

How You Can Protect Yourself and Your Family During an Outbreak

- ❑ **Stay informed. Listen to the news to learn how the outbreak is affecting your community.** Public health officials will share important information including areas where smallpox cases have been found and who to call and where to go if you think you have been exposed to smallpox.
- ❑ **Follow the instructions of public health authorities.**
- ❑ **Stay away from, and keep your children away from, anyone who might have smallpox.** This is especially important if you or your children have not been vaccinated.
- ❑ **If you think you have been exposed to smallpox, stay away from others and call your health department or health care provider immediately;** they will tell you where to go.



Keeping Connecticut Healthy

Adapted from the Centers for Disease Control and Prevention

Why Smallpox is a Concern



Smallpox

Because smallpox was wiped out many years ago, a case of smallpox today would be the result of an intentional act. A single confirmed case of smallpox would be considered an emergency.

Thanks to the success of vaccination, the last natural outbreak of smallpox in the U.S. occurred in 1949. By 1972, routine smallpox vaccinations for children in the U.S. were no longer needed. In 1980, smallpox was said to be wiped out worldwide, and no cases of naturally occurring smallpox have happened since.

Today, the smallpox virus is kept in two approved labs in the U.S. and Russia. However, credible concern exists that the virus was made into a weapon by some countries and that terrorists may have obtained it. Smallpox is a serious, even deadly, disease. CDC calls it a "Category A" agent. Category A agents are believed to present the greatest potential threat for harming public health.

Possible Ways of Getting Smallpox

Possible ways to become infected with smallpox include:

- ❑ **Prolonged face-to-face contact with someone who has smallpox** (usually someone who already has a smallpox rash). This was how most people became infected with smallpox in the past. However, a person can be exposed to someone who has smallpox and not become infected.
- ❑ **Direct contact with infected bodily fluids or an object such as bedding or clothing** that has the virus on it.

- ❑ **Exposure to an aerosol release of smallpox** (the virus is put in the air). On rare occasions in the past, smallpox was spread by virus carried in the air in enclosed places such as buildings, buses, and trains. The smallpox virus is not strong and is killed by sunlight and heat. In lab experiments, 90% of aerosolized smallpox virus dies within 24 hours; in the presence of sunlight, this percentage would be even greater.

Smallpox is not known to be spread by insects or animals.

Treatment and Prevention

There is no proven treatment for smallpox. Scientists are currently researching new treatments. Patients with smallpox may be helped by intravenous fluids, medicine to control fever or pain, and antibiotics for any secondary bacterial infections that may occur.

One of the best ways to prevent smallpox is through vaccination. If given to a person before exposure to smallpox, the vaccine can completely protect them. Vaccination within 3 days after exposure will prevent or greatly lessen the severity of smallpox in most people. Vaccination 4 to 7 days after exposure likely offers some protection from disease or may decrease the severity of disease. Vaccination will not protect smallpox patients who already have a rash.

Currently, the smallpox vaccine is not widely available to the general public. However, there is enough smallpox vaccine to vaccinate every person in the United States in the event of a smallpox emergency.

Signs and Symptoms

- ❑ For the first 7 to 17 days after exposure, the infected person feels fine and is not contagious (cannot spread the disease).
- ❑ After 7-17 days, the first symptoms of smallpox appear. These include fever, tiredness, head and bodyaches, and sometimes vomiting. The fever is usually high, in the range of 101 to 104 degrees Fahrenheit. At this time, people are usually too sick to carry on their normal activities. This stage may last for 2 to 4 days.
- ❑ Next, a rash appears first as small red spots on the tongue and in the mouth. A rash then appears on the skin, starting on the face and spreading to the arms and legs and then to the hands and feet. Usually the rash spreads to all parts of the body within 24 hours.
- ❑ The rash becomes raised bumps and the bumps become "pustules", which are raised, usually round and firm to the touch as if there is a small round object under the skin.
- ❑ The pustules begin to form a crust and then scab. By the end of the second week after the rash appears, most of the sores have scabbed over.
- ❑ The scabs begin to fall off, leaving scars. Most scabs will have fallen off three weeks after the rash first appears.

A person with smallpox is sometimes contagious when they get a fever, but the person becomes most contagious when they get a rash. The infected person is contagious until their last scab falls off. In the past, most people recovered from smallpox, but three out of every ten smallpox patients died.