

# **EARTHQUAKES**

Earthquakes are sudden rolling or shaking events caused by movement under the earth's surface. Earthquakes happen along cracks in the earth's surface, called fault lines, and can be felt over large areas, although they usually last less than one minute. Earthquakes cannot be predicted — although scientists are working on it!

Earthquakes can happen at any time of the year.

## **During An Earthquake**

If you are inside a building:

- Stay where you are until the shaking stops. Do not run outside. Do not get in a doorway as this does not provide protection from falling or flying objects, and you may not be able to remain standing.
- Drop down onto your hands and knees so the earthquake doesn't knock you down. Drop to the ground (before the earthquake drops you!)
- Cover your head and neck with your arms to protect yourself from falling debris.
- If you are in danger from falling objects, and you can move safely, crawl for additional cover under a sturdy desk or table.
- If there is low furniture or an interior wall or corner nearby, and the path is clear, these may also provide some additional cover.
- Stay away from glass, windows, outside doors and walls, and anything that could fall, such as light fixtures or furniture.
- Hold on to any sturdy covering so you can move with it until the shaking stops. Stay where you are until the shaking stops.
- If getting safely to the floor to take cover won't be possible.

Identify an inside corner of the room away from windows and objects that could fall on you. People who use wheelchairs or other mobility devices should lock their wheels and remain seated until the shaking stops. Protect your head and neck with your arms, a pillow, a book, or whatever is available.

- If you are in bed when you feel the shaking:

If you are in bed: Stay there and Cover your head and neck with a pillow. At night, hazards and debris are difficult to see and avoid; attempts to move in the dark result in more injuries than remaining in bed.

- If you are outside when you feel the shaking:

If you are outdoors when the shaking starts, move away from buildings, streetlights, and utility wires. Once in the open, “Drop, Cover, and Hold On.” Stay there until the shaking stops. This might not be possible in a city, so you may need to duck inside a building to avoid falling debris.

- If you are in a moving vehicle when you feel the shaking

If you are in a moving vehicle, stop as quickly and safely as possible 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 the earthquake may have damaged.

## **After an Earthquake**

- When the shaking stops, look around. If there is a clear path to safety, leave the building and go to an open space away from damaged areas.

- If you are trapped, do not move about or kick up dust.
- If you have a cell phone with you, use it to call or text for help.
- Tap on a pipe or wall or use a whistle, if you have one, so that rescuers can locate you.
- Once safe, monitor local news reports via battery operated radio, TV, social media, and cell phone text alerts for emergency information and instructions.
- Be prepared to “Drop, Cover, and Hold on” in the likely event of aftershocks.

## **Earthquakes - What to Do?**

Everyone has a responsibility to protect their homes and their families. Since no one can predict with certainty when an earthquake will happen, it is important to get prepared in advance. This involves three basic steps:

1. Find out what to do before, during, and after an earthquake.
2. Make a family emergency plan, so that everyone knows what to do, and where to go in case of an emergency.
3. Get an emergency kit, so that you and your family can be self-sufficient for at least 72 hours.

Planning for an earthquake will also help prepare you for many other types of emergencies. After reading this guide, keep it in a handy spot, such as in an emergency kit.

## **What to expect during an earthquake**

### Small or moderate earthquakes

These can last only a few seconds and represent no emergency risk.

Ceiling lights may move and some minor rattling of objects may occur in your home.

You may feel a slight quiver under your feet if you are outside.

If you are close to its source, you may hear a loud bang followed by shaking.

### Large earthquakes

These can last up to several minutes and constitute a natural disaster if its epicentre is near a densely populated area, or its magnitude sufficiently large for the region.

The ground or floor will move, perhaps violently.

Whether far away or close to the source, you will probably feel shaking followed by a rolling motion, much like being at sea.

If you are far away from the source, you might see swaying buildings or hear a roaring sound.

You may feel dizzy and be unable to walk during the earthquake.

