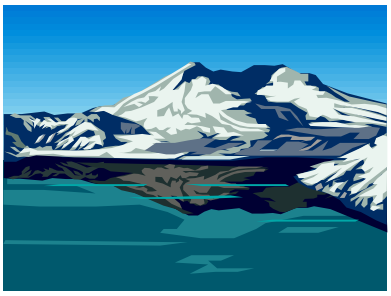
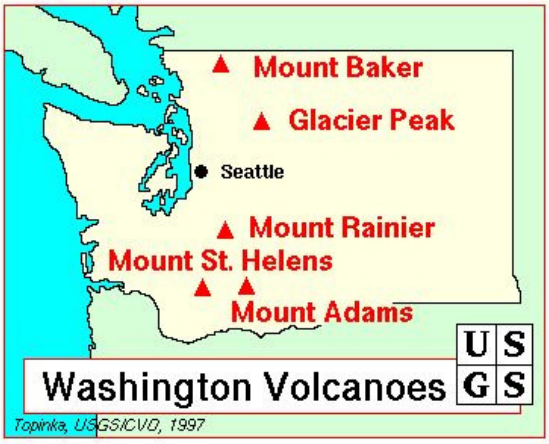
Volcano Safety

The Pacific Northwest lies in the "Ring of Fire," an area of active volcanoes surrounding the Pacific Basin. An erupting volcano can cause several different emergency situations at once.



Did you know that Washington State is home to *five* active volcanoes?



Although Mt. St. Helens is in Skamania County, the best access routes to the mountain run through Cowlitz County. The community nearest the volcano is Cougar, which is in the Lewis River valley about 11 miles south-southwest of the peak. Gifford Pinchot National Forest surrounds Mt. St. Helens.

The Eruption

On May 18, 1980, after nearly 2 months of local earthquakes and steam eruptions, picturesque Mt. St. Helens, suddenly began a major explosive eruption directed first northward and then upward. The lateral blast, which lasted only the first few minutes of a 9-hour continuous eruption, devastated more than 150 square miles of forest and recreation area, killed countless animals, and left about 60 persons dead or missing. The 9-hour eruption, the huge debris avalanche that followed, and intermittent eruptions during the following 3 days removed about 4 billion cubic yards (0.7 cubic mile) of new magmatic material and of the upper and northern parts of the mountain, including about 170 million cubic yards (0.03 cubic mile) of glacial snow and ice.

The eruption caused pyroclastic flows and many mudflows, the largest of which produced deposits so extensive that they reached, and blocked, the shipping channel of the Columbia River about 70 river miles from the volcano. The May 18th eruption blew volcanic ash consisting of pulverized old rock from the mountain's core as well as solidified new lava, more than 15 miles into the air. Winds carried the ash generally eastward across the United States and, in trace amounts, around the world. The ash, which fell in troublesome amounts as far east as western Montana, severely disrupted travel and caused widespread economic losses.

--USGS website

Real-time volcano cam:
http://www.fs.fed.us/gpnf/volcanocams/msh/

Cowlitz County Tourism:
www.visitmtsthelens.com

FEMA:
http://www.fema.gov

Volcano Safety

Before an Eruption

- ✓ Have a disaster supplies kit that includes enough food and water for each member of your family for at least 72 hours.
- ✓ Make sure your kit contains a dust mask for each member of your family. These inexpensive masks can be purchased at any hardware store.
- ✓ Develop a family emergency communication plan in case you are separated.
- ✓ Be prepared for the hazards that can accompany a volcanic eruption:
  - Mudflow and flash flood
  - Earthquake and aftershocks
  - Ashfall and acid rain
  - Tsunami

During an Eruption

- ✓ Follow any evacuation orders issued by authorities.
- ✓ Do not travel downwind or downstream from the volcano.

If you are indoors:

- ✓ Close all windows, doors and dampers.
- ✓ Bring all animals and livestock into closed shelters

If you are outdoors:

- ✓ Try to seek shelter indoors or under cover.
- ✓ If caught in a rock fall, 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 mudflow.

MUDFLOWS

Mudflows are powerful "rivers" of mud that can move 20-40 mph. Hot ash or lava from an eruption can rapidly melt ice and snow at the summit of a volcano. The resulting melt water quickly mixes with falling ash, soil and debris. This turbulent mixture is very dangerous and can travel more than 50 miles away from a volcano.

Ashfall Safety Tips

- ✓ In ashy areas, use dust masks and eye protection. If you don't have a dust mask, use a handkerchief or cloth to avoid inhalation of ash.
- ✓ Stay indoors to minimize exposure to ash, especially if you have respiratory ailments.
- ✓ Minimize travel—driving in ash is extremely hazardous to you and your car.
- ✓ If you must drive, use your headlights, drive slowly and make sure you have plenty of windshield washer fluid.
- ✓ After driving in ash, be prepared to change oil, oil filters and air filters frequently.
- ✓ Dampen ash in yards and streets to reduce re-suspension.
- ✓ Most roofs cannot support more than **four inches** of wet ash. Keep roofs free of accumulation.
- ✓ Once ashfall stops, sweep or shovel ash from roof and gutters.