



Cities on Volcanoes 9
November 20-25, 2016
Puerto Varas, Chile

'Understanding volcanoes and society: the key for risk mitigation'



A City on 53 Volcanoes: An Auckland Volcanic Field risk perception survey.

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Risk Perception, Survey, Auckland, Volcanic Field, Education, Communication

Auckland region (with a population of 1.6 million people), New Zealand, is built on Auckland Volcanic Field (AVF) made up of more than 50 eruptions from different vents. The most recent eruption at AVF occurred approximately 600 years ago. Eruptions in Auckland can produce lava flows, fire-fountains, cones, maars, pyroclastic surges and ash falls. In March 2015, a survey was conducted by Auckland Council's Civil Defence and Emergency Management (CDEM) department, together with GNS Science, University of Auckland and University of Canterbury researchers, as part of the Determining Volcanic Risk in Auckland (DEVORA) research programme. The participants were volunteering members of the Auckland public (n=5589). The aim was to help Auckland's CDEM department understand:

- The volcanic risk perception of Aucklanders
- How prepared Aucklanders are for coping during a volcanic event, and
- Their intended behaviour before and during a hypothetical volcanic eruption, including preparedness, information seeking, warning expectations and requirements, and evacuation variables.

The key findings indicate that:

- 77% of the participants know there is a risk of future volcanic activity. However, less than 1% of the participants know that an eruption could occur at any time
- Most participants expect an official warning time of 2-3 days or less prior to an eruption, with the majority stating that they would need less than one day's warning
- The majority of participants consider that more information and advice should be provided by authorities to communities
- Less than 3% of participants consider themselves to be very prepared for an eruption.

The results of this survey are published in GNS Science Report 2015/39. It is being used by Auckland Council to help improve their public education and information campaigns, and to refine their response plans and procedures (such as the multi-agency Operational Evacuation Plan), including for public information management during and after a volcanic eruption.