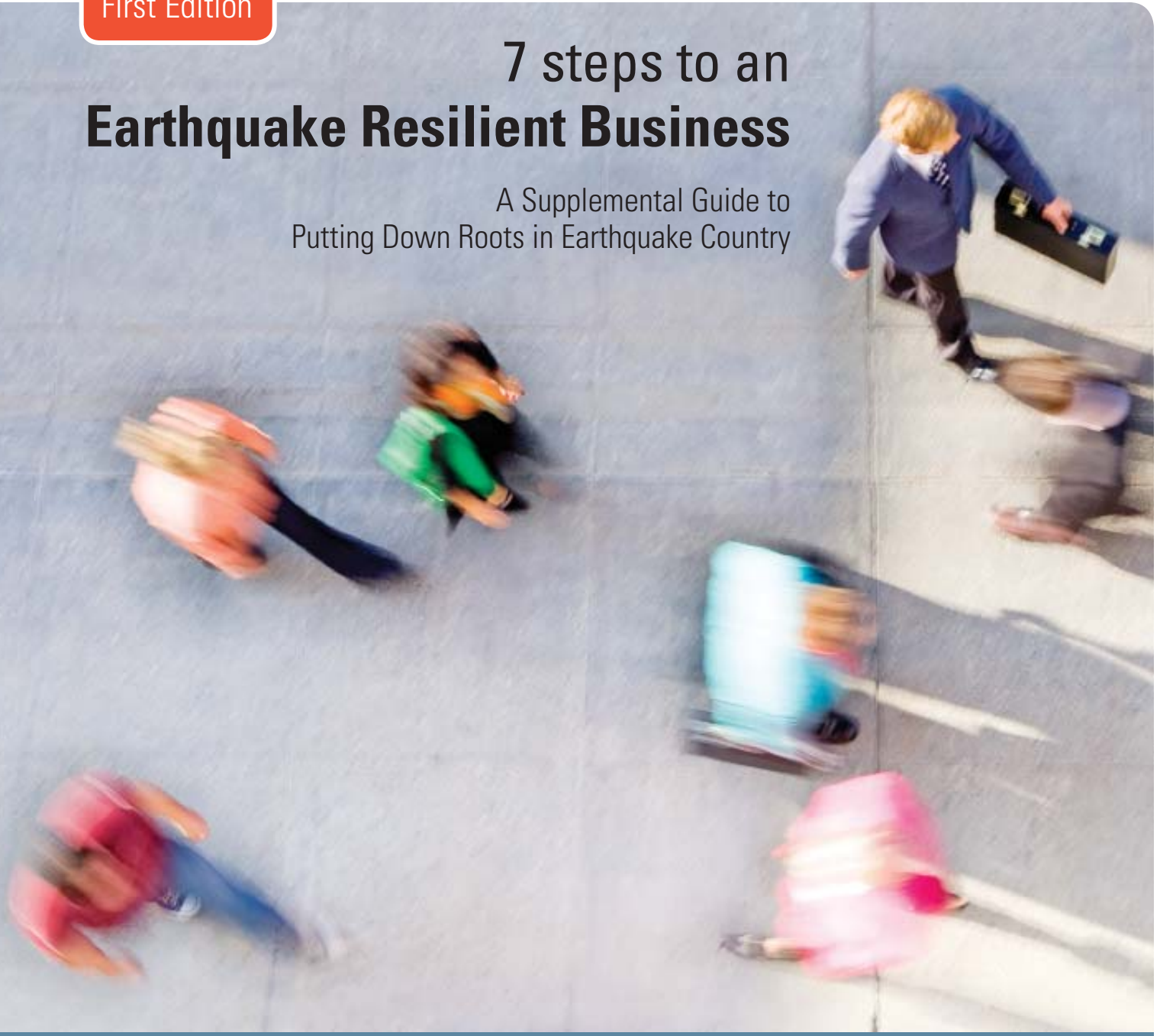


First Edition

# 7 steps to an Earthquake Resilient Business

A Supplemental Guide to Putting Down Roots in Earthquake Country



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*Producer:* Mark Benthien, SCEC / ECA

*Writer/Project Lead:* Inés Pearce, Pearce Global Partners Inc.

*Writers:* **Amgen Inc.:** Chris Wright; **NBC – Universal:** Mike Ripley; **Mathews Consulting:** Nancy Mathews; **Association of Contingency Planners (ACP) – Orange County Chapter:** Rhonda Russell; **CapitalSource Bank:** Joe Jaramillo; Jill Ganon

*Contributors and Supporters:* **NBC – Universal:** Bob Cavaglieri; **BICEPP/Caltech:** Margaret Vinci; **ACP – Orange County Chapter:** Monique Weiland; Bob Lee; and many other members of the **Earthquake Country Alliance.**

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*Design:* Denton Design Associates: Margi Denton

*Photographer:* Ann Elliott Cutting Photography: Ann Cutting

## WORKING IN EARTHQUAKE COUNTRY

Earthquakes can and will happen in many parts of the United States while you are at work. Similar to the actions described in “Putting Down Roots in Earthquake Country” to make you safer at home, this booklet will provide 7 Steps to an Earthquake Resilient Business. Every area of the country relies on their local businesses to remain open after a disaster in order for the community to recover quickly. For this to happen, people need to prepare at home and at work. If your workforce is not ready at home, they may be dealing with tragedy and unable to return to their jobs — what will you do without employees? It is just as important to protect your physical building and the contents inside from damage, as well as train your employees on what to do when disaster strikes at work — without taking these actions, you may have work stoppages or worse.

