Letter to the Membership

The IAFC and the EMS Section, with input from the Terrorism and Hazardous Materials committees, prepared this guide in response to President George W. Bush's decision to embark on an unprecedented vaccination program against the threat of a terrorist attack using the smallpox virus. Only a few decades ago, the World Health Organization (WHO) declared smallpox eradicated from the earth. It is a testament to human ingenuity and perseverance that we were able to eliminate naturally occurring smallpox—a disease that has killed and scarred millions. Sadly, in spite of its elimination in nature, the threat of a terrorist attack using the smallpox virus remains.

On Dec. 13, 2002, President Bush announced a three-phase smallpox vaccination program for the United States. In the initial phase, the vaccine will be administered to 500,000 military personnel and would be made available to up to 500,000 civilian public health and hospital workers. In phase II, the vaccine will be made available to up to approximately 10 million public safety personnel—including the fire and emergency service, career and volunteer. Eventually, in phase III, it is expected that the vaccine will be made available to the general public.

The smallpox vaccine may have serious side effects. In addition to the potential for life-threatening adverse effects, the normal side effects from this vaccine can be significant. Because of the potential for complications, it is important for fire chiefs to take an active role in planning the vaccination program for their departments. While state and local health departments will run the individual vaccination clinics, the operational and administrative issues raised by vaccination demand that fire department management be actively involved in the decision-making process.

This not an all-encompassing "how-to" guide for running a smallpox vaccination program. Instead, this document should be used to help you:

- ★ Open dialogue with state and local public health officials in order to assist them in implementation of the vaccination program
- ★ Evaluate the likely operational and administrative impact of a vaccination program on your fire department
- ★ Identify ideas to minimize that impact
- ★ Heighten your fire department's understanding of the benefits and risks from this vaccine.

Finally, I strongly advise you to supplement the information in this guide with regular visits to the federal government's smallpox vaccination Web site, www.smallpox.gov. Because of the unprecedented nature of this vaccination program, it is expected that protocols and procedures will evolve and be updated over time.

The IAFC has been actively involved in advising the federal government on this issue since May 2002. We continue to consult regularly with appropriate federal authorities. However, it is up to you, the local fire chief, to collaborate with public health officials in order to ensure the successful implementation of a smallpox vaccination program for your fire department. This will take foresight and preparation. Using this guide as a starting point, the IAFC hopes that our membership will take the lead among the public safety community in managing the challenges and risks that arise from smallpox vaccination.

Sincerely,

Randy R. Bruegman

Chief Randy R. Bruegman
President, International Association of Fire Chiefs

Foreword

This document has been prepared for local fire chiefs in order to provide them with a basic understanding of the upcoming smallpox vaccination program and its impact on their fire department. It is not intended to be a substitute for the detailed policy and medical guidance developed by the federal government and the state and local health departments charged with actual implementation of the program. *All actions taken by the fire department as a result of the implementation of the smallpox vaccination program should be done at the direction of and in close cooperation with the public health officials charged with implementing the program.*

Protocols and guidelines for smallpox vaccination will evolve and change over time. This guide is based on the most current information available at the time of publication. The recommendations contained in this guide are based upon the medical and policy guidance provided by federal authorities including the Centers for Disease Control and Prevention (CDC) and the Department of Health and Human Services (DHHS).

This document has been reviewed by legal counsel and medical professionals. However, fire departments should consult with public health and legal officials at the local level regarding their specific vaccination program. This guide is only intended to serve as an educational tool for the local fire chief.

Acknowledgments

The IAFC would like to thank the following individuals and organizations for their assistance in developing this guide.

IAFC Board of Directors

IAFC's Smallpox Vaccination Working Group, comprised of the following members:

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Richard Brooks, Hazardous Materials Committee
David Fischler, Terrorism Committee
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John Sinclair, EMS Section
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IAFC Policy on the Federal Smallpox Vaccination Program

The IAFC recommends that fire departments be prepared for and have the capacity to participate in phase II of the national smallpox vaccination plan.

Recognizing that an outbreak of smallpox would be considered a world health emergency, the IAFC recommends that fire departments should be knowledgeable about the national smallpox vaccination program, which is expected to be implemented in three phases:

I. Making the vaccine available on a voluntary basis to public health and hospital workers who would be charged with conducting the initial investigation and treatment of a suspected smallpox outbreak
II. Making the vaccine available on a voluntary basis to emergency services and health care workers, including the fire service
III. Making the vaccine available on a voluntary basis to members of the general public.

The IAFC further recommends that local fire chiefs should:

- ★ Establish an active and effective relationship with their local public health department to ensure constant communication on the vaccination program.
- ★ Initiate a comprehensive educational campaign for their employees and their families.
- ★ Educate local elected officials about the public policy and financial impacts of a vaccination program.
- ★ Begin preparing their departments for operational impacts as a result of the vaccination program.
- ★ Anticipate the system impacts if the vaccination program is made available to the general public.

Fire and emergency services leaders should reference the document, *Fire Chief's Guide to Smallpox Vaccination*, to be published by the IAFC's Smallpox Vaccination Working Group to assist with implementation of the bulleted items listed above.

This policy should be considered in the context of current information and federal policy. It should be further recognized that this is a dynamic and evolving issue and that this policy is subject to modification as necessary.

Adopted by the IAFC Board of Directors on Jan. 9, 2003.

Smallpox Vaccination Overview

Smallpox, The Disease

This information has been prepared based on guidance and publications produced by the Centers for Disease Control and Prevention (CDC). Please see their Web site www.bt.cdc.gov/agent/smallpox/index.asp for additional information and updates.

THE DISEASE

Smallpox is a serious, contagious and sometimes fatal infectious disease. There is no specific treatment for smallpox disease, and the only prevention is vaccination. Historically, smallpox has an overall fatality rate of about 30 percent.

Smallpox was eradicated after a successful worldwide vaccination program. The last case of smallpox in the United States was in 1949. The last naturally occurring case in the world was in Somalia in 1977. After the disease was eliminated from the world, routine vaccination against smallpox among the general public was ended because it was no longer necessary for prevention.

Except for laboratory stockpiles, the virus has been eliminated. However, in the aftermath of the events of September and October 2001, there is heightened concern that the smallpox virus might be used as an agent of bioterrorism. For this reason, the U.S. government is taking precautions for dealing with a smallpox outbreak.

TRANSMISSION

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. Rarely, smallpox has been spread by virus carried in the air in enclosed settings such as buildings, buses and trains.

A person with smallpox is sometimes contagious with the onset of fever, but the person becomes most contagious with the onset of rash. At this stage the infected person is usually very sick and not able to move around in the community. The infected person is contagious until the last smallpox scab falls off.

THREAT ASSESSMENT

When announcing the vaccination program, President Bush emphasized that there is no specific indication of an imminent threat of a terrorist attack using the smallpox virus. However, the president stated that in the aftermath of Sept. 11, 2001, the United States is assessing its vulnerability to all potential terrorist threats and implementing appropriate strategies to mitigate those threats.

Vaccination Strategy

VACCINATION STRATEGY

On Dec. 13, 2002 the president announced a plan to better protect the American people against the threat of a smallpox attack by hostile groups or governments. Under the plan, the Department of Health and Human Services will work with state and local governments to form volunteer smallpox response teams that will conduct the initial investigations and provide appropriate medical care in the event of a smallpox attack.

