

Colleagues,

On May 20, 2022, the Center for Disease Control and Prevention has issued a monkeypox alert to all clinicians. As of May 27, 2022, there has been multiple cases reported throughout the United States. A significant number of these patients had travelled overseas. While any individual can be infected with monkeypox, some of the most recent cases have been reported in the LGBTQ+ community.

Clinical Aspects

Monkeypox disease symptoms always involve the characteristic rash, regardless of whether there is disseminated rash. Historically, the rash has been preceded by a prodrome including fever, lymphadenopathy, and often other non-specific symptoms such as malaise, headache, and muscle aches. In the most recent reported cases, prodromal symptoms may not have always occurred; some recent cases have begun with characteristic, monkeypox-like lesions in the genital and perianal region, in the absence of subjective fever and other prodromal symptoms. Case fatality for monkeypox is reported to range between 1 and 11% depending on the strain of monkeypox.

Lesions are well circumscribed, deep seated, and often develop umbilication (resembles a dot on the top of the lesion). Lesions are relatively the same size and same stage of development on a single site of the body (ex: pustules on face or vesicles on legs). Other clinical distinguishing characteristics include, but not limited to:

- Fever before rash
- Lymphadenopathy common
- Disseminated rash is centrifugal (more lesions on extremities, face)
- Lesions on palms, soles of hands and feet
- Lesions are often described as painful until the healing phase when they become itchy (crusts), usually after Day 7 to 14.











Transmission

A person is considered infectious from the onset of symptoms and is presumed to remain infectious until lesions have crusted -and- when the crusts on the lesions have separated and a fresh layer of healthy skin has formed underneath. Human-to-human transmission occurs through large respiratory droplets and by direct contact with body fluids or lesion material. Respiratory droplets generally cannot travel more than a few feet, so prolonged face-to-face contact is required. Indirect contact with lesion material through fomites has also been documented. Animal-to-human transmission may occur through a bite or scratch, preparation of wild game, and direct or indirect contact with body fluids or lesion material. At this time, it is not known if airborne transmission has occurred in the most recent cases, but a *theoretical risk* of airborne transmission.

Treatment

There is no specific treatment for monkeypox virus infection, although antivirals developed for use in patients with smallpox may prove beneficial. At this time, health care providers with documented exposures have been offered post exposure vaccination with the Jynneos vaccine (available from CDC) which is the only FDA authorized vaccine for preventing monkeypox. Other antivirals are available (e.g. brincidofovir, tecovirimat) but there is only limited information on the efficacy of these agents against monkeypox. For those who have prior smallpox vaccination (e.g. military or more senior providers), some degree of protection is anticipated.

Exposed Healthcare Providers

Currently, CDC is NOT recommending furlough or quarantine for healthcare workers exposed to monkeypox. However, those individuals should be carefully monitored by their agency infection control or health department (e.g., persons under monitoring - PUM) for a total of 21 days.

Recommended PPE

MCEMS recommends strict contact and droplet precautions when caring for patients with suspected monkeypox. Specifically, the recommended PPE is eye protection, N95 or higher face mask, and gowns (if physical contact is made) with the patient or their surroundings. If a PAPR is available, MCEMS strongly recommends its use until further information on airborne spread from the most recent outbreak becomes available. Additionally, place patient into a gown/covering (including Tyvek suit, if available) and surgical face mask to minimize direct contact with clothing or visible lesions and droplet spread.

Environmental Decontamination

The U.S. Centers for Disease Control and Prevention (CDC) recommends disinfection of contaminated surfaces with 0.5% sodium hypochlorite or other EPA-approved high-level disinfectants. Incineration or autoclaving is appropriate for disposable items and materials.

Hospital Notification

Similar to our Ebola operations, EMS providers must provide notification to the receiving hospital of the patient with suspected monkeypox and NOT move the patient into a care area until the hospital is ready to receive the patient. POLICY continued: PAGE: MCEMS 052722–OPS 3 of 3







INITIAL ASSESSMENT AND TREATMENT

1. Before performing droplet-producing procedures (i.e. nasal or oral airways placement, use of nebulizers, bag-valve-mask (BVM) use, suctioning or endotracheal or i-Gel intubation), assure all EMS personnel are wearing appropriate PPE.

TRANSPORT

- 1. For patients in whom monkeypox is suspected, assure patient is placed into a gown/covering (including Tyvek suit, if available) and surgical face mask to minimize direct contact with clothing or visible lesions and droplet spread.
- 2. Turn on ambulance exhaust fans in the patient compartment to the highest possible setting. If feasible, open the outside air vents.
- 3. Alert receiving hospital personnel of the possibility of an infectious patient as soon as possible, and hold suspected infectious patients in the ambulance until either the ED or hospital staff is ready to receive them.

CLEANING AND DISINFECTION

- 1. EMS personnel cleaning equipment and patient care areas should wear full PPE including face and airway protection prior to initiating cleaning.
- 2. Upon completion of the call, use an approved U.S. Environmental Protection Agency (EPA) registered hospital disinfectant for any non-enveloped virus to thoroughly clean all equipment and all patient-care areas (including stretchers, railings, medical equipment control panels, and adjacent flooring, walls, and work surfaces).
- 3. After completing cleaning tasks, including cleaning and disinfection of reusable equipment, cleaning personnel should carefully remove and dispose of PPE. Dispose all contaminated PPE into proper red bag container.

Thank you for your continued hard work and dedication.

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