



WHAT IS A TSUNAMI?

A tsunami is a series of powerful waves with strong currents. They are mostly caused by underwater or coastal earthquakes, and sometimes by underwater landslides or volcanic eruptions.

NORMAL VS TSUNAMI WAVES



Normal waves

- Causes:** wind, weather, tides, and currents
- Time between waves:** 5-20 seconds
- Distance between waves:** 100-200 metres
- Speed:** Moves relatively slowly on the ocean (8-100 km per hour) and stops when it reaches land.
- Water movement:** only the top layer of water moves.



Tsunami waves

- Causes:** seafloor or coastal earthquake, underwater landslide or volcanic activity
- Time between waves:** 10 minutes to 2 hours
- Distance between waves:** 100-500 km
- Speed:** moves at the speed of a jet plane on the ocean (800-1000km per hour) and keeps going at the speed of a car on land (30km per hour).
- Water movement:** the whole water column – the water from the surface all the way to the seafloor moves.

TSUNAMI WAVES CAUSE DAMAGE BECAUSE THEY ARE...

Very fast: even once a tsunami reaches land it keeps going, moving across land at the same speed as a car (around 30km per hour) so you can't out-run it.

Powerful: waves have lots of energy and can damage or destroy buildings and carry vehicles and boats.

More than one wave: the largest wave may happen several hours after the first wave and there can be more than one set of waves.

Impossible to out-run: even once a tsunami wave reaches land it keeps going, moving across land at roughly the speed of a car.

Able to come inland/ upstream and travel up slopes: their power and speed means they can come much further inland or up hills than a regular wave.

Full of other things: as the wave travels it picks up things in its path like trees, vehicles or bits of buildings which can cause damage as they are moved by the wave.

DID YOU KNOW...



Even smaller tsunami waves are powerful and can be dangerous.

DON'T FORGET

Long or Strong
GET GONE

