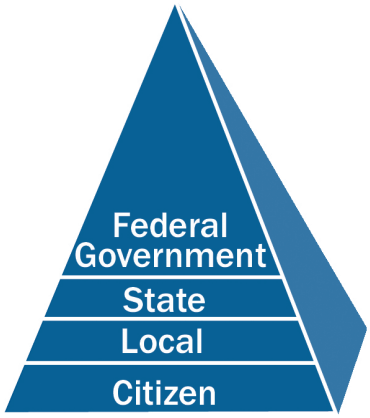
It is sometimes necessary to turn to others within the local community for help. The local level is the second tier of the pyramid, and is made up of paid employees and volunteers from the private and public sectors. These individuals are engaged in preventing emergencies from happening and in being prepared to respond if something does occur. Most emergencies are handled at the local level, which puts a tremendous responsibility on the community for taking care of its citizens. Among the responsibilities faced by local officials are:

- Identifying hazards and assessing potential risk to the community.
- Enforcing building codes, zoning ordinances, and land-use management programs.
- Coordinating emergency plans to ensure a quick and effective response.
- Fighting fires and responding to hazardous materials incidents.
- Establishing warning systems.
- Stocking emergency supplies and equipment.
- Assessing damage and identifying needs.

- Evacuating the community to safer locations.
- Taking care of the injured.
- Sheltering those who cannot remain in their homes.
- Aiding recovery efforts.



If support and resources are needed beyond what the local level can provide, the community can request assistance from the state. The state may be able to provide supplemental resources such as money, equipment, and personnel to close the gap between what is needed and what is available at the local level. The state also coordinates the plans of the various jurisdictions so that activities do not interfere or conflict with each other. To ensure personnel know what to do and efforts are in agreement, the state may offer a program that provides jurisdictions the opportunity to train and exercise together.



At the top of the pyramid is the federal government, which can provide resources to augment state and local efforts. These resources can be in the form of:

- Public educational materials, such as this guide, that can be used to prepare the public for protecting itself from hazards.
- Financial grants for equipment, training, exercises, personnel, and programs.
- Grants and loans to help communities respond to and recover from disasters so severe that the President of the United States has deemed them beyond state and local capabilities.
- Research findings that can help reduce losses from disaster.
- Technical assistance to help build stronger programs.

The national emergency management system is built on shared responsibilities and active participation at all levels of the pyramid. The whole system begins with you, the citizen, and your ability to follow good emergency management practices—whether at home, work, or other locations.

Are You Ready? An In-depth Guide to Citizen Preparedness is organized to help you through the process. Begin by reading Part 1 which is the core of the guide. This part provides basic information that is common to all hazards on how to create and maintain an emergency plan and disaster supplies kit.

Part 1: Basic Preparedness

- A series of worksheets to help you obtain information from the community that will form the foundation of your plan. You will need to find out about hazards that threaten the community, how the population will be warned, evacuation routes to be used in times of disaster, and the emergency plans of the community and others that will impact your plan.
- Guidance on specific content that you and your family will need to develop and include in your plan on how to escape from your residence, communicate with one another during times of disaster, shut-off household utilities, insure against financial loss, acquire basic safety skills, address special needs such as disabilities, take care of animals, and seek shelter.

- Checklists of items to consider including in your disaster supplies kit that will meet your family's needs following a disaster whether you are at home or at other locations.

Part 1 is also the gateway to the specific hazards and recovery information contained in Parts 2, 3, 4, and 5. Information from these sections should be read carefully and integrated in your emergency plan and disaster supplies kit based on the hazards that pose a threat to you and your family.

Part 2: Natural Hazards

- Floods
- Hurricanes
- Thunderstorms and lightning
- Tornadoes
- Winter storms and extreme cold
- Extreme heat
- Earthquakes
- Volcanoes
- Landslides and debris flow
- Tsunamis
- Fires
- Wildfires

Part 3: Technological Hazards

- Hazardous materials incidents
- Household chemical emergencies
- Nuclear power plant emergencies

Part 4: Terrorism

- Explosions
- Biological threats
- Chemical threats
- Nuclear blasts
- Radiological dispersion device events

Part 5: Recovering from Disaster

- Health and safety guidelines
- Returning home
- Seeking disaster assistance
- Coping with disaster
- Helping others

References

As you work through individual sections, you will see reference points. These are reminders to refer to previous sections for related information on the topic being discussed.

FEMA Publications

Throughout the guide are lists of publications available from FEMA that can help you learn more about the topics covered. To obtain these publications, call the FEMA Distribution Center at 1-800-480-2520 or request them by mail from:

Federal Emergency Management Agency
P.O. Box 2012
Jessup, MD 20794-2012

Other Publications

Other publications cited throughout this guide can be obtained by contacting the organizations below:

American Red Cross National Headquarters
2025 E Street, NW
Washington, DC 20006
Phone: (202) 303-4498
www.redcross.org/pubs/dspubs/cde.html

National Weather Service
1325 East West Highway
Silver Spring, MD 20910
www.nws.noaa.gov/education.html

Centers for Disease Control and Prevention
1600 Clifton Rd, Atlanta, GA 30333, U.S.A
Public Inquiries: (404) 639-3534 / (800) 311-3435
www.cdc.gov

U.S. Geological Survey
Information Services
P.O. Box 25286
Denver, CO 80225
1 (888) 275-8747
www.usgs.gov

Disaster Public Education Web sites

You can broaden your knowledge of disaster preparedness topics presented in this guide by reviewing information provided at various government and non-government Web sites. Provided below is a list of recommended sites. The Web address for each site reflects its home address. Searches conducted from each home site's page result in the most current and extensive list of available material for the site.

