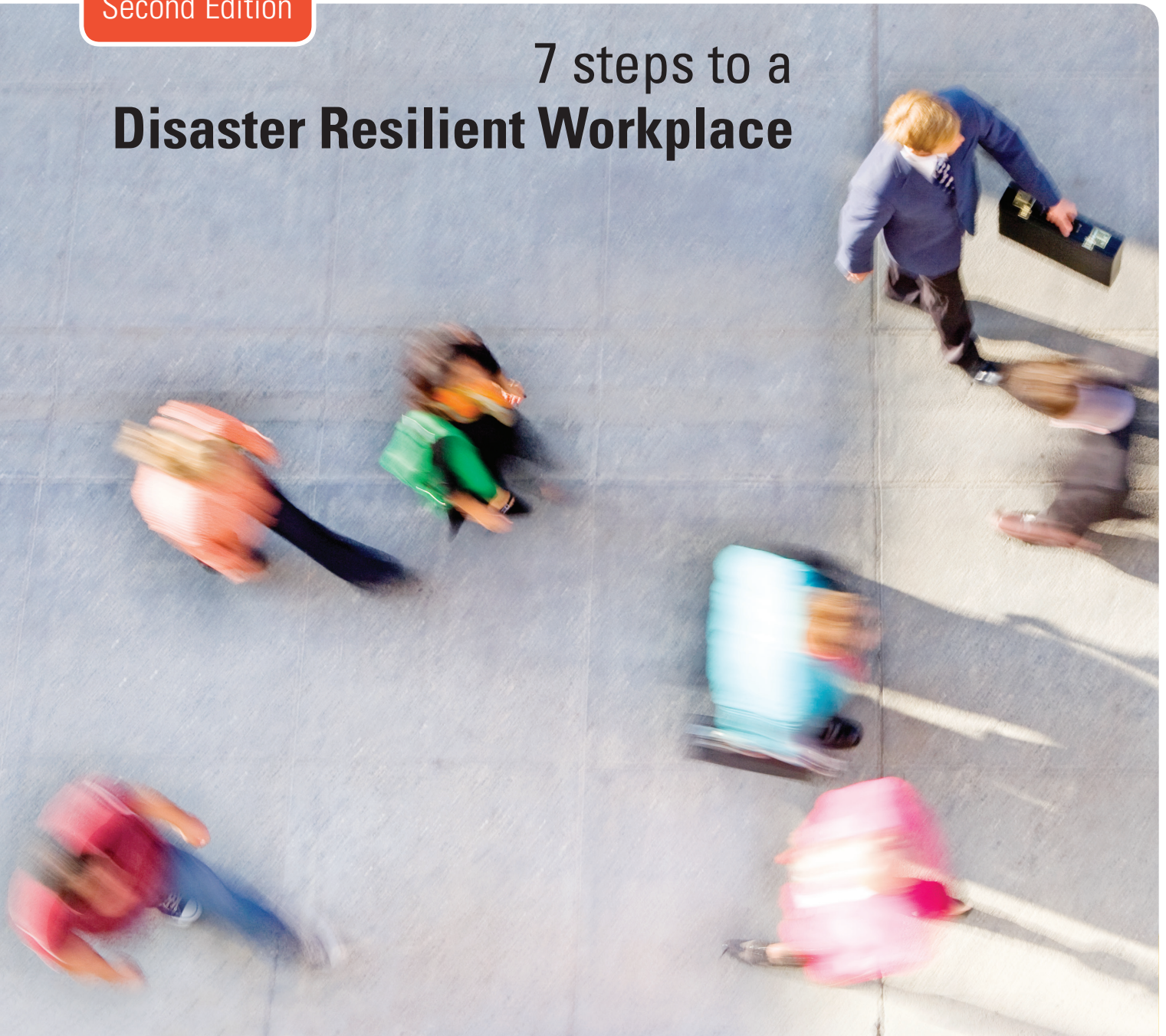


Second Edition

7 steps to a Disaster Resilient Workplace



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Disclaimer: The suggestions, photos and illustrations included in this document are intended to improve earthquake awareness and preparedness; however, they do not guarantee the safety of an individual, organization, or structure. The writers, contributors, and sponsors of this handbook do not assume liability for any injury, death, financial loss, property damage, or other effect of an earthquake or other disaster.

