June 13, 2022

Update: Georgia Department of Public Health Reminds Clinicians to be Prepared to Identify, Isolate and Inform Due to Recent Monkeypox Cases

Summary

- Scientists at the Centers for Disease Control and Prevention (CDC) are tracking multiple cases of monkeypox that have been reported in several countries that don't normally report monkeypox (view global map), including the United States. Suspicion for monkeypox should be heightened if the rash occurs in people who 1) traveled to countries with recently confirmed cases of monkeypox or countries where monkeypox activity has been ongoing, 2) report having had contact with a person or people who have a similar appearing rash or received a diagnosis of confirmed or suspected monkeypox, 3) had skin-to-skin contact with someone in a social network experiencing monkeypox activity such as men who have sex with men, or 4) had contact with dead or live wild animal or exotic pet that exists only in Africa or used a product derived from such animals (e.g., game meat, creams lotions, powders, etc.).

- Lesions may be disseminated or located on the genital or perianal area alone. Some patients may present with proctitis, and their illness could be clinically confused with a sexually transmitted infection (STI) like syphilis or herpes, or with varicella zoster virus infection. If patients had recent sexual contact, testing and treatment for STIs should occur.

- Providers can review Georgia's Travel Clinical Assistant to identify areas where monkeypox outbreaks have occurred, https://dph.georgia.gov/TravelClinicalAssistant

- Clinicians who suspect monkeypox should immediately call 866-PUB-HLTH (1-866-782-4584) and request to speak with a medical epidemiologist for consultation.

Background

Since May 14, 2022, monkeypox cases have been reported in multiple countries that don't normally have monkeypox. Although previous cases outside of Africa have been associated with travel from Nigeria, most of the recent cases do not have direct travel-associated exposure risks to countries where monkeypox is typically transmitted, but instead may be related to close or intimate contact. Anyone who has been in close contact with someone who has monkeypox is at risk.

Monkeypox is a zoonotic infection endemic to several Central and West African countries. The wild animal reservoir is unknown. Before 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. However, in May 2022, nine patients were confirmed with monkeypox in England; six were among persons without a history of travel to Africa and the source of these infections is unknown.

Monkeypox disease symptoms almost 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. For this reason, cases may be confused with more commonly seen infections (e.g., syphilis, chancroid, herpes, and varicella zoster). The average incubation period for symptom onset of monkeypox is 5–13 days.

The typical 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. Synchronized progression occurs on specific
anatomic sites with lesions in each stage of development for at least 1–2 days. The scabs eventually fall off. Lesions can occur on the palms and soles, and when generalized, the rash is very similar to that of smallpox including a centrifugal distribution. Monkeypox can occur concurrently with other rash illnesses, including varicella-zoster virus and herpes simplex virus infections. Case fatality for monkeypox is reported to range between 1 and 11%. Confirmatory laboratory diagnostic testing for monkeypox is performed using real-time polymerase chain reaction assay on lesion-derived specimens.

A person is considered infectious from the onset of symptoms and is presumed to remain infectious until lesions have crusted, those crusts 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.

There is no specific treatment for monkeypox virus infection, although antivirals developed for use in patients with smallpox may prove beneficial. Persons with direct contact (e.g., exposure to the skin, crusts, bodily fluids, or other materials) or indirect contact (e.g., presence within a six-foot radius in the absence of an N95 or filtering respirator for ≥3 hours) with a patient with monkeypox should be monitored by health departments; depending on their level of risk, some persons may be candidates for post-exposure prophylaxis with smallpox vaccine under an Investigational New Drug protocol after consultation with public health authorities.

