THE TRUTH
ABOUT
EARTHQUAKE SAFETY

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and is based on investigations and subsequent
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Survival is a Matter of Preparedness

A few years back an international rescue worker, Doug Copp, challenged the Red Cross earthquake safety advisory of duck, cover, and hold on in an earthquake.

During his rescue work around the world, Copp contended he had found that people got crushed under objects they ducked under when ceilings collapsed, but that there are spaces beside objects after collapses which he dubbed "triangles of life". These result because the crushed object still will have some height so a void is created beside the object.

From that observation he formulated "simulations" to test this observation. In the test the dummies that had been placed under objects and beside objects then the ceiling was collapsed on them. The dummies under objects were crushed while those that were beside objects were saved by the voids caused by the triangles formed. He released his warning to the world. You may have heard of "the triangles of life". If you did, and it sounds like a sure-fire solution to safety to you, it is a good idea to read on. If you haven't heard of triangles of life, read on anyhow - this report could save your life.

Are Copp's observations correct? Is observance of the triangles of life actually the best method of survival in a quake? His work has resulted in many questions and much investigation. It is time for people to understand the results of the subsequent analysis.

After Doug Copp released his reports on the triangles of life he became involved in a few activities that completely discredited him as a fraud. There are a lot of people out there that feel that the "triangle of life" study was rejected on the basis of Copp's notorious activities rather than on the merit of his study of earthquake survival. This is not the case. Experts analyzed Copp's quake simulation experiment and reports with extreme seriousness and caution.

The first issue with Copp's simulation is that, while it did effectively collapse the ceiling of the building, it did not effectively simulate an earthquake. In Copp's experiment, the columns were more or less rammed. This was an effective demolition tactic to get the building to pancake. In an earthquake this is not what happens. In an earthquake a building is shaken, an action quite different from the action of ramming a building to collapse it. In an actual quake, buildings of a particular structure might experience a collapse of the ceiling, but most will not.

If a building has been built to US codes, it won't. Sure there are some buildings that don't meet code - and I'm not sure how long those codes have been in effect. But in those that DO meet code, it's most likely not going to happen. The occurrence of ceiling collapse is more likely to happen outside of the US where buildings are not constructed according to US structural integrity codes.

The second issue of the report that has been called into question is the fact that no one has been able to predict where all of the pyramids are going to be. Furniture, etc. doesn't stay put in an earthquake. What a person might choose to tuck up next to could fall on them or push them with it as it moves. A heavy dresser might push you across the room into a wall, then in turn be pressed against you by something that falls on or into it. Being crushed between a piece of furniture and a wall when the house rocks probably isn't much more pleasant than being crushed under something. If what you are beside tips over on you, it's not even much different.

It has been admitted by Red Cross officials who analyzed Copp's findings that there may be places outside of the US that are more likely to experience ceiling collapses, than here, and in the U.S. there may be some buildings that will experience a collapse, but it is not the usual case. So it's a toss up whether this is the best advice or not.

Rescue workers here in the US contend that they rescue survivors that have used "duck and cover" as well as those who have used the triangle methods. They have also retrieved dead from both of these techniques. All buildings do not get damaged in the same way in a quake - just as some don't get damaged at all, some have

walls collapse. This means that Copp's advice that an outside wall will be a safe place isn't necessarily the best advice either. If you are against a wall and it gives (usually falling outward), you definitely have not mitigated your danger.
"Duck, cover, and hold on" is still a Red Cross advised method of survival, but they do not contend that it is the right one in each situation.

It is apparently the contentions of Red Cross rescue experts, that as much as they would like to give a comprehensive list of assured safety tips, they aren't able to do that. The hard fact is that each house is different, each quake is different. There a deaths and survivors no matter what survival technique is used. There are, though, prevention methods that will give you the best shot at survival none-the-less. It is important to understand these steps and act upon them before and during the quake to increase your odds profoundly of surviving when the shaking starts.

