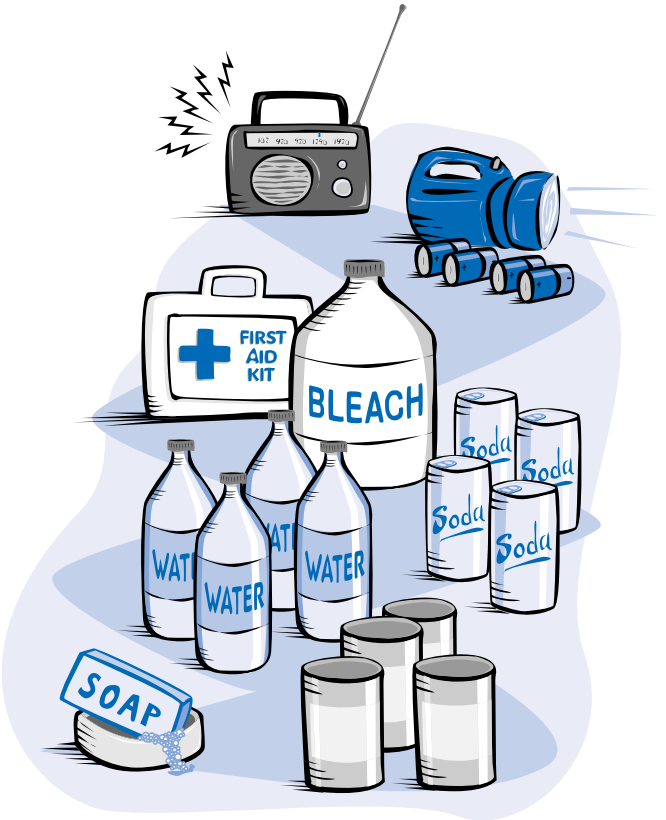
State of Illinois
Illinois Department of Public Health

SURVIVING DISASTERS

A Citizen's Emergency Handbook



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Introduction

No matter where you live, your community may experience a natural or man-made disaster — a tornado, flood, winter storm, earthquake, fire, nuclear power plant accident or terrorist attack. In any type of disaster, lives can be saved if people are prepared for the emergency, and know what actions to take when it occurs. This handbook can help. It was compiled by the Illinois Department of Public Health, with assistance from the Office of Homeland Security, the American Red Cross, the Federal Emergency Management Agency and the Illinois Emergency Management Agency. This handbook contains information and guidance on what can be done to enhance survival in the event of a disaster.

Individuals and families can prepare for any type of emergency by using the basic information in this handbook. The actions recommended are general in nature and should supplement specific instructions issued by local authorities.

For information on your community's disaster plan, contact your local emergency management office.

General Guidance

There are actions you can take that will help you to get ready for, and to cope with, almost any type of disaster. Knowing what to do is your best protection and your responsibility.

Perhaps the most basic thing to remember is to keep calm. This may mean the difference between life and death. In disasters, people often are killed or injured needlessly because they acted thoughtlessly or did nothing.

In a time of disaster, taking proper action may save your life. Take time to think, and then take the appropriate action. Usually, this will be action you have planned in advance, or the action you are instructed to take by local authorities.

Whenever a major storm or other potential disaster threatens, keep your radio or television turned on to hear weather reports and forecasts, as well as other information and advice that may be broadcast by local authorities.

Use your telephone only to report important events (such as fires, flash floods or tornado sightings) to local police. If you tie up the telephone lines, you may prevent emergency calls from being completed.

A knowledge of first aid and emergency medical care can save lives and reduce suffering. Both adults and teenagers can acquire these valuable skills by taking general first aid courses and specialty courses, such as cardiopulmonary resuscitation (CPR), which are offered free in many communities.

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

Develop an escape plan by drawing a floor plan of your residence, showing the location of doors, windows, stairways and large furniture. Indicate the location of emergency supplies, fire extinguishers, smoke detec-

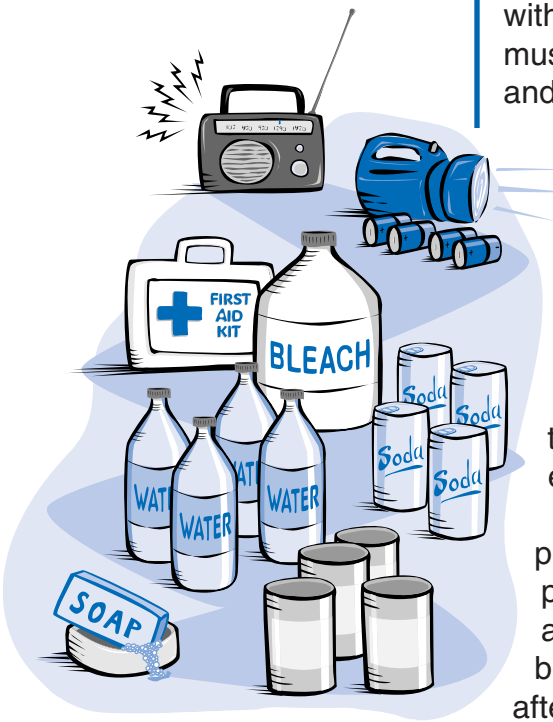
tors, collapsible ladders, first aid kits and utility shut off points. Next, draw a broken line charting at least two escape routes from each room. Finally, mark a place outside of the home where household members should meet if an evacuation is necessary. Be sure to include important points outside, such as garages, patios, stairways, elevators, driveways and porches. Put together escape plans for each floor of your home. Practice emergency evacuation drills with all household members at least two times each year.

Maintain your car in good operating condition with an ample supply of gasoline in case you have to leave your home.

Know how and where to shut off gas, water and electricity to your household. Keep necessary tools or wrenches handy.

Keep important papers in a safety deposit box at a bank. House deed, insurance policies, birth certificates, and lists and photos of your possessions for insurance purposes will be essential after the disaster.

Emergency Supplies



A disaster of almost any kind may interfere with your normal supplies of food, water, heat and other day-to-day necessities. Keep a stock of emergency supplies on hand sufficient to meet your needs for a week.

If you stay at home during the disaster, these supplies could help you live through the period of emergency without hardship. If you must evacuate your home and move temporarily to another location, your emergency supplies could be taken with you. Even if you only move to an emergency shelter station, these supplies might lessen the burden on the shelter and make your stay easier.

It is also a good idea to prepare a disaster supplies kit. Some items that are easily obtainable may become difficult to find after a disaster. The kit should include the following:

- a battery-powered radio and a flashlight, with extra batteries for each
- bottled drinking water—one gallon per day per

person, with at least a three-day supply for each person in your household, and as much drinkable liquid (fruit and vegetable juices, soft drinks, etc.) as can be carried

- canned or sealed packaged foods that do not require refrigeration or cooking and a can opener
- a blanket or sleeping bag for each family member
- writing materials to take notes or information from radio or television broadcasts
- hammer, pliers and wrench
- pocket knife
- fire extinguisher
- signal flare and whistle
- soap and towels
- paper towels and toilet paper
- household laundry bleach (unscented)
- an extra set of car keys and a credit card, cash or traveler's checks
- one change of clothing and footwear per person
- a list of family physicians
- first-aid kit and manual
- non-prescription drugs, including mild pain relievers and antiseptic
- any special prescription medicines or foods needed by family members, such as insulin, heart tablets, dietetic food and baby food (Do not store in the kit for long periods but add at the last minute.)

Ideally you should prepare two kits and store each in water-tight containers. Keep one in the basement of your home or near the front door. Keep the second kit in the trunk of your car.

Additional Supplies

Other items may prove helpful:

- plastic bags (small and large)
- a cooler and freezer-packs
- salt
- paper cups
- baking soda
- spoons
- matches
- tape
- needles and thread
- pre-moistened towelettes
- splinting material
- hand lotion
- disposable diapers
- cotton balls
- sanitary napkins
- bandages
- extra eye glasses
- medicine dropper
- contact lenses and supplies

After a Disaster

Your first concern after a disaster is the safety of your family, friends and neighbors. If possible, obtain medical attention for serious injuries. Persons with a puncture wound or deep cut may need a tetanus shot if they have not had one in the past five years.

If professional medical assistance is not immediately available, persons with a knowledge of first aid and emergency medical care can save lives and reduce suffering. Do not attempt to move seriously injured persons unless they are in immediate danger of further injury.

Tune to a local radio or television station for advice and instructions and the latest emergency information. If your area is declared a disaster area, local radio and television stations will carry information on where to go for disaster assistance.

Use extreme caution in entering or working in buildings that may have been damaged or weakened by the disaster — they may collapse without warning.

There also may be gas leaks or electrical short circuits.

Put on heavy shoes to avoid injury from glass and other debris.

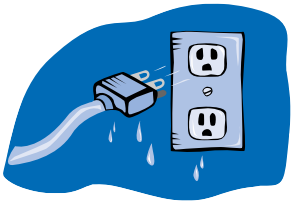
Use battery-powered flashlights or lanterns if you do not have electricity. Do not use candles, oil or gas lanterns, or torches because gas lines may be broken and an explosion could occur.

Check for leaking gas pipes in your home. Do this by smell only — do not use matches or candles. If you smell gas or suspect a leak, turn off the main gas valve at the meter, open all windows and leave the house.

Immediately notify the gas company, police or fire department. Do not turn lights on or off, light matches or do anything that could cause a spark. Do not re-enter the house until you are told it is safe to do so.

