

## Zoom Webinar General Information

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Change “View options” to  
*Fit to Window* and *Side-by-side mode*
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- Your video will not be seen
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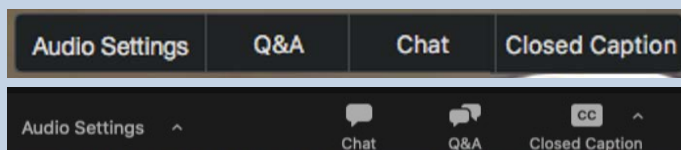


**We Will  
Begin Shortly**

1

## How to Participate:

- Click **“Q&A”** to post a question for the panelists
  - There may not be time for all questions to be asked
- Click **“Chat”** to share information, ask for technical support, and to communicate with panelists
- Click **“Closed Caption”** to see live captions on desktop computers. For mobile device users, you may need to turn the option on from Zoom settings, meetings section (before joining)



2

## ECA's Safer at Home Webinar Series

# Step 5: Drop, Cover, and Hold On and other Self-Protective Actions



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






[EarthquakeCountry.org/step5](http://EarthquakeCountry.org/step5)

[Terremotos.org/paso5](http://Terremotos.org/paso5)

3

## Earthquake Country Alliance

- 1500+ *Public-Private-Grassroots* leaders
- Statewide *Sector-based committees* and *Outreach Bureaus* develop resources and deliver programs
- Local *Regional Alliances* organize meetings and outreach activities
- California's Office of Emergency Services provides FEMA funding for ECA activities
- USC's Southern California Earthquake Center administers ECA



**Join Us: [EarthquakeCountry.org/alliance](http://EarthquakeCountry.org/alliance)**

4

## Seven Steps To Earthquake Safety

	<b>1. Secure Your Space</b> 	<b>2. Plan To Be Safe</b> 	<b>3. Organize Supplies</b> 	<b>4. Minimize Financial Hardship</b> 
<b>BEFORE</b>				
	<b>5. Drop, Cover, and Hold On</b> 	<b>6. Improve Safety</b> 		<b>7. Reconnect and Restore</b> 
<b>DURING</b>			<b>AFTER</b>	
<a href="http://EarthquakeCountry.org/sevensteps">EarthquakeCountry.org/sevensteps</a>			<a href="http://Terremotos.org/sietepasos">Terremotos.org/sietepasos</a>	

5

## Safer at Home Webinar Series

Step 1 – Secure Your Space:	June 30
Step 2 – Plan to Be Safe:	August 19
Step 3 – Organize Disaster Supplies:	September 2
Step 4 – Minimize Financial Hardship:	September 23
Step 5 – Drop, Cover, and Hold On:	September 30
Step 6 – Improve Safety:	October 21
Step 7 – Reconnect & Restore:	Mid-November

**[EarthquakeCountry.org/SaferAtHome](http://EarthquakeCountry.org/SaferAtHome)**

6

## Step 5: Drop, Cover, and Hold On Webinar Team

### Host

- **Shannon Mulhall** (Americans with Disabilities Act Coordinator, City of Fresno & Chair, Seniors & People with Disabilities Committee)

### Presenters

- **Michele Wood** (Professor and Chair, CSU Fullerton Department of Public Health)
- **Sara McBride** (ShakeAlert Social Science Coordinator, United States Geological Survey)
- **Amanda Moyer** (Executive Officer, California Earthquake Early Warning Program, CalOES)
- **Mark Benthien** (Associate Director, So. California Earthquake Center (SCEC) @ USC & Executive Director, Earthquake Country Alliance)
- **Heidi Rosofsky** (Inclusive Planning Specialist, Global Vision Consortium & Chair, Earthquake Country Alliance Southern California)

### Moderators

- **Sharon Sandow de Groot** (Director for Strategic Partnerships, SCEC @ USC & Deputy Director, ECA)
- **Jason Ballmann** (Communications Manager, SCEC @ USC & Media/Participation Bureaus Liaison, ECA)
- **Robert de Groot** (ShakeAlert® Coordinator for Communication, Education, Outreach, and Technical Engagement, United States Geological Survey & Chair, ECA EPIcenter Committee)

7

## Step 5 Webinar Agenda

1. Research behind self-protective action guidance
2. ShakeOut to ShakeAlert®: Research to Practice for Drop, Cover, and Hold On
3. Earthquake Warning California – Don't Get Caught Off Guard
4. Self-Protective Guidance for Various Settings
5. Self-Protective Guidance for Various Capabilities
6. Q&A after each presenter, and at the end

8

## Research Behind Self-Protective Action Guidance



Dr. Michele Wood  
Professor and Chair  
CSU Fullerton Department of Public Health

9

## Evidence Supporting DCHO and Other Guidance

### Entering/ Exiting Buildings

- **Whittier Narrows, Loma Prieta, Northridge:** Exiting buildings associated w injury
- **Northridge:** People who tried to move had higher rates of injury; falls were leading cause of hospitalized injury (most often from exiting building)
- **CA:** Residential housing largely wood-framed, less prone to collapse

### Falling/ Flying/ Sliding Objects

- **1999 Kocaeli:** 85% deaths/injuries due to being struck by falling object
- **Whittier Narrows, Loma Prieta, Northridge:** Falling non-structural items was most common cause of injury

