

FS No. 37-090-0822

## West African Clade Monkeypox Virus Waste Management

**BACKGROUND:** Multiple cases of the West African Clade Monkeypox Virus have appeared in the United States (U.S.), including States where Department of Defense military facilities are located.

**CLASSIFICATION:** Previous studies have defined two distinct Monkeypox clades (variants), West African and Congo Basin, with unique disease manifestations (i.e., how disease presents in people, the severity of its effects, and how readily it spreads). Human disease associated with West African Clade Monkeypox Virus infection is less severe and associated with less human-to-human transmission compared to infections with Congo Basin Clade Monkeypox Virus. Because of this, recommendations for managing waste contaminated with Monkeypox Virus differ based on the clade of the virus.<sup>1</sup>

**PURPOSE:** The purpose of this paper is to provide West African Clad Monkeypox Virus waste management guidance based on information provided by the Centers for Disease Control and Prevention (CDC) and the U.S. Department of Transportation (DOT). It will distinguish procedures for managing waste generated in a Medical Treatment Facility (MTF) and waste generated in a household setting, to include barracks.

Individual States have the authority to regulate infectious wastes generated in healthcare settings, and may impose additional requirements for West African Clade Monkeypox Virus waste management than presented in this paper. Check with your State's waste management department or public health office.

**WEST AFRICAN CLAD WASTE MANAGEMENT IN AN MTF:** Table 1 provides guidance for managing waste generated from patients infected with or suspected to be infected with the West African Clade Monkeypox Virus in a MTF. Links are provided for more detailed information on some topics.

**Table 1. Waste Generated in an MTF**

Topic	Management
Waste Classification	<p>The DOT indicates that waste contaminated with the <u>West African Clade</u> of Monkeypox Virus should be managed as UN3291 Regulated Medical Waste (RMW)* in the same manner as any other potentially infectious medical waste.<sup>1</sup></p> <p>Wastes normally considered to be RMW due to saturation or caked items would be classified as RMW from a Monkeypox patient. Wastes not contaminated enough to transmit disease (not saturated, dripping, caked) are not RMW.</p> <p>Note: * The Bloodborne Pathogen standard uses the term "regulated waste" to refer to the following categories of waste, which require special handling: (1) liquid or semi-liquid blood or Other Potentially Infectious Materials (OPIM); (2) items contaminated with blood or OPIM, which would release these substances in a liquid or semi-liquid state if compressed; (3) items that are caked with dried blood or OPIM and are capable of releasing these materials during handling; (4) contaminated sharps; and (5) pathological and microbiological wastes containing blood or OPIM.</p>
Waste Collection	<p>All red bags used to collect West African Clade Monkeypox Virus regulated waste will be leak-proof and puncture-resistant plastic bags. Title 49 CFR Section 173.197(e)(1)(i) requires that bags used for transport be marked and certified by the manufacturer to meet the 165 g Impact Strength ASTM D 1709-01 and 480 g Tear Strength ASTM D 1922-00a standards.</p> <p>Fill red bags to 2/3 capacity. Do not compact bags. Balloon tie, tape, or zip tie the red bags to prevent the release of any material from the bag if inverted. The closure method must not tear, puncture, or otherwise damage the bags.<sup>2</sup></p>

**Table 1. Waste Generated in an MTF (continued)**

Topic	Management
Environmental Infection control	<p>Implement standard cleaning and disinfection procedures using an U.S. Environmental Protection Agency (EPA)-registered hospital-grade disinfectant with an emerging viral pathogen claim. Products with Emerging Viral Pathogens claims may be found on EPA's List Q. Follow the manufacturer's directions for concentration, contact time, and care and handling.</p> <p>Detailed disinfection procedures can be found in the links below.  <a href="https://www.cdc.gov/poxvirus/monkeypox/clinicians/infection-control-healthcare.html#anchor_1653508896553">https://www.cdc.gov/poxvirus/monkeypox/clinicians/infection-control-healthcare.html#anchor_1653508896553</a>  <a href="https://www.epa.gov/pesticide-registration/disinfectants-emerging-viral-pathogens-evps-list-q">https://www.epa.gov/pesticide-registration/disinfectants-emerging-viral-pathogens-evps-list-q</a></p>

**WEST AFRICAN CLAD MONKEYPOX VIRUS WASTE MANAGEMENT IN A HOUSEHOLD SETTING:**

Table 2 provides guidance for managing waste generated from patients infected with or suspected to be infected with the West African Clade Monkeypox Virus in a household setting (to include barracks). Links are provided for more detailed information on some topics.

**Table 2. Waste Generated in a Household Setting**

Topic	Management
Waste Classification	<p>Management of waste from homes, including those people with the Monkeypox Virus isolating at home, should continue as normal. Municipal waste management systems routinely collect and dispose of waste materials from individuals with infectious diseases and can do so safely using existing procedures.</p> <p><a href="https://www.cdc.gov/poxvirus/monkeypox/specific-settings/home-disinfection.html">https://www.cdc.gov/poxvirus/monkeypox/specific-settings/home-disinfection.html</a></p>
Waste Collection	<p>The person with Monkeypox Virus should use a dedicated, lined trashcan in the room where they are isolating.</p> <p>Any gloves, bandages, or other waste and disposable items that have been in direct contact with skin should be placed in a separate sealed plastic bag, and then thrown away in the dedicated lined trashcan.</p> <p>The person with Monkeypox Virus or other household members should use gloves when removing garbage bags and the handling and disposing of trash.</p>
Environmental Infection control	<p>Implement standard cleaning and disinfection procedures using an EPA-registered hospital-grade disinfectant with an emerging viral pathogen claim. Products with <u>Emerging Viral Pathogens claims</u> may be found on EPA's List Q. Follow the manufacturer's directions for concentration, contact time, and care and handling.</p> <p>The links below provide specific procedures.  <a href="https://www.cdc.gov/poxvirus/monkeypox/specific-settings/home-disinfection.html">https://www.cdc.gov/poxvirus/monkeypox/specific-settings/home-disinfection.html</a>  <a href="https://www.epa.gov/pesticide-registration/disinfectants-emerging-viral-pathogens-evps-list-q">https://www.epa.gov/pesticide-registration/disinfectants-emerging-viral-pathogens-evps-list-q</a></p>

**REFERENCES:**

1. U.S. Department of Transportation. 2022. *Managing Solid Waste Contaminated with a Category A Infectious Substance*.  
<https://www.phmsa.dot.gov/transporting-infectious-substances/planning-guidance-handling-category-solid-waste>
2. Defense Health Agency. 2021. Procedures Manual 6050.01, *Medical Logistics (MEDLOG) Regulated Medical Waste (RMW) Management*.