

MEMORANDUM

To: Inova Health System Disaster Preparedness Task Force

From: Dan Hanfling, MD, Director,
Emergency Management and Disaster Preparedness

Re: Health Care Work Force Pre-Event Smallpox Vaccination Strategy

Date: Nov. 21, 2002

Based on current information available from the recently convened Advisory Committee on Immunization Practices (ACIP) meeting held in Atlanta on Oct. 15-16, 2002, the following recommendations are likely to be approved by the White House regarding the distribution of smallpox vaccine for health care workers. Current information from the Virginia Department of Health, Deputy Commissioner for Emergency Preparedness suggests that the initiation of smallpox vaccine on a voluntary basis will commence mid-December 2002.

The vaccine will be released to approximately 500,000 health care workers (clinical and nonclinical), strictly on a voluntary basis, who may be most likely to be involved in the initial care of potential smallpox infected patients across the United States. This includes not only physician, nurse, tech, and specialty care staff, but also clerical support, housekeeping, engineering, and safety and security personnel.

The most complete nationwide vaccine safety data (1968) recently were reported by Breman and Henderson in *The New England Journal of Medicine*, April 25, 2002. This nationwide survey found that nine vaccinees died out of 14 million who received the vaccine in 1968. Other rare, but severe, adverse reactions to the vaccine included:

- **encephalitis:** 16 people/14 million (all 16 were first-time vaccinees).
- **progressive vaccinia:** 11 people/14 million.
- **eczema vaccinatum:** 66 people/14 million AND in another 60 persons with a history of eczema who were contacts of vaccinees.
- **generalized vaccinia:** 141 vaccinees/14 million AND in 2 contact cases.

The Centers for Disease Control and Prevention will establish a monitoring system to assess the vaccination program and assist with response to any possible side effects of the vaccine. Each hospital worker who receives the vaccine will be issued a personal identification number at the time of vaccination. Local and national experts in the fields of infectious disease, dermatology, allergy, and neurology will be identified to assist in this process. In the mid-Atlantic region, this will include specialists from Johns Hopkins University and the University of Maryland.

The following EXCLUSION criteria apply to smallpox vaccine receipt, and staff with any of these conditions should **NOT** receive smallpox vaccination:

- pregnancy;
- immunocompromised: steroids, transplants, cancer, HIV/AIDS;
- history of eczema (even if years ago and no longer active);
- active skin lesions including atopic dermatitis;
- household members with any of the above listed criteria;
- allergy to tetracycline, polymyxin, neomycin, streptomycin (contained in vaccine).

Recent scientific literature also suggests that those who have been previously vaccinated with the smallpox vaccine are less likely to exhibit the expected side effects of the current vaccine. Moreover, those who have been inoculated more than once are at even lower risk of incurring the vaccine side effects and are less likely to shed live virus from the inoculation site.