



CitizenReady® guide

# How you can prepare for disasters and public health emergencies



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## About this guide

Emergencies and disasters can strike quickly and without warning. If a disaster or other medical emergency were to strike you or a member of your family, would you be prepared to handle it? Would you know what to do to protect yourself and others from harm? You, and those you care about, could be anywhere—at home, work, school or in transit. How will you find each other? Will you know your loved ones are safe? If utilities (water, gas, electricity or telephones) are not available, what would you do?

Local officials and relief workers will be on the scene after a disaster, but they cannot reach everyone right away. You are in the best position to plan for and protect your own safety. You are best able to know your abilities and possible needs during and after an emergency situation. You can cope with disaster by preparing in advance with your family and other care attendants.

Of course, we hope that you never have to face a disaster or other emergency situation. But when an event occurs, knowing what to do within the critical first few minutes or hours can save lives.

The purpose of this guide is to help you and your family plan for and respond to major emergencies. Bear in mind that this cannot take the place of formal training in lifesaving procedures such as first aid and cardiopulmonary resuscitation. We strongly encourage you to take a class from the American Red Cross, the American

Heart Association, or your local hospital or fire department.

In a disaster, each of us can make a difference—as individuals, families, and communities. The American Medical Association (AMA) recognizes the importance of citizen participation and is working to make sure everyone in the United States is fully aware and trained on how to prepare for, respond to, and recover from disasters and public health emergencies.

Through the AMA CitizenReady® program, informational and educational materials are being developed to:

- Improve individual and family preparedness
- Give citizens opportunities to contribute to local and regional preparedness and response efforts
- Increase personal and community resilience to disasters and public health emergencies

Get trained, get prepared and get involved. CitizenReady is about staying informed and doing your part. Take the time to review the information and websites included in this guide. CitizenReady means being prepared and knowing what to do in advance of a serious emergency to protect yourself and others from harm.

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## Prevention, preparedness and wellness

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Since the terrorist attacks on September 11, 2001, most people have come to appreciate that the scope of disasters extends beyond natural disasters and environmental crises. Disasters can result from biological, chemical and radiological terrorism, suicide bombings and mass violence. They also can vary in magnitude, from large-scale events, requiring community evacuation, to small-scale emergencies, impacting the health and safety of individual citizens and their families.

Now more than ever, communities need to be able to prepare for and respond quickly to critical incidents. All citizens need to be trained and educated to react appropriately to various emergency situations, as well as to appreciate the physical, social and emotional needs and outcomes that may arise during such events.

Most medical emergencies can be prevented by taking personal responsibility for one's health and safety and learning how to protect against commonly encountered dangers. Adoption of healthy lifestyle behaviors such as eating a well-balanced diet, getting regular exercise, and learning basic first aid skills can help people prepare for and cope more effectively with traumatic events. In an emergency, everyone needs to be sure they can take good care of themselves before attempting to assist others.

### Eat a healthy diet

Eating healthier can help prevent and control chronic diseases such as high blood pressure, heart disease, stroke, diabetes, cancer and osteoporosis. An appropriate diet gives the body balanced nutrition and gives you more energy. A healthy diet includes:

- Fruits, vegetables, whole grains, and fat-free or low-fat milk and milk products
- Proteins such as lean meats, poultry, fish, beans, eggs and nuts—and remember it is better to bake it, broil it, or grill it than to fry it
- Appropriate hydration (drink plenty of water)
- Limited intake of saturated fats, trans fats, cholesterol, salt (sodium) and added sugars

Adopting a healthier lifestyle includes reducing the amount of red meat and processed meats in one's diet and replacing these with foods that are high in unsaturated fats such as fish and olive oil. A healthier lifestyle also includes minimizing excess carbohydrate intake from processed foods such as white bread or pasta and shifting your diet towards complex carbohydrates such as whole grain foods. It is important to minimize excess salt, caffeine and alcohol intake.

A high-fiber diet that includes fruits and vegetables and drinking at least eight glasses of water for adults is vital to preventing gastrointestinal problems such as constipation. Most dietary authorities recommend a diet of 2,000 calories per day for adults, but you should always discuss your calorie needs with a physician, dietician or other health professional.

In a disaster, it is essential to maintain adequate nutrition and hydration. Some people may feel pressure to avoid eating food or drinking fluids, driven by the need to care for casualties or by their own self-direction. Eating habits may need to be altered as meals could be provided as pre-packaged rations/MREs (meals ready-to-eat). Alternatively, meals could be served in military-type field dining facilities, in which special diets and dietary needs might not be accommodated.

### Exercise regularly

Cardiovascular disease is linked to a sedentary lifestyle, so it is important to get regular exercise. Include aerobic activities such as walking, jogging, cycling, or swimming to improve circulation and strengthen bones and muscles. Strength training (weightlifting) also should become part of any exercise routine. Consider taking up yoga or pilates to improve flexibility and muscle tone. An optimal exercise program should include all three components: aerobic activities, strength training and flexibility exercises.

Prior to doing any physical activity, it is important to warm up appropriately and have adequate water or other fluids available to drink. Consult with a physician or other health professional before beginning any exercise program and

discuss your progress during follow-up medical visits.

### Avoid tobacco

Tobacco use is the leading cause of preventable death in the United States. Tobacco use contributes to every chronic disease, including cancer, diabetes, asthma, chronic obstructive pulmonary disease and heart problems. Smoking harms nearly every organ of the body, causing many diseases and reducing health in general. Exposure to secondhand smoke (also known as environmental tobacco smoke) causes heart disease and lung cancer in nonsmoking adults. In children, it is associated with increased respiratory conditions, middle ear infections and behavioral problems. Breathing secondhand smoke has immediate harmful effects on the cardiovascular system that can increase the risk of heart attack. People with existing heart and lung diseases are at especially high risk.

Quitting smoking has immediate as well as long-term benefits, reducing risks for diseases caused by smoking and improving overall health. Numerous effective medications are available over the counter and by prescription to treat tobacco dependence. If you smoke, talk with a physician or other health professional about ways to quit and develop a treatment plan that is right for you. If you don't use tobacco, don't start.

### Get enough sleep


Sleep is an essential aspect of illness and injury prevention. Many chronic diseases such as diabetes, cardiovascular disease, obesity and depression are associated with insufficient sleep. Sleepiness and fatigue can put you at risk for a motor vehicle crash or mishap at work.

How much sleep is enough? Sleep needs vary by age and person. Infants require the most sleep (15–18 hours per day). Children, 5–12 years of age, require from nine to 11 hours of sleep each day. Generally 8 hours of sleep is recommended for adults.

In a disaster, responders may work long hours and risk fatigue and sleep-deprivation. Talk to a doctor or other health professional about good sleep habits, especially if you are having difficulty sleeping.

### Prevent infections

Disaster conditions may provide opportunities to spread diseases through personal contact or by contaminated air, food and water. Many infectious diseases such as the common cold can be spread by coughing or sneezing or by unclean hands or surfaces.



Cardiovascular disease is linked to a sedentary lifestyle, so it is important to get regular exercise.

To help prevent the spread of disease pathogens and to avoid getting sick, it is important to adopt proper hygiene habits. This includes covering the mouth and nose with a tissue when coughing or sneezing. If you don't have a tissue, cough or sneeze into your upper sleeve, not your hands. Immediately clean your hands after coughing or sneezing and wash with soap and water for 20 seconds. If a bathroom is not nearby, use an alcohol-based hand cleaner. Hand sanitizers can significantly reduce the number of infectious microorganisms on the skin.

Protection against vaccine-preventable diseases should begin well before disaster strikes. Childhood immunization and previous completion of vaccine requirements for school, college, work or military duty should provide adequate protection for most people.

Individuals should review their health records regularly with a physician or other health professional to be sure they are appropriately immunized. People traveling outside the United States also should discuss the need for additional immunizations (e.g., yellow fever, cholera).

### **Prepare in advance for potential hazards**

When faced with a disaster or other serious emergency, you will need to take precautions to protect your immediate health and safety, as well as assist others. Know how to notify local authorities, how to contact family members, and how to manage potentially risky situations.

Keeping your home safe is a top priority. Injuries that occur in the home are an important cause of disability and death in the United States. Many of these injuries are preventable. Smoke detectors, carbon monoxide detectors and fire extinguishers are investments that can save lives. Check them each month to ensure they are in working order. Change the batteries every year on an easy-to-remember date, such as your birthday.

### **Build personal resilience**

Healthy, resilient people have stress-resistant personalities and learn valuable lessons from rough experiences. Resilience is the process of successfully adapting to difficult or challenging life experiences. Resilient people overcome adversity, bounce back from setbacks and thrive under extreme, on-going pressure without acting in dysfunctional or harmful ways.

In physics, resiliency refers to the ability of a material to return quickly to its original form after being bent, stretched, or twisted. Psychological resiliency is a similar concept. It is the ability of people to return to normal by bouncing back from the ups-and-downs of life.

