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:

- Weak immune system due to disease, medication, or contact dermatitis
- Who live with or have intimate contact with a person who has any active case of the following skin conditions: (Once the skin condition is healed you may be vaccinated)
  - burns
  - impetigo
  - contact dermatitis
  - chickenpox
  - psoriasis
  - any other open skin condition
- Who are pregnant or could be pregnant
- With a current active case of the following skin conditions:
  - chickenpox
  - shingles
  - psoriasis
- With a current active case of the following skin conditions: (Once the skin condition is healed you may be vaccinated)
  - shingles
  - persistent skin rashes
  - scars
  - skin 15 times. The pricking is not deep and should not cause any active bleeding at the site.
- 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

Who is required to receive the vaccine?

- Individuals that complete the Smallpox Vaccination Screening Form. Individuals that
  - with a history of eczema, atopic dermatitis or uncontrolled acne
  - Uncontrolled acne
- 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

Why is the Department of Defense vaccinating personnel?

The DoD began the current smallpox vaccination program in 2002 to protect personnel traveling to high threat areas. The DoD began the event 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 deployed 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.
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, 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 1 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 tender lymph nodes in the armpit and neck
- Arm may become sore and red around vaccination site
- 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 2 to 4 days after vaccination
- Allergic reaction (hives, wheezing, or light headed) after vaccination
- Chest pain, rapid heartbeat, exercise intolerance, shortness of breath
- Confusion, paralysis, numbness, change in vision, or weakness of arm, leg, or face
- A serious skin rash in people with eczema or atopic dermatitis
- Rash or sores elsewhere on the body days to several weeks after vaccination
- 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 freely with soap and an alcohol-based hand sanitizer

To reduce complications and spreading of the disease elsewhere on your body, remember the three “W’s”:

- Wash your hands!!
- Wear a non-stick bandage that covers the vaccination site
- Avoid directly touching the vaccination site

How should I care for the vaccination site?

When vaccinated for the first time, you may need to be revaccinated. If you have any questions or concerns about the smallpox vaccination site, contact your healthcare provider.

Smallpox Vaccination Site

Day 4 Day 7 Day 14

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 National Immunization Registry at 619.553.9255 / DSN 553.9255 or http://vaers.hhs.gov or call 1.800.822.7967

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.

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 vaccination 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 2002. 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-Immunization@med.ri.mil. The registry will collect important health information and answer the many questions from participants and their healthcare providers.

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