2022 Health Advisory #11: Monkeypox Transmission and Detection in New York City

- Since May 18, 2022, 10 people with monkeypox have been identified in NYC. Most of the initial cases were likely infected during travel to Europe. However, recent cases report no travel and no exposure to a person who traveled, suggesting person-to-person transmission of the virus is occurring in NYC. Additional cases are expected.
- Monkeypox does not spread easily between people, but transmission can occur through close physical contact with infectious material from skin lesions of an infected person. It may also be transmitted through respiratory droplets in prolonged face-to-face contact, and possibly through fomites.
- The majority of NYC and US reported cases, and reported cases in other countries experiencing recent outbreaks, are among gay, bisexual and other men who have sex with men, and the locations of some of the presenting lesions are the genital and perianal regions, suggesting transmission during sexual contact.
- Monkeypox typically presents with a febrile prodrome 5 to 13 days after exposure, which often includes lymphadenopathy, malaise, headache, and myalgia, followed 1 to 4 days later by the onset of a characteristic deep-seated, vesicular or pustular skin rash with lesions that are well circumscribed and often umbilicate. However, some recent cases have begun atypically, with lesions in the genital and perianal region and without subjective fever or other prodromal symptoms and may be mistaken for varicella zoster or sexually transmitted infections (e.g., syphilis, genital herpes). Co-infections with monkeypox and other infectious agents that can cause a rash (e.g., syphilis, herpes simplex) have been reported.
- Treatment is mainly supportive. However, the antiviral tecovirimat (also known as TPOXX) is available for use as an investigational new drug (IND) for people with severe disease or who are early in the course of illness but are severely immunocompromised and therefore at risk for severe disease.
- Smallpox vaccine can be considered for post-exposure prophylaxis of close contacts at increased risk for severe disease and should be given within four days of the exposure, but may be given up to 14 days of exposure.
- Providers must call the NYC Department of Health and Mental Hygiene Provider Access Line (PAL) at 1-866-692-3641 to report suspected cases; the Health Department will provide consultation and assistance with monkeypox testing when indicated.
- Visit the NYC Department of Health and Mental Hygiene and CDC websites for more information about monkeypox, including guidance on social gatherings and safer sex.

June 10, 2022

Dear Colleagues,

This advisory presents recent updates and epidemiologic findings on the detection of monkeypox disease among residents of NYC and several states and offers information on reporting suspect cases to the NYC Department of Health and Mental Hygiene (Health Department), infection control, and specimen collection.
Since May 18, 2022, 10 people in NYC have been diagnosed with monkeypox; all are males ages 27 to 50 years. Most cases were likely infected during recent travel to Europe. However, recent cases report no travel, suggesting person-to-person transmission of the virus is occurring in NYC. More cases are expected. In NYC and elsewhere the majority of reported cases are among gay, bisexual, and other men having sex with men (MSM), though anyone who has been in close contact with someone who has monkeypox is at risk. The locations of some of the presenting lesions are the genital and perianal regions, suggesting transmission occurred during sexual contact.

A recent MMWR from the Centers for Disease Control and Prevention (CDC) titled Monkeypox Outbreak — Nine States, summarizes the initial 17 cases detected in 9 states (California, Colorado, Florida, Georgia, Massachusetts, New York, Utah, Virginia, and Washington) as of May 31. Fourteen of the 17 patients reported international travel involving 11 different countries during the 21 days preceding symptom onset, and 16 of the 17 patients identified as MSM. In addition to skin rash, patients reported chills (12) fatigue or malaise (11), and lymphadenopathy (nine); fever was reported in seven patients. Twelve patients reported prodromal symptoms before rash onset such as fatigue, fever, or headache. Among eight patients, the rash started in the genital or perianal area. All but one patient developed a disseminated rash, occurring on the arms, trunk, legs, and face.

Monkeypox typically presents with a febrile prodrome 5 to 13 days after exposure (range: 4 to 17 days), which often includes lymphadenopathy, malaise, headache, and myalgia, followed 1 to 4 days later by the onset of a characteristic deep-seated, vesicular or pustular skin rash with a centrifugal distribution. The lesions are well circumscribed and often umbilicate or become confluent, progressing over time to scabs. Some recent cases have begun atypically, with lesions in the genital and perianal region and without subjective fever or other prodromal symptoms. Coinfection with monkeypox and other infectious agents that can cause a rash (i.e., syphilis, herpes simplex) have been reported.