Individuals can build resilience by taking responsibility for their physical and psychological health. Additional ways to strengthen personal resilience include building healthy relationships with family and friends and community groups, accepting and anticipating change, and taking action toward positive goals that can keep the mind focused.

Resilient people experience temporary disruptions in life when faced with challenges, but are able to continue with daily tasks and remain generally optimistic about life. People who are less resilient may obsess on problems, feel victimized and overwhelmed, and turn to unhealthy coping mechanisms, such as drugs or alcohol. They may even be more prone to develop mental health problems such as depression, anxiety or post-traumatic stress disorder.

## When disaster strikes

Disasters can strike quickly and without warning, forcing citizens to evacuate their neighborhoods or stay at home for days. Everyone should think about what to do in a disaster, particularly if water, gas, electricity or telephones are cut off for a long period of time.

In a disaster, first responders and affected individuals must act quickly to protect themselves as well as help trapped and injured persons. Under these conditions, personal health and safety must remain a primary concern. Responders risk injury and illness from various hazards, such as contaminated water, fire, damaged power lines and gas leaks, as well as from nails, broken glass, and other sharp objects in damaged or destroyed buildings.

All responders need to be aware of their surroundings with an eye for things that seem unusual or out-of-place, and thus may indicate a potential problem. This is part of surveillance, whether for law enforcement or public health.

Trust your intuition and experience, if it doesn't seem right—it probably isn't. Stay calm, use common sense, be patient, and think before you act. Follow instructions from authorities via phone, media broadcasts or at the scene.

In a disaster, individuals and communities may have to deal with an increased demand for medical resources, especially in rural areas and when local emergency medical services and hospitals are overwhelmed. The first minutes or hours are the most critical for seriously injured persons. During this time, doctors and other skilled emergency responders will probably not be available at the disaster scene.

Even when they arrive, emergency responders and relief workers cannot reach everyone right away. In such situations, citizens can help give immediate assistance at a time when rapid intervention may be essential for survival.

Until help arrives, citizens will be the first responders to care for injured victims. In such situations, citizens should be able to:

- Recognize and protect themselves from potential dangers and hazards
- Know how and when to call for help
- Be willing and able to help without interfering with organized response efforts
- Know how to provide critical life support

In a disaster, early detection, rapid reporting and immediate action are important to reduce casualties. Any suspicious or confirmed emergency situation should be reported immediately by calling 911 or other local emergency medical dispatch number. Local and state governments are responsible for protecting citizens and helping them to respond and recover.

When a disaster situation is beyond the capabilities of the state and local government, the state governor can ask for federal assistance. Following a request for federal support by a governor and the subsequent declaration of an emergency by the president of the United States, the federal government provides local and state governments with personnel, technical experts, equipment and other resources.

The Federal Emergency Management Agency (FEMA), which is part of the U.S. Department of Homeland Security, organizes this assistance. FEMA has 10 regional offices that work directly with the states to plan for disasters and relief programs and meet the needs of affected citizens.

Disaster relief focuses on meeting people's immediate survival needs. Disaster relief workers provide shelter, food, and medical and mental health services. Disaster relief organizations, such as the American Red Cross and the Salvation Army, help individuals and families return to normal daily activities.

In addition, relief workers may feed emergency workers, handle questions from family members outside the disaster area, provide blood and blood products to disaster victims, and help those affected by disaster to get other available resources.

## Weather-related and other natural disasters

Without question, a natural disaster will occur somewhere in the United States every year. Intensive monitoring by government agencies such as the U.S. Geological Survey, National Weather Service, and National Oceanic and Atmospheric Administration can provide early warning for some of these events. This allows for the early implementation of emergency communication and evacuation plans.

Although some natural disasters are predictable according to season and geographical location and by using tracking systems, many others (for example, wildfires, flash floods) can occur with little or no warning. After a disaster occurs, local authorities will watch the situation and decide what protective actions citizens should take. The most appropriate action will depend on the situation.

Natural disasters and weather-related events can disrupt communication systems, destruct roads, homes and businesses, and create large numbers of displaced persons who require food, shelter, and medical care. Special attention must be given to damaged buildings, downed power lines, ruptured gas lines, contaminated drinking water and infectious disease outbreaks.

### Earthquakes

An earthquake results from the sudden, rapid shaking of the earth caused by the breaking and shifting of rock beneath the earth's surface. This shaking can cause buildings and bridges to collapse; disrupt gas, electric and phone service; and sometimes trigger landslides, avalanches, flash floods, fires and huge, destructive ocean waves (tsunamis).

Earthquakes strike suddenly, without warning; they can occur at any time of the year and at any time of the day or night. Each year, 70–75 damaging earthquakes occur throughout the world. The keys to surviving an earthquake and reducing your risk of injury are planning, preparing, and practicing what you and your family will do if it happens.



Photo: David Valdez/FEMA

Historic flooding along the Missouri River in Bismarck, N.D.

### Floods

Ninety percent of all natural disasters in the United States involve flooding. Each year, about 100 people lose their lives in floods, with damage averaging more than \$2 billion. Flash floods are the leading weather-related killer in the United States. They can occur within a few minutes or hours of excessive rainfall, a dam or levee failure, or a sudden release of water held by an ice jam.

### Heat waves

Heat is one of the most underrated and least understood of the deadly weather events. Unlike other natural disasters, such as floods and tornadoes, a heat wave can be a silent killer.

The worst heat disasters, in terms of loss of life, occur in large cities when a combination of high daytime temperatures, high humidity, warm nighttime temperatures, and an abundance of sunshine occurs for several days. Large urban areas become “heat islands.”

Brick buildings, asphalt streets, and tar roofs store heat and radiate it like a slow burning furnace. Heat builds up in a city during the day and cities are slower than rural areas to cool down at night.

### Hurricanes/tropical storms

A hurricane is a severe tropical storm that forms in the southern Atlantic Ocean, Caribbean Sea, Gulf of Mexico, or in the eastern and central Pacific Ocean. Hurricanes need warm tropical oceans, moisture and light winds above them. Under the right conditions, a hurricane can produce violent winds, enormous waves, torrential rains and floods.

### Landslides

Landslides are typically associated with periods of heavy rainfall or rapid snow melt and tend to worsen the effects of flooding that often accompanies these events. In areas burned by forest and brush fires, less rain or snowfall may be needed to cause landslides. Debris flows, sometimes referred to as mudslides, mudflows, lahars or debris avalanches are common types of fast-moving landslides.

### Thunderstorms

A thunderstorm is formed from a combination of: moisture to form clouds and rain; rapidly rising warm air; and lift from cold or warm fronts, sea breezes, or mountains. Some of the most severe weather occurs when a single thunderstorm affects one location for a long time, bringing heavy rains (which can cause flash flooding), strong winds, hail, lightning and tornadoes.

Lightning is a major threat during a thunderstorm. In the United States, between 75 and 100 people are killed each year by lightning. While thunderstorms and lightning are found throughout this country, they happen most often in the central and southern states.

### Tornadoes

Tornadoes are among the most violent storms. Every year an average of 1,200 tornadoes kill about 55 Americans, injure 1,500 people, and cause more than \$400 million in damage. A tornado is a violently rotating column of air extending from a thunderstorm to the ground.

The most violent tornadoes are capable of tremendous destruction, with wind speeds of 250 miles per hour or more. Damage paths can be in excess of one mile wide and 50 miles long. Tornadoes can occur anywhere in the United States at any time of the year. In the southern states, peak tornado season is March through May, while peak months in the northern states are during the summer.

Aftermath from a deadly tornado in Joplin, Mo.



### Tsunamis

Tsunamis are a series of very long waves created by any rapid, large-scale disturbance of the sea. Most are generated by sea floor displacements from large undersea earthquakes.

Tsunamis can cause great destruction and loss of life within minutes on shores near their source; some tsunamis can cause destruction within hours across an entire ocean basin. Most tsunamis occur in the Pacific Ocean but can occur in every ocean and sea.

### Volcanoes

Explosive volcanoes spew hot solid and molten rock fragments and gases into the air. As a result, ash flows can occur on all sides of a volcano and ash can fall hundreds of miles downwind.

Dangerous mudflows and floods also can occur in valleys leading away from volcanoes. If you live near a known volcano, active or dormant, be prepared to follow instructions from your local emergency officials.

### Wildfires

In many areas, wild lands have become overgrown with trees and other plant life. Coupled with drought conditions and a fire source, this buildup of plants can provide the fuel for a potentially disastrous fire. Wildfires often begin unnoticed and can spread quickly, igniting brush, trees and homes.

### Winter storms

Severe winter storms can cause widespread damage and disruption. Heavy snow often results in paralyzed transportation systems, highway crashes and stranded motorists. When accompanied by intense winds, ice and extreme cold, winter storms can isolate individuals and entire communities.

### Key action steps in a natural disaster

Stay tuned to the local emergency response network or news station for up-to-date information and instructions.

If you were evacuated, return home only after local officials tell you it is safe.

Stay away from floodwaters.