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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; FLASH: Barbara Harrison; CalOES: Kate Long; 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, Elizabeth Burrill
Photography: Ann Elliott Cutting

7 STEPS TO A DISASTER RESILIENT WORKPLACE

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.

While this booklet assists addressing all hazards, we use an earthquake as our primary example. To get you started, here is a snapshot of the 7 Steps.

SETTING THE FOUNDATION

Identify potential hazards.

Which hazards pose risks to your organization, and how? In this step, you will identify what may interrupt your operations temporarily or worse. The priorities you set here will help you in the other Steps.

BEFORE...

STEP 1 Secure Your Space (page 8)

Look at the priorities you just identified, where your organization is vulnerable to interruption, and now choose how to minimize these risks. As an example, earthquake shaking can move almost anything, even large or heavy items. Imagine your workplace being picked up and shaken sideways – what would be thrown around? Learn how to secure these items to prevent damage or injuries to employees.



STEP 2

Plan To Be Safe (page 9)

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 organization might face by guiding your decisions yet allowing flexibility to adapt to the unexpected.

STEP 3

Organize disaster supplies (page 10)

After a disaster, organizations 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

Minimize Financial Hardships (page 11)

Organize your important documents, strengthen your property, and consider insurance—customized to cover your most needed items. 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.

DURING...

STEP 5

Drop, Cover, and Hold On (page 12)

The ground is shaking, what do you do? Everyone should know how to protect themselves in any situation. Most often this will be to Drop, Cover, and Hold On, but this can depend on your location. Stay clear of any objects that may fall and stay put until the shaking stops.

STEP 6

Improve Safety (page 13)

Life safety is the top priority after an earthquake or any disaster. Activate your own trained personnel to find and help anyone injured, as outside help may not be coming. Next, survey your building for damage or other hazards to prevent further injuries or damage. Decide if safe to stay.

AND AFTER...

STEP 7

Reconnect and Restore (page 14)

Once life safety is being addressed, it's time to begin recovery activities to resume operations. Conduct an assessment for operational issues then repair damage. 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 booklet lists good resources within the content and on the back page. For additional information and details, please visit www.ResilientWorkplace.org





WORKING THROUGH DISASTERS

Earthquakes and other disasters can and will happen in many parts of the United States while you are at work. While the actions described in the “Seven Steps to Earthquake Safety” (www.EarthquakeCountry.org/sevensteps) are focused on improving earthquake safety at home, this booklet provides guidance on creating a resilient *workplace* – for any disaster.

Every area of the country relies on their local businesses and non-profit organizations 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 or organization to disaster 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 as a primary example but it will also discuss and help you prepare for **all hazards anywhere in the U.S.** For specific earthquake hazard information, see the resources listed in the back for more information. No matter what your industry or the size of your organization, you can start today. And remember...

we're all in this together!

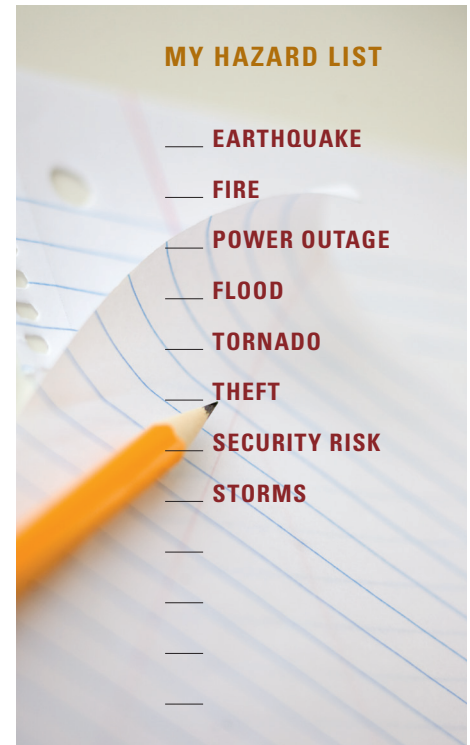
IDENTIFY YOUR NEEDS AND POTENTIAL HAZARDS

The information you gather here will help you prioritize your planning process and create your foundation to complete the Steps. In order to plan, you will need to recognize potential hazards and how they may interrupt a part or all of your workplace.

