



Volcano



WHAT IS A VOLCANO AND WHAT IS A VOLCANO ERUPTION?

A volcano is a mountain that opens downwards to a reservoir of molten rock below the surface of the earth. Unlike most mountains, which are pushed up from below, volcanoes are built up by an accumulation of their own eruptive products. When pressure from gases within the molten rock becomes too great, an eruption occurs. Eruptions can be quiet or explosive. There may be lava flows, flattened landscapes, poisonous gases and flying rock and ash.

Because of their intense heat, lava flows are great fire hazards. Lava flows destroy everything in their path., but most move slowly enough that people can move out of the way.

Fresh volcanic ash, made of pulverized rock, can be abrasive, acidic, gritty, gassy and odorous. While not immediately dangerous to most adults, the acidic gas and ash can cause lung damage to small infants, to older adults, and to those suffering from severe respiratory illnesses. Volcanic ash also can damage machinery, including engines and electrical equipment. As accumulations mixed with water become heavy and can collapse roofs. Volcanic ash can affect people hundreds of miles away from the cone of a volcano.

Sideways directed volcanic explosions, known as “lateral blasts”, can shoot large pieces of rock at very high speed for several miles. These explosions can kill by impact, burial, or heat. They have been known to knock down entire forests.

Volcanic eruptions can be accompanied by other natural hazards, including earthquakes, mudflows and flash floods, rocks falls and landslides, acid rain, fires and (under special conditions) tsunamis.

Volcano in the Philippines

The Philippines is an archipelago of more than 7100 islands. Most of these islands are of volcanic origin. The Philippines lies between the Pacific and Eurasian Plates which makes it highly vulnerable to typhoons, floods, landslides, **volcanic eruptions and earthquakes**. The **Pacific Ring of Fire** that runs at the western rim of the Pacific Ocean is the **most seismically active part of the earth**, typified by a belt of **active volcanoes and earthquake generators**. Around 20 earthquakes are registered daily, though most are too weak to be felt. There are about **300 volcanoes** in the Philippines. **Twenty-two (22)** of these are active while the larger percentage remains dormant as of the record.

The majority of the active volcanoes are located in the island of Luzon. The six most active volcanoes are Mayon, Hibok-Hibok, Pinatubo, Taal, Kanlaon and Bulusan.



Name of Volcano	Province	No of historical eruptions	Latest eruptions/activity
Babuyan Claro	Cagayan	4	1917
Banahaw	Laguna, Quezon	3	1843
Biliran	Biliran Island	1	1939 Sept. 26
Buddajo	Sulu	2	1897
Bulusan	Sorsogon	40	2022 June
Cagua	Cagayan	3	1907
Camiguin de Babuyan	Cagayan	1	1857
Didicas	Cagayan (Babuyan Island Group)	6	1978 Jan. 6-9
Hibok-Hibok	Camiguin	5	1948 Sept. 31- 1953 July
Iraya	Batanes	1	1454
Iriga	Camarines Sur	2	1642 Jan. 4
Kanlaon (Malaspina)	Negros Oriental	42	2017 December
Leonard Kniasseff	Davao del Norte	No Data	No Data
Makaturing	Lanao del Sur	11	1882
Matumtum	Cotobato	1	1911 March 7
Mayon	Albay	52	2023 July
Musuan	Bukidnon	2	1867
Parker	Cotobato	1	1640 Jan. 4
Pinatubo	Boundaries of Pampanga, Tarlac and Zambales	2	1992 July 9
Ragang	Cotobato	8	1916 July
Smith	Cagayan (Babuyan Island Group)	5	1924
Taal	Batangas	35	2021 July 1 - 2022 March 27

Advice for the period before and during a volcanic eruption

What to do before a volcanic eruption

- add a pair of goggles and a disposable breathing mask for each member of the family to your disaster supply kit.
- Stay away from active volcano sites.
- If you live near a known volcano, active or dormant, be ready to evacuate at a moment's notice.

What to do during a volcano eruption

- Follow the evacuation order issued by authorities and evacuate immediately from the volcano area to avoid flying debris, hot gases, lateral blast and lava flow.
- Be aware of mudflows. The danger from a mudflow increases near stream channels and with prolonged heavy rains. Mudflows can move faster than you can walk or run. Look upstream before crossing a bridge and do not cross the bridge if a mudflow is approaching.
- Avoid river valleys and low-lying areas.

Remember to help your neighbours who may require special assistance – infants, elderly people and people with disabilities.

Protection from falling ash

- Listen to a battery-powered radio or television for the latest emergency information.
- If you have a respiratory ailment, avoid contact with any amount of ash.
- Wear long-sleeved shirts and long pants.
- Use goggles and wear eyeglasses instead of contact lenses.
- Use a dust mask or hold a damp cloth over your face to help with breathing.
- Stay away from areas downwind from the volcano to avoid volcanic ash.
- Stay indoors until the ash has settled unless there is a danger of the roof collapsing.
- Close doors, windows and all ventilation in the house (chimney vents, furnaces, air conditioners, fans and other vents).
- Clear heavy ash from flat or low-pitched roofs and rain gutters.
- Avoid running car or truck engines. Driving can stir up volcanic ash that can clog engines, damage moving parts and stall vehicles.
- Avoid driving in heavy ash fall unless absolutely required. If you have to drive, keep speed down to 20 km/h or slower.

The role of the Swiss Embassy in the case of a volcanic eruption

- The Philippine Government will be responsible for assisting foreigners after an eruption.
- The Embassy will quickly want to ascertain the welfare and whereabouts of Swiss citizens.
- The Swiss citizens must cooperate with the Philippine authorities at evacuation sites and clearly identify themselves as Swiss.
- The Swiss Embassy will be in touch with the Philippine Government and other organisations in order to determine the well-being of the Swiss citizens.
- If the Embassy can not reach you – you are required to contact the Embassy or Warden responsible for your domicile district / province.
- It is important for the Embassy to relay as much information as possible about the situation as well as the status of the Swiss citizens to the Federal Department of Foreign Affairs, which will contact relatives in Switzerland and answer their inquiries.

How to get in touch with Swiss authorities/ Swiss Embassy in Manila

Phone Number Embassy (02) 8845 45 45 E-Mail: manila@eda.admin.ch
EDA Helpline (24h) +41 800 24-7-365 /+41 58 465 33 33
E-Mail: helpline@eda.admin.ch

Phone number contact person will be published on webpage in case of crisis

You may find more information in the web page of the PHILIPPINE INSTITUTE OF VOLCANOLOGY AND SEISMOLOGY www.phivolcs.dost.gov.ph