

Some Volcanic Disasters Since A.D. 1000 involving 1000 Fatalities or more
(incomplete before A.D. 1800)

Volcano	Country	Year	Primary Cause of Death			Posteruption Starvation	Tsunami
			Pyroclastic Flow	Debris Flow	Lava Flow		
Etna	Italy	1169	15,000				
Kelut	Indonesia	1586		10,000			
Vesuvius	Italy	1631		4,000			
Raung	Indonesia	1638		1,000			
Etna	Italy	1669	20,000				
Merapi	Indonesia	1972	3,000				
Awu	Indonesia	1711		3,000			
Cotopaxi	Ecuador	1742		800			
Makian	Indonesia	1760		2,000			
Papandajan	Indonesia	1772		3,000			
Asama	Japan	1783		1,200			
Laki	Iceland	1783				10,000	
Unzen	Japan	1792		5,000			10,000
Mayon	Philippines	1814	1,200				
Tambora	Indonesia	1815	12,000			80,000	
Galunggung	Indonesia	1822	1,500	4,000			
Mayon	Philippines	1825		1,500			
Hibok-Hibok	Philippines	1951	500				
Awu	Indonesia	1856		3,000			
Cotopaxi	Ecuador	1877		1,000			
Krakatau	Indonesia	1883	~2,000				34,000
Bandai	Japan	1888		461			
Awu	Indonesia	1892		1,530			
La Soufriere	Saint Vincent	1902	1,565				
Mt. Pelee	Martinique	1902	29,000				
Santa Maria	Guatemala	1902	6,000				
Taal	Philippines	1911	1,330				
Kelut	Indonesia	1919		5,110			
Merapi	Indonesia	1930	1,300				
Tavurvur/Vulcan	New Guinea	1937	505				
Lamington	Papua-N.G.	1951	2,940				
Agung	Indonesia	1963	1,900				
El Chichon	Mexico	1982	1,700				
Nevado del Ruiz	Colombia	1985		25,000			

(Sources: "The Blue Planet" by B.J. Skinner, S.C. Porter, D.B. Botkin, Wiley
"Volcanoes" by Maurice Krafft, Discoveries
Smithsonian Global Volcanism Program web site: <http://www.volcano.si.edu>)

FOR COMPARISON (eruptions that have being predicted and areas have been evacuated)

St. Helens	Washington	1980	63
Mt. Unzen	Japan	1991	42
Mt. Pinatubo	Philippines	1991	900-1,200
Mt. Mayon	Philippines	1993	75

YET OTHER ERUPTIONS (e.g. earlier ones)

Santorini	Greece	1450 B.C.	no fatalities on Santorini, though 70 m high tsunami on Crete
Vesuvius	Italy	79 A.D.	>2000
Lake Nios	Cameroon	1986	1700 (CO2 eruption)

Size of Explosive Eruptions vs. Number

Volume	Number	Adjective	Example
10 ⁴ -10 ⁶ m ³	100/yr	small	Stromboli 1996
10 ⁶ -10 ⁷ m ³	15/yr	moderate	Unzen 1991
10 ⁷ -10 ⁸ m ³	2-3/yr	moderate-large	Nevado del Ruiz 1985
10 ⁸ -10 ⁹ m ³	1/ 2yrs	large	Rabaul 1994
1-10 km ³	1/ 10yrs	very large	Mt. St. Helens, 1980
10-100 km ³	1/ 40yrs	huge	Pinatubo, 1991
100-1000 km ³	1/ 200yrs	colossal	Tambora, 1815
1000-10,000 km ³	1/ 50,000yrs	humongous	Yellowstone, 630,000B.C.
>10,000 km ³	not found	fortunately	none

from: R. Decker and B. Decker, 1999. "Volcanoes", Freeman and Co., New York.