If you are without heat, put on several layers of clothing. A fireplace or electric stove may be used for heat. Fireplaces should be checked for cracks and damage to the chimney or flue. Unnoticed damage could lead to a fire. Gas stoves can generate a substantial amount of carbon monoxide and should not be used for heat.

If damage to the electrical system is suspected (frayed wires, sparks or the smell of hot insulation), turn off the electrical system at the main box. If any of your electrical appliances are wet,



first turn off the main power switch, then unplug the appliance, dry it out, reconnect it and finally turn on the main power switch. If fuses blow when the electric power is restored, turn off the main power switch again and then inspect for short circuits in your home wiring, appliances and equipment. (Caution: Do not do any of these things if you are wet or standing in water.)

Do not touch downed power lines or objects touched by downed power lines.

If water leaks are found or suspected, shut off the water at the main valve.

Emergency water may be obtained from such sources as hot water tanks, toilet tanks (not the bowl and only if the tanks do not have deodorizers) and melted ice cubes. If water from hot water heaters or the tanks of toilets is used, it should be boiled first.

Check your food supplies before using them. Foods that require refrigeration may be spoiled if electric power has been off for an extended period of time. Do not eat food that has come in contact with flood waters.

A disaster may damage public water supply systems resulting in contaminated water. After a flood, consider all water unsafe. Listen for public announcements on the safety of the municipal water supply. If you have to use water from the faucet, boil it at a rolling boil for at least five minutes. If you cannot boil, add eight drops of household bleach to each gallon of water. Mix thoroughly and allow to stand for 30 minutes. Only water that is clean in appearance and free of odor should be treated this way. To be safe, drink bottled water, juices or water previously stored in the refrigerator.

Be sure to follow the instructions of local authorities concerning the use of food and water.

If necessary, seek food, clothing, medical care and shelter from Red Cross emergency shelter sites or from local government authorities.

Open closets and cupboards carefully.

Check emergency supplies.

Stay away from disaster areas. Sightseeing could interfere with first aid or rescue work and may be dangerous as well.

Do not drive unless necessary; if you drive, do so with caution. Watch for hazards to yourself and others, and report them to local authorities.

Do not pass on rumors or exaggerated reports of damage.

If the presence of radioactive material is suspected, law enforcement will rope off and station guards around the area.

Follow the advice and instructions of your local government on ways to help yourself and your community recover from the emergency. Be prepared to evacuate if necessary.

Notify your relatives when you are at a safe location. Local authorities may use valuable time and resources looking for family members if their location is unknown.

Personal Hygiene and General Cleanliness

Following a disaster, it can be difficult to maintain good hygiene and cleanliness. These steps will help you serve safe foods and beverages:

In order to prevent the spread of infection, always wash your hands with plenty of soap and water before handling or preparing food or eating. Make sure children do the same. Use plastic or rubber gloves if you have any kind of skin cut, burn or infection on your hands.

- Wash hands, work surfaces and utensils in hot, soapy water after each step in food preparation. Do not put cooked meat, poultry or fish in the same container that held the raw product. The

  cooked food may become contaminated with bacteria from the raw juices.
- Keep cloths washed and dish towels clean. Bacteria can linger or remain in towels and cloths, so wash kitchen linen often.
- Wash dishes and utensils only in water that is safe to drink. Boil unsafe water for five minutes or add eight drops of laundry bleach to each gallon of water, mix thoroughly and allow to stand 30 minutes before using it.

- Use sanitary disposable eating utensils when there is a shortage of safe drinking water.

Illness

Disease outbreaks may occur after disasters. In the event illness occurs, report symptoms to a physician or nurse. Persons with diarrhea or vomiting, and those living in temporary group housing who develop fever, sore throat, cough or other symptoms (except for the common cold) should notify a physician or health nurse. Persons who are sick should not help prepare meals.

Because children sometimes have intestinal infections without showing symptoms, and then often have inadequate hygienic practices, adults should check that children (especially young children) thoroughly wash hands after using the toilet. This reduces the risk of disease transmission.

Dispose of used diapers in a plastic bag or other container that can be closed tightly to prevent contact by others.

Food Spoilage vs. Food Poisoning

It is important to know the organisms that cause food to spoil are different from the organisms that cause food poisoning and make you sick. When spoilage organisms — some bacteria, molds and yeasts — affect the look, smell or taste of the food, throw the food away.

Unfortunately, the bacteria that commonly cause foodborne illness — mild to severe symptoms of vomiting, abdominal pain, diarrhea and sometimes fever — are not so obvious. These organisms rarely affect smell, taste and appearance of food to indicate that it is unsafe to eat. Following these simple rules will help prevent foodborne illness:

- Cook foods thoroughly, especially meats, poultry and pork. Use a meat-roasting thermometer in the thickest portion of the meat. Cook chicken to 180 degrees F, pork to 160 degrees F and beef to 160 degrees F.

- Refrigerate leftovers immediately after the meal. If there are large volumes of food to cool (more than one or two pounds, or 1/2 gallon of liquid), divide the food into several shallow containers or smaller pieces to cool it faster. This prevents bacteria from multiplying rapidly in the warm food.
- Do not thaw frozen food at room temperature. Either cook it frozen or thaw it in the refrigerator or in a place where the temperature is lower than 41 degrees F.
- Use only pasteurized milk.
- Wash your hands thoroughly before handling food, especially after handling raw meats or poultry and after using the bathroom.
- Do not leave high-protein foods (raw or cooked) sitting out at room temperature. Keep them hot (over 145 degrees F) or keep them cold (under 41 degrees F).

Examine Canned Goods

Carefully examine canned goods that have been submerged in flood waters, frozen, in a fire or crushed. Some cans may be safe to use after a good cleaning and some may not. Follow these guidelines:

- Containers with cork-lined lids or caps, screw tops or pop tops are nearly impossible to clean thoroughly around the opening after being underwater or in a fire. If there have been any major temperature changes, contaminants may actually have been sucked into the container. Discard these containers.

- Tin cans are usually safe if they appear undamaged. Wash these cans in bleach water

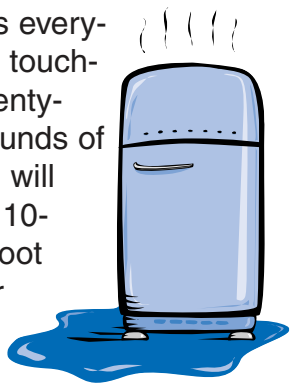
(1/4-cup bleach in one gallon of water) for one minute, then dry to prevent rusting.

- If cans have pitted rust spots that cannot be buffed off with a soft cloth, corrosion may allow contamination to enter through holes in the walls of the can. Discard these cans.
- Cans with ends that bulge or spring in and out when pressed, should be discarded immediately. This usually means bacteria are growing inside and producing gas to expand the can. **Do not taste the contents of such cans.**
- If a can is crushed, dented or creased, closely examine it to see if it is safe to use. A dent may weaken the seam and allow contamination. If a dent or crease is very sharp, the contents may be contaminated. Discard these cans. **Do not taste.**

What To Do When Your Freezer Fails

When the electricity is off, a fully stocked freezer will keep food frozen two days if the door remains closed. A half-full freezer can keep foods frozen about one day. What can you do if electric service will not be re-connected within one or two days?

- Keep the freezer door closed.
- Divide up your frozen foods among friends' freezers if they have electricity.
- Seek freezer space in a store, church, school or a commercial meat locker or freezer that has electrical service.
- Know where you can buy dry and block ice.
- Put dry ice in your freezer. **Never touch dry ice with bare hands!** It freezes everything it touches. Twenty-five pounds of dry ice will hold a 10-cubic-foot freezer below



freezing for three to four days. Do not stick your head into a freezer that contains dry ice. Dry ice gives off carbon dioxide, which replaces oxygen, so leave the door open a short time before examining your food.

- If you are not sure how long the electricity has been off, discard any food that smells bad, is slimy, has an unusual color or is room temperature.
- If food is still "cold-to-the-touch," it may be cooked and eaten immediately, or refrozen.

What To Do When Your Refrigerator Fails

When power goes off in the refrigerator, you can normally expect food inside to stay safely cold for four to six hours, depending on how warm your kitchen is.

- High-protein foods (dairy products, meat, fish, poultry) should be consumed as soon as possible if power is not restored immediately. They cannot be stored safely at room temperature.
- Fruits and vegetables can be kept at room temperature safely until there are obvious signs of spoilage (mold, slime, wilt). With good ventilation, vegetables last longer at room temperature. Remove them from the refrigerator if electrical service may not resume soon.

Cleanup

If property damage is extensive, heavy equipment such as bulldozers may be used. It is important to identify or "flag" any underground utilities, such as private sewage systems or water wells, so they are not damaged by the equipment.

During cleanup, it is important to wear protective clothing. Boots, rubber gloves and long-sleeved shirts help reduce contact with contaminated items. Take care not to step on nails or other protruding items.

Sewage Disposal

Often sewage systems are not usable after disasters. Earthquakes can cause extensive underground damage in addition to structural damage to buildings and dwellings. Tornado damage is typically limited to above ground. In either case, an extensive period of time is required to make repairs. After flood waters recede, minimal repairs are usually necessary for the sewage system to properly function.