Government Sites	
Be Ready Campaign	www.ready.gov
Agency for Toxic Substances and Disease Registry	www.atsdr.cdc.gov
Centers for Disease Control and Prevention	www.cdc.gov
Citizen Corps	www.citizencorps.gov
Department of Commerce	www.doc.gov
Department of Education	www.ed.gov
Department of Energy	www.energy.gov
Department of Health and Human Services	www.hhs.gov/disasters
Department of Homeland Security	www.dhs.gov
Department of Interior	www.doi.gov
Department of Justice	www.justice.gov
Environmental Protection Agency	www.epa.gov
Federal Emergency Management Agency	www.fema.gov
Food and Drug Administration	www.fda.gov
National Oceanic and Atmospheric Administration	www.noaa.gov
National Weather Service	www.nws.noaa.gov
Nuclear Regulatory Commission	www.nrc.gov
The Critical Infrastructure Assurance Office	www.ciao.gov
The White House	www.whitehouse.gov/response
U.S. Department of Agriculture	www.usda.gov
U.S. Fire Administration	www.usfa.fema.gov
U.S. Fire Administration Kids Page	www.usfa.fema.gov/kids
U.S. Geological Survey	www.usgs.gov
U.S. Office of Personnel Management	www.opm.gov/emergency
U.S. Postal Service	www.usps.gov
USDA Forest Service Southern Research Station	www.wildfireprograms.com
Non-government Sites	
American Red Cross	www.redcross.org
Institute for Business and Home Safety	www.ibhs.org
National Fire Protection Association	www.nfpa.org
National Mass Fatalities Institute	www.nmfi.org
National Safety Compliance	www.osha-safety-training.net
The Middle East Seismological Forum	www.meieisforum.net
The Pan American Health Organization	www.disaster-info.net/SUMA

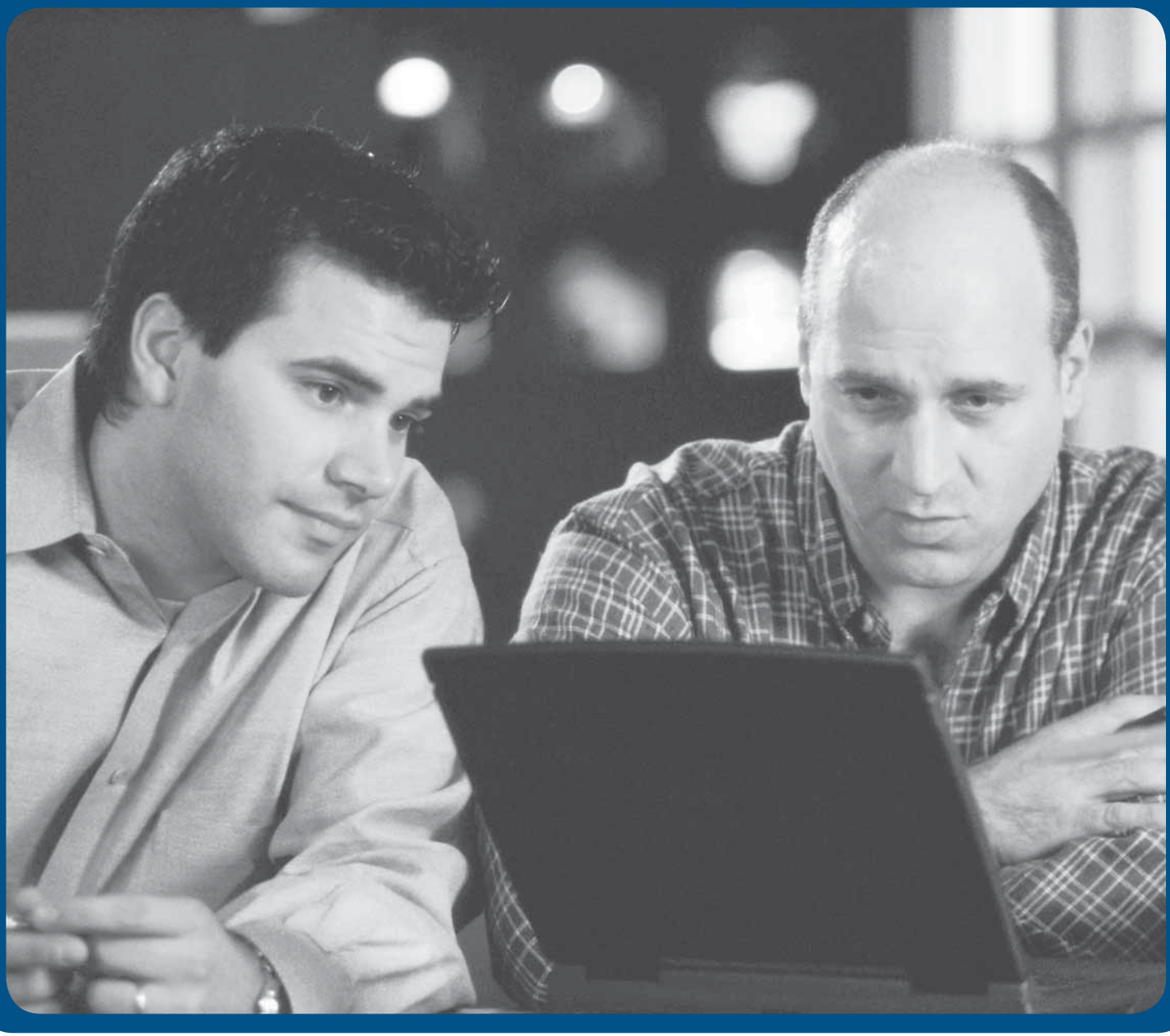
1 Basic Preparedness

In this part of the guide, you will learn preparedness strategies that are common to all disasters. You plan only once, and are able to apply your plan to all types of hazards.

