

M 6.9 AND M 6.8 EARTHQUAKES SUMATRA, INDONESIA FLASH UPDATE #1



ONE ASEAN ONE RESPONSE



M 6.9 2020-08-19 05:23
Longitude 100°54'35"E Latitude 4°30'0"S Depth 10km
Located 165 km, -58° WNW Enggano



M 6.8 2020-08-19 05:29
Longitude 101°33'36"E Latitude 3°44'24"S Depth 11km
Located 77 km, -86° WNW Bengkulu

ESTIMATED NUMBER OF PEOPLE EXPOSED BY MMI LEVEL

Intensity	II	III	IV	V	VI	VII	VIII	IX
People Exposed (x1000) M6.9 & M6.8	0 & 0	956 & 1772	732 & 1229	29 & 157	0 & 20	0 & 0	0 & 0	0 & 0
Perceived Shaking	Weak	Weak	Light	Moderate	Strong	Very Strong	Severe	Violent

Source: InaSAFE, BNPB, BMKG

Indonesia

- At 05:23 AM and 05:29 AM of 19 Aug 2020, two tectonic earthquakes rocked the Bengkulu Region. (1) **M 6.9** 100° 54'35"E, 4°30'0"S with a depth of 10km Located 165 km, -58° West-Northwest of Enggano. (2) **M 6.8** 101°33'36"E, 3°44'24"S with a depth of 11km Located 77 km, -86° West-Northwest of Bengkulu (source: [InaSAFE](#), [BNPB](#), [BMKG](#))
- Considering the location of the epicentres and the depth of the hypocentre, the earthquakes that occurred are results of the **activity of the Indo-Australian Plate Subduction under the Eurasian Plate**. Analysis shows that the earthquakes have a thrust fault mechanism according to the Head of Indonesia's Badan Meteorologi, Klimatologi dan Geofisika ([BMKG](#)) Earthquake and Tsunami Centre.
- Further, according to [BMKG](#), the shock of this earthquake was felt in Bengkulu City, North Bengkulu, Mukomuko, Seluma, Kepahiang **IV MMI** (During the daytime it was felt by many people in the house, outside by several people, broken pottery, windows / doors creaking and walls sounding), Bengkulu Selatan, Kaur, Curup, Lebong **III MMI** (Vibration felt real in the house as if a truck was passing by), Lubuk Linggau **II-III MMI** (Vibration felt by several people in the house up to vibrations feeling as if a truck was passing by), Padang, Painan, and Mentawai **II MMI** (Vibration felt by several people). Until now there has been no report of the impact of the damage caused by the earthquake. Modeling results show that this earthquake **DOES NOT have a TSUNAMI POTENTIAL**.
- [BMKG](#) monitoring results showed that there were five **aftershocks** with magnitudes **M3.4 to M4.9**.
- According to the ASEAN Disaster Monitoring and Response System ([DMRS](#)) and Pacific Disaster Center ([PDC Global](#)), these are strong earthquakes, and are very shallow (shallower quakes generally tend to be more damaging than deeper quakes.) Based on the preliminary data, earthquakes of this depth and magnitude are expected to result in moderate to severe shaking within 200.0 km (124.27 miles) from the epicenter. It is estimated that **1.72 Million people, 382,780 households, and \$33.6 Billion (USD) of infrastructure*** are concentrated within this radius. **total replacement cost*
- The AHA Centre will continue to monitor for further developments and issue necessary updates.