

Volcanic Activity - Ranking Hazardous Volcanoes

Some volcanoes can be explosively dangerous. Along with clouds of ash and other volcanic debris that can linger in the air for years after an eruption, pyroclastic flows, landslides, and mudflows are common volcanic hazards. An explosive volcano may not be a hazard to human life and property, however, if it is located in a remote area or erupts infrequently. A number of factors must be taken into account to determine if a particular volcano poses a risk.

1. Select a country and find out if there are any volcanoes in that country. If there are no volcanoes, choose another country. If there are a lot of volcanoes in that country, narrow your search.
2. Repeat step 1 for at least two other volcanoes. Record the information about each of the volcanoes you selected in the data table on the next page.

Resource Sites:

[Volcano World](http://volcano.und.edu/)

<http://volcano.und.edu/>

Volcano World contains images and information about past and current volcanic eruptions. The data are searchable by country, world region, name, or description of a volcano. The fact that the data are searchable by country makes this link a good place to start the activity. Note: Students should consult a traditional reference source to determine the approximate number of people living near a volcano of interest. Atlases and encyclopedias should be used for population estimates.

[Smithsonian Institution - Global Volcanism Program](http://www.volcano.si.edu/)

<http://www.volcano.si.edu/>

The global volcanism program of the national museum of natural history and the Smithsonian institution also provides data for volcanoes of the world, searchable by volcano name or geographic region. Like volcano world, volcano data include elevation, latitude/longitude, and type of volcano.

[U.S. Geological Survey Volcano Hazards Program](http://volcanoes.usgs.gov/)

<http://volcanoes.usgs.gov/>

This web page includes background information on volcanic hazards, including types of hazards, volcano monitoring, and emergency planning and warning.

[Volcanic Hazards, Features, and Phenomena](http://vulcan.wr.usgs.gov/Glossary/framework.html)

<http://vulcan.wr.usgs.gov/Glossary/framework.html>

This site provides an exhaustive list (and definitions) of terms related to volcanic features and hazards. It is a good reference for terminology as you search for data on a particular volcano.

[Michigan Technological University Volcanoes Page](http://www.geo.mtu.edu/volcanoes/)

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This page provides background information in volcanology. It contains several interesting links that discuss types of volcanic hazards and hazard mitigation for volcanic regions of high population density.

Data Table:

Name _____

Block _____

Ranking Hazardous Volcanoes Data Table			
Volcano Name			
Country			
Location of Volcano (Latitude and Longitude)			
Type of volcano			
Composition of lava/Explosiveness			
Date of last eruption			
Eruption interval (number of eruptions over a period of time)			
Height of volcano			
Distance to nearest population center			
Approximate number of people living near the volcano			
Type(s) of potential hazards			
Human hazard ranking (high, medium, low)			

Follow-up Questions

1. Which of the volcanoes you researched threatens the greatest number of people?
2. Which country has the greatest number of potentially dangerous volcanoes? Why?
3. Which country has the greatest total population threatened by volcanoes?