

# Earthquakes TOO?

## Best practices for higher education response to simultaneous disasters during COVID-19 (and How to Adapt Your ShakeOut Drill)



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



**Titan HST**



3

## Today's Webinar Team



**Todd De Voe**  
Dir., Emergency Management  
Titan Health & Security Tech.



**Mark Benthien**  
ECA Executive Director  
So. Cal. Earthquake Center, USC



**Sue Fisher**  
Emergency Prep. Coordinator  
Calif. State Univ. Fullerton



**Mike Colver**  
Dir. Of Public Safety & E.M.  
Coastline College



**Jon Carvell**  
Emergency Mgmt. Coordinator  
Arkansas State University



**Sharon Sandow**  
ECA Deputy Director  
So. Cal. Earthquake Center, USC

4

## 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 (SCEC.org) administers ECA



**SC/EC**  
AN NSF-USGS CENTER



Join : [EarthquakeCountry.org/alliance](https://EarthquakeCountry.org/alliance)

5

## ECA Sector-Based Committees

- |  |  |
|--|--|
| • K-12 Schools                         | • Business                               |
| • <b>Higher Education</b>              | • Non-Profit & Faith-Based Organizations |
| • Seniors and People with Disabilities | • Multi-Cultural                         |
| • Museums, parks, libraries, etc.      | • Public Sector                          |
|  | • Healthcare                             |

Learn more and join: [EarthquakeCountry.org/committees](https://EarthquakeCountry.org/committees)

6



7



**Earthquake  
Country  
Alliance**

*We're all in this together.*

**Earthquakes and COVID-19**

**Preparedness for everyone.**

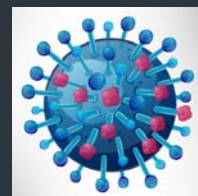
**Sue Fisher, Emergency Manager**

8

## 7 Steps to Earthquake Preparedness—Plus!



1. Secure your space
2. Plan to be safe
3. Organize disaster supplies
4. Minimize financial hardship
5. Drop, Cover, Hold On
6. Improve safety
7. Reconnect and Restore



--- **COVID-19** requires some additional considerations.

**EarthquakeCountry.org/sevensteps**

9

## 1. SECURE YOUR SPACE



**During COVID, or any time,  
do not delay this step!**

1. Secure items where you live or frequent.
2. Ensure exits and pathways will remain clear.
3. Learn how to evacuate every building you frequent.
4. Provide signage for rescuers.

10

## 2. PLAN TO BE SAFE

### Learn techniques and add plans for:

1. Efficient hand cleaning
2. Donning face coverings and masks
3. Ways to create social distancing when possible
4. Infection concerns in the Communication plan
5. Addition precautions during transportation
6. What considerations would “temporary housing” need



11

## 3. ORGANIZE SUPPLIES

### Additional (or larger quantities) of certain supplies

1. Hand sanitizer
2. Soap
3. Gloves
4. Face coverings (dust masks, bandanas)
5. Note pads or additional methods to aid in communications



***Keep hand sanitizer, gloves and masks with you!***

12



## 4. MINIMIZE FINANCIAL HARDSHIP

**Earthquakes can severely interfere with access to finances.**

1. COVID situations may add more limitations.
2. Financial aid disrupted.
3. Alternative payments to regular caretakers.
4. Alternatives to services and payment methods.
5. Investment in retrofitting your living spaces, or consider cost to secure temporary housing.

13

## 5. DROP, COVER, AND HOLD ON



**Regardless of the COVID situation...**

### **DROP, COVER and HOLD ON**

1. Do whatever PROTECTS YOUR HEAD.
2. Avoid falling.
3. Lock wheels of a wheelchair, or walker.
4. Holding on to anchored object.
5. If there's time, move to a safe spot.

14



## 6. IMPROVE SAFETY (Possibly Evacuate)

**Leaving your location may be necessary, so consider:**

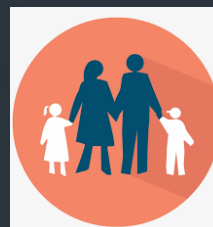
1. Have WRITTEN instructions to evacuate you and any essential supplies or equipment.
2. Have a wheelchair? Provide instructions on how to move it.
3. Note who touches you or your things.
4. Ask others to wear face coverings, too.
5. Try to maintain Social Distancing, as you help one another, or assembly in evacuation areas.

