

DEPARTMENT OF THE ARMY

US ARMY MEDICAL MATERIEL AGENCY DMLC Building, 693 Neiman Street FORT DETRICK, MD 21702-5001

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DESTRUCTION OF VACCINE STANDARD OPERATING PROCEDURES (SOP)

1. PURPOSE: To provide procedural guidance for the proper disposal of compromised and/or expired vaccines distributed by the United States Army Medical Materiel Agency Distribution Operations Center (USAMMA-DOC).

2. REFERENCES:

- a. MEDCOM Regulation 40-35, Management of Regulated Medical Waste, 15 July 2014. https://phc.amedd.army.mil/topics/envirohealth/wm/Pages/DisposalGuidance.aspx.
- b. Disposal Guidance and Information by the Army Public Health Center. https://phc.amedd.army.mil/topics/envirohealth/wm/Pages/DisposalGuidance.aspx.
- c. Army Regulation 40–562, BUMEDINST 6230.15B, AFI 48–110_IP, CG COMDTINST M6230.4G, Immunizations and Chemoprophylaxis for the Prevention of Infectious Diseases, 7 October 2013.
- **3. APPLICABILITY:** The procedures contained herein are applicable to all Department of Defense (DoD) activities receiving anthrax, smallpox and adenovirus vaccine, and Department of the Army activities receiving seasonal influenza vaccine.
- **4. DISPOSAL REQUIREMENTS:** Regulated medical waste (RMW) is generated in the diagnosis, treatment, research, or immunization of human beings or animals and is capable of causing disease or which, if not handled properly, poses a risk to individuals or a community.
- a. RMW is also called "medical waste," "infectious waste," "biomedical waste," "non-hazardous waste," and "biohazardous waste." Terms will vary based on locality and host nations, States, or local laws.
- b. RMW is grouped by waste source. Group 1: Cultures, Stocks, and Vaccines include all discarded human and animal vaccines (empty and partially full).
- c. DoD activities are responsible for disposal of unopened vials, expired vials, unused doses, and/or compromised vaccine. Vaccines are to be disposed of according to accepted methods for RMW.
- **5. METHODS OF DISPOSAL:** The Military Item Disposal Instruction (MIDI) system provides methods of destruction for the disposal of non-hazardous waste and hazardous waste (HW) used within the Department of Defense (DoD).
- a. The focus of the MIDI database is on unused or expired items. The disposal information contained in the MIDI database is based on Federal regulations. State or local regulations may

be more stringent.

- b. Military item disposal instructions are categorized and delineated by code:
 - (1) Anthrax Vaccine Absorbed (AVA) = A003
 - (2) Smallpox (ACAM2000) Vaccine = A003
 - (3) Adenovirus Vaccine = CA01
 - (4) Seasonal Influenza Vaccine (injectable) = CA01
 - (5) Seasonal Influenza Vaccine (intranasal) = CA01
- c. Explanation for the disposal codes can be found in the Army Public Health Center Military Item Disposal Instructions (MIDI) website and database. https://phc.amedd.army.mil/topics/envirohealth/wm/Pages/MIDI.aspx.
- d. Some vaccines containing Thimerosal may be HW due to high mercury content. Contact the Environmental Science and Engineering Officer (ESEO) for proper waste characterization before discarding in the sharps container or turning them in to the pharmaceutical reverse distributor program.

6. SPECIAL DISPOSAL INSTRUCTIONS:

- a. Anthrax Vaccine Adsorbed (AVA): Considered non-hazardous waste.
- (1) All partially full or empty multi-dose vials of anthrax vaccine can be disposed of in a sharps container and the contents autoclaved or incinerated, if the facility has a biohazardous waste program.
- (2) Unopened multi-dose vials should be returned through a pharmaceutical reverse distributor program (i.e., Pharma-Logistics).
 - b. Smallpox (ACAM2000) Vaccine: Considered non-hazardous waste.
- (1) <u>Prior to reconstitution</u>: The distributer of smallpox vaccine labels the vials with an 18-month expiration date. After 18 months, the vaccine can be disposed of in a sharps container and the contents autoclaved or incinerated, if the facility has a biohazardous waste program. In places where medical waste is buried, soak the vaccine in a 1:10 dilution of bleach for at least 10 minutes prior to disposal. Unopened vials should be returned through a pharmaceutical reverse distributor program (i.e., Pharma-Logistics).
- (2) After reconstitution: Smallpox vaccine expires 30 days after reconstitution. The expiration clock begins on the date that the vaccine is mixed. After 30 days, the vaccine can be disposed of in a sharps container and the contents autoclaved or incinerated, if the facility has a biohazardous waste program. In places where medical waste is buried, soak the vaccine in a 1:10 dilution of bleach for at least 10 minutes prior to disposal.
 - c. Adenovirus Vaccine: Considered a non-hazardous waste.
- (1) All opened bottles of adenovirus can be disposed of in red bags and the contents autoclaved or incinerated, if the facility has a biohazardous waste program.
 - (2) Unopened bottles should be returned through a pharmaceutical reverse distributor

