

## 4.4 Quake Shakes Students Awake

The New Year started off rumbling with a 4.4 earthquake on Thursday, January 4, at 2:40 a.m. Centered in Berkeley near the Claremont Hotel, the quake shook people awake as far away as Monterey and San Jose, covering a span of over 150 miles.

No damage or injuries have been reported. Earthquakes of this magnitude typically hit California several times a year.

The quake originated in the Hayward Fault, which produces a large earthquake approximately every 160 years. Since it has been 150 years since its last major earthquake according to a U.S. Geological Survey, Thursday's earthquake could be a precursor for a larger one, but fortunately, there is only a 5% chance of this.

USGS has estimated that there is a one in three chance of an earthquake with a magnitude of 6.7 or greater shaking the Bay Area within the next 30 years. An earthquake of this magnitude would do much more damage than simply disrupting sleep. In comparison, the San Francisco Earthquake of 1906 had a magnitude of 7.8 and destroyed around 28,000 buildings and caused around 3,000 deaths. It also left 225,000 people homeless out of San Francisco's total population of 400,000.

In order to minimize structural damage from earthquakes, the California government passed a law in 1972 prohibiting building on fault lines. However, structures built on the faults prior to this law remain in danger of earthquakes. Two million people live directly on top of the Hayward Fault, and enormous amounts of infrastructure, including gas and power lines, BART tracks, and water systems, cross it. If an earthquake were to erupt, it would cause millions of dollars of damage and leave many people without homes or power.

Fortunately, most modern structures have been built to survive earthquakes, and families are encouraged to prepare earthquake supplies in the event of disaster. The USGC's research has shown that the chances of a large earthquake that causes significant damage occurring are slim. Building regulations and earthquake drills prepare California citizens and will help prevent catastrophe in the case of a larger earthquake hitting the area.