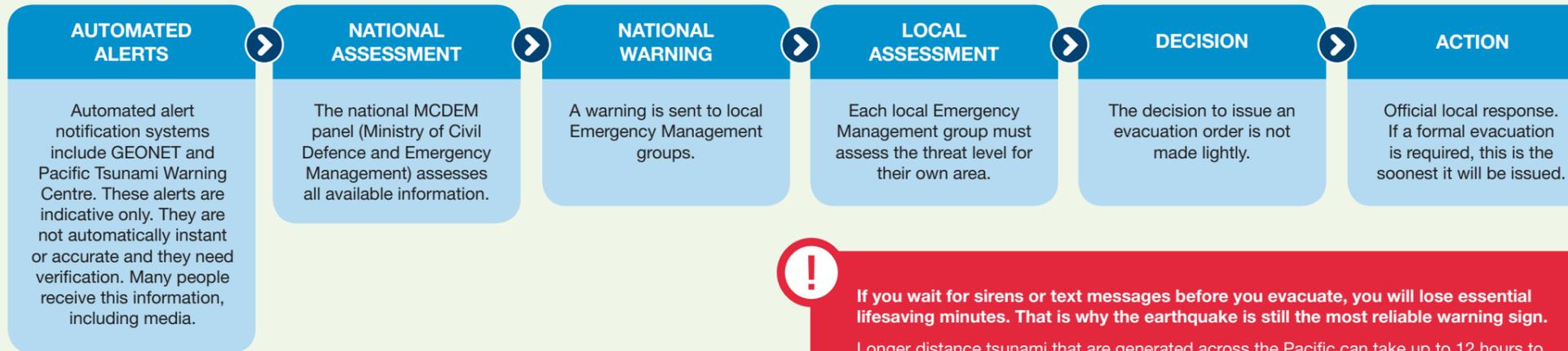
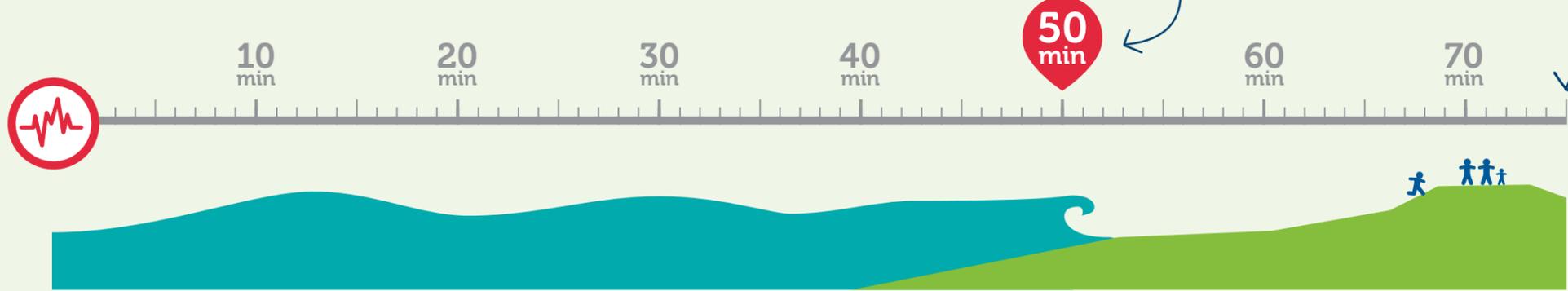


# WHY IS THERE NO TIME FOR OFFICIAL WARNINGS?

There are plenty of earthquake sensors on land, but it takes time to accurately assess the magnitude, depth and location of earthquakes when they occur out at sea.



**!** If you wait for sirens or text messages before you evacuate, you will lose essential lifesaving minutes. That is why the earthquake is still the most reliable warning sign. Longer distance tsunami that are generated across the Pacific can take up to 12 hours to arrive, so there is more time to issue official warnings in those situations.

## WHY NO SIRENS? LESSONS FROM JAPAN

On March 11, 2011, a massive earthquake triggered a tsunami that devastated many areas of Japan's Pacific coast.

**Planning ahead saves lives**  
Survival rates were higher among communities where people evacuated as soon as possible after the earthquake. Education and practice drills were significant factors.

**Waiting is costly**  
People who waited for official warnings were more likely to lose their lives because they left it too late to start evacuating, or they did not evacuate at all.

**Sirens are not reliable**  
Many sirens were knocked out by the earthquake or they did not sound because the people responsible for activating them were unable to do so.



## 3 THINGS YOU NEED TO KNOW TO SURVIVE A TSUNAMI

**1 WHEN TO EVACUATE**  
**The best tsunami warning is an earthquake**  
People often think that tsunami sirens will help keep them safe, but there is no time for official warnings for the worst-case tsunami.  
**Tsunami warning signs**

- A big earthquake that knocks you off your feet or is very difficult to stand up in.
- Any earthquake that lasts more than a minute.
- Strange ocean behaviour (loud or strange noises, sudden change in sea level, ocean drawing away from the shore).

If any of these things happen, don't wait for an official warning. Grab your emergency pack and walk as quickly as you are able to a safe location or to high ground.

**2 WHERE TO EVACUATE**  
**Inland or high ground**  
**Inland** - Green areas on the Tauranga City evacuation maps show areas that are out of reach of the predicted worst-case tsunami flooding.  
**High ground** - The vertical evacuation structure at Gordon Spratt Reserve is a safe area. Tauranga City Council plans to build more of these structures at strategic points along the coast.  
After a major earthquake it will take between 50 - 60 minutes for a tsunami to reach the coast, plus another 30 minutes to flood the yellow evacuation zone.  
Get the latest evacuation map for your area at [www.tauranga.govt.nz/tsunami](http://www.tauranga.govt.nz/tsunami).

**3 HOW TO EVACUATE**  
**Use your feet**  
**Why not leap into the car?**  
There will be crippling traffic jams. On a good day with no emergency it would still take 4 - 6 hours for everyone to drive to safety.  
Our focus is on making sure that safe areas will be accessible for people to reach within 40 minutes on foot from anywhere along the coast. Estimated walking time has been calculated very conservatively (3km per hour).  
**What if you are unable to walk?**  
Make a plan with your family or neighbours if you know that you will need assistance getting to safety. Emergency services will not be able to get you out in time.

**Take an emergency pack**  
A tsunami is not just one wave, but a series of waves caused by a displacement of water, like the ripples when you drop a rock into a puddle. It can arrive in several waves over a long period of time.  
That is why you need an emergency pack. Make sure it has some water and any important medication that you might need. You must be prepared to wait for many hours for the water to subside.