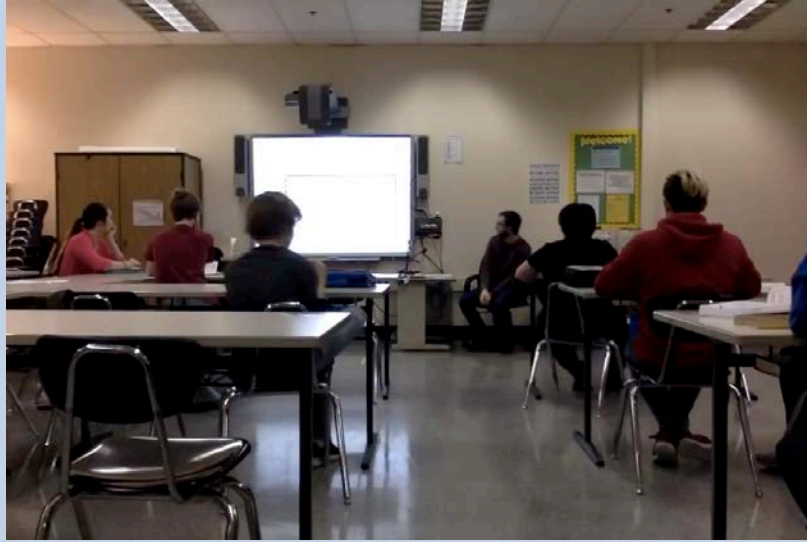
### Movement

- **Gölcük:** Staying put-sitting down associated w/ less injury than any other action
- **2010/11 Canterbury:** Tripping/falling most common cause of injury
- **Northridge:** Those who stayed in bed were less likely to be injured
- **1999 Kocaeli risk:** In bed asleep < in bed awake < standing, sitting still
- **2011 Christchurch:** Those who held onto something less likely to fall

10

## How does Drop, Cover, and Hold On work in real time?

(M7.1 Anchorage Earthquake 2018)



11

## Evidence Supporting Guidance: Other Indoor Situations

- Two walls (corners) may provide more protection than one; corners may be sturdier locations; objects can fall from fewer directions
- Low-lying furniture may deflect falling/flying/sliding objects; must weigh risk of no cover against risk of movement to low-lying furniture
- Research on elevator performance suggest risks associated w/ shaking, power loss
- Fire is one of the most deadly secondary disasters that can follow an earthquake; shaking can topple stoves, ignite flames
- When current location is risky (e.g., kitchen/lab), moving may be safer than staying; controversial because of the risk associated with movement; situational awareness

12

## Evidence Supporting Guidance: Outdoors

### General Outdoors

Threat of death/injury from falling objects entering/exiting buildings

Threat of injury from falling/falling objects while moving

Downtown areas near buildings, near glass: Risk of injury/death from falling objects/glass

### Driving

**Northridge:** Driver “overcorrection” and damage to transportation infrastructure (e.g., traffic signals) led to multiple deaths

Simulation research found overcorrection and delayed response time led to inadvertent maneuvering to adjacent lanes

Roads may be closed, damaged

13

## Evidence Supporting Protective Guidance: Coastal/Tsunami Areas

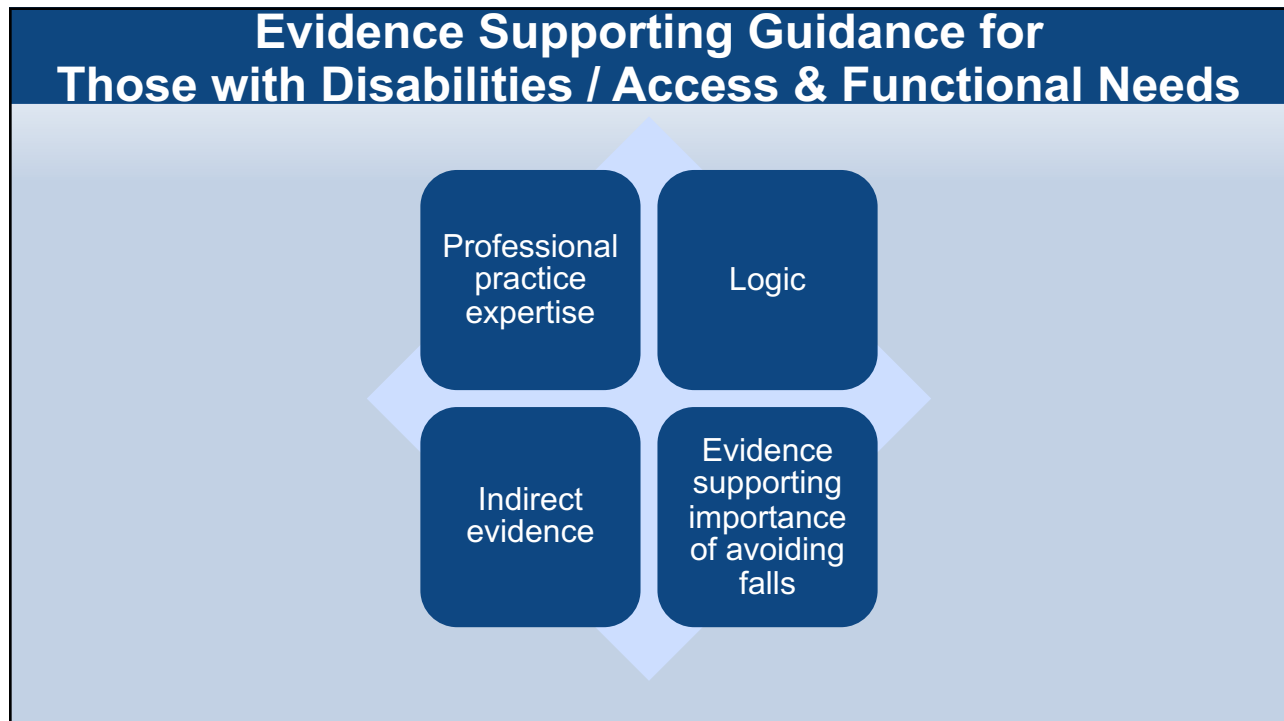
Moving to high ground during earthquake shaking can lead to injuries from falling, being struck by objects

