VOLCANOES

BE READY

WHAT IS A VOLCANO?

A volcano is a mountain that opens downward to a reservoir of molten rock below the surface of the earth.

VOLCANO FACTS

- Fresh volcanic ash, made of pulverized rock, can be harsh, acidic, gritty, glassy, and smelly. The ash can damage the lungs, especially those of older people, babies, and people with respiratory problems.
- Trying to watch an erupting volcano is a deadly idea.
- Unlike most mountains which are pushed up from below, volcanoes are built up by an accumulation of their own eruptive products such as lava, ash flows, airborne ash, and dust.
- An eruption occurs when pressure from gases and the molten lava rock becomes strong enough to cause an explosion. Gases and rock shoot up through the opening and spill over or fill the air with lava fragments.
- Volcanic eruptions can hurl hot rocks at least 20 miles. Lava flows, airborne ash, or noxious fumes can spread 100 miles or more.
- Sideways directed volcanic explosions, known as lateral blasts, can shoot large pieces of rock at very high speeds for several miles. These explosions can kill by impact, burial, or heat. They have been known to knock down entire forests.
- The danger from most volcanoes is from the ash cloud and blast; however, lava flow from some volcanoes can be especially dangerous. Because of their intense heat, lava flows are extreme fire hazards. Lava flows destroy everything in their path but most move slow enough that people can get out of their way.

KNOW THE TERMS

Lava - Molten (hot liquid) rock also known as magma.

Ash - Fine particles of material matter.

Active - A volcano that erupts frequently.

Dormant - A volcano that has not erupted in a while.

Rupture - An opening in the earths surface which allows lava, ash and gasses to escape.

Igneous Rock - The result when magma/lava rock cools.

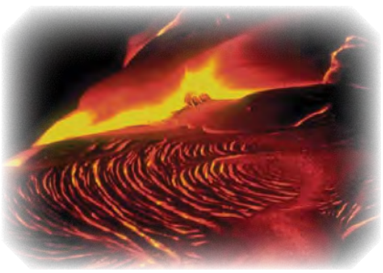
DANGER ZONES

- The U.S. states/territories with active volcanoes at greatest risk are Hawaii and Alaska. However, the active volcanoes of the Cascade Mountain Range also place California, Oregon, and Washington at risk.
- Over 75 percent of the world's active and dormant volcanoes are located in the Pacific Ring of Fire, which is an arc of intense volcanic activity stretching from the west coast of the Americas, the east coast of Siberia, Japan, the Philippines, Indonesia, and in island chains from New Guinea to New Zealand.
- The immediate danger area around a volcano covers approximately a 20 mile radius. However, it can extend as far as 100 miles or more.

ACTIONS TO CONSIDER

BEFORE

- Create an evacuation plan for your family and have a backup route in mind.
- Determine an out of town relative or friend that all family members could use as a central contact if separated.
- Determine a safe shelter for animals and livestock.
- Assemble an emergency supply kit. Be sure to include goggles and a disposable mask to be used during ash fall.
- Do not visit an active volcano unless it is designated a safe viewing area.



DURING

If Indoors

- Close all windows, doors, and ventilation during an ash fall.
- Put all machinery inside a garage or barn.
- Stay indoors until the ash has settled unless there is a danger of the roof collapsing.

If Outdoors

- Evacuate immediately if close to the volcano to avoid flying debris, hot gases, ash, lateral blast, and lava flow. If evacuation is not possible, seek shelter indoors.
- Avoid areas downwind from the volcano to avoid volcanic ash.
- Roll up into a ball to protect your head if caught in a rock fall.
- Avoid river valleys and low-lying areas where poisonous gases and lava are prone to collect.

AFTER

- Stay away from volcanic ash fall areas if possible. If you are in an ash fall area, cover your mouth and nose with a mask, keep skin covered, and wear goggles to protect your eyes.
- Avoid contact with any amount of ash if you have respiratory ailments.
- Clear roofs of ash fall which is very heavy and can cause roofs to collapse.
- Do not drive through ash fall. It is easily stirred up and can clog engine filters causing your vehicle to stall.
- Help anyone nearby who may require special assistance – large families, children, elderly, and individuals with disabilities.
- Report property damage to your insurance agent immediately.

DID YOU KNOW...

There are about 1500 active volcanoes in the world that have erupted in the past 10,000 years.

Contact your Installation Office of Emergency Management for further information.