When you complete Part 1, you will be able to:

- Get informed about hazards and emergencies that may affect you and your family.
- Develop an emergency plan.
- Collect and assemble disaster supplies kit.
- Learn where to seek shelter from all types of hazards.
- Identify the community warning systems and evacuation routes.
- Include in your plan required information from community and school plans.
- Learn what to do for specific hazards.
- Practice and maintain your plan.

1.1 Getting Informed



Learn about the hazards that may strike your community, the risks you face from these hazards, and your community's plans for warning and evacuation. You can obtain this information from your local emergency management office or your local chapter of the American Red Cross. Space has been provided here to record your answers.

Hazards

Ask local authorities about each possible hazard or emergency and use the worksheet that follows to record your findings and suggestions for reducing your family's risk.

Possible Hazards and Emergencies	Risk Level (None, Low, Moderate, or High)	How can I reduce my risk?
Natural Hazards		
1. Floods		
2. Hurricanes		
3. Thunderstorms and Lightning		
4. Tornadoes		
5. Winter Storms and Extreme Cold		
6. Extreme Heat		
7. Earthquakes		
8. Volcanoes		
9. Landslides and Debris Flow		
10. Tsunamis		
11. Fires		
12. Wildfires		

Technological Hazards		
1. Hazardous Materials Incidents		
2. Nuclear Power Plants		
Terrorism		
1. Explosions		
2. Biological Threats		
3. Chemical Threats		
4. Nuclear Blasts		
5. Radiological Dispersion Device (RDD)		

You also can consult FEMA for hazard maps for your area. Go to www.fema.gov, select maps, and follow the directions. National hazard maps have been included with each natural hazard in Part 2 of this guide.

Warning Systems and Signals

The Emergency Alert System (EAS) can address the entire nation on very short notice in case of a grave threat or national emergency. Ask if your local radio and TV stations participate in the EAS.

National Oceanic & Atmospheric Administration (NOAA) Weather Radio (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from a nearby National Weather Service office to specially configured NOAA weather radio receivers. Determine if NOAA Weather Radio is available where you live. If so, consider purchasing a NOAA weather radio receiver.

Ask local authorities about methods used to warn your community.

Warning System	What should we do?
EAS	
NOAA Weather Radio	

Evacuating Yourself and Your Family

When community evacuations become necessary, local officials provide information to the public through the media. In some circumstances, other warning methods, such as sirens or telephone calls, also are used. Additionally, there may be circumstances under which you and your family feel threatened or endangered and you need to leave your home, school, or workplace to avoid these situations.

The amount of time you have to leave will depend on the hazard. If the event is a weather condition, such as a hurricane that can be monitored, you might have a day or two to get ready. However, many disasters allow no time for people to gather even the most basic necessities, which is why planning ahead is essential.

Evacuation: More Common than You Realize

Evacuations are more common than many people realize. Hundreds of times each year, transportation and industrial accidents release harmful substances, forcing thousands of people to leave their homes. Fires and floods cause evacuations even more frequently. Almost every year, people along the Gulf and Atlantic coasts evacuate in the face of approaching hurricanes.

Ask local authorities about emergency evacuation routes.

Record your specific evacuation route directions in the space provided.

Is there a map available with evacuation routes marked? ☐ Yes ☐ No

Evacuation Guidelines

Always:	*If time permits:*
Keep a full tank of gas in your car if an evacuation seems likely. Gas stations may be closed during emergencies and unable to pump gas during power outages. Plan to take one car per family to reduce congestion and delay.	Gather your disaster supplies kit.
Make transportation arrangements with friends or your local government if you do not own a car.	Wear sturdy shoes and clothing that provides some protection, such as long pants, long-sleeved shirts, and a cap.
Listen to a battery-powered radio and follow local evacuation instructions.	Secure your home: • Close and lock doors and windows. • Unplug electrical equipment, such as radios and televisions, and small appliances, such as toasters and microwaves. Leave freezers and refrigerators plugged in unless there is a risk of flooding.
Gather your family and go if you are instructed to evacuate immediately.	Let others know where you are going.
Leave early enough to avoid being trapped by severe weather.	
Follow recommended evacuation routes. Do not take shortcuts; they may be blocked.	
Be alert for washed-out roads and bridges. Do not drive into flooded areas.	
Stay away from downed power lines.	

Community and Other Plans

Ask local officials the following questions about your community's disaster/emergency plans.

Does my community have a plan? ☐ Yes ☐ No

Can I obtain a copy? ☐ Yes ☐ No

What does the plan contain? _____

_____

How often is it updated? _____

What should I know about the plan? _____

_____

What hazards does it cover? _____

_____

In addition to finding out about your community's plan, it is important that you know what plans are in place for your workplace and your children's school or day care center.

