

## EARTHQUAKES AROUND THE WORLD

There have been deadly earthquakes which struck in the past months in countries like Japan and Ecuador.

Jonathan Stewart, professor of civil and environmental engineering in the UCLA said that the occurrence of earthquakes in time is more or less a random process.

Mark Benthien, director for outreach for the Southern California Earthquake Center says that there are times when large earthquakes do trigger an earthquake somewhere else but that the Japan earthquake was certainly not large enough to trigger an earthquake in Ecuador. According to him, a quake would need to be roughly a 9.0 magnitude to trigger another one a large distance away.

### ***When's the next earthquake in the U.S.?***

While recent quakes hit internationally, people in the U.S. -- specifically the West Coast -- are at risk for one any time, experts said.

Benthien told ABC News the following: "We certainly can have large earthquakes at any time, there's no information we have that would say one is imminent. But we have expectations for up to an earthquake the size of the Ecuador earthquake [7.8 magnitude] ... on the San Andreas fault and it could happen today ... or may not happen for 50 years. But we expect it to happen."

Benthien explained that the long-term average for a large earthquake in Southern California is every 150 years -- the last large one in Southern California was Fort Tejon in 1857 -- so now we've just past that mark.

Stewart, who explained that it's possible to predict probabilities of large earthquakes over long term -- like decades -- but not short term, said up to a magnitude 8 quake could hit in Southern California and up to a magnitude 9 could hit in Oregon or Washington.

Stewart confirmed Californians' fear of the imminent "big one", as a reference to Southern California's San Andreas fault, which is very

active and moving quickly -- about 2.5 or 3 centimeters per year.

***Are people prepared?***

After the San Francisco quake in 1906, the way buildings are built have changed significantly, Stewart said. "There really was no earthquake engineering up until the 1930s, after the Long Beach earthquake in the 1930s going up to the present, we've progressively learned how to build buildings that are stronger".

San Francisco and Los Angeles have started to put policies in place that can upgrade buildings at risk of collapse, with these policies the risk of building collapses and loss of life will definitely be reduced.

Benthien said what's really key is being prepared to survive and recover when the earthquake happens. He told ABC that people need to be prepared by storing water and securing items and furniture that could fall and break in case of a quake.