

October 2014

Emergency Preparedness Pointers

176 and Counting

October is Earthquake Awareness Month in Idaho, but are you aware of how often earthquakes occur in the state? So far this year Idaho has had 176 earthquakes. Most have been so small they went unnoticed by people, but were picked up by seismographs. The strongest of these was a 4.9 magnitude that occurred near Challis, Idaho. That event was reported by 104 people. The Magnitude Scale measures the amount of seismic energy released by an earthquake, but at what magnitude do people begin to notice it's happening? The Modified Mercalli Intensity Scale is a descriptive scale of the shaking severity. Here is a comparison of the two scales provided by U. S. Geological Survey (USGS) that matches magnitude with the effects of the ground shaking.

MAGNITUDE	TYPICAL MAXIMUM MODIFIED MERCALLI INTENSITY
1.0 - 3.0	I
3.0 - 3.9	II - III
4.0 - 4.9	IV - V
5.0 - 5.9	VI - VII
6.0 - 6.9	VII - IX
7.0 or higher	VIII or higher

RATING	ABBREVIATED MODIFIED MERCALLI INTENSITY SCALE
I	Not felt except by a very few under especially favorable conditions.
II	Felt only by a few persons at rest, especially on upper floors of buildings.
III	Felt noticeably by persons indoors, especially on upper floors of buildings. Many people do not recognize it as an earthquake. Standing motor cars may rock slightly. Vibrations similar to the passing of a truck. Duration can be estimated.
IV	Felt indoors by many, outdoors by few during the day. At night, some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably.
V	Felt by nearly everyone; many awakened. Unstable objects overturned. Some dishes, windows broken. Pendulum clocks may stop.
VI	Felt by all, many frightened. Some heavy furniture moved; some fallen plaster and slight damage.
VII	Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable damage in poorly built or badly designed structures.
VIII	Damage slight in specially designed structures; considerable damage in ordinary substantial buildings with partial collapse. Damage great in poorly built structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned.
IX	Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb or off foundations. Damage great in substantial buildings, with partial collapse.
X	Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations. Rails bent.
XI	Few, if any (masonry) structures remain standing. Bridges destroyed. Rails bent greatly.
XII	Damage total. Lines of sight and level are distorted. Objects thrown into the air.

Earthquakes strike without any warning. Keeping yourself safe takes forethought and practice. Learn what to do and practice it by participating in the Idaho Shakeout Drill. Go to: <http://shakeout.org/idaho/>