Check yourself and family members for injuries. Help those who may need special assistance and give first aid when appropriate.

Avoid loose or dangling power lines and report them to the power company, police or fire department.

Enter your home or any building with caution. Do not enter if there is water around the building.

Use flashlights to examine walls, floors, doors, staircases and windows. Consider calling a qualified person to inspect foundations for cracks and make sure the building is not in danger of collapsing.

Look for fire hazards such as flooded electrical circuits or submerged furnaces and appliances.

Check for gas leaks. If you smell gas or hear a hissing noise, open a window and leave quickly. Turn off the gas at the outside main valve and call the gas company from a neighbor's home.

Look for electrical system damage. If you see sparks or frayed wires, turn off the electricity at the main fuse box or circuit breaker. Do not step in water to get to the fuse box or circuit breaker before calling an electrician for advice.

Check for sewage and water line damage. If you think sewage lines are damaged, don't use toilets and call a plumber. If water pipes are damaged, don't use tap water and call the water company.

Watch out for animals, especially poisonous snakes that may have entered the building with floodwaters.

Take pictures of the damage for insurance claims.

Avoid drinking or preparing food with tap water until local officials tell you it is not contaminated.

Open windows and doors to ventilate and dry out your home.

Telephone systems may be jammed. Use the telephone for emergency calls only.

## Biologic emergencies

Biologic emergencies include outbreaks of naturally occurring diseases such as malaria, tuberculosis and influenza, as well as the use of biologic warfare agents to cause disease in humans, plants, and animals.

Biologic agents include bacteria, viruses, fungi (molds), parasites and biotoxins (poisonous chemicals produced by bacteria). People may be exposed to these agents through inhalation (breathing in), skin exposure, or swallowing contaminated food or water.

In recent years, concern has increased about the deliberate use of certain biologic agents by terrorists to cause diseases such as anthrax, pneumonic plague, tularemia, smallpox and botulism. Potential targets include human beings, food crops, livestock and other resources essential for national security, economy and defense.

Recent attention also has been focused on the spread of a potentially serious influenza (or flu) virus across the world. Influenza pandemics have occurred at intervals ranging from 10 to 60 years, with four in recent history (1918, 1957–1958, 1967–1968 and 2009–2010).

Influenza pandemics occur when there is a notable genetic change (termed genetic shift) in the circulating strain of influenza. Health experts are most concerned for situations in which an influenza virus change to a form that is easily transmitted from person to person. Should this happen, the potential for widespread infection of humans (that is, a pandemic) would create a serious public health emergency.

Responding to an infectious disease outbreak (natural or intended) depends on quickly identifying the cause and diagnosing the related illness. For some of these agents, delay in medical response could result in a large number of casualties. Any suspicion about an outbreak of an infectious disease should be reported to your doctor or local public health agency.

### Key points about biologic emergencies

Some biologic agents (for example, anthrax spores) can survive in the environment for long periods, creating a long-term hazard.

The start of a biologic emergency may be difficult to detect. For some infectious agents, the disease may spread for weeks before it is detected.

You may not know right away if you were exposed to the germs or poisons that caused the emergency. Symptoms depend on the type of germ or poison. Some common signs include trouble breathing and flu-like symptoms (fever, headache, chills).

Be suspicious of any symptoms you notice, but do not assume that any illness is related to a biologic emergency. Use common sense and practice good hygiene.

In case of a biologic emergency, public health officials may not immediately be able to provide information on what you should do. It will take time to determine what the illness is, how it should be treated, and who is in danger.

Local or state health officials will monitor the situation and recommend protective action. They will let you know what symptoms to look for, areas in danger, if medications or vaccinations are being distributed, and where you should seek medical attention if you become ill. The most appropriate action will depend on the situation.

Listen to television, radio, or emergency alert systems for up-to-date information and instructions. Have a battery-powered radio available, if needed. Officials will tell you whether to stay inside or leave your home. They will tell you where to go if you need to leave your home.

Some biologic agents may be spread easily from infected patients to others. Health officials will provide clearly defined instructions for dealing with exposed or infected persons. This includes measures for protecting yourself first (for example, by using masks and gloves) before trying to help others.

If you suspect that something unusual is occurring, report that information to your local public health or law enforcement agency.

### **Important clues that may signal a biologic emergency**

Unusual number or pattern of a commonly occurring illness among animals or humans

A single suspected case of an uncommon disease

Single or multiple cases of a suspected common disease that does not respond to treatment as expected

Clusters of a similar illness occurring in the same time frame in different communities

Unusual clinical, geographical, or seasonal occurrence of a disease and/or unusual route of transmission

Sudden increase in the following nonspecific illnesses:

- ✓ Pneumonia, flu-like illness, or fever with unusual features
- ✓ Bleeding disorders
- ✓ Unexplained rashes and mucus membrane or skin irritation, particularly in adults
- ✓ Nervous system problems, such as muscle weakness and paralysis
- ✓ Unexplained diarrhea

## Bombings

Across the globe, the threat of terrorism involving the use of explosive agents in urban or otherwise crowded environments has become reality. Despite widespread concern for biologic and chemical attacks, conventional explosives (such as bombs) are by far the most commonly used terrorist weapons because they are the easiest to create, obtain and use.

After an explosive event, hospitals must be prepared to treat hundreds of casualties. The response, however, may be complicated by the loss of utilities (e.g., electricity, water), difficulty in transporting casualties, lack of trained personnel and damage to surrounding buildings. Similar effects can be encountered in natural disasters such as tornadoes, earthquakes, and industrial or gas main explosions.

**After an explosive event, hospitals must be prepared to treat hundreds of casualties.**

### Key points about bombings

Bombs and explosions can cause unique patterns of injury, involving multiple organs. In the United States, such injuries are seldom seen outside of military combat.

The effects of an explosion depend on the amount of explosive materials used and how the device was made, the surrounding environment, the delivery method, and the distance and barriers between the victim and the blast.

Explosions in confined spaces (buildings, large vehicles, mines) and/or building collapse cause the most serious injuries and more deaths.

People who were near an explosion should receive follow-up medical examinations. Some health effects may be delayed.

All bomb events may result in chemical and/or radiological contamination of people and surrounding environments. Medical help should never be delayed because of the possibility of radioactive contamination of the person. The use of standard protective measures is effective in protecting first responders and other caregivers against contamination with radioactive materials.

Listen to a television, radio, or emergency alert system for up-to-date information and instructions. Have a battery-powered radio available, if needed. Officials will tell you whether to stay inside or leave your home. They will tell you where to go if you need to leave your home.



## Chemical emergencies

Toxic chemical agents are gases, liquids or solids that have harmful effects on people, animals or plants. These materials come in the form of explosives, flammable and combustible substances, corrosive agents, and poisons and are shipped daily on the nation's highways, railroads, waterways and pipelines. Many products containing hazardous chemicals, such as pesticides and drain cleaners, are also used and stored routinely in homes.

Chemical agents can be released by unintended or deliberate means, such as through a spill from a damaged railroad tank car or explosion at an industrial facility with contamination of surrounding air, food, water and other resources.

Health effects of toxic chemical agents range from irritation and burning of eyes, skin and mucous membranes to rapid failure of the heart and lungs, resulting in death. Such effects may be immediate (a few seconds) or delayed (several hours to days). Immediate symptoms may include blurred vision, eye irritation, difficulty breathing and nausea. People who are exposed may require urgent medical attention.

To minimize exposure, strict precautions must be used until thorough decontamination has been performed or the specific chemical agent is identified. For help in dealing with health effects from chemical exposures, contact your doctor or a Regional Poison Control Center at (800) 222-1222.

Many communities have a local emergency planning committee (LEPC), which identifies industrial hazardous materials and keeps the community informed of the potential risks. Contact your local emergency management office to find out if your community has an LEPC and how you can participate.

### Key points about chemical emergencies

Evaluate the risks to your household using information from your LEPC and local emergency management office. Determine how close you are to factories, highways, or railroads that may produce or transport potentially hazardous chemicals.

Learn about your community's plans for responding to a hazardous materials incident at a plant or other facility or a transportation incident involving hazardous materials. Talk to your LEPC or emergency management office.

The release of a chemical agent may be difficult to identify easily:

- ✓ Symptoms of exposure to some chemical agents can be similar to those of common diseases, such as gastroenteritis (stomach flu).
- ✓ Immediate symptoms of certain chemical exposures might be nonexistent or mild despite the risk for long-term effects.
- ✓ Health care professionals might be less familiar with illnesses suggesting exposure to chemical agents than with illnesses they treat more frequently.

Confirmation of a chemical agent, using detection equipment or laboratory analyses, will take time and will not likely contribute to the early management of affected victims.

After the release of a chemical agent, local authorities will monitor the situation and recommend protective action. The most appropriate action will depend on the situation. Stay tuned to the local emergency response network or news station for up-to-date information and instructions. You may be advised to "shelter in place," which means to stay in your home or office, or you may be advised to move to another location.