Death/injury/damage from tsunami can surpass that from initial earthquake (so move when safe to do so)

Length of shaking as indicator of tsunami risk not universal; timeframe between shaking and tsunami threat not universal

Most buildings not designed to withstand tsunami; however, upper stories of strong, tall buildings may be able to provide protection if no other option available

14



15

## Evidence for why Certain Actions are Not Recommended

Take Cover in Doorway	“Triangle of Life”
<ul style="list-style-type: none"> <li>• Doorways provide little/no cover, no more protection than other locations</li> <li>• Moving to doorway introduces risk of falling</li> <li>• Crowding in doorways</li> </ul>	<ul style="list-style-type: none"> <li>• US buildings do not usually suffer catastrophic collapse</li> <li>• Not possible to identify structural voids in advance, even with warning</li> <li>• Moving introduces risk from falling, being struck by falling/flying/sliding objects</li> </ul>

16



## General Principles of Earthquake Safety

### Get Low to Ground

- Reduces likelihood of falling

### Make Self Small

- Reduces likelihood of being struck by falling/flying/sliding objects

### Protect Head

- **1994 Northridge:** Head most common area injured among fatalities

### Turn off Flames

- Reduces likelihood of starting gas fire

**“Situational Awareness”**

17

## Q&A

Please type your questions into the “Q&A” tool.

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18

# ShakeOut to ShakeAlert®: Research to Practice for Drop, Cover, and Hold On



Dr. Sara McBride  
 ShakeAlert Social Science Coordinator  
 United States Geological Survey

19

## So why is the recommended protective action “Drop, Cover, and Hold On” when you feel shaking?

Injury data from USA, Japan, and New Zealand indicate that people are most often injured when moving drastically during shaking (e.g. moving to reach children or evacuating from a building).

### Protect Yourself During Earthquakes!

IF POSSIBLE	 <b>DROP!</b>	 <b>COVER!</b>	 <b>HOLD ON!</b>
USING CANE	 <b>DROP!</b>	 <b>COVER!</b>	 <b>HOLD ON!</b>
USING WALKER	 <b>LOCK!</b>	 <b>COVER!</b>	 <b>HOLD ON!</b>
USING WHEELCHAIR	 <b>LOCK!</b>	 <b>COVER!</b>	 <b>HOLD ON!</b>

20

## How DCHO protects you

- Dropping where you are is a critical component to the action because it reduced the chance of you breaking a limb.
- Getting under something sturdy, if you can, like a desk or table, will protect you from anything falling on top of you.
- Holding on ensures you are stabilized under the desk.



21

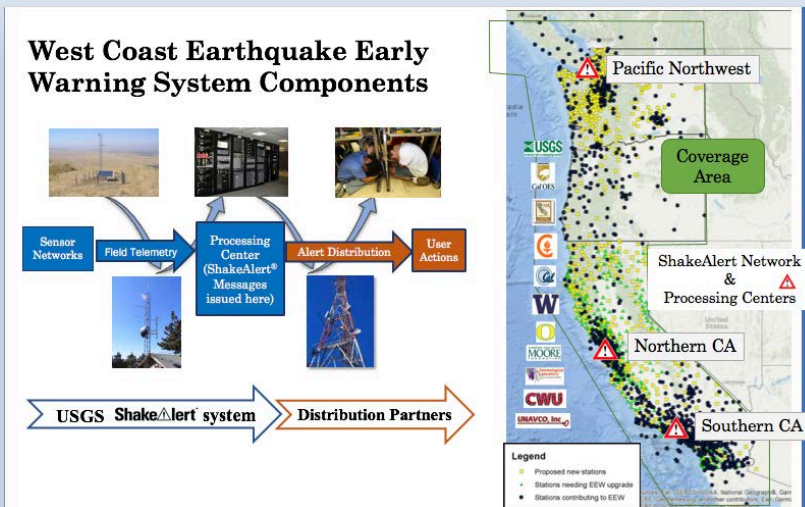
## What are some barriers as to why people don't do ShakeOut?

- A study from 2012 and 2015 ShakeOut drills in New Zealand suggests that there are a variety of reasons why people don't do Drop, Cover, and Hold On.
- 9,000 observers were involved in the drills, with thousands observed. The main barriers to doing the drill were:
  - Embarrassment
  - Fragility/Aged/Disability
  - Lack of belief in the success of the actions
  - Working/busy
  - Caretakers of children e.g. parents, teachers helping children instead of helping themselves
  - And other reasons.

22

## Connecting ShakeAlert® to the Seven Steps

- The USGS-managed ShakeAlert® Earthquake Early Warning System is now operational in California, Oregon, and Washington.
- ShakeAlert is one of many tools in one's earthquake risk reduction toolbox.



23

## Okay but what if you get an earthquake alert?

- ShakeAlert® and its partners are now testing the delivery of alerts to wireless devices in California (OR and WA to follow soon).
- The System can provide seconds of alert that stronger shaking is coming.
- It is not a prediction of an earthquake; the earthquake is already in progress.

**PROTECT (Technical Partners)**  
 The alert protects people and vital infrastructure by instructing computers to trigger automated actions, such as slowing trains, closing water valves, opening firehouse doors, starting back-up generators, and issuing public announcements.

