

# Earthquakes

It is estimated that more than 1 million earthquakes occur every year. Some of these earthquakes happen in the ocean where very few people, if any, are affected. Some of the earthquakes are too small to feel. Some earthquakes, however, are destructive and cause widespread damage. The more you know about earthquakes, the better you can protect yourself from them.

## WHAT CAUSES EARTHQUAKES?

The Earth's surface is covered with many huge tectonic plates that fit together like a puzzle. These plates, made up of rock, move slowly and often bump into each other. When the plates slide into each other with enough force, the Earth's surface breaks and energy is released. This causes the earth and anything on it to shake and tremble.



## CAN EARTHQUAKES BE PREDICTED?

Scientists that study earthquakes, called seismologists, are always searching for ways to predict when and where earthquakes will happen. So far, nothing that they have tried has been completely successful at predicting when earthquakes will occur. However, seismologists can make accurate guesses at where most earthquakes will take place. Most

earthquakes occur at faults - cracks in the Earth's surface where the Earth is moving in two different directions.

For example, the state of California is well known for having many earthquakes. This is because the San Andreas Fault stretches across California. Although seismologists cannot predict when these earthquakes will happen, they know where many earthquakes will occur – around the San Andreas Fault.

## Protecting Yourself In Case of an Earthquake

### Before an Earthquake

- Make sure breakable items are in secure cabinets
- Safely secure bookshelves and picture frames to the wall

### During an Earthquake

- Find a safe place to be, where objects won't fall on you
- Drop, Cover, and Hold On

### After an Earthquake

- Be ready for aftershocks (follow up earthquakes)
- Stay out of buildings that look damaged

## STAYING SAFE IN AN EARTHQUAKE

Although many earthquakes occur around faults, they can happen almost anywhere in the world. Because of this, it is important for everybody to know how to stay safe in case of an earthquake. If an earthquake occurs, remember to "Drop, Cover, and Hold On."

Drop: Quickly find a place where you can avoid falling objects and then drop to the ground.

Cover: Cover your head and neck with a strong table or desk. If you can't find something sturdy to cover you, then find a strong wall and cover your head and neck with your hands and arms.

Hold On: Hold on to your shelter until the shaking stops.