

Monster quake a catastrophe for Chile

Alexei Barrionuevo, Liz Robbins, New York Times
Sunday, February 28, 2010



Chile (AP Graphic)

Attention nasal allergy sufferers...



NASONEX[®] is clinically proven to help **PREVENT** seasonal nasal allergy symptoms in patients **12 years and older**... when started 2 to 4 weeks before your local nasal allergy season begins.

LEARN MORE!

Important Safety Information

Side effects were generally mild and included headache, viral infection, sore throat, nosebleeds, and coughing. Maximum benefit is usually achieved within 1-2 weeks. For best results, use regularly since effectiveness depends on regular use.

[Click here for important product information.](#)



A woman sits and pets a dog as people walk on the rubble ...

A police officer in Santiago, Chile's capital and largest...

[More...](#)

(02-28) 04:00 PST Rio De Janeiro - --

A deadly 8.8-magnitude earthquake struck central Chile early Saturday, ripping apart buildings, highways and bridges and leaving a path of fiery rubble across a long swath of the earthquake-tested country before sending waves rumbling across the Pacific Basin.

At least 300 people had died, according to Chilean officials, and more than 1.5 million people were displaced. The death toll was expected to rise, particularly around Concepcion, Chile's second-largest metropolitan area, which is roughly 70 miles from the quake's center.

There, cars lay mangled and upended on streets littered with telephone and power cables. The quake toppled old and new construction, despite the country's strict earthquake codes. A new 15-story apartment building fell, while an older, biochemical lab at the University of Concepcion caught fire.

In the nearby port of Talcahuano, a giant wave flooded the main square before receding and washing a large fishing boat onto the city streets.

"We're talking about a tragedy," President Michelle Bachelet said at a news conference Saturday night at the presidential palace in Santiago, hours after she declared a "state of catastrophe."

In Santiago, the capital, which is about 200 miles from the quake's epicenter, frightened residents felt the city shake for nearly 90 seconds. Car alarms pierced the air during the middle of the night, and at least one highway buckled, toppling cars.

The quake, one of the most powerful ever recorded, set off tsunami waves that swamped nearby islands before moving across the Pacific. Hawaii began evacuations before dawn, but by early

afternoon there - more than 15 hours after the earthquake first struck 6,500 miles away - the fears of a destructive wave had passed.

In Chile, more than two dozen significant aftershocks struck the country.

"This was a powerful and sustained eruption," Paul Simons, the U.S. ambassador to Chile, said in a telephone interview from Santiago. "Most of the embassy folks I talked to said that it felt like five minutes. It was definitely an emotional experience."

Major seaports and airports were out of operation across the central region, Chilean officials said. Cell phone and Internet service was either suspended or sporadic throughout the country, considered one of the most wired in Latin America, complicating rescue efforts.

Incoming President Sebastian Pinera, who is set to take office March 11, said the quake had dealt "a very serious blow to the infrastructure of our country" and asked key disaster-relief officials to delay their planned departures.

About 600 travelers at the Santiago airport escaped when massive sections of the roof caved in, glass shattered and water poured through the terminal. Huddled under counters and inside gift stores, the travelers watched the newly renovated airport crumble around them. Though the runways were cleared for takeoffs and landings, the airport was closed because of the internal damage.

Hundreds of prisoners in the city of Chillan, about 230 miles south of Santiago, escaped when a retaining wall collapsed. Rioting prisoners clashed with prison guards, leaving three inmates dead.

Most of the damage was in Concepcion, near where the world's largest recorded earthquake, a 9.5 temblor, struck in 1960.

Earlier on Saturday, the effects of the earthquake began rippling through the Pacific, where a huge wave had swept into a populated area in Robinson Crusoe Island, 410 miles off the Chilean coast. Authorities there said at least four people had been killed.

Across the Pacific, the first hemisphere-wide tsunami warning since 1964 was issued.

The earthquake struck at 3:34 a.m. in central Chile, centered roughly 200 miles southwest of Santiago at a depth of 22 miles, the U.S. Geological Survey reported.

