


Smallpox

Smallpox was an infectious disease caused by one of two virus variants, *variola major* and *variola minor*.^[7] The last naturally occurring case was diagnosed in October 1977 and the World Health Organization (WHO) certified the global eradication of the disease in 1980.^[10] The risk of death following contracting the disease was about 30%, with higher rates among babies.^{[6][11]} Often those who survived had extensive scarring of their skin and some were left blind.^[6]

The initial symptoms of the disease included fever and vomiting.^[5] This was followed by formation of sores in the mouth and a skin rash.^[5] Over a number of days the skin rash turned into characteristic fluid filled bumps with a dent in the center.^[5] The bumps then scabbed over and fell off leaving scars.^[5] The disease used to spread between people or via contaminated objects.^{[6][12]} Prevention was by the smallpox vaccine.^[9] Once the disease had developed certain antiviral medication may have helped.^[9]

The origin of smallpox is unknown.^[13] The earliest evidence of the disease dates back to the 3rd century BC in Egyptian mummies.^[13] The disease historically occurred in outbreaks.^[10] In 18th century Europe it is estimated 400,000 people per year died from the disease, and one-third of the cases resulted in blindness.^{[10][14]} These deaths included those of four reigning monarchs and a queen consort.^{[10][14]} In the 20th century it is estimated that smallpox resulted in 300–500 million deaths.^{[12][15][16]} As recently as 1967, 15 million cases occurred a year.^[10]

Edward Jenner discovered in 1798 that vaccination could prevent smallpox.^[10] In 1967, the WHO intensified efforts to eliminate the disease.^[10] Smallpox is one of two infectious diseases to have been eradicated, the other being rinderpest in 2011.^{[17][18]} The term "smallpox" was first used in Britain in the 15th century to distinguish the disease from syphilis, which was then known as the "great pox".^[19] Other historical names for the disease include pox, speckled monster, and red plague.^{[3][4][19]}

Smallpox	
Synonyms	Variola, ^[1] variola vera, ^[2] pox, ^[3] red plague ^[4]
	
A child with smallpox in Bangladesh in 1973. Note the characteristic bumps filled with thick fluid and a depression or dimple in the center.	
Specialty	Infectious disease
Symptoms	Early: Fever, vomiting, mouth sores ^[5] Later: Fluid filled blisters which scab over ^[5]
Complications	Scarring of the skin, blindness ^[6]
Usual onset	1 to 3 weeks following exposure ^[5]
Duration	About 4 weeks ^[5]
Causes	<i>Variola major</i> , <i>Variola minor</i> (spread between people) ^{[6][7]}
Diagnostic	Based on symptoms and

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