1. Ask your employer about workplace policies regarding disasters and emergencies, including understanding how you will be provided emergency and warning information.
2. Contact your children's school or day care center to discuss their disaster procedures.

School Emergency Plans

Know your children's school emergency plan:

- Ask how the school will communicate with families during a crisis.
- Ask if the school stores adequate food, water, and other basic supplies.
- Find out if the school is prepared to shelter-in-place if need be, and where they plan to go if they must get away.

In cases where schools institute procedures to shelter-in-place, you may not be permitted to drive to the school to pick up your children. Even if you go to the school, the doors will likely be locked to keep your children safe. Monitor local media outlets for announcements about changes in school openings and closings, and follow the directions of local emergency officials.

For more information on developing emergency preparedness plans for schools, please log on to the U.S. Department of Education at www.ed.gov/emergencyplan.

Workplace Plans

If you are an employer, make sure your workplace has a building evacuation plan that is regularly practiced.

- Take a critical look at your heating, ventilation and air conditioning system to determine if it is secure or if it could feasibly be upgraded to better filter potential contaminants, and be sure you know how to turn it off if you need to.
- Think about what to do if your employees can't go home.
- Make sure you have appropriate supplies on hand.

1.2

Emergency Planning and Checklists

Now that you've learned about what can happen and how your community is prepared to respond to emergencies, prepare your family by creating a family disaster plan. You can begin this process by gathering family members and reviewing the information you obtained in Section 1.1 (hazards, warning systems, evacuation routes and community and other plans). Discuss with them what you would do if family members are not home when a warning is issued. Additionally, your family plan should address the following:

- Escape routes.
- Family communications.
- Utility shut-off and safety.
- Insurance and vital records.
- Special needs.
- Caring for animals.
- Saftey Skills

Information on these family planning considerations are covered in the following sections.

Escape Routes

Draw a floor plan of your home. Use a blank sheet of paper for each floor. Mark two escape routes from each room. Make sure children understand the drawings. Post a copy of the drawings at eye level in each child's room.

Where to Meet

Establish a place to meet in the event of an emergency, such as a fire. Record the locations below:

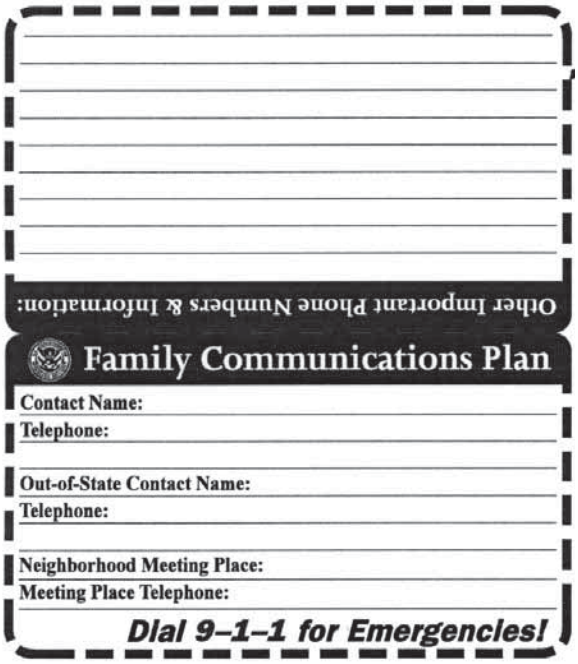
	Where to meet...
Near the home	For example, the next door neighbor's telephone pole
Outside the immediate area	For example, the neighborhood grocery store parking lot

Family Communications

Your family may not be together when disaster strikes, so plan how you will contact one another. Think about how you will communicate in different situations.

Complete a contact card for each family member. Have family members keep these cards handy in a wallet, purse, backpack, etc. You may want to send one to school with each child to keep on file. Pick a friend or relative who lives out-of-state for household members to notify they are safe.

Below is a sample contact card. Copies to fill out can be found in Appendix C. Also in Appendix C is a more detailed Family Communications Plan which should be completed and posted so the contact information is readily accessible to all family members. A copy should also be included in your family disaster supplies kit.



Utility Shut-off and Safety

In the event of a disaster, you may be instructed to shut off the utility service at your home.

Below is some general guidance for shutting off utility service:

Modify the information provided to reflect your shut off requirements as directed by your utility company(ies).

Natural Gas

Natural gas leaks and explosions are responsible for a significant number of fires following disasters. It is vital that all household members know how to shut off natural gas.

Because there are different gas shut-off procedures for different gas meter configurations, it is important to contact your local gas company for guidance on preparation and response regarding gas appliances and gas service to your home.

When you learn the proper shut-off procedure for your meter, share the information with everyone in your household. Be sure not to actually turn off the gas when practicing the proper gas shut-off procedure.

If you smell gas or hear a blowing or hissing noise, open a window and get everyone out quickly. Turn off the gas, using the outside main valve if you can, and call the gas company from a neighbor's home.

> **CAUTION** – If you turn off the gas for any reason, a qualified professional must turn it back on. NEVER attempt to turn the gas back on yourself.

Water

Water quickly becomes a precious resource following many disasters. It is vital that all household members learn how to shut off the water at the main house valve.

- Cracked lines may pollute the water supply to your house. It is wise to shut off your water until you hear from authorities that it is safe for drinking.
- The effects of gravity may drain the water in your hot water heater and toilet tanks unless you trap it in your house by shutting off the main house valve (not the street valve in the cement box at the curb—this valve is extremely difficult to turn and requires a special tool).