15

## 7. Reconnect, Restore

**Factors that could disrupt, delay:**

1. Required quarantine or hospitalization
2. Required isolation, if potentially infected



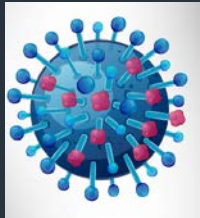
**Seek social services agencies or support groups to help:**

1. County or State Health Agencies
2. Community or volunteer organizations
3. Additional family and friends

16



## Multiple Disaster Mindset



17

## Questions?

- Sue Fisher
- Emergency Manager
- [susanfisher3141@gmail.com](mailto:susanfisher3141@gmail.com)

18



# Q&A Break

The recording and materials from today's Webinar will be available at [EarthquakeCountry.org/highereducation](https://EarthquakeCountry.org/highereducation)



Earthquake  
Country  
**Alliance**

*We're all in this together.*

EMWeekly

 Titan HST

**Shake  
Out**

19

## Great ShakeOut Earthquake Drills

- Schools, organizations, and families practice earthquake safety (Drop, Cover, and Hold On) and other aspects of their emergency plans
- 2019: **67.9 million** people worldwide  
**21.9 million** nationwide  
**10.8 million** California  
(record #s in many other states too)
- 2020 International ShakeOut Day:  
**October 15**
- Learn more and register: [ShakeOut.org](https://ShakeOut.org)

**Shake  
Out**



20

## Social Science Research Basis for ShakeOut

### People Get Motivated to Prepare When:



- They see and hear consistent information about what to do frequently, in many forms, and from many sources
- They see others like themselves getting prepared
- They talk about preparedness with people they know
- They learn potential consequences, and how to avoid them

*Based on research results of Mileti, D., Wood, M., Bourque, L., and others*

**ShakeOut puts these findings into practice**

21

## Step 5: Drop (or Lock), Cover and Hold On

- When the earth shakes, act immediately
- Protect yourself from falling to the ground, or from falling objects



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

22

## Why *Drop, Cover, and Hold On?*

- Strong consensus for many years, based on data for how people are injured, and experience of Urban Search and Rescue firefighters
- Prevents being thrown to the ground
- Reduces injury from falling or flying items... including structural elements and exterior façades (brick, glass, etc.)
- Increases chance of surviving collapse



Classroom in Calexico, CA  
April 2010 M7.2



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

23

## Why *Drop, Cover, and Hold On?*



24

## Adapt Your Response

- If you can't get back up, don't get down
  - Bend over and cover your head and neck with your arms/hands
- Instruct others how to assist you
- Practice is key
- [EarthquakeCountry.org/disability](http://EarthquakeCountry.org/disability)

### Protect Yourself During Earthquakes!

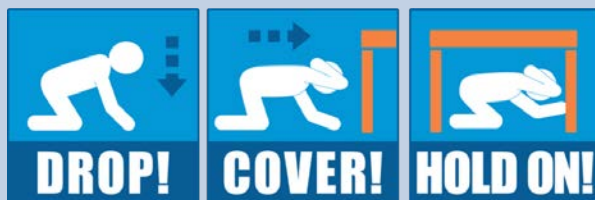


[www.EarthquakeCountry.org/disability](http://www.EarthquakeCountry.org/disability)

25

## Know How to Protect Yourself

In *most* situations and building types:



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



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

26

## Know 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

27

## Know 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

28



## Earthquake Safety Video Series



- Separate short videos:
  - indoors, nearby table/desk
  - indoors, no table/desk
  - theater/stadium
  - near the shore
  - in a car
  - in bed
  - people with mobility disabilities

• View at [Youtube.com/greatshakeout](https://www.youtube.com/greatshakeout)

• Download at [www.ShakeOut.org/messaging](http://www.ShakeOut.org/messaging)

29

## Example ShakeOut Resources



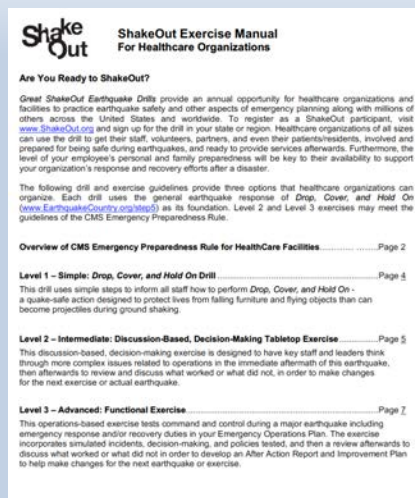
**ShakeOut. Don't FreakOut.**  
Register Now at [www.shakeout.org](http://www.shakeout.org)



30

## Healthcare ShakeOut Resources

- ShakeOut Manual for Healthcare Organizations
- CMS Emergency Preparedness Rule Requirements FAQ
- Other resources for planning and promoting your drill/exercise



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

31

## Benefits of Registering



- Be **counted** in the world's largest earthquake drill
- Be **updated** with news and safety tips
- Be **listed** with other participants
- Be an **example** that motivates others
- Have **peace of mind** that you have taken action and helped others
- Be **better prepared** to survive and recover!

