

20 Apr 2021

Volcanic eruption: St Vincent and the Grenadines

A volcanic eruption on the island of St Vincent has caused widespread damage and disruption

On 8 and 9 April 2021, the La Soufrière Volcano, on the island of Saint Vincent in Saint Vincent and the Grenadines, erupted sending clouds of hot ash and rock into the air and descending down the sides of the volcano [1]. There have been a number of subsequent eruptions and tremors. Over 100,000 people are affected on Saint Vincent and the neighbouring islands, with approximately 3,200 people now living in public shelters [2]. Damage to infrastructure has meant power outages, a lack of drinking water, and closure of the airport.

Check our Country Information for other health advice for [St Vincent and the Grenadines](#).

General information

Volcanoes can produce ash particles, toxic gases, flash floods of hot water and debris called lahars, lava flows, and fast-moving flows of hot gases and debris called pyroclastic flows. Some dangers from volcanoes can be predicted ahead of time while others may occur with little or no notice after an eruption. Each volcano and situation is different [3].

Volcanic eruptions can also:

- Contaminate water supplies.
- Damage infrastructures and machinery.
- Reduce visibility through smog and harmful gases that may threaten low-lying areas.
- Cause breathing difficulties and irritation to skin, eyes, nose and throat [4].

Cause secondary events, like floods, landslides and mudslides, if there is accompanying rain, snow or melting ice. Hot ashes can also start wildfires.

Advice for travellers

If you are planning to visit an area affected by a volcano, be prepared; check [Foreign, Commonwealth & Development Office current travel advice](#) and follow any guidance they provide, including recommendations not to travel.

Before travelling to an area that is prone to volcanic activity, check local reports and follow the advice of the local authorities, including respecting any exclusion zones. Ash clouds can affect flight schedules, disrupt international travel and the operation of regional airports. Check with your airline or travel company for the latest information. Get comprehensive [travel health insurance](#) that covers all health conditions and any planned activities.

Exposure to ash can be harmful, particularly to the respiratory tract. Avoid contact with ash as much as you can. If contact is unavoidable, keep skin covered with long sleeves and trousers and wear goggles to protect your eyes.

If you have any health problems consult your healthcare provider before travel. If you have a pre-

existing breathing (respiratory) condition such as asthma, be aware you might be at increased risk of triggering or worsening your symptoms. If you choose to travel, make sure you travel with sufficient supplies of any regular medicines to cater for this.

During eruptions, remember areas beyond local exclusion zones can be affected by mud/debris flows (particularly in valleys) and volcanic ash falls. You should therefore monitor local media, exercise caution and follow the advice of the local authorities, including any evacuation orders [3]. Ideally stay inside, with windows and doors closed and do not travel unless you have to. If your drinking water has ash in it, use another source of drinking water, such as purchased bottled water, until you are advised otherwise [3]. More information is available from the US [Centers for Disease Control and Prevention](#) and [International Volcanic Health Hazard Network](#) (IVHHN) websites.

To protect yourself outdoors or when cleaning up ash indoors, you may wish to use some sort of respiratory protection (e.g. a facemask) [4,5]. When you wear respiratory protection, the effectiveness depends particularly on two factors: 1) how effective the mask or material is at filtering particles (stopping the ash from passing through the material); and 2) the fit of the mask or material to the face. The most effective masks are certified European P2 and P3 masks (equivalent to the US N95). It is not recommended to wear a facemask while sleeping. Care should be taken to ensure that it is not harder to breathe when using any form of respiratory protection. People with existing respiratory or cardiovascular disease should talk to a health professional about whether facemasks are suitable.

Resources

- [Foreign, Commonwealth & Development Office: What to do if you're affected by a crisis overseas](#)
- [World Health Organization. Volcanic eruptions](#)
- [International Volcanic Health Hazard Network \(IVHHN\)](#)
- [International Federation of Red Cross and Red Crescent Societies: Volcanic eruptions](#)
- [National Geographic: Earth's Major Volcanoes](#)

References

1. [ReliefWeb. St Vincent & the Grenadines: La Soufrière Volcano Situation Report No. 02 \(As of 11 April 2021\). 12 April 2021. \[Accessed 20 April 2021\]](#)
2. [ReliefWeb. Saint Vincent and the Grenadines - Volcanic eruption update \(DG ECHO, NEMO, Copernicus EMS, media\) \(ECHO Daily Flash of 15 April 2021\) \[Accessed 20 April 2021\]](#)
3. [Centers for Disease Control and Prevention. Volcanoes \[Accessed 20 April 2021\]](#)
4. [International Volcanic Health Hazard Network \(IVHHN\). Protection from breathing ash \[Accessed 20 April 2021\]](#)
5. [Galea K, Covey J, Mutia Timur S et al. Short Communication: Health Interventions in Volcanic Eruptions Community Wearability Assessment of Respiratory Protection against Volcanic Ash from Mt Sinabung, Indonesia. Int. J. Environ. Res. Public Health 2018, 15, 2539.](#)