CDC Centers for Disease Control and Prevention

Emergency Preparedness and Response

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Potential Risk for New Mpox Cases

HAN HEALTH ALERT NETWORK

This is an official CDC HEALTH UPDATE

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Summary

In the United States, cases of mpox (formerly monkeypox) have declined since peaking in August 2022, but the outbreak is not over. The Centers for Disease Control and Prevention (CDC) continues to receive reports of cases that reflect ongoing community transmission in the United States and internationally. This week, CDC and local partners are investigating a cluster of mpox cases in the Chicago area. From April 17 to May 5, 2023, a total of 12 confirmed and one probable case of mpox were reported to the Chicago Department of Public Health. All cases were among symptomatic men. **None of the patients have been hospitalized.** Nine (69%) of 13 cases were among men who had received 2 JYNNEOS vaccine doses. Confirmed cases were in 9 (69%) non-Hispanic White men, 2 (15%) non-Hispanic Black men, and 2 (15%) Asian men. The median age was 34 years (range 24–46 years). Travel history was available for 9 cases; 4 recently traveled (New York City, New Orleans, and Mexico).

Although vaccine-induced immunity is not complete, vaccination continues to be one of the most important prevention measures. CDC expects new cases among previously vaccinated people to occur, but people who have completed their two-dose JYNNEOS vaccine series may experience less severe symptoms than those who have not.

Spring and summer season in 2023 could lead to a resurgence of mpox as people gather for festivals and other events. The purpose of this Health Alert Network (HAN) Health Update is to inform clinicians and public health agencies about the potential for new clusters or outbreaks of mpox cases and to provide resources on clinical evaluation, treatment, vaccination, and testing.

Background

A global outbreak of mpox began in May 2022. Previous outbreaks in places where mpox is not endemic were mostly related to international travel; however, this outbreak spread rapidly across much of the world through person-to-person contact, disproportionately affecting gay and bisexual men, other men who have sex with men (MSM), and transgender people. Most patients with mpox have mild disease, although some, particularly those with advanced or untreated HIV infection, may experience more severe outcomes.

As of May 10, a total of 30,395 cases have been reported in the United States. This outbreak had a peak of about 460 cases per day in August 2022, and gradually declined, likely because of a combination of temporary changes in sexual behavior, vaccination, and infection-induced immunity[1,2]. However, CDC continues to receive reports of new cases and clusters in the United States and internationally.

Although approximately 1.2 million JYNNEOS mpox vaccine doses have been administered in the United States since the beginning of the outbreak, only 23% of the estimated population at risk for mpox has been fully vaccinated. Vaccine coverage varies widely among jurisdictions. The projected risk of a resurgent mpox outbreak is greater than 35% in most jurisdictions in the United States without additional vaccination or adapting sexual behavior to prevent the spread of mpox [3]. Resurgent outbreaks in these communities could be as large or larger than in 2022.

To help prevent a renewed outbreak during the spring and summer months, CDC is urging clinicians to be on alert for new cases of mpox and to encourage vaccination for people at risk. If mpox is suspected, test even if the patient was previously vaccinated or had mpox. Clinicians should also refamiliarize themselves with mpox symptoms, specimen collection, laboratory testing procedures, and treatment options.

Recommendations for Clinicians Evaluating and Treating Patients

Conduct a thorough patient history to assess possible mpox exposures or epidemiologic risk factors. Mpox is usually transmitted through close, sustained physical contact and has been almost exclusively associated with sexual contact in the current global outbreak. It is important to take a detailed sexual history for any patient with suspected mpox.

Perform a complete physical examination, including a thorough skin and mucosal (e.g., oral, genital, anal) examination. Doing so can detect lesions of which the patient may be unaware.

Consider mpox when determining the cause of a diffuse or localized rash, including in patients who were previously infected with mpox or vaccinated against mpox. Differential diagnoses include herpes simplex virus (HSV) infection, syphilis, herpes zoster (shingles), disseminated varicella-zoster virus infection (chickenpox), molluscum contagiosum, scabies, lymphogranuloma venereum, allergic skin rashes, and drug eruptions. Specimens should be obtained from lesions (including those inside the mouth, anus, or vagina), if accessible, and tested for mpox and other sexually transmitted infections (STI), including HIV, as indicated. The diagnosis of an STI does not exclude mpox, as a concurrent infection may be present.

Patients with mpox benefit from supportive care and pain control. Mpox can commonly cause severe pain and can affect anatomic sites, including the anus, genitals, and oropharynx, which can lead to other complications. Assess pain in all patients with mpox virus infection and recognize that substantial pain may exist from mucosal lesions not evident on physical exam. Topical and systemic strategies should be used to manage pain. Pain management strategies should be tailored to the needs and context of an individual patient.

