

# Earthquakes

## Background

Earthquakes can happen at anywhere, any time, and are as yet not entirely predictable.

An earthquake is a sudden, rapid shaking of the earth caused by the breaking and shifting of rock beneath the earth's surface. The shaking can cause buildings and bridges to collapse, disrupt gas, electric, and phone service, and sometimes trigger landslide, avalanches, flash floods, fires, and huge, destructive ocean waves called tsunamis.

The shaking can knock buildings off their foundations if they're not tied to a reinforced foundation anchored to the ground. Buildings with foundations resting on unconsolidated landfill, old waterways or other unstable soil are at greatest risk.

## Securing a Home

Identifying potential hazards ahead of time and some planning can reduce the dangers of serious injury or loss of life from an earthquake.

Fasten shelves securely to walls

Place large or heavy objects on lower shelves

Store breakable items such as bottled foods, glass and china in low, closed cabinets with latches.

Hang heavy items such as pictures and mirrors away from beds, couches and anywhere people sit.

Brace overhead light fixtures.

Repair defective electrical wiring and leaky gas connections.

Strap the water heater to the wall studs and bolt it to the floor.

Repair any deep cracks in ceilings or foundations. If there are signs of structural defects contact an expert.

Identify

- safe places in each room.

- Under sturdy furniture

- Against an inside wall

- Away from glass or heavy bookcases

Locate safe places outdoors

- In the open away from buildings, trees, utilities lines, overpasses

Make sure all family members know how to respond after an earthquake.

Teach everyone in the house how and when to turn off gas, electricity, and water and to call 911

Have a disaster kit ready

Develop an emergency communication plan (how to contact each other.

Identify an out of state friend or family member to call and check in with.

## ***During an Earthquake***

Indoors:

Take cover under a heavy piece of furniture or against an inside wall and hold on.  
Stay inside - do not try to leave the building

#### Outside

Move into the open, away from buildings, street lights and utility wires.  
Once in the open, stay there until the shaking stops

#### In a moving vehicle

Stop quickly, but stay in the vehicle  
Move to a clear area away from buildings, trees, overpasses or utility wires.  
Once shaking has stopped, proceed with caution.  
Avoid bridges or ramps that may have been damaged by the quake

#### ***After the Earthquake***

Help injured or trapped persons  
Check on neighbors  
Stay out of damaged buildings  
Use the telephone for emergency calls only  
Clean up spilled medicines, bleaches, gasoline or other flammable liquids - leave the area if gas or fumes from other chemicals are detected.  
Inspect the entire length of chimneys carefully for damage

#### ***Pets after an Earthquake***

The behavior of pets may change dramatically after an earthquake. Normally quiet and friendly cats and dogs may become aggressive or defensive. Watch animals closely. Leash dogs and place them in a fenced yard.

#### ***Checking a Home After an Earthquake***

Gas leaks and damage to the electrical system, sewer or water line are all possible after an earthquake. Homeowners should:  
Turn off gas at the main valve if the smell of gas, a blowing or hissing noise is detected, leave the house immediately. A professional is needed to turn the gas back on.  
If sparks, broken or frayed wires are present or if insulation smells hot, turn off the electricity at the main fuse box or circuit breaker panel. Do not step in water to get to the fuse box or circuit breaker panel. Call an electrician.  
Avoid using the toilet if sewer line damage is suspected. Call a plumber.  
If water pipes are damaged, contact the water company and do not use water from the tap.

#### ***Earthquake Preparedness***

Investing in preventive steps will help reduce the impact of future earthquakes.  
Repair deep plaster cracks in ceilings and foundations  
Anchor overhead lighting fixtures to the ceiling  
Follow local seismic building standards

Adapted from The Disaster Handbook University of Florida Cooperative Extension Service