

What is the All Hazard Alert Broadcast system? (AHAB)

The AHAB sirens serve as an outdoor warning system for those nearest tsunami hazards. The pole-mounted voice/tone siren system is topped with an intense blue light.

What does an AHAB Siren sound like?

TSUNAMI SIREN TEST:

The AHAB is tested the **first Monday of each month at 12:00 noon**. During the routine **test** of the system, the siren will play the Westminster Chimes followed by a voice message in both English and Spanish.

- **Voice Test Message:** “The following is a test of the siren warning system. This is only a test of the siren warning system. Had this been a real emergency, you should have moved to higher ground or inland before tuning to your local media sources for further instructions. This was only a test.”

TSUNAMI WARNING:

Upon the issuance of a **Tsunami Warning**, the siren will play a wailing sound followed by a prerecorded voice message in both English and Spanish. After a short pause, the tsunami warning alert wail/voice message will continue to repeat until canceled.

- **Voice Warning Message:** “The National Weather Service has issued a tsunami warning. A tsunami can create strong waves, dangerous flooding and powerful currents. If you are in a coastal area, you are at risk and must move to higher ground or inland now. Do not return until directed to do so. Tune to local media for additional information after you move to higher ground or inland.”

The only time the warning wail sound is **tested** is on the third Thursday in October during the Great Washington ShakeOut.

TSUNAMI CANCELLATION:

A cancellation message will be played once a tsunami warning message has been cancelled.



3 Key elements to prepare for a tsunami

1. Develop a family disaster plan. Everyone needs to know what to do on their own to protect themselves in case of disaster. Practice!
2. Be familiar with local earthquake/tsunami emergency plans. Know where to go to survive a tsunami. Identify the closest evacuation routes to higher ground near your home/work/school, etc.
3. Prepare 2-weeks worth of emergency supplies for your home and have smaller go-bags in your vehicle and at work.

What should I have in my Go-Bag?

You should prepare emergency kits with a supply of necessary items for each member of your family, including pets. The kits should be adapted to your needs, but keep them light and manageable so they are ready to go for immediate evacuation.

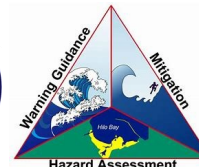
Possible supplies include:

- Maps showing safe evacuation routes to higher ground.
- Non-perishable food and cooking/eating utensils, including a can opener.
- Water and a water purification kit.
- First-aid kit and medication.
- Plastic bags for water storage and waste.
- Dental and personal hygiene items.
- Sturdy shoes, weather-appropriate clothes, sleeping bag, and tent.
- Portable NOAA radio, headlamp/flashlight, and extra batteries.
- Important documents saved on a USB.
- Multitool, whistle, matches, duct tape, and gloves.



For more information:

- Washington State Emergency Management Division at <https://mil.wa.gov/tsunami>
- Evacuation and inundation maps and models at <https://www.dnr.wa.gov/tsunami>
- NOAA’s Tsunami Warning Center <https://tsunami.gov/>
- Contact your local Emergency Manager

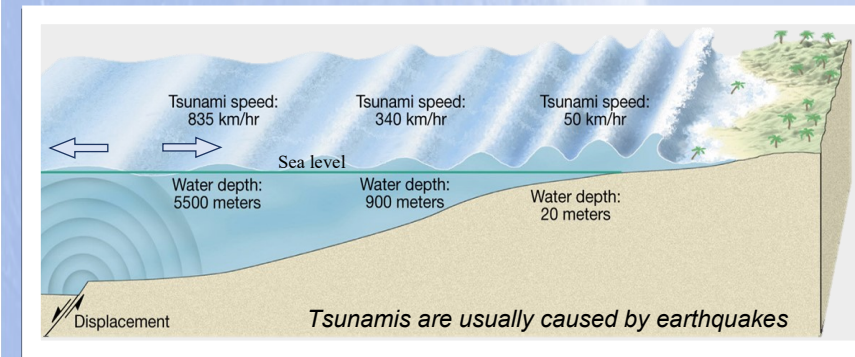


TSUNAMI

Information & Preparedness

What is a Tsunami?