If you are instructed to remain in your home or office building, you should:

- ✓ Close doors and windows and turn off all ventilation, including furnaces, air conditioners, vents and fans.
- ✓ Seek shelter in an internal room and take your disaster supply kit.
- ✓ Listen to local news stations for further instructions from authorities.

If you are caught outside during a chemical incident, try to stay uphill and upwind of the scene. Hazardous gases and mists are generally heavier than air and can be transported quickly by the wind.

**Key points about chemical emergencies**

Effects from exposure to chemical agents will vary depending on the:

- ✓ Type of agent
- ✓ Route of exposure (skin, inhaled, ingested)
- ✓ Amount and strength of the chemical
- ✓ Length of exposure
- ✓ Pre-existing medical conditions (for example, people with heart or respiratory diseases)

Professional emergency responders will need to use personal protective gear and determine appropriate decontamination procedures to avoid contamination of themselves and others, as well as transport vehicles and treatment facilities.

Removal of clothing and washing with soap and large amounts of water should be used to remove external chemical contamination.

Removal of clothing and washing with soap and large amounts of water should be used to remove external chemical contamination.

**Important clues that may signal a chemical release**

An unusual increase in the number of persons with similar symptoms after exposure to a potentially contaminated source (for example, diarrhea and vomiting within minutes of eating a meal)

Rapid onset of illness with little or no warning

Unexplained illness or death among young or previously healthy persons

Presence of an unexplained odor, low level clouds or vapors at the scene

Clusters of people who have common exposure characteristics, such as drinking water from the same source

Unexplained death of plants, fish or animals

Clusters of people with clinical signs and symptoms suggestive of known chemical exposures:

- ✓ Sudden unexplained weakness, collapse or convulsions in previously healthy persons
- ✓ Dimmed or blurred vision
- ✓ Excessive tearing, drooling, diarrhea
- ✓ Irritation of eyes, nose, throat, chest
- ✓ Shortness of breath
- ✓ Redness, burning, blistering, itching, peeling of skin

## Radiation emergencies

For many people, radiation provokes a special fear, which can be reduced through appropriate education, preparation and planning. In a radiation emergency, the health threat to response personnel is low and can be minimized by using standard safety precautions. Radiation can be easily detected with equipment carried by many emergency responders.

In a radiation emergency, dangerous radioactive materials are released into the environment. People who are contaminated with radioactive materials may expose or contaminate others with whom they come in close contact and should avoid such contact until they are appropriately decontaminated.

A radiation emergency might be a single nuclear detonation or an incident involving unintentional or deliberate radiological contamination (such as a leak at a nuclear power plant). The most likely deliberate radiation emergency involves direct placement of radioactive material in a public place or detonation of a high-yield explosive contaminated with radioactive material (a dirty bomb). Treatment for people exposed to radioactive materials may need to be started quickly to be effective.

### Key points about radiation emergencies

The primary risk of a dirty bomb or other isolated radiation incident is the psychological effect on citizens rather than sickness caused by radiation.

After a release of radioactive materials, local authorities will monitor the levels of radiation and determine what protective actions to take.

The most appropriate action will depend on the situation. Stay tuned to the local emergency response network or news station for up-to-date information and instructions.

If a radiation emergency involves the release of large amounts of radioactive materials, you may be advised to “shelter in place,” which means to stay in your home or office, or you may be advised to move to another location.

If you are instructed to remain in your home or office building, you should:

- ✓ Close doors and windows and turn off all ventilation, including furnaces, air conditioners, vents and fans.
- ✓ Seek shelter in an internal room and take your disaster supply kit.
- ✓ Listen to local news stations for further instructions from authorities.

The longer a person is exposed to radiation, the greater the dose; victims should be removed from the disaster scene as quickly as possible.

The farther away you are from a radiation source, the lower the radiation dose.

Emergency responders should wear protective gloves, protective clothing, and radiation dosimeters (devices that measure amounts of radiation exposure); respirators or protective masks can prevent breathing in radioactive particles.

Removal of clothing and washing with soap and large amounts of water are sufficient to remove most external radiation contamination.

The health effects of radiation exposure are directly related to the amount of radiation absorbed by the body (radiation dose) and are determined by the:

- ✓ Radiation type (alpha, beta, x-ray or gamma radiation)
- ✓ Means of exposure, internal or external (absorbed by the skin, inhaled, or ingested)
- ✓ Length of time exposed

People being examined for potential radiation exposure may not show obvious symptoms when first examined (even if they received a large radiation dose) due to the delayed onset of symptoms following exposure. Follow-up medical examination is needed to establish the true nature and extent of exposure.

For exposure to radioactive iodine (for example, a nuclear power plant incident), potassium iodide (KI) is given to protect the thyroid gland. KI will not protect a person from other radioactive materials or protect other parts of the body from radiation exposure.

## Dealing with the emotional impact of disasters

Experiencing a disaster can be one of the most difficult events a person can endure and can have both short- and long-term effects. Most people who experience a disaster, whether as a victim or responder, will have some type of psychological, physical and/or emotional response to the event.

Common symptoms include:

- Fear
- Helplessness
- Shock
- Worry
- Anger
- Difficulty concentrating
- Confusion
- Fatigue
- Tension
- Changes in sleep
- Loss of appetite
- Stress
- Depression

It is possible to experience many of these symptoms at the same time. It is also important to remember that most people who experience these symptoms will be able to return to normal functioning within a few weeks. You may not be able to make sense out of what happened, which is a normal feeling.

There is no one way to feel after a tragic event and you should not think that there is something wrong with you for feeling a certain way or if you respond differently than others. You may want to talk about the events that occurred and how you are feeling. This can be very helpful especially in a supportive environment. However, you should not feel like you have to talk about the event if you do not want to.

### Think positive

Think about your abilities and capability to handle the situation. A positive outlook can increase your ability to perform under stressful situations and increase your resistance to negative consequences.

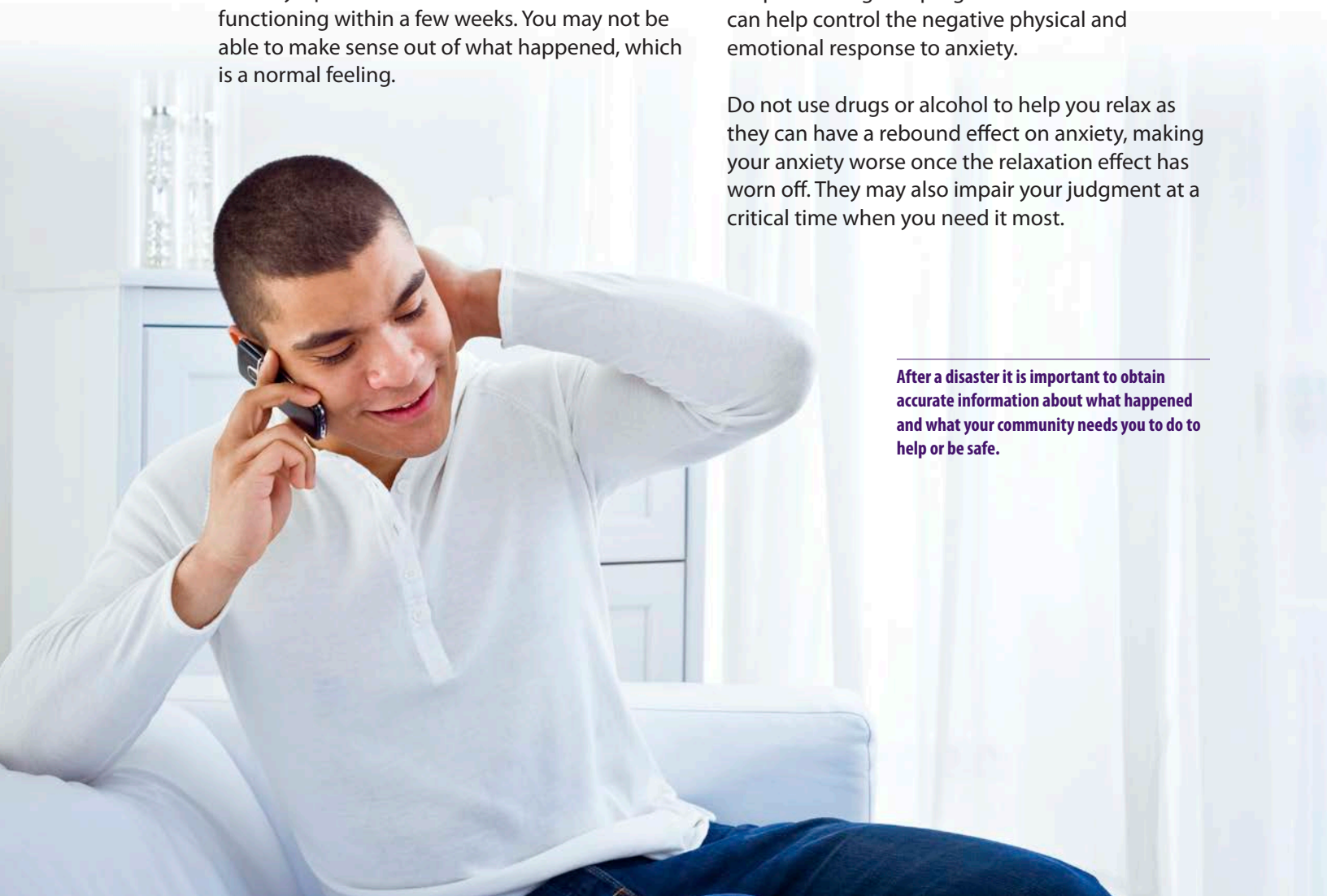
### Control anxiety

There are many ways in which people control their anxiety. Learning relaxation techniques such as deep breathing and progressive muscle relaxation can help control the negative physical and emotional response to anxiety.