If you live in a high rise or a multi-storey building, you may experience more sway and less shaking than in a smaller, single-storey building. Lower floors will shake rapidly, much like residential homes. On upper floors, movement will be slower but the building will move farther from side to side.

Furnishings and unsecured objects could fall over or slide across the floor or be thrown with damaging force across the room.

Unsecured light fixtures and ceiling panels may fall.

Windows may break.

Lights and power may go off.

AVOID the following in an earthquake

Doorways. Doors may slam shut and cause injuries.

Windows, bookcases, tall furniture and light fixtures. You could be hurt by shattered glass or heavy objects.

Elevators. If you are in an elevator during an earthquake, hit the button for every floor and get out as soon as you can.

Downed power lines – stay at least 10 metres away to avoid injury.

## **During an earthquake**

Wherever you are when an earthquake starts, take cover immediately. Move a few steps to a nearby safe place if need be. Stay there until the shaking stops.

If you are indoors: “DROP, COVER AND HOLD ON”

Stay inside.

Drop under heavy furniture such as a table, desk, bed or any solid furniture.

Cover your head and torso to prevent being hit by falling objects.

Hold on to the object that you are under so that you remain covered. Be prepared to move with the object until the shaking has finished.

If you can't get under something strong, or if you are in a hallway, flatten yourself or crouch against an interior wall and protect your head and neck with your arms.

If you are in a shopping mall, go into the nearest store. Stay away from windows, and shelves with heavy objects.

If you are at school, get under a desk or table and hold on. Face away from windows.

If you are in a wheelchair, lock the wheels and protect the back of your head and neck.

If you are outdoors - Stay outside.

Go to an open area away from buildings. The most dangerous place is near exterior walls.

If you are in a crowded public place, take cover where you won't be trampled.

If you are in a vehicle ; Pull over to a safe place where you are not blocking the road. Keep roads clear for rescue and emergency vehicles.

Avoid bridges, overpasses, underpasses, buildings or anything that could collapse.

Stop the car and stay inside.

Listen to your car radio for instructions from emergency officials.

Do not attempt to get out of your car if downed power lines are across it. Wait to be rescued.

Place a HELP sign in your window if you need assistance.

If you are on a bus, stay in your seat until the bus stops. Take cover in a protected place. If you can't take cover, sit in a crouched position and protect your head from falling debris.

## **After an earthquake**

- Stay calm. Help others if you are able.
- Be prepared for aftershocks.
- Listen to the radio or television for information from authorities. Follow their instructions.
- Place corded telephone receivers back in their cradles; only make calls if requiring emergency services.
- Put on sturdy shoes and protective clothing to help prevent injury from debris, especially broken glass.
- Check your home for structural damage and other hazards. If you suspect your home is unsafe, do not re-enter.

- **Unplug appliances and broken lights to prevent fire starts when the power is restored.**
- **Stay away from brick walls as they may be damaged or weakened and could collapse during aftershocks.**
- **If you have to leave your home, take an emergency kit and other essential items with you. Post a message in clear view, indicating where you can be found. Do not waste food or water as supplies may be interrupted.**
- **Do not light matches or turn on light switches until you are sure there are no gas leaks or flammable liquids spilled. Use a flashlight to check utilities and do not shut them off unless damaged. Leaking gas will smell like rotten eggs.**
- **If your home is equipped with natural gas: Call your gas provider immediately to report any concerns or if you smell gas (rotten egg smell). Shut off gas valve if you know how. Once the gas is turned off, don't turn it back on. Only a licensed gas technician can turn the gas on safely.**
- **If tap water is still available immediately after the earthquake, fill a bathtub /buckets and other containers in case the supply gets cut off. If there is no running water, there may be water in the hot water tank (make sure water is not hot before touching it) and toilet reservoir (not the bowl).**
- **Do not flush toilets if you suspect sewer lines are broken.**
- **Use extreme caution with hazardous materials or spills. When in doubt, leave your home.**
- **Place a HELP sign in your window if you need assistance.**