

Centerville City Office of Emergency Management

Dear Residents,

Remember to save this sheet as part of your disaster supplies kit. Keep it in a handy location and in the event of an emergency place the appropriate colored sheet on your front door so that it can be seen from the street. This will allow response teams to gather information quickly so that resources can be prioritized.

YELLOW – WE NEED SOME HELP. MINOR INJURIES & DAMAGE

Preparing for an Earthquake

Most injuries, deaths and economic loss in an earthquake are due to man-made problems. These include damage to buildings and homes, roads and bridges, lifelines, and business and industry. Most of these problems can be avoided. Here are some ideas to consider in your preparation for an earthquake:

Before

- Secure fixtures such as lights, cabinets, bookcases and top-heavy objects.
- Store bottled goods, glass, vases, china and other breakables in low or closed cabinets.
- Check the electrical wiring and connections to gas appliances.
- Develop a family plan. Prepare a 72 hour disasters supplies kit.
- Hold drills so each member of your family knows what to do during an earthquake.
- Locate master switch and shut-off valves for all utilities and know how to turn them off.

During

- Stay calm. First and foremost, having a plan will help you stay calm.
- Stay put. If you are inside, stay inside; if you are outdoors, stay there.
- Take cover. If indoors, take cover under a desk, table, or bench, stand in a supported doorway, or along an inside wall or corner. Stay clear of windows, bookcases, china cabinets, mirrors, and fireplaces until the shaking stops.

After

- Make sure everyone around you is all right. Administer first aid if appropriate.
- Don't use the telephone unless there is a severe injury.
- Only use your car if a critical situation exists.
- Keep children safe and relaxed.
- Wear sturdy shoes in areas near fallen obstacles and broken glass.
- Do not use matches, candles, or other open flames until you are sure there is no leaking gas.
- Check utilities for damage near your home, if there is a leak or damage shut them off.
- Check your home for damage. If damaged leave until a safety assessment can be made.
- Be prepared for aftershocks.
- Listen to a portable radio for official information concerning what to do.
- After you have your own situation under control, check on your neighbors.

Centerville City Hazard Information - EARTHQUAKES

In Utah Generally

Utah experiences about 700 earthquakes every year. Of this number, not counting foreshocks, aftershocks, and human triggered seismic events, there are about 6 earthquakes that are Richter magnitude 3.0 or greater. The smaller magnitude earthquakes are rarely felt by people and obviously do not cause damage. However, these small rumblings are important in studying our vulnerability to larger earthquakes. Utah has many active faults which could produce damaging earthquakes. The largest expected earthquake in Utah has a magnitude of 7.0-7.5 on the Richter scale.

What to Expect in Centerville

Ground Shaking

All earthquakes produce both vertical and horizontal ground shaking. The motion we feel is the result of several kinds of seismic vibrations. Everyone in the city will most likely experience some form of shaking during an earthquake. Certain soil conditions, which may be present in our valley floor area, could cause ground motion to become amplified and could increase the damage caused during an earthquake.

Fault Rupture, Ground Deformation and Subsidence

An earthquake with a magnitude of 6.5 or above could cause the surface of the ground at or near the existing fault to break and the valley floor may drop. The area near the fault, especially on the side which drops down, may experience severe deformation and tilting of the ground. Buildings built on or near the area of fault rupture will be damaged.

Liquefaction

Liquefaction is caused when water-saturated, sandy soils react to vibrations and temporarily acts like liquid. Many areas west of Main Street are vulnerable to liquefaction. Light objects such as buried tanks and pipelines may rise to the surface, while heavy objects tend to sink and tilt.

Slope Failure

Landslides, rock falls, and other types of slope failure could be triggered by ground shaking. Slope failure is usually confined to mountainous or canyon areas. However, steep ravines and slopes within the city limits could also experience slope failure.

Seiche

Standing bodies of water are susceptible to earthquake ground motion. Water in the Great Salt Lake and in reservoirs above the city limits may be set in motion and slosh from one end to the other, much like in a bathtub.

The Earthquake Hazard In Utah	
Magnitude	Average Frequency in State of Utah
3.0 or greater	6 per year
4.0 or greater	1 per year
5.0 or greater	1 every 4 years
5.5 or greater	1 every 10 years
6.0 or greater	1 every 20 years
6.5 or greater	1 every 50 years
7.0 or greater	1 every 150 years

Courtesy of University of Utah
Seismograph Stations, 1996

Material for this insert adapted from the brochure "Earthquakes - What You Should Know When Living in Utah"

If you have questions regarding the hazards that affect our community or about the City's emergency operations plan, please contact the City's Emergency Management Coordinator at 292-8441. Information is also available on the City website at <http://www.centervilleut.net>