

Earthquakes

An earthquake is a sudden shaking of the earth caused by the breaking and shifting of rock beneath the earth's surface.

Earthquake can cause building and bridges to collapse, down telephone and power lines, and result in fires, explosions, and landslides. Earthquake can also cause huge ocean waves, called tsunamis, which travel long distances over water until they crash into coastal areas.



Earthquakes occur most often in states west of the Rocky Mountains, though violent earthquakes have occurred in the eastern US as well. Populations in 41 states or territories are at moderate to high risk. Scientists cannot precisely predict when earthquakes will occur.

PREPARING FOR EARTHQUAKES:

- Look for items in your home that could become a hazard in an earthquake:
 - Repair defective electrical wiring, leaky gas and inflexible utility connections. Bolt down water heaters and gas appliances.
 - Place large or heavy objects on lower shelves. Fasten shelves to walls. Brace high and top-heavy objects.
 - Store bottled foods, glass, china and other breakables on low shelves or in cabinets that can fasten shut.
 - Anchor overhead lighting fixtures.
 - Check and repair deep plaster cracks in ceilings and foundations. Get expert advice, especially if there are signs of structural defects.
 - Be sure the house is firmly anchored to its foundation
 - 2. Know where and how to shut off electricity, gas and water at main switches and valves. Check with your local utilities for instructions. Do not turn on utilities without professional help.
- Hold earthquake drills with your family:
- Locate safe spots in each room under a sturdy table or against an inside wall. Reinforce this information by physically placing yourself and your family in these locations.
- Identify danger zones in each room - near windows where glass can shatter or near book cases or furniture that can fall over. During an earthquake, each family member should move away from these danger zones to the nearest safe spot.
- Gather emergency supplies and prepare for evacuation in case earthquake damage is severe.
- Develop a plan for reuniting your family after an earthquake. Establish an out-of-state telephone contact for family members to call to let others know that they're okay.
- Review your insurance policies. Some damage may be covered even without specific earthquake insurance. Protect important home and business papers.

DURING AN EARTHQUAKE:

In an earthquake, keep calm and stay where you are. Most injuring during earthquakes occur when people are hit by falling objects when entering or exiting buildings.

- If you are indoors, take cover under a sturdy desk, table or bench, or against an inside wall, and hold on. Stay away from glass, windows, outside doors or walls and anything that could fall, such as lighting fixtures or furniture.
- If you are outdoors, stay there. Move away from buildings, street lights and utility wires.

- In a crowded public place, do not rush for a doorway - other people will have the same idea. Take cover, and move away from display shelves containing objects that can fall.
- In a high-rise building, get under a sturdy desk, away from windows and outside walls. Stay in the building on the same floor, and evacuation may not be necessary. Be aware that the electricity may go out or the sprinkler systems or fire alarms go on. Do not use elevators.
- In a moving vehicle, stop as quickly as safety permits, and stay in the vehicle. Avoid stopping near or under buildings, trees, overpasses or utility wires. Then, proceed cautiously, watching for road and bridge damage.

AFTER AN EARTHQUAKE:

- Be prepared for aftershocks. These secondary shock-waves are usually less violent than the main quake, but can be strong enough to do additional damage to weakened structures.
- Check for injuries. Do not attempt to move seriously injured persons unless they are in immediate danger of death or further injury. If you must move an unconscious person, first stabilize the neck and back, then call for help immediately.
 - If the victim is not breathing but has good pupil reflex, carefully position the victim for artificial respiration, clear the airway and commence mouth-to-mouth resuscitation.
 - Maintain body temperature with blankets. Be sure the victim does not become overheated.
 - Never try to feed liquids to an unconscious person.
- If the electricity goes out, use flashlights or battery powered lanterns. Do not use candles, matches or open flames indoors after the earthquake because of possible gas leaks.
- Wear sturdy shoes in areas covered with fallen debris and broken glass.
- Check your home for structural damage. If you have any doubts about the safety, have your home inspected by a professional before entering.
- Check chimneys for damage. The initial check should be made from a distance. Have a professional inspect the chimney for internal damage before lighting a fire.
- Cleanup spilled medicines, bleaches, gasoline and other flammable liquids inside buildings. Evacuate the building if gasoline fumes are heavy and the building is not well ventilated.
- Visually inspect utility lines and appliances for damage.
 - If you smell gas or hear a hissing or blowing sound, open a window and leave the building. Shut off the main gas valve outside, if you can. Report the leak to the gas company from a neighbor's house. Stay out of the building. If you shut off the gas supply at the main valve, you will need a professional to turn it back on.
 - If there is electrical damage, switch off all electrical power at the main fuse box or circuit breaker.
 - If water pipes are damaged, shut off the water supply at the main valve.
 - Do not flush toilets until you know that sewage lines are intact.
- If water is cut off, use water from the water heater.
- Open cabinets cautiously. Beware of objects that can fall off shelves.
- Use the phone only to report a life threatening emergency.
- Listen to news reports for the latest emergency information.
- Stay off the streets. If you must go out, watch for hazards created by the earthquake, such as fallen objects, downed electrical wires, weakened walls, bridges, roads and sidewalks.
- Stay away from damaged areas, unless your assistance has been specifically requested by police, fire or relief organizations.
- If you live inland but near dams, reservoirs, or other large bodies of water be aware of the potential for seiches (water which sloshes back and forth, much like in a bathtub.) A seiche may lead to dam failure. Listen to your radio for information regarding this and other important hazards.

OTHER HAZARDS CAUSED BY EARTHQUAKES:

Earthquakes are by in large "trouble makers" and it is the secondary hazards that can bring about the greatest damage and number of injuries or deaths. Be aware of the following hazards and prepare accordingly:

Flooding

Fire

Hazardous Materials or HazMat