

# Tsunami Risk

Southland Civil Defence Emergency Management Group



## What are our TSUNAMI risks?

New Zealand's entire coast is at risk of tsunami.

The biggest tsunami in New Zealand are likely to be caused by major earthquakes or underwater landslides close to our shore and can arrive within just a few minutes. Once they travel over land, tsunami pick up debris, boats and large rocks. They can knock down buildings, kill or injure people. They have enormous destructive force.

Tsunami may also be generated by very large earthquakes far away. Some tsunami can travel thousands of kilometres and still be big enough to cause loss of life and damage when they arrive here.

### TSUNAMI KEY FACTS

- Tsunami are large ocean waves generated by major earthquakes beneath the ocean floor or by major underwater landslides
- A tsunami can occur during any time of the year
- A tsunami is a series of waves. The first wave may not be the largest
- Tsunami waves can travel up streams and rivers with damaging waves extending further inland than the immediate coast
- The tsunami danger period can continue for many hours

## How will I know?

### NATURAL WARNING

**IF** you are at the coast and you experience any of the following:

- you feel a strong earthquake (it's hard to stand up)

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- you feel a weak earthquake that lasts for a minute or more
- you see strange sea behaviour, such as the sea level suddenly rising or falling
- you hear the sea making loud and unusual noises or roaring like a jet engine

**THEN** get to high ground or go inland.

**DO NOT WAIT** for an official warning. Instead, let the natural signs be your warning. First, protect yourself from falling objects then immediately get to high ground or go inland. Wait for official all clear.

## OFFICIAL WARNING

An official warning from civil defence emergency management may be issued through radio or television broadcasts. Warning may also be through siren, telephone, txt, loud hailer, or other local arrangements.

You may receive warning from one, or several sources. Respond to the first warning, do not wait for more messages before you act. Listen to your radio and follow any official instructions. Evacuate from the areas or zone(s) stated in the warning.

## INFORMAL WARNING

Warnings from friends, other members of the public, international media, etc may be correct.

If you feel the threat is imminent, quickly get to high ground or, if the surrounding area is flat, go as far inland as possible.

Verify the warning only if you can do so quickly via radio, television, internet, or by contacting your nearest civil defence emergency management office.

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## KEY FACTS SPECIFIC TO SOUTHLAND

- The latest scientific research indicates that the maximum credible risk to the Southland coastline is a 4 metre high tsunami wave.
- The tsunami wave height will be on top of the tide height at the time.
- This size wave will have destructive force for those living at or near low lying coastal areas of Southland.
- The Southland coastline could be subject to a tsunami resulting in earthquake from the Pacific rim region especially South America, the Subantarctic region or the sea floor near Fiordland.

## OFFICIAL TSUNAMI SIGNAGE

At this point in time there is no tsunami signage on the coast of Southland.

## NATURAL WARNING

Our key message is:

*"If you live or are at a coastal area and you experience a substantial earthquake then once the earthquake has finished you should move inland or to higher ground."*

Listen to your local radio stations and you will be advised further of what actions to take.

Official warnings **will** be issued for tsunamis resulting from the Pacific rim region.

Official warnings **may** be issued for all other tsunamis if time allows however you may only receive an **informal** warning or a **natural** warning.

*For more information including the most at risk areas of Southland speak with the staff at the Emergency Management Southland office. Phone 03 211 5411*