



The Smallpox Vaccine

What Health Care Workers Need to Know A HCWC/USWA Factsheet - February 2003

The Bush Administration wants to inoculate up to half a million health care workers against smallpox. A smallpox outbreak would be terrible, but the vaccination program has its own risks. You may be asked to volunteer for vaccination. Here's what you need to know to make an informed choice.

In December, the Administration announced plans to vaccinate 500,000 military personnel, almost as many civilian health care workers, and eventually up to ten million emergency response workers. Those vaccinated would be the first line of defense against a smallpox attack on the United States.



The smallpox vaccine provides immunity to the smallpox virus. The vaccine cannot cause smallpox, but it will cause health problems in a small number of those who receive it, and some people should not receive it at all. Unfortunately, the Bush plan does not provide enough safeguards for health care workers. Unlike the military plan, the plan for civilians provides no medical care or compensation for any workers or their families. The USWA and other health care unions are working hard to correct these problems, but in the meantime, health care workers face a difficult choice.

What is Smallpox?

Smallpox is a serious, contagious and often fatal disease caused by a virus named variola. Historically, smallpox was one of the great killers of mankind, probably accounting for more deaths than influenza, plague, or any other infectious disease. Smallpox causes skin lesions and scabs, leading to fever, a collapse



Smallpox lesions, (CDC, 1973)

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Is Smallpox Common?

No. Using effective vaccines and modern public health measures, the World Health Organization eradicated smallpox in the mid-1970s. The last known case of smallpox occurred in 1978. Currently the only known samples of the smallpox virus are located in secure laboratories in Atlanta, Georgia and Novosibirsk, Russia. However, Russia kept illegal samples of the smallpox virus to use as weapons, and other countries may have done so as well. Some may even have been passed on to terrorists.

The Vaccination Plan

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| 500,000 | • Military Personnel |
| 400,000 + | • First Response Healthcare Workers |
| 10 million | • Emergency Responders (fire, police, health workers) |

What is the Vaccine?

The smallpox vaccine uses a live virus, called vaccinia that is closely related to smallpox.



Vaccinia cannot cause smallpox, but it does cause a different infection at the site of the inoculation. This infection

is usually mild. It lasts for a few weeks, leaving you immune to smallpox.

Unfortunately, the immunity wears off over time, so if you are old enough to have been vaccinated as a child, your immunity has probably worn off.

Is the Vaccine Safe?

Yes and no. Yes, the vaccine is much safer than getting the actual disease. However, the vaccine itself often causes side effects. In most cases they are mild, but in a very few cases they can be serious, even life-threatening.

What Are the Side Effects?

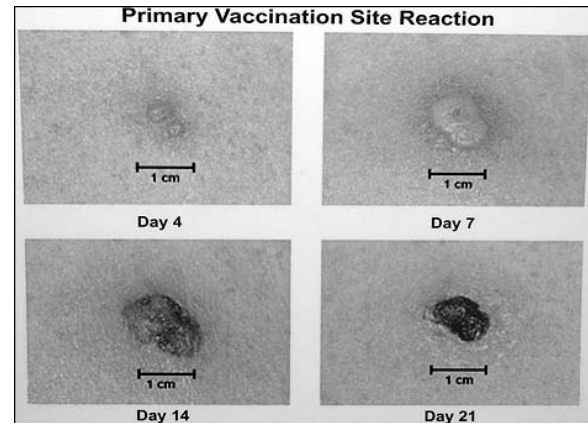
The smallpox vaccine and the vaccinia virus in it create a controlled infection in order to build your immunity. However, because it is still an infection caused by a virus, there are a number of reactions that may occur and risks you may be exposed to. You may also expose those near you to these risks.

Normal, Typical and Mild Reactions

The vast majority of those vaccinated will suffer no side effects at all, or very mild ones.

- The arm where the vaccine was given may be sore and red. A scar will often form at the site.
- The glands in the armpits may become large and sore
- The vaccinated person may run a low fever
- One out of three people may feel bad enough to miss work or have trouble sleeping.

Almost all of these reactions will disappear within a couple of weeks, and will not require medical treatment.