**PROTECT (You)**  
 You may get an alert to a cell phone through a downloadable app or automatically as a Wireless Emergency Alert (WEA), just like severe weather and AMBER alerts. You may also get an alert by TV, radio, or as a public announcement. You may only have seconds to take immediate protective actions, such as **DROP-COVER-HOLD ON**. You may have to adjust to your situation and environment.

**DETECTION AND PROCESSING (USGS)**  
 Using sensors in the field, the ShakeAlert® Earthquake Early Warning system **DETECTS** ground motion from an earthquake that has already begun and passes that information to a **PROCESSING** center. ShakeAlert quickly estimates the location, magnitude, and shaking intensity of the earthquake and if the event fits the right profile, a ShakeAlert Message is issued by the USGS.

**DELIVER (Distribution Partners)**  
 Once a ShakeAlert Message is issued, it is picked up by distribution partners, such as utilities, hospitals, transportation systems, schools, emergency management agencies, and others. The contents of the Message are used to produce and **DELIVER** an alert that tells people to take protective actions, such as **DROP-COVER-HOLD ON**, or triggers automated actions.

**If you feel shaking or get an alert, immediately **DROP-COVER-HOLD ON**. Do not wait, because seconds matter!**

**ShakeAlert®**

24

## How ShakeAlert® works with Drop, Cover and Hold On

- As with any technology, there are limitations. It takes time for the earthquake to be detected, processed, and for an alert to be delivered by a ShakeAlert partner. If you are very close to the epicenter
- Seconds matter, so it is unlikely you'll have more time to do other actions other than the DCHO suite of actions.
- In reference to Step 5, LAUSD Administrator Jill Barnes says:
  - **“ShakeAlert asks you to do what you already do, but sooner.”**



25

## Social Science Working Group for ShakeAlert

- Includes 12 projects across five states and four nations.
- More than 20 researchers involved in the project.
- Studies human behavior, perceptions, attitudes, and emergency preparedness in communities across the three West Coast states (WA, OR, CA).
- This work will continue to inform improvements in the ShakeAlert system and what we know about protective actions.

26

# Thank You!

Learn More About ShakeAlert at:

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

Follow us on Twitter: @USGS\_ShakeAlert

27

## Q&A

Please type your questions into the “Q&A” tool.

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28

## Earthquake Warning California – Don't Get Caught Off Guard



Amanda Moyer  
 Executive Officer  
 Earthquake Warning California, CalOES



29

## Earthquake Warning California - Don't Get Caught Off Guard

Earthquake Warning California is the state's **earthquake early warning system**, which provides tools and resources to warn Californians in advance of an earthquake.

The system relies on **innovative technology** that sends warnings to smartphone applications, operating systems, and Wireless Emergency Alerts (WEA).

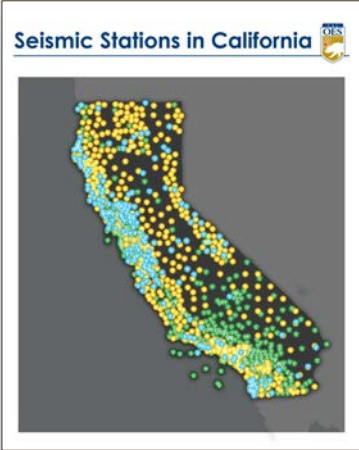
Earthquake Warning California can help the public, first responders, utility providers, transit systems, and other key industrial and business sectors **take actions to save lives**.

Visit [www.earthquake.ca.gov](http://www.earthquake.ca.gov) to learn more.



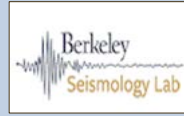
30

# Earthquake Warning California



## • How Does it Work ?

- There are more than 700 earthquake sensors across the state.
- When an earthquake occurs it must hit three sensors and those sensors send data to an earthquake alert center.
- The earthquake alert center runs an algorithm that determines magnitude, shaking intensity, and location and then sends an alert directly to:
  - The Integrated Public Alert and Warning System (IPAWS) for Government Wireless Emergency Alerts (WEA),
  - An App like *MyShake*, or
  - An Android device



31

# How Can I Get Alerts?

- **MyShake App**
- **Wireless Government Emergency Alerts (WEA)**
- **Android Earthquake Alerts**



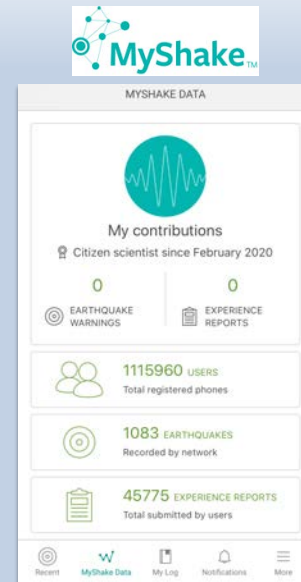
Visit [www.earthquake.ca.gov](http://www.earthquake.ca.gov) to learn more.

32



## MyShake App

- **Download the app** for free via Google Play or the Apple App store.
- **Location services** must be set to “always on” to allow the app to provide warnings. The app does not currently override “Do Not Disturb” or Silent mode.
- **Push notifications** are sent to the user’s phone or mobile device when they need them.
- This is an innovative system that is being **continuously refined and upgraded**.
- The app collects data from the phones accelerometer that acts as a mini seismometer to show trends and improve app earthquake monitoring. UC Berkeley does not collect any **personal or identifying information taken from users**.



