



Indiana State
Department of Health
Epidemiology Resource Center

Quick Facts: Smallpox

What is smallpox?

Smallpox is a very serious disease caused by a virus. The last case of smallpox occurred in Somalia in 1977. The last case of smallpox in the U.S. was reported in 1949. In 1980 the World Health Organization (WHO) stated that smallpox had been removed from the world as a natural disease threat. However, smallpox remains a threat. Some countries may have kept smallpox virus and could use it as a weapon. Smallpox is fatal in about 30% of those who become infected.

What are the symptoms of smallpox?

Symptoms occur about 7-17 days after exposure. Early symptoms include high fever, headache, severe fatigue, and severe muscle aches. Abdominal pain and vomiting sometimes occur. In about 2-5 days, a pearly, bumpy rash begins on the face, hands, and feet (including the palms and soles), which spreads inward toward the trunk. In 1-2 days, the rash starts to look like blisters. These blisters scab over in about 8-9 days. The scabs fall off about 3-4 weeks after the rash begins, leaving pigment-free skin, however pitted scars may form.

How is smallpox spread?

Smallpox spreads directly from person-to-person. It can be spread by mouth and throat droplets from an infected person or by contact with fluid from the rash. Contaminated clothes or bedding can also spread the virus. The risk of transmission is highest from the onset of the rash to about 7-10 days after the rash begins. Humans are the only known source of the virus.

Who is at risk for smallpox?

The risk of natural smallpox infection does not exist. The main risk of smallpox lies with the potential of the virus to be used as a weapon. This risk is regularly addressed as part of the government's emergency planning.

How do I know if I have smallpox?

It is very unlikely that you would ever be exposed to smallpox virus. Other viral illness, such as chickenpox, can look like smallpox in some cases. It is important to see your doctor if you develop a rash illness.

How is smallpox treated?

Since smallpox is caused by a virus, antibiotics do not cure smallpox. There are no medications that can treat smallpox itself, so treatment focuses on easing the symptoms of the illness until the virus clears from the body on its own.

Can smallpox be prevented?

Smallpox can be prevented through the use of smallpox vaccine. Smallpox vaccination used to be included in the vaccination schedule for children. Vaccinations for children stopped in the United States in 1972. People vaccinated before 1972 probably do not have lifelong immunity.

The Centers for Disease Control and Prevention (CDC) maintains a limited supply of smallpox vaccine. If the vaccine is given within 3-4 days of the first exposure, there may be some protection against infection.

Since 2002, military recruits are vaccinated against smallpox. If you receive the smallpox vaccine, it is very important to wash your hands after touching the site of vaccination. The vaccine virus can be passed on from the site of the vaccination to other parts of the body or to another person. This can cause serious problems in some people.

All information presented is intended for public use. More information on smallpox can be found at:

- <http://www.emergency.cdc.gov/agent/smallpox/>
- <https://www.cdc.gov/vaccines/vpd/smallpox/index.html>
- <http://www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/smallpox.html>