**Recommendations for Clinicians**

- The risk of monkeypox in Georgia is still very low, but, if clinicians identify patients with a rash that could be consistent with monkeypox (see above for additional details about disease presentation), especially those who meet one of the epidemiologic criteria established by CDC (https://www.cdc.gov/poxvirus/monkeypox/clinicians/case-definition.html), monkeypox should be considered as a possible diagnosis. Additional FAQs for clinicians about monkeypox can be found at https://www.cdc.gov/poxvirus/monkeypox/clinicians/faq.html
- Information on infection prevention and control in healthcare settings is provided on the CDC website: Infection Control: Hospital | Monkeypox | Poxvirus | CDC.
- Clinicians in Georgia who suspect monkeypox in a patient and would like to pursue testing should call 866-PUB-HLTH (1-866-782-4584) and request to speak to a medical epidemiologist for consultation. Detailed specimen collection guidance is listed below, however this information is subject to change with the evolving outbreak so please consult with a DPH medical epidemiologist.
- If the course of clinical assessment indicates it is safest to collect specimen prior to approval by a DPH epidemiologist, specimens can be collected if the situation warrants (please call 866-PUB-HLTH for immediate assessment). Please retain specimens per instructions below and await approval for testing of any suspect cases. If the specimen are not approved for testing, they may be disposed of by your facility or used for other testing, as appropriate.
- Once testing is approved by a medical epidemiologist, shipping instructions to the public health lab and paperwork will be provided, the specimen guidance below should be followed:
  - Molecular Testing (indicated for most acute cases):
    - Sample type: Vesicle fluid, skin, crust, "roof"
    - More than one lesion should be sampled, preferably from different locations on the body and/or from lesions with differing appearances.
    - Duplicate swabs should be taken from each lesion sampled – the purpose of this is so that there are 2 swabs from each lesion, 1 to be tested at the state public health lab and, if positive, 1 to forward to CDC for confirmation from the same lesion. Please package each swab separately.
▪ Dry or wet swab of lesion (dry swab is preferred)
  • Swab at least two lesions, with two swabs collected per lesion. This will result in two separate swabs per lesion. (Note: please store and package swabs separately, one swab per container).
  • Use a separate sterile nylon, polyester, or Dacron swab with plastic or thin aluminum shaft for each collection. Do not use other types of swabs than described here.
  • Place each swab in an individual collection tube or any dry, sterile container. Write site of collection on each container and indicate swab 1 or 2 (ex. “right forearm swab 1” and “right forearm swab 2”).
  • Refrigerate (2-8°C) or freeze (-20°C or lower) specimens within an hour after collection. Specimens only should be frozen if shipment will be delayed more than 24-48 hours.
  • Other acceptable molecular samples, but swabs are PREFERRED, non-swab submissions will need to be reviewed on a case-by-case basis
    • Touch prep (slide) of lesion
    • Fresh biopsy of pustule or vesicle (no formalin)
      ○ Serology Testing (not standard, does not need to be collected in most acute cases):
        ▪ Sample type: Serum, minimum of 0.5 mL; 1 mL preferred
        ▪ Use blood collection tubes containing a clot activator and/or gel for serum separation. Separate and aliquot serum prior to storage and transport. Refrigerate (2-8 °C) or freeze (-20 °C or lower) specimens within an hour after collection.
  • In addition to infection control protocols linked above to be used while a patient is in a health care facility, patients being tested for monkeypox who are well enough to be discharged home, should isolate from others until results are returned. If approved for testing, a person will also be contacted for daily monitoring by public health officials and may be issued an isolation order, details of this isolation order can be discussed at the time of clinical assessment based on the patient’s individual situation.
    ○ Persons who are under suspicion of monkeypox should not take public or shared transportation while test results are pending (ex. public transportation, Uber, Lyft, or other rideshare programs). Please consult with the medical epidemiologist about alternative options for patients approved for testing who may need assistance.

For More Information

▪ CDC Monkeypox Website (including information on signs, symptoms, and infection control): https://www.cdc.gov/poxvirus/monkeypox/index.html
▪ The National Emerging Special Pathogens Training and Education Center (NETEC) has the following information available about Monkeypox.
  ○ For EMS: https://netec.org/2022/05/19/ems-response-to-the-current-outbreak-of-monkeypox/
  ○ For healthcare: https://netec.org/2022/05/19/outbreak-update-monkeypox-outbreak-in-the-us/