



# Volcano

## Preparing for Events, Volcanoes

Explosive volcanoes blast hot solid and molten rock fragments and gases into the air. As a result, ash flows can occur on all sides of a volcano and ash can fall hundreds of miles downwind. Dangerous mudflows and floods can occur in valleys leading away from volcanoes. If you live near a known volcano, active or dormant, be prepared to follow instructions from your local emergency officials.

### Before:

Learn about your community warning systems and emergency plans

- [Hawaii County Lava Flow Plans](#)
- [Volcanoes Park](#)

Be prepared for the hazards that can accompany volcanoes:

- Mudflows and flash floods
- Landslides and rockfalls
- Earthquakes
- Ashfall, acid rain and [SO<sub>2</sub> Emissions](#)
- Tsunamis

Make evacuation plans. If you live in a known volcanic hazard area, plan a route out and have a backup route in mind.

Develop an emergency communication plan. In case family members are separated from one another during a volcanic eruption (a real possibility during the day when adults are at work and children are at school), have a plan for getting back together. Ask an out-of-state relative or friend to serve as the “family contact,” because after a disaster, it’s often easier to call long distance. Make sure everyone knows the name, address, and phone number of the contact person.

Have disaster supplies on hand in your [disaster supplies kit](#) to include:

- Flashlight and extra batteries
- First aid kit and manual
- Emergency food and water
- Non-electric can opener
- Essential medicines
- Dust mask
- Sturdy shoes

Get a pair of goggles and a throw-away breathing mask for each member of the household in case of ashfall.

**During:**

Follow the evacuation order issued by authorities. Avoid areas downwind and river valleys downstream of the volcano.

If caught indoors:

- Close all windows, doors, and dampers.
- Put all machinery inside a garage or barn.
- Bring animals and livestock into closed shelters.

If trapped outdoors:

- Seek shelter indoors.
- If caught in a rockfall, roll into a ball to protect your head.
- If caught near a stream, be aware of mudflows. Move up slope, especially if you hear the roar of a mudflow.

Protect yourself during ashfall:

- Wear long-sleeved shirts and long pants.
- Use goggles to protect your eyes.
- Use a dust mask or hold a damp cloth over your face to help breathing.
- Keep car or truck engines off.

**EVACUATION**

Although it may seem safe to stay at home and wait out an eruption, if you are in a hazardous zone, doing so could be very dangerous. Stay safe. Follow authorities' instructions and put your disaster plan into action.

Stay out of the area defined as a restricted zone by government officials. Effects of a volcanic eruption can be experienced many miles from a volcano. Mudflows and flash flooding, wildland fires, and even deadly hot ashflow can reach you even if you cannot see the volcano during an eruption. Avoid river valleys and low lying areas. Trying to watch an erupting volcano up close is a deadly idea.

Listen to a battery-operated radio or television for the latest emergency information.

**After:** If possible, stay away from volcanic ashfall areas.

When outside:

- Cover your mouth and nose. Volcanic ash can irritate your respiratory system.
- Wear goggles to protect your eyes.
- Keep skin covered to avoid irritation from contact with ash.

Clear roofs of ashfall. Ashfall is very heavy and can cause buildings to collapse. Exercise great caution when working on a roof.

Avoid driving in heavy ashfall. Driving will stir up more ash that can clog engines and stall vehicles.

If you have a respiratory ailment, avoid contact with any amount of ash. Stay indoors until local health officials advise it is safe to go outside.

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

**For additional information:**

- [State Civil Defense](#)
- [Hawaii County Civil Defense](#)
- [USGS](#)
- [FEMA](#)

Mudflows are powerful “rivers” of mud that can move 20 to 40 mph. Hot ash or lava from a volcanic eruption can rapidly melt snow and ice at the summit of a volcano. The melt water quickly mixes with falling ash, with soil cover on lower slopes, and with debris in its path. This turbulent mixture is dangerous in stream channels and can travel more than 50 miles away from a volcano. Also intense rainfall can erode fresh volcanic deposits to form large mudflows. If you see the water level of a stream begin to rise, quickly move to high ground. If a mud-flow is approaching or passes a bridge, stay away from the bridge.