Great news — it doesn’t have to come to that. Here are 7 simple steps to guide your business to earthquake resiliency by taking actions before, during, and after the shaking occurs so you can recover more quickly. This guide will focus on steps to prepare and protect you from earthquakes but it will also discuss and help you prepare for all hazards. For specific earthquake hazard information, please refer to “Putting Down Roots in Earthquake Country” which provides excellent information on faults, earthquakes forecasts, potential losses in major earthquakes, how to get prepared, and more. No matter what your industry or the size of your business, you can start today. And remember... we’re all in this together.

## 7 STEPS TO AN EARTHQUAKE RESILIENT BUSINESS

Each step in this booklet will provide you with a chance to identify areas in your business that need strengthening, training opportunities, and actions to be taken. They are designed so that every step builds from the last. Customize each step to suit your business type and needs. To get you started, here is a snap-shot of the 7 Steps.

### STEP 1

**Identify potential hazards.** We live in earthquake country, so that’s easy to identify, but are there other risks to your business? In this step, you will identify what may interrupt your business operations temporarily or worse. The priorities you set here will help you in the other Steps.

**Begin addressing those hazards.** Look at your priorities, where your business is vulnerable, and choose how to minimize these risks. If you secure it, it can be saved from earthquake damage or from hurting employees.

### STEP 2

**Create a disaster plan.** After you have identified the potential hazards and impacts to your business, it’s time to create your plan and train employees! Because disasters are highly unpredictable, it is impossible to anticipate every situation and impact. However, a Business Continuity Plan can greatly reduce the risks and losses your business might face by guiding your decisions yet allowing flexibility to adapt to the unexpected.

### STEP 3

**Prepare disaster supplies kits.** After a disaster, businesses will need to be self-sufficient as first responders will be addressing high priorities such as hospitals and schools. Determine what you need in the first days following an earthquake including the basics like food, water and sanitation.

### STEP 4

**Identify your building’s potential weaknesses and begin to fix them.** Most businesses lease their space, so it’s essential to work with your owner and property manager on addressing structural issues. If you own it, strengthen those weaknesses. Either way, measures taken now can help you keep your doors open. No access, no business.

### STEP 5

**Protect yourself and employees during earthquake shaking – DROP, COVER, AND HOLD ON.** The ground is shaking, what do you do? The critical life safety step is Drop, Cover, and Hold On. Stay clear of any objects that may fall and stay put until the shaking stops.

### STEP 6

**After the earthquake, check for injuries and damage.** Life safety is the top priority after an earthquake or any disaster. Use trained personnel to find anyone injured. Next, survey your building for damage or other hazards. Decide if safe to stay.

### STEP 7

**When safe, continue to follow your disaster plan.** Once life safety is being addressed, it’s time to begin recovery activities to resume business operations. Conduct an assessment for operational issues. Use your plan to guide your actions and restore priority operations first. Communicate often with employees and key contacts. Document your lessons learned to determine priorities before the next event.

This supplement lists good resources. For additional information and details, please visit [www.DaretoPrepare.org](http://www.DaretoPrepare.org).





# 1

## IDENTIFY POTENTIAL HAZARDS

A lot of the information you gather here will help you prioritize your planning process in other Steps. In order to plan, you will need to recognize potential hazards and how they may interrupt a part or all of your business.

To begin, take a sheet of paper and make a list of your hazards. To simplify this, here are examples of overall hazards that can cause more specific disruptions from a small to a catastrophic scale: earthquakes, fire, flood/water damage, human error, power outage, theft, security risk, etc. Most internal/external hazards will fall under one of these. For more ideas of hazards to consider on your list, please visit the Business section of [www.DaretoPrepare.org](http://www.DaretoPrepare.org). We will explain how to actually address these hazards later.

**MY HAZARD LIST**

EARTHQUAKE

FIRE

POWER OUTAGE

FLOOD

WATER DAMAGE

THEFT

SECURITY RISK

**TASK 1a**

### Maya

Manager, veterinary practice

*"Dogs, cats, birds, you name it — none of our patients can fend for themselves during an earthquake. Between boarding, surgeries and appointments, we can have twenty animals in the building. Talk about potential chaos! I see six earthquake hazards without even moving from my desk. I'm bringing it up at the next staff meeting."*



To begin identifying your potential internal hazards, begin by surveying your area. This is as simple as walking around your business and neighborhood. Look for hazards both internal to your organization and external to your facility. Ask yourself a few questions to spark issues: What's around me? What should I be concerned with that may interrupt my business?

One of the most common disruption or loss to small businesses is a vulnerability of technology by not backing up computer data at all or only to the desktop, then something happens to the computer taking with it all the pertinent files and information. Here are a few more examples:

#### POTENTIAL INTERNAL HAZARDS:

- Unbraced shelves located next to exits
- Filing cabinets not bolted to the floor or wall studs
- Heavy or breakable items on high shelves or bookcases
- Not backing up computer data and/or not storing back-ups off site
- 
- 

#### POTENTIAL EXTERNAL HAZARDS:

- Other businesses in your area who may experience a disaster which could impact you
- Brick elements in your building structure or façade
- Near a railroad, airport, freeways
- 
- 

### Identify Critical Assets

Now make a second list to identify your business' most critical assets. These are the items that if they were taken away, would cause disruption to your business. To simplify identifying them, all your assets will fall into one of the following six categories: people, building, equipment, data, inventory/products, operations. Regardless of your type of business, losing a critical asset may cause significant financial loss.