33

## Q&A

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34

## Self-Protective Guidance for Various Settings



Mark Benthien

Associate Director

So. California Earthquake Center (SCEC)  
& Executive Director, ECA

35

## How to Protect Yourself

In *most* situations and building types:



**Drop** on to your hands and knees, where you are

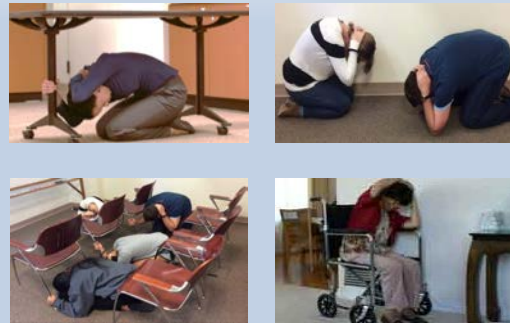


See [EarthquakeCountry.org/step5](https://www.earthquakecountry.org/step5) for advice for a variety of settings

36

## How to Protect Yourself

In *most* situations and building types:



**Cover** your head and neck with one arm and hand.

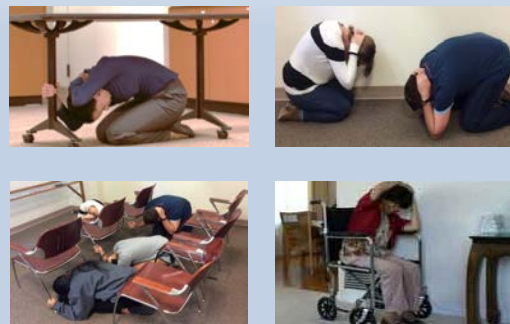
- If a sturdy table or desk is nearby, crawl underneath it for shelter
- If no table/desk, crawl against a wall or next to low furniture for sideways protection

See [EarthquakeCountry.org/step5](http://EarthquakeCountry.org/step5) for advice for a variety of settings

37

## How to Protect Yourself

In *most* situations and building types:



**Hold On** to your shelter until shaking stops

- Be ready to move with your shelter
- If not under a shelter, hold on to your head/neck with both arms and hands

See [EarthquakeCountry.org/step5](http://EarthquakeCountry.org/step5) for advice for a variety of settings

38

**Drop, Cover, and Hold On: Nearby Desk or Table**



39

**Drop, Cover, and Hold On: NO Nearby Desk or Table**



40

## Other Self-Protective Actions

- Learn how to protect yourself—wherever you are: ShakeOut in Place.
- If you can't get back up—don't get down  
[EarthquakeCountry.org/disability](http://EarthquakeCountry.org/disability)
- Guidance for many other situations—  
[EarthquakeCountry.org/step5](http://EarthquakeCountry.org/step5)  
[Terremotos.org/paso5](http://Terremotos.org/paso5)
- Videos: [Youtube.com/greatshakeout](https://www.youtube.com/greatshakeout)

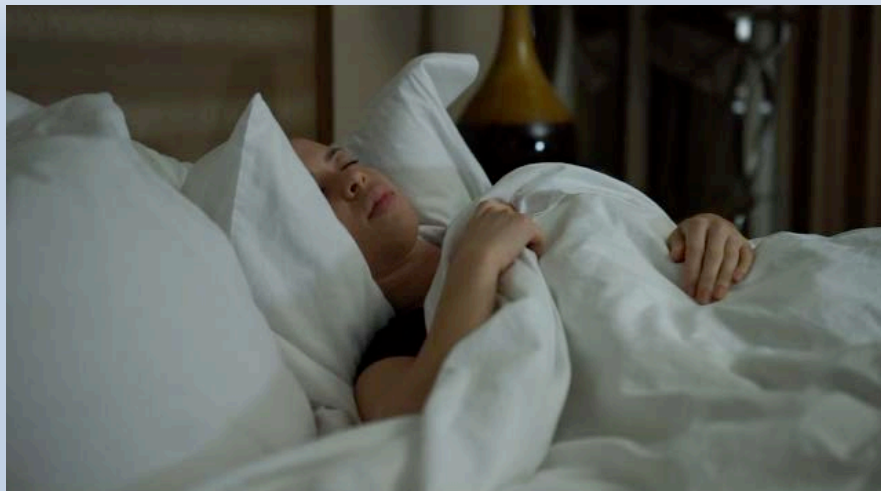
### Protect Yourself During Earthquakes!

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USING CANE			
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USING WALKER			
	<b>LOCK!</b>	<b>COVER!</b>	<b>HOLD ON!</b>
USING WHEELCHAIR			
	<b>LOCK!</b>	<b>COVER!</b>	<b>HOLD ON!</b>

  [www.EarthquakeCountry.org/disability](http://www.EarthquakeCountry.org/disability)

41

## Earthquake Safety If You Are In Bed



42

## Earthquake Safety If You Driving



**Shake  
Out**  
If You Are Driving a Car <sup>TM</sup>

43

## Drop, Cover, and Hold On: In a Stadium or Theater

**Earthquake Safety  
Video Series**  
*If You're in a Stadium or Theater*

44

## Earthquake Safety Near the Shore



TsunamiZone.org



**DROP! COVER! HOLD ON!**  
Protect Yourself During Earthquakes



**GO TO HIGH GROUND OR INLAND!**  
The Shaking is Your Tsunami Warning



**STAY THERE!**  
Tsunami Waves May Arrive for Hours

45

## Earthquake Safety Video Series

		<ul style="list-style-type: none"> <li>• Separate short (1-8 min) videos:             <ul style="list-style-type: none"> <li>• indoors, nearby table/desk</li> <li>• indoors, no table/desk</li> <li>• theater/stadium</li> <li>• near the shore</li> <li>• in a car</li> <li>• in bed</li> <li>• people with mobility disabilities</li> </ul> </li> <li>• View full videos at <a href="https://www.youtube.com/greatshakeout">Youtube.com/greatshakeout</a></li> <li>• Download full videos and these GIFs at <a href="http://www.ShakeOut.org/messaging">www.ShakeOut.org/messaging</a></li> </ul>
		
