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CLINICAL BULLETIN			
Bulletin #	**Title**		**Date Issued**
#2022-08-11-01	Monkeypox Virus Infection in the United States and Other Non-endemic Countries—2022		August 11, 2022
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N/A	Maine EMS	Maine CDC, U.S. CDC	3
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Maine EMS is working collaboratively with the Maine Center for Disease Control and Prevention (Maine CDC) to monitor cases of monkeypox. Monkeypox is caused by infection with monkeypox virus. Monkeypox belongs to the Orthopox genus, which also includes smallpox and cowpox. Historically monkeypox cases in humans in the U.S. have been linked to international travel as well as imported animals. You can find updated resources regarding monkeypox on the Maine Center for Disease Control & Prevention's website.

Monkeypox is a zoonotic viral infection endemic to several Central and West African countries. Prior to May 2022, cases outside of Africa were reported either among people with recent travel to Nigeria or contact with a person with a confirmed monkeypox virus infection. In May 2022, several patients were confirmed with monkeypox in England; at least six were among persons without a history of travel to Africa and the source of these infections is unknown.

Epidemiologic risks for monkeypox

Epidemiologic criteria may be updated over time, please find the most up-to-date criteria at: https://www.cdc.gov/poxvirus/monkeypox/clinicians/case-definition.html

Currently, primary epidemiologic risks in the 2022 outbreak include persons who in the 21 days prior to symptom onset:

- Report having contact with a person or people with a similar appearing rash or who received a diagnosis of confirmed or probable monkeypox, OR
- Had close or intimate in-person contact with individuals in a social network experiencing monkeypox activity, this includes persons that have had close or intimate in-person contact with individuals in a social network experiencing monkeypox activity, this includes persons who meet partners through online platforms, digital applications ("apps") or social events (e.g., a bar or party) (NOTE: men who have sex with men (MSM) appear to be at higher risk based on this epidemiological risk factor); OR
- Traveled outside the US to a country with confirmed cases of monkeypox or where monkeypox virus is endemic, had contact with a dead or live wild animal or exotic pet that is an African endemic species, or used a product derived from such animals (e.g., game meat, creams, lotions, powders, etc.)

Key Characteristics for Identifying Monkeypox:

- Lesions are well circumscribed, deep seated, and often develop umbilication (resembles a dot on the top of the lesion) (examples below) 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)
- Fever before rash
- Swollen lymph nodes common
- Disseminated rash is centrifugal (more lesions on extremities, face)
- Lesions on palms, soles
- Lesions are often described as painful until the healing phase when they become itchy (crusts)

