

First Case of Clade I Mpox Diagnosed in the United States

DATE:	November 26, 2024
TO:	Health Alert Network
FROM:	Debra L. Bogen, M.D., FAAP, Secretary of Health
SUBJECT:	First Case of Clade I Mpox Diagnosed in the United States
DISTRIBUTION:	Statewide
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STREET ADDRESS:	N/A
COUNTY:	N/A
MUNICIPALITY:	N/A
ZIP CODE:	N/A

This transmission is a “Health Advisory” which provides important information for a specific incident or situation; may not require immediate action.

HOSPITALS: PLEASE SHARE WITH ALL MEDICAL, PEDIATRIC, NURSING AND LABORATORY STAFF IN YOUR HOSPITAL; EMS COUNCILS: PLEASE DISTRIBUTE AS APPROPRIATE; FQHCs: PLEASE DISTRIBUTE AS APPROPRIATE LOCAL HEALTH JURISDICTIONS: PLEASE DISTRIBUTE AS APPROPRIATE; PROFESSIONAL ORGANIZATIONS: PLEASE DISTRIBUTE TO YOUR MEMBERSHIP; LONG-TERM CARE FACILITIES: PLEASE SHARE WITH ALL MEDICAL, INFECTION CONTROL, AND NURSING STAFF IN YOUR FACILITY

Summary

- On November 18, 2024, the Centers for Disease Control and Prevention (CDC) released a [Health Alert Network \(HAN\)](#) to provide information about the first case of clade I mpox diagnosed in the United States, and to provide recommendations to clinicians about preventing, diagnosing, treating, and reporting mpox cases.
- On November 15, 2024, the California Department of Public Health (CDPH) confirmed the [first reported case of clade I mpox](#) in the United States.
- No additional cases in the United States have been detected as of November 25, 2024.
- The [risk of clade I mpox to the public](#) in the United States remains low.
- There is no change to CDC clinical or travel guidance on clade I mpox since [HAN Health Update 516](#).
- Clinicians should be aware of [mpox symptoms](#), [travel and other risk factors](#), and [MPXV testing](#). Suspected and confirmed cases of clade I mpox should be reported to local health departments or Pennsylvania Department of Health (DOH) as soon as possible, including *orthopoxvirus* generic (e.g., non-variola *orthopoxvirus*) **positive** and clade II **negative** test results from a patient with recent history of travel to a [country affected](#) by clade I mpox.
- Vaccination is recommended for people who are [eligible to receive mpox vaccine](#).
- To report a suspected or confirmed case of clade I mpox, contact your local health department or contact Pennsylvania Department of Health (DOH) at 877-PA-HEALTH (877-724-3258).

Background

Monkeypox virus (MPXV) has two distinct genetic clades: clade I (with subclades Ia and Ib) is [endemic to some countries in Central Africa](#), and [clade II](#) (with subclades IIa and IIb) is historically [endemic to some countries in West Africa](#). MPXV transmission in countries where the virus is endemic typically occurs via exposure to infected wildlife with subsequent [person-to-person spread](#) via close contact (including intimate, sexual, or household contact) with a person with mpox, or direct contact with infectious respiratory secretions (e.g., mucus) or contaminated objects (e.g., bedding). Clade I and clade II mpox present similarly, and, as with clade II mpox, [clinical management](#) of clade I mpox is based on the severity of illness at diagnosis and the [potential for severe or prolonged mpox](#).

From January 1 through November 15, 2024, about 12,000 [confirmed cases of clade I mpox](#) and at least 47 deaths have been reported in [Central and Eastern African countries](#). These countries include Burundi, Central African Republic, Democratic Republic of the Congo, Republic of the Congo, Rwanda, and Uganda. Data from affected countries indicate that a large proportion of clade I mpox cases among adults were [associated with heterosexual contact](#). Transmission to close contacts within households, including to children, also has been reported.

In 2024 thus far, travel-associated clade I mpox cases have been [reported](#) in Germany (1), India (1), Kenya (17), Sweden (1), Thailand (1), the United Kingdom (UK) (4), Zambia (1), and Zimbabwe (2), and no onward spread has been reported except to close household contacts in Kenya and the UK. [Current data](#) suggest that subclade Ib may be less severe. Clade Ib mpox has a lower death rate (less than 1%) than clade Ia, both in and outside of Africa. No deaths have occurred in travel-associated clade Ib mpox cases in countries outside of Africa; for a subset of these cases for which clinical data are available, relatively mild disease courses were described.