Do not use drugs or alcohol to help you relax as they can have a rebound effect on anxiety, making your anxiety worse once the relaxation effect has worn off. They may also impair your judgment at a critical time when you need it most.

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**After a disaster it is important to obtain accurate information about what happened and what your community needs you to do to help or be safe.**



### Stay informed

After a disaster it is important to obtain accurate information about what happened and what your community needs you to do to help or be safe. Newspapers, radio and television are ways to get accurate local information. Do not listen to rumors as they can be misleading.

Having direction after an event will likely lessen your emotional response to the event. Again, getting accurate information from reliable sources will help you know what actions and direction to take.

### Stay connected

People bounce back from trauma when they feel connected and part of a team. Reconnect with loved ones, neighbors, co-workers and others, such as through your place of worship. Attend convocations and memorial services to heal as a community.

### Seek help if things get worse

Remember that feelings of anxiety and depression following a traumatic event are natural. If these symptoms continue for several weeks after the event has passed, or if these feelings begin to overwhelm you to the extent that you cannot continue your daily activities, you should consider talking to your doctor or other mental health professional.

Symptoms that may indicate a need for a medical evaluation include but are not limited to:

- Changes in eating and sleeping habits
- Physical problems such as stomach upset, back and neck aches, and headaches
- Inability to focus or concentrate on routine tasks or work
- Lack of interest in previously enjoyable activities
- Extreme fear of leaving your home
- Irritability and significant mood swings
- Having flashbacks or nightmares or playing the events over and over in your mind

- Taking extreme measures to avoid the memories through the use of alcohol or other drugs
- Having extreme anxiety such as panic attacks
- Feeling hopeless, helpless or that life is not worth living

### Key points to help cope with disaster

Educate yourself about the potential danger. Keep informed about breaking news and developments. If television or other news reports greatly increase your feelings of anxiety and helplessness, avoid them; you don't need every graphic detail.

Avoid overexposure to news rebroadcasts of the events. Television news of traumatic events can be particularly frightening to children, especially when it is viewed repeatedly.

Try to take control of your situation as best you can. If possible, avoid places that will cause you unnecessary stress and anxiety. If you feel anxious, angry or depressed, realize that others are experiencing similar emotions.

Avoid being alone. Talk about your feelings with family or friends.

Reunite with friends or family, and utilize your social and community support networks.

If you have contact with children, let them know that you are there for them to talk about the disaster and their feelings.

Avoid becoming preoccupied with the disaster. Take some time to get away from your "normal" routine. Find ways to distract yourself from thinking about the event and the potential for further harm. Get involved in an activity that you can control (work in the house or garden, do volunteer work, go see a movie or play).

Maintain healthy behaviors. Eat a well-balanced diet. Avoid or at least minimize alcohol intake. Get regular exercise and adequate sleep. If you smoke, don't increase your tobacco consumption. Although it may seem to ease anxiety in the short term, smoking has significant health risks.

Learn techniques to help you relax and decrease your anxiety.

## Prepare before disaster strikes

The best way to make your home and community safer is to be prepared before disaster strikes. This can be done through thoughtful planning and can ensure that if a disaster occurs, you are ready to get through it safely and respond to it effectively.

It is important for all family members to know how to react in a disaster or other emergency. Talk with your family about disasters that are likely to happen in your area and how to prepare for each type. In any disaster, the best protection is knowing what to do.

### Have a plan

Plan in advance for an emergency. How will you take care of yourself and your loved ones? Where would you go? How will you meet and communicate with others? Make backup plans for children in case you can't get home in an emergency. Children should know or have contact information with them.

Sharing plans and communicating in advance is a good strategy. Talk to neighbors about how you can work together. Find out if anyone has special equipment, like a gas-powered generator, or expertise such as medical knowledge, that might help in a crisis. Decide who will check on elderly or disabled neighbors. Take time to complete the "Emergency Notification Form," which is provided in Appendix A of this guide, and share it with family and friends.

Emergency plans also should be standard in the workplace. Most often, these are created and then forgotten on a shelf. Employees should ask the following questions about their workplace response plans:

- Is there one?
- Where is it located?
- What does it contain?
- What are your specific responsibilities?

Ask similar questions about emergency plans for local schools and daycare centers, and for elder care centers. Take the time to research these plans before they need to be implemented.

A family disaster plan is simple to create. You can begin by gathering family members and making sure each person is well-informed on potential hazards and community action plans.

Discuss what you would do if family members are not home when an emergency alert or other warning is given. Practice your family disaster plan at least twice each year so that everyone will remember what to do in an emergency.

### Learn about your local emergency warning system

In a disaster, local radio and television stations will provide information on evacuation routes, temporary shelters and other emergency procedures. Depending on the circumstances, any one of three protective actions (shelter-in-place, prepare-to-evacuate or evacuate) may be appropriate.

In emergencies, the news media will be relied upon to communicate essential messages to the public. It is important to have the means (such as, a battery-powered radio) to get up-to-date information and instructions.

### Plan home escape routes

Talk about and decide on escape routes in the home for all family members. Know the fastest way out of your home and how not to become trapped.

### Agree on places to meet

Decide on a place for family members to meet if an emergency happens. Agree on a meeting place away from your home (a neighbor or relative's house or even a street corner) where you would get together if you were separated in an emergency.

Give each family member an emergency list with the name, address and phone number of the meeting place. For children who are old enough, help them memorize the names, addresses and phone numbers of people to contact in an emergency.

### Plan local evacuation routes

There are many types of emergencies that can lead to evacuation. School evacuations, earthquake evacuations, flood evacuations, or fire emergency evacuations can result in the loss of your home and style of living.

The amount of time you have to leave the area will depend on the type of disaster. If the event is weather-related, such as a hurricane that can be monitored, you might have a day or two to get ready. Many other disasters allow no time to gather even the most basic necessities. In such situations, it is essential to plan ahead.

### Have a family communication plan

Your family may not be together when a disaster strikes, so plan in advance on how you will contact each other. Think about how you will communicate in different situations. Keep emergency phone numbers where family members can find them.

Pick an out-of-state person who family members can “check-in” with if you are separated during an emergency or if your home is damaged or you cannot get to it.

### Know how to shut off utilities

In the event of a disaster, you may be instructed to shut off the utility service (water, electricity, natural gas) at your home. Learn the location of utility shut-off valves and how to close them.

### Identify local shelters

Know the location of shelters that are available for community members. Shelters are often located in public school buildings.

### Inquire about school and workplace emergency plans

Find out what your local school district, day care center and employer plan to do in the event of an emergency. Many school districts stagger school hours so schools can share buses and therefore might not be able to evacuate all the schools at the same time. Make sure children know where to meet parents in the event schools are evacuated or an early release occurs.

### Plan for animal care

Evacuate animals whenever possible. Pets and livestock may not be able to survive on their own, and if they do, you may not be able to find them when you return. Ensure all animals have some form of identification that will allow you to identify them later. Arrangements for evacuation, including routes and places to take the animals, should be made in advance.

