

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! K-12 education 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 schools and teachers to learn about how they can receive warning before shaking is felt with California's comprehensive earthquake warning program, "Earthquake Warning California." The program 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 school 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

Certain K-12 educational settings pose above average risks during an earthquake, including science labs, libraries, storage areas, and buildings known to have structural hazards. Younger and special needs children are especially at risk because they may take longer to process situations before protecting themselves. Most public schools in California are already required to conduct annual earthquake training drills for students and staff, which could easily incorporate the earthquake alert system. Most schools are also equipped with a Public Address (PA) system that can communicate verbal messages and announcements in an emergency.

K-12 schools can incorporate Earthquake Warning California resources as follows:

- Integrate a hard-wired interface between the earthquake warning system and the school's PA or alarm system
- For special needs students, consider additional warning tools such as television screens or blinking lights
- In the event of an earthquake warning, train teachers and staff to shout to students to drop, cover, and hold, and do the same themselves
- If possible, office staff should use the PA system to warn students and others on the premises to take cover if a warning is issued
- If children are in a moving bus, the driver or other relevant staff should take steps to safely slow and stop the bus (see the "Transportation" fact sheet for more information on steps for transit to take in an emergency situation).

Getting Campus, Faculty, Staff, and Students Prepared

Careful and thorough planning can help ensure the safety of students and staff if an earthquake occurs.

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

- 1. Building Safety & Securing Furniture.** Ensure school buildings meet current earthquake protection standards. Anchor shelves, audio-visual equipment, and other heavy objects to the wall. Make sure no classroom decorations are in places that can fall and injure students or teachers. For at-home learning, ensure students are aware of places to take shelter in the event of an earthquake, such as under a sturdy table. Do not stand in doorways.
- 2. Create An Emergency Plan With Emergency Supplies.** Each school should have a clear emergency plan that all staff, students, and parents understand. The Department of Education sponsors the [Readiness and Emergency Management for Schools \(REMS\)](#) website, which includes free resources and links to publications to aid in developing a [school-wide emergency plan](#). Consider how to tailor instructions for at-home learning environments.
- 3. Practice Earthquake Drills and Evacuation Plans.** Students, staff, and teachers should be familiar with safety procedures such as to drop, cover, and hold on. A carefully planned and practiced evacuation plan can not only help administrations figure out the process, but prepare students to quickly and safely evacuate during an emergency. If schools don't already have a practice drill planned, set aside a day for an earthquake drill. Adapt drills for at-home learning as necessary.
- 4. Download the MyShake App and Adjust Phone Settings.** Schools typically have a strong warning system in place and are equipped with automatic alarms to contact emergency services. The MyShake App, Android Alerts, and WEAs can supplement existing warning systems and give students and teachers time to take cover before shaking starts. Demonstrate to students what an earthquake warning sounds and looks like. Teachers, students, or other instructors with access to mobile phones should be familiar with enabling phones to sound a warning in an emergency situation, such as ensuring their phone location settings are set to "always on." Earthquake warnings do not override silent and "Do Not Disturb" settings.
- 5. Encourage Teachers, Parents, and Students to Be Prepared.** Remind parents, caretakers, and students that natural disasters can strike at any time. Families, caretakers, and students should have their own emergency plan in place, practice drills at home, and be familiar with Earthquake Warning California resources and how to use them.

**EARTHQUAKE
WARNING
CALIFORNIA**



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. Send questions or comments regarding this fact sheet to earthquakeinfo@caloes.ca.gov.

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