Earthquake Safety Checklist

FEMA 526 / August 2005

FEMA

nehrp

Important Numbers and Addresses

911

Call 911 for emergencies

Your family may not be together when an earthquake strikes, so use the spaces below to record information that will help you communicate with one another. Remember, during the first 24 hours following a major earthquake, use your telephone only in case of an emergency.

Police telephone _____

Fire Department telephone _____

Ambulance telephone _____

_____ 's work address

_____

Telephone/cell phone _____

_____ 's work address

_____

Telephone/cell phone _____

_____ 's school

_____

Telephone/cell phone _____

School policy: ❑ Hold student ❑ Release student

_____ 's school

_____

Telephone/cell phone _____

School policy: ❑ Hold student ❑ Release student

Name and telephone/cell phone number of an out-of-town relative or friend who can act as a point-of-contact for separated family members:

_____

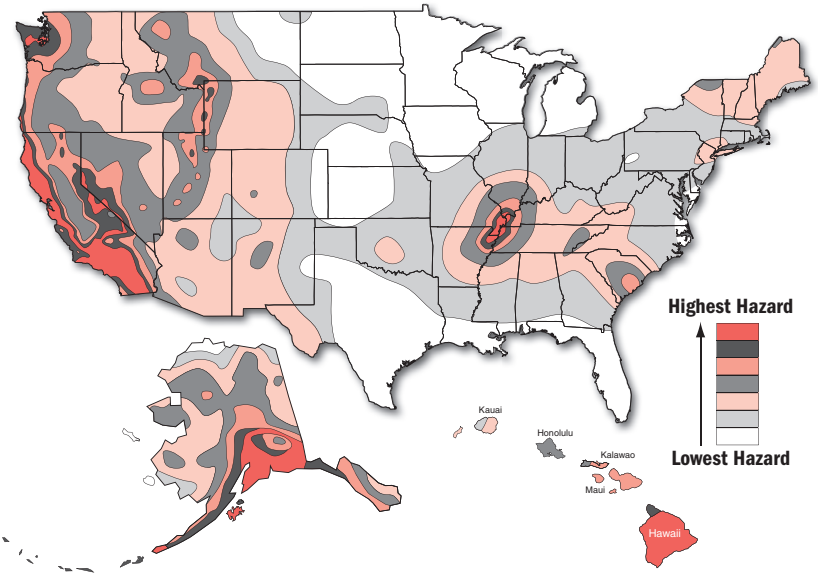
_____

Location of Disaster Supplies Kit:

_____

_____

Earthquake Hazards in the United States



Based on U.S. Geological Survey National Seismic Hazard Map for the Coterminous United States (http://eqhazmaps.usgs.gov/html/map_graphic.html).

Are You Prepared for the Next Earthquake?

This booklet is designed to help you and your family plan for and survive a major earthquake. By taking action to be prepared, you can lessen the impact of an earthquake on your family. Set aside some emergency supplies, and teach your family what to do at home during and after a disaster. You could be without help for up to 72 hours, so learn to cope for at least that long.

Movement of the ground is seldom the actual cause of death or injury. Most casualties result from partial building collapse and falling objects and debris, like toppling chimneys, falling bricks, ceiling plaster, and light fixtures. Many of these conditions are easily preventable.

Because earthquakes occur without warning, it's important to take steps now to prepare, so that you know what you can do and how to respond — constructive, protective action is possible.

Have on Hand for Any Emergency – Ideas for Home, Workplace, and Car

Because you don't know where you will be when an earthquake occurs, prepare a Disaster Supplies Kit for your home, workplace, and car.

❑ **Water**. Store at least 1 gallon of water per person per day and be prepared for a 72-hour period. A normally active person needs at least ½ gallon of water daily just for drinking. In determining adequate quantities, take the following into account:

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

It is recommended that you buy commercially bottled water. Keep bottled water in its original container and do not open it until you need to use it. Also, pay attention to the expiration or "use by" date.

If you choose to prepare your own containers of water, you should buy air-tight, food-grade water storage containers from surplus or camping supply stores. Before filling the containers, clean them with dish washing soap and water, and rinse them completely so that there is no residual soap. Water stored in your own containers should be replaced about every 6 months.

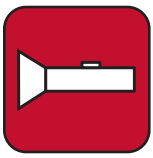
In addition to water, have purification tablets such as Halazone and Globaline, but be sure to read the label on the bottle before using the tablets.

