What is the smallpox vaccine?

Smallpox vaccine contains a weakened live virus called “vaccinia.” Vaccinia is a virus related to smallpox but does NOT cause the disease. After one dose of vaccine, about 95% of people develop protection within 5 to 10 days. Currently, in a pre-event setting, a booster dose is recommended every 10 years to maintain immunity.

The smallpox vaccine that is licensed in the U.S. is called ACAM2000. The vaccine is delivered in the upper arm by pricking the top layer of skin 15 times. The pricking is not deep and should not cause any active bleeding at the site.

Who should not get smallpox vaccine?

Prior to receiving the smallpox vaccine, individuals are required to complete the Smallpox Vaccination Screening Form. Individuals that should not receive the smallpox vaccine include those:

- » With a weak immune system due to disease, medication, or radiation therapy
- » With any previous history of eczema, atopic dermatitis or persistent skin rashes
- » With a current active case of the following skin conditions: (Once the skin condition is healed you may be vaccinated)
  - burns
  - impetigo
  - contact dermatitis
  - chickenpox
  - shingles
  - psoriasis
  - uncontrolled acne
  - an active case of herpes or any other open skin condition
- » Who are pregnant or could be pregnant
- » Who live with or have intimate contact with a person who has any of the above conditions
- » With serious heart or blood vessel conditions (such as angina, heart attack, coronary artery disease, congestive heart failure, stroke, other cardiac problems)
- » With at least 3 cardiac risk factors to include:
  - smoking
  - high blood pressure
  - high cholesterol
  - diabetes
  - family history of heart disease

Continued on following page ▶

USAPHC
U.S. ARMY PUBLIC HEALTH COMMAND
http://phc.amedd.army.mil

Report any illness or adverse event that may occur after vaccination to your healthcare provider or the Vaccine Adverse Events Reporting System (VAERS). You can submit a VAERS report online at http://vaers.hhs.gov/ or call 1-800-822-7967.

More information from Defense Health Agency Immunization Healthcare Branch (DHA IHB)

- **For clinical consultation, or more information about vaccines or policies:**
  Phone: 877.GET.VACC (877.438.8222) DSN 761.4245
  E-Mail: DoDvaccines@mail.mil
  Website: www.vaccines.mil
- **Civilian Healthcare Providers:**
  If military member presents to you for a condition that may be an adverse event caused by a military vaccination, please provide the appropriate care.
  For authorization and payment contact:
  The Military Treatment Facility (MTF) where the member is enrolled, OR contact the **Military Medical Support Office (MMSO)** 888.647.6676 if not enrolled to an MTF.

DHA
Defense Health Agency
Public Health Division
Immunization Healthcare
http://www.vaccines.mil

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Important Safety Information for You and Your Family

What You Need to Know About Smallpox Vaccine

What is smallpox?

Smallpox is a contagious and infectious disease caused by the variola virus. Smallpox can be deadly; resulting in death for about 3 out of 10 unvaccinated individuals. Survivors are often left with scars on their bodies and their eyes, resulting in blindness.

How does the smallpox virus spread and what are the symptoms?

The virus is usually spread by prolonged face-to-face contact with an infected person, by direct contact with infected body fluids or contaminated objects like clothing, towels, or bedding. Symptoms of smallpox begin with a high fever, head and body aches, and fatigue. A pustular rash typically develops 12 to 14 days after exposure lasting for about 3 weeks. A person infected with the smallpox virus is contagious from the time fever starts, but is most highly contagious when a rash begins. The infected person can spread the disease until the last scab falls off. There is no specific treatment to cure a smallpox infection, and the only way to prevent the disease is through vaccination.

Why is the Department of Defense vaccinating personnel?

Due to vaccination of the masses, smallpox was declared eradicated in 1980, and routine smallpox vaccination stopped. Although no cases of smallpox have been reported since the eradication, the potential exists for the virus to be used as a biological weapon by enemies of the U.S. The DoD began the current smallpox vaccination program in 2002 to protect personnel traveling to high threat areas.

Who is required to receive the vaccine?

Smallpox vaccination is mandatory for uniformed personnel deploying or assigned to the Korean Peninsula for 15 or more consecutive days. Vaccinations are also mandatory for some emergency-essential personnel and contractors, certain uniformed personnel assigned to special units, and comparable U.S. government civilian employees.

For more details on the specific criteria for each of these groups, please see applicable DoD and Service policies.

Who should not get smallpox vaccine? (continued from previous page)

- Using eye drops or ointment
- Who are breastfeeding
- With recent tattoos (30 days or less), tattoos must be healed before receiving the vaccine and no new tattoos should be gotten until the vaccination site is healed
- Who have had problems after previous doses or are allergic to the vaccine or any of its component

What should I expect the vaccination site to look like after receiving the vaccine?

If vaccination is successful, after 2 to 4 days a red and itchy bump will form at the vaccination site. Over the next few days, the bump becomes a blister and fills with pus. During the second week, the blister dries up and a scab forms. The scab falls off after 2 to 4 weeks, leaving a scar. The vaccine virus is present on the skin at the vaccination site for 30 days after vaccination and until the site is healed.