Preparing to Shut Off Water

- Locate the shut-off valve for the water line that enters your house. It may look like this:
- Make sure this valve can be completely shut off. Your valve may be rusted open, or it may only partially close. Replace it if necessary.

- Label this valve with a tag for easy identification, and make sure all household members know where it is located.

Electricity

Electrical sparks have the potential of igniting natural gas if it is leaking. It is wise to teach all responsible household members where and how to shut off the electricity.

Preparing to Shut Off Electricity

- Locate your electricity circuit box.
- Teach all responsible household members how to shut off the electricity to the entire house.

FOR YOUR SAFETY: Always shut off all the individual circuits before shutting off the main circuit breaker.

Insurance and Vital Records

Obtain property, health, and life insurance if you do not have them. Review existing policies for the amount and extent of coverage to ensure that what you have in place is what is required for you and your family for all possible hazards.

Flood Insurance

If you live in a flood-prone area, consider purchasing flood insurance to reduce your risk of flood loss. Buying flood insurance to cover the value of a building and its contents will not only provide greater peace of mind, but will speed the recovery if a flood occurs. You can call 1(888)FLOOD29 to learn more about flood insurance.

Inventory Home Possessions

Make a record of your personal property, for insurance purposes. Take photos or a video of the interior and exterior of your home. Include personal belongings in your inventory.

You may also want to download the free *Household and Personal Property Inventory Book* from the University of Illinois at www.ag.uiuc.edu/~vista/abstracts/ahouseinv.html to help you record your possessions.

Important Documents

Store important documents such as insurance policies, deeds, property records, and other important papers in a safe place, such as a safety deposit box away from your home. Make copies of important documents for your disaster supplies kit. (Information about the disaster supplies kit is covered later.)

Money

Consider saving money in an emergency savings account that could be used in any crisis. It is advisable to keep a small amount of cash or traveler's checks at home in a safe place where you can quickly access them in case of evacuation.

Special Needs

If you or someone close to you has a disability or a special need, you may have to take additional steps to protect yourself and your family in an emergency.

Disability/Special Need	Additional Steps
Hearing impaired	May need to make special arrangements to receive warnings.
Mobility impaired	May need special assistance to get to a shelter.
Single working parent	May need help to plan for disasters and emergencies.
Non-English speaking persons	May need assistance planning for and responding to emergencies. Community and cultural groups may be able to help keep people informed.
People without vehicles	May need to make arrangements for transportation.
People with special dietary needs	Should take special precautions to have an adequate emergency food supply.

Planning for Special Needs

If you have special needs:

- Find out about special assistance that may be available in your community. Register with the office of emergency services or the local fire department for assistance so needed help can be provided.

- Create a network of neighbors, relatives, friends, and coworkers to aid you in an emergency. Discuss your needs and make sure everyone knows how to operate necessary equipment.
- Discuss your needs with your employer.
- If you are mobility impaired and live or work in a high-rise building, have an escape chair.
- If you live in an apartment building, ask the management to mark accessible exits clearly and to make arrangements to help you leave the building.
- Keep specialized items ready, including extra wheelchair batteries, oxygen, catheters, medication, food for service animals, and any other items you might need.
- Be sure to make provisions for medications that require refrigeration.
- Keep a list of the type and model numbers of the medical devices you require.

Caring for Animals

Animals also are affected by disasters. Use the guidelines below to prepare a plan for caring for pets and large animals.

Guidelines for Pets

Plan for pet disaster needs by:

- Identifying shelter.
- Gathering pet supplies.
- Ensuring your pet has proper ID and up-to-date veterinarian records.
- Providing a pet carrier and leash.

Take the following steps to prepare to shelter your pet:

- Call your local emergency management office, animal shelter, or animal control office to get advice and information.
- Keep veterinary records to prove vaccinations are current.
- Find out which local hotels and motels allow pets and where pet boarding facilities are located. Be sure to research some outside your local area in case local facilities close.
- Know that, with the exception of service animals, pets are not typically permitted in emergency shelters as they may affect the health and safety of other occupants.

Guidelines for Large Animals

If you have large animals such as horses, cattle, sheep, goats, or pigs on your property, be sure to prepare before a disaster.

Use the following guidelines:

1. Ensure all animals have some form of identification.
2. Evacuate animals whenever possible. Map out primary and secondary routes in advance.
3. Make available vehicles and trailers needed for transporting and supporting each type of animal. Also make available experienced handlers and drivers.

   Note: It is best to allow animals a chance to become accustomed to vehicular travel so they are less frightened and easier to move.
4. Ensure destinations have food, water, veterinary care, and handling equipment.
5. If evacuation is not possible, animal owners must decide whether to move large animals to shelter or turn them outside.

Safety Skills

It is important that family members know how to administer first aid and CPR and how to use a fire extinguisher.

Learn First Aid and CPR

Take a first aid and CPR class. Local American Red Cross chapters can provide information about this type of training. Official certification by the American Red Cross provides, under the "good Samaritan" law, protection for those giving first aid.

Learn How to Use a Fire Extinguisher

Be sure everyone knows how to use your fire extinguisher(s) and where it is kept. You should have, at a minimum, an ABC type.

1.3

Assemble a Disaster Supplies Kit

You may need to survive on your own after a disaster. This means having your own food, water, and other supplies in sufficient quantity to last for at least three days. Local officials and relief workers will be on the scene after a disaster, but they cannot reach everyone immediately. You could get help in hours, or it might take days.

