



May 20, 2022

**TO:** Healthcare Providers, Hospitals, Local Health Departments, Laboratories, Sexual Health Providers, Family Planning Providers, Emergency Rooms, Community Health Centers, College Health Centers, Community-Based Organizations, and Internal Medicine, Family Medicine, Pediatric, Adolescent Medicine, Dermatology, Infectious Disease, and Primary Care Providers

**FROM:** New York State Department of Health (NYSDOH) Bureaus of Communicable Disease Control (BCDC) and Healthcare Associated Infections (BHA), New York City Department of Health and Mental Hygiene (NYCDOHMH) Division of Disease Control

**HEALTH ADVISORY: MONKEYPOX CASES NOT ASSOCIATED WITH TRAVEL TO AREAS WHERE MONKEYPOX IS ENZOOTIC**

**SUMMARY**

- See attached HAN from the Centers for Disease Control and Prevention (CDC): Monkeypox Virus Infection in the United States and Other Non-endemic Countries—2022
- Monkeypox is an uncommon zoonotic viral disease found in Central or West Africa.
- People diagnosed with monkeypox outside of Africa rarely have been reported and typically are associated with travel or exposure to an infected animal.
- Since May 14, 2022, multiple people diagnosed with monkeypox have been reported in several countries that don't normally have monkeypox, including the United Kingdom, Spain, Portugal and Canada.
- On May 18, 2022, a case of monkeypox was confirmed in a resident of Massachusetts following travel to Canada.
- On May 19, 2022, the New York City (NYC) Health Department began investigating two NYC residents for possible monkeypox infection. Preliminary testing at NYC Public Health Lab ruled out one of the cases. The other was positive for orthopox virus and had an illness consistent with monkeypox. The patient is isolating and contact investigation is underway.
- At this time, the source of infection for the recent cases outside of Africa has not been established.
- Regardless of gender or sex of sex partner(s), providers should be alert for patients who have rash illnesses consistent with monkeypox, regardless of whether they have travel or specific risk factors for monkeypox.
- Clinicians suspecting monkeypox infection should strictly adhere to infection control practices and immediately contact their local health department (LHD) to coordinate testing.

- Testing for monkeypox can be performed at NYSDOH Wadsworth Center and the NYC Public Health Laboratory.

## REPORTING

Healthcare providers must immediately report suspect cases of monkeypox to their local health department (LHD). Reporting should be to the county where the patient resides.

New York City residents suspected of monkeypox infection should be reported to the NYC Health Department Provider Access Line (PAL) at 866-692-3641. Outside of New York City, contact information is available at: [https://www.health.ny.gov/contact/contact\\_information](https://www.health.ny.gov/contact/contact_information).

If you are unable to reach the LHD where the patient resides, please contact the NYSDOH Bureau of Communicable Disease Control at 518-473-4439 during business hours or 866-881-2809 evenings, weekends, and holidays.

## TESTING

Testing for monkeypox is available at NYSDOH Wadsworth Center Biodefense Laboratory and the New York City Public Health Laboratory. Specimen collection and submission must be coordinated with the local health department and/or NYSDOH. Within NYC, coordination must be done in consultation with the NYC Health Department.

### Specimen Collection

	<i>FOR SPECIMENS COLLECTED FROM NYS RESIDENTS AND TESTED AT THE NYSDOH WADSWORTH CENTER</i>	<i>FOR SPECIMENS COLLECTED FROM NYC RESIDENTS AND TESTED AT THE NYC PUBLIC HEALTH LABORATORY</i>
Specimen Types	1. Dry Swab (two for each lesion) 2. Lesion Cap	1. Dry Swab ONLY (two for each lesion)
Collection	Collect multiple specimens for preliminary and confirmatory testing as follows: 1) Vigorously swab or brush lesion with two separate sterile dry polyester or Dacron swabs; 2) 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.  Sterile 1.5 to 2mL plastic screw cap tube for each lesion caps.	Two separate dry swabs (either polyester, nylon, or Dacron) should be used to collect infected cells from the base of the open lesion (do NOT use viral transport media) and placed and transported in a sterile container (conical tube or urine cup).
Submission information	A <a href="#">Wadsworth Center Infectious Disease Request Form</a> <b>must</b> accompany all samples; Remote Order Entry on the Health Commerce System is preferred.  Label all tubes and swab holders with the patient's name, unique identifier, date of collection, source of specimen	A <a href="#">New York City Public Health Test Requisition (available upon request)</a> <b>must</b> accompany each sample/collection site.  Label all tubes and swab holders with the patient's name, unique identifier, date of collection, source of specimen

	(vesicle/pustule) and name of person collecting the specimen.	(vesicle/pustule), collection site, and name of person collecting the specimen.
Shipping Address	Dr. Christina Egan DAI 3021, Biodefense Laboratory, Wadsworth Center, NYS Dept. of Health 120 New Scotland Avenue Albany, NY 12208	Dr. Scott Hughes New York City Public Health Lab Biothreat Response Unit 455 1 <sup>st</sup> Avenue New York, NY 10016
Questions	Call the Wadsworth Center Biodefense Laboratory at 518-474-4177 (business hours) or the duty officer 866-881-2809 (after hours).	Call the NYC Biothreat Response Laboratory at 212-671-5834 (business hours) or Poison Control at 212-764-7667; ask for PHL duty officer (after hours).

