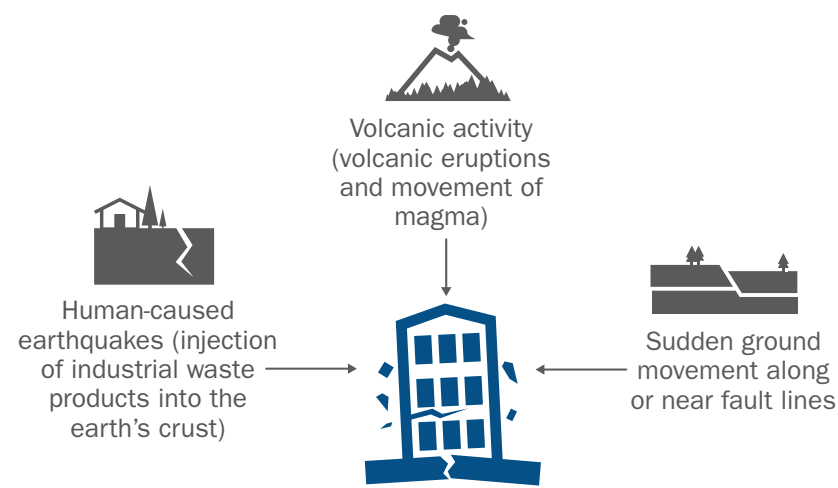


# EARTHQUAKE

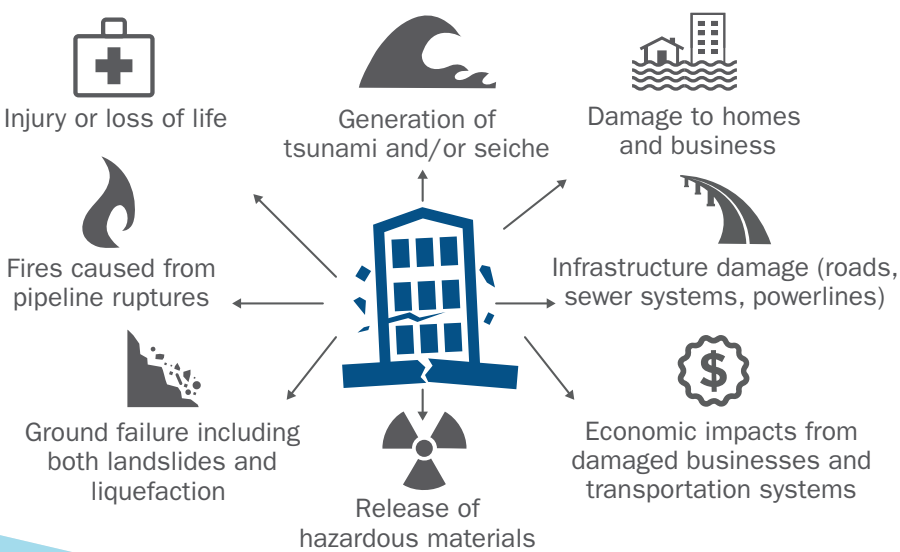
A sudden release of energy that creates a movement in the earth’s crust.

## CAUSES



## IMPACTS

Impacts of an earthquake depend on the magnitude, the population in the area, the time of day it occurs, design of buildings and infrastructure, soil type, and depth of the earthquake.



## Reducing Risk

### WHAT YOU CAN DO:

- Anchor rooftop-mounted equipment (e.g., HVAC units and satellite dishes)
- Use bracing to reinforce and anchor masonry chimneys and building facades
- Bolt your home to its foundation
- Consider anchoring heavy items like book cases and armoires to the wall and strapping down heavy appliances like water heaters, computer monitors, and television screens

### WHAT LOCAL GOVERNMENT CAN DO:

- Prioritize seismic retrofits of critical facilities and infrastructure
- Consider increased seismic standards for bridges and critical infrastructure
- Conduct outreach to builders, architects, engineers, and inspectors
- Conduct routine inspections of buildings for earthquake safety
- Adopt and enforce seismic building codes
- Retrofit unreinforced masonry buildings



## Definitions



**Fault:** features in the Earth’s crust where rock periodically breaks and moves, releasing seismic energy and creating an earthquake.



**Liquefaction:** A process by which water-saturated sediment temporarily loses strength and acts as a fluid, like when you wiggle your toes in the wet sand near the water at the beach. This effect can be caused by earthquake shaking.

## Additional Resources

**Ready.gov**  
<https://www.ready.gov/earthquakes>

**USGS Earthquake Hazard Program** <http://earthquake.usgs.gov/earthquakes>

For more information on earthquake risk reduction, please contact the State of Alaska Risk Mapping, Assessment and Planning (Risk MAP) Coordinator, Sally Russell Cox at [sally.cox@alaska.gov](mailto:sally.cox@alaska.gov), (907) 269-4588.



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