

West Virginia Department of Health and Human Resources Information for the Public Regarding Smallpox

What is smallpox?

Smallpox is caused by variola virus. It is an "old" disease, having naturally occurred throughout the world for many centuries. Mortality is estimated at 30%. Smallpox was the first disease for which a vaccine was demonstrated when persons were "vaccinated" using cowpox in 1796. Smallpox vaccine was routinely administered in the U.S. until 1972 when it was discontinued. The last naturally occurring case of smallpox in the world occurred in 1977, and the world was declared to be smallpox-free in 1980. No smallpox cases have appeared since that time.

What are the symptoms of smallpox?

- ◆ Initial symptoms include high fever, fatigue, headache, and backache. Abdominal pain and delirium may also occur.
- ◆ Two to three days following initial symptoms, a raised red rash appears in the mouth and throat, on the face and forearms, then spreads to the trunk and legs.
- ◆ Within 1-2 days, the rash changes to round, raised blisters that fill with pus.
- ◆ Early in the second week, the round pus-filled pox begin to crust and scabs develop.
- ◆ After about 3-4 weeks, the scabs fall off, leaving pitted scars.

How soon after exposure would symptoms begin?

Symptoms generally develop between 7 and 17 days after exposure.

Can smallpox be spread person to person?

- ◆ Smallpox is spread from one person to another by infected saliva droplets (coughing, sneezing, spitting, etc.)
- ◆ Persons with smallpox are most infectious during the first week of the illness when the virus is present in large amounts in their saliva.
- ◆ The risk of infecting other people lasts until all scabs have fallen off.
- ◆ Contaminated clothing and bedding can also spread smallpox.

How likely is it that I will be exposed to smallpox?

Historically, the last reported case of smallpox in West Virginia occurred in 1948. Use of smallpox as a weapon is thought to be unlikely. Smallpox is highly contagious and could cause disease in terrorists and their own allies.

How could an intentional release of smallpox be managed?

Early recognition by physicians is key to managing this illness. Public health officials could use the same strategy as was used in the eradication of smallpox, ring vaccination. Ring vaccination means that vaccine is given to direct contact of case and household contacts of contacts. The vaccine is effective against smallpox if given within 4 days of exposure.