



Hazards in Auckland

Auckland is exposed to a wide range of natural and technological hazards. This fact sheet briefly outlines these hazards, how likely they are to affect you, and what you can do to prepare for them.

What Hazards is Auckland Exposed to?

Auckland is exposed to a range of natural hazards:

- Coastal hazards (e.g., storm surge, coastal erosion, tsunami, coastal flooding etc.)
- The effects of Climate Change (e.g., sea level rise, more extreme rainfall and temperatures)
- Cyclones and Storms that can cause high winds and flooding
- Earthquakes that can cause ground shaking, liquefaction (violent shaking of the earth causes soil to become like liquid and no longer be able to support buildings), fault rupture, land instability, and sometimes tsunami (Refer Hazardfacts H06-H09 for more information on earthquake and tsunami hazards)
- Fire induced by humans, volcanic eruptions, earthquakes or extreme temperatures and dryness (wildfire)
- Land Instability can be induced by heavy rainfall, earthquakes, or even by construction activity which can reduce land stability
- Meteorological hazards such as drought, hail, lightning and tornadoes
- Volcanic eruptions that generate lava, ash, rock bombs, and surges (hot clouds of gas and ash)

Auckland can also be affected by Technological hazards, or 'man-made' hazards like:

- Major aircraft accidents
- Dam failure
- Large scale Computer systems failure, e.g. Y2K
- Terrorism

The table over the page shows how likely some of the above hazards are to affect you.

What is the chance that you could be affected by hazards in Auckland?

Probabilities are often used to describe the likelihood of a hazard event of a particular size occurring in the future. Identifying the likelihood of a particular event allows an appropriate level of future planning for that event.

In all probability.... In the Auckland Region these hazards will occur once every...

Hazard	Probability in any one year	Probability in a 50 year period	
		%	1 chance in....
Earthquake:			
Magnitude 6.0 earthquake 20 km east of Auckland city	1 chance in 2000	2.5	1 chance in 40
Volcanic Eruption:			
Eruption from the Auckland Volcanic Field ¹	1 chance in 1000	4.9	1 chance in 20
Distant eruption from a volcano like Egmont - 0.1 km ³ of magma erupted	Somewhere between 1 chance in 50 and 1 chance in 300	15- 63	Somewhere between 1 chance in 7 and 1 chance in 2
Tropical Cyclone:			
140 kph wind gusts; 250-500 mm rain over 3 days; atmospheric pressure=970hPa	1 chance in 100	39	1 chance in 3
Rain Induced Slope Instability:			
Based on 100 year cyclone event	1 chance in 100	39	1 chance in 3
Tsunami:			
2.5m wave, Locally generated	1 chance in 7000	0.71	1 chance in 130
1m wave, Locally generated	1 chance in 1000	2.5	1 chance in 40
1m-4m wave, Far field generation	1 chance in 75	49	1 chance in 2
Storm Surge:			
Total wave run-up in Waitemata Harbour of about 4.5m above mean sea level	1 chance in 100	39	1 chance in 3
Drought:			
200 return period drought will provide the water supply system with 335 000m ³ of water per day	1 chance in 200	22	1 chance in 5

¹ Return period based on 20 events in the last 20,000 years

What can you do to protect yourself from hazards?

You can gather together items that you will need to help yourself and your family survive a disaster before a disaster occurs.

You should have:

- water (3 litres per person/day)
- warm clothing & blankets
- battery powered radio
- hygiene, e.g. toilet paper
- extra cash (ATM may not working).
- non-perishable food (e.g. tinned)
- torch (& extra batteries)
- first aid kit and regular medications
- important documents (e.g. insurance policy)
- special supplies (babies & people w/disabilities)

Whakatepea te kō, kia kotahi We're in it together 09 379 4420 WWW.ARC.GOV.T.NZ

For more information on volcanic hazards, visit the Auckland Regional Council's web site: <http://www.arc.govt.nz/volcanic>



Te Kaunihera o
MANUKAU
City Council



NORTH SHORE CITY



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AUCKLAND CITY



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