### Learn first aid and safety skills

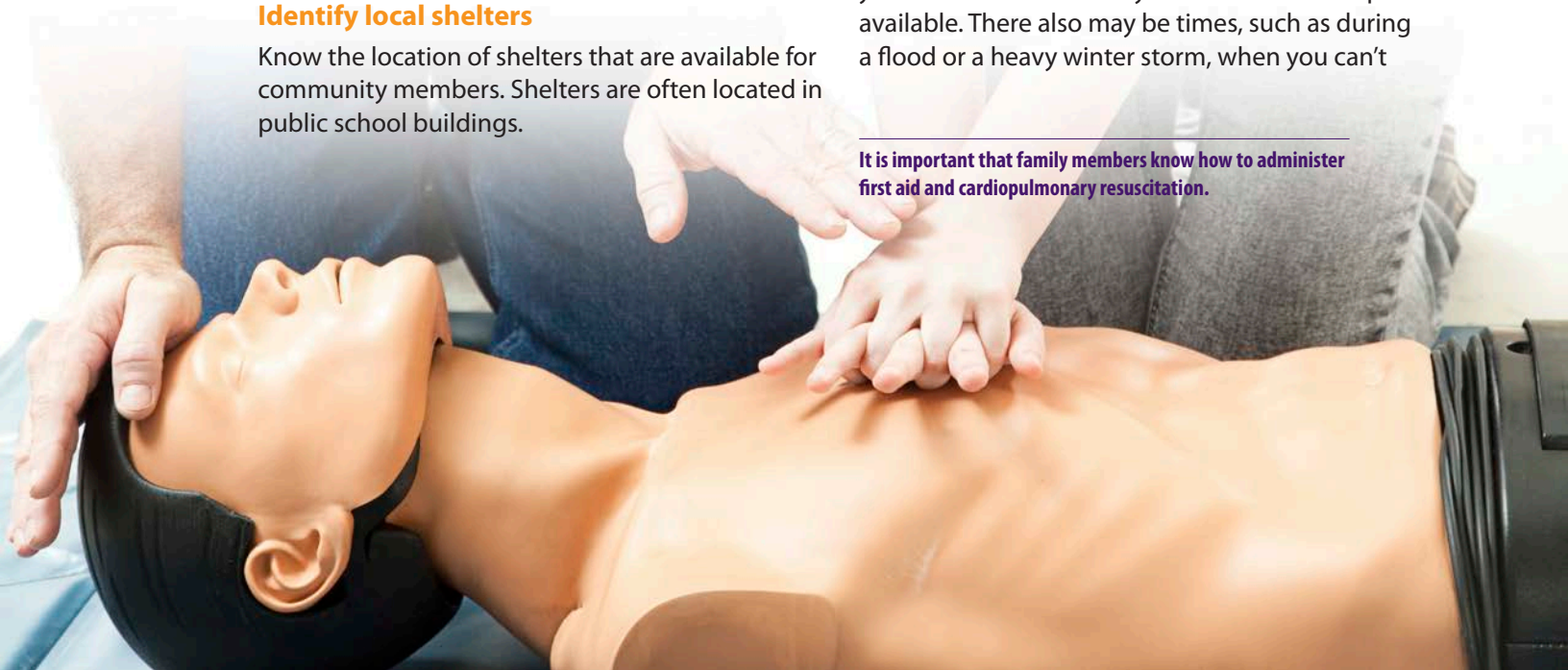
It is important that family members know how to administer first aid and cardiopulmonary resuscitation, and how to use an automated external defibrillator and a fire extinguisher. Take a first aid course from the American Red Cross, National Safety Council or other accredited provider.

### Assemble a disaster supply kit

After a disaster, you and your family may be on your own for hours or days before outside help is available. There also may be times, such as during a flood or a heavy winter storm, when you can't

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**It is important that family members know how to administer first aid and cardiopulmonary resuscitation.**



leave your home for days. In other situations, you may be asked to leave at a moment's notice with very little time to pack personal belongings. Basic items that should be considered in a family disaster kit are listed in Appendix B of this guide.

### **Protect your home and personal belongings**

If you are unsure whether your property or business is at risk in a disaster, check with your local building official, city engineer, or planning and zoning administrator. They can tell you whether you are in a disaster-prone area and can usually tell you how to protect yourself, your house, business, and property from different hazards.

### **Buy insurance**

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

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 also speed the recovery if a flood occurs.

### **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.

Having an inventory of your home provides you with the security of knowing that no matter what happens (break in, natural disaster or home tragedy), you will be able to provide the necessary information to the insurance companies and other authorities to get your life back on track.

### **Protect 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 supply kit.

Without proof of who you are, what you owned, and what coverage you have, getting assistance and rebuilding your life after a disaster emergency is very difficult and emotionally taxing. A backup storage system for your documents is the only way to avoid this frustration.

Learn how to distinguish between replaceable and non-replaceable documents. Choose an alternate storage location for these documents.

### **Stow away some money**

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

## Know how to get help

When faced with a disaster or other medical emergency, immediately dial 911 or the local emergency medical dispatch number on any available phone and do not hang up until help arrives. This action will provide you, in most circumstances, with a person trained to assist, as you await the arrival of appropriate emergency medical personnel and vehicles at your location.

Staying on the phone gives you a person to talk with as you continue managing the situation until help arrives. If you are unable to speak, or must walk away from the phone to help another person, do not hang up the phone, as it may provide the operator a means to find your location while you are still connected.

It is important to have quick access to the names and telephone numbers of doctors and other health care personnel who provide regular care to you and your family members. A list should be maintained with contact information (complete names, addresses and phone numbers) of family members, legal guardians, and others who have responsibility for making health care decisions in an emergency. Take the time to fill out the “Emergency Information and Telephone Numbers” form, which is provided as Appendix A of this guide.

### In case of emergency (ICE)

A recent practice that has gained widespread recognition is to make an entry in your cell phone directory for ICE (“In Case of Emergency”) with the contact information for the person who should be called if you are ill or injured and cannot tell someone whom to call. Emergency medical and hospital personnel are now being taught to look for this information in cell phone directories. In addition, if there is a “note filed” capability in your cell phone, you can put key medical information in the ICE listing such as allergies, medications and medical conditions.

If you are unable to access help by calling 911 or your local emergency medical dispatch number for whatever reason, and have attempted at least three times, call a local hospital, ambulance service, or police or fire department. You also can contact the poison control center for your local area, especially if a poisoning, ingestion of an unknown substance, or possible chemical exposure is suspected.

Paramedics and other ambulance personnel are usually available through various community resources such as the fire department, police department and volunteer associations. Learn about the emergency medical services that are available in your community before an emergency occurs.

In a disaster, paramedics should not be called for minor illnesses or injuries such as sprained ankles, minor cuts or colds; they need to be available to treat people who have more serious conditions.

Often people with minor injuries can be driven to the hospital by a family member or friend. If you are taking someone to the hospital and there is time, call your physician so that he or she can call the emergency department. This enables the staff to know what to expect, to prepare for the person’s arrival, and to discuss the case with the doctor.

### Reporting emergencies

Any suspicious or confirmed emergency situation should be reported immediately by calling 911 or your local emergency medical dispatch number. If you are sick or injured, first try to contact your physician to determine if emergency medical care is warranted. If he or she is not available, call 911 or other local emergency medical dispatch number.

If you believe that someone has been exposed deliberately to a biological, chemical or radioactive agent, or if you believe a terrorist threat will occur or is occurring, contact your local FBI office, police or other law enforcement agency, or health department.

Upon arrival at the scene, first responders will follow steps outlined in their standard operating procedures or local emergency response plan to notify authorities and request additional assistance.

## Get trained, get involved, get ready

The need for trained citizens is vital in the first minutes, hours and even days after an event, when survivors may have no alternative to treating and caring for themselves, their families, coworkers and neighbors. At times, citizens may be required to act independently for many hours after a disaster event until outside help arrives.

To improve personal and community preparedness, all citizens should seek disaster training to make sure they can:

- Recognize potential life-threatening situations and act appropriately, while protecting personal health and safety
- Know how to contact and work with local emergency medical and public health systems
- Make decisions with limited resources and limited information
- Access reliable disaster health information and resources
- Know about medical, social and mental health resources that are available

Learn about opportunities that are available to become more involved in local disaster preparedness and response efforts. Sign up for a first aid training course.

In many communities, disaster education and training is available through chapters of the American Red Cross, through Citizen Corps Councils, Medical Reserve Corps units and Community Emergency Response Teams. Find out about opportunities for disaster training in your area. This includes opportunities to volunteer in local disaster relief efforts.

The Citizen Corps, which offers five programs, was created within the Department of Homeland Security to help coordinate volunteer activities to make communities safer, stronger and better prepared to respond to any emergency situation (such as, crime threats, terrorism and disasters).

### Citizen Corps programs:

#### Community Emergency Response Team (CERT) program ([www.citizencorps.gov/cert/index.shtm](http://www.citizencorps.gov/cert/index.shtm)).

Administered by FEMA, the CERT program prepares people to help themselves, their families, and their neighbors in the event of a disaster in their community. Through CERT, citizens can learn about disaster preparedness and receive training in basic disaster response skills such as fire safety, light search and rescue, and disaster medical operations. With this training, volunteers can provide immediate assistance to victims before first responders arrive on scene. CERT volunteers also participate in community preparedness outreach activities.

**Fire Corps** ([www.firecorps.org](http://www.firecorps.org)) promotes the use of citizen volunteers to support and augment the capacity of resource-constrained fire and emergency service departments at all levels: volunteer, career and combination (career/volunteer). Fire Corps is funded through the Department of Homeland Security and is managed and implemented through a partnership between the National Volunteer Fire Council and the International Association of Fire Chiefs.

**Medical Reserve Corps (MRC) program** ([www.medicalreservecorps.gov](http://www.medicalreservecorps.gov)) reports directly to the U.S. Surgeon General. The MRC aims to improve the health and safety of communities across the country by organizing and utilizing public health, medical, and other volunteers who donate their time and expertise to prepare for and respond to emergencies. Volunteer MRC units accomplish this mission by supplementing existing emergency and public health resources during local emergencies.

