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Earthquake Shaking Green Alert

GSN ANSS USAID FROM THE AMERICAN PEOPLE

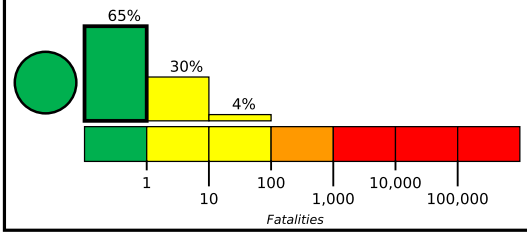
M 6.7, 68 km S of Punta de Burica, Panama

Origin Time: 2021-07-21 21:15:12 UTC (Wed 15:15:12 local)
Location: 7.4162° N 82.7894° W Depth: 10.0 km
FOR TSUNAMI INFORMATION, SEE: tsunami.gov

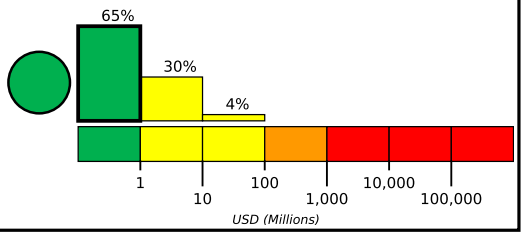
PAGER Version 3
Created: 2 hours, 5 minutes after earthquake

Estimated Fatalities

Green alert for shaking-related fatalities and economic losses. There is a low likelihood of casualties and damage.



Estimated Economic Losses



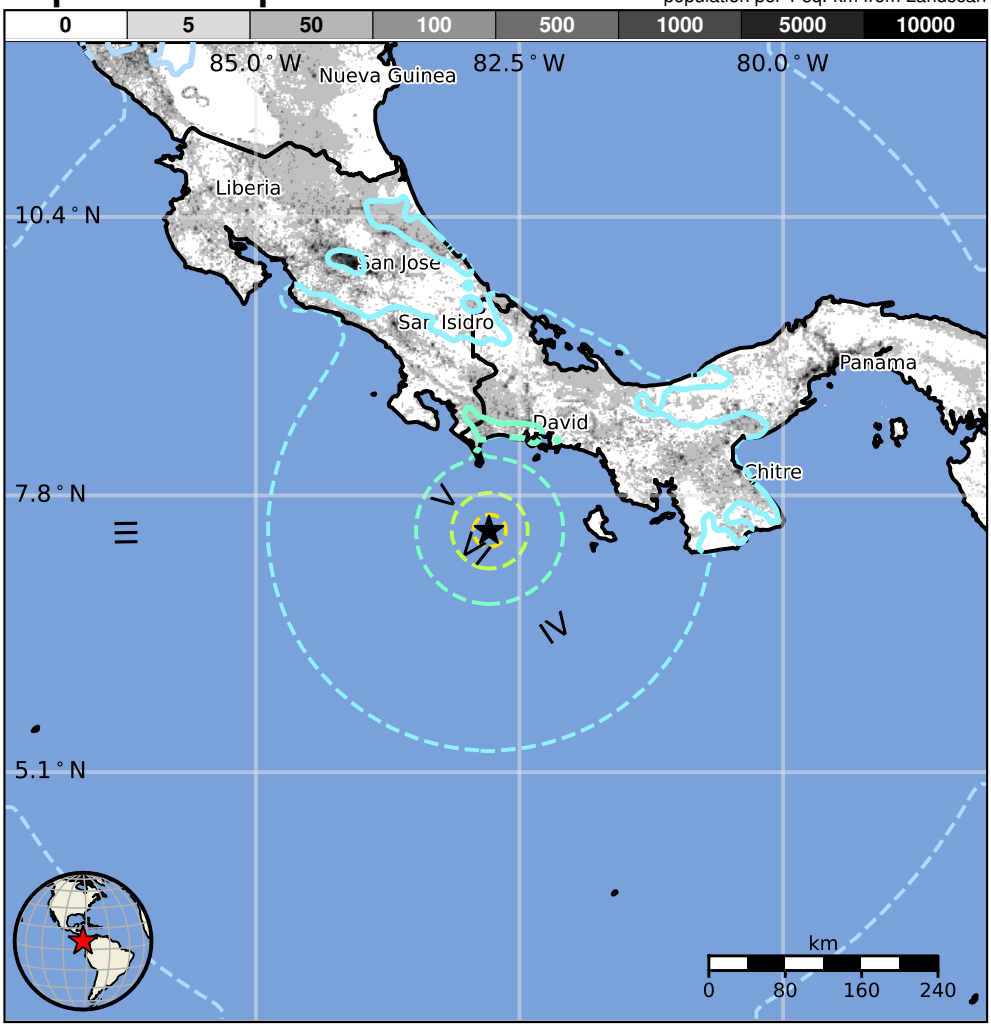
Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k=x1000)		–*	5,642k*	4,490k	191k	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

population per 1 sq. km from Landscan



Structures

Overall, the population in this region resides in structures that are a mix of vulnerable and earthquake resistant construction. The predominant vulnerable building types are mud wall and adobe block construction.

Historical Earthquakes

Date (UTC)	Dist. (km)	Mag.	Max MMI(#)	Shaking Deaths
1993-07-10	282	5.8	VII(45k)	1
1990-12-22	326	5.9	VIII(188k)	1
1991-04-22	252	7.6	VII(213k)	75

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
V	Guarumal	2k
V	Palo Grande	<1k
V	La Esperanza	2k
V	Finca Blanco	2k
V	Finca Corredor	1k
V	Pedregal	16k
V	**David**	**83k**
IV	**San Jose**	**335k**
III	**Panama**	**408k**
III	Granada	89k
III	Masaya	130k

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/us6000exs5#pager

Event ID: us6000exs5