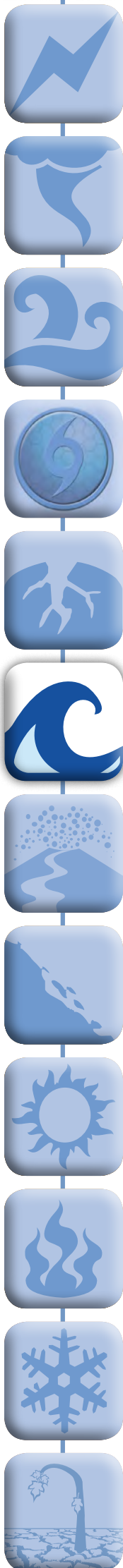




# TSUNAMIS



## ? WHAT IS A TSUNAMI?

A tsunami is a series of destructive waves generated by an undersea disturbance such as an earthquake.

### 🔍 TSUNAMI FACTS

- The North Sumatra Earthquake (December 26, 2004), triggered a tsunami that killed nearly 300,000 people from over 55 countries. It also affected five million people, leaving over one million homeless. The waves were reportedly over 80 feet high.
- As the tsunami nears the coastline, it may grow to great height and smash into the shore, causing great destruction.
- Tsunamis can originate hundreds or even thousands of miles away from coastal areas. Local geography may intensify the effect of a tsunami.
- Although most tsunami waves are less than 10 feet, tsunamis reaching heights greater than 100 feet have been recorded.
- Tsunamis arrive as a series of successive crests (high water levels) and troughs (low water levels). These successive crests and troughs can occur anywhere from 5 to 90 minutes apart. They usually occur 10 to 45 minutes apart and the wave speed in the open ocean will average 450 miles per hour.
- Since 1945, more people have been killed as a result of tsunamis than as a direct result of an earthquake's ground shaking. Most deaths during a tsunami are a result of drowning.
- Tsunamis most frequently come on shore as a rapidly rising turbulent surge of water choked with debris.

### 📄 KNOW THE TERMS

**Tsunami Advisory** - An earthquake has occurred which might generate a tsunami. Hourly bulletins advising of the situation will be issued.

**Tsunami Watch** - A tsunami was or may have been generated, but is at least two hours away. Prepare for possible evacuation if the watch is upgrade to a warning.

**Tsunami Warning** - A tsunami was or may have been generated, which could cause damage. People within the warned area are strongly advised to evacuate.

### 🌐 DANGER ZONES

- Areas less than 50 feet above sea level and within one mile of the shoreline.
- Tsunamis can strike anywhere along most of the U.S. coastline.
- States most at risk within the U.S. include: Hawaii, Alaska, Washington, Oregon, and California.

### ⚠️ WARNING AND DANGER SIGNS

- Tsunamis may be caused by an underwater disturbance or an earthquake. People living along the coast should consider an earthquake or a sizable ground rumbling a warning signal.
- A noticeable rise or fall in coastal waters.



## ACTIONS TO CONSIDER

### ⚡ BEFORE

- Avoid living within several hundred feet of the coastline.
- Make a list of items to bring inside in the event of a tsunami advisory.
- Assemble an emergency supply kit.
- Follow flood preparedness precautions.
- Have an engineer check your residence and advise on ways to make it more resistant to tsunami water.

### ⚡ DURING

- Find protection for you and your family when an earthquake strikes. When the shaking stops, gather your family members and evacuate quickly to higher ground away from the coast. Leave everything else behind. A tsunami may be coming in minutes.
- Avoid downed power lines and stay away from buildings and bridges from which heavy objects might fall during an aftershock.
- If you hear an official tsunami warning or detect signs of a tsunami, evacuate at once to higher ground.
- Stay away from the beach. If you can see the wave you are too close to escape.
- Do not assume that when the first wave passes, the danger is over. Additional waves may follow.

### ⚡ AFTER

- Provide first aid and CPR if trained to do so.
- Return home only after authorities advise it is safe to do so.
- Stay out of your residence if water remains around it. Tsunami waters, like flood waters, can undermine foundations, causing buildings to sink, floors to crack, or walls to collapse.
- Watch out for animals, especially poisonous snakes that may have come into buildings with the water.
- Open the windows and doors to help dry the residence.
- Shovel mud while it is still moist to give walls and floors an opportunity to dry.
- Report property damage to your insurance agent immediately.

### DID YOU KNOW...

*The enormous energy of a tsunami can lift giant boulders, flip vehicles, and demolish houses.*

Contact your Installation Office of Emergency Management for further information.

