

# The Norman Lear CENTERTAINMENT

Studying and Shaping the Impact of Entertainment & Media on Society

For Immediate Release

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## Participants in Largest U.S. Earthquake Drill Say They'd Do It Every Year

*California residents who took part in earthquake drama benefited most  
But survey by USC's Norman Lear Center reveals lingering confusion and a lack of preparedness*

LOS ANGELES, California | September 17, 2009 – A survey of more than 3,000 Southern Californians who signed up for the largest earthquake drill in U.S. history found that 97% overwhelmingly agree that it should be an annual event. The Great Southern California ShakeOut involved almost 5.5 million people, many of whom practiced the “Drop, Cover and Hold On” procedure at 10 am on November 13, 2008. Part of a week of special events, the Drill was based on a realistic earthquake scenario designed by 300 experts led by the U.S. Geological Survey. The USC Annenberg School's Norman Lear Center issued its evaluation today.

The evaluation found that people who pretended that a large earthquake was happening at 10am on November 13 benefited the most from the educational campaign. Compared to those who had signed up but did not participate, Drill participants were more likely to receive a high score on earthquake knowledge; to recall the key message of the campaign; to have practiced other aspects of their disaster plan; to have helped others to prepare for earthquakes; and to have invited others to join.

“It's good news that California has turned last year's ShakeOut Drill into a statewide annual performance,” said Martin Kaplan, Lear Center Director and Principal Investigator on the project. “This study provides baseline data for measuring the effectiveness of learning by doing.” Just this month, the California State Senate passed a resolution to support annual statewide drills that will be held on the third Thursday of October each year. The next Drill will be on October 15, 2009, at 10:15am.

Conducted one month after the 2008 Drill took place, the evaluation also revealed that a large majority of participants in the Great ShakeOut was still not well prepared for a major earthquake, and a majority was unable to recall the key message of the campaign. Only 12% of respondents described themselves as “very well prepared” for a large-scale earthquake, and 32% described themselves as fairly or totally unprepared. While this finding may be troubling, ShakeOut participants, who were drawn from all of Southern California, demonstrate a significantly higher rate of preparedness than Angelinos surveyed in 2004. That survey by Los Angeles County found that 52% reported that they did not have adequate disaster supplies and 60% did not have a family communication plan. As with all self-selected survey samplings, it is advised that the results be interpreted with some caution. Respondents who chose to take the survey may be more motivated to prepare for earthquakes.

The ShakeOut campaign produced several positive results:

- Ninety-six percent of people who signed up for the Drill reported conversations about earthquakes.
- Eighty-four percent of those who physically participated in the Drill invited others to join, compared to 70% of those who signed up, but didn't participate.
- Drill participants were more likely to have practiced other aspects of their disaster plan (49% vs 27%) and to have helped others in their earthquake preparations (46% vs 18%).

- Drill participants were more likely to recall at least some portion of the key message (48% vs. 38%) and to get the highest score on knowledge questions (48% vs 37%).

Johanna Blakley, Research Director for the evaluation, said, “An earthquake drill is like an immersive theater experience, where the participants are actors and audience alike, suspending their disbelief for a moment while they follow a script. It’s not surprising that people who took part were more likely to remember what they learned and talk to other people about it.”

Despite their enthusiasm and their relatively higher level of preparedness, a large majority of ShakeOut participants exhibited confusion about proper earthquake safety procedures:

- Only 22% of people who signed up for the Drill were able to recall the key message – “Drop, Cover and Hold On” – without a prompt.
- Twenty-two percent of respondents endorsed the debunked “Triangle of Life” response, which involves crouching beside large pieces of furniture or walls during earthquakes, as an appropriate response to an earthquake.
- Thirteen percent of respondents believe that getting under a doorway is an appropriate response to an earthquake, although health agencies say that this advice is only applicable to people in adobe structures.

The confusion was likely caused by the tremendous scope of the campaign, which included over 30 institutional sponsors, supporters and organizers. The campaign included messages about the earthquake scenario, about registering and participating in the Drill, about other events that took place during ShakeOut week, in addition to messages about preparedness in general. The ShakeOut distributed multiple publications (including *Putting Down Roots in Earthquake Country*, *Shift Happens – Secure Your Space* and *Drop, Cover and Hold On!*) that contained overlapping information expressed in different styles. Deborah Glik of UCLA, one of the researchers on this survey noted, “As the Shakeout Drill evolves into a yearly campaign, one benchmark of this becoming a successful risk communication campaign will be clear and consistent messages for both senders and receivers.”

The Lear Center evaluation also revealed how difficult it is to reach a population as diverse as the one in Southern California. The racial distribution of those who signed up for the Drill did not match the distribution in Southern California. Seventy-five percent of those who signed up were white, compared to 42% in Southern California. Hispanics were vastly underrepresented (15% vs 39%), as well as Asian-Americans (7% vs 12%) and African-Americans (3% vs 7%). The 2008 ShakeOut team translated its key earthquake resources into Spanish, Chinese, Japanese, Korean, Russian, Tagalog and Vietnamese, but the evaluation indicates that the campaign must increase its effort to reach beyond cultural and social boundaries if it intends to include all the communities of Southern California.

Mark Benthien, Executive Director of the Earthquake Country Alliance, which organized the ShakeOut events, said “The results of this evaluation are very useful as we prepare for the 2009 ShakeOut on October 15th. All residents and organizations should register for this year’s drill at [www.ShakeOut.org](http://www.ShakeOut.org). For future years, the Lear Center evaluation provides insights for continuing to expand the participation of all Californians.”

The Internet survey of 3,068 adults who had signed up for the Great Southern California ShakeOut was conducted between December 15, 2008 and December 30, 2008. Eighty percent of respondents (2,468) completed every question on the survey. The margin of error is 1.85%. This evaluation was funded by a USC Annenberg School Dean’s Innovation Grant to the Lear Center’s Hollywood, Health & Society program.

A full copy of the report is available online: <http://www.learcenter.org/pdf/ShakeOutReport.pdf>

### **About The Norman Lear Center**

Based at the Annenberg School for Communication at the University of Southern California, the Norman Lear Center is a multidisciplinary research and public policy center exploring implications of the convergence of entertainment, commerce and society. On campus, the Lear Center builds bridges between eleven schools whose faculty study aspects of entertainment, media and culture. Beyond campus, it bridges the gap between the entertainment industry and academia, and between them and the public. For more information, please visit [www.learcenter.org](http://www.learcenter.org).