

Smallpox Vaccine Information for Clinicians

The federal government has concerns that smallpox virus (or variola) infection, which historically has a 30% mortality rate, may be used as a biological weapon against the US population. President Bush has therefore announced a plan to vaccinate Americans against smallpox in phases, beginning with military personnel and certain health care workers and public health response teams. Vaccination is expected to begin in early 2003. This update is based on information obtained from the Centers for Disease Control and Prevention on January 27, 2003.

Texas has submitted a pre-event vaccination plan that has been approved by the Centers for Disease Control and Prevention (CDC). State public health professionals, trained in December at CDC in smallpox vaccination planning and technique, will train other state and local public health and hospital personnel. These individuals will vaccinate designated volunteer hospital care teams (those who would care for persons with suspected smallpox) and volunteer public health response teams (those who would investigate possible cases of smallpox). The emphasis of the vaccination efforts will be on safety.

- Since the smallpox vaccine has not been in general use for almost three decades, most health care workers and much of the general population have not had direct experience with the vaccine or with the associated adverse events.
- Smallpox vaccine contains a live virus, vaccinia, closely related to cowpox virus.
- Vaccination against smallpox is associated with a higher incidence of adverse reactions than most other vaccines in use today.
- Liability, workman's compensation, disability insurance and life insurance issues are still being clarified.
- Smallpox vaccination will be voluntary for the civilian population.
- Vaccinia infection is transmissible from the vaccination site to other persons.
- Protection provided by the smallpox vaccine wanes after several years, so persons who were vaccinated in the past against smallpox will need revaccination. However, they are likely to have milder adverse reactions to the vaccine.
- The population of persons with immune systems compromised by such factors as HIV infection or chemotherapy is thought to be larger than in past decades. These individuals should not receive the smallpox vaccine and are also at risk if infected with vaccinia from someone who was vaccinated.
- There are several other contraindications to the use of the smallpox vaccine.*

* *Contraindications are described in the following smallpox fact sheets and in Web sites listed on page 5.*

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Also in this issue::

New Initiative Proves Certification for Community Health Workers

Pre-event Smallpox Vaccination Fact Sheet for Clinicians

The following material is from the CDC online report, SMALLPOX FACT SHEET - **Information for Clinicians**, Smallpox (Vaccinia) Vaccine Contraindications. For the original CDC document, [download the PDF version formatted for print](#) (165 KB/3pages).

Smallpox (Vaccinia) Vaccine Contraindications for Potential Vaccinees and Their Household Contacts


Because the vaccinia virus used in smallpox vaccine can be spread to others from the vaccine site of an immunized person, the contraindications below apply to **both potential vaccinees and their household contacts**. Household contacts include persons with prolonged intimate contact with the potential vaccinee, including the potential for direct contact with the vaccination site (eg, sexual contacts).

Eczema or Atopic Dermatitis and Other Acute, Chronic, or Exfoliative Skin Conditions

- Persons who have ever been diagnosed with eczema or atopic dermatitis should not be vaccinated, even if the condition is not currently active. These patients are at high risk of developing eczema vaccinatum, a potentially severe and sometimes fatal complication. Additionally, persons with household contacts that have a history of eczema or atopic dermatitis, irrespective of disease severity or activity, should not be vaccinated.
- If the potential vaccinee or any of their household contacts have other acute, chronic, or exfoliative skin conditions (eg, burns, impetigo, chicken pox, contact dermatitis, shingles, herpes, severe acne, or psoriasis), they are at risk for inadvertent autoinoculation of the affected skin with vaccinia virus and should not be vaccinated until the condition(s) resolves.
- Persons with Darier's disease can develop eczema vaccinatum and therefore should not be vaccinated.

Diseases or Conditions that Cause Immunodeficiency or Immunosuppression

- If a potential vaccinee or any of their household contacts have conditions such as HIV/AIDS, solid organ or stem cell transplant, generalized malignancy, leukemia, lymphoma, agammaglobulinemia, or autoimmune disease, they should not be vaccinated. People with these conditions are at greater risk of developing a serious adverse reaction resulting from unchecked replication of the vaccine virus (progressive vaccinia).
- 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. Anyone who is concerned that they could have HIV infection also should be tested. HIV testing should be available in a confidential or, where permitted by law, anonymous setting with results communicated to the potential vaccinee before the planned date of vaccination. Persons with a positive test result should be told not to present to the vaccination site for immunization.

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Treatments that Cause Immunodeficiency or Immunosuppression

- If a potential vaccinee or any of their household contacts are undergoing treatment with radiation, antimetabolites, alkylating agents, corticosteroids, chemotherapy agents, or organ transplant medications, they should not be vaccinated. People who are receiving these therapies are at greater risk of serious adverse reactions to the smallpox vaccine.
- People undergoing treatment which causes immunosuppression or who have household contacts undergoing such treatment should not receive smallpox vaccine until they or their household contact have been off immunosuppressive treatment for 3 months.