Many communities provide portable toilets, but these may be limited. Flooded outdoor toilets should be scrubbed thoroughly with a solution of one-half cup of laundry bleach per gallon of water.

If no toilet facilities are available, deposit human waste in a sturdy water-tight receptacle used for that purpose only. Double line the container with garbage bags. To make it easier to empty, place a small amount of water in the receptacle before it is used. If waste system becomes functional, dispose of waste into this system.Another option is to bury waste by digging a trench or pit 24 inches deep and empty the contents of the receptacle into this pit as soon as possible after each use. Also empty any water used to wash the receptacle into the pit or trench. Cover the waste in the trench after each use with a small layer of dirt, ashes or lime. When closing the trench, cover it with at least 12 inches of earth. Empty, used bags can be disposed of with normal garbage. It is very important that good hand washing practices are followed after handling human waste. Good hand washing is the first line of defense against the spread of many illnesses, from the common cold to more serious illnesses such as hepatitis A, meningitis, E. Coli and most other types of infectious diarrhea.

Earthquakes

An earthquake is the shaking or trembling of the crust of the earth, caused by underground volcanic forces or by breaking and shifting of rock beneath the surface. Earthquakes usually last only for a few seconds, but can last for as much as a minute. Minor earthquakes will cause rattling windows and dishes; if stronger, you may feel a shaking sensation or, in a severe earthquake, the ground may sway like the deck of a ship. The movement can cause buildings and other structures to shake or collapse. The earth, however, does not open up and swallow a whole neighborhood. Earthquake deaths and injuries are seldom caused by the actual movement of the ground but from falling objects and debris, splintering glass and fires.

Earthquake Preparedness

Survey your home for possible hazards and then take action to lessen those hazards.

Another important step is to be sure your family knows what to do if an earthquake occurs. You should learn where to seek shelter and how to protect yourself.

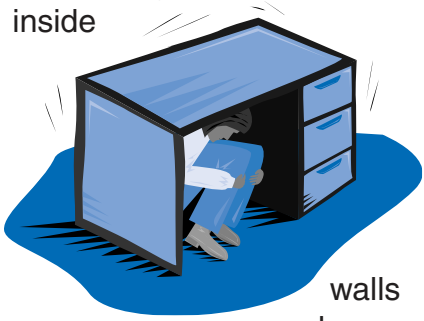
In addition, you should —

- Anchor the water heater, refrigerator and tall or heavy furniture to wall studs. Prevent the refrigerator or other heavy appliances from moving by blocking the rollers.
- Move heavy items to lower shelves.
- Install clips, latches and other locking devices on cabinet doors.
- Add bracing to support air conditioners, particularly on rooftops.
- Secure gas lines by installing flexible connectors to appliances.
- Remove all flammable liquids, such as painting and cleaning products, to the garage or outside storage area. Be sure these items are stored away from heat sources and appliances, particularly the hot water heater or furnace.
- Locate beds away from windows.

During an Earthquake

1. Keep calm. Do not run or panic. Stay where you are. Most injuries occur as people are entering or leaving buildings.

2. If you are **indoors**, take cover under a table, desk or bench, or brace yourself against inside



walls or doorways. Watch for falling, flying and sliding objects. Stay away from outside doors, heating units, stoves, glass, windows, chimneys and heavy objects (such as refrigerators and machinery) that may topple or slide across the floor.

3. If you are in a **high-rise building**, get under a desk until the shaking stops. Seek safety where you are. Do not use the elevator to evacuate. Wait for instructions from building authorities. Falling debris around a building is a common hazard.

4. If you are in a **public place**, get under a table or any sturdy object, or in an interior doorway. Avoid stopping under anything that could fall. Do not dash for an exit. If you must leave, choose your exit carefully.

5. If you are **outdoors**, move to an open area away from buildings, utility wires and brick or block walls that could fall. Once in the open, lie or sit down to avoid being thrown around by the quake until the shaking stops.

6. If you are in a **vehicle**, stop as quickly as safety permits and stay in it until the shaking stops. Avoid stopping near or under buildings, overpasses, trees and utility lines. When you drive on, watch for hazards created by the earthquake, such as fallen objects, downed electric wires, or broken or undermined roadways.

7. Insure all telephone receivers in the house or office are returned to the cradle.

8. If you are trapped in a collapsed building —

- Put something over your mouth and nose to protect yourself from dust.
- Keep still so you do not kick up dust.
- Tap (on metal or concrete) to make noise; shouting may not be heard in a large building.

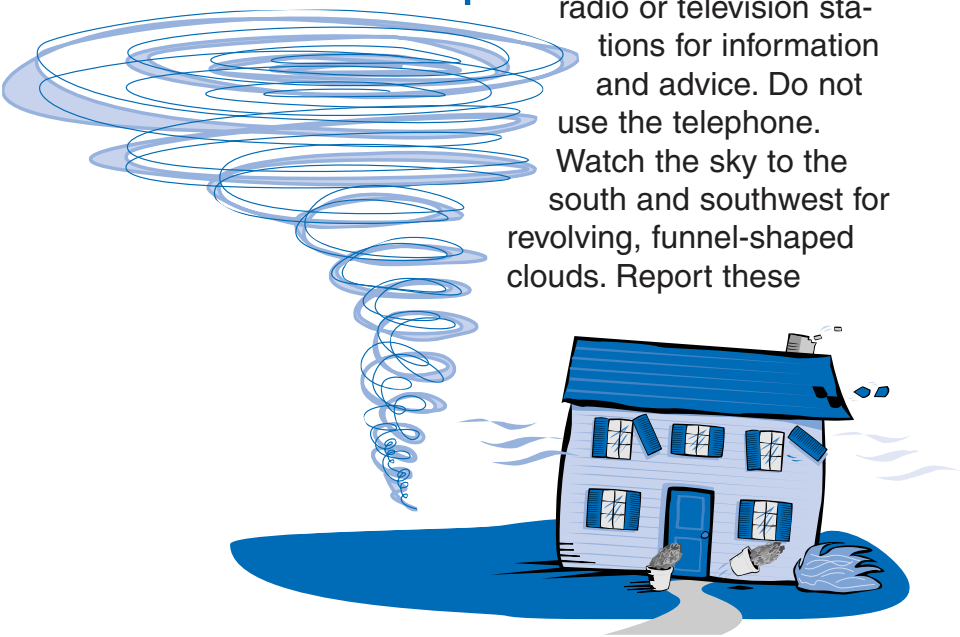
Do not be surprised if you feel more than one shock. After the first motion is felt, there may be a temporary decrease in the motion followed by another shock. This phenomenon is the arrival of different seismic waves from the same earthquake. Aftershocks also may occur. These are separate earthquakes that follow the main shock. Aftershocks may occur several minutes, hours or even days afterwards. Aftershocks can cause additional damage or collapse structures already weakened by the main earthquake.

Be prepared to deal with the emotional needs of family members. Stay close enough to touch and comfort each other.

Tornadoes

A tornado is a violent storm with whirling winds of up to 300 miles per hour. It appears as a rotating, funnel-shaped cloud, from gray to black in color, that extends toward the ground from the base of a thundercloud. A tornado spins like a top and may sound like the roaring of an airplane or locomotive. These short-lived storms are the most violent of all storms and the most destructive. They occur most frequently during April, May and June.

A TORNADO WATCH (forecast) means that tornadoes may occur in or near your area. Listen to local radio or television stations for information and advice. Do not use the telephone. Watch the sky to the south and southwest for revolving, funnel-shaped clouds. Report these



immediately to your local police department, sheriff's office or weather service.

If a TORNADO WARNING is issued for your area, take shelter immediately. A warning means a tornado has been sighted, or has been indicated by radar, and may strike in your vicinity.

What To Do During A Tornado

Take action to protect yourself from being struck by falling objects, injured by flying debris or blown away. The best protection is an underground shelter, cave or steel-framed or reinforced concrete building. If none of these is available, there are other places where you can take refuge.

- IF YOU ARE AT HOME, go to an underground storm cellar or basement if you have one. If not, go to a corner of your home and take cover under a sturdy workbench or table (but not underneath heavy appliances on the floor above). If your home has no basement, take cover in the center part of the house, on the lowest floor, in a small room such as a closet or bathroom, or under heavy furniture. Stay away from windows to avoid flying debris. Do not remain in a trailer or mobile home if a tornado is approaching; take cover in a nearby shelter or lie flat in the nearest depression or ditch.
- IF YOU ARE AT WORK in an office building, go to an interior hallway on the lowest floor, or to a designated shelter area.
- IF YOU ARE AT SCHOOL, follow the instructions of school authorities. These usually involve taking shelter in interior hallways on the lowest floor, and staying out of structures with wide, free-span roofs, such as auditoriums and gymnasiums.
- IF YOU ARE OUTSIDE IN OPEN COUNTRY, take cover and lie flat in the nearest depression, such as a ditch, culvert, excavation or ravine, and cover your head with your arms.

Floods

Floods are the most common and widespread of all natural hazards. Some floods develop over a period of days, but flash floods can produce raging waters in just a few minutes. Water runs off steeper ground very rapidly, causing natural drainage systems to overflow with rushing flood waters and a deadly cargo of rocks, mud, smashed trees and other debris.

Remember, even very small streams, gullies, creeks, culverts, dry streambeds or low-lying ground that may appear harmless in dry weather can flood.

