

# EARTHQUAKE MYTHS



## FACT VS. FICTION

**FICTION:** *It's been raining a lot, or very hot--it must be earthquake weather!*

**FACT:** Many people believe that earthquakes are more common in certain kinds of weather. In fact, no correlation with weather has been found. Earthquakes begin many kilometers (miles) below the region affected by surface weather. People tend to notice earthquakes that fit the pattern and forget the ones that don't.

**FICTION:** *My house will be swallowed up during an earthquake.*

**FACT:** The ground moves across a fault during an earthquake, not away from it. If the fault could open, there would be no friction. Without friction, there would be no earthquake. Shallow crevasses can form during earthquake induced landslides, lateral spreads, or other types of ground failures. Faults, however, do not gape open during an earthquake.

### For more information visit:

- [www.ShakeOut.org/california](http://www.ShakeOut.org/california)
- <http://www.sbcfire.org/oes/shakeout.aspx>
- [www.EarthquakeCountry.org](http://www.EarthquakeCountry.org)

**San Bernardino County Fire**  
**Office of Emergency Services**



**FICTION:** *California will fall into the ocean.*

**FACT:** The ocean is not a great hole into which California can fall, but it is itself land at a somewhat lower elevation with water above it. It's absolutely impossible that California will be swept out to sea. Instead, southwestern California is moving horizontally northward towards Alaska as it slides past central and eastern California. The dividing point is the San Andreas fault system, which extends from the Salton Sea in the south to Cape Mendocino in the north. This 800 mile long fault is the boundary between the Pacific Plate and North American Plate. The Pacific Plate is moving to the northwest with respect to the North American Plate at approximately two inches per year (the rate your fingernails grow). At this rate, Los Angeles and San Francisco will one day (about 15 million years from now) be next-door neighbors, and in an additional 70 million years, Los Angeles residents will find themselves with an Alaska zip code!



**FICTION:** *During an earthquake you should head for the doorway.*

**FACT:** That's outdated advice. In past earthquakes in unreinforced masonry structures and adobe homes, the door frame may have been the only thing left standing in the aftermath of an earthquake. Hence, it was thought that safety could be found by standing in doorways. In modern homes doorways are no stronger than any other parts of the house and usually have doors that will swing and can injure you. **YOU ARE SAFER PRACTICING THE "DROP, COVER, AND HOLD" maneuver under a sturdy piece of furniture like a strong desk or table.** If indoors, stay there. Drop to the floor, make yourself small and get under a desk or table or stand in a corner. If outdoors, get into an open area away from trees, buildings, walls and power lines. If in a high-rise building, stay away from windows and outside walls, stay out of elevators, and get under a table. If driving, pull over to the side of the road and stop. Avoid overpasses and power lines. Stay inside your car until the shaking is over. If in a crowded public place, do not rush for the doors. Crouch and cover your head and neck with your hands and arms.

Source:  
[http://earthquake.usgs.gov/learn/topics/megaqk\\_facts\\_fantasy.php](http://earthquake.usgs.gov/learn/topics/megaqk_facts_fantasy.php)