### Tsunamis in the Capital Region

A tsunami is a natural hazard, consisting of a series of long, surge-like waves that are usually caused by an underwater earthquake, landslide, or volcanic eruption.

The main tsunami threat to the Capital Region is from a Cascadia Subduction Zone (CSZ) earthquake off the Pacific Coast of Vancouver Island, which could result in a local tsunami.

An earthquake may happen far away that we won't feel, causing a distant tsunami. This is a very low-risk and low-impact event for the Capital Region.

Sometimes, distant tsunamis are preceded by water rapidly moving away from the shore. If this happens, move to higher ground.

#### Projected Local Tsunami Arrival Times

Location	Max Water Level (m)/(ft)*	Tsunami Arrive Time (min)
Port Renfrew	3.5 / 11.5	35
Sooke Harbour	2.5 / 8.2	60
Esquimalt Harbour	2.7 / 8.9	76
Victoria Harbour	2.5 / 8.2	76
Cadboro Bay	2.0 / 6.6	90
Sidney	2.0 / 6.6	110

<sup>\*</sup>These estimated levels are based on a 9.0 CSZ earthquake.
By contrast the 2011 Japanese tsunami caused by a 9.0
earthquake, had a maximum water level of 40 metres.

#### Tsunami Alert Levels

ALERT LEVEL	THREAT	ACTION
<b>▲</b> WARNING	Flood wave possible	Full evacuation suggested
ADVISORY	Strong currents likely	Stay away from the shore
<b>▲</b> WATCH	Danger level not yet known	Stay alert for more information
INFORMATION STATEMENT	Minor waves at most	No action suggested
<b>A</b> CANCELLATION	Tidal gauges show no wave activity	Confirm safety of local areas

## Be Prepared to Respond to a Tsunami Warning

Know your zone! Check the Tsunami Hazard Map on the reverse to see if you live, work, play, or go to school in a tsunami hazard zone.

If you do, here's what you should do during a tsunami warning:

- Move to higher ground. If you are at four metres or 13 feet above sea level, you're safe from a tsunami in the Capital Region. You can look at the compass on your mobile device or Google Earth to find out your elevation.
- Move to higher ground on foot or bike if possible, to keep roads clear for emergency responders.
- Move away from beaches, marinas and bodies of water and DO NOT go back to tsunami hazard zones until local government officials tell you it is safe to return.
- DO NOT call 911 unless you have a life threatening emergency and stay off phone lines as they will be in use by emergency personnel.
- Stay tuned to local media channels for further instructions (Have a battery or crank-operated radio in your Grab-and-Go bag and know your local radio, TV, and trusted social media sources of information).

#### Tsunami Preparedness Tips

- Know where higher ground is and how to get there (see map on reverse).
- Practise your evacuation routes on foot or bike with your family members, friends or colleagues.
- Have Grab-and-Go bags ready for your family and pets to take with them. (See PrepareYourself.ca for tips on what to include.)
- Have a family reunification plan which includes evacuation routes, emergency contacts, designated meeting places, and arrangements to stay with family or friends who are not located in a tsunami hazard zone.
- If you are not located in a tsunami hazard zone, be prepared to assist family and friends in need of shelter.

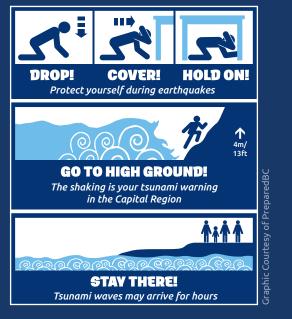
## Tsunami Safety in the Capital Region

If you are near the ocean and feel an earthquake that makes it difficult to stand, move to higher ground or inland immediately. Do not wait for an official warning!

In the event of a tsunami warning, local governments will communicate instructions using various methods. These may include telephone/email/text alert systems, sirens, social media channels, websites, media outlets, or door-to-door visits.

Go to **PrepareYourself.ca** to find out which systems your local government uses, and if there is an alert system you can subscribe to.

If you are near the ocean and feel an earthquake that lasts 60 seconds or more, or makes it difficult to stand:



DO Drop, Cover and Hold On until the shaking has stopped

DO move to higher ground

**DO** stay tuned to local media for updates

**DO** follow the instructions of authorities

DO NOT go near the water to watch

Tsunami signs to watch for at the beach:

- A sudden rise or fall of ocean level
- A loud roaring noise coming from the ocean
- Ground shaking

It is important to remember that tsunami waves will continue to arrive for hours after the initial rise and fall of the ocean level.

#### District of Saanich

# Tsunami Information for the Capital Region



Working together to promote emergency preparedness in the Capital Region

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