To ensure that smallpox response teams can mobilize immediately in an emergency, health care workers and other critical personnel are being asked to volunteer for smallpox inoculation in phase I of the announced strategy. In phase II, the vaccine will be made available to public safety personnel, including the fire service, career and volunteer. The federal government is not recommending vaccination for the general public at this time. However, in phase III, the vaccine may be offered to members of the general public who insist on being vaccinated.

The president also announced that the Department of Defense (DOD) will vaccinate certain military and civilian personnel who are or may be deployed in high threat areas. Some U.S. personnel assigned to certain overseas embassies also will be offered vaccination.

Q. As first responders, why aren't fire fighters and EMS personnel included in phase I of the vaccination program?

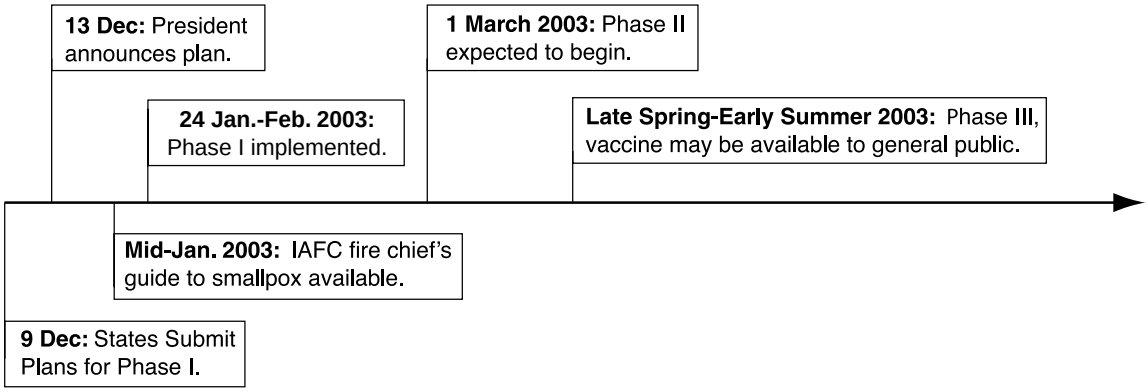
A. In most states, personnel selected to be vaccinated in phase I include emergency room and intensive care staff, certain medical specialists and public health epidemiologists. This group was specifically chosen because of its ability to perform the following functions in the event of a suspected smallpox outbreak:

1. Initial diagnostic procedures
2. Interviewing contacts of the patient to determine who will need rapid vaccination as a contact
3. The initial hospital treatment of individuals who are ill with smallpox.

Any fire fighter or EMS worker who comes into contact with a suspected smallpox patient prior to receiving a vaccination would be identified during the contact tracing and vaccinated. Vaccination within three days of exposure will prevent or significantly lessen the severity of symptoms in the vast majority of people. Vaccination four to seven days after exposure likely offers some protection from the disease.

ANNOUNCED TIMELINE FOR SMALLPOX VACCINATION PROCESS

The White House announced the following timeline for implementation of the federal smallpox vaccination program. Because the vaccination programs are being implemented at the state level, these dates should only serve as a guideline. There will be variation among the states in the exact timing of each phase.



Phase I: Up to 500,000 hospital and public health workers.
Phase II: Up to 10 million police, fire and EMS workers.
Phase III: Vaccine expected to be made available to the general public.

The Smallpox Vaccine

This information has been prepared based on guidance and publications produced by the Centers for Disease Control and Prevention (CDC). Please see their Web site www.bt.cdc.gov/agent/smallpox/index.asp for additional information and updates.

THE SMALLPOX VACCINE

The smallpox vaccine helps the body develop immunity to smallpox. The vaccine is made from a virus called *vaccinia*, which is a virus related to smallpox. The smallpox vaccine contains the live *vaccinia* virus, not dead virus like many other vaccines. For that reason, the vaccination site must be cared for carefully to prevent the virus from spreading. Also, the vaccine can have side effects.

Q. Can I contract smallpox from the smallpox vaccine?

A. No. The vaccine does not contain the smallpox virus and cannot give you smallpox.

Currently, the United States has a sufficient stockpile of smallpox vaccine to vaccinate everyone who might need it in the event of an emergency.

LENGTH OF PROTECTION

Smallpox vaccination provides full immunity for three to five years and decreasing immunity thereafter. If a person is vaccinated again later, immunity lasts even longer. Historically, the vaccine has been effective in preventing smallpox infection in 95 percent of those vaccinated. In addition, the vaccine was proven to prevent or substantially lessen infection when given within a few days of exposure. It is important to note, however, that at the time when the smallpox vaccine was used to eradicate the disease, testing was not as advanced or precise as it is today, so there may be more to learn about the vaccine and its effectiveness and length of protection.

Q. Is there any need for people who have been vaccinated for smallpox as children to be vaccinated?

A. Yes. Smallpox vaccination provides high-level immunity for three to five years and decreasing immunity thereafter. Someone who was vaccinated decades ago may retain some immunity, but it is unlikely that this level of immunity would protect them from smallpox.

RECEIVING THE VACCINE

The smallpox vaccine is not given with a hypodermic needle. It is not a shot as most people have experienced. The vaccine is given using a bifurcated (two-pronged) needle that is dipped into the vaccine solution. When removed, the needle retains a droplet of the vaccine. The needle is used to prick the skin 15 times in a few seconds. The pricking is not deep, but it will cause a sore spot and one or two droplets of blood to form. The vaccine usually is given in the upper arm.

If the vaccination is successful, a red and itchy bump develops at the vaccine site in three or four days. In the first week, the bump becomes a large blister, fills with pus and begins to drain. During the second week, the blister begins to dry up and a scab forms. The scab falls off in the third week, leaving a small, permanent scar. People who are being vaccinated for the first time have a stronger reaction than those who are being revaccinated.

POST-VACCINATION CARE
After vaccination, it is important to follow care instructions for the site of the vaccine. Because the virus is live, it can spread to other parts of the body or to other people. The *vaccinia* virus may cause rash, fever, and head and body aches. In certain groups of people complications from the *vaccinia* virus can be severe.

BENEFIT OF VACCINE FOLLOWING EXPOSURE
Vaccination within three days of exposure will prevent or significantly lessen the severity of symptoms in the vast majority of people. Vaccination four to seven days after exposure likely offers some protection from the disease or may modify the severity of the disease.

SMALLPOX VACCINE SAFETY
The smallpox vaccine is the best protection you can get if you are exposed to the smallpox virus.

Anyone directly exposed to smallpox, regardless of health status, should be offered the smallpox vaccine because the risks associated with smallpox disease are far greater than those posed by the vaccine.

There are side effects and risks associated with the smallpox vaccine. Most people experience normal, usually mild reactions that include a sore arm, fever and body aches. However, other people experience reactions ranging from serious to life-threatening.

In the past, about 1,000 people for every one million people vaccinated for the first time experienced reactions that, while not life-threatening, were serious. Careful screening of potential vaccine recipients is essential to ensure that those at increased risk do not receive the vaccine. Serious side effects generally are rarer after revaccination, compared to first vaccinations.

SMALLPOX VACCINE AVAILABILITY
Routine smallpox vaccination among the American public stopped in 1972 after the disease was eradicated in the United States. Until recently, the U.S. government provided the vaccine only to a few hundred scientists and medical professionals working with smallpox and similar viruses in a research setting.

