What is Smallpox?

Smallpox is a highly contagious, deadly disease caused by the *Variola* virus. Historically, 1 out of 3 people who contracted the disease died. The last case of smallpox in the United States was in 1949. The last case of smallpox in the world was in 1977. The virus has been eliminated from the human population.

How could you get Smallpox?

Smallpox normally spreads from contact with an infected person. Generally, a direct and extended face-to-face contact can spread smallpox from one person to another. Smallpox can also be spread by contact with infected bodily fluids or contaminated clothing and bedding.

*Smallpox is not transmitted to humans by insects or animals.*

What are the symptoms of Smallpox?

The symptoms of smallpox appear between 7 and 17 days after exposure. These are:
- high fever,
- head and body aches,
- and, sometimes, vomiting.

This is followed by a skin rash that spreads and turns into bumps and pustules, which form a crust and a scab.

People are contagious until all the scabs have fallen off (which happens after about three weeks).

Why should you be concerned about Smallpox?

Smallpox is a potential agent for use in biological warfare. That is, smallpox could be deliberately released and used as a weapon in a bioterrorist attack.

What is the treatment for Smallpox?

The treatment for smallpox is primarily those things that prevent malnutrition, provide comfort, reduce fever and pain, and prevent other infections.

*Because it is a virus, antibiotic drugs will not cure smallpox.*
Is there a way to prevent Smallpox infection?

Routine vaccination against smallpox in the US ended in 1972. The following factors were helpful in eliminating smallpox and would aid in the control of a future outbreak:

- All individuals who get smallpox have symptoms.
- Smallpox makes people so sick that they are unable to perform their usual activities.
- Close contact is generally required to spread smallpox from one person to another.
- Smallpox is not transmitted by insects or animals. Humans are the only hosts of the *Variola* virus.
- The vaccine against smallpox is very effective if it is given prior to exposure. In people exposed to smallpox, the vaccine can lessen the severity or even prevent illness if it is given within 4 days after exposure to the virus.

**THE SMALLPOX CONTROVERSY**

What side effects can the Smallpox vaccine cause?

The smallpox vaccine is made with a live virus called *vaccinia*. *The vaccine cannot cause smallpox.* However, it can cause serious, even life-threatening side effects. It is estimated that for every one million people who are vaccinated, the following may happen:

- there will be one or two deaths,
- between 14 and 52 people would have a potentially life-threatening reaction, such as inflammation of the brain (encephalitis),
- about 1,000 people would have serious but not life-threatening reactions. These include a toxic or allergic reaction at the site of the vaccination, skin rashes such as eczema, and spread of the *vaccinia* virus to other parts of the body and to other people.

*(Vaccinated workers can cause vaccinia infection among other family members, co-workers, other close contacts and patients if there is contact with the site of inoculation!)*

The smallpox vaccine also causes milder reactions that usually go away without treatment:

- the arm receiving the vaccination may be sore and red,
- the glands in the armpits may become large and sore,
- the vaccinated person may get a low fever,
- an estimated one-third of vaccinated workers will miss work from one to a few days.

In addition, workers with certain medical conditions should not be vaccinated if they have not been exposed to smallpox.

Who should NOT be vaccinated?

- people with a weakened immune system caused by cancer treatment, an organ transplant, HIV, etc.;
- people with eczema or atopic (allergic) dermatitis (even if the condition is not active);
- people with burns, chickenpox, shingles, impetigo, herpes, severe acne, psoriasis, or other skin conditions until they have completely healed;
- women who are breastfeeding and/or pregnant, or who may become pregnant within a month of vaccination;
- people who are allergic to the vaccine or any of its ingredients;
- children younger than 12 months of age;
- people experiencing a moderate or severe short-term illness (they should wait until they recover);
- people currently using steroid drops in their eyes.
How can healthcare workers be protected?

Education – Healthcare workers must receive education about the health risks associated with the smallpox for themselves, their family members, other close contacts, and their patients.

Screening - Workers must be carefully screened to make sure they or their close contacts do not have any of the medical conditions that would put them at risk. The screening should include confidential and free medical testing.

Voluntary Participation and Informed Consent - Workers must not be pressured by their employers into volunteering to be vaccinated, and there should be no discrimination or reprisals against workers who decline to be vaccinated for any reason. In addition, there must be no discrimination against workers who experience an adverse reaction to the vaccine virus. The informed consent form they sign should also tell them of the availability of medical care and compensation, or lack thereof, in the event of side effects that require time away from work.

Monitoring of the Vaccination Site and Medical Treatment - The vaccination site must be carefully monitored to rapidly identify and treat any reactions. Hospitalization is required for severe side effects. Vaccinia Immune Globulin (VIG) is used to treat certain conditions, such as progressive vaccinia and eczema vaccinatum.

Full Coverage for Medical Costs, Pay, and Benefits – Labor unions say that workers should receive first-day and first-dollar coverage for all medical costs and lost income due to any vaccine side effects. Workers should not have to use accrued leave to cover lost time if they miss work because of vaccine side effects.

For more information contact:

Centers for Disease Control (CDC) public response hotline:

- English: (888) 246-2675
- Español: (888) 246-2857
- TTYÑ (866) 874-2646

American Federation of State, County & Municipal Employees (AFSCME) Health and Safety Program at (202) 429-1228, or 1625 L Street, N.W., Washington, DC 20036