Tecovirimat is considered first-line among options that have not been approved by the U.S. Food and Drug Administration to treat eligible patients with mpox. If a clinician intends to prescribe oral tecovirimat, consider seeking access through enrollment in the AIDS Clinical Trials Group (ACTG) Study of Tecovirimat for Human Monkeypox Virus (STOMP) so that the trial can determine efficacy of this drug. This trial 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. For patients not eligible for the STOMP trial or who decline to participate, stockpiled oral tecovirimat is available upon request for mpox patients who meet treatment eligibility (e.g., have severe disease or are at increased risk for severe disease) under CDC's Expanded Access Investigational New Drug (IND) protocol. More information about evaluating and treating patients can be found on the CDC mpox Clinical Guidance web pages.

Clinicians should notify their state or local health departments of any suspected or confirmed mpox cases (via 24-hour Epi On Call contact list).

Recommendations for Vaccinating Patients

JYNNEOS vaccine can be given as post-exposure prophylaxis (PEP) both to people with known or presumed exposure to the mpox virus. Vaccine can also be given to people with certain risk factors and recent experiences that may make them more likely to have been exposed to mpox. As PEP, vaccine should be given as soon as possible, ideally within 4 days of exposure; however, administration 4 to 14 days after exposure may still provide some protection against mpox. People who are vaccinated should continue to avoid close, skin-to-skin contact with someone who has mpox. JYNNEOS involves 2 vaccine doses given 28 days apart; peak immunity is expected 14 days after the second dose [4].

Previous studies have suggested that JYNNEOS vaccination is protective against mpox. When combined with other prevention measures, vaccination prior to exposure and PEP vaccination strategies might help control outbreaks by reducing transmission of the mpox virus, preventing disease, or reducing disease severity and hospitalization. Duration of immunity after one or two doses of JYNNEOS is unknown.

Currently, CDC does not recommend routine immunization against mpox for the general public. Mpox vaccination should be offered to people with high potential for exposure to mpox:

- People who had known or suspected exposure to someone with mpox.
- People who had a sex partner in the past 2 weeks who was diagnosed with mpox.

- Gay, bisexual, and other MSM, and transgender or nonbinary people (including adolescents who fall into any of these categories) who, in the past 6 months, have had
  - A new diagnosis of one or more sexually transmitted diseases (e.g., chlamydia, gonorrhea, syphilis).
  - More than one sex partner.
- People who have had any of the following in the past 6 months
  - Sex at a commercial sex venue.
  - Sex in association with a large public event in a geographic area where mpox transmission is occurring.
  - Sex in exchange for money or other items.
- People who are sex partners of people with the above risks.
- People who anticipate experiencing any of the above scenarios.
- People with HIV infection or other causes of immunosuppression who have had recent or anticipate potential mpox exposure.
- People who work in settings where they may be exposed to mpox.
  - People who work with orthopoxviruses in a laboratory.

Extensive risk assessment should not be conducted in people who request vaccination to avoid the barriers created by the stigma experienced by many who could benefit from vaccination. People in the community at risk (e.g., gay, bisexual, or other MSM; transgender or nonbinary people) asking for vaccination is adequate attestation to individual risk of mpox exposure. People who previously received only one JYNNEOS vaccine dose should receive a second dose as soon as possible.

For More Information

- Clinical Quick Reference
- Vaccination Basics for Healthcare Professionals
- Case Definitions for Use in the 2022 Mpox Response
- Clinical Recognition
- Clinical Considerations for Treatment and Prophylaxis of Mpox Infection in People Who are Immunocompromised
- Treatment Information for Healthcare Professionals

References

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2. Clay, P.A., et al. Modelling the impact of vaccination and behavior change on mpox transmission in Washington D.C. medRxiv (Preprint), 2023 Feb 14. Available at: https://doi.org/10.1101/2023.02.10.23285772
3. CDC. Risk assessment of mpox resurgence and vaccination considerations. 2023 Apr 4. Available at: https://www.cdc.gov/poxvirus/mpox/response/2022/risk-assessment-of-resurgence.html
4. Rao, A., et al. Use of JYNNEOS (Smallpox and Monkeypox Vaccine, Live, Nonreplicating) for Preexposure Vaccination of Persons at Risk for Occupational Exposure to Orthopoxviruses: Recommendations of the Advisory Committee on Immunization Practices — United States, 2022. MMWR Morb Mortal Wkly Rep 2022; 71:734-742. https://dx.doi.org/10.15585/mmwr.mm7122e1

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DEPARTMENT OF HEALTH AND HUMAN SERVICES

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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.

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