The assets will differ from one business to another, although industries share commonalities. Here are examples of assets in each of the categories.

Once you have your list of hazards and list of assets, you'll be ready to assess where your business is vulnerable to disruption. For each of your six categories, you will decide the level of impact each hazard will have. The exercise on the next page will assist you in prioritizing areas that need to be addressed.

### TASK 1b



### TASK 1c

#### CRITICAL BUSINESS ASSETS



##### PEOPLE

- employees
- customers
- vendors
- suppliers
- visitors



##### DATA

- documents
- files
- records
- server back-up tapes



##### OPERATIONS

- Look at your standard operating procedures or SOPs and think of a disruption to your revenue generating operations.
- Accounts Receivable or Payable
- Payroll
- Manufacturing
- Mail Room



##### INVENTORY

- Stock
- supplies
- raw materials



##### EQUIPMENT

- Computers (hardware & software)
- servers
- network
- specialty equipment
- manufacturing machinery
- copiers
- furniture



##### BUILDING(S)

- Physical structure
- storage unit
- warehouse
- main office
- store front
- capital lease

RISK ASSESSMENT MATRIX

Type of Event (samples)	IMPACT TO CRITICAL BUSINESS ASSETS						SCORE
	PEOPLE 1 = Negligible 2 = Marginal 3 = Critical 4 = Catastrophic	DATA 1 = Negligible 2 = Marginal 3 = Critical 4 = Catastrophic	BUILDING 1 = Negligible 2 = Marginal 3 = Critical 4 = Catastrophic	INVENTORY 1 = Negligible 2 = Marginal 3 = Critical 4 = Catastrophic	EQUIPMENT 1 = Negligible 2 = Marginal 3 = Critical 4 = Catastrophic	OPERATIONS 1 = Negligible 2 = Marginal 3 = Critical 4 = Catastrophic	
Earthquake	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	
Fire Response	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	
Flood	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	
Hurricane	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	
Power Outage	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	
Plane Crash	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	
Terrorism	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	
Thunderstorm/Lightening	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	
Tornado	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	
Tsunami	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	
Volcanic Eruption	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	
Winter Storm	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	
	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	
	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	
TOTALS							
PRIORITY							

Before you begin completing the table above, you will need to understand the difference between the levels of impact. They are listed in order of escalation.

**Negligible** – limited to no business disruptions or property damage

**Marginal** – a hindrance that may effect business operations without shutting down, you have no or minor damage, it may be an occurrence in neighborhood

**Critical** – temporary disruptions of business or major damage to the facility, impacts are to community

**Catastrophic** – a disaster that affects entire regional community causing business disruptions and forces closure of building(s). This is an event of large proportions. It can include complete destruction, multiple injuries or deaths, and a regional event which means limited or no outside resources available for some time.

Above is a table to help you determine and prioritize your business risks. General types of events are listed in the left-hand column, but add your own in the blanks provided.

Begin with the first listed disaster event, earthquake. Circle the number in each asset area to score how the hazard would likely impact your business. Complete the other rows then total your numbers for both columns and rows. As the last step, prioritize which areas should be addressed first, based on highest vulnerability, then assign each column with your priority number 1-6.

Most people know earthquakes are a real risk. If you haven't already, refer to the scenario in "Putting Down Roots" as it may be a higher risk than you think.

Need another copy of this table? Please visit [www.DareToPrepare.org](http://www.DareToPrepare.org) and download it.

Congratulations, you have finished assessing your risks. If you haven't involved others in this process yet, consult with personnel in your business about the results to ensure you are considering the whole business picture. No one-person knows every facet to a business, so ask for their thoughts and revise priorities accordingly.



BEGIN ADDRESSING THOSE HAZARDS

Now that you have prioritized where you are vulnerable, here is how to minimize your risk. While "Putting Down Roots" has images showing what to do at home, this is what you can do in the workplace. An example is a business choosing to protect specialty equipment, which is difficult or expensive to replace from earthquake damage. If you secure it, it can be saved.

One of the questions that surfaces at this early stage is cost. Many solutions are low or no cost. Others may be more complicated with a higher price tag but when compared with protecting employees' lives, property, inventory, and keeping the business doors open, it begins to balance out the decision. The benefit for addressing hazards before the next disaster is that you do not have to suffer the pain and high cost of damage repair and replacement. If you add to all the post-disaster costs with the psychological toll and stress, the pre-disaster solutions pay for themselves. A recent study shared by the Natural Hazard Center showed: for every dollar spent addressing hazards pre-disaster, four dollars in disaster losses are saved.

If you are not sure where to begin, start on high impact and low-cost solutions such as moving heavy items to lower shelves. An important aspect to ensure success for the long-term is to be diligent with continuing the solutions. Moving heavy items back to shelves after six months saves no one and only adds to your business' vulnerability. Continue on the risk-reduction path by reinforcing and rewarding the safe behavior of all employees.

The great news is that by addressing one solution you may also be limiting the negative effects of multiple hazards. For instance, securing computers from earthquake damage can also protect them from theft, or strengthening a structure for earthquakes can also



There are many easy-to-do items that do not require technical personnel to address. Put these tasks at the top of the list, as you will have many quick successes. Your employees will quickly see a safer work environment emerging. These solutions do not take a lot of time or money, and can create great momentum towards getting the larger tasks accomplished. Here are a few examples of these types of simple tasks and which impact areas they address:

- > Move heavy items onto lower shelves. (people, operations, data, inventory, equipment)
- > Lock storage cabinets and file cabinets when not in use. (people, operations, data)
- > Do not stack boxes near exits. (people, operations, inventory)
- > Keep space cleared under your desk so you can Drop/Cover/Hold On. (people, operations)
- > Back-up computer files on regular basis. "Auto backup" is only to the computer, not to off site storage. Store back-up files off site (eg. fire safe box at home, off site storage). (operations, data, inventory)
- > Secure laptops or other items that can easily fall or be stolen. (people, operations, equipment, data)

*Note:* These simple items are all internal to your building such as its contents. Addressing building structural issues will be covered in Step 4.



protect it in strong winds. Now you can begin addressing those priority hazards.

