



Earth



1943

J. B. BODA

Issue: February 2016



Location of Earthquake
Source: USGS

Destructive M6.4 earthquake hit southern Taiwan

An earthquake struck the south Taiwanese city of Tainan just before 4:00 a.m. local time on Saturday February 6, 2016 (19:57 UTC on February 5, 2016) when most people were at home asleep.

The USGS reported magnitude of event 6.4 at a depth of 23 km (14.3 miles). Being a shallow focus earthquake, its effects would have been amplified to cause more damage. The quake was felt in the capital Taipei, 300 km away.

The quake killed 116 people and injured more than 400 as on Saturday February 13, 2016. Damage from the quake, apart from the fatalities, is not regarded as widespread. At least nine buildings collapsed or were left in a semi-collapse state following the quake. The worst hit was a 17-storey Weiguan Jinlong residential building in Tainan that was left lying on its side.

According to the Financial Supervisory Commission (FSC), the Life insurance claims were of about NT\$ 168 million (USD 5.1 million) and Non-Life insured losses were around NT\$ 296 million (USD 9 million) respectively.

The Taiwan Residential Earthquake Insurance Fund (TREIF) estimated losses of around NT\$ 146 million (USD 4.43 million). Commercial losses were of NT\$ 139 million (USD 4.22 million) while other insured losses were of NT\$ 11 million (USD 0.33 million). ROE: 1 USD = 32.94 NT\$.

Source: USGS



Vehicles under a damaged building in Tainan
Source: www.ibtimes.com

Seismic Activities in Taiwan

Taiwan is located at the intersection of the Philippines Sea Plate and the Eurasian Plate, which are part of the circum-Pacific volcano and seismic zone. The Hualian-Taitung Valley is the boundary of these two plates. Over the years, the Philippines Sea Plate has moved to the north-west at the average velocity of 7 cm/year. The northern arc of Luzon Island, which is located in the west Philippines Sea Plate, collided with the edge of the Eurasian Plate 6 million years ago and elevated the Eurasian Plate rapidly to form Taiwan's Central Mountain Range.

Because the pushing force comes from the east, the faults in Taiwan are mainly thrust faults. The crust of the eastern side of the faults is gradually moving upward and westward, and stacking up on the western side. This is the basic background of Taiwan's seismic activity.

The research of the Central Geological Survey shows Taiwan now has 42 active faults; whereas the research of National Central University says Taiwan has 51 active faults. The difference between these two institutes is the fault determining difference. National Central University treats some faults as individual faults while Central Geological Survey treats as one fault. The active faults in Taiwan can be classified as Type I Active Fault (AF1), Type II Active Fault (AF2) and Suspected Active Faults (AF3).

On Sept. 21, 1999, Central Taiwan Suffered a serious earthquake known as The Chi-chi earthquake measured 7.3 on the Richter scale. It caused NT\$300 billion (US\$9.09 billion) in economic losses, and NT\$27.6 billion (US\$0.84 billion) in insured losses. It destroyed 52 thousands households, but the insured loss of residences was only NT\$39.4 million (US\$1.22 million) due to the fact that only about 1% of residences in Taiwan had earthquake insurance at that time.



Historic Earthquakes in Taiwan

Table below shows historic earthquake occurred in Taiwan since 1900.

