

**Significant Earthquakes**
**Northridge, CA M6.7 -- 1994**

57 deaths  
more than 11,000 injuries  
\$40+ billion in damage

**Prince William Sound, AK, M9.2**

1964

**Landers, CA M7.3 -- 1992**

1 death - \$93 million in damage

**Humboldt, CA M6.9 -- 1992**

\$60 million in damage

**New Madrid, Missouri, M 8.1**

1911

**Loma Prieta, CA M7.1 -- 1989**

63 deaths - 3,757 injuries  
\$5.9 billion in damage

**Whittier-Narrows, M5.9 -- 1987**

8 deaths - 200 injuries  
\$358 million in damage

**New Mexico, M5 --2005**
**Arkansas, M4.1 -- 2005**
**Morgan Hill, CA M6.2 -- 1984**

27 injuries  
\$10 million in damage

**Coalinga, CA M6.4 -- 1983**

47 injuries  
\$31 million in damage

**Kern County, CA M7.7 -- 1952**

12 deaths - 18 injuries  
\$50 million in damage

**San Francisco, M8.3 -- 1906**

700-800 deaths  
\$400 million in damage

# Safety Sounds

A Monthly Safety Bulletin From SPSG Schools Group

*April is  
National Earthquake  
Preparedness month*

## Earthquakes

You hear rumbling and your house begins to shake. No matter where you live, the cause could be an earthquake. Think it's just a California problem? The first big recorded U.S. quake (in 1886) covered 2-million square miles and took 100 lives. And it happened on the East Coast. So, no matter where you live, be prepared. Locate main controls for water, gas and electricity, and know how to shut them off quickly. Keep a three-day supply of drinking water per person. And keep candles, batteries and canned food in supply. Secure things that could shake loose or fall such as water heaters or heavy bookcases. Simple things, like a battery-operated radio, could be lifesavers. April is National Earthquake Preparedness Month. Be prepared!

## What is an earthquake?

An earthquake is a sudden, rapid shaking of the Earth caused by the breaking and shifting of rock beneath the Earth's surface. For hundreds of millions of years, the forces of plate tectonics have shaped the Earth as the huge plates that form the Earth's surface move slowly over, under, and past each other. Sometimes the movement is gradual. At other times, the plates are locked together, unable to release the accumulating energy. When the accumulated energy grows strong enough, the plates break free causing the ground to shake. Most earthquakes occur at the boundaries where the plates meet; however, some earthquakes occur in the middle of plates.

## Earthquakes can occur in any state

Many people think of California as "Earthquake Country," but the state with the most major earthquakes is Alaska. The granddaddy of earthquakes was along the New Madrid Fault in Missouri where a 3-month long series of quakes in 1811--1812 included three quakes larger than a magnitude of 8. These quakes were felt over 2 million square miles.

## Emergency Information

1. The best protection during an earthquake is to get under heavy furniture such as a desk, table, or bench
2. The greatest danger exists directly outside buildings, at exits, and alongside exterior walls. Many of the 120 fatalities from the 1933 Long Beach earthquake occurred when people ran outside of buildings only to be killed by falling debris from collapsing walls.
3. Ground movement during an earthquake is seldom the direct cause of death or injury. Most earthquake-related casualties result from collapsing walls, flying glass, and falling objects.
4. Expect Aftershocks

## Preschool and School-age Children

By age three or so, children can understand what an earthquake is and how to get ready for one. Take the time to explain what causes earthquakes in terms they'll understand. Include children in family discussions and planning for earthquake safety. Conduct drills and review safety procedures.

- Show children the safest places to be in each room when an earthquake hits. Also show them all possible exits from each room.
- Use sturdy tables to teach children to Duck, Cover & Hold.
- Teach children what to do wherever they are during an earthquake (at school, in a tall building, outdoors).
- Make sure children's emergency cards at school are up-to-date.
- Although children should not turn off any utility valves, it's important that they know what gas smells like. Advise children to tell an adult if they smell gas after an earthquake.

## Activity Book

Download a free activity book at:  
[www.iinc.org/pdf/EQ03Book.pdf](http://www.iinc.org/pdf/EQ03Book.pdf)