After the events of September and October 2001, however, the U.S. government took further actions to improve its level of preparedness against terrorism. One of many such measures designed specifically to prepare for an intentional release of the smallpox virus included updating and releasing a smallpox response plan. In addition, the U.S. government ordered production of enough smallpox vaccine to immunize the American public in the event of a smallpox outbreak. Right now, the U.S. government has access to enough smallpox vaccine to effectively respond to a smallpox outbreak in the United States.

Smallpox Vaccine Contraindications

This information has been prepared based on guidance and publications produced by the Centers for Disease Control and Prevention (CDC). Please see their Web site www.bt.cdc.gov/agent/smallpox/index.asp for additional information and updates.

WHO SHOULD NOT RECEIVE THE SMALLPOX VACCINE IN THE CURRENT VACCINATION PROCESS?
Some people are at greater risk for serious side effects from the smallpox vaccine. Individuals who have any of the following conditions, **or live with someone who does**, should **NOT** get the smallpox vaccine **unless they have been exposed to the smallpox virus.**

- ★ Eczema or atopic dermatitis. (This is true even if the condition is not currently active, mild or experienced as a child.)
- ★ 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.)
- ★ Weakened immune system. (Cancer treatment, an organ transplant, HIV or medications to treat autoimmune disorders and other illnesses can weaken the immune system.)
- ★ Pregnancy or plans to become pregnant within one month of vaccination.

In addition, individuals should not get the smallpox vaccine if they:

- ★ Are allergic to the vaccine or any of its ingredients.
- ★ Are younger than 12 months of age. However, the Advisory Committee on Immunization Practices (ACIP) advises against non-emergency use of smallpox vaccine in children younger than 18 years of age.
- ★ Have a moderate or severe short-term illness. (These people should wait until they are completely recovered to get the vaccine.)
- ★ Are currently breastfeeding.

Smallpox Vaccine Side Effects

This information has been prepared based on guidance and publications produced by the Centers for Disease Control and Prevention (CDC). Please see their Web site www.bt.cdc.gov/agent/smallpox/index.asp for additional information and updates.

REACTIONS AFTER SMALLPOX VACCINATION

The smallpox vaccine usually prevents smallpox. For most people, it is safe and effective. Most people experience normal, typically mild reactions to the vaccine, which indicate that it is beginning to work. Some people may experience reactions that may require medical attention.

NORMAL, TYPICALLY MILD REACTIONS

These reactions usually go away without treatment:

- ★ The arm receiving the vaccination may be sore and red where the vaccine was given.
- ★ 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, school, recreational activity or have trouble sleeping.

SERIOUS REACTIONS

In the past, about 1,000 people for every one million people vaccinated for the first time experienced reactions that, while not life-threatening, were serious. These reactions may require medical attention:

- ★ A *vaccinia* rash or outbreak of sores limited to one area. This is an accidental spreading of the *vaccinia* virus caused by touching the vaccination site and then touching another part of the body or another person. It usually occurs on the genitals or face, including the eyes, where it can damage sight or lead to blindness. Washing hands with soap and water after touching the vaccine site will help prevent this (inadvertent inoculation).
- ★ A widespread *vaccinia* rash. The virus spreads from the vaccination site through the blood. Sores break out on parts of the body away from the vaccination site (generalized *vaccinia*).
- ★ A toxic or allergic rash in response to the vaccine that can take various forms *(erythema multiforme)*.

LIFE-THREATENING REACTIONS

Rarely, people have had very bad reactions to the vaccine. In the past, between 14 and 52 people per one million people vaccinated for the first time experienced potentially life-threatening reactions. These reactions require immediate medical attention:

- ★ *Eczema vaccinatum.* Serious skin rashes caused by widespread infection of the skin that occurs most often in people with skin conditions such as eczema or atopic dermatitis.
- ★ Progressive *vaccinia* (or *vaccinia necrosum*). Ongoing infection of skin with tissue destruction frequently leading to death.
- ★ Postvaccinal encephalitis. Inflammation of the brain.

People with certain medical conditions—including people with weakened immune systems or certain skin conditions—are more likely to have these reactions and should not get the smallpox vaccine unless they have been exposed to smallpox.

Based on past experience, it is estimated that between one and two people out of every one million people vaccinated may die as a result of life-threatening reactions to the vaccine.

TREATMENT FOR SERIOUS REACTIONS TO THE VACCINE

Two treatments may help people who have certain serious reactions to the smallpox vaccine. These are *Vaccinia* Immune Globulin (VIG) and Cidofovir. These treatments are available through the Centers for Disease Control and Prevention (CDC).

Vaccination Program Implementation

STATE AND LOCAL PUBLIC HEALTH OFFICIALS

As currently structured, the federal smallpox vaccination effort will be carried out through state and local public health agencies. The fire department should have a close working relationship with these agencies. The local public health officials should work with the fire department to train workers about the risks of smallpox immunization and the management of immunization complications. They should investigate home situations as appropriate to ensure the safety of the family members and significant others of immunized persons. State or local health department employees, not fire department personnel, should do all screening and immunization. This will improve the worker's privacy protections and will shift any liability for negligent screening or unforeseen reactions to the state.

State and local public health officials will be responsible for a large number of both policy and logistical issues associated with the vaccination program. These issues include:

- ★ Number of clinics and their location
- ★ Amount of vaccine
- ★ Amount of associated medical supplies—needles, gauze, etc.
- ★ Informed consent process
- ★ Necessary human resources and training
- ★ Short-term follow up of vaccinated individuals
- ★ Long-term follow up.

The Centers for Disease Control and Prevention (CDC) has extensive information on vaccination clinics and the vaccination process available at their Web site.

Issues for the Fire Chief

Legal Concerns

It is strongly recommended that local fire department management consult with appropriate legal authority in their jurisdiction about liability issues arising from this vaccination program.

LIABILITY FOR MEDICAL COMPLICATIONS ARISING FROM VACCINATION

There is currently no federal program to cover the medical costs associated with side effects from the smallpox vaccine. The federal government is recommending that potential vaccinees check with their employer to determine if vaccination reactions will be covered under workers' compensation. Because the vaccination is voluntary, many states may refuse to cover the medical costs associated with this program under workers' compensation. If that is the case in your jurisdiction, any costs—including medical costs and lost wages—that result from a serious reaction to the vaccine will be borne by the vaccinated individual and his or her health insurance plan. Local governments may choose to cover costs associated with adverse reactions from the vaccine. If not, all costs will be the responsibility of the vaccinated individual.

Fire department management should monitor this issue very closely in order to determine if their personnel are covered under all provisions of the workers' compensation system including disability and wrongful death. They should call their appropriate state agency or workers' compensation insurance carrier to determine if the costs of medical care caused by a reaction to the vaccine are covered under workers' compensation.

SECTION 304 OF THE HOMELAND SECURITY ACT

Section 304 of the Homeland Security Act provides a very narrowly tailored exemption to liability for manufacturers of the smallpox vaccine and the healthcare entities that administer the vaccine. This provision provides that no claim for liability for injury or death as a result of participation in the smallpox vaccination program can be brought against a manufacturer of the vaccine or the healthcare provider that administered the vaccine.

A legal analysis of section 304 of the Homeland Security Act has been prepared by the CDC and is available on their Web site at www.bt.cdc.gov/agent/smallpox/vaccination/pdf/section-304-qa.pdf.