Date	Time	Magnitude (M_L)	Date	Time	Magnitude (M_L)
4/24/1904	14:39	6.1	10/25/1967	8:59	6.1
11/6/1904	4:25	6.1	1/25/1972	10:07	7.3
3/17/1906	6:43	7.1	4/24/1972	17:57	6.9
4/14/1906	3:18	6.6	12/13/1978	19:23	6.8
1/11/1908	11:35	7.3	1/23/1982	22:11	6.5
4/15/1909	3:54	7.3	5/20/1986	13:25	6.2
4/12/1910	8:22	8.3	11/15/1986	5:20	6.8
8/28/1916	15:27	6.8	12/13/1990	11:01	6.5
11/15/1916	6:31	6.2	6/5/1994	9:09	6.2
1/5/1917	0:55	6.2	9/16/1994	14:20	6.8
1/7/1917	2:08	5.5	2/23/1995	23:13	5.8
6/5/1920	12:21	8.3	6/25/1995	14:59	6.5
9/2/1922	3:16	7.6	7/17/1998	12:51	6.2
10/15/1922	7:47	5.9	9/21/1999	1:47	7.3
12/2/1922	11:46	6	5/17/2000	11:25	5.3
8/25/1927	2:09	6.5	6/11/2000	2:23	6.7
12/8/1930	16:01	6.1	3/31/2002	14:52	6.8
4/21/1935	6:02	7.1	5/15/2002	11:46	6.2
7/17/1935	0:19	6.2	12/10/2003	12:38	6.8
12/17/1941	3:19	7.1	5/1/2004	12:38	5.8
10/23/1943	0:01	6.2	12/26/2006	20:26	7
12/2/1943	13:09	6.1		20:34	6.9
12/5/1946	6:47	6.1	12/19/2009	21:02	6.8
10/22/1951	5:34	7.3	3/4/2010	8:18	6.4
11/25/1951	2:50	7.3	2/26/2012	10:35	6.4
2/24/1957	4:26	7.3	3/7/2013	11:36	5.6
10/20/1957	2:28	6.6	3/27/2013	10:03	6.2
4/27/1959	4:41	7.7	6/2/2013	13:43	6.5
8/15/1959	16:57	7.1	6/8/2013	0:38	5.9
2/13/1963	16:50	7.3	6/29/2013	7:51	5.6
3/4/1963	21:38	6.4	10/31/2013	20:02	6.3
1/18/1964	20:04	6.3	4/20/2015	9:42	6.3
3/13/1966	0:31	7.8	2/6/2016	3:56	6.4



Yellow fever outbreak reported in Angola

An outbreak of yellow fever was reported to the World Health Organization (WHO) by the National IHR Focal Point of Angola on January 21, 2016.

The first cases were identified in the district of Viana (Luanda province) on 5 December 2015. Yellow fever infection was initially confirmed in three patients by polymerase chain reaction at the Zoonosis and Emerging Disease Laboratory of the National Institute for Communicable Diseases in Johannesburg, South Africa and at the Pasteur Institute in Dakar, Senegal.

As of 8 February, a total of 164 suspected cases and 37 deaths had been reported in Angola. The majority of cases had been reported in the province of Luanda. Other affected provinces include Cabinda, Cuanza Sul, Huambo, Huila and Uige. Suspected cases were undergoing laboratory testing in order to rule out other aetiologies and cross reactions with yellow fever.

The national task force has been activated to control the outbreak. Health authorities in Angola implemented number of control and response activities, including coordination, clinical case management, enhanced surveillance, laboratory testing, social mobilization and vector control. Epidemiological and entomological investigations were carried out in the main affected areas. On 3 February, the first round of immunization campaign started in Luanda.

WHO deployed three experts to provide operational support. In addition to financial support, technical directives and guidelines were shared with country officials to improve the quality of the response.

On 2 February, an immunization campaign was launched in Luanda to initially cover a target population of 1,578,085 in Viana.

In the affected districts of Luanda, there is a high density of *Aedes Aegypti*, the primary vector of yellow fever; consequently, the risk of spread to unaffected districts is high. This risk is further exacerbated by the high proportion of susceptible individuals. WHO continues to monitor the epidemiological situation and conduct risk assessment.

Yellow fever is an acute viral haemorrhagic disease transmitted by infected mosquitoes. Up to 50% of severely affected persons without treatment will die from yellow fever. There are an estimated 130,000 cases of yellow fever reported yearly, causing 44,000 deaths worldwide each year, with 90% occurring in Africa. There is no specific treatment for yellow fever. Treatment is symptomatic, aimed at reducing the symptoms for the comfort of the patient. Vaccination is the most important preventive measure against yellow fever. Since the second half of 2015, yellow fever virus circulation has been reported in Mali and Ghana.

Source: WHO

For more details email us at: earth@jbbodagroup.com

Address: J. B. Boda Reinsurance Brokers Pvt. Ltd. Maker Bhavan No. 1, Sir. Vithaldas Thackersey Marg,
Mumbai 400 020, India | Phone :+91-22-6631 4949

www.jbboda.net | [in company/jb-boda](https://www.linkedin.com/company/jb-boda) | [f https://www.facebook.com/jbboda](https://www.facebook.com/jbboda)