		
		

46

## Some Other Settings

- **In a high-rise:** *Drop, Cover, and Hold On.* Avoid windows and other hazards. Do not use elevators. Do not be surprised if sprinkler systems or fire alarms activate.
- **In a classroom:** *Drop, Cover, and Hold On.* Laboratories or other settings may have special safety considerations. Students should also be taught what to do at home or other locations.
- **In a store:** *Drop, Cover, and Hold On.* Getting next to a shopping cart, beneath clothing racks, or within the first level of warehouse racks may provide extra protection.

[EarthquakeCountry.org/Step5](http://EarthquakeCountry.org/Step5)

47

## Be Safe During Earthquakes, Just like Rocket!

**DROP**



**COVER**



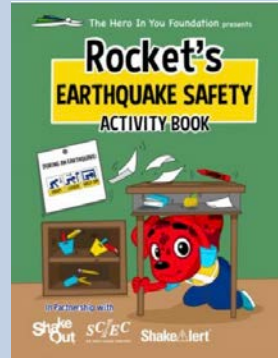
**HOLD ON!**



48



## RocketRules.org: New materials for children age 5-9

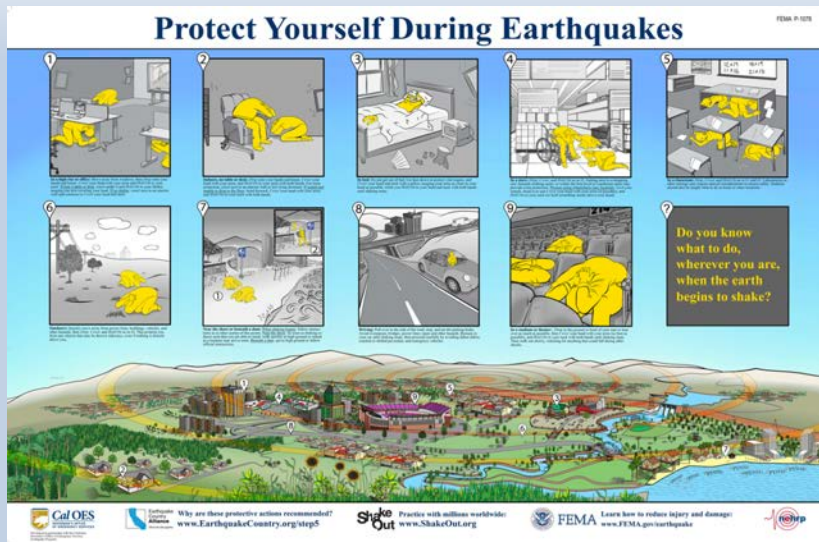


English and Spanish Story Books

English, Spanish, Vietnamese, Chinese, and Tagalog

49

## FEMA P-1078: Free Poster

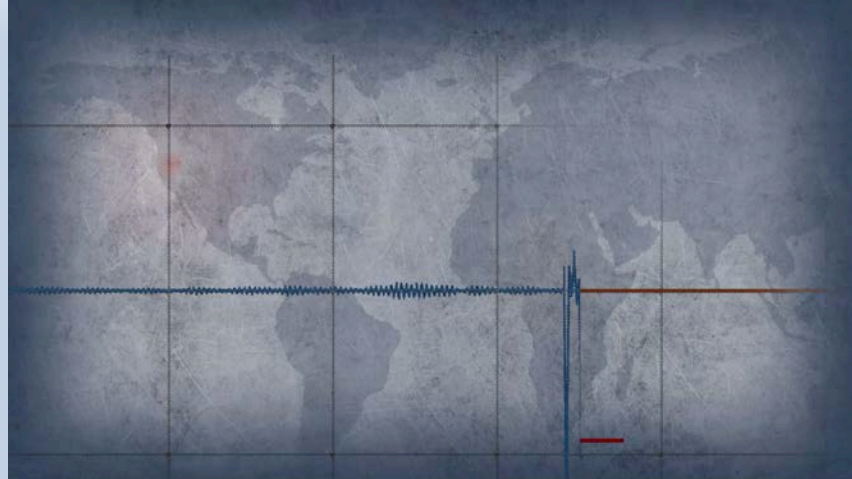


Send the following to [femapubs@gpo.gov](mailto:femapubs@gpo.gov):

- Publication **FA-P-1078**
- # of copies
- Shipping address
- Phone number

50

# Be Safe During Earthquakes, Just like Mario!



51

## ShakeOut.org    ShakeOut.org/espanol

**Official Participant**

**Join Us**  
in the  
World's Largest  
Earthquake Drill.

**DROP! COVER! HOLD ON!** ShakeOut  
October 18, 10:18 a.m.

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

**ShakeOut** Great ShakeOut Earthquake Drill

**K-12 Schools and Districts** Register Online at [ShakeOut.org](http://ShakeOut.org)

**Ready! Cover! Hold On!**

**Prepárese para el Shake Out.**

**¡AGÁCHESE! ¡CÚBRASE! ¡SUJÉTASE!**

15 de octubre

Register at [ShakeOut.org/espanol](http://ShakeOut.org/espanol)