**USAonWatch** ([www.usaonwatch.org](http://www.usaonwatch.org)) is the face of the National Neighborhood Watch Program. The program is managed nationally by the National Sheriffs' Association in partnership with U.S. Department of Justice. USAonWatch empowers citizens to become active in homeland security efforts through community participation. This is accomplished through the delivery of information, training, technical support, and resources to local law enforcement agencies and citizens.

**Volunteers in Police Service (VIPS) program** ([www.policevolunteers.org](http://www.policevolunteers.org)) serves as a gateway to information for law enforcement agencies and citizens interested in law enforcement volunteer programs. The program's ultimate goal is to enhance the capacity of state and local law enforcement agencies by incorporating the time and skills that volunteers can contribute to a community law enforcement agency. The International Association of Chiefs of Police manages the VIPS Program in partnership with the U.S. Department of Justice.

## Closing thoughts

Take the time now to prepare a personal and family disaster plan, and consider volunteering in a local disaster relief organization. Know the emergency plans where you work, at school, and for your community. Be prepared so you can recognize and respond effectively to potentially dangerous situations.

Participate in the Citizen Corps or other local volunteer organization in your community. If you don't have a Citizen Corps Council in your area, contact your state Citizen Corps representative and work with your local officials to get one started.

Everyone needs to be aware of their surroundings with an eye for things that seem unusual. Be wary of circumstances that are out-of-place and thus may indicate a potential problem. This is part of surveillance, whether for law enforcement or public health.

Recognize what is vulnerable to sabotage or theft. Trust your instincts, if it doesn't seem right—it probably isn't. Always be respectful of other people's rights, but if a situation seems suspicious, call security, 911 or the FBI and let law enforcement investigate. Stay calm, use common sense, be patient, and think before you act. Follow instructions from authorities via phone, media broadcasts or at the scene.

Recognize that regardless of your training, you can participate in disaster preparedness activities that are going on in your community right now. Across the United States, community leaders and citizen volunteers are working on the development and refinement of local plans that will be used in the event of a local or national emergency.

These hometown meetings serve as an opportunity to meet with state and national emergency response partners who will be working with your community in an emergency and to learn about their preparations and plans.

Everyone who is interested can and should have a part in ongoing community planning efforts. It is important that all voices have a seat at the table. When it comes to understanding the unique

strengths and weaknesses of your community, there is no greater expert than you. Your knowledge and views are unique and valued.

The more you know, the better able you will be to protect yourself and your community in the event of a serious disaster or other public health emergency. The bottom line is to get prepared and be CitizenReady!

### Disaster preparedness steps for all citizens

Understand the disaster risks in your community. Ask local authorities about possible hazards that may affect your community and what the risks might be for you and your family.

Prepare and practice an emergency plan with your family.

Prepare a disaster kit.

Be aware of your surroundings. Move or leave if you feel uncomfortable or if something does not seem right.

Take precautions 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 in buildings you frequent.

Promptly report unusual behavior, suspicious or unattended packages, and strange devices to the police or security personnel.

Learn about emergency preparedness and response plans for your community, schools and place of employment. Know the location of these plans.

Know how to contact local medical, public health and law enforcement authorities.

Be aware of available medical and mental health information and resources and how to access them immediately and in various ways.

Be prepared emotionally; understand stress and how to deal with it.

Be prepared physically; maintain a healthy lifestyle (eat a well-balanced diet, be physically active; get adequate sleep; avoid tobacco, alcohol and other drugs).

**Disaster preparedness steps for all citizens** *(continued)*

Learn immediate actions to protect the health and safety of yourself, your family, and your neighbors.

Take measures to protect your home and personal belongings; be sure to have working fire extinguishers, smoke detectors and carbon monoxide detectors.

Learn first aid and basic life support procedures; participate in additional education and training programs to improve your knowledge, ability, and willingness to respond to an emergency or mass casualty situation.

Learn about your community's emergency warning system and emergency communications plan.

Learn about local disaster relief services that can provide assistance. Contact local agencies and organizations about volunteer opportunities.

## For more information

Personal preparedness resources can be found on the websites of most state and local public health and emergency management agencies. The following agencies, organizations and Internet sites also provide helpful information for your disaster planning

### Government resources

#### Centers for Disease Control and Prevention

([www.cdc.gov](http://www.cdc.gov)). Part of the U.S. Department of Health and Human Services, the CDC is a comprehensive and authoritative resource on medical and public health issues for health professionals and citizens worldwide. The website is updated frequently to provide reliable information quickly.

*CDC Emergency Preparedness and You:*  
<http://emergency.cdc.gov/preparedness/>

#### Citizen Corps program ([www.citizencorps.gov](http://www.citizencorps.gov))

The Citizen Corps asks everyone to take personal responsibility to be prepared; to get training in first aid and emergency skills; and to volunteer to support local emergency responders, disaster relief and community safety. Currently there are more than 2,300 Citizen Corps Councils in the United States.

#### Community Emergency Response Team CERT program ([www.citizencorps.gov/cert/](http://www.citizencorps.gov/cert/))

The CERT program educates people about preparedness for hazards that may impact their area and trains them in basic disaster response skills, such as fire safety, light search and rescue, team organization and disaster medical operations.

With this training, CERT members can assist others in their neighborhood or workplace following an event when professional responders are not immediately available to help.

#### Federal Emergency Management Agency

([www.fema.gov](http://www.fema.gov)) FEMA, which is part of the U.S. Department of Homeland Security, is the lead federal agency responsible for reducing the loss of life and property and protecting communities from disasters.

*DisasterHelp:* [www.disasterhelp.gov](http://www.disasterhelp.gov)

*FEMA for Kids:* [www.fema.gov/kids](http://www.fema.gov/kids)

#### Medical Reserve Corps program ([www.medicalreservecorps.gov/HomePage](http://www.medicalreservecorps.gov/HomePage))

MRC units are community-based and function as a way to locally organize and utilize volunteers who want to donate their time and expertise to prepare for and respond to emergencies and promote healthy living throughout the year.

MRC volunteers include medical and public health professionals such as physicians, nurses, pharmacists, dentists, veterinarians and epidemiologists. Many other community members—interpreters, chaplains, office workers, legal advisors and others—can fill key MRC support positions.

#### National Oceanic and Atmospheric

**Administration** ([www.noaa.gov](http://www.noaa.gov)) NOAA is the federal agency responsible for monitoring and increasing understanding of the role of the oceans, coastal areas and the atmosphere in the global ecosystem, as well as for conserving and managing coastal and marine resources to meet national economic, social and environmental needs.

*National Hurricane Center:* [www.nhc.noaa.gov](http://www.nhc.noaa.gov)

*National Weather Service:* [www.nws.noaa.gov](http://www.nws.noaa.gov)

#### Substance Abuse and Mental Health Services

**Administration** ([www.samhsa.gov](http://www.samhsa.gov)) Part of the U.S. Department of Health and Human Services, SAMHSA focuses on building resilience and facilitating recovery for people with or at risk for mental or substance use disorders.

*National Mental Health Information Center:*  
[www.mentalhealth.samhsa.gov/cmhs/EmergencyServices/default.asp](http://www.mentalhealth.samhsa.gov/cmhs/EmergencyServices/default.asp)

#### U.S. Department of Health and Human Services

([www.dhhs.gov](http://www.dhhs.gov)) HHS is the U.S. government's principal agency for protecting the health of all Americans and providing essential human services, especially for those who are least able to help themselves.

*Disasters and Emergencies:* [www.hhs.gov/disasters/index.shtml](http://www.hhs.gov/disasters/index.shtml)

*Pandemic Influenza:* [www.pandemicflu.gov](http://www.pandemicflu.gov)

**U.S. Department of Homeland Security**

([www.dhs.gov](http://www.dhs.gov)) The DHS leads the unified national effort to secure the country against terrorism and other disasters.

The DHS Ready.gov campaign ([www.ready.gov](http://www.ready.gov)) takes an all-hazards approach to preparedness and in many ways compliments resources from the CDC and American Red Cross. It is a good public resource that addresses basic planning and technical information for individuals, families and businesses.

**U.S. Geological Survey** ([www.usgs.gov](http://www.usgs.gov)) The USGS provides reliable scientific information to describe and understand the Earth; minimize loss of life and property from natural disasters; manage water, biological, energy, and mineral resources; and enhance and protect quality of life.

**World Health Organization** ([www.who.int/en](http://www.who.int/en))

The WHO is the directing and coordinating authority for health within the United Nations system. It is responsible for providing leadership on global health matters, shaping the health research agenda, setting norms and standards, articulating evidence-based policy options, providing technical support to countries and monitoring and assessing health trends.

**Professional associations and volunteer organizations****American Academy of Pediatrics** ([www.aap.org](http://www.aap.org))

The AAP is a medical specialty society devoted to attaining optimal physical, mental, and social health and well-being for all infants, children, adolescents and young adults.

