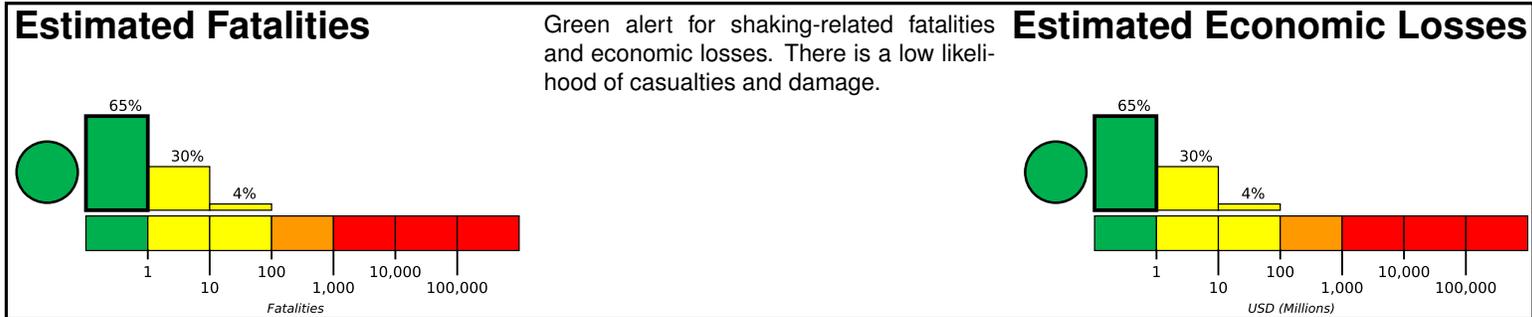


M 4.2, 38 km W of Petrolia, CA
 Origin Time: 2024-12-06 14:58:17 UTC (Fri 06:58:17 local)
 Location: 40.2271° N 125.1292° W Depth: 10.0 km

PAGER Version 4

Created: 3 weeks, 4 days after earthquake

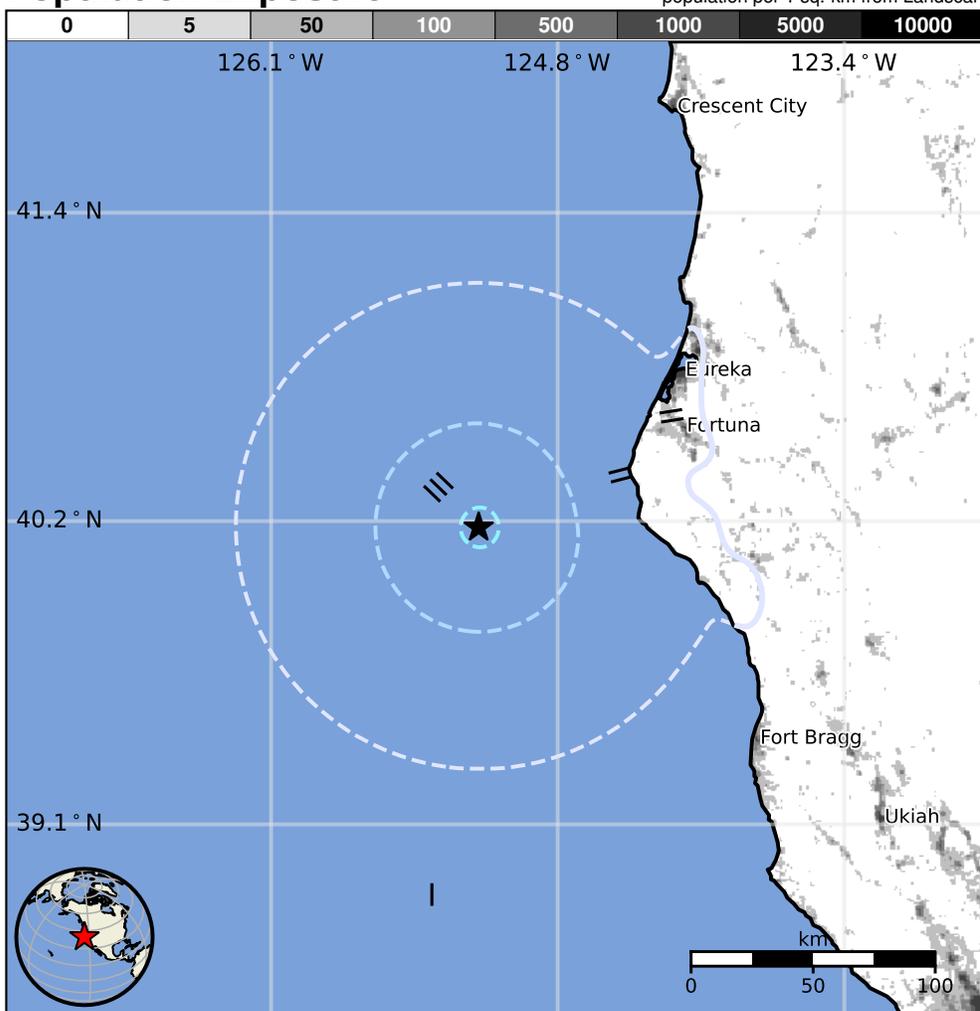


Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k=x1000)	422k	118k	0	0	0	0	0	0	0	
ESTIMATED MODIFIED MERCALLI INTENSITY	I	II-III	IV	V	VI	VII	VIII	IX	X+	
PERCEIVED SHAKING	Not felt	Weak	Light	Moderate	Strong	Very Strong	Severe	Violent	Extreme	
POTENTIAL DAMAGE	Resistant Structures	None	None	None	V. Light	Light	Moderate	Mod./Heavy	Heavy	V. Heavy
	Vulnerable Structures	None	None	None	Light	Moderate	Mod./Heavy	Heavy	V. Heavy	V. Heavy

*Estimated exposure only includes population within the map area.

Population Exposure



Structures

Overall, the population in this region resides in structures that are resistant to earthquake shaking, though vulnerable structures exist. The predominant vulnerable building types are unreinforced brick masonry and reinforced masonry construction.

Historical Earthquakes

Date (UTC)	Dist. (km)	Mag.	Max MMI(#)	Shaking Deaths
2000-09-03	311	5.0	VI(77k)	0
1980-11-08	120	7.3	IX(16k)	0
1993-09-21	348	6.0	VI(47k)	1

Recent earthquakes in this area have caused secondary hazards such as landslides and liquefaction that might have contributed to losses.

Selected City Exposure

from GeoNames.org

MMI	City	Population
II	Ferndale	1k
II	Eureka	27k
II	Bayview	3k
II	Humboldt Hill	3k
II	Cutten	3k
II	Pine Hills	3k
II	Arcata	17k
II	Bayside	17k
I	Santa Rosa	168k
I	Windsor	27k
I	Ukiah	16k

bold cities appear on map.

(k = x1000)

PAGER content is automatically generated, and only considers losses due to structural damage. Limitations of input data, shaking estimates, and loss models may add uncertainty.
<https://earthquake.usgs.gov/earthquakes/eventpage/nc7509771#pager>

Event ID: nc75097711