

Earthquake Warning California For Business

Don't Get Caught Off Guard

Earthquakes can happen in California at any time. Businesses 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 businesses 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 business 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. Businesses should review existing organizational or 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

While most businesses in California can benefit from an effective earthquake warning system, those businesses that operate potentially dangerous (e.g. high-heat boilers, moving heavy equipment) or hazardous equipment/facilities (e.g. chemical use / storage) represent inherently high-risk work environments where a large earthquake can magnify the level of risk for employee injury/fatality and property damage. Worker safety is a factor for all businesses in California, and the primary benefit from Earthquake Warning California is preventing injuries and deaths. Additionally, businesses operating sensitive or critical equipment/machinery may be able to automatically put equipment and machinery into a safe position or mode, preventing an accidental release of dangerous materials.

Earthquake Warning California Benefits

- Prevent injuries to workers
- Prevent or mitigate damage to sensitive and critical equipment
- Provide workers with warning to drop, cover, and hold on and to avoid dangerous areas
- Avoid lengthy recovery and downtime periods
- Prevent repair or recalibration of equipment
- Avoid lost operational time needed to hire and train replacement workers
- Prevent the loss of operational downtime and lost revenue
- Prevent the potential release and subsequent cleanup of hazardous materials

Earthquake Warning California Costs

- Installation of infrastructure to automatically shut off, lock, or power down equipment when an earthquake warning is issued
- IT support to develop and maintain automatic systems
- Maintenance and system testing
- Equipment or safety training for employees on an annual basis
- Equipment depreciation and replacement costs over time

Getting Your Business and Employees Prepared

Careful planning can help ensure the safety of employees and customers if an earthquake occurs. Below are five tips that can aid in the preparation process:

- 1. Identify Risks and Hazards.** By identifying potential hazards specific to each business, business leaders can better understand how to prepare and mitigate the risks of an earthquake. For example, what types of equipment or processes could pose a potential threat in an earthquake situation? Is there a “safe mode” that can be automatically turned on when shaking occurs? Is heavy office equipment bolted down? Assess risks early and often as part of a regular business operations plan.
- 2. Develop Emergency Preparedness and Mitigation Plan.** Business preparedness plans should include measures to protect the safety of all employees and any customers, delivery persons, or other individuals that may be onsite. Assess both non-structural mitigation activities (e.g., securing shelves, anchoring filing cabinets, automatic fire sprinklers) and structural risk (e.g., reinforcing walls, anchored roof system) to determine where improvements can be made. Be sure all emergency exits are appropriately marked and accessible at all times. If possible, identify how to put machinery that could pose a major hazard into safe mode.
- 3. Schedule Practice Drills.** All employees should be appropriately trained through practice drills. These exercises provide opportunities to practice with community partners and identify gaps or weaknesses in existing emergency plans. Make sure employees know what actions to take whether in the office, warehouse, working from home, on the road, or out in the field.
- 4. Download or Enable Earthquake Warning California Resources.** The MyShake App, Android Alerts, and WEAs can supplement existing warning systems and give employees time to take cover before shaking starts. Demonstrate to employees what an earthquake warning sounds and looks like. Businesses that supply employees with phones should consider steps to ensure a warning can be activated in an emergency situation, such as setting phone location settings to “always on.” Warnings do not override silent and “Do Not Disturb” settings. For businesses that do not supply phones, consider providing information about how to download the MyShake App, or enable Android Alerts or WEAs to all employees.
- 5. Share Information.** Remind employees that natural disasters can strike at any time in California. Individuals that are prepared and know the appropriate steps to take during and after an earthquake can mitigate injuries or fatal hazards. Encouraging other community businesses to develop an emergency preparedness plan can help protect and build a resilient community.

Identifying Potential Hazards and Risks

Identifying potential hazards and risks before an earthquake strikes can help mitigate damages, injuries, and develop a resilient business. Earthquake risk-reduction measures can range from inexpensive methods of securing building contents to extensive structural modifications. It's important for organizations that are located in a high-risk area to be appropriately prepared. Businesses should also determine if supply chains, vendors, clients or customers, or transport routes are located in earthquake hazard areas. Additional hazards that can occur after an earthquake include flood or water damage, fires, power outages, theft, security risk, gas leaks, etc.

Begin by identifying potential hazards and risks. Survey the area and property, both internal and external. When addressing structural hazards, the goal is to reduce the risk of a building collapsing or being damaged during an earthquake. Existing buildings with structural weakness are more vulnerable to earthquake-related damage and puts employees at risk of injuries or death. Businesses that rent or lease should consult the building owner before addressing any structural hazards.

The most common disruption or loss to small businesses occurs from not properly backing up or protecting technology systems.

Below are a few examples of potential internal and external hazard to account for as part of a business earthquake preparedness plan:

Potential Internal Hazards

- Unbraced shelves
- Filing cabinets and other large furniture not bolted or anchored to the floor or wall studs
- Heavy or breakable items on high shelves or bookcases
- Not backing up computer data and/or not storing data offsite
- Non-structural components (architectural elements, light fixtures, storage racks, water heater, HVAC equipment, piping, etc.)

Potential External Hazards

- Business located near a railroad, airport, freeway, or other major transportation infrastructure
- Downed power lines or levees
- Poor building infrastructure (concrete buildings, unreinforced masonry, soft story configuration, cripple walls, etc.)

Develop a Plan

After a business has identified the potential earthquake hazards and risks, a mitigation plan should be created. The mitigation plan should list the business' internal and

external risks, and techniques to address hazards and reduce risk. Small businesses are more vulnerable to losses from earthquakes because they typically have fewer resources to devote to the development of mitigation plans.

Every business is unique and will need to account for different scenarios that could occur in an emergency. Determine which elements should be included in an emergency plan and which steps to mitigate risk could be taken quickly if an earthquake warning is issued.

Employee Emergency Contacts

The ability to contact employees and their families during an earthquake is critical. During an emergency, business managers will need to contact employees regarding business status, where to report, and what to do following the emergency. Create call lists that include work, cell, home phone numbers, and emails. In an emergency situation, text messages to check in on employee or family well-being can help keep phone lines open for calls to emergency responders.

Key Contact List

Key contacts include vendors, suppliers, customers, property managers, business partners, etc. During an emergency like an earthquake, it is important to determine the potential impacts of an earthquake on all key contacts and how it will affect business operations.

Critical Business Functions

Identify business functions that are critical for business survival. It is important to understand how to continue essential functions during and after a disaster.

Vital Records and Equipment/Machinery

Identify records that are essential to business functions, such as employee data, payroll, financial and insurance records, customer data, etc. If possible, upload these vital records or store copies offsite. Determine what equipment or machinery is necessary to keep the business operational. The emergency plan should include solutions and recommendations to continue business operations if the critical equipment is lost or damaged. Consider an alternate emergency site if the business is site specific.

Emergency Response Team

Develop an emergency response team responsible for implementing emergency plans and ensuring employee safety during and after an earthquake. The emergency response team should understand their roles and responsibilities before, during, and after an earthquake or other disaster, and practice actions to take in an emergency.

Plan Employee Education

Educate employees on the business emergency plan, how it works, recovery strategies, emergency contact list, and other items to ensure they are ready and prepared for a disaster. Businesses should schedule drills for employees to practice and collect feedback to improve the business' emergency plan.

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.

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