❑ **Food**. It's always a practical idea to keep a supply of non-perishable food on hand that can be rotated into your diet and replenished on a regular basis. Have a sufficient supply

of canned or dehydrated food, powdered milk, and canned juices for at least 72 hours. Dried cereals and fruits and non-salted nuts are good sources of nutrition. Keep the following points in mind:

- Avoid foods that will make you thirsty. Choose salt-free crackers, whole grain cereals, and canned goods with high liquid content.
- Stock foods that do not require refrigeration, cooking, water, or special preparation. You may already have many of these on hand.
- Remember to include foods for infants and special dietary needs.

You should also have kitchen accessories and cooking utensils, especially a manual can opener.



❑ **Flashlights and spare batteries**. Keep a flashlight beside your bed, at your place of work, and in your car. Do not use matches or candles after an earthquake until you are certain that no gas leaks exist.

❑ **Portable, battery-powered radio or television and spare batteries**. Most telephones will be out of order or used for emergency purposes, so radios will be your best source of information. You may also want to have a battery-powered CB or other two-way radio.

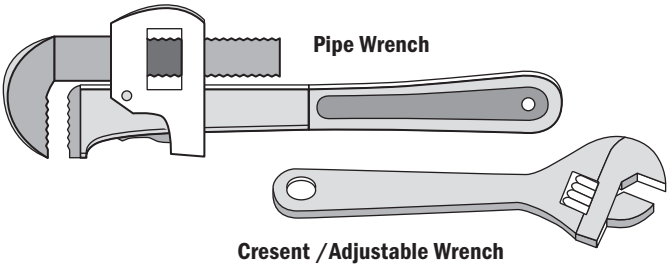
❑ **First aid kit and manual**. Keep a first aid kit at home and in your car. Also, have a manual such as *Standard First Aid & Personal Safety* by the American Red Cross. Have members of your household take basic first aid and CPR courses.

❑ **Fire extinguishers**. Keep a fire extinguisher at home and in your car. Some extinguishers are good only for certain types of fires — electrical, grease, or gas. Class ABC extinguishers are designed for safe use on any type of fire. Your fire department can show you how to use an extinguisher properly.

❑ **Special needs**. Keep a supply of special needs items, such as medications, extra eyeglasses, contact lens solutions, hearing aid batteries, items for infants (formula, diapers, bottles, and pacifiers), sanitation and hygiene items (moist towelettes and toilet paper), and any items unique to your family's needs.

❑ **Important papers and cash**. Be sure to have a supply of cash for use if ATMs, banks, and credit card systems are not operating. Also, keep copies of credit and identification cards and important documents, such as insurance policies and financial records.

❑ **Tools**. In addition to a pipe wrench and crescent wrench (for turning off gas and water valves), you should have a lighter, a supply of matches in a waterproof container, and a whistle for signaling rescue workers.



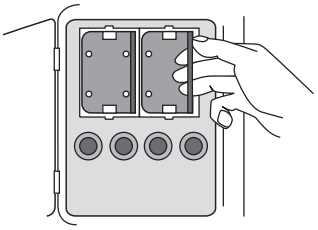
❑ **Clothes**. If you live in a cold climate, you must think about warmth. You might not have heat after an earthquake. Think about your clothing and bedding supplies. Be sure to have one complete change of clothing and shoes per person, including the following:

- jacket or coat
- long pants
- long sleeve shirt
- sturdy shoes
- hat, mittens or gloves, and scarf
- sleeping bag or warm blanket (per person)

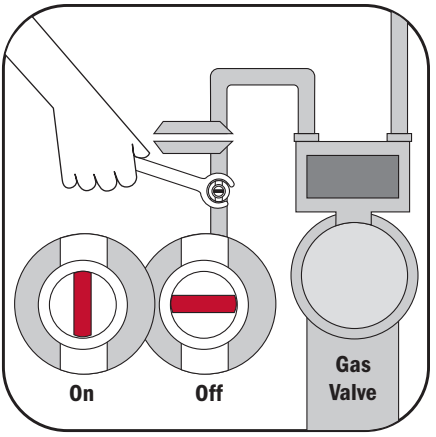
❑ **Pet needs**. Identify a shelter area for your pet, gather the necessary supplies, ensure that your pet has proper ID and up-to-date veterinarian records, and make sure you have a pet carrier and a leash.

Home Preparedness

In the event of an earthquake, you may be instructed to shut off the utility services at your home. Teach responsible members of your family how to turn off the gas, electricity, and water at valves and main switches. Consult your local utilities if you need more information.