*AAP Children and Disasters:* [www.aap.org/disasters](http://www.aap.org/disasters)

**American Association of Poison Control Centers**

([www.aapcc.org/DNN](http://www.aapcc.org/DNN)) The AAPCC maintains a 24-hour Poison Help hotline (800-222-1222) that is continuously staffed by pharmacists, physicians, nurses and poison information providers who are toxicology specialists.

The Poison Help hotline provides immediate access to exposure management instructions and information on potential poisons. The public may use the number to ask questions about the proper handling and ventilation related to household

products, bites and stings, plants, over-the-counter and prescription medications, drugs, alcohol, hydrocarbons, carbon monoxide, and other types of potentially toxic fumes and gases.

**American Medical Association** ([www.ama-assn.org](http://www.ama-assn.org)) The AMA is a national professional association of physicians who are dedicated to working on the most important medical and public health issues affecting doctors and their patients.

*AMA Center for Public Health Preparedness and Disaster Response:* [www.ama-assn.org/go/disasterpreparedness](http://www.ama-assn.org/go/disasterpreparedness)

**American Public Health Association** ([www.apha.org](http://www.apha.org))

The APHA is a professional association representing a variety of health professions and others who are dedicated to protecting individuals and their communities from preventable, serious health threats; and assuring that community-based health promotion and disease prevention activities and preventive health services are accessible throughout the United States.

*APHA Get Ready:* [www.getreadyforflu.org/newsite.htm](http://www.getreadyforflu.org/newsite.htm)

**American Red Cross** ([www.redcross.org](http://www.redcross.org))

The American Red Cross website and offices nationwide have excellent resources for answering questions and walking citizens through appropriate disaster preparation steps. Many of their materials are available in multiple languages.

**National Voluntary Organizations Active in Disaster**

([www.nvoad.org](http://www.nvoad.org)) NVOAD is a coalition of nonprofit organizations that respond to disasters as part of their overall mission.

**State and local directories****Federal Bureau of Investigation Field Offices**

[www.fbi.gov/contact/fo/fo.htm#cities](http://www.fbi.gov/contact/fo/fo.htm#cities)

**Local public health agencies** [www.naccho.org/about/LHD](http://www.naccho.org/about/LHD)

**State public health agencies** [www.cdc.gov/mmwr/international/relres.html](http://www.cdc.gov/mmwr/international/relres.html)

**State emergency management offices**

[www.fema.gov/about/contact/statedr.shtm](http://www.fema.gov/about/contact/statedr.shtm)

## Appendix A: Emergency Notification Form

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Ambulance (local emergency medical dispatch number) \_\_\_\_\_

Police department \_\_\_\_\_

Fire department \_\_\_\_\_

Local poison control center \_\_\_\_\_

Local health department \_\_\_\_\_

State health department \_\_\_\_\_

Hospital emergency department \_\_\_\_\_

Physician \_\_\_\_\_

Physician \_\_\_\_\_

Psychiatrist or other mental health professional \_\_\_\_\_

24-hour pharmacy \_\_\_\_\_

Other neighborhood pharmacy \_\_\_\_\_

Health insurance number \_\_\_\_\_

Work number \_\_\_\_\_

Work number \_\_\_\_\_

Dentist \_\_\_\_\_

Babysitter \_\_\_\_\_

School \_\_\_\_\_

School \_\_\_\_\_

Day care center \_\_\_\_\_

Veterinarian \_\_\_\_\_

Electric company \_\_\_\_\_

Gas company \_\_\_\_\_

Water company \_\_\_\_\_

Neighbor \_\_\_\_\_

Neighbor \_\_\_\_\_

Relative \_\_\_\_\_

Relative \_\_\_\_\_

Other \_\_\_\_\_

## Appendix B: Components of a disaster supply kit

A disaster supply kit is a collection of basic items that family members may need in a disaster. Every household should have adequate food, water and other supplies to last for at least three days, and if possible, for up to two weeks.

Keep the items that you would most likely need while away from home in an easy-to-carry container (possible containers include airtight plastic bags; a large, covered trash can; camping backpack; large suitcase or duffle bag). Store your kit in a convenient place known to all family members. Keep a smaller version of the supplies kit in the trunk of your car.

### Water

- You should have at least a three-day supply of water and you should store at least 1 gallon of water for each family member per day. Water lasts longer if it unopened bottled water. Otherwise, it needs to be replaced every six months.

### Food

- Store at least a three-day supply of non-perishable food. Select foods that do not need refrigeration, preparation, or cooking and require little or no water. Avoid foods that will make you thirsty. Choose salt-free items, whole grain cereals and canned foods with high liquid content.

### First aid kit

- Assemble a first aid kit for your home and one for each car
- Adhesive bandages, various sizes (20)
- 5" x 9" sterile dressing (1)
- Conforming gauze bandage (1 roll)
- Triangular bandages (2)
- 3" x 3" sterile gauze pads (2)
- 4" x 4" sterile gauze pads (2)
- 3" cohesive bandage (1 roll)
- Germicidal hand wipes or waterless alcohol-based hand sanitizer (2)
- Antiseptic wipes (6)

- Large medical grade non-latex gloves (1 pair)
- Adhesive tape, 2" width (1 roll)
- Anti-bacterial ointment
- Cold pack (1)
- Scissors (small, personal)
- Tweezers
- CPR breathing barrier, such as a face shield
- First aid manual

### Tools and supplies

- Mess kits, or paper cups, plates and plastic utensils
- Battery-operated radio and extra batteries (Preferably this should be a battery-operated National Oceanic and Atmospheric Administration or NOAA all-hazard alert radio. You will pick up the frequency of the NOAA, which will include instructions on whether to stay in your home, when to evacuate, and the status of the emergency event. You can purchase such a radio at a local electronics store.)
- Flashlight and extra batteries
- Personal hygiene items (such as deodorant, toothpaste, toothbrushes, comb and brush)
- Lip balm
- Sunscreen
- Cash or traveler's checks
- Extra set of house and car keys
- Manual can opener
- Fire extinguisher (small canister ABC type)
- Small tent
- Compass
- Mirror
- Matches in a waterproof container
- Aluminum foil
- Plastic storage containers
- Signal flares

- Paper, pencils
- Needles, thread
- Medicine dropper (this can be used to sanitize water by using 16 drops of unscented liquid chlorine bleach to a gallon of water)
- Basic tools (such as hammer, pliers, screwdrivers, utility knife, shovel, wrench to turn off household utilities)
- Whistle
- Sunglasses
- Plastic sheeting and duct tape
- Regional maps
- Portable generator

### Sanitation supplies

- Toilet paper, towelettes
- Soap, liquid detergent
- Feminine supplies
- Plastic garbage bags, ties (for personal sanitation uses)
- Plastic bucket with tight lid
- Disinfectant
- Household chlorine bleach

### Clothing and bedding

(Include at least one complete change of clothing and footwear per person)

- Sturdy shoes or work boots
- Rain gear
- Blankets or sleeping bags
- Hat and gloves
- Thermal underwear

### Special items

Remember family members with special requirements, such as infants and elderly or disabled persons.

### For infants:

- Formula
- Diapers
- Bottles
- Pacifiers
- Powdered milk
- Medications

### For other family members:

- Heart, high blood pressure, and other prescription medications
- Insulin
- Non-prescription medications
- Denture needs
- Extra eyeglasses, contact lenses and hearing-aid batteries
- Extra wheelchair batteries
- List of style and serial number of medical equipment
- Know where to find family medical insurance cards. The emergency kit should include photocopies of the cards; extra copies also can be requested from the health care insurance provider.

### Pets

The following should be included in the kit to be able to properly care for pets:

- Clothing to help small pets keep warm
- For cats, litter box and litter
- Leash or harness
- Collar with ID and rabies tags
- Crate or carrier
- Food and water
- Medications
- Vaccination records
- List of pet shelters
- List of veterinarians
- In addition, it is useful to have a microchip placed in each pet in case of loss or emergency.

### Prescription medications

- Everyone should carry a current list of prescription medications with them at all times (this includes why they are taking the medicine, the doses, and the physician's and pharmacist's contact information). Diabetic individuals should have a one-week supply of insulin. Physicians can be consulted about ways to ensure that individuals have a large enough supply of prescription medications for an emergency.

### Entertainment

- Games and books

### Important documents

(Keep records in a waterproof, portable container)

- Wills
- Insurance policies
- Contracts, deeds, stocks and bonds
- Passports
- Social security cards
- Immunization and other health records
- Bank account numbers
- Birth, marriage, death certificates
- Mortgage records
- Motor vehicle records
- Photocopies of credit cards and identification cards

### Important telephone numbers and addresses

- A list should be kept of contact information for physicians, pharmacists, special needs service providers and caregivers, as well as contact and meeting place information for family members.
- Having a contact system in place is important for the immediate family, but also for the extended family members and friends who will be worried about the family during a situation such as an emergency evacuation.
- Take the time to complete the "Emergency Notification Form," which is provided in Appendix A of this guide. Be sure it is current and accessible to all family members.