



June 22, 2023

Health Notice for District of Columbia Health Care Providers

Mpox Virus Infection in the United States and Other Non-endemic Countries – 2022 (UPDATED) Potential Risk for New Mpox Cases

SUMMARY

The 2022 global mpox (formerly monkeypox) outbreak is ongoing despite the decline in cases since August 2022. Cases continue to be reported in the United States and around the world. A recent increase in mpox cases in Chicago this spring including people who were fully vaccinated for mpox has highlighted the potential for a possible resurgence in mpox cases as the US enters the summer and people gather for events and celebrations. The purpose of this Health Alert Notice is to provide situational updates and to provide updated recommendations for patient evaluation, testing, and infection control. Healthcare providers should continue to monitor the DC Health Alert Notice webpage for updates at dchealth.dc.gov/page/health-notices.

BACKGROUND

Since early May 2022, a global outbreak of mpox has been ongoing in countries that are non-endemic for mpox. Prior to the 2022 outbreak, almost all previous cases of mpox diagnosed in non-endemic countries had epidemiologic links with travel to endemic areas of Africa. However, the current outbreak has been characterized by sustained person-to-person spread in non-endemic countries. Although anyone, regardless of gender or sexual orientation, can contract and spread mpox, a disproportionate number of cases identified during this current outbreak have occurred in men who have sex with men (MSM) and transgender people.

Since the first case of mpox in the US was confirmed in May 2022, more than 30,000 cases have been reported in the US, including 531 confirmed cases in DC¹. After peaking in August 2022, case numbers gradually declined. The decline was likely due to a combination of vaccination, behavior changes, and natural immunity. (A recent preprint modeling study suggested vaccination and behavior change together may have averted 80% [Interquartile Range 74%-85%] of cases in DC².) A recent increase in mpox cases in Chicago this spring has highlighted the potential for a possible resurgence in mpox cases as the US enters the summer and people gather for events and celebrations.

Over 1.2 million doses of the mpox vaccine, JYNNEOS, have been administered in the US since the beginning of the current outbreak, but as of March 2023 it was estimated that only 23% of the US population at risk for mpox had been fully vaccinated³. As of June 13,2023, a total of 39,782 doses of the mpox vaccine have been administered in DC. While vaccine-induced immunity is not complete, it remains the most important prevention measure against mpox. CDC expects that new cases among previously vaccinated people will continue to occur. However, people who have completed their two-dose JYNNEOS vaccine series may be less likely to experience severe disease compared to those who are unvaccinated or have only received one dose. Clinicians should be on the alert for new mpox cases and strongly encourage vaccination for at risk populations.

Mpox basics:

Mpox is a viral zoonotic infection which is endemic to several Central and West African countries. It is a DNA virus of the orthopoxvirus genus of the Poxviridae family. There are two clades of the virus: Clade I





(formerly called the Congo Basin clade) and Clade II (formerly the West African clade). The current outbreak strain belongs to Clade II, which historically has caused less severe infections in humans compared to Clade I. The natural animal reservoir remains uncertain but is thought to be small mammals present in West and Central Africa. Mpox was first discovered in monkeys in 1958. The first human case occurred in the Democratic Republic of the Congo in 1970. Animal-to-human transmission in endemic countries can occur through a bite or scratch, or preparation/consumption of wild game (bush meat). Once infected, humans can transmit mpox to other people. The main way mpox has spread during the current outbreak has been through contact with lesions or body fluids of an infected person during close, personal contact, including sex. Mpox can also be spread by touching objects that have been used by someone with mpox and not disinfected, such as clothing, bedding, towels and sex toys, but this is less common. The incubation period ranges from 3-17 days. It is usually a self-limiting disease but can be severe or fatal. People at increased risk for severe disease include children, pregnant women, immunocompromised individuals, and individuals with certain skin conditions (e.g., history of atopic dermatitis, eczema, extensive breaks in dermal barrier). There is no specific treatment for mpox, although antivirals developed for use in patients with smallpox are available to treat patients with mpox.

The lesions of mpox are firm or rubbery, well-circumscribed, deep-seated, and often develop umbilication. Lesions typically develop simultaneously and evolve through different stages together (i.e., macules to papules, to vesicles, to pustules, then the healing phase of crusts followed by desquamation). Fever and other symptoms like chills, lymphadenopathy, malaise, myalgias, and headache may precede or follow development of lesions, or may not occur at all. The lesions are typically painful until the healing phase when they become pruritic. Classically, the rash of mpox is diffuse but it has been common during this outbreak for patients to present with highly localized lesions (e.g., only occurring in the genital area), or lesions affecting mucosal areas of the genitals, anus, and oropharynx. A person is considered infectious from up to 4 days prior to the onset of symptoms until the lesions have crusted, the crusts have separated, and a fresh layer of healthy skin has formed underneath.