32



## Example Statistics and Participant List

2014 participation by ShakeOut Region		Category		Participants
<b>All Regions</b>		<b>California</b>		<b>10,410,401</b>
Alaska (Mar. 27)	103,931	Individuals/Families		11,941
Alaska (Oct. 16)	80,536	Childcare and Pre-Schools		50,111
American Samoa	5,102	K-12 Schools and Districts		6,366,514
Arizona	123,595	Colleges and Universities		1,954,438
British Columbia	743,126	Local Government		461,805
California	10,410,401	State Government		149,993
Central U.S. (AL, AR, IL, IN, KS, KY, MO, MS, OH, OK, TN)	2,761,667	Federal Government (Including Military)		221,009
CNMI	12,508	Tribes/Rancherias		3,402
Colorado	35,971	Businesses		2,307
Guam	78,281	Hotels and Other Lodgings		2,307
Hawaii	30,007	Healthcare		185,402
Idaho	75,220	Senior Facilities/Communities		17,445
Japan	4,453,244	Disability/AFN Organizations		9,727
Montana	157,189	Non-Profit Organizations		82,167
Nevada	571,494	Neighborhood Groups		30,737
New Mexico	106,838	Preparedness Organizations		13,498
NorthEast U.S. (CT, MA, ME, NH, NJ, NY, PA, RI, VT)	505,590	Faith-based Organizations		166,366
Oregon	398,815	Museums, Libraries, Parks, etc.		8,407
Puerto Rico	595,954	Volunteer/Service Clubs		258
Quebec	152,808	Youth Organizations		1,993
SouthEast U.S. (DC, DE, FL, GA, MD, NC, SC, VA, WV)	2,192,111	Animal Shelter/Service Providers		273
Southern Italy	12,285	Agriculture/Livestock		1,340
U.S. Virgin Islands	7,249	Volunteer Radio Groups		931
Utah	835,729	Science/Engineering Organizations		5,096
Washington State	1,089,620	Media Organizations		13,671
Wyoming	10,698	Other		24,598
Yukon	9,770			
Other States and Countries	1,105,606			

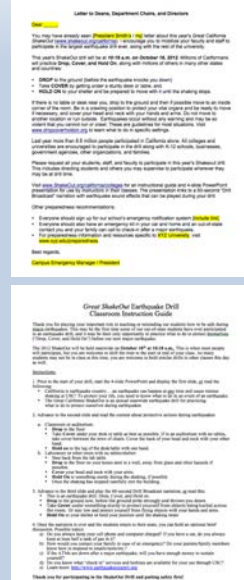
  

Businesses	
<b>Del Norte</b>	Mary Dorman - State Farm Agent, Crescent City Wal-Mart 1910, Crescent City
<b>El Dorado</b>	AAA AAA Northern California, Nevada and Utah, Folsom Branch, Folsom
<b>Fresno</b>	ADT Security Services, LLC, Fresno SSO, Fresno DeVita Healthcare Devita Senger, Sanger F & F Contracting, Inc./Elex Trucking/Golden Eagle Charter, Inc., Fresno HD Supply HD Supply White Cap, Fresno Branch, Fresno Humanscale, Fresno facility, Fresno Kohl's Department Stores Kohl's Department Stores, Fresno Kohl's Department Stores, Fresno Kohl's Department Stores, Clovis Landscape Contractors Insurance Services, Inc., Fresno Masterch Fashion Fair Mail, Fresno Rabobank, Fresno
<b>Humboldt</b>	Cafe Nooner, Cafe Nooner Teo, Eureka Cal-One Life Flight, Humboldt Base, Eureka GHD, Inc., Eureka Kohl's Department Stores Pacific Gas and Electric Company PMW Productions, Eureka Stewart Telecommunications, Eureka
<b>Imperial</b>	Kohl's Department Stores Kohl's Department Stores, El Centro United States Gymnasium, Paster City Plant, El Centro
<b>Kern</b>	AEG Rabobank Arena, Theater & Convention Center, Bakersfield Allstate, Sales, Ridgecrest DeVita Healthcare Devita-Bakersfield Dialysis Center, Bakersfield Environmental Resources Management ERM-Bakersfield, Bakersfield FedEx Ground, Bakersfield Golden Empire Transit, Bakersfield HD Supply Construction & Industrial White Cap, Bakersfield Branch