A tsunami is a series of waves most commonly caused by an earthquake (EQ) beneath the sea floor. They can occur at any time of the day or night. In deep water, tsunamis travel as fast as a commercial jet plane and are hardly noticed by ships. As a tsunami wave approaches the shore it slows down and can grow to heights of 60 feet in some locations.



Remember:

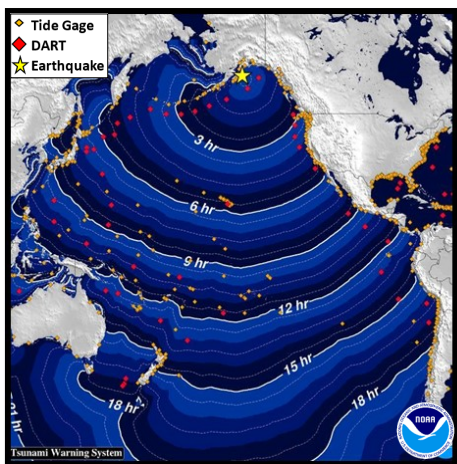
- Tsunamis are a series of waves; the first wave is not always the largest.
- Tsunami waves can continue for over 12 hours.
- Tsunamis can be thunderous walls of water that immediately flood inland areas. City streets can become river channels of floating debris.
- Even 1 to 2 foot tsunami waves create strong currents that can move vehicles and easily sweep people off their feet.
- A person cannot swim, surf or outrun a tsunami.
- Do not attempt to return to coastal areas after a tsunami until local officials have declared it safe.

Know these natural signs:

- Earthquake ground shaking.
- Unusual ocean activity. If the sea level decreases rapidly exposing the sea bed, this is a warning sign that a tsunami will arrive imminently. Do not go to the sea bed; run to high ground immediately.
- Loud roaring sounds from the ocean, like an approaching airplane or train.

What are the different types of tsunamis?

DISTANT



Distant Tsunamis originate far away from Washington state and take more than 3 hours to reach the outer coast. Distant tsunamis generally have smaller waves than local.

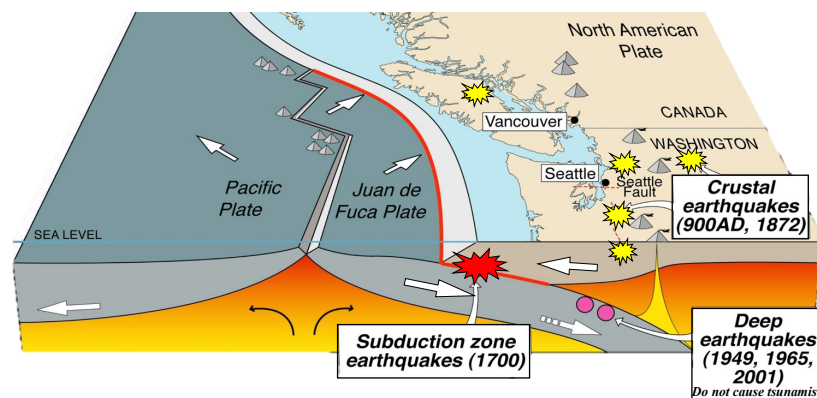
Example: Washington's greatest distant tsunami threat is from an earthquake generated off the coast of Alaska. The 1964 Great Alaskan Earthquake/Tsunami struck the Washington coast within 4 hours causing dangerous coastal flooding and powerful currents.

Note: Distant tsunamis allow sufficient time for officials to broadcast tsunami alerts.

The Great Alaskan earthquake of 1964 created a tsunami that not only damaged local coasts, but also traveled across the ocean to impact the Pacific Northwest and beyond.

