

How Can I Prepare?

- Make a family disaster plan NOW.
- Assemble a portable 3-day disaster supply kit.
Include:
 - Food and Water
 - Medications and copies of prescriptions
 - A change of clothes and comfortable shoes
 - Personal hygiene and first aid supplies
 - Special items such as diapers, formula or special food requirements
 - Pet carrier, leash and pet food
 - Copies of important documents
- Keep the items that you would most likely need for evacuation in a backpack, duffle bag or wheeled cooler in an easily accessible location.
- Take a first aid class and learn survival skills.



Tsunami Evacuation

If you notice a sudden drop or rise in sea level, nature may be warning you of impending danger. Move inland or to higher ground immediately.

If you feel a strong earthquake near the beach, evacuate as noted on the map inside! If you are on the beach, leave your car and hurry inland or to higher ground immediately. The first waves from a Local-Source Tsunami could arrive within 10 minutes.

If you are within a Tsunami hazard zone and are alerted to a tsunami warning, follow the Tsunami Evacuation Route signs to a safe distance above sea level.

Each Tsunami Evacuation route ends in a designated Tsunami Evacuation Site where evacuees should gather. Evacuees will receive updated information from public safety personnel at these sites.



Tsunami Safety Rules

Move away from low-lying coastal areas when you feel a strong earthquake or if a Tsunami Warning is issued.

- **Check the map** to see if you live or work in the Tsunami Zone.
- **If you are on or near the beach** and feel a strong earthquake lasting 20 seconds or more, immediately move inland or to high ground. Do not wait for a Tsunami Warning to be issued.
- **If you are in the Tsunami Evacuation Zone** when a Tsunami Warning is issued, **EVACUATE**. Follow evacuation routes and signs inland.
- **CAUTION**— If there is a noticeable rapid recession in water away from the shoreline, this is nature's tsunami warning and it should be heeded. You should move inland or to high ground immediately.
- **If you are unable to move inland**, find refuge above the third floor in a high-rise, multi-story, reinforced-concrete building.
- **Do Not call 9-1-1 for information.** Rather, listen to radio station KWVE 107.9 FM for emergency information.
- **Do not return home** until authorities say it is safe to do so.

Fortunately, a tsunami is a rare event. You can protect your family by evacuating promptly if a Tsunami Warning is issued.

For further information, contact:

West Coast & Alaska Tsunami Warning Center

<http://wcatwc.arh.noaa.gov/>

NOAA Tsunami Website

<http://tsunami.noaa.gov/>

Federal Emergency Management Services (FEMA)