33

## Higher Education ShakeOut Registration

- Students and staff aren't always on campus each day or not always in class, so we know a simultaneous drill is a challenge.
- To register your **entire campus population** for ShakeOut, we ask that you:
  - Use e-mail, social media, or your campus alert system to notify faculty, staff, and students that your school will be participating in the ShakeOut Drill
    - Example messages, email announcements, videos, etc. are at [ShakeOut.org/highereducation](http://ShakeOut.org/highereducation) and [ShakeOut.org/messaging](http://ShakeOut.org/messaging)
  - Invite everyone to "Drop, Cover, and Hold On" at 10:15 a.m. on 10/15 (or whatever day/time your school is holding its ShakeOut drill) Wherever they are (class, lab, office, dorm, bookstore, home, traveling...)
    - Instructor guides and a 5-slide presentation for leading 10-minute drills are at [ShakeOut.org/highereducation](http://ShakeOut.org/highereducation)
  - Encourage everyone to improve their preparedness for all emergencies
  - Include your school's emergency information in your email



34

## Earthquake Drills in 2020

- Earthquakes likely will not happen at 10:15 a.m. on a Thursday.  
**So choosing alternative times for your ShakeOut drill each year is good practice!**
- Earthquakes likely will not happen when everyone is on campus  
**So encourage participation no matter where people are (campus, home, traveling...)**
- Consider **supporting your ShakeOut activity remotely through video conferencing** - be sure to take recordings or screenshots, have an after-action dialogue, or even a survey to participants!  
**During classes, during department faculty or staff meetings, etc.**
- **Provide ample space between people** at all stages. **Wear masks** and other **personal protective equipment** in addition to **regular hand-washing**.
- Have a **back-up ShakeOut date** in case of any other unexpected events.

35

## ShakeOut Higher Education Drill Slides

- 5 slides:
  - Very basic ShakeOut overview
  - What to do (Drop, Cover, and Hold On)
  - Guidance for people with disabilities
  - 1-minute audio file to play
  - Discussion questions
- Made for drills during classes; can also be for staff meetings
- Download from [www.ShakeOut.org/highereducation](http://www.ShakeOut.org/highereducation)
- The next 5 slides...

36

## Great ShakeOut Earthquake Drills



Earthquakes are unpredictable and may happen where you live, work, or travel.

Most injuries in earthquakes are from falling or flying objects.

Today we are joining millions of people worldwide who are practicing how to be safe during earthquakes

37

*People get injured by falling objects and when they try to run, which is why we will practice **Drop, Cover, and Hold On:***

### In a CLASSROOM OR AUDITORIUM:

- **Drop** to the floor where you are.
- **Cover** your head and neck with one arm/hand.
- Nearby tables or desks: crawl underneath and **Hold On** to your shelter with your free hand.
- Rows of chairs: get between the rows and **Hold On** to a chair with your free hand.
- Alternative: get next to a wall with no windows and cover your head and neck with both arms/hands.

### In a LABORATORY:

- Step back from the lab table.
- **Drop** to the floor on your knees next to a wall, away from glass and other hazards if possible.
- **Cover** your head and neck with your hands and arms.
- **Hold On** to something sturdy if possible.

### After Shaking Stops:

- Wait a minute for everything to settle.
- Before getting up, look around for hazards (including above and behind you)
- Carefully exit the building if instructed.



38

## Adapt Your Response

- If you can't get back up, don't get down
  - Bend over and cover your head and neck with your arms/hands
- Instruct others how to assist you
- Practice is key
- [EarthquakeCountry.org/disability](http://EarthquakeCountry.org/disability)

### Protect Yourself During Earthquakes!



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

39

## Time to ShakeOut!



[ShakeOut 60-second Drill Narration](#)  
(Click to Play)

40

## Discussion Questions

1. If you were at home during an earthquake, what might fall on you?  
Can you move those items or secure them so they won't cause injury?
1. Do you always keep your cell phone and computer charged? If you have a car, do you always keep the gas tank at least half full?
2. How would you contact your family in case of an emergency? Do you have a plan for checking in with one another and responding to emails/texts/etc.?
3. ATMs may be offline after a major earthquake. How long can you live on the money you have right now?
4. Do you know what "check in" services and hotlines are available for your use through our school?

Learn more at [www.EarthquakeCountry.org](http://www.EarthquakeCountry.org)

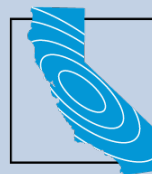
41

## Connect with ShakeOut and ECA

- [ShakeOut.org](http://ShakeOut.org)
- [info@shakeout.org](mailto:info@shakeout.org)
- [Twitter.com/ShakeOut](https://twitter.com/ShakeOut)
- [EarthquakeCountry.org](http://EarthquakeCountry.org)
- [info@earthquakecountry.org](mailto:info@earthquakecountry.org)
- [Twitter.com/eca](https://twitter.com/eca)



**#ShakeOut**



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

42

# Q&A

The recording and materials from today's Webinar will be available at [EarthquakeCountry.org/highereducation](https://EarthquakeCountry.org/highereducation)



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



43

# Thank You!

The recording and materials from today's Webinar will be available at [EarthquakeCountry.org/highereducation](https://EarthquakeCountry.org/highereducation)



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



44