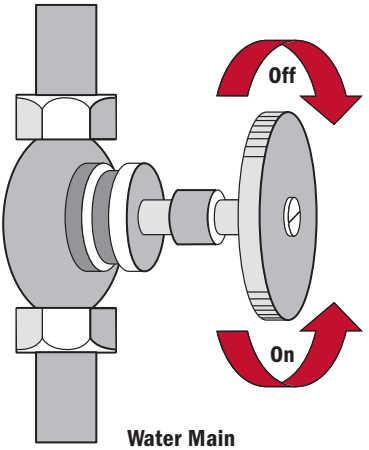


Pull-out Electrical Cartridge Fuses



Electrical Circuit Breaker

Label the water shut-off valve, found where water enters the house, and main water shut-off valve, found with meter in a concrete box in the sidewalk or yard.



Water Main

Caution: Do not shut off gas unless an emergency exists. If gas is ever turned off, a professional must restore service.

Earthquake Hazard Hunt

You can identify potential dangers in your home by conducting an earthquake hazard hunt. Foresight and common sense are all that are needed as you go from room to room and imagine what would happen in an earthquake.

Some possible hazards are:

- Tall, heavy furniture that could topple, such as bookcases, china cabinets, or modular wall units.

- Water heaters that could be pulled away from pipes and rupture.
- Appliances that could move enough to rupture gas or electrical lines.
- Hanging plants in heavy pots that could swing free of hooks.
- Heavy picture frames or mirrors over a bed.
- Latches on kitchen or other cabinets that will not hold the door closed during shaking.
- Breakables or heavy objects that are kept on high or open shelves.
- A masonry chimney that could crumble and fall through an unsupported roof.
- Flammable liquids, like painting or cleaning products, that would be safer in a garage or outside shed.

Take steps to correct these hazards — secure or relocate heavy items as appropriate.

Family Earthquake Drill

It's important to know where you should go for protection when your house starts to shake. By planning and practicing what to do before an earthquake occurs, you can condition yourself and your family to react correctly and spontaneously when the first jolt or shaking is felt. An earthquake drill can teach your family what to do in an earthquake.

- Each family member should know safe spots in each room.
- Safe spots: The best places to be are under heavy pieces of furniture, such as a desk or sturdy table; under supported archways; and against inside walls.
- Danger spots: Stay away from windows, hanging objects, mirrors, fireplaces, and tall, unsecured pieces of furniture.
- Reinforce this knowledge by physically placing yourself in the safe locations. This is especially important for children.
- In the days or weeks after this exercise, hold surprise drills.
- Be prepared to deal with what you may experience after an earthquake — both physically and emotionally.

How To Ride Out the Earthquake

Limit your movements during an earthquake to a few steps to a nearby safe place. Stay indoors until the shaking has stopped and you are sure it is safe to leave.

If you are indoors:

- Drop, Cover, and Hold — Take cover under a sturdy desk, table, or bench, or against an inside wall, and hold on. If there is no desk or table near you, cover your face and head with your arms and crouch in an inside corner of the building.
- Stay away from glass, windows, outside doors and walls, and anything that could fall, such as lighting fixtures and furniture.
- If you are in bed when the earthquake strikes, stay there. Hold on and protect your head with a pillow, unless you are under a heavy light fixture that could fall. In that case, move to the nearest safe place.
- Stay inside until the shaking stops and it is safe to go outside. Most injuries during earthquakes occur when people are hit by falling objects while entering or leaving buildings.
- Be aware that electricity may go out or that sprinkler systems or fire alarms may turn on.
- Do not use elevators.

If you are outdoors:

- Stay there.
- Move away from buildings, trees, streetlights, and utility wires.

If you are in a moving car:

- Stop as quickly as safety permits, pull to the side of the road, and stay in the car.
- Avoid stopping near or under buildings, trees, overpasses, and utility wires.

- Do not attempt to drive across bridges or overpasses that have been damaged.
- Proceed cautiously after the earthquake has stopped, watching for road and bridge damage.

If you are trapped under debris:

- Do not light a match.
- Do not move about or kick up dust.
- Cover your mouth with a handkerchief or clothing.
- Tap on a pipe or wall so that rescuers can find you. Use a whistle if one is available. Shout only as a last resort — shouting can cause you to inhale dangerous amounts of dust.

When the Ground Stops Shaking

Check for Injuries

If anyone has stopped breathing, give mouth-to-mouth resuscitation. Stop any bleeding injury by applying direct pressure to the wound. Do not move seriously injured people unless they are in immediate danger of further injury. Cover injured persons with blankets to keep them warm.

