

Tsunami Preparedness

Tsunamis are a series of unusually large waves formed by a large-scale disturbance of water bodies. One of the primary causes of tsunamis is an earthquake, but tsunamis may also be triggered by landslides, volcanoes or explosions.

Tsunamis are a rare but serious threat. There are two main types of tsunamis that could impact British Columbia's coast. The first threat is from tsunamis that are generated out in the Pacific Ocean. These **off-shore tsunamis** could impact BC's outer coastal communities with waves from either, the north, south or west. The second type of threat is from tsunamis that are generated in local waters. These **near-shore tsunamis** may be triggered by earthquakes, landslides or underwater slides and could impact any coastal area of British Columbia.

Sometimes it is the trough, rather than the crest of the wave that arrives onshore first. In this case, instead of very high water levels, the first sign of a tsunami is what appears to be a very low tide.

It is generally agreed by the scientific community, that areas including the lower mainland, Greater Victoria, the Georgia Basin and the east coast of Vancouver Island are, in most cases, not at risk from tsunami waves generated as a result of a distant off-shore earthquake.

However, in a less likely situation, a near-shore earthquake may also generate a tsunami. This could create a tsunami that might impact any coastal area within a very short period of time.

If you are near the coast and feel intensely strong shaking from an earthquake—strong enough to make standing difficult—it is best advised to head to high ground immediately (greater than 10 metres or 30 feet above the tide line).

Local emergency officials may not have enough time to issue a warning to residents in the event of tsunami created by a near-shore earthquake.

It is important to remember that tsunamis are rare events, and not all earthquakes will generate a tsunami. However it is also critical to know what to do as a precaution if you live in a vulnerable area. For more information on tsunami preparedness contact your local emergency program coordinator or visit the Provincial Emergency Program website at: <http://www.pep.bc.ca>

Rare But Serious...

- The probability that a tsunami will do damage along British Columbia's coast is small, but very real.
- If you live in a coastal area of British Columbia, you and your family need to know what to do in the event of a tsunami and be prepared to respond.
- If a **Tsunami Watch** or **Warning** is issued for your area, listen to your local media and follow the instructions of local emergency officials.

Tsunami Watch— be alert and get prepared for further instructions by local officials.

Tsunami Warning— local officials may be starting to evacuate high-risk areas along pre-determined evacuation routes. Give local emergency officials your fullest cooperation.

More information about watch or warning status and a detailed notification zone map for risk areas is available at <http://www.pep.bc.ca/>

In the Event of an Immediate Tsunami Threat Move to higher ground

- o If you are in a coastal area identified in a tsunami risk zone, and you feel intense shaking from a near-shore earthquake, it is advisable to move immediately to higher ground (greater than 10 metres or 30 feet above the tide line)
- o Some communities have pre-identified safe areas that you should be aware of. Stay tuned to your radio for updates.
- **Follow the instructions of all emergency officials.** This is for your safety and the safety of those around you.
- **In the first 24 hours, use the telephone only to report life threatening emergencies.**
- **Do not go to the beach to watch.** All areas of the coastline will not be impacted equally. Within very short distances, the effects of a tsunami may vary considerably and there could be dramatic differences in wave height and impact.

Protect Yourself, Your Family and Your Property

- Know where you and your family will evacuate to in the event of a tsunami.
- Know how you will get to your pre-determined safe area.
- Maintain a family emergency kit in state of readiness for unexpected evacuation.
- Listen to local media and follow the instructions of emergency officials.