Basic services such as electricity, gas, water, sewage treatment, and telephones may be cut off for days, or even a week or longer. Or, you may have to evacuate at a moment's notice and take essentials with you. You probably will not have the opportunity to shop or search for the supplies you need.

A disaster supplies kit is a collection of basic items that members of a household may need in the event of a disaster.

Kit Locations

Since you do not know where you will be when an emergency occurs, prepare supplies for home, work, and vehicles.

Home	Work	Car
Your disaster supplies kit should contain essential food, water, and supplies for at least three days. Keep this kit in a designated place and have it ready in case you have to leave your home quickly. Make sure all family members know where the kit is kept. Additionally, you may want to consider having supplies for sheltering for up to two weeks.	This kit should be in one container, and ready to "grab and go" in case you are evacuated from your workplace. Make sure you have food and water in the kit. Also, be sure to have comfortable walking shoes at your workplace in case an evacuation requires walking long distances.	In case you are stranded, keep a kit of emergency supplies in your car. This kit should contain food, water, first aid supplies, flares, jumper cables, and seasonal supplies.

Water

How Much Water do I Need?

You should store at least one gallon of water per person per day. A normally active person needs at least one-half gallon of water daily just for drinking.

Additionally, in determining adequate quantities, take the following into account:

- Individual needs vary, depending on age, physical condition, activity, diet, and climate.
- Children, nursing mothers, and ill people need more water.
- Very hot temperatures can double the amount of water needed.
- A medical emergency might require additional water.

How Should I Store Water?

To prepare safest and most reliable emergency supply of water, it is recommended you purchase commercially bottled water. Keep bottled water in its original container and do not open it until you need to use it.

Observe the expiration or "use by" date.

If you are preparing your own containers of water

It is recommended you purchase food-grade water storage containers from surplus or camping supplies stores to use for water storage. Before filling with water, thoroughly clean the containers with dishwashing soap and water, and rinse completely so there is no residual soap. Follow directions below on filling the container with water.

If you choose to use your own storage containers, choose two-liter plastic soft drink bottles – not plastic jugs or cardboard containers that have had milk or fruit juice in them. Milk protein and fruit sugars cannot be adequately removed from these containers and provide an environment for bacterial growth when water is stored in them. Cardboard containers also leak easily and are not designed for long-term storage of liquids. Also, do not use glass containers, because they can break and are heavy.

If storing water in plastic soda bottles, follow these steps

Thoroughly clean the bottles with dishwashing soap and water, and rinse completely so there is no residual soap.

Sanitize the bottles by adding a solution of 1 teaspoon of non-scented liquid household chlorine bleach to a quart of water. Swish the sanitizing solution in the bottle so that it touches all surfaces. After sanitizing the bottle, thoroughly rinse out the sanitizing solution with clean water.

Filling water containers

Fill the bottle to the top with regular tap water. If the tap water has been commercially treated from a water utility with chlorine, you do not need to add anything else to the water to keep it clean. If the water you are using comes from a well or water source that is not treated with chlorine, add two drops of non-scented liquid household chlorine bleach to the water.

Tightly close the container using the original cap. Be careful not to contaminate the cap by touching the inside of it with your finger. Place a date on the outside of the container so that you know when you filled it. Store in a cool, dark place.

Replace the water every six months if not using commercially bottled water.

Food

The following are things to consider when putting together your food supplies:

- Avoid foods that will make you thirsty. Choose salt-free crackers, whole grain cereals, and canned foods with high liquid content.
- Stock canned foods, dry mixes, and other staples that do not require refrigeration, cooking, water, or special preparation. You may already have many of these on hand. **Note:** Be sure to include a manual can opener.
- Include special dietary needs.

Basic Disaster Supplies Kit

The following items are recommended for inclusion in your basic disaster supplies kit:

- Three-day supply of non-perishable food.
- Three-day supply of water – one gallon of water per person, per day.
- Portable, battery-powered radio or television and extra batteries.
- Flashlight and extra batteries.
- First aid kit and manual.
- Sanitation and hygiene items (moist towelettes and toilet paper).
- Matches and waterproof container.
- Whistle.
- Extra clothing.
- Kitchen accessories and cooking utensils, including a can opener.
- Photocopies of credit and identification cards.
- Cash and coins.
- Special needs items, such as prescription medications, eye glasses, contact lens solutions, and hearing aid batteries.
- Items for infants, such as formula, diapers, bottles, and pacifiers.
- Other items to meet your unique family needs.

If you live in a cold climate, you must think about warmth. It is possible that you will not have heat. Think about your clothing and bedding supplies. Be sure to include one complete change of clothing and shoes per person, including:

- Jacket or coat.
- Long pants.
- Long sleeve shirt.
- Sturdy shoes.
- Hat, mittens, and scarf.
- Sleeping bag or warm blanket (per person).

Be sure to account for growing children and other family changes. See Appendix B for a detailed checklist of disaster supplies. You may want to add some of the items listed to your basic disaster supplies kit depending on the specific needs of your family.

