



Oregon

John A. Kitzhaber, MD, Governor

Military Department
Office of Emergency Management
PO Box 14370
Salem, OR 97309-5062
Phone: (503) 378-2911
Fax: (503) 373-7833
TTY: (503) 373-7857

DATE: October 2, 2013

TO: Local Oregon Emergency Managers

FROM:  Althea Rizzo, Geologic Hazards Program Coordinator

SUBJECT: **DROP, COVER, and HOLD ON EARTHQUAKE SAFETY MEASURE**

With the October 17, 2013 Great Oregon ShakeOut coming up soon, I thought I would re-visit the subject of why we choose to **Drop, Cover, and Hold On** during an earthquake. You may have received an article circulating on social media promoting the “Triangle of Life”.

While the advice in the “Triangle of Life,” article is well intentioned; its prescribed actions are gleaned only from worst-case accounts from collapsed buildings outside of the United States. Buildings in the United States are built to stricter codes and enforcement standards than those in other countries so collapses from earthquakes in the United States are rare.

Studies on earthquake injuries in our country confirm that the use of **Drop, Cover, and Hold On** reduces the likelihood of serious injury. Most earthquake injuries are a result of falling nonstructural elements (lighting fixtures, ceiling tiles, windows) and contents (appliances, shelves, office equipment), or when building occupants attempted to exit buildings or move to a different location in the building (Peek-Asa et al, 1998; Shoaf et al, 1998).

Drop, Cover, and Hold On is the earthquake safety procedure recommended by Office of Emergency Management, the Oregon Seismic Safety Policy Advisory Commission, the Federal Emergency Management Agency, the U.S. Geological Survey, and the American Red Cross. Recent scientific research has found that Oregon will experience future earthquakes. Ultimately, Oregon residents should evaluate the earthquake readiness of their homes and work places and take appropriate steps to reduce their risk from structural and nonstructural building components. You are also encouraged to participate in the Great Oregon ShakeOut by going to www.shakeout.org/oregon and registering to participate.

Please share this information with the constituents in your areas of service. If you have any questions or need additional information, contact Althea Rizzo, Geologic Hazards Program Coordinator, at 503-378-2911 ext. 22237.

References:

Peek-Asa, C., Kraus, J. F., Bourque, L. B., Vimalachandra, D., Yu, J., & Abrams, J. (1998). Fatal and hospitalized injuries resulting from the 1994 Northridge earthquake. *International Journal of Epidemiology*, 27(3), 459-465.

Shoaf, K. I., Sareen, H. R., Nguyen, L. H., & Bourque, L. B. (1998). Injuries as a result of California earthquakes in the past decade. *Disasters*, 22(3), 218-235.

