

## Earthquake Warning California For Medical Facilities and Personnel

### Don't Get Caught Off Guard

Earthquakes can happen in California at any time. Medical facilities and personnel 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 medical facilities, including but not limited to hospitals, outpatient centers, long-term care settings, and community clinics, 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 medical settings.

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. Medical personnel should review their existing facility earthquake preparedness plans 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**

Medical facilities and personnel play a critical role in the aftermath of an earthquake by helping injured individuals. Earthquake Warning California can help medical personnel prepare for an earthquake and assist patients to a safe area. In addition, Earthquake Warning California can warn medical personnel that may be performing surgery or other medical procedures, giving them time to protect themselves and their patients.

Medical facilities can incorporate Earthquake Warning California resources as follows:

- Integrate a hard-wired interface between the earthquake warning system and the medical setting alarm system
- Consider additional warning tools such as television screens or blinking lights to help patients with disabilities
- In the event of an earthquake warning, train healthcare providers and staff to shout to others to drop, cover, and hold, and do the same themselves
- If possible, staff should use a PA system to warn patients and others on the premises to take cover if a warning is issued
- If possible, lock wheels on gurneys or wheelchairs and tell patients to protect their head and neck with a pillow.

### Earthquake Warning California Benefits

- Reduce injuries and fatalities
- Additional time to assist patients to drop, cover, and hold on
- Additional time to lock wheels on walkers, wheelchairs, gurneys, etc.
- Potential to quickly put medical equipment into safe mode

### Earthquake Warning California Costs

- Cost of interface between earthquake warning system and PA / alarm system
- Installation cost, including IT staff time
- Annual technology cost, such as internet
- Annual maintenance and service cost for equipment
- Staff time to teach employees about Earthquake Warning California resources and how to take protective actions

## **Getting Facility, Personnel, and Volunteers Prepared**

Careful and thorough planning can help ensure the safety of individuals during and after an earthquake or other natural disaster, and help medical personnel and volunteers move quickly after an earthquake to aid those in need. Below are five tips that can aid in the preparation process:

- 1. Develop an Emergency Preparedness and Mitigation Plan.** All medical settings must have an emergency preparedness and mitigation plan to protect the safety of employees, volunteers, visitors, and patients. A comprehensive preparedness and mitigation plan must include pre-incident awareness and training for staff, building and equipment assessment, and sharing plan with key stakeholders and community partners (e.g. neighboring hospitals, outpatient overflow). In addition, medical settings must develop an emergency staffing and communication plan to enable leaders to make decisions about shifts, rotations, and coordination during and after an emergency. Review protocols early and often, and identify / remediate where gaps may exist.
- 2. Understand Equipment Functions and Capabilities.** Some medical machinery and other essential equipment have automated safety features to power down quickly in the event of an emergency. Discuss options for how to safely and quickly power down medical machinery, and secure equipment in place that could potentially fall and injure those in the immediate area. Determine which safety features are automated and which require a manual switch.
- 3. Download or Enable Earthquake Warning California Resources.** MyShake App, Wireless Emergency Alerts (WEAs), and Android Alerts can supplement existing warning systems and give medical personnel time to take cover before shaking starts. Medical settings should demonstrate to employees and volunteers what an earthquake warning sounds and looks like. Ensure staff knows how to enable mobile devices to receive earthquake warnings, such as turning phone location settings to "always on." Warning do not override silent and "Do Not Disturb" settings.
- 4. Add Earthquake Warning to Emergency Response Plans.** Incorporate action items into emergency plans for when an earthquake warning is issued. This may include putting equipment into safety mode or assisting patients to take cover. Medical facilities should include earthquake warnings into emergency drills and consider what actions should be taken for all settings that staff might be in, including in the office, an operating room, in transit (such as an ambulance or helicopter), or in the field.

- 5. Spread the Word.** Medical facilities should consider posting information about actions to take in places where employees and volunteers can regularly review them, such as break rooms, company newsletters, bathrooms, or other highly trafficked areas. Remind medical staff and volunteers to have a plan for their households in addition to the workplace. Encourage community partners, social services, and other organizations that regularly interact with personnel and patients to adopt Earthquake Warning California into their own emergency response plans.

### **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)