Wherever you live, be aware of potential flooding hazards. If you live in a low-lying area, near water or downstream from a dam, you should be prepared for a flood. Know the National Weather Service terms for potential flooding conditions that will be broadcast on radio

and television and through local government emergency personnel:

- Flood forecast means rainfall is heavy enough to cause rivers to overflow their banks or melting snow is mixing with rainfall to produce similar effects.
- Flood warning or forecast of impending floods describes the affected river or lake, the severity of flooding (minor, moderate or major) and when and where the flooding will begin.
- Flash flood watch means current or expected heavy rains may cause sudden flash flooding in specified areas. Be alert to the possible emergency, which may require immediate action.
- Flash flood warning is announced when flash flooding is occurring or imminent along certain streams and designated areas. Careful preparations and prompt response will ensure personal safety and reduce property loss.

Before the Flood

Flood losses are not covered under normal homeowner insurance policies, but flood insurance is available in participating communities through the federally sponsored National Flood Insurance Program. Contact a local licensed insurance broker or agent for more information. Usually there is a five-day waiting period for coverage to take effect, so do not wait until the last minute.

Find out how many feet your property is above or below possible flood levels. When predicted flood levels are broadcast, you can determine if you may be flooded.

Keep materials like sandbags, plywood, plastic sheeting and lumber on hand for emergency waterproofing. If flooding of significant depth is imminent, DO NOT stack sandbags around the outside walls of your house to keep water out of your basement. Water seeping downward through the soil (either beyond the sandbags or over them) may collect around the

basement walls and under the floor, creating pressure that could damage the walls or raise the entire basement. In most cases, it is better to permit the flood waters to flow freely into the basement (or flood the basement yourself with clean water, if you feel sure it will be flooded anyway. This will equalize the water pressure on the outside of the basement walls and floors, and thus avoid structural damage to the foundation and the house.)

If flooding is likely and time permits, move essential items and furniture to the upper floors of your house. Disconnect any electrical appliances that cannot be moved, but do not touch them if you are wet or standing in water.

Evacuation

If you are advised to evacuate your home and move to another location temporarily, there are certain things to remember to do. The following are the most important.

FOLLOW THE INSTRUCTIONS AND ADVICE OF YOUR LOCAL GOVERNMENT. If you are advised to evacuate, do so promptly. If you are instructed to move to a certain location, go there — do not go anywhere else. If travel routes are specified or recommended, use those routes rather than trying to find short cuts on your own. It would be helpful if you previously became familiar with the routes likely to be used. If you are told to shut off water, gas or electrical service before leaving home, do so. In case you need to use them, find out from radio or television broadcasts where emergency housing and feeding stations are located.

SECURE YOUR HOME BEFORE LEAVING. If you have time, and if you have not received other instructions from local authorities, take the following actions before leaving home:

- Bring outside possessions inside the house, or tie them down securely. This includes outdoor furniture, garbage cans, garden tools, signs and other movable objects that might be washed away.

- Disconnect any electrical appliances or equipment that cannot be moved, but do not touch them if you are wet or standing in water.
- Lock all doors and windows.

TRAVEL WITH CARE. If you are walking or driving your car to another location, keep these points in mind:

- Leave early enough to avoid being marooned by flooded roads.
- Make sure you have enough gasoline in your car.
- Follow recommended routes.
- As you travel, listen to the radio for additional information and instruction from local authorities.
- Watch for washed-out or undermined roadways, earth slides, broken sewer or water mains, loose or downed power lines, and falling or fallen objects.
- Watch for areas where rivers or streams may suddenly flood.
- Do not try to cross a stream or pool of water unless you are certain the water will not be over your knees, or above the middle of your car wheels. Sometimes the water hides a bridge or part of the road that has been washed out. If you decide it is safe to drive across, put your car in low gear and drive very slowly to avoid splashing water into the engine and causing it to stall. Also, remember your brakes may not work well after the wheels of your car have been in deep water. Pump the brakes a few times when you reach dry ground.

Special Advice On Flash Floods

In many areas, unusually heavy rains may cause quick or flash floods. Small creeks, gullies, dry streambeds, ravines, culverts or low-lying ground can flood quickly and endanger people, sometimes before any warning can be issued.

The National Weather Service issues two types of flash flood advisories: a flash flood watch and a flash flood warning. A **watch** means that heavy rains occurring or expected may soon cause flash floods in certain areas, and citizens should be alert to the possibility of a flood emergency that would require immediate action. A **warning** means that flash flooding is occurring or imminent on certain streams or designated areas, and immediate action should be taken by those affected.

During heavy rains, be aware of the hazards of flash floods and be prepared to protect yourself. If you see any possibility of a flash flood occurring where you are, immediately move to a safer location and then notify local authorities of the danger, so other people can be warned.

During periods of heavy rainfall —

- STAY AWAY FROM NATURAL STREAMBEDS, gullies and other drainage channels during and after rainstorms. Water runs off the higher elevations very rapidly, causing the natural drainage system to overflow with floodwaters and their deadly cargo of rocks, mud, smashed trees and other debris.
- USE YOUR MAPS. Know where you are and whether you are on low ground. You do not have to be at the bottom of a hill to be a target of flash flooding.
- KNOW WHERE THE HIGH GROUND IS and how to get there in a hurry. Many roads and trails parallel existing drainage patterns and may be swept away by flood waters.
- STAY OUT OF FLOODED AREAS. The water may still be rising and the current could be swift. Never try to cross a flowing stream on foot if the water is above your knees.
- ABANDON STALLED VEHICLES IN FLOODED AREAS if you can do so safely. Flood waters may rise and

sweep the vehicle and its occupants away. Many deaths have resulted from attempts to move stalled vehicles.

- IF YOU ARE CAUGHT IN FLOOD WATERS, try to keep a flashlight or other light source with you to attract help. To stay afloat, hang on to driftwood or other debris. As a last resort, button up a shirt and tie knots in the sleeves or tie knots in the legs of pants to trap air to act as a life vest.

After the Flood

- Do not use fresh food that has come in contact with flood waters.
- Have drinking water tested for contaminants. Wells should be pumped out and the water tested before drinking. (See pages 26 through 28 for information on how to disinfect a well).
- Do not visit the disaster area. Your presence will interfere with rescue and emergency efforts.
- Do not handle live electrical equipment in wet areas. Electrical equipment should be checked and dried before being returned to service.
- Use battery-powered lanterns or flashlights, not oil or gas lanterns or torches, to examine buildings. Flammables may be inside, which could ignite.
- Report broken utility lines to police, fire or utility companies.
- Keep tuned to local radio or television stations for advice and instructions on where to obtain medical care, and where to get housing, clothing and food assistance.
- Notify your insurance company if your property was damaged.
- Flooded indoor areas must be scrubbed with warm soapy water. Also, scrub food-contact surfaces (counter tops, pantry shelves, refrigerators, stoves, cutting boards, etc.) and areas where small children play. Then, rinse with a solution of 1/2 cup of laundry bleach to each gallon of water.

How to Disinfect a Drilled Well

Diameter of well (in inches)	Gallons per foot
3	.37
4	.65
5	1.0
6	1.5
8	2.6
10	4.1
12	6.0

Amount of disinfectant required for each 100 gallons of water

Laundry bleach (5.25% chlorine)	3 cups*
Hypochlorite granules (70% chlorine)	2 ounces**

1 cup = 8-ounce measuring cup *1 ounce = 2 heaping tablespoons of granules

- Wash all linens and clothing in hot water, or dry clean them.
- It is best to discard items that cannot be washed or dry-cleaned, such as mattresses, upholstered furniture, etc. If you must keep such items, air dry them in the sun, then, thoroughly vacuum them and spray with a disinfectant.
- Steam clean or discard carpeting.

Drilled Wells

1. Using the above table, determine the amount of water in the well by multiplying the gallons per foot by the depth of the well in feet. Example: A well with a 6-inch diameter contains 1.5 gallons of water per foot. To determine the number of gallons in a well that is 120 feet deep, multiply 1.5 by 120 (1.5 x 120 = 180).

2. For each 100 gallons of water in the well, use the amount of chlorine (liquid or granules) indicated. Example: 180 gallons of water X 2 ounces of chlorine granules (per 100 gallons of water) = 3.6 ounces of granules (use 4 ounces).

Mix this total amount of liquid or granules in about 10 gallons of water. Be sure dry granules or tablets are completely dissolved before adding to the well.

3. Pour the solution into the top of the well before the seal is installed.

4. Connect a hose from a faucet on the discharge side of the pressure tank to the well casing top. Start the pump. Spray the water back into the well and wash the sides of the casing for at least 15 minutes.

5. Open every faucet in the system and let the water run until the smell of chlorine can be detected. Then close all the faucets and seal the top of the well.

6. Let stand for several hours, preferably overnight.

7. After you have let the water stand, operate the pump, discharging water from all outlets (turning on all faucets) until all odor of chlorine disappears. Adjust the flow of water from faucets or fixtures that discharge into septic tank systems to a low flow to avoid overloading the disposal system.

Dug Wells

1. The amount of water in the well determines how much disinfectant (bleach or granules) is required. Use the table below to make calculations.

