

## INFORMATION PAPER

Military Vaccine Agency  
1 November 2013

SUBJECT: Smallpox Revaccination

1. Purpose: To provide guidance to Uniformed Service members on when smallpox revaccination is required.

2. Facts.

- a. The Smallpox Vaccination Program (SVP) was implemented in December 2002 to protect Service members from the biological threat of smallpox based on geographic area, occupation and other designated units.
- b. Smallpox vaccination is required for:
  - (1) Service members deploying to high threat areas (CENTCOM or Korea) for 15 or more consecutive days.
  - (2) U.S. Northern Command Chemical, Biological, Radiological, and Nuclear Response Enterprise (CBRNE) units.
  - (3) Military personnel and applicable civilians who are assigned to designated forces that constitute mission-critical capabilities or are smallpox epidemic response team members, assigned to medical teams at hospitals and clinics.
- c. Smallpox revaccination is required every 10 years to maintain current immunity.
- d. An individual receiving the initial smallpox vaccination will not be required the 10 year booster unless paragraph b applies. Revaccinations will not be permitted on a voluntary basis to personnel not in a required status.

3. Immunization

- a. Screen all potential vaccine recipients for eligibility for vaccination using standardized screening forms available from the Military Vaccine Agency at: [www.vaccines.mil](http://www.vaccines.mil). Provide all eligible vaccinees a medication guide and brochure before vaccination to educate them on the proper care of the vaccination site and to minimize potential risks associated with the vaccine. For both primary (naïve) vaccinees and re-vaccinees, administer a droplet of ACAM2000® with 15 jabs with a bifurcated needle by percutaneous route (scarification) on the skin of the arm just above the insertion of the deltoid muscle. After vaccination, individuals must follow specified site-care guidelines listed in the ACAM2000® Medication Guide approved by the FDA.
- b. About 95% of primary vaccinees are protected for 3 to 10 years or more depending on product and type of exposure. For certain individuals at high risk for exposure, such as research laboratory personnel handling variola virus, revaccination is recommended every 3 years. In the event of a smallpox outbreak, revaccination is recommended every

3 years. For individuals deemed to be at an increased risk, such as segments of the military, revaccination is recommended every 10 years.

- c. Revaccination timelines. All vaccinees should receive a booster dose of 15 jabs by percutaneous route if 10 or more years since last dose.

(1) Individuals who are required to remain vaccinated but are not in a deployment status may be vaccinated up to 6 months prior to booster dose due date. (para 2.b.2, 2.b.3)

(2) Individuals who are required vaccination due to deployment to a high threat area and will expire during the prescribed deployment timeframe may be revaccinated at mobilization. (para 2.b.1)

- d. Individuals who are revaccinees can expect to have less local and systemic side effects. On average they will develop very small blisters if any, which will heal at a much faster rate.
- e. Individuals originally vaccinated with Dryvax® will be revaccinated with ACAM2000®. Dryvax® is no longer licensed in the US it was replaced by ACAM2000®.

5. Caution. ACAM2000® is a live vaccinia virus that may be transmitted to persons who have close contact with the vaccinee. The risks of exposure to close contacts are the same as those stated for vaccinees. Vaccinees or their close contacts may be at risk for developing serious side effects from exposure to the vaccine so some re-vaccinees may be deferred depending upon the risk of exposure to them or their close contacts. Smallpox vaccinations should be deferred during pregnancy and until a woman has returned to full duty and is no longer breastfeeding. Screening for all known contraindications is required by DoD prior to all smallpox vaccination.

#### 6. Adverse Events.

- a. Common side effects include: pain, redness, warmth, and itching at the vaccination site. Swollen lymph nodes, fatigue, fever, muscle aches, and headache also occur. These side effects occur less frequently in revaccinated persons than persons receiving the vaccine for the first time. Inadvertent inoculation of other body sites such as the face, nose, mouth, lips, genitalia, and anus are the most frequent complication.
- b. Although less likely in the revaccinee, rare serious adverse events, such as myocarditis and pericarditis, encephalitis, encephalomyelitis, encephalopathy, progressive vaccinia, generalized vaccinia, severe vaccinia skin infections, erythema multiforme major, eczema vaccinatum, ocular complications, and fetal death, have occurred following either primary vaccination or revaccination with live vaccinia virus vaccines.
- c. Any suspect adverse event, autoinoculation and/or contact transfer should be reported to the Vaccine Health Care Centers Network for clinical consultation.

7. Special Considerations. Vaccinia virus can be spread from the vaccination site to other parts of the body or to close contacts through close physical contact. This can happen for up to 30 days after vaccination. Do not touch a smallpox vaccination site or dirty bandages; this is the best way to avoid spreading the virus. Frequent hand washing also helps prevent spread of the virus if the vaccination site is accidentally touched.

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Approved by LTC Carrillo