



## **Emergency Preparedness Forum THIRD WALNUT CREEK MUTUAL**

Preparing Together for Recovery and Resilience

### **America's New National Earthquake Early Warning System and How to Download the "MyShake" App to your Cell Phone Third Mutual Board Meeting (November 14, 2022) by Fran Gibson, Chair Emergency Preparedness Forum**

The ShakeAlert™ Earthquake Early Warning system (joint achievement of United States Geologic Survey, California Office of Emergency Services and UC-Berkeley) is now available on all California smart phones and may provide residents priceless seconds of warning to protect you before ground shaking begins in a major earthquake striking Rossmoor and beyond.

ShakeAlert is based on seismic sensors placed along earthquake fault lines throughout our state — California contains 500 active faults — which record the first seismic movement before any main temblor shaking begins for all earthquakes with a magnitude of 4.5 or greater and those at a level of 3 or greater on the ten point Modified Mercalli Intensity Scale — offering Rossmoor residents precious seconds to get under a desk or table or against an interior manor wall or interior room corner to “drop, cover and hold on” — cradling your head with your arms above to protect you from flying debris which is the main cause of earthquake deaths and injuries.

Earthquakes are Rossmoor's highest natural hazard risk — well above our other four Rossmoor-specific natural hazard risks — wildfires, severe weather events, landslides and flooding. The free MyShake app should soon be downloaded and activated on every Rossmoor smart phone!

California's early earthquake warning system uses seismic science, state-of-the-art ground motion monitoring, as well as new and existing alerting technology to deliver warnings through your cell phone before you feel the main shaking under your feet. Seconds to tens of seconds of warning can

provide invaluable opportunity for you and your household to take life-saving actions to “ drop, cover, and hold on”.

"Dropping, covering and holding on" will help you prevent getting injured by falling objects and protect your head and other parts of your body when the shaking is bad. In a serious shaking situation, you may be knocked to the ground — sheltering yourself quickly and effectively is the safest thing to do.

Drop, cover and hold on under a strong table or desk, against an inner wall of your manor or in an inner corner in your manor. Never stand in your main exit doorway, never go outside (flying debris and downed power lines are safety dangers) and when the main shaking stops, prop open your main exit so it does not jam tightly shut in a strong aftershock and prevent you from receiving first responder help.

The further you are from the quake's origin (or epicenter), the more warning seconds you will receive — the speed of the alert varies then depending on your distance from the origin of the earthquake. The closer you are to the epicenter, the quicker you will receive the alert. In some cases you may receive an alert once you already feel the shaking or after the shaking ceases.

UC-Berkeley's seismology lab estimates early warning for the 1989 Loma Prieta 7.5 magnitude earthquake would have offered Marina District residents in San Francisco 20 seconds of warning, Candlestick Point 15 seconds of warning, San Jose several seconds of warning and Santa Cruz would have received no seconds of warning because the epicenter of the 6.9 magnitude and intensity 9 earthquake was Loma Prieta Peak in the Santa Cruz mountains.

Your cell phone itself also becomes a real-time earthquake sensor in this new national early warning system — your cell phone joins with California's smart phone network to collect valuable seismic motion data from your cell phone. MyShake and ShakeAlert combine to become a citizen science project that overtime will build a stronger global early warning systems for earthquakes worldwide.

The MyShake Alert information is found on the Rossmoor EPO 's web site's under Resident Resources at the bottom in blue color — [www.rossmoorepo.org](http://www.rossmoorepo.org) and videos helping you to effectively drop, cover and hold on regardless of your location or physical challenges can also be found under “earthquakes” in the Resident Resources section.

Go to Apple App or Google Play stores to download the free MyShake app — it could literally save your life!

Android phones with updated operating systems are automatically subscribed to “Android Earthquake Alerts” which is identical to MyShake.

All other cell phone users need to personally opt into the app to receive these lifesaving warnings.

Take a few minutes soon and go into each room of your manor to answer one question — if the ground began to shake, where precisely would you “drop, cover and hold on” in each room of your home? Decide now before the Big One hits!