DOCUMENTING THAT EMPLOYEES RECEIVED APPROPRIATE INFORMATION ON SMALLPOX AND SMALLPOX VACCINATION

The IAFC recommends that all fire fighters receive written materials explaining all of the risks and other necessary information relating to smallpox and smallpox vaccination. These materials should be developed by the local health department, and the fire department should assist in the logistical matter of distributing them and ensuring that all employees sign them. This process will provide some evidence and protection against a charge that the vaccinated individual was not provided with enough information to make an informed decision regarding the vaccination. Regardless of whether the fire fighter is vaccinated or not, the department should have a record that the fire fighter was at least advised of all necessary information. These materials also should be sent home with the fire fighters to obtain the signatures of his or her family members who are at risk of exposure after the fire fighter is vaccinated.

SUMMARY OF LIABILITY ISSUES

Overall, liability risks to fire departments from the implementation of a smallpox vaccination program will be reduced if:

- ★ The local health departments are the source of all information relating to the risks associated with accepting or declining the vaccination.
- ★ The fire department takes all possible steps to ensure that information regarding its fire fighters' health matters remain private and known by only essential personnel.

- ★ The fire department maintains comprehensive and accurate records documenting that all of its fire fighters and their family members were educated about the vaccination program and the risks of accepting or declining the vaccination.
- ★ The fire department takes all possible steps to ensure that the risk of exposure to patients and others that come into contact with a vaccinated fire fighter are reduced.

Stakeholders

AGENCY MEDICAL DIRECTOR
In consultation with the public health officials running the vaccination program, the agency medical director should be involved in the vaccination effort. The department may wish to utilize the medical director to assist in providing information to potential vaccinees on the smallpox vaccine and its risks and benefits and in providing follow up medical care to vaccinated individuals.

FIRE FIGHTER'S IMMEDIATE FAMILY
Because of the risk of exposure to the *vaccinia* virus from the vaccination site, a fire fighter should not be vaccinated if a family member has any of the contraindications for the vaccine. In addition, even if no family members are contraindicated for the vaccine, the vaccinated individual should keep the site bandaged at all times and continue diligent hand hygiene in order to prevent the spread of virus to others.

Please see the appendix for a sample document from the CDC entitled, *Someone You Are Close to Is Getting the Vaccine: What You Should Know and Do* that contains information for family members of potential vaccinees.

Q. Are the family members of fire fighters and EMS personnel eligible to receive the vaccine in phase II?

A. No. The federal government is not making the smallpox vaccine available to the family members of those selected to participate in either phase I or phase II of the national smallpox response plan. However, under the timeline announced by the president the vaccine is expected to be made available to members of the general public in spring 2003. Family members of fire fighters should be eligible to receive the vaccine at this time.

WORKFORCE ISSUES
Decisions regarding the implementation of the vaccination program should be made in consultation and/or negotiation with appropriate labor organizations as required by contract.

The International Association of Fire Fighters (IAFF) has released a paper on vaccination for its union leaders. The paper is available on the IAFF Web site at: http://daily.iaff.org/122002sml1.htm.

LOCAL ELECTED OFFICIALS
Local elected officials will have to make policy decisions regarding the implementation of the vaccination program. Local governments may wish to pay for some or all of the costs associated with the pre-vaccination screening of their personnel (for example, HIV testing). In addition, local officials should be made aware of the legal issues arising from vaccination and the limited protections currently available under section 304 of the Homeland Security Act.

They also should be apprised of the costs of the vaccination program, as well as the operational and administrative impacts of the program on the fire department during the vaccination process. In particular, there are likely to be significant costs for associated overtime and there may be significant workers' compensation costs as a result of the vaccination program.

FEDERAL RESOURCES
The federal government controls the smallpox vaccine. It is releasing the vaccine to appropriate public health agencies through the states for the purpose of implementing the vaccination program.

The federal government has initiated an extensive education program on smallpox vaccination that is targeted to various audiences: the general public, public health, primary care physicians and first responders. The information covers all aspects of smallpox disease and vaccination. A list of information resources is included as an appendix to this guide.

GENERAL PUBLIC

The federal government is not recommending that the general public receive the smallpox vaccine, and the vaccine is not currently being made available to the general public. It is expected that the vaccine will be made available to members of the general public in the spring 2003, if they insist on receiving the vaccine.

MEDIA

Local governments may wish to inform the local media of the vaccination program for public safety officers in phase II. It is recommended that all media releases be coordinated among the participating organizations as well as the public health agency responsible for conducting the actual vaccination. In many jurisdictions it is likely that the public health agency responsible for implementing the program already will have established contact with the media during phase I.

You may wish to emphasize the following points in your releases to the media:

- ★ The local vaccination program is part of a nationwide program designed to reduce the threat of a terrorist attack by smallpox
- ★ There is currently no indication of an imminent threat of a bioterrorist attack using smallpox
- ★ Smallpox has been eradicated as a naturally occurring disease
- ★ The federal government does not recommend that members of the general public be vaccinated at this time

Informed Consent

INFORMED CONSENT
Because of the complications associated with this vaccine and the high number of contraindicated individuals, the fire department should assist the local public health agency in providing appropriate information to their personnel as they weigh the benefits of vaccination against its risks. The fire department should work with the local public health agency to distribute appropriate guidance to personnel and their families.

Legal Advisory: Fire department officials are generally not experts on smallpox vaccination. State and local health department personnel have the expertise, and therefore, they are charged with the responsibility of administering the immunization program. However, fire department personnel undoubtedly will act as points of contact for disseminating information about the immunization program to employees. Such personnel also will be tempted to answer a variety of questions about the program, including policy, logistical and health issues. Since fire department personnel are not experts on smallpox vaccinations, they should not be the source of any information to be given fire department employees, but only the conduit of information. Acting only as a conduit of information will protect fire departments and their personnel from the very possible charge that they gave incorrect information, or not enough information, to a vaccination candidate.

The prudent method to disseminate information is through the use of written materials prepared and approved by the health department and through persons trained to provide pre-approved information and answers to questions. (For example, fire departments—in consultation with their state and/or local health department—may wish to utilize the documents included in the appendix to this document that have been prepared by the CDC on issues related to smallpox vaccination.) Fire department personnel should not be in a position to provide any substantive information that has not been approved in advance by the health department.

PRE-VACCINATION SCREENING
Because fire and emergency medical personnel are at a heightened risk of exposure to blood-borne pathogens in the normal course of their duties, fire departments may wish to emphasize the importance of pre-vaccination screening for their personnel. Because this vaccine uses a live virus, it should not be given to a person with a condition or disease that weakens the immune system. It is the responsibility of the public health departments that are running the vaccination programs to properly screen prospective vaccinees and refer those individuals to appropriate medical facilities or their primary care physician. An employee's own inquiries regarding his or her personal health status should be handled by health department officials, and not fire department personnel, to protect the employee's privacy.

The federal government does not recommend mandatory HIV testing prior to smallpox vaccination but recommends that HIV testing should be readily available to all persons considering smallpox vaccination. HIV testing is recommended for persons who have any history of a risk factor for HIV infection and who are not sure of their HIV infection status. The local public health officials running the vaccination program should provide information about local testing options to all potential vaccinees.

