

Safety Note #109

## TSUNAMI AWARENESS



Tsunamis are ocean waves caused by earthquakes, submarine or surface landslides, or submarine volcanic eruptions. According to information available from the California Office of Emergency Services, 14 tsunamis with wave heights greater than three feet have struck the California Coast since 1812. Six of these tsunamis destroyed property, including the March 1964 tsunami that created wave heights of seven to 21 feet along the coast between Del Norte and Monterey Counties and caused 12 deaths at Crescent City.

### Tsunami Detection and Warning Systems

- Potential tsunamis are monitored at the West Coast and Alaska Tsunami Warning Center and Hawaii Tsunami Warning Center.
- Regional Warnings and Watches are issued for earthquakes that generally exceed a magnitude of 7.5 (or magnitude 7.0 for earthquakes in the Aleutian Islands area).
- Locations within a three-hour tsunami travel-time zone of an earthquake epicenter are put on a Tsunami Warning status, whereas areas within a three to six hour travel-time zone are given a Tsunami Watch status.
- Estimated time of tsunami arrivals are issued to governmental agencies within the Tsunami Watch and Warning areas.
- Agencies within the Tsunami Watch and Warning areas evaluate the probability of a tsunami impacting their region and then, determine a suitable local response.

### Tsunami Safety Measures

- Persons in close proximity to the coast should be aware that if they experience prolonged ground shaking, they should also anticipate the near term occurrence of a tsunami and promptly seek safety by moving to higher ground.
- If a rapid rise or fall of coastal water is observed, it may be an indicator of a forthcoming tsunami. Accordingly, seek safety by immediately moving to higher ground.
- Persons that work or live in proximity to the coast should develop a tsunami response plan that includes an evacuation route, emergency supplies (i.e., flashlight, water, food, first aid kit, batteries, etc.), and a portable communication device and radio.
- Upon issuance of an official tsunami evacuation order, follow your established evacuation route and all emergency response agency directives.
- Never attempt to watch a tsunami by moving in proximity to or onto a beach.
- Following a tsunami event, do not return to coastal areas until an official clearance advisory has been issued.
- If a property has sustained tsunami damage, be aware of potential leaking natural gas, electrical, or other hazards.

**Note:** Portions of Safety Note #109 were developed from information given in the document entitled *Local Planning Guidance on Tsunami Response, Second Edition, California Office of Emergency Services*.