Reporting People Suspected for Monkeypox
Providers are required to immediately report suspected and confirmed cases of monkeypox to the NYC Health Department. Providers should report:

- Patients with a clinically compatible rash (as described below) and who within the 21 days before symptom onset meet any of the following criteria:
  - Are men who had close physical contact (sexual contact, kissing, touching, or other close physical contact) with multiple or anonymous other men in connection with social settings (e.g., clubs, raves, saunas) or connections made through an online website or digital application;
  - Anyone who had multiple anonymous sexual partners; or
  - Anyone who had contact with a person who was diagnosed with suspect or confirmed monkeypox.
- Patients with a characteristic monkeypox lesion that is deep-seated, well-circumscribed and with central umbilication.

A clinically compatible rash associated with monkeypox characteristically evolves from macules, papules, vesicles, and then pustules, which eventually form scabs that dry and fall off. In its latter stages the rash tends to be firm, deep, well circumscribed and umbilicated; however, depending on when the patient presents, the progression of the rash may not appear to fit this pattern, especially if lesions are in the early stages of progression (see images below). Among recent monkeypox infections, a prodromal illness has not always
preceded the onset of the rash, and lymphadenopathy has not been consistently reported; neither is required for consideration for testing.

Providers with a suspected case of monkeypox must immediately contact the NYC Health Department by calling the Provider Access Line at 1-866-692-3641. Staff will assist with monkeypox evaluation and with determining whether testing is indicated. At this time, testing can only be performed at the NYC Public Health Laboratory, and submissions must be performed using eOrder. General instructions for collecting, storing and transporting specimens can be found here and additional detailed instructions will be provided at the time testing is authorized. Testing at PHL consists of rtPCR to detect Orthopoxvirus, which, if detected, is assumed to be monkeypox virus in the context of the current outbreak. Specimens will be sent to CDC for confirmation; however, a positive Orthopoxvirus result is sufficient for diagnosis of monkeypox.

Managing People with Suspected or Confirmed Monkeypox
Patients should be counseled that if monkeypox testing results are positive, they will receive a call from their provider. Patients with monkeypox (or while they are awaiting test results) who do not require hospitalization should isolate in a room or area separate from other family members and pets until all lesions have resolved, the scabs have fallen off, and a fresh layer of intact skin has formed. Home isolate on guidance can be found on the CDC Clinician FAQ webpage under question 10 “When a patient is isolating in their home, what should they do?”

The NYC Health Department will conduct contact tracing with the patient and facilitate symptom monitoring and the administration of post-exposure prophylaxis (PEP) to contacts when indicated.

Treatment is mainly supportive. However, the antiviral tecovirimat (also known as TPOXX) is available for use as an investigational new drug (IND) for people with severe disease or who are early in the course of illness but are severely immunocompromised and therefore at risk for severe disease.

Management of Case Contacts – Symptom Monitoring and Post-Exposure Prophylaxis
When a person tests positive for Orthopoxvirus at PHL, the NYC Health Department will work with the patient to identify contacts of cases. An assessment will be made based on the type of exposure each potential contact had. People with a high or intermediate exposure risk (e.g., sexual or close physical contact) will be monitored daily for symptoms for 21 days from the date of the last exposure. In addition, PEP using a smallpox vaccine (JYNNEOS™) may be offered through the Health Department. PEP should be administered within 4 days of exposure to prevent disease, but may be given up to 14 days after exposure. If given 5 to 14 days after the exposure, vaccination may reduce symptoms but may not prevent disease.

For more information on infection prevention and control of monkeypox, please visit the CDC website on Infection Control.

Celia Quinn, MD, MPH
Deputy Commissioner, Division of Disease Control
Photo credit: UK Health Security Agency

Additional Resources

NYC Health Department https://www1.nyc.gov/site/doh/health/health-topics/monkeypox.page
CDC https://www.cdc.gov/poxvirus/monkeypox/index.html