For case studies and examples of businesses that took preventive action and how well they fared after the disaster, compared to those that did not, please visit [www.DareToPrepare.org](http://www.DareToPrepare.org).

In this step, you have identified potential hazards to your business, determined your critical assets, prioritized the impacts, and identified your solutions to mitigate the impact. You are now ready to begin Step 2.



## 2

### CREATE A DISASTER PLAN

You have identified the potential hazards and impacts to your business, so it's time to create a plan! Because disasters are highly unpredictable, it is impossible to anticipate every situation and impact. However, a Business Continuity Plan can assist with decision-making in a crisis.

#### Collaborate on Your Plan

Work with your neighbors and similar businesses. During a disaster, it will be necessary to help each other out as much as possible as first responders are limited and will focus on hospitals and schools first. Determine your needs ahead of time and how you can share resources, supplies, etc.

### George

Owner, construction company

*"First aid situations come up in construction, but earthquakes — I need training for myself and everybody who works for me. With crews and heavy equipment out on three or four jobs, how can I expect my foremen to manage their sites during a disaster unless I have disaster plans in place, and make sure we all get schooled. I put new people on all year long so we need regular drills to keep things calm if it starts shaking."*



## TASK 2a

### BASIC PLAN ELEMENTS

Even though every business and the risks they face are unique, basic plan elements apply to all. Determine which elements make sense for your business and should be included in your plan. Even if you only include some basic elements in your plan, you will be ahead of the pack!

- EMPLOYEE EMERGENCY CONTACTS.** The ability to contact employees and their families during a disaster is critical. You will need to communicate if employees are injured, sick or unable to leave the workplace. You will also need to contact employees regarding business status, where to report and what to do following a disaster. Create call lists to include work, cell, home phone numbers and emails.
- KEY CONTACTS LIST.** Key contacts are vendors, suppliers, customers, etc. that you rely on to conduct business. You may need to notify property management, utility companies, business partners, or others that you have been impacted by a disaster. You will also want to determine if they have been impacted and how that will affect your business. Consider Service Level Agreements (SLA) to identify the responsibility of these groups to you.
- CRITICAL BUSINESS FUNCTIONS.** Identify the functions in your operations that are critical for business survival. Which functions are necessary to fulfill legal and financial obligations? Which are necessary to maintain cash flow and reputation? How long can your business be down and remain viable? How will you continue to perform these functions in a disaster situation?
- VITAL RECORDS.** Identify the records that are essential to perform your critical functions. Vital records may include employee data, payroll, financial and insurance records, customer data, legal and lease documents. Are any impossible to re-create or are copies stored offsite?
- CRITICAL EQUIPMENT/MACHINERY.** Determine what equipment or machinery is necessary to keep your business operational. What would you do if you lost critical equipment? Do you have spare parts or equipment stored at an offsite location? Can you get a replacement?
- RECOVERY LOCATIONS.** Would you be able to recover from an alternate site? Do you have multiple locations? Are you site dependent? You may consider setting up another site or establishing an agreement to rent space in a disaster situation.
- LIFE SAFETY – EMERGENCY RESPONSE.** Develop a team of first responders. Local authorities and emergency response may not be able to respond immediately. Having a trained team onsite can help save lives. See later in this Step for employee training.
- PLAN EDUCATION.** Educate employees on your plan, how it works, recovery strategies, call trees, etc., so they are ready.
- MAINTENANCE AND TESTING.** Update the plan when a change in your business impacts the information in the plan. Testing your plan is extremely important as it's the only way to know if your plan works and the employees know what to do!

For sample scenarios to assist your planning and other planning resources, visit [www.daretoprepare.org](http://www.daretoprepare.org).



### First Aid and Employee Training

Consider organizing trained employees into teams that can provide aid during an emergency. Conduct annual training and regular drills as they ingrain training principles and cause smoother, calmer reaction by employees during emergencies. Local resources can be used to provide low cost/no cost training to employees. Resources include: fire departments, American Red Cross, American Heart Association, civic groups, and online resources.

For an effective impact, provide information on individual/family preparedness during company sessions. Employees prepared at home will promptly resume work and assist your business.

## TASK 2b

### EMPLOYEE TRAINING

Some businesses have requirements for on-site emergency responders for daily emergencies that may include floor wardens and first aid trained employees. To address disasters, it is optimal to also have employees trained in the following:

- EVACUATIONS:** Train designated employees to initiate evacuations when an emergency arises, sweep the work place to ensure employees have left, and account for employees in a safe area outside
- "DROP/COVER/HOLD ON" AND EARTHQUAKE PROCEDURES:** All employees should be trained on proper earthquake procedures including "Drop/Cover/Hold On" techniques
- FIRST AID/CPR:** Pre-designate and train employees to provide first aid after emergencies
- FIRE EXTINGUISHERS AND FIRE SAFETY:** All employees should be trained in basic fire safety and what to do if a fire occurs in the workplace. Designated employees should also receive additional training utilizing fire extinguishers to suppress small fires

## 3

### PREPARE DISASTER SUPPLIES KITS

First responders and supplies may be overwhelmed after an earthquake or other disaster. Businesses should take basic measures to be self-sufficient during the early phases after disaster. Remember: food, sanitation, etc., may not be available. Encouraging employees to be prepared at home and work will also aid in prompt resumption of your business operations.

