

What happens during an earthquake?

CLIMATE SMART

EARTHQUAKE SAFETY



Noise

An earthquake announces its onset with a rumbling that grows to a roar, like the sound of a heavy freight train approaching at high speed or a low-flying passenger jet. The earth will start to shake, perhaps violently, for anywhere from 15 seconds to longer than five minutes. Fire and burglar alarms will likely go off, and buildings may creak and groan.

Movement

During an earthquake, there could be violent shaking or some sudden thumps. Light fixtures will sway, and furniture will shake and start to move across the floor. Tall, unsupported bookshelves and filing cabinets may fall over, and unsecured items like televisions and china may fall from their shelves.

What to do during an earthquake

Earthquakes happen without warning, and may be so strong that you will not be able to run or crawl. You will probably be knocked to the ground. The best way to protect yourself is to immediately “drop, cover and hold on.”

Many studies of injuries and deaths caused by earthquakes in the US over the past several decades show that you are much more likely to be injured by falling or flying objects—such as TVs, lamps, broken glass and bookcases—than to be killed in a collapsed building.

The “drop, cover and hold on” method is the best way to protect yourself from these kinds of injuries. Do not panic, do not run outside; the safest place for you is to be in a secure area until the earthquake stops.

How to drop, cover and hold on:

Drop: Drop to the ground (before the earthquake knocks you down).

Cover: Take cover by getting under a sturdy desk or table.

Hold on: Grab the legs of the desk or table, and hold on until the shaking stops.

An earthquake can be a scary experience, with a lot of loud noise and unfamiliar movement. If you know what to expect during an earthquake, you will be less afraid, making it easier to keep yourself and your family safe.





If there are no tables or desks near you, do not try to run to another room to get under a table. Instead, stay where you are, cover your face and head with your arms, and crouch in an inside corner of the room.

If you are caught in an elevator, press all the floor buttons and get off at the first stop. If the elevator stops between floors, use the emergency phone or any other means to call for help. Elevators are unlikely to snap their cables and plunge down. Multiple cables and counter-balances are designed to prevent exactly that kind of accident, so try not to panic.

If you are in a parkade on foot, crouch down against a solid wall or pillar and protect your head with a briefcase, shopping bag or anything else at hand. If you are in a car, stop where you are—do not try to race for the exit—and get down as low as possible.

If heavy debris falls while you are in a car, try to get lower than the level of the dashboard.

Should an earthquake occur when you are inside a building, you should expect at least some broken glass and debris. Studies show that keeping the blinds down on windows and doors will help to keep debris and glass from falling inwards onto you or other surfaces you may traverse.

What to do after an earthquake

- Be aware of aftershocks, which can occur minutes, hours or even days after the earthquake.
- Check yourself and others for injuries, and give first aid to anyone who needs it.
- Check your water, gas and electric lines for damage; if damaged, shut off the valves.
- Check for the smell of gas. If you smell gas, open all the windows and doors, leave immediately, and report it to the authorities (use someone else's phone if yours is not available).
- Turn on a radio for updates.
- Check your hardwired telephone to ensure it has not been knocked off its cradle.
- Do not use the phone unless it is an emergency.
- Stay out of damaged buildings.
- Be careful around broken glass and debris, and wear boots or sturdy shoes to keep it from cutting your feet.
- Be careful of chimneys as they may fall on you.
- Stay away from beaches, as tsunamis sometimes hit after the ground has stopped shaking.
- Stay away from damaged areas.
- If you are at school or work, follow the emergency plan or the instructions of the person in charge.
- Expect aftershocks, which will be less strong than the earthquake but can still cause additional damage.

Do not try any of the following methods during an earthquake:

Do not stand in a doorway—In modern homes, doorways are no stronger than the rest of the building. They also cannot protect you from falling or flying objects.

Do not run outside—Trying to run during an earthquake is dangerous. The ground is moving, which can cause you to fall and hurt yourself on debris or glass on the ground. At the same time, glass, bricks and other building materials may be falling. It is much safer to stay inside and get under a table.

Do not follow the “triangle of life” method—The “triangle of life” is a controversial theory about how to survive a major earthquake. This method advises against taking shelter under a table and has been discredited by many leading experts.