On November 15, 2024, CDPH confirmed through laboratory testing the first reported case of clade I mpox in the United States. This individual had recently traveled to areas experiencing clade I monkeypox virus (MPXV) transmission and sought medical care for mpox symptoms in the United States. Based on the patient's travel history and symptoms, clinical specimens were tested; Polymerase Chain Reaction (PCR) was positive for non-variola *orthopoxvirus* and negative by PCR for clade II. Subsequent PCR testing for clade I mpox was positive. Specimens have been sent to the CDC for additional virus characterization.

The individual received care in the United States and is isolating from others. The patient has no underlying health conditions and has not had any severe manifestations of disease. Consistent with other recent clade I mpox cases, the patient has relatively mild illness and is recovering. CDC is working closely with the local and state health authorities to rapidly investigate the circumstances surrounding this case and to prevent spread of the virus. As of November 25, no additional clade I mpox cases have been reported in the United States.

Since March 2024, CDC has been working with local, tribal, state, and territorial public health authorities and other U.S. government agencies to prepare for potential cases of clade I mpox in the United States by enhancing surveillance, detection, and reporting capacities of existing domestic public health systems and structures. This reported case demonstrates that these systems are working as intended. Given the widespread outbreaks in Central and Eastern Africa, additional travel-associated cases may be reported in the future in the United States.

CDC guidance for [clinical care](#), [prevention](#), [vaccination](#), [infection prevention and control](#), and exposure risks in community, health care, and travel settings have not changed. Guidance for travelers is unchanged from that described in HAN Health Update [516](#) (also see HAN Health Update [513](#) and HAN Health Advisory [501](#)).

The overall [risk of clade I mpox to the public](#) in the United States remains low.

Recommendations for Health Care Providers and Public Health Practitioners

Evaluation and Diagnosis

- **Consider mpox as a possible diagnosis in patients with [epidemiologic characteristics](#) and lesions or other [clinical signs and symptoms](#) consistent with mpox.**
 - This includes symptomatic people who have been in [Central or Eastern Africa](#) (including, but not limited to, Burundi, Central African Republic, Democratic Republic of the Congo, Kenya, Republic of the Congo, Rwanda, Uganda, Zambia, or Zimbabwe) in the previous 21 days.
 - This also includes people who had close or intimate contact with symptomatic people who have been in these countries.
 - An up-to-date [list of countries](#) affected by clade I mpox outbreaks is available on the CDC website.
- Follow CDC guidance on mpox [infection prevention](#) and control to minimize transmission risk when evaluating and providing care to patients with suspected mpox.
- Ask patients with signs and symptoms of mpox but no recent travel whether they have had contact with people who had recently been in Central or Eastern Africa and who were symptomatic for mpox.
- Consider mpox as a possible diagnosis if a clinically consistent presentation occurs, even in people vaccinated for or [previously diagnosed](#) with mpox.
- Advise all patients suspected of having mpox to stay at home and [isolate](#) themselves from others until mpox has been ruled out by laboratory testing. In the event of a positive mpox diagnosis, advise patients to isolate until their mpox lesions have cleared and fresh skin has formed, which could take several weeks.
- Test all [suspected](#) cases for MPXV. If a symptomatic patient reports travel to Central or Eastern Africa in the 21 days prior to relevant symptom onset, contact DOH or your local health department to facilitate testing for MPXV that includes clade I MPXV testing. In most situations, specimens should be sent to the appropriate state public health laboratory or a commercial laboratory for initial testing. For further testing, DOH will assist with coordination with the CDC regarding specimen types accepted, labeling, specimen storage, and shipping timeframes.
- Follow [specimen collection guidelines](#) (including collecting two swabs per 2-3 lesions) to ensure specimen availability for clade-specific testing. This testing will help distinguish cases that are part of the [ongoing clade II mpox global outbreak](#) from those that are part of this clade I outbreak.
 - Avoid unroofing or aspirating lesions (or otherwise using sharp instruments for mpox testing) to minimize the risk of a needlestick injury.
 - Send clinical specimens to a laboratory that can perform clade-specific MPXV testing **as quickly as possible**. If you need assistance locating relevant laboratories in your area, contact DOH by calling 877-PA-HEALTH (877-724-3258).
 - Promptly report suspected cases of clade I mpox to [DOH](#) or your local health department.