Maintaining Your Disaster Supplies Kit

Just as important as putting your supplies together is maintaining them so they are safe to use when needed. Here are some tips to keep your supplies ready and in good condition:

- Keep canned foods in a dry place where the temperature is cool.
- Store boxed food in tightly closed plastic or metal containers to protect from pests and to extend its shelf life.
- Throw out any canned good that becomes swollen, dented, or corroded.
- Use foods before they go bad, and replace them with fresh supplies.
- Place new items at the back of the storage area and older ones in the front.
- Change stored food and water supplies every six months. Be sure to write the date you store it on all containers.
- Re-think your needs every year and update your kit as your family needs change.
- Keep items in airtight plastic bags and put your entire disaster supplies kit in one or two easy-to-carry containers, such as an unused trashcan, camping backpack, or duffel bag.

1.4 Shelter

Taking shelter is critical in times of disaster. Sheltering is appropriate when conditions require that you seek protection in your home, place of employment, or other location where you are when disaster strikes. Sheltering outside the hazard area would include staying with friends and relatives, seeking commercial lodging, or staying in a mass care facility operated by disaster relief groups in conjunction with local authorities.

To effectively shelter, you must first consider the hazard and then choose a place in your home or other building that is safe for that hazard. For example, for a tornado, a room should be selected that is in a basement or an interior room on the lowest level away from corners, windows, doors and outside walls. Because the safest locations to seek shelter vary by hazard, sheltering is discussed in the various hazard sections. These discussions include recommendations for sealing the shelter if the hazards warrants this type of protection.

Even though mass care shelters often provide water, food, medicine, and basic sanitary facilities, you should plan to take your disaster supplies kit with you so you will have the supplies you require. Mass care sheltering can involve living with many people in a confined space, which can be difficult and unpleasant. To avoid conflicts in this stressful situation, it is important to cooperate with shelter managers and others assisting them. Keep in mind that alcoholic beverages and weapons are forbidden in emergency shelters and smoking is restricted.

The length of time you are required to shelter may be short, such as during a tornado warning, or long, such as during a winter storm. It is important that you stay in shelter until local authorities say it is safe to leave. Additionally, you should take turns listening to radio broadcasts and maintain a 24-hour safety watch.

During extended periods of sheltering, you will need to manage water and food supplies to ensure you and your family have the required supplies and quantities. Guidance on how to accomplish this follows.

Managing Water

Essentials

1. **Allow people to drink according to their needs**. Many people need even more than the average of one-half gallon, per day. The individual amount needed depends on age, physical activity, physical condition, and time of year.

2. **Never ration water unless ordered to do so by authorities**. Drink the amount you need today and try to find more for tomorrow. Under no circumstances should a person drink less than one quart (four cups) of water each day. You can minimize the amount of water your body needs by reducing activity and staying cool.
3. **Drink water that you know is not contaminated first**. If necessary, suspicious water, such as cloudy water from regular faucets or water from streams or ponds, can be used after it has been treated. If water treatment is not possible, put off drinking suspicious water as long as possible, but do not become dehydrated.
4. **Do not drink carbonated beverages instead of drinking water.** Carbonated beverages do not meet drinking-water requirements. Caffeinated drinks and alcohol dehydrate the body, which increases the need for drinking water.
5. **Turn off the main water valves.** You will need to protect the water sources already in your home from contamination if you hear reports of broken water or sewage lines, or if local officials advise you of a problem. To close the incoming water source, locate the incoming valve and turn it to the closed position. Be sure you and other family members know how to perform this important procedure.
   - To use the water in your pipes, let air into the plumbing by turning on the faucet in your home at the highest level. A small amount of water will trickle out. Then obtain water from the lowest faucet in the home.
   - To use the water in your hot-water tank, be sure the electricity or gas is off, and open the drain at the bottom of the tank. Start the water flowing by turning off the water intake valve at the tank and turning on the hot-water faucet. Refill the tank before turning the gas or electricity back on. If the gas is turned off, a professional will be needed to turn it back on.

Review

Section 1.2: Emergency Planning and Checklists

Water Sources

Safe Sources	Unsafe Sources
Melted ice cubes	Radiators
Water drained from the water heater (if the water heater has not been damaged)	Hot water boilers (home heating system)
Liquids from canned goods such as fruit or vegetable juices	Water beds (fungicides added to the water or chemicals in the vinyl may make water unsafe to use)
Water drained from pipes	Water from the toilet bowl or flush tank
	Swimming pools and spas (chemicals used to kill germs are too concentrated for safe drinking but can be used for personal hygiene, cleaning, and related uses)

Water Treatment

Treat all water of uncertain quality before using it for drinking, food washing or preparation, washing dishes, brushing teeth, or making ice. In addition to having a bad odor and taste, contaminated water can contain microorganisms (germs) that cause diseases such as dysentery, cholera, typhoid, and hepatitis.

Review

How I Should Store Water, Section 1.3

There are many ways to treat water. None is perfect. Often the best solution is a combination of methods. Before treating, let any suspended particles settle to the bottom or strain them through coffee filters or layers of clean cloth.

Make sure you have the necessary materials in your disaster supplies kit for the chosen water treatment method.

There are three water treatment methods. They are as follows:

- Boiling
- Chlorination
- Distillation

These instructions are for treating water of uncertain quality in an emergency situation, when no other reliable clean water source is available, or you have used all of your stored water.

Boiling

Boiling is the safest method of treating water. In a large pot or kettle, bring water to a rolling boil for 1 full minute, keeping in mind that some water will evaporate. Let the water cool before drinking.

Boiled water will taste better if you put oxygen back into it by pouring the water back and forth between two clean containers. This also will improve the taste of stored water.