## Specimen Collection

To collect vesicular and pustular material:

1. Sanitize the patient's skin with an alcohol wipe and allow skin to dry.
2. For the lesions caps (NYS ONLY), use a sterile disposable scalpel, remove the lesion cap and transfer it to a dry, 1.5- to 2-mL sterile screw-capped tube. Label the tube with the patient's name and date of birth.
3. For the dry swabs (NYC and NYS) label a swab holder and remove swab from the outer sheath. Collect cells from the lesion base by 1) vigorously swabbing or brushing lesion with two separate sterile dry polyester or Dacron swabs; 2) 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.
4. Repeat this process on different lesions.
  - a. For NYS there should be two specimens collected for each sample type from each lesion: two plastic tubes, one containing the lesion cap, and one containing the two swabs from that lesion.
  - b. For NYC there should be two swabs for each lesion
5. After specimen collection is completed all protective materials worn by the specimen collector (gloves, mask, gown, etc.) and all used sample collection materials (alcohol wipes, holders, etc.) must be placed in red biohazard bags and autoclaved or incinerated prior to disposal. Needles, blades, etc. used to open vesicles should be disposed of in an appropriate sharps container. **Thorough hand-washing using soap** should be done immediately after specimen collection and following removal of personal protective equipment.
6. Other sample types such as serum and whole blood may also be requested.

Please note: Monkeypox virus can be cultivated in several cell culture types routinely used by the viral testing laboratory. Although laboratories should not attempt to isolate this virus, if you become aware that your laboratory has isolated monkeypox using cell culture, you should **immediately** contact the Wadsworth Center or the NYC PHL.

## INFECTION CONTROL GUIDELINES

A combination of **Standard, Contact, and Droplet Precautions** should be applied in all healthcare settings when a patient presents with fever and vesicular/pustular rash. In addition,

because of the theoretical risk of airborne transmission of monkeypox virus, **Airborne Precautions** (i.e., **caring for a patient in a negative-pressure airborne infection isolation room (AIIR)**) **should be applied whenever possible**. If a patient presenting for care at a hospital or other health care facility is suspected of having monkeypox, infection control personnel should be notified immediately.

For more information on infection prevention and control of monkeypox, please visit the CDC website for this situation at <https://www.cdc.gov/poxvirus/monkeypox/outbreak/current.html> or the monkeypox main information page at <https://www.cdc.gov/poxvirus/monkeypox/index.html>.

This is an official  
**CDC HEALTH ADVISORY**

Distributed via the CDC Health Alert Network  
May 20, 2022, 11:30 AM ET  
CDCHAN-0466

**Monkeypox Virus Infection in the United States and Other Non-endemic Countries—2022**

**Summary**

The Massachusetts Department of Public Health and the Centers for Disease Control and Prevention (CDC) are investigating a confirmed case of monkeypox in the United States. On May 17, 2022, skin lesions that had several features suspicious for monkeypox—firm, well circumscribed, deep-seated, and umbilicated lesions—on a Massachusetts resident prompted specialized Laboratory Response Network (LRN) testing of swab specimens collected from the resident; preliminary testing confirmed the presence of DNA consistent with an orthopoxvirus using Orthopoxvirus generic and non-variola Orthopoxvirus real-time polymerase chain reaction (PCR) assays. This group of viruses includes monkeypox virus (the causative agent of monkeypox). Testing at CDC on May 18 confirmed the patient was infected with a West African strain of monkeypox virus. The patient is currently isolated and does not pose a risk to the public.

Cases of monkeypox have previously been identified in travelers from, or residents of, West African or Central African countries where monkeypox is considered to be endemic. CDC is issuing this Health Alert Network (HAN) Health Advisory to ask clinicians in the United States to be vigilant to the characteristic rash associated with monkeypox. Suspicion for monkeypox should be heightened if the rash occurs in people who 1) traveled to countries with recently confirmed cases of monkeypox, 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, or 3) is a man who regularly has close or intimate in-person contact with other men, including those met through an online website, digital application (“app”), or at a bar or party. 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.

