

Earthquakes

Facts and Stats

The Richter Scale, developed in 1935, measures the severity of and earthquake. The scale gives more severe quakes larger numbers, with the worst recorded quakes being over 8.0 on the scale.

Earthquakes strike suddenly, violently, and without warning at any time of the day or night.

Both Kentucky and Indiana are considered High Risk areas for earthquakes.

Most earthquakes occur as the result of slowly accumulating pressure that causes the ground to slip abruptly along a geological fault plane on or near a plate boundary.

Most earthquake activity in Kentucky has occurred in the western portion of the State, near the New Madrid seismic zone.

In 1980 a 5.2 magnitude Earthquake occurred near Sharpsburg, KY in Bath County with an estimated \$3 million in damage. 269 homes and 37 businesses in Maysville were damaged.

A preliminary estimate by FEMA of annual earthquake loss in Kentucky is about \$18.7 million.

Be Red Cross Ready

Get A Kit. Make A Plan. Be Informed.

For more information, please visit your Louisville Area Chapter American Red Cross online at:
www.louisville-redcross.org

Or your national Red Cross at:
www.redcross.org



American Red Cross

Prepared and Ready

Disaster preparedness tips from the American Red Cross • October 2009

Earthquakes: Are We Really at Risk?

Well if you were in or around the area in April of last year, you already know the answer to that question. On April 18, 2008, around 5:40 a.m., The U.S. Geological Survey confirms that an earthquake, centered near West Salem, Ill., struck the region. Tremors were felt as far west as Kansas, as far north as Upper Michigan and as far south as Georgia. The Geological Survey also recorded multiple aftershocks too small to be felt by people, as well as a larger one -- 4.6 in magnitude -- at about 11:14 a.m. on April 18th. Thankfully here locally there were no reports of major injury and only some scattered minor damage.

Prior to this, many people did not realize that earthquakes can happen here in the Louisville area. Obviously earthquakes can and do happen here, so it is important for your family to prepare. The major seismic zone that affects Kentucky is the New Madrid Seismic Zone. In 1811-1812 three major Earthquakes occurred along the New Madrid Fault that was estimated to have been greater than magnitude 8 on the Richter scale. In Frankfort reports were that the quake lasted several minutes and bricks fell from the courthouse chimney. In Henderson many chimneys were cracked, and at sunrise a second shock brought down the damaged chimneys. And in Lexington it was recorded that windows vibrated as they would with a hard gust of wind. In Louisville many houses received damage. During that time period Kentucky was sparsely settled. Imagine, with current population levels, how wide spread the damage will be when an earthquake of that magnitude occurs again. Read below to learn how to prepare.

Know What to Do When the Shaking Begins

- DROP, COVER, AND HOLD ON!
- If you are indoors, move to a safe place such as under a sturdy desk or table, and protect your eyes by pressing your face against your arm. If there's no table or desk nearby, sit on the floor against an interior wall away from windows, bookcases, or tall furniture that could fall on you.
- Stay indoors until the shaking stops and you're sure it's safe to exit. Stay away from windows. In a high-rise building, expect the fire alarms and sprinklers to go off during a quake.
- If you are in bed, hold on and stay there, protecting your head with a pillow.
- If you are outdoors, find a clear spot away from buildings, trees, and power lines. Drop to the ground.
- If you are in a car, slow down and drive to a clear place (as described above). Stay in the car until the shaking stops.

Identify What to Do After the Shaking Stops

1. Check yourself for injuries. Protect yourself from further danger by putting on long pants, a long-sleeved shirt, sturdy shoes, and work gloves.
2. Check others for injuries. Give first aid for serious injuries.
3. Look for and extinguish small fires. Eliminate fire hazards. Turn off the gas if you smell gas or think it is leaking. (Remember, only a professional should turn it back on.)
4. Listen to the radio for instructions.
5. Inspect your home for damage. Get everyone out if your home is unsafe.
6. Expect aftershocks.

Eliminate Home Hazards in Advance

- Bolt bookcases, china cabinets and other tall furniture to wall studs.
- Install strong latches on cupboards.
- Strap the water heater to wall studs.
- Secure other items that might potentially fall (TV, books, computers, etc.)