LOCAL

Cascadia Subduction Zone (CSZ) and Crustal Fault EQ can cause local tsunamis



Local Tsunamis originate off our coasts and only take minutes from the time the shaking begins to strike our outer coast (15-20 for CSZ).

Example: Washington state is prone to local tsunamis from the Cascadia Subduction Zone. It has produced large earthquakes at least 6 times in the past 3,500 years. The last one struck on January 26, 1700.

Note: The EQ is your warning to immediately move to higher ground or inland. There may not be time to receive an official warning.

How am I warned of a tsunami?

Tsunami Alert Messages are sent from the National Tsunami Warning Center in Palmer, Alaska. You can receive tsunami alerts from a NOAA weather radio, local radio and TV stations, AHAB sirens, local alerting systems and Wireless Emergency Alerts (WEA) sent to your phone. WEA messages are only sent during a **tsunami warning** event.

Tsunami Alerts		
Alert Name	Actions	Potential Hazards
WARNING	Get to high ground or inland IMMEDIATELY Follow tsunami evacuation signage	DANGER! TSUNAMI IMMINENT! Flooding/powerful currents Wave heights > 3 ft. or unknown
ADVISORY	Stay out of the water and away from the shore	STRONG CURRENTS AND DANGEROUS WAVES in or very near coastal water Wave heights of 1 - 3 ft.
WATCH	Be prepared to take action Stay tuned to local radio/TV/NOAA "alert" weather radios	TSUNAMI IS POSSIBLE Alert level will change once more information is known
INFORMATION STATEMENT	No action needed	NO TSUNAMI IMPACT EXPECTED Alert level may change once more information is known

THREAT Message: Intended to alert international partners only. Not applicable to U.S. coasts

THE NATIONAL TSUNAMI WARNING CENTER ISSUES OFFICIAL TSUNAMI ALERTS FOR WASHINGTON. CHECK TSUNAMI.GOV OR WEATHER.GOV WEBSITES FOR TSUNAMI ALERT DETAILS.

What should I do during an earthquake?

Action: Drop, Cover & Hold On



Once the shaking stops: Run to Higher Ground or Inland!



How do I know when to evacuate?

If you *feel strong ground shaking*, notice a *sudden drop or rise in sea level*, or hear a *loud roaring sound from the ocean*, follow your evacuation route to higher ground or inland immediately.

If you are *inside* and hear a local radio/TV broadcast or NOAA "alert" weather radio warning alert; or if you are *outside* and hear an AHAB siren, follow the instructions provided.

Where do I evacuate to?

Evacuation maps can be found at your local emergency management office or by visiting <https://mil.wa.gov/tsunami>. Please use these maps to determine the quickest routes you should take to reach higher ground. Be sure to review and practice several evacuation routes to ensure you are prepared no matter where you are.



You can also plan your evacuation routes using online resources, such as the Washington State Geologic Information Portal, NVS Tsunami Evacuation Zones (NANOOS) or a mobile app:

- www.dnr.wa.gov/geologyportal
- <http://nvs.nanoos.org/TsunamiEvac>
- www.dnr.wa.gov/mobilegeology
- IOS device App: TsunamiEvac-NW

What do the evacuation signs mean?

Evacuation signs have been placed along main roads to guide coastal residents and visitors to higher ground. In some places, there may be more than one way to reach safer areas. These routes are marked with multiple signs showing additional options for evacuation. It is recommended that you review evacuation routes for your area and practice walking them.

Pedestrian evacuation for local tsunamis:

Strong shaking may damage roads and make routes impassable due to downed power lines and dangerous debris. Be prepared to **evacuate on foot** with your go-bag once it is safe to do so. **Follow evacuation signs** or your pre-planned evacuation routes to the nearest high ground.

Vehicle evacuation for distant tsunamis:

If you are able to use a vehicle to evacuate, stay calm and follow the evacuation route signs to safety. Traffic, fearful drivers, abandoned vehicles, and car accidents may clog evacuation routes. Always be prepared to evacuate on foot.