#### First Aid Kits vs. Disaster Supplies

As outside resources will be very limited after an earthquake, companies should stockpile some supplies in order to support your employee base in the initial phases of a disaster. Emergency and Disaster supplies should be easily accessible, in protected locations, and easily dispersed. Keep track of perishable disaster supplies and replace regularly. Also, employees should be encouraged to keep a three day supply of personal medications at work.

## TASK 3

### DISASTER SUPPLIES KITS

A minimum 3-day supply should be kept on hand including:

- FIRST AID KITS/MEDICAL SUPPLIES**
- FOOD** – canned, packaged, ready to eat
- WATER** – enough for one gallon/per person/per day
- LIGHTING** – flashlight & extra batteries, lanterns, light sticks
- COMMUNICATIONS** – portable AM/FM radio and extra batteries, portable TV
- TOOLS** – basic hand tools: hammers, screw-drivers, wrenches, etc.
- PERSONAL PROTECTIVE EQUIPMENT** – hard hats, gloves, dust masks
- TARPS/PLASTIC SHEETING**
- FOOD PREPARATION** – portable stoves/grills for outdoor use, can openers, mess supplies
- HYGIENE AND SANITATION SUPPLIES**
- ADDITIONAL SUPPLIES** to meet the training level of your employees: first aid, Community Emergency Response Team (CERT), EMT

### Anna

Director, hotel building staff

*"There's ample opportunity for confusion on a good day at a big hotel. But staff and guests are most likely to rise to the occasion when measures are in place to meet their most basic food, safety, hygiene and communication needs. We keep food and water in our disaster supply kits current; and we're seeking expert advice about stockpiling medical supplies that will go beyond the medical capacity of the first aid kits we already have on hand."*



Most businesses have a requirement to furnish first aid kits in the workplace due to Occupational Safety & Health Administration (OSHA), state, or other regulations. First aid kits are only one part of supplies needed to support an employee base after a disaster. As first aid kits are designed to handle only day-to-day minor injuries, businesses should consider stockpiling additional medical supplies to handle a greater number and larger type of injuries. Additional Supplies should match the level of employees' training.





# 4

## IDENTIFY YOUR BUILDING'S POTENTIAL WEAKNESSES AND BEGIN TO FIX THEM

In Step 1 you identified hazards most likely to disrupt your business and how to address lower cost ones. Review the analysis for any priority you chose to reduce or eliminate the potential for injury, property damage or business interruption. Now begin addressing structural hazards that could interrupt your business, typically those items that were high impact — potentially higher cost.

While most businesses do not own their building, it is essential to work with your owner and/or property manager on addressing structural issues. A good relationship can assist you getting access to your property or inventory, while structural damage can keep you from opening for business. If you own your building, take the time to strengthen weaknesses or replace elements that may injure people or keep you from reopening. Strengthening protects you, your employees and customers, and allows you to return to operating more quickly.



# Lee

Store manager, clothing shop

*"I love working in a place that's an architectural treasure. But is the ground floor of this hundred year old, four-story building structurally sound? I have no idea, so I sent an email to my boss, and copied it to the owner of the building. We're meeting next week to talk about possible hazards."*



### Bring in expert advisors

Not sure where to start? Do some homework to determine which additional measures to take to protect your business. Ideally this will be done before you lease or purchase a facility. Talk to the experts to learn what damage might be expected in a seismic event and to help you prioritize solutions. Structural engineers and your local Fire Marshall may be able to help you understand the building code and how its application affects your building. Depending on the year built, a building may be designed to not collapse, but still may not be operational following an earthquake. Also, if needing to relocate, keep code issues in mind for the new site.

### Lease

If you lease your building, we encourage you to contact your owner/property manager and develop a relationship with them now, before the disaster occurs. If your research uncovered a need for seismic retrofitting of your building, work with your owner/manager to consult with various reputable, licensed, experienced retrofitters to provide an estimate and consider strengthening options. Also, discuss how you will communicate with each other following a disaster. Without connections in advance, tenants may not get access to their site after an event.

Learn about the other safety systems in place. Does the building have sprinklers? Does it have smoke and/or heat detectors? Does it have emergency power? How has the building and surrounding area been effected by disasters in the past? Asking these types of questions now will help you with customizing your own disaster plan and emergency response procedures.

### Own

Businesses who own their buildings should look to the experts for guidance in addressing identified vulnerabilities. Prioritize fixing weaknesses based on those which could most significantly impact your ability to do business. If you know you need to strengthen your building, consult with licensed, reputable, experienced retrofitters to discuss your options and have them provide a free estimate. Home-based businesses are considered a high-risk group, since you have the potential of losing both your business and your home. We recommend using "Roots" for both structural and non-structural residential solutions.

The goal of all businesses is to continue operations or restore them as quickly as possible following a disaster. Taking steps now, will save much time, money and energy after disaster and will increase our ability to sustain your business. Consider getting involved with organizations such as the Building Owners and Managers Association (BOMA) who can assist connecting tenants with owners, and other resources.

