

Smallpox

Frequently Asked Questions about Smallpox

What should I know about smallpox?

Smallpox is an acute, contagious and sometimes fatal disease caused by the variola virus, and marked by fever and a distinctive progressive skin rash.

In 1980, public health officials declared that worldwide vaccination programs had been successful in eradicating smallpox. However, small amounts of the virus exist in government laboratories around the world. After September 11 and the anthrax attacks in October, 2001, the U.S. government has been taking precautions to be ready to deal with a bioterrorist attack using smallpox as a weapon.

There is a detailed nationwide smallpox preparedness program to protect Americans in the event of a smallpox outbreak.

Response teams have been organized and are ready to respond to a smallpox attack on the United States. Members of these teams (healthcare and public health workers) have been vaccinated so they can safely protect others in the event of a smallpox outbreak. Nearly 600 public health and healthcare providers have been vaccinated in New Jersey. There is enough smallpox vaccine to vaccinate everyone who would need it in the event of an emergency.

How serious is the smallpox threat?

The deliberate release of smallpox as an epidemic disease is now regarded as a possibility, and the United States is taking precautions to deal with this possibility.

If I am concerned about a smallpox attack, can I go to my doctor and get the smallpox vaccine?

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

What are the symptoms of smallpox?

The symptoms of smallpox begin with 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.

If someone comes in contact with smallpox, how long does it take to show symptoms?

After exposure, it takes between 7 and 17 days for symptoms of smallpox to appear (average incubation time is 12 to 14 days). During this time, the infected person feels fine and is not contagious.

Is smallpox fatal?

The majority of patients with smallpox recover, but death may occur in up to 30% of cases. Many smallpox survivors have permanent scars over large areas of their body, especially their face. Some are left blind.

How is smallpox spread?

Smallpox normally spreads from contact with infected persons. Generally, direct and fairly prolonged 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 or contaminated objects such as bedding or clothing. Indirect spread is less common. Rarely, smallpox has been spread by virus carried in the air in enclosed settings such as buildings, buses and trains. Smallpox is not known to be transmitted by insects or animals.

If smallpox is released in aerosol form, how long does the virus survive?

The smallpox virus is fragile. In laboratory experiments, 90% of aerosolized smallpox virus dies within 24 hours; in the presence of ultraviolet (UV) light, this percentage would be even greater. If an aerosol release of smallpox occurs, 90% of the virus will be inactivated or dissipated in about 24 hours.

How many people would have to get smallpox before it is considered an outbreak?

One confirmed case of smallpox would be considered a public health emergency.

Is smallpox contagious before the smallpox symptoms show?

A person with smallpox is sometimes contagious with onset of fever, but the person becomes most contagious with the onset of rash. The infected person is contagious until the last smallpox scab falls off.

Is there any treatment for smallpox?

Smallpox can be prevented through use of the smallpox vaccine. There is no proven treatment for smallpox, but research to evaluate new antiviral drugs is ongoing. Early results from laboratory studies suggest that the drug cidofovir may fight against the smallpox virus; currently, studies with animals are being done to better understand the drug's ability to treat smallpox disease. Patients with smallpox can benefit from supportive therapy (e.g., intravenous fluids, medicine to control fever or pain) and antibiotics for any secondary bacterial infections that may occur.

How dangerous is smallpox?

The Centers for Disease Control and Prevention (CDC) classifies agents with recognized bioterrorism potential into three categories: A, B and C. Smallpox is a Category A agent. Category A agents:

What is the public health system in New Jersey doing to prepare for a possible biological attack?

New Jersey and the CDC are working together to prepare for all potential health hazards, including bioterrorism.

Activities include:

- Developing plans and procedures to respond to biological attacks
- Training and equipping emergency response teams, gathering samples and performing tests to help state and local governments control infection

- Educating healthcare providers, the media and the general public about what to do in the event of an attack
- Working closely with local health departments, veterinarians and laboratorians to monitor for suspected cases of bioterrorism
- Working with hospitals, laboratories, emergency response teams and healthcare providers to make sure they have the supplies they need in the event of an attack.

Where can I get more information?

- Your healthcare provider
- Your local department of health
- The New Jersey Department of Health
 - Website – www.nj.gov/health
 - Communicable Disease Service at (609) 826-5964
- CDC
 - Website www.cdc.gov/smallpox
 - 1-800-CDC-INFO (4636) for assistance in English and Spanish
 - TTY 1-888-232-6348
 - E-mail: cdcinfo@cdc.gov

This information is intended for educational purposes only and is not intended to replace consultation with a healthcare professional. Adapted from the Centers for Disease Control and Prevention.