**ShakeOut** "Countdown to ShakeOut"

1. Prepare your home and workplace for an earthquake. ...

2. Practice earthquake drills with your family, friends, and coworkers. ...

3. Know what to do during an earthquake. ...

4. Know what to do after an earthquake. ...

**DROP! COVER! HOLD ON!**

**¡AGÁCHESE! ¡CÚBRASE! ¡SUJÉTASE!**

**Get Ready to Shake Out.**

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

**ShakeOut** Great ShakeOut Earthquake Drill

**Drop! Cover! Hold On!**

**Protect yourself during an Earthquake!**

**DROP! COVER! HOLD ON!**

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

**¡Ande, Muévase! ¡Participe y Protéjase!**

15 de octubre, 2020

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

**ShakeOut**

**#ShakeOut**

**Join Us**  
in the  
World's Largest  
Earthquake Drill.  
October 15, 2020

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

**ShakeOut**

**ShakeOut. Don't FreakOut.**


Register Now at [www.shakeout.org](http://www.shakeout.org)

**ShakeOut**

**ShakeOut Shop**

52

# ShakeOut.org/COVID-19 & ShakeOut.org/espanol/COVID-19



**ShakeOut** Great ShakeOut Earthquake Drills

**SHAKEOUT COVID-19 RESOURCES**

There has been a lot of uncertainty over the past few months due to COVID-19. Work environments are adapting and changing. Schools and colleges are considering how to operate. A sense of normalcy is being lost, but we are continuing to face challenges. All while earthquakes are still happening.

One thing's for sure: **ShakeOut is also still happening, and we are here to support you.**

As with any year, you can ShakeOut when and where you want, whether that's at home, work, school, or practice through a video conference with people working or taking classes from home. We can and should still practice how to be safe when the earth shakes, especially when our situation changes. Your ShakeOut activity may look different this year, but there has always been flexibility in how and when you would like to hold your drill.

In many regions, ShakeOut has been an annual practice for more than ten years. Because everyone gets to participate in the way that works best for them. The good news you have your drill on another day than this year's International ShakeOut Day, October 15, or across multiple days depending on your situation.

While some ShakeOut drills and other activities may happen as always, there are some new considerations:


- Where will you all be for your drill? Together, or some at work, school or home? Consider video-conferencing!
- How will you incorporate COVID-19 health and safety guidelines into your activity?
- In order to have everyone participate all at once, or perhaps in staggered (or even requested) dates and times?


Over the years, many people have found more people to join the drills like as a part of their ShakeOut participation. They have proudly engaged their families, workplaces and all from playing softball with neighbors, schools, and co-workers to more formal disaster drills, and even attended their homes and businesses. And all of a sudden, they have had a similar drill, quake and food or drink. This year, going the same may mean participating at a different time or location, with physical distancing and other different measures in place.

We will have more COVID-19 specific guidance soon, and welcome your innovative ideas. Join ShakeOut is a grassroots effort, and your 2020 ShakeOut plans may inspire others, so please contact us!

We're all in this together.

**CORONAVIRUS DISEASE 2019 (COVID-19)**





**ShakeOut and COVID-19**  
International ShakeOut Day is each third Thursday of October. This year, that's 10/15. How will you participate?

There has been a lot of uncertainty over the past few months due to COVID-19. Work environments are adapting and changing. Schools and colleges are considering how to operate. It seems like every day, we are confronting new challenges. All while earthquakes are still happening. One thing's for sure: **ShakeOut is also still happening on 10/15**, and we are here to support you.


**Considerations:**

- Where will you all be for your drill?** Together, or some at home, work, and school? Consider video-conferencing! Take recordings or screenshots to share on social media. Have an after-action dialogue and survey.
- If in-person**, follow COVID-19 health and safety guidelines. **Ensure distancing and wear masks**, and regularly wash your hands.
- Choose your own date** (or multiple dates) to accommodate as many participants as possible, rotating schedules, and the unexpected. **Most may still participate on 10/15.**

**... What Else?**

- Consider all potential hazards and the risks you may face. Fires, floods, weather, earthquakes, tsunamis, landslides, and more can still happen.
- Follow the Seven Steps to Earthquake Safety to protect your family, property, and way of life ahead of the next disaster: **EarthquakeCountry.org/sevensteps.**
- Visit **coronavirus.gov** for the latest updates.

**Join Us** in the World's Largest Earthquake Drill  
October 15, 2020 Register Now at [ShakeOut.org](http://ShakeOut.org)



**Consideraciones para COVID-19**

- ¿Estarás en tu casa, trabajo, o escuela?
- Sigue los **consejos de salud** para COVID-19.
- Elige tu propia **fecha** (o múltiples fechas).

**Unase** 15 minutos

**Considerations for COVID-19**

- Will your drill be at **home, work, or school?**
- Follow COVID-19 **health and safety guidelines.**
- Choose your own **date** (or multiple dates).

**Join Us** in the World's Largest Earthquake Drill.

53

# Q&A

Please type your questions into the "Q&A" tool.

