

Times Standard

Not My Fault: ShakeOut numbers tell a preparedness story

Lori Dengler for the times-Standard

Posted October 19, 2024

<https://www.times-standard.com/2024/10/19/lori-dengler-shakeout-numbers-tell-a-preparedness-story/>



Participating in ShakeOut can be fun. The author, border collie Pip, and husband Tom Lisle practice Drop Cover and Hold On during the 2021 ShakeOut.

The 2024 Great ShakeOut is in the books. If you, your family, school, workplace or other organization used Thursday to talk about preparedness or participated in the drill, pat yourself on the back. You have taken the most important step to protecting yourself in the next temblor – earthquakes are on your radar screen.

ShakeOut registration numbers tell a preparedness tale. Since the first statewide ShakeOut in 2009, participants have been urged to register at <https://www.shakeout.org/>. It's not a requirement but does provide a way to track relative participation in different segments of our community and how these have changed over time.

When people or organizations register, they select a category such as individual/family, preschool, business, or government agency. They can also include other activities related to ShakeOut. For example, when I registered the Redwood Coast Tsunami Work Group, I included last month's Disaster-Con meeting for emergency personnel.

In 2024, there were 51,833 registrants in the North Coast ShakeOut region (Del Norte, Humboldt, Mendocino, and Lake Counties), 10.62 million in the State of California, 19.7 million in U.S. states and territories, and global registrations of 58.1 million. That doesn't mean 58 million people all over the world simultaneously Dropped, Covered, and Held On

at 10:17 AM last Thursday. Registrations can double or triple count some folks – for example I registered as an individual and also as part of the Redwood Coast Tsunami Work Group. There is no requirement that your drill must be exactly at 10:17 AM or even on Thursday, and there were quite a few people who participated but didn't sign up.

Zooming in on the North Coast region, our registrations were up about 6% over 2023 but lag far behind other parts of California. It's not just in total numbers where they have a population advantage, but also when normalized for population. Leading the State in participation per capita is the Central Coast region at more than twice the rate as the North Coast. Of the ten State regions, only two rank below us and we are just about equal to tiny, relatively aseismic Inyo-Mono. We've lost a lot of ground since pre-pandemic levels. In 2019 our region ranked fourth in the per-capita numbers.

Digging deeper into the data provides part of the answer. The largest participation category has always been K-12 schools. Public schools are mandated by law to conduct regular Drop Cover Hold On earthquake drills and adopting ShakeOut was an easy way to do this. Most counties work hard making sure all of the regional schools participate.

Registration numbers for K-12 and University enrollments have dropped throughout the State since the pandemic. For California as a whole, the number of Elementary through High School registrants in 2024 dropped by 11% and college numbers were down about 6% compared to 2019. In that same time period, Humboldt County K-12 school numbers dropped by 33% and colleges tanked by 20%. The decline in college numbers is primarily due to Cal-Poly Humboldt's precipitous student decline during the pandemic that has yet to recover.

The K-12 decline is the result of several factors – demographics (fewer children), growth of alternative schools (some of which don't sign up for ShakeOut), and the growing homeschooling population. Of the 14 charter/alternative schools in Humboldt County, only half registered for ShakeOut in 2024. The large number of Humboldt County school districts also has an impact as each district must register separately. Del Norte County has only one district and their school ShakeOut registration declined by less than 1% between 2019 and 2024.

Just because a school did not register for ShakeOut doesn't mean they haven't prepared or don't have an emergency response plan. But as a parent, it would definitely make me raise my eyebrows and ask some questions. What sort of actions has the school taken to protect students? How prepared is the school to take care of students if isolated in an earthquake? Do children participate in regular drills? How will I be notified if communication systems are disrupted? Who can pick up my child if I can't reach the school? These are questions to ask both teachers and administrators at the beginning of every school year.

The North Coast numbers are not all negative. Tribal participation was up 15% over the 2019 pre-pandemic numbers, a measure of the growing engagement of the Blue Lake and Bear River Rancherias and the Yurok and Tolowa tribes. The biggest growth was Healthcare where the registrations soared 33% compared to 2019. Nearly all of our regional hospitals and larger medical groups were signed up. But there are still gaps in the Healthcare area –

not a single dental office registered. I'd want to know if they get earthquake early warnings and know what to do while they have a drill in my mouth.

An area of almost no change is Business. Seven businesses registered in 2019 and four this year – less than a drop in the bucket. And if you add in the Hotels and Hospitality, it's the same story because our region had zero registrants in 2019 and zero again this year. This is really alarming because these sectors are so important to the economy of our area and can easily be knocked out of business in an earthquake.

Small businesses are particularly vulnerable because their assets are in one location and normal business margins leave little room for a disaster cushion. Nearly 80% of the small businesses operating in the areas of strong shaking in the 1994 Northridge earthquake were out of business two years afterwards. The federal government provides low-cost loans to small businesses after a major disaster – but these are only loans and must be repaid. And you won't get any assistance if the damage doesn't rise to the federal disaster level such as the December 2022 Ferndale earthquake.

The best way to assure your post disaster business survival is to reduce potential loss beforehand – take actions to protect stock and restrain items that may topple or crash. If your business involves the public, all staff should be trained in earthquake protocol – freeze during the shaking and stay put – and loudly announce for everyone to do the same. Staff who do nothing or run out of a building resulting in injuries may bring the additional burden of unwanted lawsuits if customers are injured.

ShakeOut 2024 was also an opportunity for government and response volunteers to exercise aspects of emergency response plans. Kudos to the Humboldt County Office of Emergency Services, Cal-Poly Humboldt, and the City of Eureka who all used ShakeOut as an opportunity to test their Emergency Notification systems.

The Humboldt notification test reached nearly 100,000 people – about 75% of the population. New this year was the opt out system – anyone with a cell phone linked to a Humboldt address was included unless they had contacted the Office of Emergency Services to be excluded. If you did not receive a message on Thursday, it may be because your phone is not considered local. Best to visit <https://humboldt.gov/2014/Emergency-Notifications> and make sure you can be reached.

Note: I will be leading a preparedness discussion at the Unitarian Universal Fellowship on Jacoby Creek Rd, 11 AM November 3. Both in person and zoom participation options – visit <https://huuf.org/services/being-prepared/> for details.

Lori Dengler is an emeritus professor of geology at Humboldt State University, an expert in tsunami and earthquake hazards. The opinions expressed are hers and not the Times-Standard's. All Not My Fault columns are archived online at <https://kamome.humboldt.edu/taxonomy/term/5> and may be reused for educational purposes. Leave a message at (707) 826-6019 or email Kamome@humboldt.edu for questions and comments about this column or to request copies of the preparedness magazine "Living on Shaky Ground."