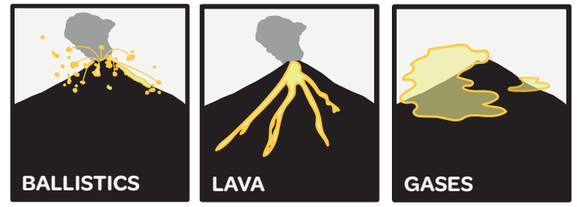
6

Taranaki Maunga
OTHER VOLCANIC PROCESSES



Flying hot rocks
BALLISTICS

- Ballistics are **flying rocks** ejected during an eruption.

Source: Mark Simpson, GNS Science

Where will ballistics go?

- Ballistics are confined to the upper slopes of the volcano, **within 6 km** from the top.
- The map shows the area where ballistics may happen during a future eruption.

Ballistic zones

Main impacts

Ballistics are **lethal** and **highly damaging.**

They can damage buildings and structures close to an eruption.

What should you do if you see ballistics coming towards you?

1. 

Seek shelter and cover your head with your pack.

2. 

If you can, **leave the area** and head down the volcano immediately.

Hot flowing molten rock
LAVA FLOWS

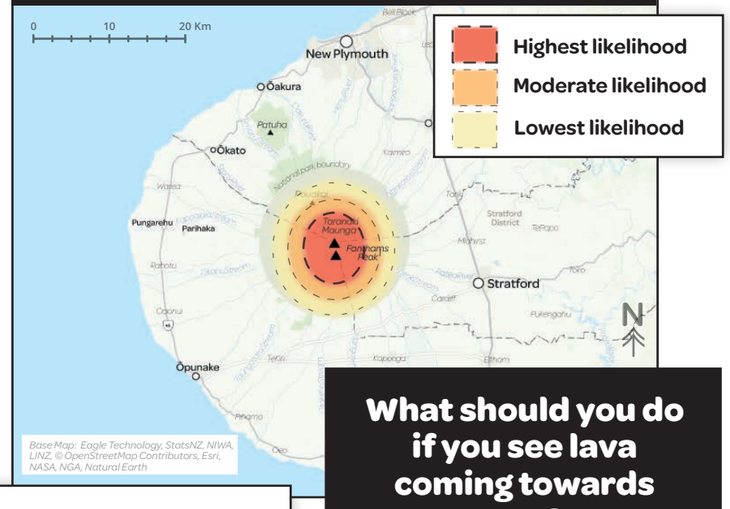
- Lava flows are **streams of molten rock** that pour from an eruption flowing down slopes.

Lava flows on Arenal volcano in Costa Rica

Where will lava flows go?

- Lava flows usually start higher up on the maunga, flowing down valleys over time.
- They are likely to happen in areas that are **within 8 km** from the top.

Lava flow zones



Main impacts

Lava flows will **destroy** everything in their **path**.

Lava flows **set fire** to buildings and vegetation.

What should you do if you see lava coming towards you?

1. 

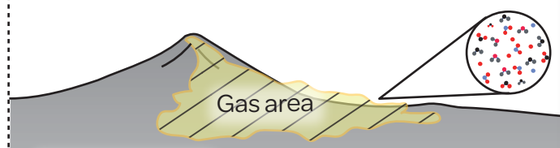
Leave the area and head down the volcano immediately.

2. 

Avoid any valleys or low points as you're leaving.

Silent and invisible
GASES

- **Volcanic gases** are often released before, during and after an eruption.



Wind controls the direction of gases

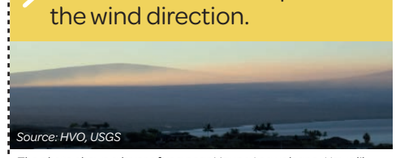
The International Volcanic Health Hazard Network (IVHHN) has more useful information on their website: www.ivhhn.org/

As magma rises it releases:

- Water (H_2O)
- Hydrogen Sulphide (H_2S)
- Sulphur Dioxide (SO_2)
- Carbon Dioxide (CO_2)
- and other gases.

Where will gases go?

- Dangerous amounts of gases usually only occur very close to the volcano.
- Areas affected will depend on the wind direction.



Source: HVO, USGS

The photo shows a layer of vog near Mauna Loa volcano, Hawai'i.

Main impacts

Volcanic gases can form a weak **acid rain** or volcanic fog, called **vog.**

Volcanic gases are usually an **irritant,** but worsen symptoms for people who have **pre-existing health conditions.**

What should you do if you smell or are warned of volcanic gases?

1. 

Stay indoors. Close all doors and windows, and seal up large gaps to the outdoors.

2. 

Be aware that P2/N95-rated masks provide no protection against volcanic gases

3. 

People with pre-existing health conditions should carefully monitor their health and contact their doctor as necessary.

These maps do not show the exact areas or the level to which areas will be impacted in a future eruption. Volcanic activity may change the features on this map and hazard zones may change without notice.

See the whole series from Taranaki Emergency Management at **cdemtaranaki.govt.nz**

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