INFORMATION FOR CLINICIANS

Patient evaluation and management:

- Consider mpox in your differential diagnosis when evaluating a patient with a diffuse or localized rash. Other diagnoses to consider include: herpes simplex virus (HSV; genital herpes), syphilis, herpes zoster (shingles), disseminated varicella-zoster virus infection, molluscum contagiosum, scabies, lymphogranuloma venereum, allergic skin rashes, and drug eruptions.
- Conduct a thorough sexual history to assess possible mpox exposures or risk factors.
 - For more information about conducting sexual histories, see cdc.gov/std/treatment/sexualhistory.htm.
- Perform a thorough physical exam including the skin, oral mucosa, and genital and anorectal area
- Evaluate any individual who presents with genital, anal, or perianal ulcers, proctitis, or a diffuse rash for sexually transmitted infections (STIs). The diagnosis of an STI does not exclude mpox, as a concurrent infection may be present. (For more information, see the CDC STI Treatment Guidelines).





- <u>Testing</u>*: Skin lesion material (including swabs of lesion surface, exudate, or lesion crusts) should be submitted for laboratory testing. <u>Unroofing, lancing or aspiration of lesions is not reccomended</u> due to the risk for sharps injury.
 - For more information, see <u>cdc.gov/poxvirus/mpox/clinicians/prep-collection-specimens.html</u>.
- <u>Treatment</u>: For many patients, supportive care and pain control may be enough. Selected patients with (or at risk for) severe disease may benefit from antiviral treatment, such as *Tecovirimat* (TPOXX). A full description of treatment criteria for TPOXX and prescribing information can be found at cdc.gov/poxvirus/mpox/clinicians/Tecovirimat.html.
 - Clinicians are encouraged to refer patients who would benefit from TPOXX for enrollment in the NIH-funded STOMP trial (Study of Tecovirimat for Human Mpox Virus). STOMP is an ongoing multicenter clinical trial to evaluate the efficacy of TPOXX in the treatment of mpox. STOMP includes a placebo-controlled, randomized arm, and an open-label option for individuals with severe disease or those who decline randomization. Remote enrollment is available. NOTE: Do not allow the process of enrollment in STOMP to delay needed treatment.
 - For patients who are not eligible or not interested in participating in the STOMP trial.,
 TPOXX is also available through DC Health using the DC Health Mpox TPOXX
 Request Form at forms.office.com/g/NtnXmp17FF.
 - o For more information, see cdc.gov/poxvirus/mpox/clinicians/treatment.html.
 - See also *Clinical Considerations for Pain Management of Mpox* at cdc.gov/poxvirus/mpox/clinicians/pain-management.html.

Vaccination:

- Clinicians should review vaccination recommendations and strongly encourage vaccination for eligible patients. CDC does not recommend routine mpox vaccination for the general public or for health care workers who are not at increased risk for exposure to orthopoxviruses.
- For information about eligibility criteria for mpox vaccination and where to get a vaccine in DC, visit dchealth.dc.gov/page/mpox.
- See also *Vaccination Basics for Healthcare Professionals* at: cdc.gov/poxvirus/mpox/clinicians/vaccines/vaccine-basics-healthcare.html

Monitoring close contacts of people with mpox:

- DC Health will conduct contact tracing of mpox cases to identify close contacts.
- Close contacts will be classified by exposure risk level: high risk, intermediate risk, low/uncertain risk, or no risk.
- Transmission of mpox requires contact with lesions, crusts, or contaminated materials or prolonged close contact with an infected individual. Brief interactions and those conducted wearing proper PPE (e.g., healthcare workers) are not high -risk exposures.
- Post-exposure prophylaxis (PEP) with smallpox vaccine will be offered to all high-risk contacts and certain intermediate risk contacts.
- Contacts will be monitored for 21 days for the development of mpox symptoms. Contacts who
 develop symptoms should follow isolation precautions and contact a healthcare provider for
 clinical guidance.

^{*} Currently, the Public Health Laboratory (PHL) can only accept dry swab specimens. For the most current information about orthopox/mpox testing at LabCorp, see labcorp.com/infectious-disease/mpox, and for Quest, see questdiagnostics.com/healthcare-professionals/about-our-tests/infectious-diseases/monkeypox.





- Contacts who remain asymptomatic can continue their normal daily activities during the monitoring period.
- For more information about monitoring of close contacts, see cdc.gov/poxvirus/mpox/clinicians/monitoring.html.

