

Peru girds for the worst: a killer quake in the capital

May 31 2012, by Luis Jaime Cisneros



Volunteers work through the rubble after an earthquake in Peru in 2007. Peru is holding a huge safety drill Thursday to see how Lima authorities respond to a cataclysmic 8-magnitude earthquake and tsunami, a devastating one-two punch they fear could claim 50,000 lives.

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The drill in this crowded capital of eight million is set to jolt into action Thursday at 10:00 am local time. At that time a pretend [quake](#) would strike 190 km (118 miles) west in the Pacific, unleashing a tsunami that would take 15-20 minutes to hit the coast.

"An earthquake at 8-magnitude or higher could kill more than 50,000 people and destroy about 200,000 homes, in a worst-case scenario -- if we do not prepare for it," Mayor Susana Villaran, who leads civil defense efforts, told AFP.

Goals of the exercise include evaluating how authorities respond, how prepared the public is, and how the emergency and evacuation routes work, especially in areas that could be flooded by a tsunami.

Villaran said the drill is an important part of raising people's level of preparedness in a country located on the Pacific ring of fire that has suffered [powerful earthquakes](#) in the past.

Every year the Andean nation of more than 28 million is shaken but not too stirred by low-intensity quakes because it sits on the edge of the Nazca tectonic plate.

It is critical "to know what to do, and who should do it, in the first 24 to 72 hours after an earthquake," Villaran warned.

The Pacific ring of fire

40,000 km arc of fault lines, zone of frequent quakes, volcanic eruptions



Peru, which lies on the Pacific ring of fire, is gearing up for a huge safety drill to see how Lima authorities respond to a cataclysmic 8-magnitude earthquake and tsunami, a devastating one-two punch they fear could claim 50,000 lives.

Earthquake drills are mandatory for all government and private organizations, so they mobilize massive numbers of people.

Part of the sense of urgency is that Lima has not had a major earthquake in more than 250 years.

"We have to consider that earthquakes are cyclical beasts," explained Hernan Tavera, top quake expert at the Geophysical Institute of [Peru](#).

A major quake will eventually strike Lima. "So the longer we go without a major one here, the more likely it is we'll get one," he said.

The last powerful quake to strike Lima was on October 28, 1746, and is believed to have been as strong as the 8.8 magnitude quake that hit southern Chile in 2010, Tavera said.

The quake and the tsunami wave that followed, which devastated the nearby port city of Callao, killed between 15,000 and 20,000 people.



La Costa Verde bay in Lima, Peru, in 2010. Peru is holding a huge safety drill Thursday to see how Lima authorities respond to a cataclysmic 8-magnitude earthquake and tsunami, a devastating one-two punch they fear could claim 50,000 lives.

Lima has experienced two strong quakes in living memory: a 7.5 magnitude quake in October 1966 that left 200 dead and caused a minor tsunami, and another in October 1974 at 7.2-magnitude which killed 252 people. Another 300,000 lost their homes.

Peru's capital is geographically vulnerable because it is built on desert topography, not the most stable soil. Lima is a forest of mid- and high-rise buildings, surrounded by 5,000 separate slum neighborhoods where construction is precarious and far from quake-safe.

"Of those slums, 3,000 are in high-risk areas," said Villaran, noting that some two million people lived in those areas.

Jitters about a potentially devastating quake have been mounting in Lima, in part because of the 2007 earthquake that hit Pisco -- 250 kilometers to the south -- that left more than 500 people dead, and intense coverage of the Chile's powerful 2010 earthquake and Japan's devastating 2011 quake and tsunami.

Villaran said the scope of the disaster can be reduced by taking preventive efforts said could cost \$1 billion over the next three years.

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