



EARTHQUAKE PROCEDURES

What is an earthquake?

An earthquake is a sudden, rapid shaking of the ground 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). Buildings with foundations resting on unconsolidated landfill, old waterways, or other unstable soil are most at risk. Buildings or trailers and manufactured homes not tied to a reinforced foundation anchored to the ground are also at risk since they can be shaken off their mountings during an earthquake. Earthquakes can occur at any time of the year.

What hazards are associated with earthquakes?

When an earthquake occurs in a populated area, it may cause deaths and injuries and extensive property damage. Ground movement during an earthquake is seldom the direct cause of death or injury. Most earthquake-related injuries result from collapsing walls, flying glass, and falling objects as a result of the ground shaking, or people trying to move more than a few feet during the shaking. Much of the damage in earthquakes is predictable and preventable.

What are aftershocks?

Aftershocks are smaller earthquakes that follow the main shock and can cause further damage to weakened buildings. After-shocks can occur in the first hours, days, weeks, or even months after the quake. Be aware that some earthquakes are actually foreshocks, and a larger earthquake might occur.

What can I do to prepare before an earthquake occurs?

- Pick "safe places". A safe place could be under a sturdy table or desk or against an interior wall away from windows and bookcases, or tall furniture that could fall on you. The shorter the distance to move to safety, the less likely you will be injured. Injury statistics show that people moving as little as 10 feet during an earthquake's shaking are most likely to be injured.

- Practice drop, cover, and hold-on in each safe place. Drop under a sturdy desk or table and hold on to one leg of the table or desk. Protect your eyes by keeping your head down. Practice these actions so that they become an automatic response.
- Practice drop, cover, and hold-on at least twice a year. Frequent practice will help reinforce safe behavior. When an earthquake or other disaster occurs, many people hesitate, trying to remember what they are supposed to do. Responding quickly and automatically may help protect you from injury.
- Wait in your safe place until the shaking stops, then check to see if you are hurt. You will be better able to help others if you take care of yourself first, then check the people around you. Move carefully and watch out for things that have fallen or broken, creating hazards. Be ready for aftershocks.
- Be on the lookout for fires. Fire is the most common earthquake-related hazard, due to broken gas lines, damaged electrical lines or appliances, and previously contained fires or sparks being released.
- If you must leave a building after the shaking stops, use the stairs, not the elevator. Earthquakes can cause fire alarms and fire sprinklers to go off. You will not be certain whether there is a real threat of fire. As a precaution, use the stairs.
- If you're outside in an earthquake, stay outside. Move away from buildings, trees, streetlights, and power lines. Crouch down and cover your head. Many injuries occur within 10 feet of the entrance to buildings. Bricks, roofing, and other materials can fall from buildings, injuring persons nearby. Trees, streetlights, and power lines may also fall, causing damage or injury.
- Inform workers of the plan. Everyone in your workplace should know what to do if an earthquake occurs.
- Get training. Take a first aid class from your local Red Cross chapter. Get training on how to use a fire extinguisher. Keep your training current. Training will help you to keep calm and know what to do when an earthquake occurs.
- Discuss earthquakes with workers. Everyone should know what to do. Discussing earthquakes ahead of time helps reduce fear and anxiety and lets everyone know how to respond. Emergency Responders Collapsed structures are a common result of earthquakes. Rescue workers and emergency responders may have to enter collapsed structures to perform search and rescue activities, and it is vital that they perform their duties safely.

What is a collapsed structure?

When internal load bearing structural elements fail, a building will collapse into itself and exterior walls are pulled into the falling structure. footprint. Alternatively, if the structural failure is caused by an explosion or natural forces such as weather, the building may collapse in an outward direction resulting in a less dense and scattered debris field.

Who enters a collapsed structure?

Following a catastrophic failure of a structure, rescue workers and emergency responders may be required to enter the collapsed structure. Emergency responders include firefighters, police, emergency medical technicians, construction workers and government representatives. Emergency responders may be responsible for assisting survivors, extinguishing fires, shutting off utilities, assessing structural instabilities, shoring-up safe paths into the structure and assessment of other hazards such as airborne contaminants. Rescue workers such as Urban Search and Rescue Teams focus on finding survivors and later removing victims from collapsed structures.

Earthquake Procedures

In the event of an earthquake:

- During the shaking, DROP – COVER – HOLD. Protect yourself by dropping to the floor and taking cover under a desk, sturdy table or other piece of furniture. Hold on to whatever you are under. If taking cover under a sturdy piece of furniture is not possible, get into a corner and, facing out, bring your knees and hands up to protect yourself. Stay away (and face away) from windows (do not stand in a doorway because you are more exposed to flying debris). Stay away from anything that can shatter or fall on you (light fixtures, bookshelves, etc.). If possible, predetermine a safe location in which to take cover, prior to an earthquake.
- Do not leave cover until the shaking has completely stopped.
- After a major shock, Emergency Personnel will direct you when and where to evacuate (a relocation to another internal portion of the building) (normally to the lowest safe floor in the office building). REMEMBER, additional shocks or tremors may occur.
- If required to evacuate, proceed to the designated assembly area outside as directed by Emergency Personnel. If you require assistance to evacuate, proceed to the designated Area of Refuge and wait for assistance from emergency personnel.
- If fire occurs, activate the nearest fire alarm pull station as the system may still be functional. Follow the office building's fire and evacuation procedures.
- If you are forced out of the building by a fire or other hazardous event, remain calm. Do not run outdoors. Watch for falling debris and electrical wires when leaving the building.
- Report any missing persons to Emergency Personnel, as they will relay information to building staff and the authorities.
- Telephones are to be reserved for emergency use only.

If in a moving vehicle:

- Stop as quickly as safety permits and stay in the vehicle. Avoid stopping near or under buildings, trees, overpasses, and utility wires.
- Proceed cautiously once the earthquake has stopped. Avoid roads, bridges, or ramps that might have been damaged by the earthquake.

Source:

Emergency Preparedness and Response - **OSHA**

<http://www.osha.gov/SLTC/emergencypreparedness/guides/earthquakes.html>