Infection control recommendations for healthcare facilities:

- Transmission of mpox in healthcare settings has been a rare occurrence to date.
- Recommended precautions: Standard, contact and droplet precautions should be used for any patient presenting with symptoms of possible mpox. There is a theoretical risk of airborne transmission, so airborne precautions should also be applied.
- Isolate patients with suspected/confirmed mpox in a private room as soon as possible. No special air handling is necessary**. Keep door shut if possible.
 - o If a private room is not available, take steps to minimize the patient's exposure to other people.
 - o Minimize transport outside of the patient's room to only medically essential purposes.
 - The patient should wear a mask and any exposed lesions should be covered with a gown or sheet if:
 - They are not in a private room

OR

- They are transported outside of their room.
- Recommended personal protective equipment (PPE) for healthcare personnel: Gown, gloves, eye protection (i.e., goggles or a face shield that covers the front and sides of the face), and NIOSH (National Institute for Occupational Safety & Health)-certified N95 respirator.
 - o PPE should be donned before entering the patient's room. All PPE should be disposed of prior to leaving the patient's room.
- Waste management:
 - Ouring the current global outbreak of Clade II mpox, patient medical waste may be treated as UN3291 Regulated Medical Waste in the same manner as any other potentially infected medical waste (e.g., soiled dressings, contaminated sharps).
 - o If there is suspicion for Clade I mpox (i.e., history of recent travel to the Democratic Republic of the Congo, the Central African Republic, Cameroon, or Gabon in the last 21 days), medical waste must be treated as Category A Regulated Medical Waste)
 - For more information, see phmsa.dot.gov/transporting-infectious-substances/planning-guidance-handling-category-solid-waste.
- More information on infection prevention and control in healthcare settings can be found at cdc.gov/poxvirus/mpox/clinicians/infection-control-healthcare.html.

Infection control recommendations for home settings:

- Patients who do not require hospital admission may isolate at home. Feasibility of home isolation may be influenced by factors such as the presence of other household members or pets, the nature and extent of lesions present, and whether the patient is a child.
- During home isolation patients should:
 - o not leave home except to get medical care
 - avoid visitors
 - wear a mask or respirator around others (especially if the patient has respiratory symptoms)

^{**} Intubation, extubation, and other procedures likely to spread oral secretions should be performed in an airborne-infection isolation room.





- If the patient is unable to wear a mask or respirator, household members should wear a mask or respirator when around the patient.
- o cover their lesions with clothing as much as possible (e.g., long sleeves, long pants).
 - If they have extensive lesions that cannot be covered (e.g., weeping/draining lesions, lesions on the face) or if they have respiratory symptoms, they should isolate in a room or area separate from other household members and pets.
- o avoid contact with pets or any other animals (especially mammals)
- Household members should limit contact with the isolating person.
- Household members who must provide care to people who are isolating should wear disposable gloves if they have any direct contact with lesions. Dispose of gloves after use and perform hand hygiene.
 - o Hand hygiene should also be performed after touching lesion material, clothing, linens, or environmental surfaces that may be contaminated with lesion material.
- More information about home isolation can be found at cdc.gov/poxvirus/mpox/clinicians/infection-control-home.html.

Reporting to DC Health:

Please notify DC Health about suspected mpox cases by phone <u>immediately</u> at 844-493-2652 AND Submit a Notifiable Disease and Condition Case Report Form online using DCRC: <u>dccovid.force.com/provider/s/login</u>. DC Health will provide assistance and work with the DC PHL to coordinate collection of lesion samples and testing and consult with CDC as needed.

REFERENCES

- 1. 2022 Outbreak cases and Data. (CDC, 2023)
- 2. Clay PA, Asher JM, Carnes N, et al. Modelling the impact of vaccination and sexual behavior change on reported cases of mpox in Washington, DC. medRxiv [Preprint posted online February 14, 2023] at medRxiv [Preprint posted online February 14, 2023] at medRxiv [Preprint posted online February 14, 2023] at medRxiv [Preprint posted online February 14, 2023] at medRxiv [Preprint posted online February 14, 2023] at medrxiv.org/content/10.1101/2023.02.10.23285772v1
- **3.** Owens LE, Currie DW, Kramarow EA, et al. JYNNEOS Vaccination Coverage Among Persons at Risk for Mpox United States, May 22, 2022–January 31, 2023. MMWR Morb Mortal Wkly Rep 2023; 72:342–347 at dx.doi.org/10.15585/mmwr.mm7213a4
- 4. Health Alert Network. (CDC, 2023), Potential Risk for new Mpox Cases

Please visit the DC Health - Health Notices website (<u>dchealth.dc.gov/page/health-notices</u>) regularly for the most current information.

For more information, or to report suspected mpox cases, please contact the Division of Epidemiology – Disease Surveillance and Investigation: Phone: 1-844-493-2652 | Fax: (202) 442-8060 | Email: doh.epi@dc.gov