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, tornado, hurricane, human error, power outage, theft, etc. Most internal/external hazards will fall under one of these. For more ideas of hazards to consider on your list, please visit www.ResilientWorkplace.org. We will explain how to actually address these hazards later.

To begin identifying your potential internal hazards, start by surveying your area. This is as simple as walking around your organization 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 operations?

One of the most common disruption or loss to small organizations 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
- Utilities located in the basement or on the floor
-
-

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
- Near a water source, such as a river
-
-

CRITICAL BUSINESS ASSETS



PEOPLE

employees
customers
vendors
suppliers
visitors
volunteers



DATA

documents
files
records
server back-ups



OPERATIONS

Look at your standard operating procedures or SOPs and think of a disruption to your revenue generating operations or the critical services you provide.

Accounts Receivable or Payable
Payroll
Manufacturing
Mail Room
Food delivery to at-home seniors
Medical care for people with disabilities
or access and functional needs



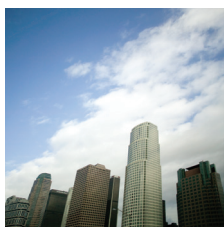
INVENTORY

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

Identify Critical Assets

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

The assets will differ from one organization to another, although sectors and 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 workplace is vulnerable to disruption. For each of your six categories, you will then 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.

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

Negligible – limited to no organizational disruptions or property damage

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

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

Catastrophic – a disaster that affects entire regional community causing workplace 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 that means limited or no outside resources available for some time.

On the right is a table to help you determine and prioritize your workplace 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 organization.

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	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	
Pandemic	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							

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 U.S. Geological Survey seismic hazard maps as it may be a higher risk than you think.

Need another copy of this table? Please visit www.EarthquakeCountry.org/workplace 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 organization about the results to ensure you are considering the whole organizational picture. No one-person knows every facet to an organization, so ask for their thoughts and revise priorities accordingly.



1

SECURE YOUR SPACE

Now that you have prioritized where you are vulnerable, here is how to minimize your risk. An example is a business choosing to protect specialty equipment, which is difficult or expensive to replace after 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 organization's 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, at least four dollars in disaster losses are saved.

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."



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 shelf-tops after six months saves no one and only adds to your organization's vulnerability. Continue on the risk-reduction path by reinforcing and rewarding the safe behavior of all employees, especially over time.

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

For great QuakeSmart checklists to secure space, systems, structure, staff and services; to get the simple, step-by-step plan-builder (DRB Toolkit®) that includes solutions for multi-hazards; or other resources, visit www.ResilientWorkplace.org

In your foundation work, you identified potential hazards to your organization, determined your critical assets, and prioritized the impacts. In Step 1 you identified solutions to mitigate impacts. You are now ready to begin Step 2.

TASK 1



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 or have open shelves near exits. *(people, operations, inventory)*
- > Keep space cleared under your desk so you can Drop, Cover, and Hold On. *(people, operations)*
- > 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.

2

PLAN TO BE SAFE

You have identified potential hazards and impacts to your operations - time to create a plan! Because disasters are unpredictable, it is impossible to anticipate every situation or impact. However, a Business Continuity Plan can aid decision-making and communication in any crisis.

Collaborate on Your Plan

In disasters, first responders will be limited, focusing on priorities such as hospitals, schools. Instead, work with neighbors and similar organizations to identify needs ahead of time, then help each other by sharing resources, supplies, locations, etc.