The first thing you must do - not maybe do, but MUST do - is study your home and find out where it's vulnerable locations are. If you do not understand architecture, then have an engineer come out and inspect it. He can let you know where the danger zones are and what you can do, if anything to fix them. If you live in a structurally unsound building and it cannot be fixed for any reason, the Red Cross strongly suggests that you move. Point blank - get out. It was boldly stated in one report by this agency that giving any advice to do otherwise is just plain irresponsible. Not being in an unsafe building is the best prevention that you will get.

Remember that a wooden roof is not the same danger as a concrete roof if it falls, but after the quake the wood will be more of a risk of fire than the concrete. Make sure you have fire extinguishers placed strategically around your home in places that will be the easiest for you to reach them in an emergency. Many victims are not hurt or killed in the earthquake itself, but in the fires that result from them.

A second preventive measure is to anchor objects in your house so they can't move. Unless you have been through attacks from Mother Nature of one form or another it is likely that you are in for the shock of a lifetime at the raw and brutal force of a disaster. If you've never been through a tornado, the force of a wind that can drive a toothpick through a tree is unimaginable. The force with which objects being tossed by a quake can hit you is also completely unexpected by those going through a severe shaker for the first time. It's no joke that you don't want to get hit by a flying lamp or book in an earthquake. When you hear experts say to anchor things, that means everything you can and not just heavy furniture.

Have emergency kits and disaster supplies placed where they can be retrieved easily after a quake. You and others around you may be badly injured in the quake. Unfortunately, medical resources will be strained, as will be rescue operations. Being prepared to treat wounds may be your only hope of survival until help arrives after the shaking stops. Keep kits by doors and in cars or wherever else they will be easy to get to after an emergency. Remember that supplies don't do any good if you can't get to them.

Many serious injuries and even deaths result from falls during the quake. While Cobb suggested the fetal position, the Red Cross warned of rolling when in this position. You do want to protect your head and chest areas as they are vulnerable and account for many serious quake casualties, but it is best to get on your knees and shins so you can move more freely without the risk of falling and can keep more control of your movements. Stay low, and keep as tucked as possible to give objects less of a target. A flashlight and shoes by a bed will help prevent cutting feet on broken glass or other wreckage if the quake happens at night.

It is reported that it is actually safer to stay in bed than to roll out of bed during the shaking. Beds are prone to slide while the house is tipping. That bed will not protect you if it slides away from you as you roll off of it. It can also push you with it and crush you against a wall if something jams it while it is pushing you. In a quake of sufficient magnitude, it may even bounce on top of you.

If you can get outside, do so, but if you can't get out safely, duck and cover or get to your pre-determined safe spots. The Red Cross concurred with Cobb that you should stay away from stairs and out of doorways. Victims of earthquakes have been questioned and have agreed that beside a couch was a safe place to be in what they had experienced, so do not rule out ducking beside large heavy objects that might give just a bit, especially if your inspection has indicated that is a safe zone and the object is anchored to avoid movement during a quake. Your inspections of the home with your family before a disaster will help you decide the safest places in each room to be during a quake. During the shaking is not a great time to try to decide where the best places in each room are located.

The importance of inspecting a home and knowing where the safety zones are before a quake cannot be stressed enough. It cannot be stressed enough that no one technique can be considered the panacea of all techniques. Each quake is different, and so is each home. While there is a bit of luck to survival of a disaster, the likelihood of being a survivor is greatly increased by knowing your home and practicing reacting to an emergency. Preparedness is more than just a term, it is your best chance of surviving a quake or any other disaster, natural or man-made.

I hope this report has cleared up misconceptions about earthquake safety that may have resulted from reports about the triangles of life. The Red Cross is continuing to investigate methods survivors used during earthquakes to save themselves.

If you haven't gotten your earthquake preparedness kits together yet, now is the time to do so.
When the shaking starts - it's too late. Click here for supplies and kits.

I hope you found this document informative and vital. I hope you will join us at http://selfreliancesurvivalsystems.com and keep abreast of all the latest information about dangers we are facing and solutions that can be offered. Don't forget that the Self-Reliance Report is a Free newsletter! If you haven't already signed up to receive the Self-Reliance Report, you can do so when you visit the site.