**Background**

Since May 14, 2022, clusters of monkeypox cases, have been reported in several 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. The United Kingdom Health Security Agency (UKHSA) was the first to announce on May 7, 2022, identification of a recent U.K. case that occurred in a traveler returning from Nigeria. On May 14, 2022, UKHSA announced an unrelated cluster of monkeypox cases in two people living in the same household who have no history of recent travel. On May 16, 2022, UKHSA announced a third temporally clustered group of cases involving four people who self-identify as gay, bisexual, or men who have sex with men (MSM), none of whom have links to the three previously diagnosed patients. Some evidence suggests that cases among MSM may be epidemiologically linked; the patients in this cluster were identified at sexual health clinics. This is an evolving investigation and public health authorities hope to learn more about routes of exposure in the coming days.

[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 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 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<sup>1</sup>. 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<sup>2</sup>. 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**

- If clinicians identify patients with a rash that could be consistent with monkeypox, especially those with a recent travel history to a country where monkeypox has been reported, monkeypox should be considered as a possible diagnosis. The rash associated with monkeypox involves vesicles or pustules that are deep-seated, firm or hard, and well-circumscribed; the lesions may umbilicate or become confluent and progress over time to scabs. Presenting symptoms typically include fever, chills, the distinctive rash, or new lymphadenopathy; however, onset of perianal or genital lesions in the absence of subjective fever has been reported. The rash associated with monkeypox can be confused with other diseases that are more commonly encountered in clinical practice (e.g., secondary syphilis, herpes, chancroid, and varicella zoster). However, a high index of suspicion for monkeypox is warranted when evaluating people with the characteristic rash, particularly for the following groups: men who report sexual contact with other men and who present with lesions in the genital/perianal area, people reporting a significant travel history in the month before illness onset or people reporting contact with people who have a similar rash or have received a diagnosis of suspected or confirmed monkeypox.
- Information on infection prevention and control in healthcare settings is provided on the CDC website: [Infection Control: Hospital | Monkeypox | Poxvirus | CDC](#). CDC is currently reviewing this information to consider the need for updates.

- Clinicians should consult their state health department ([State Contacts](#)) if they suspect monkeypox; if the health department cannot be reached, CDC can be contacted through the CDC Emergency Operations Center (770-488-7100) as soon as monkeypox is suspected.
  - All specimens should be sent through the state and territorial public health department, unless authorized to send them directly to CDC.

### Recommendations for Health Departments

- If monkeypox is suspected, CDC should be consulted through the CDC Emergency Operations Center (770-488-7100).
  - Appropriately collected samples can be sent to CDC or an appropriate [Laboratory Response Network](#) laboratory for testing by PCR.
- Laboratory Response Network laboratories can provide orthopoxvirus testing on lesion specimens that clinicians obtain from suspected patients; confirmatory monkeypox virus-specific testing at CDC requires a dry lesion swab specimen. [Collect](#) multiple specimens for preliminary and confirmatory testing as follows: 1) Vigorously swab or brush lesion with two separate sterile dry polyester or Dacron swabs; 2) 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.
- After diagnosis of monkeypox, begin contact tracing of individuals who may have been exposed to the patient while the patient was symptomatic. Contacts should be monitored for 21 days after their last date of contact with the patient.
- Share this HAN Health Advisory with relevant healthcare provider networks, including STI clinics that may not always receive CDC HAN messages.

### Recommendations for the Public

- Based on limited information available at this time, risk to the public appears low. Some people who may have symptoms of monkeypox, such as characteristic rashes or lesions, should contact their healthcare provider for a risk assessment. This includes anyone who 1) traveled to countries where monkeypox cases have been reported 2) reports contact with a person who has a similar rash or received a diagnosis of confirmed or suspected monkeypox, or 3) is a man who has had close or intimate in-person contact with other men in the past month, including through an online website, digital application (“app”), or at a bar or party.

### For More Information

- Contact your state or local health department if you have any questions or suspect a patient may have monkeypox.
- CDC Poxvirus and Rabies Branch: [poxvirus@cdc.gov](mailto:poxvirus@cdc.gov) or for issues that cannot be resolved through emails, CDC’s 24/7 Emergency Operations Center (EOC): 770-488-7100 or [CDC-INFO](#) (1-800-232-4636)

### References

<sup>1</sup> [Clinical Recognition of Monkeypox](#)

<sup>2</sup> [Antivirals](#)

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*The Centers for Disease Control and Prevention (CDC) protects people's health and safety by preventing and controlling diseases and injuries; enhances health decisions by providing credible information on critical health issues; and promotes healthy living through strong partnerships with local, national, and international organizations.*

Categories of Health Alert Network messages:

Health Alert	Requires immediate action or attention; highest level of importance
Health Advisory	May not require immediate action; provides important information for a specific incident or situation
Health Update	Unlikely to require immediate action; provides updated information regarding an incident or situation
HAN Info Service	Does not require immediate action; provides general public health information

##This message was distributed to state and local health officers, state and local epidemiologists, state and local laboratory directors, public information officers, HAN coordinators, and clinician organizations##