program (i.e., Pharma-Logistics).

- d. Seasonal Influenza Vaccine:
 - (1) Seasonal Influenza Vaccine (injectable):
- i. Manufacturer filled syringes Considered non-hazardous waste. Used syringes can be disposed of in a sharps container, then autoclaved or incinerated, if the facility has a biohazardous waste program. Unused syringes should be returned through a pharmaceutical reverse distributor program (i.e., Pharma-Logistics).
- ii. Multi-dose vials (MDV) Considered hazardous waste because these formulations contain thimerosal, a mercury derivative, added as a preservative. As a result, all used or partially used multi-dose vials of vaccine should be disposed of as hazardous waste in a black hazardous waste container. Unopened multi-dose vials should be returned through pharmaceutical reverse distributor program (i.e., Pharma-Logistics).
- (2) Seasonal Influenza Vaccine (intranasal): Used nasal mist vaccine dispensers can be disposed of in red bags, then autoclaved or incinerated, if the facility has a biohazardous waste program. Unused syringes should be returned through a pharmaceutical reverse distributor program (i.e., Pharma-Logistics).

Note: Do not discharge any of these items into a sanitary sewer.

e. State-by-State Regulated Medical Waste Resource Locator <u>www.hercenter.org/rmw/rmwlocator.cfm</u>

7. HOW TO PREPARE A DESTRUCTION DOCUMENT:

- a. Activities that already have a standardized destruction document in place do not need to prepare any additional destruction documents
- b. Activities that do not have a standardized destruction document must prepare a destruction document. Include the following information in the destruction document:
- (1) Date when the vaccine was destroyed.
- (2) List of the lot number(s) destroyed.
- (3) Number of unopened vials destroyed.
- (4) Method of destruction.
- (5) For Navy ships, where the vaccine was acquired, i.e., FISC, another ship (include ship name), etc.
- (6) Signature block, email, and phone number.
- c. Email or fax the destruction document to USAMMA-DOC:
 - (1) Email: <u>usarmy.detrick.medcom-usamma.mbx.doc@mail.mil</u>
 - (2) Fax: commercial (301) 619-4468, DSN 343-4468
- d. Activities will report vaccine inventories for destruction to their Service Medical Logistics Agency and Defense Health Agency Immunization Healthcare Specialist (IHS).

8. INSTRUCTIONS FOR ACTIVITIES UNABLE TO DISPOSE OF VACCINE AT THEIR FACILITY:

- a. Contact USAMMA-DOC and provide information regarding the lot numbers and quantity of vaccine. USAMMA-DOC will provide shipping guidance.
- b. Remove each vial of vaccine from its box. Tear or shred the package insert and box, and dispose of as regular waste.
 - c. Deface the label on each vaccine vial with a red permanent marker.
- d. The activity will pack the shipping container according to USAMMA-DOC instructions and mail the shipment to USAMMA-DOC at 693 Neiman Street, Fort Detrick, MD 21702-5001.
- e. The activity will call USAMMA-DOC at (301) 619-4318, 3017, 9539 and provide overnight express mail tracking number for the shipment.
- **9. QUESTIONS OR CONCERNS:** Personnel responsible for the disposal and/or destruction of vaccine(s) should address all questions or concerns to USAMMA-DOC at (301) 619-4318/3017, DSN 343-4318/3017, Fax (301) 619-4468, DSN 343-4468. Any proposed changes or updates to this SOP must be brought to the attention of USAMMA-DOC.

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