REFUSAL TO RECEIVE THE VACCINE
The vaccination is contraindicated for certain serious health conditions. An employee may decline the vaccination because he or a member of his family has a condition that does not allow the fire fighter to receive the vaccination. As with any other medical condition, the fact that the fire fighter or a member of his family has a condition should remain private to the greatest extent possible. The fact that a fire fighter has accepted or declined the vaccination should therefore be safeguarded and known by only essential personnel.

The IAFC concurs with the recommendation of the International Association of Fire Fighters (IAFF) on how to appropriately document fire fighters who decline vaccination. The section below is based upon a similar passage in the IAFF's Guidance on Smallpox Vaccinations. There are a few changes to the waiver language below.

If a member of the department declines to receive the vaccination, he/she should sign a waiver. The waiver should include the following language (language is consistent with waiver language promulgated by U.S. OSHA for hepatitis B vaccination and Section 4(b)(4) of the Occupational Safety and Health Act):

> *I understand that due to my occupation, I may be at risk of being exposed to and acquiring smallpox. I have been given the opportunity to be vaccinated with smallpox vaccine, at no charge to myself. However, I decline the smallpox vaccine at this time. I understand that by declining this vaccine, I may be at risk of acquiring smallpox, a serious disease. If in the future I want to be vaccinated with the smallpox vaccine, I can receive the vaccination at no charge to me. My statement of declination of smallpox vaccination is not intended to supersede or in any manner affect any workers' compensation law or to enlarge or diminish or affect in any other manner to common law or statutory rights, duties or liabilities of employers and employees under any law with respect to injuries, diseases or death of employees arising out of, or in the course of, employment. I also understand that I will not be discriminated against by my employers if I decline to be vaccinated.*

FAMILY ISSUES

In order to ensure that family members receive all appropriate information, the local fire department should include family members in the pre-inoculation education program. All fire department personnel should take home and share with their families the materials they receive as part of the informed consent process. As stated earlier, the fire fighter should obtain the signatures of his or her family members who are at risk of exposure after the fire fighter is vaccinated. In addition, the fire department may wish to invite family members to any information sessions on the vaccine or the vaccination process.

Also, prospective vaccinees should be informed that there is currently no provision to allow their families to receive the vaccine. However, it is likely that family members will be eligible to receive the vaccine in phase III of the vaccination process that is expected to start in spring 2003.

Vaccination Site Care and Infection Control

This information has been prepared based on guidance and publications produced by the Centers for Disease Control and Prevention (CDC). Please see their Web site www.bt.cdc.gov/agent/smallpox/index.asp for additional information and updates.

POST-INOCULATION SITE CARE

The smallpox vaccine contains a live virus. After vaccination, this live virus is present at the vaccine site and can be spread to other parts of the body or to other individuals through contact. To avoid this, the vaccination site must be cared for carefully until the scab that forms after vaccination falls off on its own (in two to three weeks).

Q. What is the most significant step a vaccinated individual can take to minimize inadvertent transmission of the *vaccinia* virus from the vaccination site?

A. The most critical measure in preventing inadvertent transmission following smallpox vaccination is **thorough hand washing** after changing the bandage or after any other contact with the vaccination site. The importance of hand washing must be stressed to every vaccinated person.

VACCINATED INDIVIDUALS SHOULD:

- ★ **Cover the vaccination site loosely with a gauze bandage, using medical tape to keep it in place.** Keep it covered until the scab has separated on its own. This bandage will provide a barrier to protect against spread of the *vaccinia* virus.
- ★ **Fire fighters should wear a shirt that covers the vaccination site** as an **extra** precaution to prevent spread of the *vaccinia* virus. This is particularly important in situations of close personal contact.
- ★ **Change the bandage every day.** This will keep skin at the vaccination site from softening and wearing away.
- ★ **Wash hands with soap and warm water after direct contact with the bandage or after direct contact with the vaccination site.** This is vital in order to remove any virus from your hands and prevent contact spread.
- ★ **Keep the vaccination site dry.** Cover the vaccination site with a water-resistant pad, such as a waterproof Band-Aid®, when you bathe. Remember to change back to the loose gauze bandage after bathing.
- ★ **Put the contaminated bandages in a sealed plastic bag and throw them away.**
- ★ **Wash clothing or other any material that comes in contact with the vaccination site.** Use hot water with detergent and/or bleach.
- ★ When the scab comes off, **throw it away in a sealed plastic bag** (remember to wash your hands afterwards).

Note: The direction to throw away the vaccination site bandages and scab in a sealed plastic bag is based on the recommendations of the CDC. Fire departments may wish to treat these items as infectious waste and use appropriate procedures for disposing of this material.

INDIVIDUALS SHOULD NOT:

- ★ **Use a bandage that blocks all air from the vaccination site.** This may cause the skin at the vaccination site to soften and wear away. Use loose gauze secured with medical tape to cover the site.
- ★ **Put salves or ointments on the vaccination site.**
- ★ **Scratch or pick at the scab.**

RISK OF MEDICAL CARE PROVIDER/PATIENT TRANSMISSION

Most fire departments in the United States provide emergency medical services (EMS) in their local communities. Because of the risks associated with this live virus vaccine, there is considerable concern that EMS patients who are

contraindicated for the vaccine may risk exposure to *vaccinia* virus if they are treated by a fire fighter who has been recently inoculated. The Advisory Committee on Immunization Practices (ACIP) has provided the following guidance.

With respect to administrative leave for healthcare workers, the ACIP does not believe that healthcare workers need to be placed on leave because they received a smallpox vaccination. Administrative leave is not required routinely for newly vaccinated healthcare workers unless they are physically unable to work due to systemic signs and symptoms of illness, extensive skin lesions which cannot be adequately covered, or if they do not adhere to the recommended infection control precautions. It is important to realize that the very close contact required for transmission of vaccinia to household contacts is unlikely to occur in the healthcare setting. (from the October 2002 ACIP Smallpox Vaccination Recommendations)

Based on the above recommendation, fire departments should follow the guidelines below to minimize the risk of virus transmission. Medical personnel should cover the vaccination site with an absorbent material such as gauze that is in turn covered by a semi-permeable dressing. This provides an additional barrier to prevent contact transmission during patient care activities. They should also change the dressing at least once a day and wear a long sleeved shirt over the vaccination site. Finally, they should carefully monitor the vaccination site, properly dispose of bandages and engage in frequent hand washing.

Do not use a semi-permeable dressing alone. Use of only a semi-permeable dressing could cause maceration of the vaccination site and increased prolonged irritation and itching at the site, thereby increasing touching, scratching and contamination of the hands. Products combining an absorbent base with an overlying semi-permeable layer can be used to cover the vaccination site.

BEDDING, LINENS

Clothing or any other material that may have come in contact with the vaccination site and therefore contaminated with *vaccinia* should be handled with special care. A separate hamper should be used for these items. Contact with these items should be kept to a minimum. These items should be laundered in warm water with detergent and/or bleach. After handling, individuals should wash their hands thoroughly in warm water with soap or with an alcohol-based hand rub, such as a gel or foam. If hands are visibly contaminated with fluids from the vaccine, then individuals should wash with warm water and soap.

Q. Can I prepare food for others while my vaccination site is "active"?

A. Individuals who have been vaccinated can cook and clean normally as long as they wash their hands after contact with the vaccination site or any potentially contaminated materials.

