

Peruvian & Chilean Earthquakes Since 1900 With 1,000 or More Deaths

May 31 1970	Chimbote, Peru	Deaths: 70,000	Mag: 7.9	Tsunami/Fires: No
<p>About 50,000 people were killed - 20,000 missing and presumed dead - and 150,000 injured in Ancash and La Libertad Departments from the earthquake and a catastrophic debris avalanche of rock, ice and mud which buried the town of Yungay, which had a population of about 20,000.</p>				
May 22 1960	Temuco-Valdivia, Chile	Deaths: 1,655	Mag: 9.5	Tsunami/Fires: Yes
<p>Severe damage from shaking occurred in the Valdivia-Puerto Montt area. Most of the casualties and much of the damage was because of large tsunamis which caused damage along the coast of Chile from Lebu to Puerto Aisen and in many areas of the Pacific Ocean. Puerto Saavedra was completely destroyed by waves which reached heights of 11.5 m (38 ft) and carried remains of houses inland as much as 3 km (2 mi). Wave heights of 8 m (26 ft) caused much damage at Corral. Tsunamis caused 61 deaths and severe damage in Hawaii, mostly at Hilo, where the runup height reached 10.6 m (35 ft). Waves as high as 5.5 m (18 ft) struck northern Honshu about 1 day after the quake, where it destroyed more than 1600 homes and left 185 people dead or missing. Another 32 people were dead or missing in the Philippines after the tsunami hit those islands. Damage also occurred on Easter Island, in the Samoa Islands and in California. One to 1.5 m (3-5 ft) of subsidence occurred along the Chilean coast from the south end of the Arauco Peninsula to Quellon on Chiloe Island. As much as 3 m (10 ft) of uplift occurred on Isla Guafo. Many landslides occurred in the Chilean Lake District from Lago Villarica to Lago Todos los Santos. On May 24, Volcan Puyehue erupted, sending ash and steam as high as 6,000 m. The eruption continued for several weeks. This quake was preceded by 4 foreshocks bigger than magnitude 7.0, including a magnitude 7.9 on May 21 that caused severe damage in the Concepcion area. Many aftershocks occurred, with 5 of magnitude 7.0 or greater through Nov 1. This is the largest earthquake of the 20th Century. The rupture zone is estimated to be about 1000 km long, from Lebu to Puerto Aisen. Note that the tsunami deaths from outside Chile are included in the 1,655 total. This is still considerably fewer than some estimates which were as high as 5,700. However, Rothe and others state that the initial reports were greatly overestimated. The death toll for this huge earthquake was less than it might have been because it occurred in the middle of the afternoon, many of the structures had been built to be earthquake-resistant and the series of strong foreshocks had made the population wary.</p>				
Nov 10 1946	Ancash, Peru	Deaths: 1,400	Mag: 7.3	Tsunami/Fires: No
<p>Nearly all buildings were destroyed or heavily damaged in the Sihuas-Quiches-Conchucos area of Ancash Department. Many landslides occurred: one buried the village of Acobamba and another dammed the Pelagatos River. The quake was felt from Guayaquil, Ecuador to Lima, Peru. Several segments of surface faulting were seen in a zone about 18 km (11 mi) long from Quiches to Hacienda Mayas. The faulting was purely dip-slip (vertical) with as much as 3.5 m (11 ft) offset.</p>				
Jan 25 1939	Chillan, Chile	Deaths: 28,000	Mag: 7.8	Tsunami/Fires: No
<p>Extreme damage in the Cauquenes-Chillan area. It was felt from Arica to Puerto Aisen.</p>				
Aug 17 1906	City: Valparaiso, Chile	Deaths: 20,000	Mag: 8.2	Tsunami/Fires: Yes
<p>Much of Valparaiso destroyed. Severe damage in central Chile from Illapel to Talca. Felt from Tacna, Peru to Puerto Montt. Tsunami generated. Uplift occurred along the coast from Zapallar to Llico (about 250 km or 150 mi).</p>				

From USGS Earthquake Hazards Program, Earthquakes with 1,000 or More Deaths since 1900:
http://earthquake.usgs.gov/regional/world/world_deaths.php