George

Owner, construction company

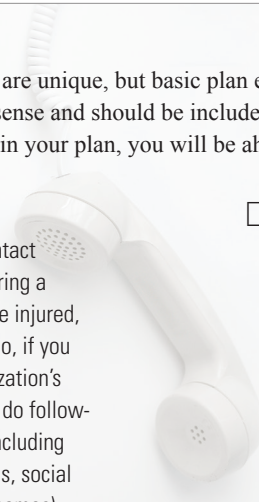
"First aid situations come up in construction, but earthquakes — I need training for myself and everybody who works for me. With crews and heavy equipment out on three or four jobs, how can I expect my foremen to manage their sites during a disaster unless I have disaster plans in place, and make sure 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

Every organization and their risks are unique, but basic plan elements apply to all. Determine which elements make sense 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.** It's crucial to contact employees and their families during a disaster such as if employees are injured, sick or unable to leave work. Also, if you must share regarding the organization's status, where to go and what to do following a disaster. Create call lists including work, cell, home numbers, emails, social media (contact info/link/pages/names) and the same for spouse or significant others.
- RECOVERY LOCATIONS.** Can you recover from an alternate site? Do you have multiple locations or are you site dependent? Consider setting up another site or creating an agreement to rent space in a disaster. Can you co-locate with a neighbor, partner or competitor?
- KEY CONTACTS LIST.** Key contacts are vendors, suppliers, clients, customers, etc. that you rely on to conduct operations or may need to notify when you've been impacted by a disaster such as property management, utility companies, business partners, board, or others. You will also want to determine if they have been impacted and how that will affect you - consider Service Level Agreements (SLA) to identify their responsibility to you.
- LIFE SAFETY – EMERGENCY RESPONSE.** As local first responders may not be available, create your on-site team of first responders and train them to help save lives using now/low cost resources. Conduct annual training and drills such as:
 - Evacuations
 - First Aid/CPR
 - Fire Safety and Extinguishers
 - Great ShakeOut Earthquake Drills:

Train all employees to "Drop, Cover, and Hold On" and participate in the annual drill at www.ShakeOut.org
- CRITICAL BUSINESS FUNCTIONS.** Identify and prioritize those in your operations that are critical for survival; are necessary to fulfill legal / financial obligations; and are necessary to maintain cash flow and/or reputation. How long can you be down and remain viable? How will you continue performing these functions in disaster and who is relying on you for products or services.
- PLAN EDUCATION.** Educate employees on your plan, how it works, recovery strategies, call trees, etc., Also, provide information on individual/family preparedness as employees ready at home will promptly return to work and assist your organization.
- VITAL RECORDS.** Identify those essential to perform critical functions such as employee data, payroll, inventory, financial and insurance records, customer data, legal and lease documents. Are any impossible to re-create, are copies stored offsite, or are they accessible online?
- MAINTENANCE AND TESTING.** Update the plan when a change in your org impacts the information in the plan. Testing your plan is very important, as it's the only way to know if your plan works and employees know what to do!
- CRITICAL EQUIPMENT/ MACHINERY.** Determine what is necessary to keep you operational. What if you lost critical equipment? Do you have spare parts or equipment stored offsite or can you get replacements?

For a simple, yet comprehensive, step-by-step plan-builder to become a more disaster resistant business (DRB) or organization get the DRB Toolkit® at www.Resilient-Workplace.org, along with other great resources.

3

ORGANIZE DISASTER SUPPLIES

First responders and supplies may be overwhelmed after an earthquake or other disaster. Organizations 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 critical operations.

First Aid Kits vs. Disaster Supplies

As outside resources will be very limited after an earthquake, organizations 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 minimum three-day supply of personal medications at work, copies of prescriptions, and extra glasses or contacts.

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, organizations 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

MINIMIZE FINANCIAL HARDSHIP

In your foundation work and Step 1, you identified hazards most likely to disrupt your organization 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. As the impacts can last for weeks and months begin to minimize financial hardships by organizing important documents, strengthening your property, and considering insurance. Structural hazards can cause serious impacts and interruptions your operations. Address any structural hazards, as the cost of not addressing them will be even higher.

Organize important documents

If you have to leave work quickly, due to a fire or other emergency, and not be able to return—what key info or documents do you need for decision-making (lease, legal agreements, emergency contacts, insurance policies, etc.)? Create a “grab-and-go” bag or case, that is secure and possibly waterproof, so it can go with you.