# 5

## PROTECT YOURSELF AND EMPLOYEES DURING EARTHQUAKE SHAKING — DROP, COVER, AND HOLD ON

When at work and the earthquake starts shaking — the critical initial step for life safety is to: Drop underneath a sturdy desk or table, Cover your head and neck, and Hold On to the furniture as it moves and stay until the shaking stops. If there is no desk/table nearby, move to an internal wall, drop to the floor and cover your head and neck. Stay clear of objects that may fall, windows, or anything that may harm you.

# Sam

Chef/owner, small restaurant

*"We're doing a great lunch business. So I was thinking, what if there was an earthquake? If we have customers at—or under—every table, how do my employees protect themselves? I'm bringing them all in to do a drill and figure out how to best handle that rule to drop, cover and hold on."*



### DROP, COVER, AND HOLD ON

When the ground is shaking, you need to protect yourself quickly from things that may fall or are being projected across the room with great force. Your head should be lower than the next highest surface such as a desk, table or other sturdy furniture which will take the brunt of the impact. Your life and the lives of your co-workers are of highest importance. As some people will panic, stand frozen in place or run out of the building, they become a target for the dangerous objects that are moving within and off of a building. The earthquake-safe action is to Drop, Cover, and Hold On to ride out the shaking.

### SAFE PLACES IN THE OFFICE

In Step 1 you identified possible hazards to your business and learned that earthquakes are a real threat. It is important to know what to do to protect you and your employees. Common safe areas and considerations for Drop, Cover, and Hold On are:

- > Under desk
- > Under a sturdy table
- > Away from windows
- > Stay low
- > Cover head & neck
- > Next to large furniture like a sofa, over-stuffed chair



### HAZARDS IN YOUR SAFE PLACES

While there are many safe places to Drop, Cover, and Hold On, there are potential hazards that might keep you unsafe. Practicing with annual drills is a simple way to educate all employees on what to do and highlight issues that can be easily rectified such as:

- > Boxes under desk
- > Not enough space
- > Near windows

Once the hazards are identified, the next step is to fix them immediately. When the ground starts shaking, it is too late.

### EDUCATE YOUR BUSINESS VISITORS

Just like the annual employee drills, create actions and procedures to address visitors and customers. A simple step is to present emergency briefing information to all visitors before each meeting, so they are aware of what to do during an earthquake. It is also helpful to have employees pre-identified to be responsible to tell non-employees what to do.



# 6

## AFTER THE EARTHQUAKE, CHECK FOR INJURIES AND DAMAGE

Once the shaking has stopped it is time to emerge from your safe places. First, check for people injured, then look for serious damage. Decide if it's safe to stay.

### Nadine

Director, dialysis center

*"If you're a medical professional in earthquake country, employee training can make all the difference in the world to a patient's well-being. Once the shaking stops, we put our training into action: first we see to our patients' medical needs, then we check for obvious structural damage or other hazards to help us figure out if we should stay put or begin to evacuate."*



### TASK 6

#### INJURY AND DAMAGE ASSESSMENT

After an earthquake, your trained employees can start to perform what they have learned.

- Address life safety
- Address exterior building safety
- Address internal building safety
- Perform more detailed building assessment
- Establish a hub



#### Activate trained employees

In an earlier step, you identified training for your employees, and this is when it goes into action. Life safety is the priority at this stage of the disaster, especially if you have limited personnel. Start by activating the "person in charge" or their designee as they may be absent or injured. This is the decision-maker for the organization but won't necessarily be the CEO during a disaster. If you have a larger business, the activation will be of your trained responders who are carrying out your response procedures. The first decision to be made is whether to evacuate or stay put. Fire procedures are clearly to evacuate, but in an earthquake, being outside of your new building may be more dangerous where there is falling debris from other buildings. Training employees pre-disaster will help with good disaster decision-making.

#### Addressing life safety

Regardless of whether you evacuate or stay put, you need to account for your employees. This is a basic check on the welfare of the employees and any visitors. If you do have people injured, work with trained staff to manage their care, but only to the level that matches their training. If you need to move people out of danger, make sure it is safe to do so. For those that are more severely injured,

contact 9-1-1 if available. If not available, use a radio or send a runner to locate a trained first aid responder to assist them.

#### Address building & operations

Once immediate life safety is being addressed or stabilized, it is time to move to building & operations needs. First, inspect the exterior of your building for damage. Check for these potential hazards:

- > Fire
- > Damage to utilities
- > Leaking gas
- > Chemical spill
- > Obvious structural damage
- > Falling hazards during aftershocks

If it appears safe, then inspect the interior structure. If at any time during inspection, inside or outside, you find a significant hazard, consider whether occupants need to be evacuated or relocated.

Next, perform a more detailed facilities inspection to assess utilities and specialized equipment — do they work? Use information gathered to determine impacts on your ability to resume or continue operations. Look for damage to critical files and/or data.

#### Establish a hub (location or person) to receive reports of damage and injuries

Depending on the scale of the earthquake or other disaster, it is important to establish a centralized location, or hub, to manage information on life safety and building & operations. This will help with key decision-making, tracking issues, documenting a progression of the disaster, and lessons learned. For a very small organization, the hub may just be a person.

This central location, or emergency operations center, can help communicate status with employees such as whether it is safe to stay, where to relocate employees if not, when it is safe to leave, routes to evacuate and so forth. It also can become an easier way to document damage for insurance, public and customer purposes, by centralizing disaster files, photos, video, receipts, etc. as the disaster progresses.