Pregnancy

- Live virus vaccines are generally contraindicated during pregnancy. Pregnant women who receive the smallpox vaccine are at risk of fetal vaccinia. Although this is a very rare condition (fewer than 50 cases have ever been reported), it usually results in stillbirth or death of the infant shortly after delivery.
- Before vaccination, people should be asked if they or any of their household contacts are pregnant or intend to become pregnant in the next 4 weeks; those who respond positively should not be vaccinated.
- In addition, women who are vaccinated should be counseled not to become pregnant during the 4 weeks after vaccination.
- Routine pregnancy testing of women of childbearing age is not recommended.
- Any woman who thinks she could be pregnant or who wants additional assurance that she is not pregnant should perform a urine pregnancy test using a “first morning” void urine on the day scheduled for vaccination.
- If a pregnant woman is inadvertently vaccinated or if she becomes pregnant within 4 weeks after vaccinia vaccination, she should be counseled regarding the basis of concern for the fetus. However, vaccination during pregnancy should not ordinarily be a reason to terminate pregnancy.

Smallpox (Vaccinia) Vaccine Contraindications for Potential Vaccinees ONLY

Previous Allergic Reaction to Smallpox Vaccine or Any of the Vaccine’s Components

- Anyone who has experienced a previous allergic reaction to the smallpox vaccine should not be vaccinated.

- Vaccinia vaccine (Dryvax[®]) contains small amounts of polymyxin B sulfate, streptomycin sulfate, chlortetracycline hydrochloride, neomycin sulfate, and phenol. Anyone who has experienced an anaphylactic reaction to these components should not be vaccinated.

Moderate or Severe Acute Illness

- Moderate or severe acute illness is generally a contraindication to vaccination.
- Vaccination should be deferred until the acute illness has resolved.

Infants and Children

- Smallpox vaccine is contraindicated for children under 12 months of age.
- The Advisory Committee on Immunization Practices (ACIP) advises against non-emergency use of smallpox vaccine in persons younger than 18 years of age.

Breastfeeding

- Breastfeeding mothers should not receive the smallpox vaccine. The close physical contact that occurs during breastfeeding increases the chance of inadvertent inoculation.

General precaution: The vaccine vial stopper contains dry natural rubber that may cause hypersensitivity reactions when handled by, or when the product is administered to, persons with known or possible latex sensitivity.

Don't Hesitate!

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

Vaccination Protocols During a Smallpox Emergency

During a smallpox emergency, all contraindications to vaccination would be reconsidered in the light of the risk of smallpox exposure. Persons would be advised by public health authorities on recommendations for vaccination. Careful screening is essential to minimize complications from the smallpox vaccine. *Further information regarding whether or not someone should receive the smallpox vaccine is available from several CDC Websites, listed on the following page.*

Sources of Information on Smallpox Vaccination

CDC public response hotline:

English: 888/246-2675

Español: 888/246-2857

TTY: 866/874-2646

CDC Internet Information for Professionals and the Public:

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

Smallpox vaccination and preparedness questions and answers:

www.bt.cdc.gov/agent/smallpox/vaccination/vaccination-program-qa.asp

Information on smallpox vaccine contraindications:

www.bt.cdc.gov/agent/smallpox/vaccination/contraindications-clinic.asp

www.bt.cdc.gov/agent/smallpox/vaccination/contraindications-public.asp

Training information for health professionals:

www.bt.cdc.gov/agent/smallpox/training/index.asp

Web broadcast: "Clinical Management of Adverse Events Following Smallpox Vaccination: A National Training Initiative" on February 4, 2003:

www.bt.cdc.gov/agent/smallpox/training/webcast/04feb2003/index.asp

The National Center for Infectious Diseases comprehensive report, "Smallpox Vaccination and Adverse Reactions – Guidance for Clinicians":

www.cdc.gov/mmwr/pdf/wk/MMWRDispatch1-24-03.pdf

President's Announcement:

www.bt.cdc.gov/agent/smallpox/vaccination/vaccination-program-statement.asp

Texas Department of Health:

www.tdh.state.tx.us/stateepi/anthrax.htm



Prepared by Susan Penfield, MD, Chief, TSH Bureau of Communicable Disease.

New Initiative Provides Certification for Community Health Workers

They work in clinics, hospitals, community-based organizations, faith-based organizations, public health departments, and university-sponsored activities. They reach out to people in community centers, in private homes, and even on the streets. They deal with the realities of limited resources and ever-present demands. Known as promotores(as) or community health workers (CHWs), they address some of the most difficult public health problems in our state today.

