



Tāmaki Makaurau Auckland could be affected by a volcanic eruption from both inside and outside of the Auckland rohe/region.

The Auckland Volcanic Field contains 53 known volcanic centres.

While scientists consider the probability of an eruption from the Auckland Volcanic Field occurring within our lifetimes to be low, the field is active and the consequences of a future eruption in Tāmaki Makaurau Auckland would be highly impactful.

Some of the hazards associated with an eruption include hot, fast-moving ash and debris clouds (base surges), ash fall, volcanic gasses, earthquakes, volcanic bombs as well as lava flows.

Tāmaki Makaurau Auckland may also be affected by volcanic eruptions outside of the rohe/region, for example the central volcanic zone near Taupō and central plateau volcanoes like Ruapehu, by ash fall and disruption to lifeline utilities such as Auckland Airport.

Stay informed on volcanic alert levels on GeoNet's website or app: geonet.org.nz/volcano/aucklandvolcanicfield

#### If ash fall is forecasted

- Go to your whare/home to avoid exposure to, and driving during, ash fall.
- If you have respiratory or heart conditions, keep your relief and preventer medication handy, and use as prescribed. If you have any concerns, call your doctor.

# Steps to take to keep ash out of your house

- Set up a single entry/exit point for your house. Place damp towels by the door to prevent ash being tracked indoors on your shoes.
- Close all remaining doors, windows, and other entry points, such as cat doors and air vents.
- Shut down heat pumps and air conditioning units, to prevent ash from being blown indoors, and to prevent ash from damaging the units by clogging filters and corroding metal.

- Cover electronics and leave covered until the indoor environment is free of ash.
- Cover spa pools and swimming pools.
- Disconnect downpipes from gutters to allow ash and water to empty from gutters onto the ground.
- Disconnect roof catchment rainwater storage tanks from downpipes to prevent contamination.
- Seal any openings in water storage tanks.
- Cover any open gully traps or drains with a sheet of plywood or similar to prevent ash from entering the wastewater or stormwater systems.
- Cover vegetable gardens with tarpaulins to prevent ash contamination.

#### **During ash fall**

- · Stay indoors and keep pets with you.
- Do not attempt to clear ash from your roof while ash is falling. Ash is unstable, hire a professional to remove ash from your roof.
- Avoid non-essential driving. If you must drive, drive slowly, maintain a safe following distance behind other traffic, use headlights on low beam, and avoid using wipers as ash can scratch windscreens.
- Do not use un-flued gas heaters indoors while your house is sealed to keep out ash, as there is a risk of carbon monoxide poisoning.
- Never use outdoor gas appliances indoors.
- · Do not wash ash into drains.

## **Protecting your health**

 Reduce your exposure to ash, gases and aerosols by staying indoors. This is particularly important for high-risk groups such as children, older adults and those with pre-existing respiratory conditions, such as asthma, Chronic Obstructive Pulmonary Disease (COPD), or chronic bronchitis.

If you have been prescribed preventer medication, ensure you take it as advised by your doctor. Keep your reliever medication with you at all times.

- If you have to go outside, wear protective clothing: an N95 mask, goggles without side vents, strong footwear, gloves and clothing that covers your skin.
  - Be aware that masks can make breathing more difficult for some people. Speak to your doctor if you are unsure if you should wear a mask.
  - Masks do not fit smaller children well, so may offer little protection. Keep children indoors.
  - Do not wet masks as evidence shows this makes no difference to filtration efficiency.
  - Further information on respiratory protection in ash fall, including how to fit a dust mask correctly, is available on the International Volcanic Health Hazard Network (IVHHN) website.
- Do not wear contact lenses, because trapped ash can scratch your eyes. Wear glasses instead.
- Contact your doctor or Healthline on 0800 611 116 if you have any concerns. People experiencing asthma symptoms should not ignore them. Seek medical advice as soon as possible. A severe asthma attack can vary in severity and can be life threatening. If there are signs that someone's condition is deteriorating, call 111.
- If working in or around volcanic ash, i.e. during cleanup operations, limit exposure to the ash and gases by using PPE including:

- A well-fitting, industry certified face mask such as a N95 (or P2) mask is best. Other COVID-style masks provide less protection from ash entering your respiratory system.
- Eye protection such as fitted goggles to limit ash contact with eyes.
- Long sleeves, trousers, closed toe shoes and gloves to limit contact of ash with the skin.

### **Protecting vehicles**

Ash may damage vehicles by clogging filters, corroding metal surfaces, and causing abrasion damage to windscreens, paintwork, and moving engine parts.

- · Keep vehicles under cover.
- Remove ash from car paintwork and windscreens by gently brushing with a soft brush. Avoid rubbing as this can cause abrasion damage.
- Clean or replace air and oil filters regularly (every 80-160 kilometres in heavy ash or every 800-1600 kilometres in light ash).
- Apply lubricants and grease more frequently and check for wear regularly.

Further information on protecting vehicles and other machinery from ash fall is available on the International Volcanic Ash Impacts website.