In identifying critical documents, make sure you protect your vital records. Back-up computer files on regular basis and store back-ups at an off-site location (e.g. the cloud, fire safe at home, off-site storage). Know that “auto backup” is only to that computer and not off-site. Stored data can include client history, inventory records, or other information difficult to recapture or required to be protected, such as grant documentation.

TASK 3

DISASTER SUPPLIES

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

- FIRST AID KITS/MEDICAL SUPPLIES** – cuts are most likely injury so have bandages, pads, wraps
- 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**
- BACK-UP POWER** – generator & extra fuel, batteries, uninterruptable power supply (UPS), and consider other sources: e.g. solar, hand-cranked
- ADDITIONAL SUPPLIES** to meet the training level of your employees: first aid, Community Emergency Response Team (CERT), EMT



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."



Strengthen your property

While most organizations do not own their building, it is essential to work with your owner and/or property manager on addressing structural issues (e.g. floor, ceiling, walls, support columns). A good relationship can assist you getting access to your property or inventory, while structural damage can keep you from opening your doors. If you own your building, take the time to strengthen weaknesses, 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.

Depending on the hazard, consider solutions such as earthquake retrofit, hurricane shutters, elevating for flood or installing flood resistant doors. While retrofitting or elevating the structure can be a significant cost, if you are reliant on that building to operate consider the cost to mitigate versus not having a building. No access, mean no business.

Bring in expert advisors

Not sure where to start? Do some homework to determine which additional measures are needed to protect your workplace. Ideally do it before you lease or purchase a facility. Learn what damage might be expected to help you prioritize solutions. Structural engineers and local Fire Marshall may help you understand the building code and how its application affects your building. Depending on 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, contact your owner/property manager and develop a relationship with them now, before a disaster occurs. If you uncovered a need to retrofit your building, work with your owner/manager to get various reputable, licensed, experienced retrofitters to give estimates 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

Organizations who own their buildings should look to the expert guidance in addressing identified vulnerabilities. Prioritize fixing weaknesses based on those that could most significantly impact your ability to do operate. If you know you need to strengthen your building, consult with licensed, reputable, experienced retrofitters to discuss your options. Home-based businesses are considered a high-risk group, since you have the potential of losing both your business and your home. We recommend www.ResilientWorkplace.org for both structural and non-structural solutions.

The goal of all organizations 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 your ability to remain operational. Consider getting involved with organizations that connect tenants with owners, (e.g. Building Owners and Managers Association (BOMA)).

Consider insurance

After Hurricane Sandy, we learned many small businesses/non-profits did not have any insurance or the right type, like flood insurance, to cover impacts. The lesson learned too late is to review your policy and make an informed decision to select the one that covers your most critical equipment or operations. Most organizations do not have reserves to address impacts such as damage repairs and recovery. Consider cost of the deductible versus cost for all losses, then consult with an agent about options, such as business interruption insurance.



5

DROP, COVER, AND HOLD ON

When at work and the earth starts shaking — the critical initial step for life safety is to: Drop onto your hands and knees to avoid being knocked down by shaking. Cover your head with your arms (as best as possible), and Hold On to your neck with your hands. If you are near a table or desk, crawl under it and Hold On to your shelter with one hand. If needed, move with your shelter until the shaking stops. If there is no nearby shelter, crawl next to an interior wall (away from windows and other hazards), keep holding your arms over your head, and continue to Hold On to your neck with both hands.

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."



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. When you *Drop* onto your hands and knees your head should be lower than the next highest surface such as a desk, table or other sturdy furniture that will take the brunt of the impact. If seated and unable to drop to the floor (or in a wheelchair, first Lock your wheels), bend as far forward as possible, *Cover* your head/neck with your arms, and *Hold On* to your neck with both hands. 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 An Office

In your foundation work, 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
- > Next to an interior wall
- > Next to large furniture that won't tip over, like a sofa, or an 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. Regular practice, such as participation in annual Great ShakeOut Earthquake Drills, is a simple way to educate all employees on what to do and highlight issues that can be easily rectified such as:

- > Boxes stored 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. If in a store, move away from dangerous areas quickly then Drop, Cover, and Hold On. Look for items that may provide protection, such as next to shopping carts or clothing racks, or inside the ground level of product racks at warehouse stores to avoid falling objects, then hold onto the rack.

