

TIP No. 042-1024

Smallpox Vaccine – Waste Management and Vaccine Transport Considerations

- 1. Scope.** This information paper provides general guidance for the classification, management, and disposal of wastes from smallpox vaccination events. This guidance pertains primarily to medical treatment facility (MTF) settings rather than a field or combat environment.
- 2. Classification.** The World Health Organization (WHO) classifies infectious agents by risk group. Risk Group 4 identifies the most severe and profoundly dangerous agents, including the variola virus which causes Smallpox. Risk Group 1 identifies the least severe and most commonly occurring and normally non-lethal agents. The smallpox vaccine contains the vaccinia virus which is classified as a Risk Group 2 virus. Because the vaccinia virus poses a lower risk than the variola virus, the wastes generated during the vaccination process are classified as Regulated Medical Waste (RMW).
- 3. Special considerations.** The medical literature is clear that people with specific medical conditions should avoid exposure to the vaccinia virus. These people might include custodial workers, waste haulers, waste disposal personnel and their family members who could accidentally be exposed to incorrectly managed wastes. Management and disposal of wastes from smallpox vaccination programs should prevent exposure of vaccinia contaminated items. For further guidance, contact Preventive Medicine, Infection Control or other medical authorities at your location.
- 4. Waste containers.** At the point of generation, put vaccination wastes in sharps containers or red bag RMW receptacles as appropriate. These containers **MUST** be managed as RMW for transportation, treatment, and disposal purposes. Use sharps containers for diluent syringes, bifurcated vaccination needles, and empty or expired vaccine vials. Use red bags for gauze used to wipe excess vaccine on the patient's vaccination site, any spill cleanup material and personal protective equipment (PPE) used for spill cleanup. Ensure the collection containers are managed and transported as RMW through the MTF in a manner preventing accidental exposure.

The following are not RMW: items that have never come in contact with the vaccine (such as wrappers, boxes, and packaging for the supplies and equipment), and those items with no potential for exposure to the vaccine. Manage these non-RMW wastes as ordinary trash to avoid unnecessary increases in volume (or weight) of RMW.

- 5. Movement within the MTF.** Follow locally developed protocols and use prescribed PPE, specified collection containers, and designated transportation routes through the MTF. Again, this waste must not be handled in a way that poses a risk of exposure to healthcare workers, support staff, and contractors who provide waste management services.

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6. Waste treatment and disposal. The current RMW treatment methods by the DHA waste contractor are satisfactory to inactivate the vaccinia virus. There is no reason to change or modify treatment or disposal procedures for RMW that contains waste from vaccination events.

7. Care of used bandages at home or in the barracks. Although medical waste management regulations and transportation requirements do not apply to household waste, there are considerations that should be made to protect personnel who may encounter the waste. After vaccination, the injection site is usually covered with a bandage or gauze. When that covering is removed, place it in a zip bag, seal, and discard in the regular trash. The scab should also be managed in the same manner when it, or portions of it, fall off. Additional information on patient care for a vaccination site can be found at the CDC web site at <https://www.cdc.gov/smallpox/vaccine-basics/who-gets-vaccination.html#care-for>

8. Transportation of the vaccine. To ship the vaccine by a commercial carrier (e.g., FedEx) to a subordinate MTF, ship the vaccine in the same manner as received. For example, if your MTF receives it as an Infectious Substance, then ship it to the supported MTF as an Infectious Substance [49 CFR 173.196(a) (1) (ii); 9 CFR Part 112]. Because the vaccine is a Licensed Biological Product, it may arrive at your organization packaged, marked, labeled, and described as a Biological Product [49 CFR 173.134(a) (1) (ii); 9 CFR Part 112]. However, if your organization is moving the vaccine with a vaccination team, then the vaccine can be transported using a government vehicle. Ensure the vaccine is contained in combination packaging, and the Materials of Trade exception in 49 CFR 173.6(a) (4) must be followed.

9. Point of Contact

If you have any questions, please contact the Waste Management Branch at 410-417-1337.