

April 2020 (Supplement)

Earthquake Edition

I have heard about the possibilities of earthquakes all of my life, so I guess it really wasn't a huge surprise when one finally came along. This one was not especially big, but it was big enough to knock things off shelves, break windows, displace brick or rock, and cause some structural damage to older homes near the epicenter. If it had even been a little greater we could have experienced damage here.

So What Should You Do in an Earthquake?

We are warned about earthquakes, but many people don't know the answer to this question. When you don't know what to do and panic sets in, it is easy to do the wrong thing. In a fire or other situation where you need to evacuate it is wise to grab your 72hr-(now 5-day recommended) kit and leave. However, that is not necessarily the answer in an earthquake. Where would you go? You may be putting yourself and your family at risk getting there. Here are the things you should do.

1. If you are in bed, stay in bed until the shaking stops. You can use pillows to protect your head and body. If you are not, step to an inside wall or door frame where something won't fall on you. You should stay away from glass, furniture and pictures or shelves that might fall. If you can get under a table or desk then do, and hold on. Don't try to get out of the house while it is shaking. More people are injured from falling or having things fall on them while trying to get out of the house than anything else.

- 2. If you are in your car, pull over away from trees, tall buildings, or power lines and wait.
- 3. If you are in a public building find something that will protect you from falling objects like windows, lights, merchandise, or a piece of the roof.
- 4. When the shaking is over observe your surroundings (especially above you) and proceed outside to clear space carefully. If you are in bed, this is the time to use your go bag. Slip on clothes and shoes.
- 5. Make sure you have good shoes on when you do leave the house. I always keep my shoes by my bed. Broken glass is always a risk after an earthquake. Collect young children and help them out.
- 6. Meet in a place that your family has agreed upon. Make sure everyone is safe before after-shocks if you can. Give instructions to family members.
- 7. If serious damage is obvious to the road or structure of your home it is best to turn off the water and gas. If little damage is apparent then smell for gas and water leaks or look for possible breaks in the lines before turning things off. It can take weeks to get your gas back on, but either water or gas leaks can seriously damage your home.
- 8. If no structural damage is obvious wait for after-shocks. When these are over, then you can proceed to clean up anything that may be needed. Before you do laundry, shower, or flush toilets you should observe and make sure that you do not have a broken sewer line and learn whether there are broken lines for people below you. It is not a bad idea to plug up your sewer floor drain and basement toilets or any place there could be sewage coming up with a plastic or foam ball.
- 9. If there is obvious structural damage, then you may need to have your home inspected before you occupy it or use the electricity and sewer. It may be wise to make sure electricity is also turned off. This is when you need to possibly consider an alternative shelter depending on how serious the damage is. This is when you may need your emergency water supply, potty bucket, tent, and all those other emergency supplies. It could be a while before professional help can determine the safety of your home.

- 10. Once your family is all safe (at least those you are with), and you have checked for water and gas leaks, it is a good idea to text family members who are not present and those out of area to let them know your status. Texting may work for a short time when other forms of communication are down.
- 11. Check with neighbors to see if they are okay or need help. Report your status to your neighborhood captain.
- 12. If the safety of your home appears uncertain, set up camp outside in your yard until you can get professional help or find out what the conditions around you are. If you have a radio or other form of communication you can listen for instructions and reports. If you have structural damage, especially to a newer home, there is a good chance that there will be road damage, power outages, and it will be difficult to find somewhere safe to go. Organize and assign family members tasks to help set up shelter and camp. *The building codes in the 1990s were pretty good for earthquake safety, and those in the last few years are even better.
- 13. In a catastrophic quake big enough to cause mountain reservoirs to break there may be refugees that you are asked to help. While we may have some landslides, Alpine is not at high risk for flooding as some of the lower spots in the valley are.
- 14. Going to the store after an earthquake may be unwise at best and impossible at worst. You need to be prepared ahead!

If You Are Away from Home

After an earthquake, if you are well and whole, you should text loved ones to let them know of your status and find out theirs. Sometimes phone service can be out, but you can still text for a little while. In a serious quake your next concern is to get home or find safe shelter. This is when it is really nice to have an escape bag with good walking shoes and some basics in your car or at least where you can access it.

*You should always have a coat and means of keeping warm in the winter along with some food and water at least in your car—any time of year. See the appendix for contents of an escape bag.