2. To determine the exact amount of chlorine liquid or granules to use, multiply the amount of disinfectant indicated (according to the diameter of the well) by the depth of the well. Example: A well 5 feet in diameter requires 4 1/2 cups of bleach per foot of water. If the well is 30 feet deep, multiply 4 1/2 by 30 to determine the total number of cups of bleach required

How to Disinfect a Dug Well

Diameter of well (in feet)	Amount of 5.25% laundry bleach per foot of water	Amount of 70% chlorine granules per foot of water
3	1 1/2 cups	1 ounce
4	3 cups	2 ounces
5	4 1/2 cups	3 ounces
6	6 cups	4 ounces
7	9 cups	6 ounces
8	12 cups	8 ounces
10	18 cups	12 ounces

(4 1/2 X 30 = 135). 135 cups = 8.44 gallons (16 cups = 1 gallon; use 8 1/2 gallons).

Example: A well 6 feet in diameter requires 4 ounces of chlorine granules or powder per foot of water. If the well is 40 feet deep, multiply 4 (ounces) by 40 (feet). This well, then, requires 160 ounces of granules or powder, or 10 pounds.

3. Add this total amount of liquid or dry bleach to about 10 gallons of water. Splash the mixture around the lining or wall of the well. Be certain the bleach solution contacts all parts of the well.

4. Seal the well top.

5. Open all faucets and pump water until a strong odor of chlorine is noticeable at each faucet. Then stop the pump and allow the solution to remain in the well overnight.

6. After it stands overnight, operate the pump, discharging water from all outlets (turning on all faucets) until the chlorine odor disappears. Adjust the flow of water faucets or fixtures that discharge to septic tank systems to low flow to avoid overloading the disposal system.

Driven Wells

All that is necessary to restore a driven or sandpoint well is to pump it out thoroughly.

If the well has a pit, pump out any water that has accumulated in the pit.

Winter Storms

Heavy snow and extreme cold can immobilize an entire region. Even areas that normally experience mild winters can be hit with a major snow storm or extreme cold. The results can range from the havoc of cars trying to maneuver on ice-covered highways to isolation due to power outages and blocked roads. Whatever the case, winter storms can cause seasonal deaths and injuries. To protect yourself and your family from the many hazards of winter weather —blizzards, heavy snows, low temperatures, freezing rain or sleet — follow these safety tips.

Keep Posted On Weather Conditions

Use radio and television to keep informed of current weather conditions and forecasts. Even a few hours warning may enable you to avoid being caught in a storm, or at least be better prepared to cope with it. You also should understand the terms commonly used in weather reports:

- A WINTER STORM WARNING is issued when heavy snow (expected snowfall of 4 inches or more in a 24-hour period), sleet or freezing rain are forecast to occur separately or in combination. A WINTER STORM WATCH indicates there is a threat of severe winter weather.
- FREEZING RAIN OR FREEZING DRIZZLE is forecast when expected rain is likely to freeze as soon as it strikes the ground, putting a coating of ice on roads and walkways. If a substantial layer of ice is expected to accumulate from the freezing rain, a winter storm warning is issued.
- SLEET is small particles of ice, usually mixed with rain. If enough sleet accumulates on the ground, it will make the roads slippery.
- TRAVELERS' ADVISORIES are issued when ice and snow are expected to hinder travel but not seriously enough to require warnings.

Be Prepared for Isolation At Home

If you live in a rural area, make sure you can survive at home for a week or two in case a winter storm isolates you and it is impossible to leave. You should —

- Keep an adequate supply of heating fuel on hand and use it sparingly. Your regular supplies may be curtailed by storm conditions. If necessary, conserve fuel by keeping the house cooler than usual, or by temporarily closing off some rooms. Have some kind of EMERGENCY heating equipment and fuel available so you could keep at least one room of your house warm enough to be livable. Keep in mind when fuel heating devices are used, there must be adequate ventilation to avoid a buildup of potentially toxic fumes. Be sure to use only the proper fuel recommended by the manufacturer. If you have a fireplace, keep a good supply of dry wood on hand. If your furnace

is controlled by a thermostat and your electricity is cut off by a storm, the furnace will not operate and you will need emergency heat.

- Stock an emergency supply of food and water as well as emergency cooking equipment such as a portable stove. Some of this food should not require refrigeration or cooking.
- Keep on hand the simple tools and equipment needed to fight a fire such as a fire extinguisher. Be certain that all family members know how to take precautions to prevent fire at such a time when the fire department may not be available or able to reach you.

Dress for the Season

If you spend time outdoors, wear several layers of loose-fitting, lightweight, warm clothing rather than a single layer of thick clothing. Mittens are warmer than gloves. Use a hood to protect your head and face and a scarf to cover your mouth to protect your lungs from the extremely cold air.

Travel Only If Necessary

If you must travel, use public transportation if possible. If you are forced to use your automobile for a trip of any distance, take these precautions:

- Make sure your car is in good condition, properly serviced, equipped with chains or snow tires, and filled with gas.
- If possible, take another person with you.
- Make sure someone knows where you are going, your approximate schedule and your estimated time of arrival.
- Have emergency “winter storm” supplies in the car, such as a container of sand, shovel, windshield scraper, tow chain or rope, flares and a flashlight with extra batteries. It is also good to have heavy gloves or mittens, overshoes, extra woolen socks and winter headgear to cover your head and face.
- If you can, travel by daylight and use major

highways. Keep the car radio tuned to weather information and advice.

- Drive with caution. Do not try to save time by traveling faster than road and weather conditions permit.
- Do not be daring or foolhardy. Rather than risk being stalled, lost or isolated, stop, turn back or seek help if conditions threaten to test your ability or endurance. If you are caught in a blizzard, seek refuge immediately.

Keep Calm if You Get In Trouble

If your car breaks down during a storm, or if you become stalled or lost, do not panic. Think the problem through, decide the safest and best thing to do, and use caution. If you are on a heavily traveled road, indicate you are in trouble. Turn on your emergency flashers or directional lights, or hang a cloth from the radio antenna or car window. Stay in your car and wait for help to arrive. If you run the engine to keep warm, open a window to provide ventilation and protect you from carbon monoxide poisoning. Make sure the exhaust pipe is not clogged with snow. Do not leave your car to search for assistance; you may become confused and get lost.

Avoid Overexertion

Every winter, many unnecessary deaths occur because people — old and young — engage in more strenuous physical activity than their bodies can stand. Cold weather alone puts an extra strain on your heart. If you add physical exercise to which you are not accustomed — such as shoveling, pushing an automobile or even walking — you are at greater risk of a heart attack or stroke. In winter weather, avoid overexertion.

Fire

Fire safety rules are of special importance in an emergency, but also should be observed every day to prevent a disaster.

Most fire deaths occur in the home. A smoke alarm is a low-cost device that has proven successful in saving lives. Deaths from fire in the home are substantially reduced when smoke alarms are present.

A smoke alarm should be placed as close as possible to the bedrooms. It is also a good idea to install a smoke alarm on each level of the house near stairways. Smoke alarms should be tested and maintained regularly. Each member of your family should know what to do if the smoke alarm sounds. A little time spent selecting escape routes and practicing what to do may save lives if a fire occurs in your home. Agree on a place to meet outside so you can be sure everyone gets out of the house safely.

Common sense fire prevention rules are of special importance in an emergency. To keep fires from starting —

- Clean out attics, closets and garages frequently. Do not let trash and junk accumulate.
- Do not overload extension cords. Check cords for fraying and avoid running them under rugs. An extension cord used to connect an appliance should always be the proper size and capacity for the appliance.
- Store flammable liquids in approved containers, outside the home if possible. Never use gasoline, benzene, naphtha and similar liquids indoors because their fumes can readily ignite from any kind of spark. Rags soaked with cleaning fluids or turpentine sometimes catch fire by themselves and they should be safely discarded after use. Never smoke when handling flammable liquids.
- Check your home's heating sources. Many home fires are started by faulty furnaces and stoves, cracked or rusted furnace parts, and chimneys with creosote buildup. Be sure whatever heating source you use is clean and in good working order.
- Energy shortages and high heating costs have made alternative heating sources, such as wood, coal and kerosene burning stoves, popular. When using any type of room or area heating device, make sure there is adequate ventilation to the outside. Make sure there is adequate space around the heater and that the floor and nearby walls are properly insulated. Use only the fuel designated for your unit; DO NOT SUBSTITUTE. Properly store ashes in a metal container outside and away from the building.
- When stoves or heaters have an open flame, keep the unit away from walls, furniture, draperies and other flammable items, and place a screen in front of the

flame. Also, remember to keep newspapers and other flammable items away from gas appliances that have pilot lights, such as water heaters and furnaces.

- When installing home insulation, care should be taken to keep it clear of electrical wiring.
- Know where your main gas meter and central electrical panels are so they can be shut off in an emergency. Keep a wrench next to the gas meter at all times. If your gas line must be shut off, it should only be returned to service by a gas company representative.

Remember the Ways to Put Out a Fire

- Take away its fuel.
- Take away its air (smother it).
- Cool it with water or fire extinguishing chemicals. Special types of fires require special methods. Whichever method is used, act quickly.
- Never use water on an electrical fire. Use only specially designed fire extinguishing chemicals. If you can turn off the electricity, you can then use water or anything else available to put out the fire.
- Oil and grease fires (most of which occur in the kitchen) can be smothered with baking soda or salt or by putting a lid over the flame if it is burning in a small pan on the stove.
- Small fires can be controlled with water or fire extinguishers, but do not try to fight a fire that is getting out of control. Get everyone out of the house and call the fire department.