<http://www.ready.gov/>

City of San Clemente

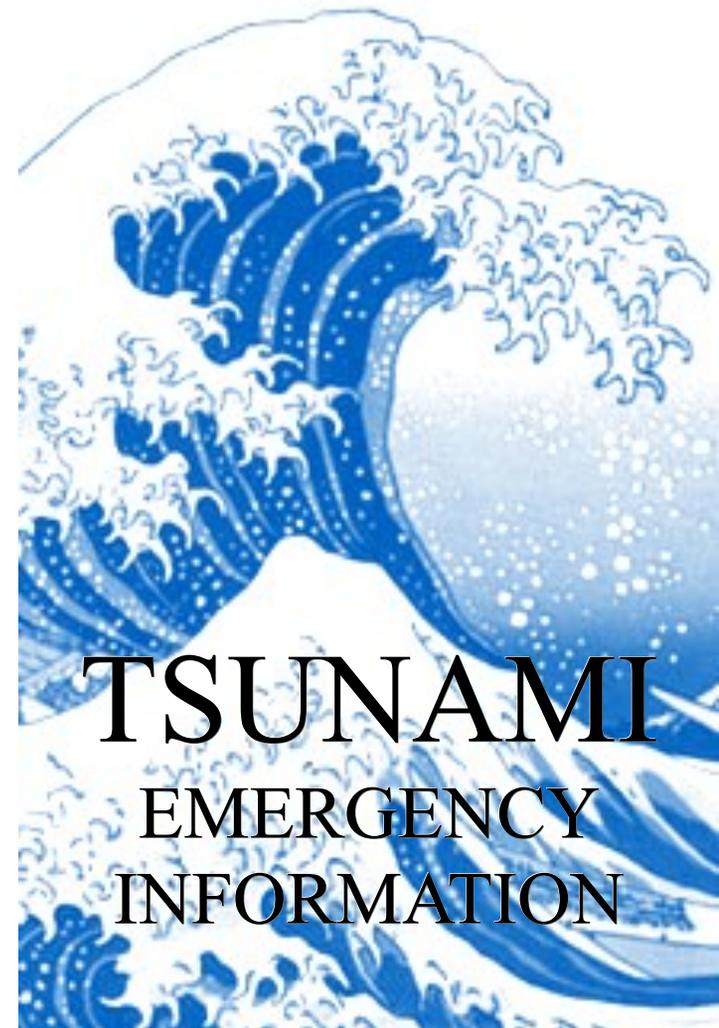
Emergency Planning

San Clemente, CA

949-361-6109

<http://www.san-clemente.org/>

*This information could save a life!
Share with your
family, neighbors & friends.*



*City of San Clemente
Emergency Planning*

What Is A Tsunami?

Tsunami is a Japanese word meaning "harbor (tsu) wave (nami)". A tsunami is a series of sea waves of local or distant origin that result from large-scale sea-floor displacements associated with large earthquakes, major underwater landslides, or exploding volcanic islands. A tsunami can travel at speeds in excess of 450 mph. As the waves enter shallow water they slow down and may raise several feet, or in rare cases, tens of feet. The first wave is almost never the largest and damaging waves may potentially arrive for hours.

In the past, tsunamis were sometimes incorrectly referred to as tidal waves as they appeared to be very rapidly rising or extremely receding tides. Tsunamis are not caused by or related to tides, although a tsunami striking a coastal area is influenced by the tide level at the time of impact.

Two kinds of tsunamis could affect the coastal area of California:

- **Local-Source Tsunami:** If a large earthquake displaces the sea floor near our coast, the first waves may reach the coast within minutes after the ground stops shaking. **There is no time for authorities to issue a warning.** People on the beach or in low coastal areas need to be prepared to move to higher ground immediately, and stay there until they are told by an official source that the danger has passed.
- **Distant-Source Tsunami:** Tsunami waves may also be generated by large earthquakes in other areas of the Pacific Ocean, reaching our coastline many hours after the earthquake occurred.



Tsunami Hazard Zone Sign, San Clemente State Beach San Clemente, CA

The City's Tsunami Zone

All Orange County low-lying coastal areas, including those in San Clemente, can be struck by a tsunami. Scientists estimate that if a tsunami hits the Orange County coast, it could generate waves as great as 32-feet high. The map at right depicts the Tsunami Hazard (in red) along the San Clemente coast. Designated evacuation routes are shown in pink.

If a tsunami should occur, the impact could cause loss of life, destroy homes, greatly affect coastal businesses, and impact tourism. The waves could move inland over the City's beaches, coastal canyons and low-lying residential areas faster than a person can run.

The City of San Clemente's proximity to fault lines just off its coastline increases the potential of a Local-Source Tsunami striking our coast. Historically, Distant-Source Tsunamis, like the one generated in Chile in 1960, have caused significant damage to the California coast.

As scientists continue to study these devastating waves, new, more accurate predictions of the potential hazard become available. San Clemente has been a NOAA certified TsunamiReady/StormReady community since 2006 and will continue to incorporate the best available data into its Tsunami preparedness programs.



How Do We Know When To Evacuate?

The West Coast/Alaska Tsunami Warning Center continuously monitors the Pacific Basin. It will alert State, County and Local officials, who may order an evacuation. The public may be notified via Sheriff, Fire or Lifeguard public announcements, the Emergency Alert System (EAS), Community Alert Sirens, NOAA Weather Radios, and automated mass-notification call system. The public should listen to and obey any evacuation orders given by local officials.

The three levels of notification are described at right:

Tsunami Warning: The highest level of tsunami alert. Indicates that a tsunami is imminent and that coastal locations in the designated inundation areas should be alerted and evacuated immediately.

Tsunami Watch: The second highest level of tsunami alert. An alert is usually issued to areas outside the warned area.

Tsunami Advisory: The third highest level of tsunami alert. Advisories are issued to coastal populations within areas not currently in either warning or watch status when a tsunami warning has been issued for another region of the same ocean.