U.S. Monkeypox (MPX)

Information and Recommendations

Introduction

This resource contains information, data, and recommendations from the United States Centers for Disease Control and Prevention (U.S. CDC) and from other infectious disease experts. It is intended for healthcare providers caring for people with HIV (PWH) or those at risk of HIV in the U.S.

MPX (monkeypox virus) infections have been significantly increasing since early 2022 throughout the U.S. **After exposure and an incubation period of roughly 1-2 weeks, an initial prodrome may occu**r (e.g., fever, malaise, lymphadenopathy, headache, weakness, chills, etc.), **followed by rash.** Most cases have been identified among men who have sex with men (MSM), but transmission may occur from any person with MPX infection to anyone they've been in close physical contact with, regardless of age, gender or sexual identity.

Lesions typically begin to develop simultaneously and evolve together on any given part of the body. The evolution of lesions progresses through four stages—macular, papular, vesicular, to pustular—before scabbing over and resolving. The rash can look like pimples or blisters that appear on the face, inside the mouth, and/or on other parts of the body (e.g., hands, feet, chest, anogenital region). Sometimes, people get a rash first, followed by other symptoms. Others only experience a rash.

Transmission

MPX is a virus that can spread through:

- Direct contact with the infectious rash, scabs, or body fluids
- Respiratory secretions during prolonged, face-to-face contact, or during intimate physical contact, such as kissing, cuddling, or sex
- Touching items (such as clothing or linens) that previously touched the infectious rash or body fluids
- Pregnant people can spread the virus to their fetus through the placenta

MPX can spread from the time symptoms start until the rash has fully healed and a fresh layer of skin has formed.

The illness typically lasts 2-4 weeks. At this time, it is not known if MPX can spread through semen or vaginal fluids.

Prevention

The CDC recommends the following measures to prevent MPX infection:

- Avoid close, skin-to-skin contact with someone with MPX
 - Do not touch the rash or scabs
 - Do not kiss, hug, cuddle or have sex
 - Do not share eating utensils, cups, or beverage containers (e.g., water bottles)
 - Do not share toothbrushes or razors
- Do not handle or touch the bedding, towels (including towels used at the gym), or clothing of a MPX symptomatic person.
- Wash your hands often with soap and water or use an alcohol-based hand sanitizer, especially after contact with MPX symptomatic people.
- A person who is sick with MPX should isolate (at home or in a safe shelter if possible). If they have an active rash or other symptoms, they should be in a separate room or area from other members of the household and pets when possible.
- A person who is sick with MPX should wear a mask when not isolated.

Consult with the **National Clinician Consultation Center** for clinical decision making regarding MPX in PWH:

HIV Management

1-800-933-3413

Expert advice on preventing and treating HIV. Monday-Friday 9am-8pm ET.



Vaccination

A vaccine against MPX is available, though its efficacy has not been well studied. However, evidence to date suggests 85% efficacy. The CDC currently recommends vaccination of at-risk persons:

- Post-Exposure Prophylaxis (PEP): For the current outbreak, MPX vaccine can be considered as "standard PEP" for MPX. People can be vaccinated following exposure to MPX to help prevent illness from MPX virus. It is important that states and other jurisdictions identify contacts of confirmed or probable MPX cases to offer vaccine for PEP and to monitor for any early signs of illness.
- CDC recommends that the vaccine be given within 4 days from the date of exposure for the best chance to prevent onset of the disease.
- If given between 4 and 14 days after the date of exposure, vaccination may reduce the symptoms of disease, but may not prevent the disease.
- When coupled with self-isolation and other early prevention measures, PEP can be a vital component for preventing further MPX transmission.
- Pre-Exposure Prophylaxis (PrEP): This approach refers to administering vaccine to someone at high risk for MPX. This is recommended by several jurisdictions for persons at risk for MPX infection. Check with your local department of health for recommendations in your city, state, district, or territory.

MPX Vaccines

Two vaccines are licensed by the U.S. Food and Drug

Administration (FDA) for preventing MPX infection – JYNNEOS (also known as Imvamune or Imvanex) and ACAM2000.

JYNNEOS vaccine: can be given to people with HIV. The CDC recommends it should be prioritized for people who are at risk for severe disease from MPX, including people with HIV or other immunocompromising conditions. Currently, it is being allocated to jurisdictions for use for the following individuals:

- Known contacts who are identified by public health via case investigation, contact tracing, and risk exposure assessments
- Presumed contacts who meet the following criteria:
- Know that a sexual partner in the past 14 days was diagnosed with MPX
- Had multiple sexual partners in the past 14 days in a jurisdiction with known MPX

ACAM200 vaccine: should not be given to people with HIV or other immunocompromising conditions because of elevated risk of adverse events.

Testing and Diagnosis

Diagnosis can be made by DNA testing of specimens from skin or mucosal lesions, and culturing is not recommended.

The patient should be isolated in a clinic room.

Clinic staff should wear protective equipment including gown, gloves, N-95 mask, and face shield.

DNA, PCR Testing

- CDC's Laboratory Response Network (LRN)
- Local Health Department Laboratories
- LabCorp
- Quest
- Mayo Clinic Laboratories
- Aegis Sciences

CDC and local health departments have specific instructions for the collection and handling of specimens and the ordering of MPX diagnostic tests; consult CDC and local health department requirements before collecting specimens.

CDC recommends, in general, that: "Two swabs from each lesion should be collected for testing. Using two sterile synthetic swabs (including, but not limited to polyester, nylon, or Dacron) with a plastic, wood, or thin aluminum shaft, swab the lesion vigorously to collect adequate DNA. Do not use cotton swabs. It is not necessary to de-roof the lesion before swabbing. Break off the end of each swab's applicator into a 1.5-or 2-mL screw-capped tube with O-ring or place the entire swab in a sterile container that has a gasket seal and is able to be shipped under the required conditions. Two swabs from each lesion should be collected, preferably from different locations on the body or from lesions which differ in appearance. Swabs and other specimens should each be placed in different containers.

Perform other tests as needed to rule out other causes of skin lesions, e.g., syphilis, herpes simplex virus (HSV), or varicella zoster virus (VZV).

Treatment

MPX infection generally is mild and self-limiting with need for only supportive care of symptoms and isolation to prevent spread. The antiviral medication tecovirimat (TPOXX) is available under expanded Access Investigational New Drug (EA-IND) or compassionate use authority for treatment of persons with more severe symptoms OR at risk of severe disease, including significant pain, widespread lesions, lesions in areas of particular concern, and systemic symptoms.^{1,2} Click here for ordering instructions.

¹ Rizk, J.G., Lippi, G., Henry, B.M. et al. Prevention and Treatment of Monkeypox. Drugs (2022). https://doi.org/10.1007/s40265-022-01742-y

² Aden TA, Blevins P, York SW, et al. Rapid Diagnostic Testing for Response to the Monkeypox Outbreak — Laboratory Response Network, United States, May 17–June 30, 2022. MMWR Morb Mortal Wkly Rep. ePub: 8 July 2022.

MONKEYPOX

VISUAL EXAMPLES OF MONKEYPOX RASH











Photo Credit: NHS England High Consequence Infectious Diseases Network

MONKEYPOX

VISUAL EXAMPLES OF MONKEYPOX RASH













Photo Credit: UK Health Security Agency

