

# EARTHQUAKE WARNING CALIFORNIA



## Earthquake Warning California

Scientists are still unable to predict earthquakes, but thanks to new technology, individuals and organizations can potentially receive a few seconds of notice to take appropriate safety precautions before an earthquake strikes. Earthquake Warning California utilizes the California Integrated Seismic Network, which is a partnership between Cal OES, United States Geological Survey (USGS), UC Berkeley, the California Institute of Technology, and the California Geological Survey.

The system uses ground-motion sensors to detect earthquakes that have already started and estimates their size, location, and impact. When it detects a significant magnitude, the system issues a ShakeAlert® Message, providing a warning before shaking begins.

To receive earthquake warnings, individuals and families can download the MyShake App and ensure their phone settings are adjusted to receive emergency alerts, including:

## DON'T GET CAUGHT OFF GUARD

Earthquakes can happen in California at any time and with new technology, warning is possible! Public safety organizations and first responders (including but not limited to police, fire fighters, emergency medical technicians (EMTs), and search & rescue) 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 first responders to learn about how they can receive warning before shaking is felt with Earthquake Warning California, a comprehensive program, that includes tools and resources to help warn Californians and visitors as soon as shaking is detected.

This document is intended to supplement existing emergency preparedness procedures. Please review existing organizational earthquake preparedness plans for full instructions on how to proceed during an emergency.

- **Wireless Emergency Alerts (WEAs):** No-cost text messages for emergency situations (magnitude 5.0 or higher and Modified Mercalli Intensity IV shaking);
- **MyShake App:** Free smartphone app that provides iPhone and Android users with audio and visual warnings (magnitude 4.5 or higher and Modified Mercalli Intensity III shaking). Available in the Apple App and Google Play stores; and
- **Android Earthquake Alerts:** Android phones with updated operating systems are automatically subscribed to Android Earthquake Alerts, which uses the same technology as the MyShake App.

## Benefits and Applications

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Earthquake Warning California can give public safety organizations time to drop, cover, and hold on, and decrease the likelihood of injury from falling equipment. Firefighters in the field may enter a dangerous environment and be susceptible to intense shaking, either from an earthquake or an aftershock, that could result in injury or fatality. Additionally, without an automatically activated garage door system, there is the potential for a firetruck to be struck in the station if the doors sustain damage during an earthquake. This would prevent firefighters from responding effectively to an emergency.

A fire station can incorporate Earthquake Warning California resources as follows:

- Install automatic activation system for garage doors to open upon receiving an earthquake warning
- Connect earthquake warnings to station alarm systems to provide immediate warning to firefighters to drop, cover, and hold on
- Install an automatic activation system for backup generators if loss of power occurs
- Add Earthquake Warning California technology to mobile devices for first responders in the field
- Integrate Earthquake Warning California technology into dashboards for firefighters in transit to give drivers time to slow down and stop fire trucks until shaking subsides

## Getting Campus, Faculty, Staff, and Students Prepared

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When earthquakes happen, rapid reporting allows public and emergency managers to assess potential impacts, determine what type of emergency response will be most effective, and coordinate emergency response efforts. Community preparedness is a key priority in lessening the impact of earthquakes and other natural disasters. Below are five tips that can aid in the preparation process:

- 1. Understand Local Hazard Vulnerabilities.** Assess the community's vulnerability to hazards and prioritize preparedness measures for specific areas. Identify specific infrastructure that could pose a risk in an earthquake, such as overpasses, bridges, gas lines, communication systems, utilities, water services, or construction sites. Damage to infrastructure along transit pathways may severely restrict the abilities of police, fire, and emergency medical services to move quickly after an earthquake.
- 2. Assess Current Earthquake Response Plans.** Determine what day-to-day operations involve and how an earthquake might affect these functions. For example, earthquakes may occur in conjunction with a wildfire, public health crisis, heat wave, or other emergency event. During an emergency, normal communication lines may be interrupted or inundated. Have a plan in place to keep communication lines open during a natural disaster with a mass impact and how to deploy the appropriate teams to provide assistance following an earthquake.
- 3. Download the MyShake App and Adjust Phone Settings.** The MyShake App, Android Earthquake Alerts, and WEAs can supplement existing warning systems and give first responders time to take cover before shaking starts. Organizations should demonstrate to employees what an earthquake warning sounds and looks like. Ensure staff knows how to enable mobile devices to get earthquake warnings, such as turning phone location settings to "always on."
- 4. Schedule Drills.** Public safety officers and first responders should be familiar with Earthquake Warning California tools and how to use them. Determine what actions are appropriate for each public safety sector to take if a warning is issued, such as opening fire doors or safely pulling over a police car to take cover.
- 5. Download the MyShake App and Stay Informed.** Public safety organizations and first responders are often on the forefront of community relations efforts and can have an outsized impact in helping the public learn about and adopt resources that can keep them safe in an emergency. Consider adding Earthquake Ready California resources to community presentations on public safety, including how to install or enable mobile technology, and actions to take if they receive an earthquake warning.

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### **For more information:**

Earthquake Warning California is managed by Cal OES. It provides individuals, organizations, and communities with easily accessible earthquake warning and emergency preparedness information, as well as resources. For the latest news and resources, visit [earthquake.ca.gov](http://earthquake.ca.gov). Send questions or comments regarding this fact sheet to [earthquakeinfo@caloes.ca.gov](mailto:earthquakeinfo@caloes.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).