A promotor(a) or CHW may also be known as a lay health advocate, outreach educator, community health representative, or peer health promoter. With or without compensation, CHWs

Provide

Cultural mediation between communities and health and human service systems
Informal counseling and social support
Culturally and linguistically appropriate health education
Referral and follow-up services

Advocate for

Individual and community health needs

Assure that


People get the health services they need

Build

Individual and community capacity

The uniqueness of their services lies in their ability to relate to clients through shared experiences drawn from living as neighbors in common communities. They have a stake in eliminating barriers that impact the health of a community because they live in that community and they are directly affected by those very barriers. CHWs have consistently demonstrated their value as gatekeepers who link public health services to hard-to-reach community residents.

The role of CHWs differs widely from community to community. The strength of this workforce is that it can be shaped to fit the needs identified by community members. For example, CHWs may serve as interpreters or language translators for clients during doctor visits, help clients identify benefits for which they are eligible, and assist with completion of applications for benefits and services. As community leaders, they may empower their neighbors by organizing and motivating them to become actively involved in improving living conditions in the neighborhood. As health educators, CHWs may inform their clients of ways to prevent illnesses and teach them how to manage chronic diseases. Experience has shown that CHWs are a valuable resource for informing and recruiting their neighbors to participate in social programs for which they qualify. By working hand-in-hand with the communities they serve, CHWs empower community residents to help themselves.

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While the promotor(a) model has been replicated in communities located along the Texas-Mexico Border, the concept is also being used in other parts of Texas, including Fort Worth and Houston. Although it is best known among the Hispanic community, it is also being used in African American communities. These programs can be successful in both urban and rural settings and in any community where people join together to improve their quality of life.

Certification of Community Health Workers

On December 6, 2002, the Texas Department of Health (TDH) certified the first 6 CHWs, making Texas the first state in the country to implement a standardized training and certification program for promotores(as) or CHWs.

Prior to this certification initiative, existing training programs for CHWs varied in content and number of course hours because they focused on knowledge/skills that addressed the health specialties, organizational standards, and other health concerns of the individual CHW's community. Consequently, a CHW could be skilled in working in the community where training occurred but not necessarily in a different community. Moreover, the differences in training led to uncertainty as to what basic competencies potential health and social service agencies could expect from CHWs.

To address these issues, the Texas Board of Health appointed the Promotor(a) or Community Health Worker Training and Certification Advisory Committee on April 6, 2001. Public hearings for community members on training and certification rules were held in Arlington, El Paso, Houston, and Weslaco where 150 speakers shared their thoughts on and suggestions for the proposed Rules Regarding Training and Certification of Promotores(as) or CHWs. The rules adopted by the Texas Board of Health in July 2000 (25 Texas Administrative Code, Sections 146.1-146.10) are the results of recommendations from TDH, the Promotora Program Development Committee, and the many concerned community members who participated in the process. The rules serve as a blueprint for the training and certification program, which will be managed by TDH.

The Public Health Workforce Development Program of the TDH Office of Public Health Practice has developed a protocol for training and certification of CHWs, instructors, and sponsoring institutions. The certification process implements standard curriculum and evaluation guidelines designed to ensure uniformity and transferability of basic knowledge and skills regardless of where the CHW practices. Applicants will participate in 160 required hours of training in 8 core areas: communication, interpersonal interaction, service coordination, capacity building, advocacy, teaching, organization, and knowledge base.

The benefits of certification are as follows:

- ◆ The State of Texas acknowledges that promotores(as) or community health workers (CHWs) are an effective workforce in the community.

- ◆ Certification brings recognition to promotores(as) or community health workers for their work in their communities.
- ◆ Certification recognizes the promotor(a) or CHW's diverse skills, including language translation.
- ◆ Certification acknowledges promotor(a) or CHW training and work experience.
- ◆ Certification can help build self-esteem and self-worth.
- ◆ Certification can further career goals and increase employment opportunities.
- ◆ Certification can help develop job market opportunities for paid employment and more respect for the work of promotores(as) or CHWs.
- ◆ Certification can increase opportunities for further formal education.

For decades, promotores(as) or CHWs have served their communities primarily as volunteers. Through a new initiative these dedicated workers will have a better chance to be paid for their work and, at least equally as important, they will be provided a sense of dignity and needed recognition for their valuable contributions to their communities and unselfish dedication to help others.



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For more information on the certification program and the requirements, please contact Cecilia Berrios, Texas Department of Health, at 512/458-7405 or at CHW@tdh.state.tx.us or visit this Web site: www.tdh.state.tx.us/php/chw/chw.htm.



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