Keep a battery-powered radio with you so you can listen for emergency updates and news reports.

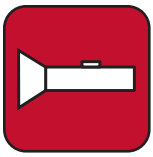
Be aware of possible tsunamis if you live in a coastal area. Tsunamis are also known as seismic sea waves. When local authorities issue a tsunami warning, assume that a series of dangerous waves is on the way. Move inland to higher ground as quickly as possible.

Do not use the telephone unless there is a severe injury. For more detailed emergency procedures, consult your first aid manual.

Wear shoes in areas near fallen debris or broken glass.

Check for Hazards

If possible, put out small fires. If not, leave your home immediately, notify the fire department if possible, and alert your neighbors.



Use a battery-powered flashlight to inspect your home. Turn the flashlight on outside, before entering, because the battery may produce a spark that could ignite leaking gas, if present.

Check gas, electrical, and water lines, and check appliances for damage. If you smell gas or see a broken line, shut off the main valve from the outside. Do not switch on the electricity again until the power company has first checked your home. Remember, if gas is turned off, a professional must restore service. Do not search for gas leaks with a lighted match.

Caution: Do not use electrical switches or appliances if gas leaks are suspected, because sparks can ignite gas from broken lines.

Switch off electrical power if there is damage to your house electrical wiring. If the situation is unsafe, leave your home and seek help.

Do not touch downed lines or broken appliances.

Check the building for cracks and damage, particularly around chimneys and masonry walls. Leave immediately if it looks like the building might collapse. Use fireplaces only if the chimney has no damage and no cracks.

Clean up spilled medicines, bleaches, and gasoline and other flammable liquids.

Check to see that water and sewage lines are intact before using the toilet. Plug bathtub and sink drains to prevent sewage backup.

Check water and food supplies. If the water is cut off, use emergency water supplies — in water heaters and melted ice cubes. Throw out all food that may be spoiled or contaminated.

Check closets and cupboards. Open doors cautiously. Beware of objects tumbling off shelves.

Use charcoal or gas grills for emergency cooking, only out of doors.

Do not use your car, unless there is an emergency. Do not go sightseeing through areas of damage. You will only hamper the relief effort. Keep streets clear for the passage of emergency vehicles.

Be prepared for aftershocks. These secondary earthquakes are usually less violent than the main quake, but they can be strong enough to cause additional damage and weaken buildings. Stay away from damage areas unless your assistance has been specifically requested by police, fire, or relief organizations.

If You Have To Evacuate

Post a message in clear view that states where you can be found. Take your Disaster Supplies Kit. List reunion points in case of separation. Such points may be the homes of neighbors, friends, or relatives; schools; or community centers. Use the blanks below to list reunion points.

1. _____

_____

_____

2. _____

_____

_____

Information about earthquake hazards and measures for reducing risks is available from the following:

FEMA / U.S. Department of Homeland Security
500 C Street, SW.
Washington, DC 20472
http://www.fema.gov

The National Earthquake Hazards Reduction Program
http://www.fema.gov/hazards/earthquakes/nehrp/

FEMA Publications:

You can order printed copies of the following publications by calling the FEMA Distribution Facility at 1-800-480-2520. As noted, some are available for download from the FEMA website.

After Disaster Strikes. FEMA 292. Available in both English and Spanish.

Are You Ready? An In-depth Guide to Citizen Preparedness, IS-22, August 2004. Full publication and individual sections available online in both English and Spanish at http://www.fema.gov/preparedness/prepare_guides_links.shtm.

Before Disaster Strikes, FEMA 291. Available in both English and Spanish.

Earthquake Home Hazard Hunt, FEMA 528, September 2005.

Food and Water in an Emergency, FEMA 477, August 2004. Available online in both English and Spanish at http://www.fema.gov/preparedness/prepare_guides_links.shtm.

Helping Children Cope with Disaster, FEMA 478, August 2004. Available online in both English and Spanish at http://www.fema.gov/preparedness/prepare_guides_links.shtm.

Preparing for Disaster for People with Disabilities and Special Needs, FEMA 476, August 2004. Available online in both English and Spanish at http://www.fema.gov/preparedness/prepare_guides_links.shtm.

U.S. Geological Survey
12201 Sunrise Valley Drive
Reston, VA 20192

For earthquake information, consult the USGS Earthquake Hazards Program at:
http://earthquake.usgs.gov/

American Red Cross
National Headquarters
2025 E Street, NW.
Washington, DC 20006
http://www.redcross.org

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