SHOWERS

Fire departments should require vaccinated personnel to wear a water-resistant pad, such as a waterproof Band-Aid®, while showering.

RECREATIONAL ACTIVITIES

Vaccinated fire fighters should be careful to avoid close physical contact with others. Many documented cases of transmission of the virus from person to person in families are among children who engage in sports activities or rough housing. Fire departments may choose to limit voluntary recreational activities of vaccinated fire fighters where there is close contact with other participants.

HAND WASHING
Hand hygiene is necessary after direct contact with the vaccine, the vaccination site or the bandage. This is vital in order to remove virus from the hands and prevent contact spread of *vaccinia*. You can either wash your hands with soap and water or use alcohol-based hand rubs, such as gels or foams. If hands are visibly contaminated with fluids from the vaccine, the vaccination site or the bandage, then you must wash your hands with soap and water.

Impact on Operations

While there has been extensive reporting of the possible complications from this vaccine, most of that coverage has focused on the extremely rare side effects that could result in serious injury or death. What is often overlooked is that the expected side effects from this vaccine are more significant than those associated with most modern vaccines. Many people who receive the vaccine experience normal, usually mild reactions that include a sore arm, fever and body aches. In recent tests, one in three people felt bad enough to miss work, school or recreational activity or had trouble sleeping after receiving the vaccine.

SCHEDULING
It is expected that one in three people who receive the vaccine will miss work for at least one day because of normal reactions to the vaccine. Based upon federal recommendations, the IAFC advises local fire departments to consider staggering the vaccination of fire fighters within a shift or fire station in order to minimize the number of vaccinated individuals who would be on sick leave concurrently. An examination of the medical evidence indicates that vaccinated individuals who miss work generally do so eight to ten days after vaccination.

Individuals who have been previously vaccinated against smallpox experience fewer side effects when revaccinated. Because of this, the fire department may wish to start its vaccination program with individuals being revaccinated.

ADDITIONAL MEASURES TO PREVENT TRANSMISSION OF THE *VACCINIA* VIRUS
There are aspects of life in many fire departments that involve close contact among co-workers—shared living and sleeping quarters, shared bathing facilities, shared personal protective clothing. While current recommendations from federal authorities do not suggest taking any steps to limit the threat of *vaccinia* transmission beyond those listed in the prior section, departments may wish to consider certain additional steps to minimize the possibility of inadvertent transmission of the *vaccinia* virus to non-vaccinated individuals on the job. This is because of the close contact among fire fighters that can occur in the course of normal job-related activity and the potential consequences of exposing a contraindicated individual to the *vaccinia* virus. Such policies should be carefully considered and implemented in such a manner so as to minimize the disclosure of private medical information as discussed earlier.

These steps may include:

- ★ Taking measures to limit shared sleeping quarters among vaccinated and non-vaccinated personnel
- ★ Temporarily reassigning personnel to different shifts or stations based on their vaccination status for the purpose of minimizing the risk of transmission
- ★ Departments that utilize shared bunker gear may wish to clean the gear following use by vaccinated personnel while they are infectious. Note: Because bunker gear is generally worn over other garments the risk of transmission of the *vaccinia* virus is unlikely in this circumstance, particularly if the vaccination site is properly dressed.

Financial Considerations

FINANCIAL IMPACT

A smallpox vaccination program may have a significant financial impact on a fire department. It is recommended that fire department management conduct a fiscal analysis of the impact of a vaccination program for their workforce. This analysis should take into consideration those costs implicit in undertaking a program of this nature. These costs include, but are not limited to:

- ★ The cost of associated education and training
- ★ The cost of time used for the actual vaccination and transportation to and from the vaccination program site
- ★ The cost of sick pay and disability resulting from the side effects of the vaccine
- ★ The cost of backfill and overtime pay
- ★ Administrative costs associated with overseeing the program
- ★ The cost of dressings and follow-up care for vaccinated individuals.

Depending upon the size of the department, these costs may be substantial. Currently, these costs will be borne by the individual receiving the vaccine or the local fire department. There is no provision for the federal government to cover or assist with these costs.

Resources

A listing of Web sites and publications with additional information on the vaccination program, smallpox and bioterrorism in general.

Web Sites

U.S. Department of Health and Human Services
www.smallpox.gov

Centers for Disease Control and Prevention

Main smallpox information index
www.bt.cdc.gov/agent/smallpox/index.asp

Smallpox vaccination and adverse reaction training module
www.bt.cdc.gov/training/smallpoxvaccine/reactions/

National Association of County and City Health Officials
www.naccho.org/Smallpox.html

National Library of Medicine/National Institutes of Health
www.nlm.nih.gov/medlineplus/smallpox.html

Listing of state immunization program Web sites
www.immunize.org/states/index.htm

Smallpox as a Biological Weapon: Medical and Public Health Management
http://jama.ama-assn.org/issues/v281n22/ffull/jst90000.html

American Academy of Dermatology
www.aad.org/BioInfo/smallpox.html

Smallpox chapter from the *Textbook of Military Medicine*
http://chemdef.apgea.army.mil/textbook/Ch-27.pdf

World Health Organization Fact Sheet on Smallpox
www.who.int/emc/diseases/smallpox/factsheet.html

Johns Hopkins University: smallpox fact sheet
www.hopkins-biodefense.org/pages/agents/agentsmallpox.html

New England Journal of Medicine

Early release of smallpox related articles
http://nejm.org/earlyrelease/early.asp

More articles relating to smallpox and smallpox vaccination
http://nejm.org/specialnotice/special.asp

U.S. Department of Defense

Official site for military vaccinations
www.vaccines.army.mil

DOD smallpox vaccination program
www.smallpox.army.mil/

Agency for Healthcare Research and Quality: Extensive Smallpox Information
www.bioterrorism.uab.edu/EIPBA/Smallpox/moreExtInfo.html

National Network for Immunization Information
www.immunizationinfo.org/vaccineInfo/disease_results.cfm?id=26

PUBLICATIONS

Chin, J. (Ed.), *Control of Communicable Diseases Manual*, 17th ed., Washington, DC; American Public Health Association, 2000: pp 455-457.

Henderson, D. A., "The research agenda *utilizing variola* virus: a public health perspective," a working paper for the World Health Organization meeting on smallpox, Baltimore, MD; Johns Hopkins University Center for Civilian Biodefense Studies, 1999.

Preston, R., *The Demon in the Freezer,* 1st ed., New York; Random House, Inc., 2002.

Appendix

CDC SMALLPOX FACT SHEETS

These fact sheets were prepared by the Centers for Disease Control and Prevention (CDC). You may wish to distribute them to educate your personnel and their families. This should be done in consultation with and at the direction of the public health officials responsible for implementing your local vaccination program.

These materials are available at: www.bt.cdc.gov/agent/smallpox/reference/resource-kit.asp.

1. Smallpox Vaccination: An Important Decision
2. People Who Should NOT Get the Smallpox Vaccine
3. Caring for the Smallpox Vaccination Site
4. Someone You Are Close to Is Getting the Vaccine: What You Should Know and Do

SMALLPOX FACT SHEET

Smallpox Vaccination: An Important Decision

The smallpox vaccine was used to eradicate smallpox disease from the Earth. However, supplies of the smallpox virus still exist, and concern that smallpox might be used as a weapon has led the United States government to prepare for a fast and effective response to a smallpox outbreak.