Educate Your Workplace Visitors

Just like planning for the annual ShakeOut drills, create actions and procedures to address visitors or customers. A simple step is to present emergency briefing information to all visitors before each meeting, so they know 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

IMPROVE SAFETY

Once the shaking has stopped it is time to emerge slowly from your safe places, looking carefully for new hazards or falling objects. Expect aftershocks and prepare to drop again. Once up, decide if it's safe to stay. If in a tsunami zone and shaking lasted for more than 20 seconds move quickly to higher ground or inland. Then check for injured people and for serious damage. Take actions to prevent further injuries or damage.

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."



Decide if evacuation is necessary

The first decision is whether to evacuate or stay put. Fire procedures are clearly to evacuate, but in an earthquake, being outside of a newer building may be more dangerous as it's where there may be falling debris from other buildings. Training employees pre-disaster will help with good disaster decision-making. If a tsunami is possible, evacuate to higher ground.

Activate trained employees and help the injured

In an earlier step, you identified training for your employees, and this is where trained employees go into action carrying out your response procedures. Life safety is the priority at this stage of the disaster, especially if you have limited personnel. Also activate 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.

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. Even if no injuries are present, treat for shock. 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.

Prevent further injuries or damage

Once immediate life safety is being addressed or stabilized, it is time to move to building & operation 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.

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



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.

7

RECONNECT AND RESTORE

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.”



Once all life safety concerns are addressed, it is time to begin recovery activities to resume your operations. Keep in mind some aspect of your organization may never return to “normal” after a disaster. To be resilient is to be flexible to recover in this changed environment and make the organization survive and thrive. You can begin to restore daily life by reconnecting with others, repairing damage, and rebuilding community.

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 daily 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/clients, vendors, stakeholders, and key organizational partners often. Consider alternate communications methods in a disaster, such as your website, social media, telephone calls, news services and publications, 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/client base, or the community at large, know when you are open. 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.

Also, encourage employees to talk to one-another about what happened. Mental health is a big part of the recovery, and not addressing can lead to poor performance, absenteeism, etc.

Recovery Activities “Things to Consider”

How were your employees impacted at home? Are they able to return to work? 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/client 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/clients 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, or other disasters, from occurring it is important that we take steps today to minimize loss of people and property.

YOUR CHECKLIST FOR A PREPARED WORKPLACE

SETTING THE FOUNDATION

- Create My Hazard List
- Identify potential internal hazards
- Identify potential external hazards
- Identify critical business assets
- Complete the Risk Assessment Matrix

BEFORE...

STEP 1

SECURE YOUR SPACE

- Begin addressing hazards by starting on no/low cost items with high impact
- Consider benefits vs. loss of higher cost items
- Be diligent in continuing solutions
- Reinforce & reward employees' safe behavior
- Address priority hazards

STEP 2

PLAN TO BE SAFE

- Collaborate on Your Plan
- Complete Basic Plan (see page 9)
 - Employee Emergency Contacts
 - Key Contacts List
 - Critical Business Functions
 - Vital Records
 - Critical Equipment/Machinery
 - Recovery Locations
 - Life Safety — Emergency Response
 - Plan Education
 - Maintenance and Testing

STEP 3

ORGANIZE DISASTER SUPPLIES

- Understand first aid kits vs. disaster supplies
- Disaster Supplies Kits (see page 10)
 - First Aid Kits/Medical Supplies
 - Food and Food Preparation
 - Water
 - Lighting
 - Communications
 - Tools
 - Personal Protective Equipment
 - Tarps/plastic sheeting
 - Hygiene and sanitation supplies
 - Back-up power
 - Additional supplies

STEP 4

MINIMIZE FINANCIAL HARDSHIPS

- Organize important documents
- Strengthen your property
- Bring in expert advisors
- Actions if you lease
- Actions if you own
- Consider insurance

DURING...

