

## Earthquake Warning California For the General Public

### Don't Get Caught Off Guard

Earthquakes can happen in California at any time. Individuals and families living or visiting the Golden State should be appropriately prepared to react and respond quickly when an earthquake occurs, including using earthquake warnings as part of their preparedness efforts.

The California Governor's Office of Emergency Services (Cal OES) invites Californians and visitors to learn about important resources that can help them to prepare and respond when an earthquake happens. This fact sheet outlines some of the resources available through "Earthquake Warning California," California's statewide earthquake warning system, and how they can be applied in settings where Californians and visitors live, work, and play as part of a comprehensive emergency plan.

This document is meant to supplement existing emergency preparedness procedures and help all Californians to learn about available earthquake warning tools and resources to help ensure their safety. During an emergency, familiar travel routes may be blocked, gas or water left on in the home may result in secondary disasters, and access to technology may be compromised. Appropriate preparation is critical to aid all individuals to minimize injuries and other hazards.

This document is meant to supplement existing emergency preparedness procedures and help equip Californians and visitors with added resources to help ensure their safety. Individuals and families should review existing earthquake preparedness plans for work, school, travel, and other places frequently visited for full information on what to do in an emergency situation.

### Earthquake Warning California

Scientists are still unable to predict earthquakes, but thanks to new technology, individuals and organizations can potentially receive a few seconds notice to take appropriate safety precautions before an earthquake strikes. Earthquake Warning California is the first statewide earthquake warning system in the nation, and includes tools such as:

- **Wireless Emergency Alerts (WEAs)** that deliver no-cost text messages for emergency situations for earthquakes magnitude 5.0 and higher;
- **MyShake App**, a free smartphone application that provides users with an audio and visual warning for earthquakes magnitude 4.5 and higher; and

- **Android Alerts** that use the same ground sensor technology as the MyShake App and are automatically included in Android phones with updated operating systems.

Earthquake Warning California uses technology to detect earthquakes that have already started and ground motion sensors to estimate the earthquake size, location, and impact. When the estimate predicts a strong enough magnitude, the Earthquake Warning California quickly issues a warning through its various communication channels (MyShake App, etc.) to warn mobile device users nearby that shaking is about to occur. When users receive a warning, they should immediately take steps to protect themselves, such as to drop to the ground, cover their heads with their arms, and hold onto their necks with both hands until shaking stops.

### **Benefits and Applications**

Earthquake warnings can provide additional seconds for individuals to drop, cover, and hold on, and for industry sectors to potentially take life saving actions to reduce injuries and fatalities. The objective of Earthquake Warning California is to empower users to take action as soon as possible, ideally before shaking begins or becomes too intense for effective response.

Earthquake Warning California benefits for smartphone users include:

- More time to take protective cover for self
- More time to assist others to take protective cover
- Reduced injuries from shaking hazards
- Reduced post traumatic stress
- Quicker return to normal activities post-event
- Reduced need for medical or emergency services

### **Getting Prepared**

Because everyone's situation is different, it's important to develop an emergency preparedness plan that is customized for specific needs. Individuals and organizations should have a plan for what to do during and after an earthquake. They should also consider all locations where they might be in the event of an earthquake (at home, in the car, outside, etc.).

Below are five tips that can aid the general public in the preparation process:

1. **Develop an Emergency Preparedness Plan and Supply Kit.** When creating an emergency plan, think through details of everyday life and the emergency

supplies needed to address daily needs. For parents and guardians, explain to children or those being cared for what to do during and after an earthquake in case an adult is not present. Consider scheduling practice drills in different settings (on the road, indoors, outside) to practice reacting correctly and automatically in the event of an earthquake warning or when shaking begins. Keep a copy of a family plan with instructions for contacting others after an emergency in an emergency supply kit. This should also include instructions to contact others via text message if possible to avoid blocking emergency call lines. The emergency supply kit should include basic emergency supplies, but also include prescription and over the counter medication, durable medical equipment, medical records, and an emergency contact list. It should also include a radio, first-aid kit, flashlight, batteries, water, and non-perishable food. There may also be needs unique to individuals that should be accounted for when packing an emergency kit, such as hearing aid batteries or prescription glasses.

- 2. Understand and Mitigate Hazards.** Natural disasters can occur anywhere, but earthquakes are more common in certain regions in California. Secure furniture that could fall over with wall anchors and cabinets that could fly open with latches. During an earthquake, teach family members to drop to the ground, cover heads with arms, and hold onto their neck until shaking stops. People should not stand in a doorway and should stay away from large glass windows and mirrors. If people have difficulty getting onto the ground or cannot get back up without assistance, they or a caregiver should lock wheelchair or walker wheels, cover their head with their arms as much as possible, and try to remain in place. More information for individuals with disabilities can be found at [www.earthquakecountry.org/disability](http://www.earthquakecountry.org/disability). To view potential hazard areas, visit [myhazards.caloes.ca.gov](http://myhazards.caloes.ca.gov).
- 3. Download or Enable Earthquake Warning California Resources.** The MyShake App, WEAs, and Android Alerts can all provide life-saving seconds of warning to take cover before shaking starts. All family members with access to mobile phones should install the no-cost MyShake App or ensure the Android Alert system is installed if they have an Android phone. Location services must be set to “always on” for the mobile phone to connect with ground sensor technology. Warnings do not override silent and “Do Not Disturb” settings, so sound or vibrations will need to be on for the warnings to be heard or felt. Most wireless carriers offer WEA, but there may be circumstances where this service is not available.

- 4. Get Familiar with Earthquake Warnings.** Ensure that all household members know what an earthquake warning sounds and looks like, and that a warning means they should immediately take steps to protect themselves. The MyShake App includes a demo of the warning under the “Settings” tab. Individuals may have seen a WEA for other emergency instances such as Amber Alerts, wildfires, or flash flood warnings. There may be instances where an earthquake warning is issued, but no shaking is felt. Always react to a warning with the expectation that shaking will follow.
  
- 5. Share Earthquake Preparedness Resources with Others.** Preparing for an emergency today can prove invaluable when an emergency happens. It's important to share information and encourage others in the community to create an emergency preparedness plan and understand how to use available resources before an earthquake occurs. More information and resources are available at [earthquake.ca.gov](http://earthquake.ca.gov).

### **For More Information**

Earthquake Warning California is a comprehensive program of earthquake warning services managed by the California Governor's Office of Emergency Services (Cal OES). The goal of the program is to provide individuals, organizations, and communities with direct and easily accessible emergency preparedness information and resources to keep individuals and families safe in an emergency situation. Visit the Earthquake Warning California website for the latest tools, news, information, and resources: [www.earthquake.ca.gov](http://www.earthquake.ca.gov).

For information, questions, or comments relating to this fact sheet, email Cal OES at: [earthquakeinfo@caloes.ca.gov](mailto:earthquakeinfo@caloes.ca.gov)