Part of this preparedness effort is the creation of smallpox healthcare teams that would respond to a smallpox emergency. Members of these teams would investigate, manage and control a smallpox outbreak. Membership on these teams is voluntary, but vaccination of team members is required for their own safety and to ensure that team members cannot transmit smallpox.

Individuals considering smallpox vaccination should be well informed about smallpox disease; the vaccine and its side effects—including potentially life-threatening reactions; and health conditions that indicate an individual should not be vaccinated as part of this preparedness effort because they are at increased risk of experiencing adverse reactions to the vaccine. This fact sheet provides an overview of the information that will be provided to those offered the vaccine.

Smallpox Disease

- The deliberate release of smallpox is now regarded as a possibility.
- Smallpox is a serious, contagious and potentially deadly disease that can be prevented through vaccination.
- Vaccination within 3 days of exposure to smallpox will prevent or significantly lessen the severity of symptoms in most people. Vaccination 4 to 7 days after exposure offers some protection from disease or may reduce disease severity.

The Smallpox Vaccine

- The vaccine is safe and effective for most people who receive it. This same vaccine was used to eradicate naturally occurring smallpox.
- The vaccine to be used for smallpox response teams is licensed and passes all tests required by the Food and Drug Administration.
- The smallpox vaccine provides high-level immunity from smallpox for 3 to 5 years, with decreasing immunity thereafter.
- Persons receiving smallpox vaccinations previously (before 1980) should assume they have little or no immunity to smallpox today and will require a new vaccination if they wish to be a member of smallpox response team.
- Smallpox vaccine contains live vaccinia virus to protect against smallpox. The virus can spread to other parts of the body and to other people. The vaccine site ought to be cared for carefully for this reason.
- Smallpox vaccine does not contain smallpox virus and cannot give you smallpox.
- The vaccine can have side effects ranging from normal and typically mild reactions to potentially life-threatening reactions causing death (see "Possible Reactions to the Vaccine" in this fact sheet).
- People with certain conditions are at greater risk of experiencing serious reactions and should not get the vaccine unless they have been exposed to smallpox (see "Who Should Not Get the Vaccine" in this fact sheet).
- Careful screening can identify people more likely to have serious reactions and thus help prevent them.

Possible Reactions to the Vaccine

- Minor reactions—including sore arm, fever and body aches—are common.
- Serious reactions can occur, including a toxic or allergic reaction at the vaccination site, spread of the *vaccinia* virus to other parts of the body or to other individuals, or spread of the vaccinia virus through the blood. (In the past, these occurred in about 1,000 people for every 1 million people vaccinated for the first time.)
- Life-threatening reactions can occur, including inflammation of the brain, ongoing infection of the skin with tissue destruction, and disfiguring and painful skin rashes. (In the past, between 14 and 52 people for every 1 million people vaccinated for the first time experienced these reactions.)
- Based on past experience, it is estimated that between 1 and 2 people per every 1 million vaccinated may die from complications of the vaccine.

Site Care

- The vaccination site must be cared for carefully until the scab that forms after vaccination falls off on its own (in 2 to 3 weeks).
- Proper care (including hand washing, covering the site with gauze, wearing long-sleeved shirts) can decrease the risk of spread of the vaccinia virus to other parts of the body or to other persons.
- Health care workers involved in direct patient care need to take additional measures for site care, such as using semi-permeable dressings.

Who Should Not Receive the Vaccine (Contraindications)

Individuals who have any of the following conditions, or live with someone who does, should NOT receive the smallpox vaccine unless they have been exposed to the virus:

- Eczema or atopic dermatitis (even if the condition is not currently active, mild, or experienced as a child).
- Other skin conditions such as burns, chickenpox, shingles, impetigo, herpes, severe acne, or psoriasis (Individuals should not get the vaccine until the condition has completely healed).
- Weakened immune system (for instance, from cancer treatment, an organ transplant, HIV, or medications such as steroids to treat autoimmune disorders and other illnesses).
- Pregnancy or plans to become pregnant within one month of vaccination.

In addition, individuals should not receive the smallpox vaccine if they:

- Are allergic to the vaccine or any of its ingredients.
- Are less than 12 months of age. Also, the Advisory Committee on Immunization Practices advises against non-emergency smallpox vaccination in those younger than 18 years of age.
- Have a moderate or severe short-term illness. (These people should wait until they are completely recovered to get the vaccine.)
- Are currently breastfeeding.

Cost of Treatment of Vaccine Reactions

- Treatments for the more serious reactions can be very expensive. There is no federal program to pay these expenses. Workers compensation or health insurance may cover these expenses. If not, individuals may end up being responsible.
- Individuals may lose time from work following vaccination because of illness or because of concern that they could transmit the virus to others. There is no program in place to cover this. Individuals should check with their employer to see if the employer or workers compensation would cover this.

For more information, visit www.cdc.gov/smallpox, or call the CDC public response hotline at (888) 246-2675 (English), (888) 246-2857 (Español), or (866) 874-2646 (TTY)
December 18, 2002

SMALLPOX FACT SHEET

People Who Should NOT Get the Smallpox Vaccine (*Unless* they are Exposed to the Smallpox Virus)

Some people are at greater risk for serious side effects from the smallpox vaccine. **Individuals who have any of the following conditions, or live with someone who does**, should **NOT** get the smallpox vaccine **unless they have been exposed to the smallpox virus**:

- Eczema or atopic dermatitis. (This is true even if the condition is not currently active, mild or experienced as a child.)
- 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.)
- Weakened immune system. (Cancer treatment, an organ transplant, HIV, or medications to treat autoimmune disorders and other illnesses can weaken the immune system.)
- Pregnancy or plans to become pregnant within one month of vaccination.

In addition, individuals should not get the smallpox vaccine if they:

- Are allergic to the vaccine or any of its ingredients.
- Are younger than 12 months of age. However, the Advisory Committee on Immunization Practices (ACIP) advises against non-emergency use of smallpox vaccine in children younger than 18 years of age.
- Have a moderate or severe short-term illness. (These people should wait until they are completely recovered to get the vaccine.)
- Are currently breastfeeding.

Again, people who have been directly exposed to the smallpox virus should get the vaccine, regardless of their health status.

Don't Hesitate!

If offered the smallpox vaccine, individuals should tell their immunization provider if they have any of the above conditions, or even if they suspect they might.

