The Commonwealth of Massachusetts

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Memorandum

TO: Massachusetts Healthcare Providers, Hospitals and EMS
Local Boards of Health

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SUBJECT: Clinical and Laboratory Testing Guidance for Monkeypox

DATE: May 20, 2022

BACKGROUND:

On May 18, the Massachusetts Department of Public Health (MDPH) reported that a Massachusetts resident tested positive for monkeypox after returning to the U.S. from Canada. Since early May, global public health authorities have been reporting multiple clusters of monkeypox in several countries that do not typically report monkeypox, including Britain, Europe, Australia, and Canada. In most instances, these cases did not have the traditional risk factor, which is recent travel to an endemic country in West or Central Africa. Some recent case clusters have been identified in men who report sex with men (MSM). MDPH is urging healthcare providers to be alert for patients who have rash illnesses consistent with monkeypox.

ABOUT MONKEYPOX:

Monkeypox is a rare but potentially serious viral illness that typically begins with flu-like illness (fever, chills, malaise, headache, muscle aches) and swelling of the lymph nodes and progresses to a rash on the face and body. Most infections last 2-to-4 weeks. In parts of Central and West Africa where monkeypox occurs, people can be exposed through bites or scratches from rodents and small mammals, preparing wild game, or having contact with an infected animal or possibly animal products. The virus does not spread easily between people; transmission can occur through direct contact with body fluids and monkeypox sores, or indirect contact with fomites (items that have been contaminated with the

virus (clothing, bedding, etc.), or through large respiratory droplets following prolonged face-to-face contact.

Symptoms of monkeypox involve a characteristic rash. The rash is typically preceded by a prodrome including fever/chills, lymphadenopathy, and other non-specific symptoms such as malaise, headache, and muscle aches following an average incubation period of up to 21 days (typically 6-16 days). Some recent cases have begun with characteristic lesions in the genital/perianal region, and in the absence of subjective fever and other prodromal symptoms. For this reason, cases may be confused with more commonly seen infections (e.g., syphilis, chancroid, herpes, and varicella zoster).

Monkeypox lesions typically progress through specific stages—macules, papules, vesicles, and pustules—with the same stage present on a single site of the body, before scabbing and falling off. The rash appearance of monkeypox is very similar to that of smallpox, including a centrifugal distribution, appearing first on the face or genital area, and spreading to other parts of the body and may include lesions on the palms and soles. The characteristic lesions are deep-seated and well-circumscribed, often with central umbilication. Monkeypox can occur concurrently with other rash illnesses, including varicella-zoster virus and herpes simplex virus infections. The illness is usually mild and most of those infected will recover within a few weeks without treatment, with a case fatality rate between 1 and 11%. Initial laboratory testing for monkeypox is performed using real-time polymerase chain reaction assay on lesion material.

RECOMMENDATIONS FOR CLINICIANS:

Clinicians should consider monkeypox in patients with a new and otherwise unexplained skin rash (exhibiting macular, papular, vesicular, or pustular lesions; generalized or localized; discrete or confluent), who in the last 30 days,

1) traveled to a country where there is a current outbreak of monkeypox; OR

2) reports close contact with a person or people with confirmed or suspected monkeypox; OR

3) is a man (individual assigned male sex at birth) who has sex with men, or a transgender man who has sex with men, who regularly has proximate physical, sexual, or other close contact with other men, including encounters with individuals met through online dating applications or in social venues.

Suspected patients may present with a flu-like illness (e.g., fever, chills, malaise, headache, muscle aches) prodrome and new lymphadenopathy (periauricular, axillary, cervical, or inguinal). Illness could be clinically confused with a sexually transmitted infection like syphilis or herpes, or with varicella zoster virus.

Patients should be advised to stay home, avoid physical contact, mask in the presence of household contacts, and cover lesions as they await clinical care. Clinicians should generally rule out more common causes of rash illness before considering monkeypox, especially in people without known close contact to a case. Other diagnoses to consider include:

- herpes
- secondary syphilis
- chancroid
- varicella-zoster virus

Known close contacts of a case should be evaluated clinically while wearing full PPE (gloves, gown, respiratory protection, [N95 respirator or equivalent], and eye protection).

Anyone who is being tested for monkeypox is considered a Person Under Investigation (PUI) and must isolate pending test results. Isolation at home is preferred and means staying away from household members. Both PUI and household members should mask if they must be in the same room, and PUI should not share a bathroom if possible. Disinfection of high touch surfaces in a shared bathroom and kitchen between uses should be performed. Standard household cleaning/disinfectants may be used in accordance with the manufacturer's instructions.

LABORATORY TESTING AND SPECIMEN COLLECTION:

Preliminary testing for monkeypox virus infection is available at the State Public Health Laboratory (SPHL) with confirmatory testing available through the Centers for Disease Control and Prevention. Test requests MUST be pre-approved prior to sample submission. **Clinicians should contact the Division of Epidemiology at (617) 983-6800 with clinical information, including a complete exposure history, to discuss if testing is indicated.**

Personnel should wear appropriate barrier protection (N95 or equivalent respirator, gloves, gown, etc.) for specimen collection of suspected cases of monkeypox. Masks and eyewear or face shields should be used if splashing is anticipated.

Acceptable specimen types include:

- Dry swab of vesicular/pustular fluid and/or crust (diagnostic)
- Dry swab of lesion (diagnostic)
- Roof of vesicle or scab (diagnostic)
- Serum for serology (diagnostic)
- Throat swab (public health surveillance only)

Vigorously swab or brush lesion with two separate sterile dry polyester or Dacron OP type swabs with a plastic shaft (NP swabs are not preferred). Break off end of applicator of each swab into a 1.5- or 2-mL screw-capped tube with O-ring or place each entire swab in a separate sterile container. **Do not add or store in viral or universal transport media.**

Please collect multiple specimens as separate specimens are necessary for preliminary and confirmatory testing.

Samples should be maintained at 4^{o}C prior to and during shipment and should be packaged as Category B. Complete all fields on the submission form and ensure that the information on the form matches exactly the information on the specimen container. Place the form in the outer pocket of each specimen bag.

Transport should be arranged as soon as possible to the SPHL at 305 South Street, Jamaica Plain, MA 02130.

Questions should be directed to the MDPH Division of Epidemiology at (617) 983-6800 available 24/7.