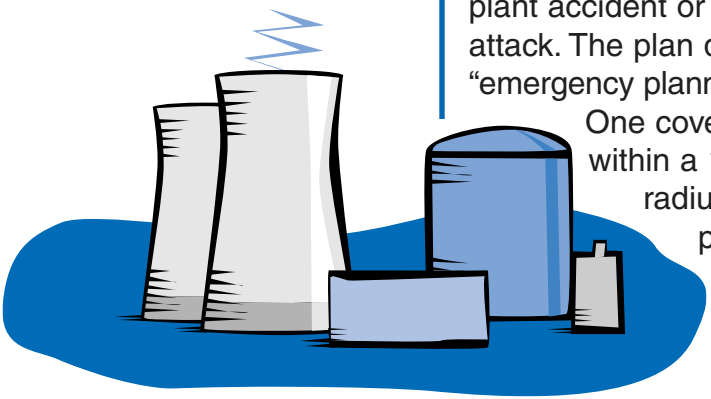
Most fire departments have free brochures and pamphlets on a variety of fire safety topics. Contact your local fire department or public safety office for additional information.

Nuclear Power Plant Accident

Nuclear power plants in Illinois provide approximately one-fifth of the state's electrical power. About 150,000 Illinoisans live within 10 miles of a nuclear power plant.

The operation of these facilities is closely monitored by the state and regulated by the federal Nuclear Regulatory Commission. Accidents or a terrorist attack at these plants are unlikely but possible. An accident or terrorist attack could result in a release of radiation that might affect the health and safety of the public living near the nuclear power plant.

Illinois state, county and local governments have developed an emergency response plan — called the *Illinois Plan for Radiological Accidents* — for use in the event of a nuclear power plant accident or terrorist attack. The plan defines two "emergency planning zones." One covers an area within a 10-mile radius of the plant, where people could be



harmed by direct radiation exposure. The second zone covers a broader area, usually up to a 50-mile radius from the plant, where radioactive materials could contaminate water supplies, food crops and livestock.

Understanding Radiation

Each of us is exposed to radiation — energy that can travel through the air — from radioactive materials that exist in nature. Small traces of radiation are even present in food and water. Radiation also is released from man-made sources such as X-ray machines, television sets and microwave ovens.

Nuclear power plants use the heat generated from nuclear fission in a contained environment to convert water to steam, which powers generators to produce electricity.

In general, radiation has a cumulative effect. The longer a person is exposed to radiation, the greater the risk. A high exposure to radiation can cause serious illness or death. Studies show that any negative health effects that might be caused by low-level exposure to radiation cannot be distinguished from those caused by other environmental hazards.

If you are within 10 miles of a nuclear power plant and a release of radiation occurs in your area, local authorities would activate a loud, steady warning siren that holds a pitch for three minutes or more. Instructions on how you should protect yourself would be broadcast on local radio stations.

In general, there are three ways to minimize radiation exposure to your body: distance, shielding and time.

- Distance. The greater the distance between you and the source of the radiation, the better your chance of reducing exposure. In a serious nuclear power plant accident or terrorist attack, local authorities will call for an evacuation to increase the distance between you and the radiation.
- Shielding. Like distance, the more heavy, dense materials between you

and the source of the radiation, the better. For this reason local authorities may advise you to remain indoors if an accident occurs at a nearby nuclear power plant. In some cases, the walls of your home would provide sufficient shielding to protect you.

- Time. Most radioactivity loses its strength fairly quickly. In a nuclear power plant accident or terrorist attack, the Illinois Department of Nuclear Safety will monitor any release of radiation and advise local authorities when the threat has passed.

How to Prepare

1. Know the terms used to describe a nuclear emergency.

- NOTIFICATION OF UNUSUAL EVENT means a small problem has occurred at the plant. No radiation leak is expected. Federal, state and county officials will be told right away. No action on your part will be necessary.
- ALERT means a small problem has occurred, and small amounts of radiation could leak inside the plant. This will not affect you. Federal, state and county officials will be on standby. You should not have to take action.
- SITE AREA EMERGENCY is a more serious problem. Small amounts of radiation could leak from the plant. Federal, state and county officials will take necessary action to assure public safety. Area sirens may be sounded. Listen to your radio or television for safety information.
- GENERAL EMERGENCY is the most serious problem. Radiation could leak outside the plant and off the plant site. The sirens will sound. Tune to your local radio or television station for reports. State and county officials will act to assure public safety. Be prepared to follow their instructions promptly.

2. Learn your community's warning system. Nuclear power plants are required to install sirens and other warning systems to cover a 10-mile area around the plant.

- Siren tests occur on the first Tuesday of each month at 10 a.m.
- Determine whether you can hear the siren from your home, and become familiar with the sound.

3. Obtain public emergency information materials from the utility that operates your local nuclear power plant or from your local emergency services office. If you live within 10 miles of the power plant, you should receive these materials every year from the utility.

4. Learn the emergency plans for schools, day care centers, nursing homes and other places where members of your family might be. Stay tuned to your local radio stations for further updates.

5. Be prepared to evacuate:

- Gather, in advance, clothing, a battery-powered radio and personal items.
- Consider your transportation options. If you do not own or drive a car, call your state or local emergency management agency office and ask for more information on alternative transportation.
- See the evacuation and checklists chapters for important details.

What To Do In A Nuclear Power Plant Emergency

1. Keep calm. Not all incidents result in the release of radiation. The incident could be contained inside the plant and pose no danger to the public.

2. Stay tuned to local radio or television stations. Local authorities will provide specific information and instructions.

- The advice given will depend on the nature of the emergency, how quickly it is evolving and how much radiation, if any, is likely to be released.
- Local instructions take precedence over any advice given in this handbook.
- Review the public infor-

mation materials you received from the utility company or government officials.

3. Evacuate if you are advised to do so.

- Close and lock home doors and windows.
- Keep car windows and vents closed; use recirculating air.
- Listen to radio broadcasts for evacuation routes and other instructions.

4. If you are not advised to evacuate, remain indoors.

- Close doors and windows.
- Turn off the air conditioner, ventilation fans, furnace and other air intakes.
- Go to a basement or other underground area if possible.
- Keep a battery-powered radio with you at all times.
- If you must go outdoors, cover your nose and mouth with a handkerchief.

5. Shelter livestock and give them stored feed and protected water, if you are advised to do so by local authorities.

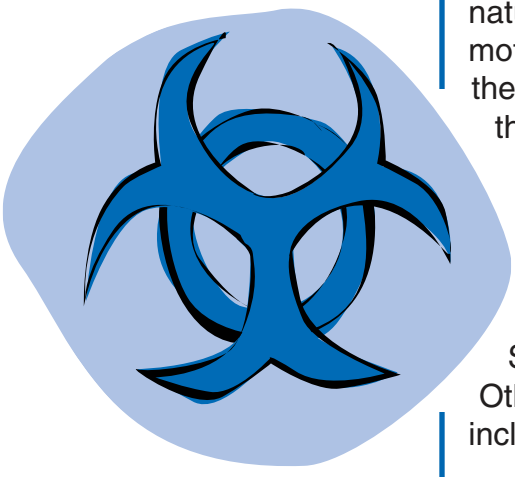
6. Do not use the telephone unless absolutely necessary. All lines will be needed for emergency calls.

Terrorism

Terrorism is the unlawful use of force or violence, or the threat of violence for purposes of intimidation, coercion or ransom. Terrorists often use such threats or actions to create fear among the public, to try to convince citizens their government is powerless to prevent terrorism and to get public attention for political or social objectives.

The effects of terrorism can vary significantly from injuries and loss of life to property damage and disruptions in services such as electricity, water supply, public transportation and communications.

Attacks can take several forms, depending on the technological means available to the terrorist, the nature of the political issue motivating the attack and the points of weakness of the terrorist's target.



Before the Sept. 11, 2001, attacks on New York and on the Pentagon, most terrorist incidents in the United States were bombings. Other terrorist methods include kidnappings, arson,

shootings and the use of chemical, biological or nuclear agents.

Terrorists look for visible targets where they can avoid detection before and after an attack, such as international airports, large cities, major international events, resorts or high-profile landmarks. One way the government has attempted to reduce the nation's vulnerability to terrorist incidents is by increasing security at airports and other public facilities, along with helping private industry to enhance security for vital assets and infrastructure.

You can prepare to deal with a terrorist incident by adapting many of the same techniques used to prepare for other crises. But, people should take additional precautions:

- Be alert and aware of your surroundings. The very nature of terrorism suggests there may be little or no warning.
- Be careful when traveling. Be aware of conspicuous or unusual behavior. Do not accept packages from strangers. Do not leave luggage unattended.
- Learn where emergency exits are located. Think ahead about how to evacuate a building, subway or congested public area in a hurry. Learn where staircases are located.
- Notice your immediate surroundings. Be aware of heavy or breakable objects that could move, fall or break in an explosion.

Preparedness

Develop a disaster plan for your family

- Choose an out-of-town contact your family or household will call or E-mail to check on each other should a disaster occur. Your selected contact should live far enough away that he/she would be unlikely to be directly affected by the same event; be sure the person knows he/she is the chosen contact. Make sure every household member has the contact's and each other's E-mail addresses

and telephone numbers (home, work, pager and cell).