Chlorination

You can use household liquid bleach to kill microorganisms. Use only regular household liquid bleach that contains 5.25 to 6.0 percent sodium hypochlorite. Do not use scented bleaches, color safe bleaches, or bleaches with added cleaners. Because the potency of bleach diminishes with time, use bleach from a newly opened or unopened bottle.

Add 16 drops (1/8 teaspoon) of bleach per gallon of water, stir, and let stand for 30 minutes. The water should have a slight bleach odor. If it doesn't, then repeat the dosage and let stand another 15 minutes. If it still does not smell of chlorine, discard it and find another source of water.

Other chemicals, such as iodine or water treatment products sold in camping or surplus stores that do not contain 5.25 to 6.0 percent sodium hypochlorite as the only active ingredient, are not recommended and should not be used.

Distillation

While the two methods described above will kill most microbes in water, distillation will remove microbes (germs) that resist these methods, as well as heavy metals, salts, and most other chemicals.

Distillation involves boiling water and then collecting only the vapor that condenses. The condensed vapor will not include salt or most other impurities. To distill, fill a pot halfway with water. Tie a cup to the handle on the pot's lid so that the cup will hang right-side-up when the lid is upside-down (make sure the cup is not dangling into the water) and boil the water for 20 minutes. The water that drips from the lid into the cup is distilled.

Effectiveness of Water Treatment Methods

Methods	Kills Microbes	Removes other contaminants (heavy metals, salts, and most other chemicals)
Boiling	√	
Chlorination	√	
Distillation	√	√

Managing Food Supplies

Safety and Sanitation

Do:	Don't:
• Keep food in covered containers • Keep cooking and eating utensils clean • Keep garbage in closed containers and dispose outside, burying garbage if necessary • Keep your hands clean by washing them frequently with soap and water that has been boiled or disinfected • Use only pre-prepared canned baby formula for infants • Discard any food that has come into contact with contaminated floodwater • Discard any food that has been at room temperature for two hours or more • Discard any food that has an unusual odor, color, or texture	• Eat foods from cans that are swollen, dented, or corroded, even though the product may look safe to eat • Eat any food that looks or smells abnormal, even if the can looks normal • Use powdered formulas with treated water • Let garbage accumulate inside, both for fire and sanitation reasons

Note: Thawed food usually can be eaten if it is still "refrigerator cold." It can be re-frozen if it still contains ice crystals. To be safe, remember, "When in doubt, throw it out."

Cooking

- Alternative cooking sources in times of emergency include candle warmers, chafing dishes, fondue pots, or a fireplace.
- Charcoal grills and camp stoves are for outdoor use only.
- Commercially canned food may be eaten out of the can without warming.
- To heat food in a can:
  1. Remove the label.
  2. Thoroughly wash and disinfect the can. (Use a diluted solution of one part bleach to ten parts water.)
  3. Open the can before heating.

Managing without Power

Here are two options for keeping food safe if you are without power for a long period:

- Look for alternate storage space for your perishable food.
- Use dry ice. Twenty-five pounds of dry ice will keep a 10-cubic-foot freezer below freezing for 3-4 days. Use care when handling dry ice, and wear dry, heavy gloves to avoid injury.

1.5

Hazard-Specific Preparedness

There are actions that should be taken before, during, and after an event that are unique to each hazard. For example:

- Seeking a safe shelter during a tornado.
- Reducing property loss from a hurricane.

Information about the specific hazards and what to do for each is provided in Parts 2, 3, and 4. Study the material for those hazards that you identified in Section 1.1 as the ones that have happened or could happen. Share the hazard-specific information with family members and include pertinent material from these parts in your family disaster plan.

1.6

Practicing and Maintaining Your Plan

Once you have developed your plan, you need to practice and maintain it. For example, ask questions to make sure your family remembers meeting places, phone numbers, and safety rules. Conduct drills such as drop, cover, and hold on for earthquakes. Test fire alarms. Replace and update disaster supplies.

For More Information

If you require more information about any of these topics, the following are resources that may be helpful.

FEMA Publications

Disaster Preparedness Coloring Book. FEMA-243. Coloring book for ages 3-10. Also available in Spanish.

Before Disaster Strikes. FEMA A-291. Contains information about how to make sure you are financially prepared to deal with a natural disaster. Also available in Spanish.

The Adventures of Julia and Robbie: Disaster Twins. FEMA-344. A collection of disaster related stories. Includes information on preparedness and how to mitigate against disasters.

FEMA for Kids. L-229. Provides information about what FEMA (specifically fema.gov) has to offer children.

Community Shelter. FEMA 361. Contains guidelines for constructing mass shelters for public refuge in schools, hospitals, and other places.

Food and Water in an Emergency. L-210 If an earthquake, hurricane, winter storm, or other disaster strikes your community, you might not have access to food, water, and electricity for days, or even weeks. By taking some time now to store emergency food and water supplies, you can provide for your entire family. Also available online at www.fema.gov/pdf/library/f&web.pdf.

Helping Children Cope with Disaster. FEMA L-196. Helps families understand how to help children cope with disaster and its aftermath.

Assisting People with Disabilities in a Disaster. Information about helping people with disabilities in a disaster and resources for individuals with disabilities. Available online at www.fema.gov/rrr/assistf.shtm.

American Red Cross Publications

Facing Fear: Helping Young People Deal with Terrorism and Tragic Events. A school curriculum designed to help alleviate worries and clear up confusion about perceived and actual threats to safety. Available online at www.redcross.org/disaster/masters/facingfear, or contact your local Red Cross chapter.