The quake was vastly more powerful than last month's 7.0-magnitude earthquake that caused widespread damage in Haiti and, according to the government, killed an estimated 230,000 people.

But experts said the damage in Chile was likely to be much more limited, and the rescue efforts easier, because it is a far more prosperous country and was better prepared because of the 1960

quake, which killed nearly 2,000 people in Chile. Chile rests in one of the most active earthquake zones in the world, and building codes are far stricter than in Haiti.

Shortly after a 7.8-magnitude earthquake struck in Valparaiso in 1985, the country established strict building codes, according to Andre Filiatrault, the director of the Multidisciplinary Center for Earthquake Engineering Research at the University at Buffalo.

"Chile is not a stranger to earthquakes," he said, adding that Chilean engineers have been very active in world earthquake conferences.

"There is a lot of reinforced concrete in Chile, which is normal in Latin America," Filiatrault said. "The only issue in this, like any earthquakes, are the older buildings and residential construction that might not have been designed according to these codes."

President Obama offered assistance to Chile in a brief, televised statement in which he also urged Americans on the West Coast to heed tsunami warnings. A tsunami advisory - less urgent than a warning - was posted for the U.S. and Canadian West Coast and coastal Alaska to alert people to dangerous currents.

State Department officials said that Secretary of State Hillary Rodham Clinton, who had been planning a trip to South America beginning Monday, was also contacting Bachelet, with whom she has long had warm personal relations.

Ban Ki-moon, the U.N. secretary general, also offered his condolences, as well as longer-term aid should Chilean officials signal the need for it.

Inside: Why Chile has a history of high-magnitude quakes; tsunami delivers glancing blow to Hawaii; tsunami advisory closes some Bay Area beaches. **A16**

The world's strongest earthquakes

Earthquakes that registered at least magnitude 8.6.

-- **May 22, 1960:** A magnitude 9.5 in southern Chile and ensuing tsunami killed 1,716 people.

-- **March 27, 1964:** A magnitude 9.2 in Prince William Sound, Alaska, and ensuing tsunami killed 128 people.

-- **Dec. 26, 2004:** A magnitude 9.1 off the Indonesian island of Sumatra triggered a tsunami that killed 226,000 people in 12 countries.

-- **Aug. 13, 1868:** A magnitude 9.0 in Arica, Peru (now Chile) generated catastrophic tsunamis; 25,000 people were killed in South America.

-- **Jan. 26, 1700:** A magnitude 9.0 shakes Northern California, Oregon, Washington and British Columbia and triggers tsunami that damages villages in Japan.

-- **Nov. 4, 1952:** A magnitude 9.0 in Kamchatka, Russia, causes damage but no reported deaths, despite setting off 30-foot waves in Hawaii.

-- **Jan. 31, 1906:** A magnitude 8.8 off the coast of Ecuador and Colombia and ensuing tsunami killed 500 people.

-- **Feb. 27, 2010:** A magnitude 8.8 off the coast of Chile killed a still-undetermined number of people and sends a tsunami across the Pacific.

-- **Nov. 1, 1755:** A magnitude 8.7 and ensuing tsunami in Lisbon, Portugal, killed 60,000 people.

-- **July 8, 1730:** A magnitude 8.7 quake in Valparaiso, Chile, killed 3,000 people.

-- **Aug. 15, 1950:** A magnitude 8.6 earthquake in Assam, Tibet, killed at least 780 people.

-- **March 28, 2005:** A magnitude 8.6 in northern Sumatra, Indonesia, killed 1,300 people.

Source: Associated Press

The Washington Post contributed to this report.

<http://sfgate.com/cgi-bin/article.cgi?f=/c/a/2010/02/28/MNUE1C8BTR.DTL>

This article appeared on page **A - 1** of the San Francisco Chronicle

© 2010 Hearst Communications Inc. | [Privacy Policy](#) | [Feedback](#) | [RSS Feeds](#) | [FAQ](#) | [Site Index](#) | [Contact](#)