

EARTHQUAKE



One of the most frightening and destructive phenomena of nature is a severe earthquake and its terrible aftereffects.

TERMS TO KNOW

Earthquake

A sudden slipping or movement of a portion of the earth's crust, accompanied and followed by a series of vibrations.

Aftershock

An earthquake of similar or lesser intensity that follow the main earthquake.

Fault

The fracture across which displacement has occurred during an earthquake. The slippage may range from less than an inch to more than 10 yards in a severe earthquake.

Epicenter

The place on the earth's surface directly above the point on the fault where the earthquake rupture began. Once fault slippage begins, it expands along the fault during the earthquake and can extend hundreds of miles before stopping.

Seismic Waves

Vibrations that travel outward from the earthquake fault at speeds of several miles per second. Although fault slippage directly under a structure can cause considerable damage, the vibrations of seismic waves cause most of the destruction during earthquakes.

Magnitude

The amount of energy released during an earthquake, which is computed from the amplitude of the seismic waves. A magnitude of 7.0 on the Richter Scale indicates an extremely strong earthquake. Each whole number on the scale represents an increase of about 30 time more energy released than the previous whole number represents. Therefore, an earthquake measuring 6.0 is about 30 times more powerful than one measuring 5.0.

An earthquake is a sudden movement of the earth, caused by abrupt release of strain that has accumulated over a long time. For hundreds of millions of years, the forces of plate tectonics have shaped the earth, as the huge plates that form the earth's surface slowly move over, under and past each other. Sometimes, the movement is gradual. At other times, the plates are locked together, unable to release the accumulating energy. When the accumulated energy grows strong enough, the plates break free. If the earthquake occurs in a populated area, it may cause many deaths and injuries and extensive property damage.



The following are things you can do to protect yourself, your family, and your property in the event of an earthquake:

Install flexible pipe fittings to avoid gas and water leaks. Flexible fittings are more resistant to breakage.

Locate safe spots in each room under a sturdy table or against an inside wall. Reinforce this information by moving to these places during each drill.

Hold earthquake drills with your family members: **Drop, cover and hold on!**

During an Earthquake:

Minimize 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 exiting is safe.

Indoor

Take cover under a sturdy desk, table or bench, or against an inside wall and hold on. If there isn't a table or desk 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 or furniture.

Stay in bed--if you are there when the earthquake strikes--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.

Before an Earthquake:

Repair defective electrical wiring, leaky gas lines and inflexible utility connections. Get appropriate professional help. Do not work with gas or electrical lines yourself.

Bolt down and secure to wall studs the water heater, refrigerator, furnace, and gas appliances. Install a shut-off valve that is triggered by strong vibrations.

Place large or heavy objects on lower shelves. Fasten shelves, mirrors, and large picture frames to walls. Brace high and top-heavy objects.

Store bottled foods, glass, china, and other breakables on low shelves or in cabinets that fasten shut.

Anchor overhead lighting fixtures.

Be sure the residence is firmly anchored to its foundation.

