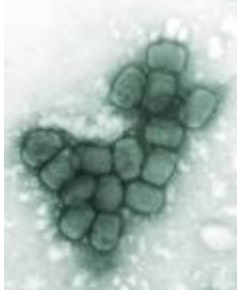


Fact Sheet

Smallpox

What is Smallpox?



Smallpox is caused by the variola virus that emerged in humans thousands of years ago. Smallpox infects only humans, and the last natural case of smallpox in the world occurred in 1977.

Except for laboratory samples at the Centers for Disease Control and Prevention (CDC), the smallpox virus has been eliminated. However, there is concern that the smallpox virus could be used as an agent of bioterrorism. For this reason, government and public health officials are taking precautions for dealing with a smallpox outbreak and have developed detailed nationwide smallpox response plans.

How is it spread?

Generally, direct and fairly prolonged face-to-face contact is required to spread smallpox from one person to another. A person with smallpox is sometimes contagious with onset of fever, but the person becomes most contagious when the rash appears. Once the rash appears the person is usually very sick and not able to move around in the community. The infected person is contagious until the last smallpox scab falls off.

Contaminated clothing or bed linen spread the virus. Special precautions need to be taken to ensure that all bedding, clothing, and other surfaces patients have come into contact with are cleaned with disinfectants like bleach and quaternary ammonia.

Smallpox is not known to spread by insects or animals. It is rare for smallpox to be spread by virus in the air in enclosed settings, such as buildings, busses, and trains.

If you think you may have been exposed to smallpox, your doctor or the public health department will instruct you to limit contact with others. If you have smallpox, symptoms will appear in 7 to 19 days after exposure. People should stay at home and monitor themselves daily for a temperature higher than 101°F. Immediately contact your local health department to receive guidance on how to isolate yourself (either at home or a designated care site) to minimize the risk of exposure to others. Public health authorities will discuss with you the need for vaccination.

In the United States, routine vaccination against smallpox ended in 1972 when the disease was fully controlled. The vaccine is not recommended for routine use. The CDC maintains an emergency supply of vaccine.

Signs and Symptoms

The symptoms of smallpox begin with high fever, head and body aches and sometimes vomiting. A rash, most prominent on the face, arms and legs, follows in two to three days and will usually spread to all parts of the body within 24 hours. As the rash appears, the fever usually falls and the person may start to feel better. The rash starts with flat red bumps that develop at the same time. The raised bumps become pus-filled blisters that crust early in the second week. Scabs develop and fall off after about three weeks, leaving pitted scars.

Smallpox is sometimes confused with chickenpox, but several features of these diseases are significantly different:

- The initial symptoms of smallpox are much more severe than those of chickenpox. Smallpox has severe symptoms like muscle aches and high fever. Chickenpox has mild symptoms that may not be noticeable before the rash appears.
- Smallpox rash is most common on exposed portions of the body: face, forearms, wrists, palms, lower legs, feet and soles. Chickenpox is most common on covered areas of the body.
- Smallpox bumps tend to be the same stage of development, and they happen all at once. With chickenpox, it is common to have more than one occurrence of bumps and they may keep coming back. Smallpox bumps tend to be deeper in the skin than chickenpox bumps, are hard to the touch, and they are tough to break.

Treatment

There is no proven treatment for smallpox. Patients with smallpox can benefit from supportive therapy, such as intravenous fluids, medicine to control fever or pain, and antibiotics for any bacterial infections that may develop.

Complications

Most people who have smallpox get better, but death may occur in up to 30% of cases. For people exposed to smallpox, the vaccine can lessen the severity or even prevent illness if it is given within four days after exposure. Vaccine administered after exposure has been shown to provide significant protection against death from smallpox.



For more sources of information on this topic visit:

ST. CLAIR COUNTY HEALTH DEPARTMENT www.scchealth.co

MICHIGAN DEPARTMENT OF HEALTH AND HUMAN SERVICES www.michigan.gov/mdhhs

CENTERS FOR DISEASE CONTROL AND PREVENTION www.cdc.gov