STEP 5

DROP, COVER, AND HOLD ON

- Know how to Drop, Cover, and Hold On
- Understand how to Drop, Cover, and Hold on—when you cannot Drop
- Review safe places in an office
- Identify hazards in your safe places
- Educate your workplace visitors

STEP 6

IMPROVE SAFETY

- Decide if evacuation is necessary
- Activate trained employees and help the injured
- Prevent further injuries or damage
 - Inspect the building exterior for damage and/or hazards
 - Inspect the building interior for damage and/or hazards
 - Perform a more detailed facilities assessment of impacts to utilities, special equipment, etc.
- Inspect the building exterior for damage and/or hazards
- Inspect the building interior for damage and/or hazards
- Perform a more detailed facilities assessment of impacts to utilities, special equipment, etc.
- Establish hub for communications

AND AFTER...

STEP 7

RECONNECT AND RESTORE

- 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

WE'RE ALL IN THIS TOGETHER

EARTHQUAKE COUNTRY ALLIANCE

www.EarthquakeCountry.org

Great information for how to get prepared to survive and recover after major earthquakes, according to the *Seven Steps to Earthquake Safety*. This site also has useful information about earthquakes risk in California, a broad collection of earthquake science preparedness resources, and information about major activities of the ECA.

www.terremotos.org

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

QUAKESMART

www.QuakesmartCommunity.org

A program of resources and recognition for organizations looking to secure their space, systems, structure, staff and services for earthquakes. Great guidance to complete steps and application for recognition

DISASTER RESISTANT BUSINESS (DRB) TOOLKIT®

www.DRBToolkit.org

Simple, yet comprehensive step-by-step application uses videos and interactive content that's 100% customizable for organizations to identify risk, prioritize operations, and train employees. Develop or enhance your continuity plan and program. Learn how to create exercises; get solutions for before, during, and after disaster; and make better decisions to keep your doors open

GREAT SHAKEOUT EARTHQUAKE DRILLS

www.ShakeOut.org

Register here to join millions of people worldwide who practice self-protective actions each year, in businesses, organizations, government, schools, and other organizations. Comprehensive drill planning resources are available for simple to advanced drills at any time. Many additional resources for what to do before, during, after are also available

U.S. DEPARTMENT OF HOMELAND SECURITY (DHS) FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA)

www.dhs.gov / www.fema.gov

DHS/FEMA provide current National Terrorism Advisory Level, national security, preparedness and response programs, applying for disaster assistance, resources, and training

READY BUSINESS

www.ready.gov/business/

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

CALIFORNIA GOVERNOR'S OFFICE OF EMERGENCY SERVICES

<https://www.caloes.ca.gov/businesses-organizations>

Businesses can do much to prepare for and lessen impacts of natural hazards, including earthquakes, floods, fires, tsunamis, and pandemics. Cal OES offers information about training, materials and assistance to help respond to and recover from such disasters.

U.S. CHAMBER OF COMMERCE FOUNDATION

www.uschamberfoundation.org/disaster-response-and-community-resilience

The Chamber's Corporate Citizenship Center (CCC) has great resources such as Preparedness & Recovery Quick Guides (printed and expanded online guides), as well as the National Disaster Help Desk that provides assistance to organizations and communities struck by disaster—just call 1-888-MY-BIZ-HELP (888-692-4943)

U.S. SMALL BUSINESS ADMINISTRATION (SBA)

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

E-mail: answerdesk@sba.gov

www.sba.gov/services/disasterassistance

Provides excellent information regarding types and how to apply for disaster assistance, and other resources

www.preventionweb.net/files/3548_servdispreplanningguide.pdf

SBA's "Expect the Unexpected: Prepare Your Business for a Disaster" guide with tips and resources for multi-hazards

CENTER FOR DISEASE CONTROL (CDC)

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

www.disaster-resource.com

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

resilientworkplace.org



Earthquake
Country
Alliance

We're all in this together.