### Joe

Manager, downtown bank

*"Understandably, people want and need access to their funds in the aftermath of an earthquake. I hope there'll be no disruption to our business, but you just never know. My job is to do my best to keep customers continuously updated about access to our banking services, and their money."*



# 7

## WHEN SAFE, CONTINUE TO FOLLOW YOUR DISASTER PLAN

Once all life safety concerns are addressed, it is time to begin recovery activities to resume your business operations. Keep in mind some aspect of your business may never return to "normal" after a disaster. To be resilient is to be flexible to recover in this changed environment and make the business survive and thrive.

#### Detailed Assessment

You completed a facilities inspection, but now you need a more detailed assessment of operational issues. Based on what you found in your facilities inspection in Step 6, prioritize your findings by what is most important and then begin to create an action plan. If necessary, conduct additional assessments, possibly bringing in professionals such as structural engineers. In your action plan, show how you will address these issues based on their criticality to operations.

At this stage of the disaster it is important to look more thoroughly at business operations. What you find may impact the following areas: communications, recovery activities, and restoration of services and or production.

#### Communications

First determine what communication is needed and how you can be successful. Consider your different target groups as each must be handled differently. Communicate with employees, customers, vendors, stakeholders, and key business partners often. Consider alternate communications methods in a disaster, such as your website, through telephone calls, or if there is no power then utilizing the U.S. Postal Service.

One of the simplest but important communication is to let your customer base, or the public at large, know when you are open for business. If your surrounding area has been hard hit this may be more difficult, but banners and other advertising will help you, as can the media.

#### Recovery Activities "Things to Consider"

As you are working to restore interrupted services, here are a few areas to consider that might have an impact on how or when you resume operations.

- > Temporary v. permanent relocation
- > Availability of resources
- > Customer needs
- > Staff availability
- > Infrastructure — what is occurring in the surrounding neighborhood that may impact you

#### Full restoration of services/production

At this point you need to work with your community and your partners to reconnect to your customers as well as get help. Look to businesses and/or government for assistance if you need it. Resources can be found at the local, state, and national level. Use this time to enhance existing relationships by keeping them in the communication loop and share your available resources with them, especially if it might assist your community.

#### Lesson Learned

You are on the road to recovery, but it is still important to develop your list of lessons learned before the memories fade. This will help you to implement changes to operations, add to your plan, then circle back to Step 1 and lessen future impacts. Since we cannot stop earthquakes from occurring it is important that we take steps today to minimize loss of people and property.

## WE'RE ALL IN THIS TOGETHER

### EARTHQUAKE COUNTRY ALLIANCE

213-740-1560

[www.DareToPrepare.org](http://www.DareToPrepare.org)

Great information to secure your space (how to secure building contents, electronics, breakables; and how to secure the structure of the building) to protect from earthquake damage

[www.EarthquakeCountry.info](http://www.EarthquakeCountry.info)

Read online or order copies of "Putting Down Roots in Earthquake Country" including the 7 Steps to Earthquake Safety at home, the site also has great information about general understanding of earthquakes and specific faults in California

[www.ShakeOut.org](http://www.ShakeOut.org)

Comprehensive earthquake drill planning resources developed for the Great Southern California Shakeout, November 13, 2008. The materials are useful for planning simple to advanced drills at any time.

[www.terremotos.org](http://www.terremotos.org)

Earthquake preparedness information and resources in Spanish, including the Spanish-language version of "Putting Down Roots."

### U.S. SMALL BUSINESS ADMINISTRATION (SBA)

1-800-U-ASK-SBA (1-800-827-5722)

E-mail: [answerdesk@sba.gov](mailto:answerdesk@sba.gov)

[www.sba.gov/services/disasterassistance](http://www.sba.gov/services/disasterassistance)

Provides excellent information regarding types and applying for disaster assistance, disaster plan, and other resources

[www.sba.gov/idc/groups/public/documents/sba\\_homepage/serv\\_disprep\\_planningguide.pdf](http://www.sba.gov/idc/groups/public/documents/sba_homepage/serv_disprep_planningguide.pdf)

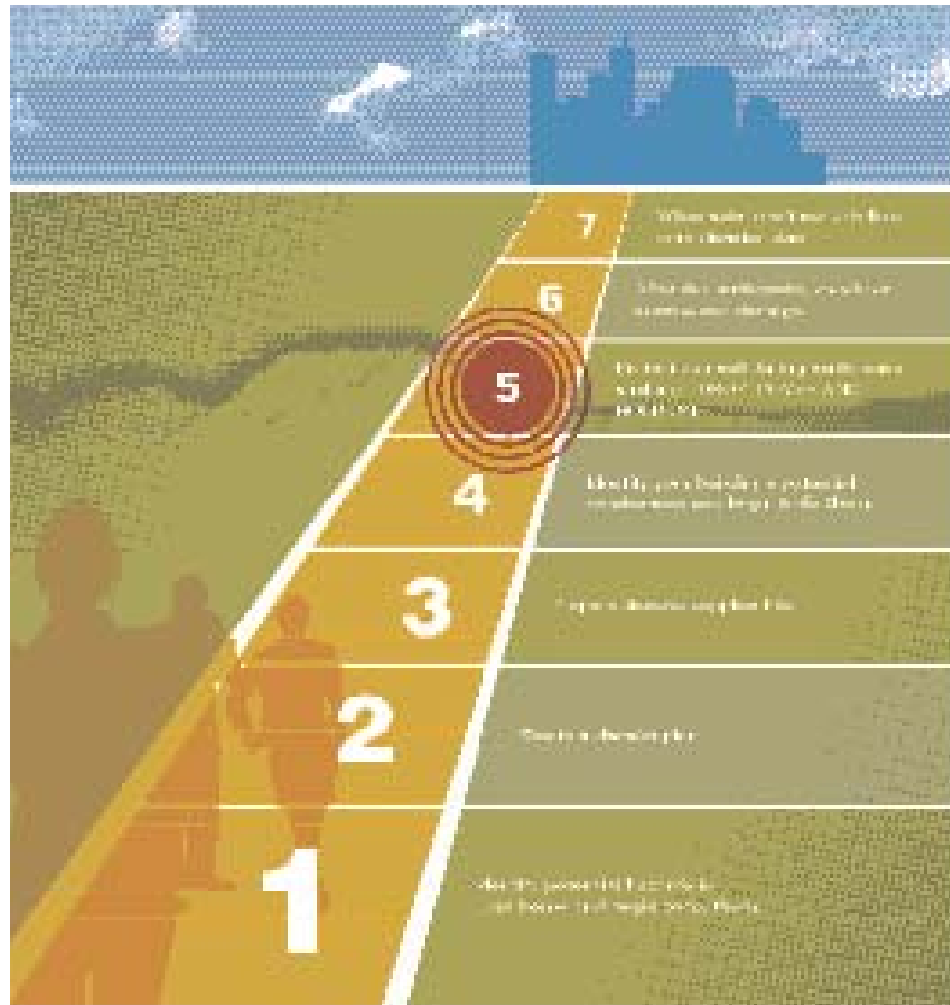
SBA's Expect the Unexpected: Prepare Your Business for a Disaster with tips and resources on a variety of disaster types

