

2.9 Case Study

Investigating Smallpox

eradicated:
wiped out.

Bacteria and viruses can make you sick. The illnesses they cause can be very serious. Over the last 200 years, the number of bacterial and viral illnesses that can change your life has dropped dramatically. For example, 200 years ago most people got smallpox, almost as many as now get the flu. Unfortunately, many of those who were infected died of smallpox. Smallpox has been mostly **eradicated**, and you do not hear about people getting it anymore. Read about smallpox below. Use what you learn to fill in the *Communicable-Disease Information Table* with information about smallpox.

Smallpox

Symptoms and Spread

Smallpox is a serious, contagious, and often fatal infectious disease. Smallpox is caused by the variola (vair-ee-OH-luh) virus. Humans are the only natural hosts of the variola virus. The symptoms include a rash and high fever. Smallpox is often recognized by the type of rash it causes.

The rash is in the form of small blisters. The blisters are filled with fluid and crusted over. This sounds like chickenpox, but the blisters look and feel different. The smallpox rash usually appears on exposed parts of the body: the face, arms, palms, lower legs, and soles of the feet. Other symptoms of smallpox include fever, headache, backache, and fatigue (tiredness).



The “pox” means “spotted.” It refers to bumps that appear on an infected person, as shown in the picture.

Generally, face-to-face contact is required to spread smallpox from one person to another. Smallpox also can be spread through direct contact with infected bodily fluids. If someone touches an object such as bedding or clothing that has smallpox on it, he or she may get infected. Sometimes, smallpox has been spread by viruses carried in the air. Smallpox is not known to be transmitted by insects or animals.