# **TSUNAMI EVACUATION INFORMATION KNOW THE SIGNS - ARE YOU READY? HIMATANGI BEACH EVACUATION ZONE**

## WHAT IS A TSUNAMI?

New Zealand's entire coast is at risk of tsunami. A tsunami can violently flood coastlines, causing devastating property damage, injuries and loss of life.

A tsunami is a natural phenomenon consisting of a series of waves generated when a large volume of water in the sea, or in a lake, is rapidly displaced. A tsunami can be caused by large submarine or coastal earthquakes; underwater landslides which may be triggered by an earthquake or volcanic activity; large coastal cliff or lakeside landslides; or volcanic eruptions beneath or near the sea.

#### THE THREE TYPES OF TSUNAMI

- DISTANT TSUNAMI are generated from a long way away. such as from across the Pacific in Chile. In this case, we will have more than three hours warning time for New Zealand
- **REGIONAL TSUNAMI** are generated between one and three hours travel time away from their destination. An earthquake in the Kermadec Trench to the north of New Zealand, could generate a regional tsunami
- LOCAL TSUNAMI are generated very close to New Zealand. This type of tsunami are very dangerous because we may only have a few minutes warning

#### **KEY FACTS**

- A tsunami can occur at any time of the year
- A tsunami is a series of waves, the first wave may not be the biggest
- Tsunami waves can travel up streams & rivers with damaging waves extending further inland than the immediate coast
- The tsunami danger period can continue for many hours







### **KNOW THE SIGNS** WHAT ARE THE WARNINGS?

Warning messages and signals about a possible tsunami can come from several sources – official, unofficial, natural,

#### **OFFICIAL WARNINGS**

Official warnings are received from local CDEM Groups. These warnings may come to you via TV/radio broadcasts or the emergency services (ie: Police, Fire, or Ambulance). You may receive warnings from one or several sources. In an official warning there will be instructions to evacuate from the zone(s) stated in the warning message. Wait in the safe zone for the official "all clear" or advice from the local CDEM Group.

#### **UNOFFICIAL WARNINGS**

Warnings from friends, the public, or international media, may be correct. Evacuate from all zones if you are concerned. Verify the warning once you are in the safe zone.

#### **TSUNAMI - NATURAL SIGNS**

In the case of:

- A large earthquake (one that is hard to stand up in)
- Weak rolling earthquake shaking of unusually long duration (ie: a minute or more)
- Out of the ordinary sea behaviour, such as sudden sea level rise or fall and/or unusual noise

You should evacuate ALL zones - a wave may arrive within minutes, wait in the safe zone for the official all clear.

#### NATURAL WARNINGS

For a local source tsunami which could arrive in minutes, there won't be time for an official warning. It is important to recognise the natural warning signs and act guickly.

You should immediately move inland as far as you can and look for any Tsunami evacuation routes or Tsunami Safe Zone signage!

FOR MORE INFORMATION VISIT WWW.CIVILDEFENCE.GOVT.NZ OR WWW.GNS.CRI.NZ



EVACUATION ZONE RED EVACUATION ZONE ORANGE EVACUATION ZONE YELLOW

IN A LONG OR STRONG EARTHQUAKE (LONGER THAN A MINUTE OR HARD TO STAND UP) **IMMEDIATELY EVACUATE ALL ZONES** 



### REMEMBER

New Zealand's entire coast is at risk of tsunami. The absence of tsunami signage does not mean an absence of tsunami risk