For more information, visit www.cdc.gov/smallpox, or call the CDC public response hotline at (888) 246-2675 (English), (888) 246-2857 (Español), or (866) 874-2646 (TTY)
December 9, 2002

SMALLPOX FACT SHEET

Caring for the Smallpox Vaccination Site

The smallpox vaccine contains a **live** virus called vaccinia. After vaccination, this live virus is present at the vaccine site and can be spread to other parts of the body or to other individuals through contact. To avoid this, the vaccination site must be cared for carefully until the scab that forms after vaccination falls off on its own (in 2 to 3 weeks). Follow these instructions:

WHAT YOU SHOULD DO:

- ***Cover the vaccination site loosely with a gauze bandage, using first aid adhesive tape to keep it in place.*** Keep it covered until the scab falls off on its own. This bandage will provide a barrier to protect against spread of the vaccinia virus. (When involved in direct patient care, healthcare workers should cover the gauze with a semipermeable [semiocclusive] dressing as an additional barrier. A semipermeable dressing is one that allows for the passage of air but does not allow for the passage of fluids.)
- ***Wear a shirt that covers the vaccination site*** as an ***extra*** precaution to prevent spread of the vaccinia virus. This is particularly important in situations of close physical contact.
- ***Change the bandage every 1 to 3 days.*** This will keep skin at the vaccination site from softening and wearing away.
- ***Wash hands with soap and warm water or with alcohol-based hand rubs such as gels or foams after direct contact with the vaccination site, the bandage or clothes, towels or sheets that might be contaminated with virus from the vaccination site.*** This is vital in order to remove any virus from your hands and prevent contact spread.
- ***Keep the vaccination site dry.*** Cover the vaccination site with a waterproof bandage when you bathe. Remember to change back to the loose gauze bandage after bathing.
- ***Put the contaminated bandages in a sealed plastic bag and throw them away in the trash.***
- Keep a **separate laundry hamper** for clothing, towels, bedding or other items that may have come in direct contact with the vaccine site or drainage from the site.
- ***Wash clothing or other any material that comes in contact with the vaccination site***, using hot water with detergent and/or bleach. ***Wash hands afterwards.***
- When the scab falls off, ***throw it away in a sealed plastic bag*** (remember to wash your hands afterwards).

DO NOT:

- ***Don't use a bandage that blocks all air from the vaccination site.*** This may cause the skin at the vaccination site to soften and wear away. Use loose gauze secured with medical tape to cover the site.
- ***Don't put salves or ointments on the vaccination site.***
- ***Don't scratch or pick at the scab.***

For more information, visit www.cdc.gov/smallpox, or call the CDC public response hotline at (888) 246-2675 (English), (888) 246-2857 (Español), or (866) 874-2646 (TTY)

January 14, 2003

SMALLPOX FACT SHEET

Someone You Are Close to Is Getting the Vaccine: What You Should Know and Do

If someone you have close, physical contact with (your spouse or partner or other adult family member) is getting the smallpox vaccine, there are some things you should know.

What You Should Know:

The smallpox vaccine contains a live virus called vaccinia, which is related to smallpox, though milder. The vaccine helps the body develop immunity to smallpox. And while the smallpox vaccine is safe and effective for most people who receive it, the fact that the virus is live creates special concerns.

The main concern for people who have close, physical contact with someone who has gotten the vaccine is that the vaccinia virus can be spread from the vaccination site, causing rash (mild to severe), fever, and head and body aches. Vaccinia is spread by touching a vaccination site before it has healed or by touching bandages, clothing, or other material contaminated with live virus from the vaccination site and then touching another part of the body or touching someone else. The vaccination site often becomes itchy, which may lead to scratching, rubbing, or touching the site. In the past, when vaccinated persons spread vaccinia to other parts of their body, it often was to their eyes or their genitals. Vaccinated persons also can spread vaccinia to other individuals. In the past, this was reported to occur between 20 and 60 times out of 1 million primary vaccinees and often involved children. Most of the time, this took place in situations of close contact, such as happens in a household, or in similar situations involving close physical contact where careful hand hygiene and site care may not be followed.

People getting the vaccine will receive instructions for special care to minimize the risk of spreading vaccinia by touch, but you also can take precautions to protect yourself. These precautions should be followed until the scab that forms on the vaccine after vaccination falls off on its own (in 2 to 3 weeks).

What You Should Do:

- Do not touch the vaccine site or any materials that might be contaminated with live virus from the site (such as bandages, towels, clothing, or washcloths used by the person who got the vaccine).
- If you accidentally come in contact with the vaccine site, or something that may be contaminated with live virus, immediately wash with soap and warm water.
- If you share a bed with the person who got vaccinated, be sure that they are wearing a gauze bandage held in place with medical tape over the vaccination site. As an extra precaution, the person who got the vaccine can wear a shirt or pajamas that cover the bandaged vaccine site. If they do not, you may choose to sleep in separate beds. (Healthcare workers involved in direct patient care should cover the gauze with a semipermeable dressing as an additional barrier.)
- Keep a separate laundry hamper for items like clothing, towels, or bedding that have come in direct contact with the vaccine site or drainage from the site. Launder these items, using warm water with detergent and/or bleach and wash hands carefully afterwards.
- Remind the person who got the vaccine to follow site care and hand washing instructions. If their hand is contaminated and they touch you, you can contract vaccinia.

For more information, visit www.cdc.gov/smallpox, or call the CDC public response hotline at (888) 246-2675 (English), (888) 246-2857 (Español), or (866) 874-2646 (TTY)

January 7, 2003

ABOUT THE INTERNATIONAL ASSOCIATION OF FIRE CHIEFS AND OUR LEADERSHIP ROLE IN PREPARING THE FIRE AND EMERGENCY SERVICES

Established in 1873, the International Association of Fire Chiefs (IAFC) is the premier organization for professionals in the fire and emergency services and is the keystone organization among those active in the industry. IAFC provides its 12,000 members with powerful regional, national and global professional networks, industry expertise, resources and information, and professional development and training. Through IAFC's strong government relations efforts and its role as a leader among industry organizations, the association serves the entire fire and emergency services community.

Traditional IAFC members are fire chiefs, fire marshals, chief officers and company-grade officers serving populations of fewer than 10,000 to those communities of more than one million. Currently, as the need for public and private sector cooperation increases, a rising number of new members are officer-level equivalents in private sector chemical, manufacturing, transportation and other commercial organizations. Additional members represent related fields such as apparatus and equipment suppliers.

In addition to serving the specific and unique needs of our diverse members, IAFC committees and task forces are concerned with pertinent issues such as occupational safety, personnel diversity, technology advances and natural disaster preparedness.

While recent events, such as the Oklahoma City bombing and the September 11, 2001 attacks in New York, Virginia and Pennsylvania, have brought terrorism preparedness issues to the attention of many, IAFC has been preparing for such tragedies for more than 20 years. In 1980, IAFC established the Hazardous Materials Committee to address fire fighter response to hazardous spills. In 1985, IAFC experts began testifying before Congress on the need for terrorism preparedness and response training for fire fighters. To follow through on this concept the IAFC convened the first World Conferences on Fire and Emergency Services Response to Terrorism in 1995 and launched a national conference in 1998 on Strengthening the Public Safety Response to Terrorism. In 1996, a permanent IAFC committee on terrorism was established to continue work on the topic. In 2002, the IAFC, through a grant from the Office for Domestic Preparedness (U.S. Department of Justice) hosted the second national conference on Strengthening the Public Safety Response to Terrorism. In addition, IAFC has held the International Hazardous Materials Response Teams Conference annually since 1994. IAFC has many members who have experienced terrorist incidents, such as Chief Gary Marrs, Oklahoma City Fire Department, Chief Edward Plaugher, Arlington County (Va.) Fire Department and former Fire Commissioner Thomas Von Essen, Fire Department of the City of New York. They have shared their experiences and lessons learned with the membership at various conferences including the annual Fire-Rescue International.

As IAFC continues to serve its members, the industry and the public, we welcome those individuals or organizations who would join us in our efforts or wish to enhance their own skills and knowledge through our education and training programs. Please call, e-mail or fax your inquiries or visit our Web site (www.iafc.org) for timely information regarding current IAFC and industry news, IAFC events and activities, or membership information.

Leadership ★ Expertise ★ Integrity

International Association of Fire Chiefs
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