- Establish a meeting place. Having a predetermined meeting place right outside your house and another outside your neighborhood will save time and minimize confusion should your home be affected or the area evacuated. You may even want to make arrangements to stay with a family member or friend in case of an emergency. Be sure to include any pets in these plans.
- Prepare disaster supply kits. If you need to stay in your home, evacuate your home or are asked to take shelter, having essential supplies on hand will make you and your family more comfortable. Two kits should be prepared — one that can be kept in the house and another that can be taken with you. For complete information on what to include in the kits, refer to the emergency supplies chapter in this booklet.
- School emergency plans. If you have children, learn what the emergency plans are at their school(s). Some schools will send children home alone; others require a parent or designated adult to pick them up. Be sure the school has updated information about how to reach parents or responsible caregivers.
- Work emergency plans. Learn what the emergency plans are at your workplace.

Preparing for a building explosion

The use of explosives by terrorists can result in collapsed buildings and fires. People who live or work in a multi-level building should do the following:

- Review emergency evacuation procedures. Know where the fire exits are located.
- Keep fire extinguishers in working order. Know where they are located and how to use them.
- Learn first aid. Contact the local chapter of the

American Red Cross for additional information.

- Keep the following items in a designated place on each floor of the building — portable, battery-operated radio and extra batteries; several flashlights and extra batteries; first aid kit and manual; several hard hats; and fluorescent tape to rope off dangerous areas.

Bomb threats

If you receive a bomb threat, get as much information as possible from the caller. Keep the caller on the line and record everything that is said. The following checklist will assist you in recording the necessary information:

Time
Date
Caller ID #

Questions to ask

1. When is the device going to explode or release?
2. Where is it right now?
3. What does it look like?
4. What kind of device or package is it?
5. What is in the package? Chemicals? Germs?
6. What will cause it to explode or release its contents?
7. Did you place the package, bomb or device?
8. Why?
9. What is your address?
10. What is your name?

Exact wording of the threat

Additional information
- Sex of caller
- Race
- Age of caller
- Call duration

Caller's voice
(check all that apply)

Calm	Nasal
Angry	Stutter
Excited	Lisp
Slow	Raspy
Soft	Ragged
Loud	Clearing throat
Laughing	Deep breathing
Crying	Cracked voice
Normal	Disgusted
Distinct	Accent
Slurred	Familiar
Whispered	Altered

If voice is familiar, who did it sound like?

If accented, what type of accent?

Background sounds
- Street noises
- Factory noises
- Restaurant noises
- Animal noises
- Voices
- Clear
- P.A. system
- Static
- Music
- Local
- House noises
- Long distance
- Motor
- Phone booth
- Office machines
- Other

Threat language
- Well spoken (educated)
- Incoherent
- Taped
- Foul
- Irrational
- Message read by threat maker

Report call immediately to your local police agency
- Phone number
- Your name
- Your telephone number

After you have been notified of a bomb threat, do not touch any suspicious packages. Clear the area around any suspicious package and notify the police immediately. When evacuating a building, avoid standing in front of windows or other potentially hazardous areas. Move a safe distance away from the building. Do not restrict sidewalk or streets to be used by emergency officials.

What To Do In A Terrorist Attack

Take action to protect yourself and others. Remain calm and be patient. Listen to the radio or television for news and instructions, and follow the advice of local emergency officials.

In a **building explosion**, get out of the building as quickly and calmly as possible. If items are falling off of bookshelves or from the ceiling, get under a sturdy table or desk. Untrained persons should not attempt to rescue people who are inside a collapsed building. Wait for emergency personnel to arrive.

If there is a **fire –**

- Stay low to the floor and exit the building as quickly as possible.
- Cover nose and mouth with a wet cloth.
- When approaching a closed door, use the palm of your hand and forearm to feel the lower, middle and upper parts of the door. If it is not hot, brace yourself against the door and open it slowly. If it is hot to the touch, do not open the door; seek an alternative escape route.
- Heavy smoke and poisonous gases collect first along the ceiling. Stay below the smoke at all times.

If the terrorist attack occurs near you, check for injuries. Give first aid and get help for seriously injured people.

If the attack occurs near your home while you are there, check for damage using a flashlight. Do not light matches or candles or turn on electrical switches because gas lines may be broken and an explosion could occur. Check for fires, fire hazards and other household hazards. Sniff for gas leaks, starting at the water heater. If you smell gas or suspect a leak, turn off the main gas valve, open windows and get everyone outside quickly.

Shut off any other damaged utilities. Confine or secure your pets. Call your family contact. Do not use the telephone again unless it is a life-threatening emergency because the telephone lines will most likely be overwhelmed. Check on your neighbors, especially those who are disabled or elderly.

If you are trapped in debris –

- Use a flashlight.
- Stay in your area so that you do not kick up dust. Cover your mouth with a handkerchief or clothing.
- Tap on a pipe or wall so that rescuers can hear where you are. Use a whistle if one is available. Shout only as a last resort – shouting can cause a person to inhale dangerous amounts of dust.

Bioterrorism

Biological agents are organisms or toxins that can produce illness or death in people and animals. They can be dispersed as aerosols or airborne particles or by infected individuals. Terrorists also can use biological agents to contaminate food or water.

Numerous biological agents could be used as weapons, but government officials believe the most likely pathogens would cause diseases that include anthrax, smallpox, botulism, cholera, plague, Q fever, salmonellosis, tularemia and viral hemorrhagic fever.

Because biological agents take time to cause a disease, a biological attack may not be obvious for days to weeks depending on the incubation period of the disease. If government officials become aware of a biological attack through an informant or warning by terrorists, they would most likely instruct citizens to either seek shelter where they are and seal the premises or evacuate immediately.

If there is no warning, the most likely way the attack will be detected is through the state or federal government's disease surveillance system. Through this system, health care providers and public health officials are constantly on guard for unusual clusters of illness.

A person affected by a biological agent requires the immediate attention of professional medical personnel. Some resultant diseases – plague, smallpox and viral hemorrhagic fevers – are contagious, and victims may need to be isolated. While it is possible for Q fever to be transmitted from person to person, it is rare.

Information, treatment options and other advice would be provided by government officials to the public through the news media.

Bioterrorism Disease Chart

Disease	Germ	Symptoms	Treatment
Anthrax (bacterial)	*Bacillus anthracis*	Inhalation: Fever, fatigue, chest pain, difficulty breathing	Antibiotics, if prescribed early
		Skin: Fever, fatigue, headache, swollen lymph nodes and skin ulcer	Antibiotics
		Gastrointestinal: Sore throat, difficulty swallowing, fever, swollen lymph nodes, vomiting blood or bloody diarrhea	Antibiotics, if prescribed early
Botulism (bacterial)	*Clostridium botulinum*	Progressive paralysis, respiratory failure	If given early, equine antitoxin treats most cases.
Cholera (bacterial)	*Vibrio cholerae*	Acute diarrhea, vomiting, leg cramps	Immediate replacement of fluids. Antibiotics can shorten course and diminish severity of illness.
Hemorrhagic fevers (viral)	Several viruses	Vary by type, but often include fever, headache, dizziness, muscle aches, abnormal bleeding	No treatment for most VHFs other than supportive therapies. Ribavirin for some VHFs
Pneumonic plague (bacterial)	*Yersinia pestis*	High fever, chills, headache, cough with bloody sputum	Several antibiotics, including streptomycin, doxycycline and ciprofloxacin
Q Fever (bacterial)	*Coxiella burnetii*	Fever, headache, weakness, severe sweating	Doxycycline is most effective when initiated within first three days.
Salmonellosis (bacterial)	*Salmonella*	Diarrhea, fever, chills, dehydration	Usually resolves in five to 10 days and does not require treatment in most cases
Smallpox (viral)	Variola virus	High fever, aches (mostly back), rash on arms, legs, palms of hands, soles of feet	Vaccination up to four days after exposure; no proven treatment later; antibiotics for secondary bacterial infections
Tularemia (bacterial)	*Francisella tularensis*	Fever, headache, tiredness, chest discomfort, loss of appetite, cough	Antibiotics such as streptomycin or gentamicin

Stockpiling Antibiotics

Antibiotics are used to successfully treat a variety of diseases, but there is no one antibiotic effective against all diseases. The precautionary use of antibiotics when there is no exposure is not recommended because such a measure can weaken resistance against other diseases and deplete the supply of drugs that might be needed in a real emergency. Antibiotics should only be taken with medical supervision. Keeping a supply of antibiotics poses other problems because there is a limited shelf life before they lose their strength.

The federal government has stockpiled antibiotics for large-scale distribution in the event of a bioterrorist attack. The National Strategic Stockpile is designed to ensure the availability and rapid deployment of life-saving pharmaceuticals, antidotes, other medical supplies and equipment to any U.S. location in the event of a terrorist attack involving a biological or chemical agent.

Gas Masks

A gas mask is not a good buy or good protection against potential bioterrorist threats. Different types of masks and filters protect against different types of biological and chemical agents. If you were to buy one type and an attack with a different agent occurred, your mask would be useless. In addition, most of the gas masks on the market are used and gas masks lose their effectiveness over time.

New gas masks with NBC (nuclear, biological, chemical) filters are effective against a variety of agents. However, protection against some airborne agents may require a full protective suit. Even if you had the proper mask and/or suit for a given agent, you would have to wear it 24 hours a day in order to be safe. Biological and chemical agents could be in the air without your knowledge.

To make matters worse, gas masks can be difficult to use properly. People have been known to suffocate in their masks.