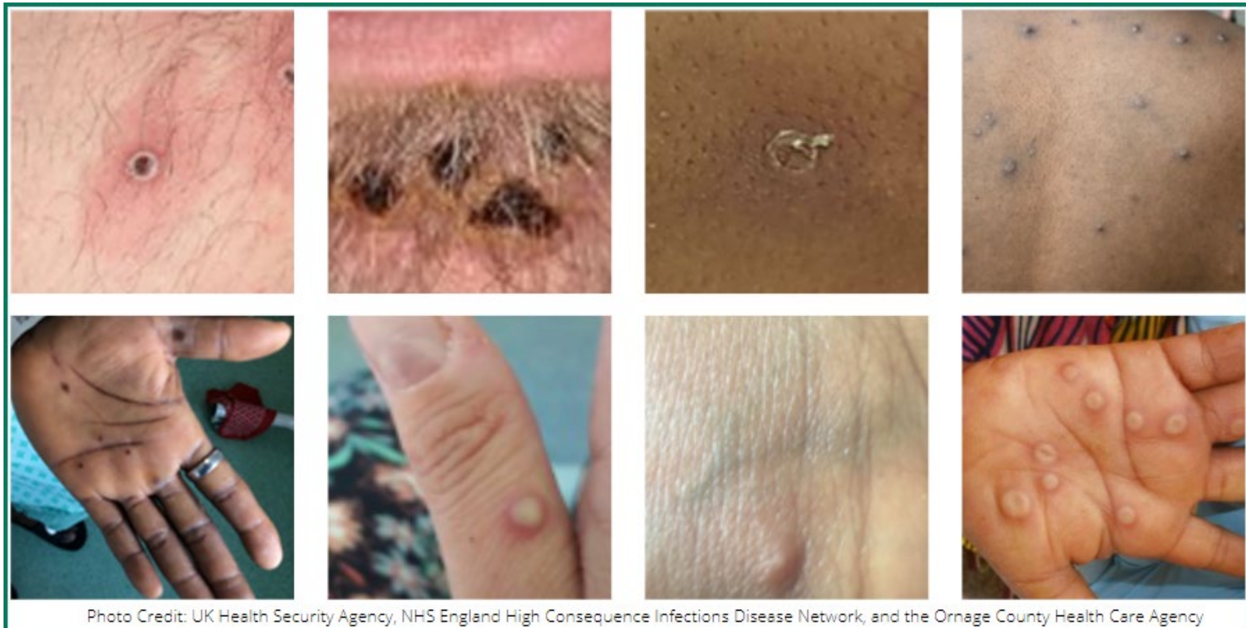

Photo Credit: UK Health Security Agency, NHS England High Consequence Infections Disease Network, and the Ornage County Health Care Agency

Based on recommendations from the U.S. CDC and the Maine CDC, Maine EMS, and the Medical Direction & Practices Board recommend the following:

1. Ask all patients presenting with signs and symptoms relevant to monkeypox about **recent travel or exposure**, particularly those with; fever, rash/lesions, headache, chills, muscle aches, exhaustion, or swollen lymph nodes (lymphadenopathy).
2. Identify patients under investigation for monkeypox (PUIs) using the following criteria:
    a. Clinicians should be alert to patients presenting with a new characteristic rash (The characteristic rash (see images above) associated with monkeypox lesions involve the following: deep-seated and well-circumscribed lesions, often with central umbilication; and lesion progression through specific sequential stages—macules, papules, vesicles, pustules, and scabs.; this can sometimes be confused with other diseases that are more commonly encountered in clinical practice (e.g., secondary syphilis, herpes, and varicella zoster). Historically, sporadic accounts of patients co-infected with *monkeypox virus* and other infectious agents (e.g., varicella zoster, syphilis) have been reported, so patients with a characteristic rash should be considered for testing, even if other tests are positive.)

OR

    b. Patients meeting one of the epidemiologic criteria (listed above) **AND** there is a high clinical suspicion for monkeypox.

If you identify a PUI, please take the following steps:

1. Separate the driver compartment from the patient compartment, if possible.
2. Place a surgical (simple) mask on the patient. (Clinically permitting)
3. Ensure staff are using appropriate personal protective equipment (PPE).
    a. Gown
    b. Gloves
    c. Eye protection (i.e., goggles or a face shield that covers the front and sides of the face)
    d. NIOSH-approved N95 respirator higher
4. Turn the exhaust fan on high in the patient compartment (if so equipped) and adjust air handling to introduce fresh air in both compartments if possible.
5. Exercise caution when performing aerosol-producing procedures (e.g., endotracheal intubation, airway suctioning, CPAP/BiPAP, CPR). Only perform these procedures if medically necessary and cannot be postponed.
6. Contact the receiving hospital before initiating the transport and utilize the term "PUI for monkeypox" during the consultation.
7. Standard cleaning and disinfection procedures should be performed on ALL potentially contaminated surfaces using an 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.
8. Soiled laundry (e.g., bedding, towels, personal clothing) should be handled using full-PPE, avoiding contact with lesion material that may be present on the laundry. Soiled laundry should be gently and promptly contained in an appropriate laundry bag and never be shaken or handled in manner that may disperse infectious material. Please refer to the receiving facility's staff and/or soiled linen policies if transporting a PUI.
9. All clinicians should use quality handwashing techniques to help protect themselves and their patients.