Things You Can Do Ahead to Prepare for a Quake

- 1. Make sure your family has a plan and knows what to do.
- 2. Put together "go bags" that are hung on the bedpost or tucked right beneath the side of the bed. (See *Go Bag* in this paper's appendix.)
- 3. Have escape bag in your car trunk. (See *Escape Bag* in this paper's appendix.)
- 4. Have a 72 hr.-kit—with supplies of food, water, and clothing for 5 days.
- 5. Have $1\frac{1}{2}$ gallons of water per person per day for at least 3 days, and 5 or more days where possible.
- 6. Have your 3-month supply of foods you eat on a regular basis.
- 7. Know where your water shut off, your gas shut off, and your power shut off are. Know how to shut these things off and have the tools handy to do so. Know where you should plug drains for sewage and have balls and other things ready should you need them.
- 8. Make sure that your water heaters are strapped to the wall well. Strap any tall furniture to the wall (the studs in the wall).
- 9. Check your house for things that may be unsafe like pictures and shelves over beds that could fall on someone in a quake.
- 10. Keep your home clear of clutter and things that could shift, making it difficult to get out.
- 11. You can use museum wax to secure keepsakes and valuables in place. You can put latches on your cupboards so they do not open and spill the contents. If you really want to, you can buy earthquake film to put over your windows to prevent shattered glass from falling all over.
- 12. Secure storage shelves by adding a rail along the front and 2" from the bottom.
- 13. If possible, store glass jars of food in their box with cardboard dividers.
- 14. It is good to keep a roll of construction plastic and duct tape. It cans have many uses after a quake.

Appendix

Go Bag—This is a small bag or backpack to put by the bed of each family member. I have simple drawstring bags for my family. I also used these as Christmas gifts for extended family one year with a tin of personalized treats for each person. This is not a 72-hour kit. It is simply what you might need to get out of the house safely after an earthquake that happens at night. The basics in a go bag are:

- 1. Some clothes to quickly slip on, like sweats.
- 2. A whistle that is loud enough that you can signal if needed.
- 3. A pair of leather work gloves. It is possible that you will need to move debris while exiting your house or working to clear things later.
- 4. A flashlight and extra batteries. A headlamp is desirable for some people. *Keep the batteries current. This is vital if you need to exit at night.
- 5. *I like to include a bottle of water and a small tin of snacks and hard candy. Sometimes an inexpensive pack of cards or other game is nice in case there is wait time.
- 6. *** Have shoes and socks in the go bag or keep close-toed shoes by the bag just under your bed with socks in them or in your bag.

Escape Bag—This is a bag to keep in the trunk of your car or under your desk at work. It should contain whatever you need to get home or to safety in a crisis such as an earthquake or civil unrest. The backpack, duffle bag, or whatever you use should not be big, flashy, or stand out. This is a time you will want to blend in. While the following list is not all-inclusive, traveling lightly is important. Here is an idea of important things to have:

- 1. Good walking shoes and extra socks. If you have to walk a long distance it is wise to have thin nylon socks to wear closest to your feet and then a pair of heavier socks. This will lessen the friction on your skin and help prevent blisters.
- 2. Bottle of water, Life Straw or filtering water bottle.

- 3. MRE or other emergency food supply for at least 2–3 meals depending on how far home is (protein bar can count as 1 meal). Hard candy to suck is a nice extra.
- 4. Good pocket multi-tool or at least a knife. (Some people also like a small hatchet.)
- 5. Emergency whistle
- 6. Flashlight with extra batteries
- 7. 1–2 plastic garbage bags and twist ties
- 8. Plastic bag with TP
- 9. Wet Wipes
- 10. Bivy Bag-Simple sleeping bag that packs up very small (Red Cross sells these).
- 11. Emergency light-weight blanket and jacket with gloves and hat
- 12. Rain poncho
- 13. Hand-crank Radio
- 14. Small first aid kit
- 15. Map and compass
- 16. Ultra-light tent or at least plastic sheeting for a shelter
- 17. Water-proof pouch with copies of important documents and ID
- 18. Money—It is advisable to have a few small bills like 5s, 10s, and 20s as well as a couple of 100s. I was told by a CIA agent that a \$100 bill can be very persuasive in a pinch.

*Most people won't need more than is listed above. However, if you want a really good professional opinion from someone I trust and have worked with and who has used these in dire circumstances here is a link to his list: https://www.truetrust.com/forms/EscapeBag.pdf.

72-Hour Kit—There are a lot of lists from many sources for these. I have published one of them in the 2019 preparedness guide for November under Plans, kits, and equipment. Donna Nash from the 2nd ward has recently shared another list that is very good. It will be a PDF below this paper to download her list for anyone who wants it.