Smallpox Vaccination Site

Day 4	Day 7	Day 14

To verify proper vaccination, it is important for a healthcare provider to evaluate your vaccination site 6 to 8 days after receiving the vaccine. People vaccinated for the first time may have a larger reaction than those being revaccinated. Your site may not look exactly like the picture, because everyone responds differently to the vaccine. However, if your vaccination site does NOT look similar to one of the pictures above, on or between days 6 to 8 after vaccination, see your healthcare provider; you may need to be revaccinated. If you have any questions or concerns about the smallpox vaccination site, contact your healthcare provider.

How will I feel after vaccination?

Most individuals experience mild reactions that usually peak 3 to 12 days after vaccinations and rarely last more than 30 days. The most common reactions include:

- Itching at and around the vaccination site
- Swollen and/or sore lymph nodes in the armpit and neck
- Arm may become sore and red around vaccination site
- Fever, headache, and body ache
- Fatigue

On rare occasions individuals may experience more serious side effects that require immediate medical attention. If you experience any of the below symptoms it is important that you seek immediate medical care at the nearest medical facility.

- Rash or sores elsewhere on the body days to several weeks after vaccination
- Allergic reaction (hives, wheezing, or light headed) after vaccination
- A serious skin rash in people with eczema or atopic dermatitis
- Ongoing infection of skin with tissue destruction or site is unable to heal
- Confusion, paralysis, numbness, change in vision, or weakness of arm, leg, or face.
- Chest pain, rapid heartbeat, exercise intolerance, shortness of breath or any other heart symptoms within 30 days of vaccination. These symptoms may indicate an inflammation in and around the heart. Seek immediate medical care if you experience any of these symptoms.

Remember to inform your doctor that you recently received a smallpox vaccination. Contact the 24-hour DHA Immunization Healthcare Support Center at 877.GET.VACC (438.8222) and press Option 1 for immediate clinical consultation and register with the ACAM2000™ Myopericarditis Registry at 619.553.9255/DSN 553.9255 or NHRC-VaccineRegistry@med.navy.mil

Adverse events after vaccination should be reported to the Vaccine Adverse Events Reporting System (VAERS). Submit VAERS online at http://vaers.hhs.gov or call 1.800.822.7967.

How should I care for the vaccination site?

Remember the three "W's":

1. *Wear* a non-stick bandage that covers the vaccination site

2. *Wear* long sleeves to cover the bandage

3. *Wash* your hands!!

To reduce complications and spreading of the disease elsewhere on your body or to someone else:

- Keep site completely covered with a dry non-stick bandage (i.e., Band-Aid®, telfa™ pad); DO NOT use gauze
- Avoid directly touching the vaccination site
- Do NOT let others touch your vaccination site or materials that may have touched your blister; like clothing and bandages
- Keep site as dry as possible and when showering keep site covered
- Avoid swimming, wrestling, or other contact sports until site is healed
- Wash your hands frequently with soap and water or a alcohol- based hand sanitizer

Make sure you cover the site with a bandage and wear long sleeves to prevent scratching; especially in bed. Change your bandages frequently so surface remains dry. If you exercise enough to cause sweat to drip, use a waterproof or reinforced bandage. When not around others, you can leave the site uncovered; air drying will speed healing. Minimize close contact with infants until the site is healed; at least 30 days after vaccination.

Normal bathing can continue, but don't touch or scrub the vaccination site. Be careful when toweling off so as not to spread the virus to other parts of your body. Dry the site last by blotting with tissue, toilet paper, or paper towel. Discard used bandages and tissue paper in sealed or double plastic bags. You may add bleach, alcohol, or soap to the bag to kill the virus. Reapply a clean, dry bandage after showering and do not use creams or ointments; they will delay healing and can spread the virus.

Do not share clothes, towels, linen, or toiletries with others. To avoid the handling of these items by others, vaccine recipients should wash their own laundry in hot water with detergent.

Can the vaccine virus be sexually transmitted?

No, the virus is not passed through kissing or sex, and is not airborne. Although rare, transfer of the vaccine virus to a spouse and intimate partner has occurred. You can be intimate with your partner; however, be sure to follow all precautions as stated above, such as wearing a bandage and long sleeves; if the vaccination site is not properly covered, you may spread the virus to your partner. Be sure to thoroughly wash your hands before and after sexual contact.

What if I become pregnant within 4 weeks of my vaccination?

Women should avoid getting pregnant for 4 weeks after receiving the smallpox vaccination

A very rare complication of women vaccinated during pregnancy is called fetal vaccinia. There have been only three cases in the 20th century and no reported cases since the U.S. started the smallpox program in 2003. If you received the smallpox vaccine within 42 days from conception it is recommended you enroll in the National Smallpox Vaccine in Pregnancy Registry by calling 619.553.9255/DSN 553.9255 or email at NHRC-birthregistry@med.navy.mil. The registry will collect important health information and can answer the many questions from participants and their healthcare providers.

There is no specific treatment for smallpox disease, and the only prevention is vaccination.