

SMALLPOX

Polk County Preparations

Because of ongoing concerns about potential terrorist attacks, the U.S. government is working to improve overall preparation against terrorism. One aspect of this preparation is to learn more about protecting ourselves against possible attacks with biological agents.

If a public health emergency happens in our community, the Polk County Public Health Department will be the local agency responsible for preparing and guiding medical response and public information efforts. During such an emergency, a critical role of the Public Health Department will be to work with other local first responders, such as fire and police. The Public Health Department will also coordinate response activities with state and federal agencies.

The Polk County Public Health Department is providing this information to help you understand what smallpox is in the unlikely event that you would be exposed to smallpox.

What is Smallpox?

Smallpox is a serious, highly contagious disease that can be fatal. A virus called *variola* causes smallpox. This virus can be spread from person-to-person, in the same way as a cold. It can also be spread through direct contact with rash, infected bodily fluids or contaminated objects such as clothes or bedding. Historically, smallpox has a case-fatality rate of about 30%.

Due to an effective global vaccination program, the last reported case of smallpox anywhere in the world was in 1977. Since then, routine vaccinations against smallpox among the general public were stopped because it was no longer necessary for prevention.

Smallpox and Bioterrorism

Smallpox is one of the biological agents considered to pose the greatest public threat and the deliberate release of smallpox is now a possibility. The United States government has taken precautions including organizing voluntary smallpox vaccination of certain healthcare workers. Vaccination of these healthcare workers was a priority because they would be called upon to contain a smallpox outbreak, vaccinate the public and care for patients with smallpox. One confirmed case of smallpox is considered a public health emergency world-wide.

In the event of a bioterrorist attack with smallpox, the Public Health Department and emergency officials will provide emergency information and instructions on how to protect yourself and your family. You may be asked to evacuate (leave the area) or shelter-in-place (remain inside a building). In either case, it is important that you and your family have an Emergency Preparation Plan.

Symptoms of Smallpox

The symptoms of smallpox begin with a high fever, head and body aches and sometimes vomiting. A rash follows that spreads and progresses to raised bumps and pus-filled blisters that crust, scab, and fall off after about three weeks, leaving a pitted scar.

Smallpox spreads from contact with infected persons. Generally, direct and extended face-to-face contact is needed to spread smallpox from one person to another. Smallpox can also be spread through direct contact with infected bodily fluids or contaminated objects like bedding or clothing. Indirect spread is not common. Smallpox is not known to be transmitted by insects or animals.

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Exposure to Smallpox

If you were exposed to smallpox, it takes between 7 and 17 days for symptoms of smallpox to appear. The average time is 12 to 14 days. During this time you would feel fine. After this incubation time, you may be contagious when fever starts, but you would become most contagious when the rash first appeared. You would be contagious until the last smallpox scab falls off.

The Smallpox Vaccine

The smallpox vaccine is a live-virus containing *vaccinia*, which is closely related to the actual smallpox virus. While the vaccine is generally safe, serious complications may occur. Typical side effects of the vaccine include tenderness at the vaccination site and flu-like symptoms. Serious complications occur more frequently in people receiving the first dose of vaccine and in people with weakened immune systems. One of the most serious complications of vaccination is encephalitis, which occurs in approximately one in 200,000 adults vaccinated. One or two deaths occur per million recipients of the vaccine.

Treatment for Smallpox

There is no specific treatment for smallpox and the only prevention is vaccination. If a smallpox outbreak were to occur, everyone in contact with a person with smallpox or exposed to the virus would be required to receive the vaccine. This would be *regardless of age, allergies, pregnancy, or medical condition* because the risk of catching the smallpox disease is greater than the risks of getting the vaccine.

At the moment, the smallpox vaccine is not available to members of the general public. In the event of a smallpox outbreak, there is enough smallpox vaccine to vaccinate everyone in the United States who would need it.

If you have any questions about smallpox, please contact the **Polk County Health Department at 515-286-3798**. Public Health Department staff members are available to answer your questions Monday to Friday from 8 a.m. to 5 p.m.

For information about putting together an Emergency Preparation Plan, visit the Department of Homeland Security site at www.ready.gov. Also, see the Centers for Disease Control and Prevention's Web site at www.bt.cdc.gov for additional information.