Suspicious Mail

Terrorists have used a biological agent, *Bacillus anthracis*, in letters mailed through the U.S. Postal Service. Other forms of attack, such as bombs, also can be distributed by mail.

Characteristics of suspicious packages and letters include –

- Inappropriate or unusual labeling
- Excessive postage
- Handwritten or poorly typed addresses
- Misspellings of common words
- Strange return address or no return address
- Incorrect titles or title without a name
- Not addressed to specific person; marked with restrictions, such as "Personal," "Confidential" or "Do not X-Ray"
- Marked with threatening language
- Postmark from a city or state different from the return address and excessive packaging material

  Appearance
- Powdery substance felt through or appearing on the package
- Oily stains, discolorations or odor
- Lopsided or uneven envelope
- Excessive weight
- Ticking sound
- Protruding wires or aluminum foil

Suspicious packages or envelopes should be handled as follows:

- Do not shake or empty the contents of a suspicious package or envelope.
- Do not carry the package or envelope, show it to others or allow others to examine it.
- Put the package or envelope on a stable surface; do not sniff, touch, taste or look closely at the package or any contents that may have spilled.
- Alert others in the area about the suspicious package or envelope. Leave the area, close any doors and take actions to prevent others from entering the area. If possible, shut off the ventilation system.
- Wash hands with soap and water to prevent

spreading potentially infectious material to face or skin. Seek additional instructions for exposed or potentially exposed persons.
- If at work, notify a supervisor, a security officer or a law enforcement official. If at home, contact the local law enforcement agency.

Chemical Terrorism

Chemical agents are poisonous gases, liquids or solids that can kill or incapacitate people and animals. Some chemical agents are odorless and tasteless, thus making them difficult to detect. These chemicals can have an immediate or delayed effect.

Depending on the agent, human exposure can occur via skin, inhalation, ingestion of contaminated water or food, or entry through other mucous-lined areas such as the eyes, nose and open cuts.

Exposure to chemical agents can be fatal. Severity of injuries depends on the type and amount of the chemical agent used and the duration of exposure. There are four categories of agents:

- Nerve – These types of chemicals disrupt the transmission of nerve impulses in the body. The effects of nerve agents appear almost immediately and often include visual disturbance, runny nose, chest tightness, nausea, vomiting, convulsions and death.
- Blister – These agents cause skin burns and blisters, and may damage the eyes, airways, lungs and other internal organs.
- Blood – These rapidly acting agents can cause seizures, respiratory failure and cardiac arrest.
- Pulmonary – If inhaled, these types of chemicals can result in varying degrees of pulmonary edema, usually after a symptom-free period that varies in duration with the amount inhaled.

Quick decontamination of exposed surfaces is possible for most chemical agents. Bleach, special powders, or soap and water

can neutralize some of these agents. For example, bleaching powder can lessen skin injuries from exposure to mustard gas, a type of blister agent, if applied soon after contact.

Medical or drug treatment can help some victims of chemical weapons. There are antidotes available that neutralize the effects of nerve agents. Since nerve agents can kill in minutes, the antidotes must be injected almost immediately after exposure.

For the effects of most other chemical weapons, symptomatic and/or supportive treatments can be administered.

In the event of a chemical agent attack, authorities would instruct citizens either to seek shelter where they are and seal the premises or to evacuate immediately. Most chemical agents are not detectable without special equipment so you should not leave the shelter until appropriate notification has been given that the chemical agent is no longer a threat. Do not leave the shelter to assist or rescue victims.

Nuclear Terrorism

Terrorists could potentially target nuclear facilities.

The primary risk associated with nuclear facilities is a physical attack or act of sabotage designed to cause an uncontrolled release of radioactivity to the surrounding environment. If terrorists were to attack a nuclear power plant, the state's emergency response and the actions to be taken by the public would be the same as if there were an accident at a nuclear plant. (See previous chapter on nuclear power plants.)

Although terrorists have never used a nuclear weapon, some terrorist groups have attempted to acquire the material to make one. The nuclear industry is keenly aware of the dangers of nuclear material falling into terrorists' hands. There is a complex infrastructure at work to ensure nuclear material is accounted for, safeguarded from diversion, and protected from theft and sabotage.

Following a terrorist attack

Evacuation

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

- Wear long-sleeved shirts, long pants and sturdy shoes so you can be protected as much as possible.
- Take your disaster supplies kit.
- Take your pets with you; do not leave them behind.
- Lock your home.
- Use travel routes specified by local authorities. Don't use shortcuts because certain areas may be impassable or dangerous.
- Stay away from downed power lines.

Shelter in Place

If you are advised by local officials to "shelter in place," it means you are to remain inside your home or office and protect yourself there.

- Close and lock all windows and exterior doors.
- Turn off all fans and heating and air conditioning systems.
- Close the fireplace damper.
- Get your disaster supplies kit and make sure the radio is working.
- Go to an interior room without windows that's above ground level. In the case of a chemical threat, an above-ground location is preferable because some chemicals are heavier than air and may seep into basements even if the windows are closed.
- Using duct tape, seal all cracks around the door and any vents into the room. Keep listening to your radio or television until you are told all is safe or you are told to evacuate. Stay if told to do so.

Evacuation

Disasters force people to evacuate their homes more often than you may realize. Transportation or industrial accidents release harmful substances, forcing thousands of people to leave their homes for a safer area. Fires and floods result in evacuation even more frequently.

Therefore, local evacuation planning is important. Specific evacuation plans vary by community and by the type of disaster, so contact your local emergency management or civil defense office for your community's plans.

How Much Time Will You Have to Evacuate?

The amount of time you will have to evacuate your home or community depends on the type of disaster. In disasters resulting from a hazardous material spill, you may have only moments to leave. This means you must prepare now, for you may have no time to collect even the most basic necessities.

Evacuation Periods

Evacuation periods can last for hours or several days. For part or all of this time, you may be responsible for your own food, clothing and other supplies until help arrives or utilities are repaired.

Advanced Planning for Evacuation

1. Use the chapter on emergency supplies as a guide to learn what you should gather for you and your family in case of evacuation. Collect these crucial materials, especially food and water, well in advance of a disaster. Remember, once you are told to evacuate, you may have only minutes to leave.

2. Review evacuation procedures with your family so that everyone understands what to do and where to meet if you are separated.

- Ask a friend or relative outside your area to be the "checkpoint," so family members can call that person to say they are safe.
- Find out where children will be sent if they are in school when an evacuation is announced.

3. Plan now where you will go if you must evacuate.

- Consider the homes of relatives or friends who live nearby but outside the potential disaster area.
- Contact the local emergency management or civil defense office for community evacuation plans. Review public information to identify reception centers and shelter areas such as schools, churches, national guard armories or other public buildings.

4. Keep fuel in your car at all times. During emergencies, filling stations may be closed. Never store extra fuel in the garage.

5. If you do not have a car or other vehicle, make transportation arrangements with friends, neighbors or your local emergency management office.

6. Know where and how to shut off your home's electricity, gas and water at the main switches and

valves. Make sure you have the necessary tools to do this (usually pipe and crescent or adjustable wrenches). Check with your local utilities for instructions.

What to Do When You Are Told to Evacuate

1. If there is time, secure your house.

- Unplug appliances.
- Turn off natural gas, propane or other fuel valves where they enter the house. In a flood hazard area, store propane tanks or secure them to the structure.
- Turn off the main water valve.
- Take any actions needed to prevent damage to water pipes by freezing weather, if this is a threat.
- Securely close and lock all doors, windows and the garage.
- Place a sign on the front door or window to notify authorities that your house or apartment has been evacuated and no one remains inside. If possible, leave a number where you can be reached.

2. Follow recommended evacuation routes. Do not take shortcuts. They may be blocked.

3. Listen to the radio for instructions and emergency shelter information.

4. Carry a family safety kit. See the emergency supplies chapter for a list of those items the kit should include.

Returning Home

1. Do not return to the emergency site until local authorities say the area is safe.

2. Continue listening to the radio or television for information and instructions.

3. Use extreme caution when entering or working in buildings —structures may be damaged or weakened. Beware of poisonous snakes in flooded structures and debris.

4. Do not take lanterns, torches or any kind of flame into a damaged building. Leaking gas or other flammable materials may be present. Use battery-operated flashlights for light. However, if you suspect a gas leak, do not use any

kind of light. The light itself could cause an explosion.

5. If you smell gas, turn off the main gas valve at the meter.

- Do not turn on lights — they can produce sparks that will ignite the gas.
- Leave the house immediately and notify the gas company or the police.
- Do not re-enter the house until an authorized person tells you it is safe to do so.

6. Notify the power company or fire department if you see fallen or damaged electrical wires.

7. If any appliances are wet, turn off the main electrical power switch in your home before you unplug them. Dry out appliances, wall switches and sockets before you plug appliances in again. Call utility companies for guidance.

8. Check food and water supplies for contamination and spoilage. Follow specific instructions from your local health department or agriculture extension agency.

9. Wear sturdy shoes when walking through debris or broken glass, and use heavy gloves when removing debris.

For more information on how you can better cope with specific disasters and emergencies, contact your local library or –

Illinois Emergency Management Agency
2200 S. Dirksen Parkway
Springfield, IL 62703
217-782-2700
800-782-7860
or
Federal Emergency Management Agency
Federal Center Plaza
500 C St. SW
Washington, D.C. 20472
202-566-1600

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