

KASRA Members:

The information presented below is another perspective on how to behave in an earthquake. You make your choices and take your chances, we suspect.

Triangle of Life Commentary by Snopes

Claim: A 'Triangle of Life' article gives good advice about earthquake safety.

Status: *Multiple — see below.*

Origins: We can't say that every single point mentioned in the above article about earthquake safety by controversial "rescue expert" Doug Copp is wrong or bad advice, but there are some pretty substantial reasons why readers might want to take the article (particularly its advice that everyone who uses the "duck and cover" technique in an earthquake ends up crushed to death) with some very large grains of salt:

- Disaster preparedness experts with the American Red Cross [dispute](#) that findings based on earthquake experiences in other countries (e.g., Turkey) are applicable to the U.S., where building codes are substantially different.
- The scientific validity of the conclusions expressed in the article has been [questioned](#) by others.
- Doug Copp's claim that he performed rescue work at the World Trade Center (for which he was paid \$650,000 in compensation for injuries he supposedly sustained there) has been [challenged](#) in a series of articles published in the *Albuquerque Journal* which describe him as a self-serving opportunist rather than a true rescue expert:

Self-proclaimed rescue guru Doug Copp's mission to ground zero was considered so important that he had clearance to be flown to New York even though all civilian air traffic in the United States had been grounded. Once there, he says he assumed a pivotal role and sustained devastating injuries while wading through the "toxic soup" in search of survivors and victims, and was awarded nearly \$650,000 for his injuries. But there is little evidence Copp performed real rescue work, and it is doubtful that he deserves compensation.

Doug Copp was awarded \$649,000, tax free, from the fund set up to compensate victims of 9/11. He says it's not enough. But it's doubtful he deserves anything. A Journal investigation found little evidence that Copp did real rescue work in New York. His forays into the rubble were to shoot video, some of which he tried to sell. His claim of seeking medical care within the time frame appears false. All typical of Copp's years as a self-proclaimed rescue guru.

- Other articles have relayed [complaints](#) from numerous people who have dealt with Mr. Copp.
- Mr. Copp is under [investigation](#) by a U.S. Department of Justice fraud unit.

We'd recommend sticking with safety information prepared by established earthquake safety experts, such as the [American Red Cross](#) and the [Federal Emergency Management Agency](#).

Last updated: 15 September 2004

American Red Cross response to "Triangle of Life" by Doug Copp

Sent from

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Recently it has been brought to my attention that an email from Doug Copp, titled "Triangle of Life," is making its rounds again on the Internet. "Drop, Cover, and Hold On" is CORRECT, accurate, and APPROPRIATE for use in the United States for Earthquake safety. Mr. Copp's assertions in his message that everyone is always crushed if they get under something is incorrect.

Recently, the American Red Cross became aware of a challenge to the earthquake safety advice "Drop, Cover, and Hold On." This is according to information from Mr. Doug Copp, the Rescue Chief and Disaster Manager of American Rescue Team International (a private company not affiliated with the U.S. Government or other agency.) He says that going underneath objects during an earthquake [as in children being told to get under their desks at school] is very dangerous, and fatal should the building collapse in a strong earthquake. He also states that "everyone who gets under a doorway when a building collapses is killed." He further states that "if you are in bed when an earthquake happens, to roll out of bed next to it," and he also says that "If an earthquake happens while you are watching television and you cannot easily escape by getting out the door or window, then lie down and curl up in the fetal position next to a sofa, or large chair." These recommendations are inaccurate for application in the United States and inconsistent with information developed through earthquake research. Mr. Copp based his statements on observations of damage to buildings after an earthquake in Turkey. It is like "apples and oranges" to compare building construction standards, techniques, engineering principles, and construction materials between Turkey and the United States.

We at the American Red Cross have studied the research on the topic of earthquake safety for many years. We have benefited from extensive research done by the California Office of Emergency Services, California Seismic Safety Commission, professional and academic research organizations, and emergency management agencies, who have also studied the recommendation to "drop, cover, and hold on!" during the shaking of an earthquake. Personally, I have also

benefited from those who preceded me in doing earthquake education in California since the Field Act was passed in 1933.

What the claims made by Mr. Copp of ARTI, Inc., does not seem to distinguish is that the recommendation to "drop, cover, and hold on!" is a U.S.-based recommendation based on U.S. Building Codes and construction standards. Much research in the United States has confirmed that "Drop, Cover, and Hold On!" has saved lives in the United States. Engineering researchers have demonstrated that very few buildings collapse or "pancake" in the U.S. as they might do in other countries. Using a web site to show one picture of one U.S. building that had a partial collapse after a major quake in an area with thousands of buildings that did not collapse during the same quake is inappropriate and misleading.

According to the Centers for Disease Control and Prevention (CDC), which collects data on injuries and deaths from all reportable causes in the U.S., as well as data from three University-based studies performed after the Loma Prieta (September, 1989) and Northridge (January, 1994) earthquakes in California, the following data are indicated: Loma Prieta: 63 deaths, approximately 3,700 people were injured. Most injuries happened as a result of the collapse of the Cypress Street section of I-880 in Oakland. Northridge: 57 deaths, 1,500 serious injuries. Most injuries were from falls caused by people trying to get out of their homes, or serious cuts and broken bones when people ran, barefooted, over broken glass (the earthquake happened in the early morning on a federal holiday when many people were still in bed.) There were millions of people in each of these earthquake-affected areas, and of those millions, many of them reported to have "dropped, covered, and held on" during the shaking of the earthquake.

We contend that "Drop, Cover, and Hold On" indeed SAVED lives, not killed people. Because the research continues to demonstrate that, in the U.S., "Drop, Cover, and Hold On!" works, the American Red Cross remains behind that recommendation. It is the simplest, reliable, and easiest method to teach people, including children.

The American Red Cross has not recommended use of a doorway for earthquake protection for more than a decade. The problem is that many doorways are not built into the structural integrity of a building, and may not offer protection. Also, simply put, doorways are not suitable for more than one person at a time.

The Red Cross, remaining consistent with the information published in "Talking About Disaster: Guide for Standard Messages," (visit <http://www.disastereducation.org/guide.html>) states that if you are in bed when an earthquake happens, remain there. Rolling out of bed may lead to being injured by debris on the floor next to the bed. If you have done a good job of earthquake mitigation (that is, removing pictures or mirrors that could fall on a bed; anchoring tall bedroom furniture to wall studs, and the like), then you are safer to stay in bed rather than roll out of it during the shaking of an earthquake.

Also, the Red Cross strongly advises not try to move (that is, escape) during the shaking of an earthquake. The more and the longer distance that someone tries to move, the more likely they are to become injured by falling or flying debris, or by tripping, falling, or getting cut by damaged floors, walls, and items in the path of escape. Identifying potential "void areas" and

planning on using them for earthquake protection is more difficult to teach, and hard to remember for people who are not educated in earthquake engineering principles. The Red Cross is not saying that identifying potential voids is wrong or inappropriate. What we are saying is that "Drop, Cover, and Hold On!" is NOT wrong -- in the United States. The American Red Cross, being a U.S.-based organization, does not extend its recommendations to apply in other countries. What works here may not work elsewhere, so there is no dispute that the "void identification method" or the "Triangle of Life" may indeed be the best thing to teach in other countries where the risk of building collapse, even in moderate earthquakes, is great.

Submitted by Evo Alexandre