Serious Reactions

In the past, about 1,000 people for every 1 million people (0.1%) vaccinated for the first time experienced reactions that were serious, but not life threatening. **These reactions may require medical attention.**

- A widespread rash and outbreak of sores away from the vaccination site, caused by the virus spreading throughout the blood.
- An allergic reaction in response to the vaccine or its components.

Life-Threatening Reactions

Reactions this serious are rare. In the past, 14-52 people per 1 million people ($\leq 0.005\%$) vaccinated for the first time experienced potentially life-threatening reactions. **These require immediate medical attention!**



- Serious skin rashes caused by widespread infection of the skin in people with skin conditions like eczema or atopic dermatitis.
 - Infection of skin with tissue destruction frequently leading to death.
 - Inflammation of the brain
- It is expected that 1-2 people per million vaccinated will die from complications caused by the smallpox vaccine.

**The smallpox vaccine does NOT contain the smallpox virus.
It does NOT cause smallpox.**

Are Some People More At Risk?

Yes. If you or anyone you live with has **EVER** had any of the following conditions, **DO NOT** get the smallpox vaccine.

- Eczema or topical dermatitis.
- A weakened immune system. Cancer treatment, an organ transplant, HIV, medications to treat autoimmune disorders and other illnesses like asthma or arthritis can weaken the immune system.
- Taking immunosuppressant drugs, for example after organ transplants.

If you or anyone you live with **CURRENTLY** has any of the following conditions, **DO NOT** get the smallpox vaccine.

- Skin conditions such as burns, chickenpox, shingles, impetigo, herpes, severe acne, or psoriasis. (People with any of these conditions should not get the vaccine until they have completely healed.)
- Pregnancy or plans to become pregnant within one month of vaccination.

In addition, you **SHOULD NOT** get the vaccine if you:

- Are allergic to the vaccine or any of its ingredients.
- Have a moderate or severe short-term illness.
- Are currently breastfeeding

However, if there is a smallpox attack on the United States, and you are exposed to smallpox, you should take the smallpox vaccine no matter what the risk factors. None of them are as dangerous as smallpox itself.

If I Get the Vaccine, Can I Spread the Vaccinia Virus?

Yes. During the first week or two, you can spread the virus to people near you, especially people with weakened immune systems. This is especially the case in a health care setting, where there one is always near sick individuals who are at high risk of contracting diseases. The risk can be minimized, but not eliminated, by keeping the inoculation site well-covered and washing frequently.

What Happens If I Or Somone In My Family Has A Bad Reaction?

First, see a doctor at once. You may need immediate medical treatment.

Unfortunately, how you pay for that treatment, and whether you receive compensation, may be uncertain. Some insurance plans may cover you; others may not. Workers compensation may cover you in some states, but not in others. These problems are the worst part of the Administration plan, but they could be corrected. Military personnel and their families get good medical treatment and compensation from the government for vaccine side effects. Civilian health care workers – our first line of defense against bioterrorism – deserve no less. The USWA and other unions are lobbying hard for legislation to fix this problem, but so far, the Bush Administration has not supported it.

What Can the Union Do?

As a member of the USWA's Health Care Workers Council, you have important rights that non-union workers do not.

Most important, your union has the power to negotiate the details of the program. Under the National Labor Relations Act, conditions of employment are "mandatory subjects of bargaining." That is true, even though the vaccination program is voluntary. The law does not guarantee that you will get your way on all issues, but it does force your employer to negotiate, and it provides a mechanism for resolving disputes. The union can also fight for workers rights through the grievance procedure.

Here are a few simple things the union should ask for:

- There must be good, confidential screening to identify those who should not be vaccinated.
- There should be no discrimination against workers who choose not to be vaccinated.
- Vaccinated caregivers who deal with at-risk patients should be given temporary transfers with full pay and benefits.
- Full medical care and compensation should be provided for workers and their families.

It's Your Choice

The smallpox vaccination plan is entirely voluntary.

Know the facts.

Know your rights.

Work with your union.

Make an informed choice.

This factsheet was prepared for the USWA's Health Care Workers Council by the union's Health, Safety and Environment Department. You can contact us at 5 Gateway Center, Pittsburgh, PA 15222. Our phone is (412) 562-2581; fax (412) 562-2584; email safety@uswa.org. Visit our website at www.uswa.org.