We will try to answer all questions, either in writing or via discussion "live"

The recording of today's webinar will be available by early next week at:

[EarthquakeCountry.org/SaferAtHome](http://EarthquakeCountry.org/SaferAtHome)

54

## Self-Protective Guidance for Various Capabilities



Inclusive Planning Specialist

Global Vision Consortium

&

Chair, ECA Southern California

55

## Earthquake Safety Video Series



- Separate short (1-8 min) videos:
  - indoors, nearby table/desk
  - indoors, no table/desk
  - theater/stadium
  - near the shore
  - in a car
  - in bed
  - **people with mobility disabilities**
- View full videos at [Youtube.com/greatshakeout](https://www.youtube.com/greatshakeout)
- Download full videos and these GIFs at [www.ShakeOut.org/messaging](http://www.ShakeOut.org/messaging)

56

## Earthquake Safety for Various Mobility Devices

<b>For an individual who uses a:</b>	
Wheelchair	0:22
Power Wheelchair	1:22
Cane or Single Crutch	2:12
Double Crutches or Arm Braces	3:09
Walker	4:14
Rollator-Style Walker	5:43
<i>Or has:</i>	
Limited Upper-Body Movement	06:51

57

## Person Using a Wheelchair, Near a Table



<b>For an individual who uses a:</b>	
Wheelchair	
<i>When a Table Is Nearby</i>	

58

## Person Using a Power Wheelchair





59

## Person Using a Power Wheelchair: Move to Corner



60

## Person Using a Power Wheelchair: Lock Wheels



**LOCK!**   **COVER!**   **HOLD ON!**

61

## Slide Title



**LOCK!**   **COVER!**   **HOLD ON!**

62

## Person Using Double Crutches or Arm Braces

**For an individual who uses a:**  
Double Crutches or Arm Braces

63

## Person Using a Cane

**Shake  
Out<sup>TM</sup>**  
**If you're using a cane**

64



## Person Using a Walker and a Nearby Chair



65

## Person Using a Walker and a Nearby Chair



66

## Person Using a Walker and a Nearby Chair



67

## Person Using a Walker, No Nearby Chair



68

## Person Using a Walker/Rollator



69

## Person with Limited Upper Body Movement



70

### Person with Limited Upper Body Movement



71

### Person with Limited Upper Body Movement



72

## For Everyone

- Look around for hazards
- Check body for areas of pain or reduced sensation
- Connect with Personal Support Team



73

## Remain Connected: Personal Support Team

### **AT LEAST 3 PEOPLE**

Who can come to your assistance immediately

### **Practice:**

- How to assist you
- Use of assistive devices
- Evacuating you with your supplies
- Emergency Drills/Exercises



74

## Keep Exits and Pathways Clear



Secure Furniture, TVs, and other Objects to Prevent Damage, Injury, and Blocked Exits

75

## Service Animal Considerations

- Keep animal close, under table or next to chair
- Service animal may be frightened or injured
- May not be able to work immediately
- Increased risk of injury to paws from broken glass or debris on the ground
- Be prepared to use alternate equipment if your animal cannot provide its normal services.



76

## Seniors and People with Disabilities Resources

- Earthquake Preparedness Guide for People with Disabilities and Other Access or Functional Needs
- Adapts messaging from ECA's *Seven Steps to Earthquake Safety*
- [EarthquakeCountry.org/disability](https://EarthquakeCountry.org/disability)

### Earthquake Preparedness Guide for Seniors, People with Disabilities, and Others with Access and Functional Needs (AFN)



Seniors, People with Disabilities, and others with Access and Functional Needs (AFN) may have additional needs before, during and after an earthquake.

#### Questions to consider:

- What can you do independently and where may you need assistance?
- Will your regular sources of assistance be available after a disaster?
- What if power, gas, and phone lines are not working?
- What if roads and sidewalks are impassible or your means of transportation is unavailable?
- How will you maintain supplies of water, food, medications, and other needs?

This guide follows the Seven Steps to Earthquake Safety ([EarthquakeCountry.org/sevensteps](https://EarthquakeCountry.org/sevensteps)) with content adapted for Seniors, People with Disabilities and AFN, as well as their caregivers.

Additional resources, including this guide, are at [EarthquakeCountry.org/disability](https://EarthquakeCountry.org/disability).

#### STEP 1 – SECURE YOUR SPACE

[EarthquakeCountry.org/step1](https://EarthquakeCountry.org/step1)

Secure your space by identifying hazards and securing moveable items.

Earthquake shaking can move almost anything, even large or heavy items. Safe spaces are places where heavy or falling objects and breaking glass will not injure you, such as under tables or desks along inside walls. When you enter a room, look for safe spaces to protect yourself and identify emergency exits.

The more limitations you have, the more important it is to create safe spaces - especially if you cannot "Drop, Cover, and Hold On" under a desk or table. To create safe spaces in your home or office:

- Secure essential equipment such as oxygen tanks or other life support devices
- Secure furniture and electronics to wall studs
- Move heavy items to low shelves
- Hang mirrors and pictures with closed hooks
- Consider how to keep exit routes clear

Page 1 of 6 Earthquake Preparedness Guide for People with Disabilities/AFN © Earthquake Country Alliance 02/2020

77

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78

**Safer at Home Webinar Series**


Step 1 – Secure Your Space:	June 30
Step 2 – Plan to Be Safe:	August 19
Step 3 – Organize Disaster Supplies:	September 2
Step 4 – Minimize Financial Hardship:	September 23
Step 5 – Drop, Cover, and Hold On:	September 30
<b>Great ShakeOut Earthquake Drills</b>	<b>October 15</b>
Step 6 – Improve Safety:	October 21
Step 7 – Reconnect & Restore:	Mid-November

**[EarthquakeCountry.org/SaferAtHome](http://EarthquakeCountry.org/SaferAtHome)**

79


ECA’s Safer at Home Webinar Series

**Step 5: Drop, Cover, and Hold On**  
and other Self-Protective Actions



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

# Thank you!



**Please take our webinar survey:**  
[surveymonkey.com/r/YWY36SW](https://surveymonkey.com/r/YWY36SW)

**Questions?**  
[info@earthquakecountry.org](mailto:info@earthquakecountry.org)

80



# RocketRules.org Earthquake Safety Video (excerpt)