### U.S. DEPARTMENT OF HOMELAND SECURITY

202-282-8000

[www.ready.gov/business/](http://www.ready.gov/business/)

Business Section – Information on how to create a plan for your business, training and awareness aids, downloadable information



[www.dhs.gov](http://www.dhs.gov)

Provides current National Threat Level, national security programs, preparedness and response programs, applying for disaster assistance, resources, training

### REALLYREADY.ORG FOR BUSINESS (American Federation of Scientists)

(202)546-3300

<http://www.fas.org/reallyready/business/>

Business Section – Information on how to create a plan for continuity, an emergency response plan, and information on multiple hazards and resources

### CENTER FOR DISEASE CONTROL (CDC)

(404) 498-1515 / (800) 311-3435

[www.cdc.gov](http://www.cdc.gov)

Emergency Preparedness and Response Section – Obtain information regarding specific health threats, how to plan for them and how to create a supply kit

### DISASTER RESOURCE GUIDE

(714) 558-8940

[www.disaster-resource.com](http://www.disaster-resource.com)

A source for Business Continuity news, articles, trends, and a guide for additional resources

### OFFICE DEPOT — Expecting the Unexpected, Disaster Preparedness Strategies for Small Business

<http://www.officedepot.com/speciallinks/us/od/docs/promo/pages/docs/online-disasterbrochure.pdf>

This brochure offers some great additional information on how businesses can prepare for disasters

### AMERICAN RED CROSS

202.962.3979

[www.redcross.org](http://www.redcross.org)

Obtain information on preparing at home, work, school, and in your community

## PREPAREDNESS ACTIVITIES CHECKLIST

- STEP 1 IDENTIFY POTENTIAL HAZARDS AND BEGIN TO FIX THEM**
- Identify potential internal hazards
  - Identify potential external hazards
  - Create My Hazard List
  - Identify critical business assets
  - Complete the Risk Assessment Matrix
  - Begin addressing hazards by starting on no/low cost items with high impact

- STEP 2 CREATE A DISASTER PLAN**
- Complete Basic Plan (*see page 8*)
    - Employee Emergency Contacts
    - Key Contacts List
    - Critical Business Functions
    - Vital Records
    - Critical Equipment/Machinery
    - Recovery Locations
    - Life Safety — Emergency Response
    - Maintenance and Testing
  - Collaborate on Your Plan
  - Plan Education
    - Evacuation
    - Drop/Cover/Hold On Procedures
    - First Aid/CPR
    - Fire Extinguishers and Fire Safety

- STEP 3 PREPARE DISASTER SUPPLIES KITS**
- Disaster Supplies Kits (*see page 9*)

- STEP 4 IDENTIFY YOUR BUILDING'S POTENTIAL WEAKNESSES AND BEGIN TO FIX THEM**
- Identify structural weaknesses
  - Contact outside experts if needed
  - Address structural issues if you lease
  - Address structural issue if you own

- STEP 5 PROTECT YOURSELF AND EMPLOYEES DURING EARTHQUAKE SHAKING — DROP, COVER, AND HOLD ON**
- Know how to Drop, Cover, Hold on
  - Identify safe places
  - Keep safe places clear from hazards
  - Educate visitors what to do during an earthquake

- STEP 6 AFTER THE EARTHQUAKE, CHECK FOR INJURIES AND DAMAGE**
- Activate trained employees after an earthquake
  - Address life safety
    - Care for injured
  - Address building & operations
    - Inspect the building exterior for damage and/or hazards
    - Inspect the building interior for damage and/or hazards
  - Perform a more detailed assessment of impacts to utilities, special equipment, etc.
  - Establish hub for communications

- STEP 7 WHEN SAFE, CONTINUE TO FOLLOW YOUR DISASTER PLAN**
- Perform a more detailed assessment of operational issues
  - Communicate frequently with target groups
  - Consider recovery activities
  - Fully restore operations/production
  - Document lessons learned
  - Return to Step 1 to update plan



Will your business  
be open or closed after the  
next big earthquake?



**daretoprepare.org**



**Earthquake Country Alliance**  
*We're all in this together.*