Treatment

- Promptly consult DOH or your local health department about any mpox cases for which severe manifestations might occur (e.g., immunocompromised patients).
- Inform all patients, including those with mild disease, about the [STOMP Trial](#) and encourage them to consider enrollment. To enroll in STOMP, call 1-855-876-9997.
- For patients who are not eligible for inclusion in the STOMP trial and who meet CDC's expanded use Investigational New Drug (EA-IND) [eligibility](#) for tecovirimat treatment, contact DOH.

Prevention

- Recommend vaccination to people who are [eligible](#) for mpox vaccine, including those who may have a [recent MPXV exposure](#).
- Continue to follow CDC's current vaccine [guidance](#) to prevent mpox.
 - Two doses of JYNNEOS vaccine offer [substantial protection](#) against mpox and are expected to offer protection against both clades.
 - If people at risk for mpox have only received one dose, remind them to get a second dose as soon as possible.
 - "Booster" doses of JYNNEOS vaccine (additional doses) are not currently recommended.
- Discuss mpox prevention and risk reduction strategies with all travelers to countries with ongoing human-to-human transmission of clade I MPXV.
- Discuss patients' [sexual history](#) and travel plans, including if patients anticipate sexual or intimate activity during travel.
- Advise patients that mpox exposure risk is often associated with sexual or intimate contact.
- Reassure patients that mpox is not spread through casual contact, such as what one encounters in public spaces like markets, offices, classrooms, public transit, or air travel.
- Counsel patients on [activities that may increase risk](#) for MPXV exposure and risk reduction strategies if they have plans to travel to a country where [ongoing](#) human-to-human transmission of clade I MPXV is occurring. Travelers to affected countries should:
 - Avoid close contact with people who are sick with [signs and symptoms](#) of mpox, including skin or genital lesions.
 - Avoid contact with contaminated materials used by people who are sick, such as clothing, bedding, toothbrushes, sex toys, or materials used in health care settings.
 - Avoid contact with animals that can carry the virus that causes mpox or their products (e.g., bushmeat, lotions, hides) in areas where mpox is endemic, particularly in Central or West Africa.
- Clinicians should counsel patients about what to do to [prevent household transmission](#) if they have mpox symptoms, including isolating from others, avoiding sharing items they have touched, and regularly cleaning and disinfecting the spaces they occupy in order to limit household contamination.

Recommendations for the Public

- Learn more about which activities may increase your [risk of exposure](#) when you travel to a country where clade I MPXV is [spreading](#). Mpox is not spread through casual contact, such as what one encounters in public spaces like markets, offices, classrooms, public transit, or air travel.
- [Protect](#) yourself and others from mpox, by:
 - Avoiding close contact with people who are sick with [signs and symptoms](#) of mpox, including skin or genital lesions.

- Avoiding contact with contaminated materials, such as materials used by people who are sick (e.g., clothing, bedding, toothbrushes, or sex toys), materials used in health care settings, or materials that came in contact with wild animals.
- Avoid contact with animals that can carry the virus that causes mpox or their products (e.g., bushmeat, lotions, hides) in areas where mpox is endemic, particularly in Central or West Africa.
- If you may be at risk for mpox, talk to your health care provider about mpox prevention, including getting vaccinated with two doses of JYNNEOS if you are [eligible](#) to get mpox vaccine.
- Learn more about [Preventing Mpox While Traveling](#).
- Learn more about [the current situation](#) about Mpox in the United States and Around the World.

More Information for Clinicians and Public Health Partners

- [Clade I Mpox Outbreak Originating in Central Africa | Mpox | CDC](#)
- [Ongoing Clade II Mpox Global Outbreak | Mpox | CDC](#)
- [Clinical Overview of Mpox | Mpox | CDC](#)
- [Public Health Strategies for Mpox | Mpox | CDC](#)
- [Guide to Taking a Sexual History | CDC](#)
- [Mpox Considerations for People Who Are Pregnant or Breastfeeding | Mpox | CDC](#)
- [Provider Briefing on Mpox Clade I | Mpox Briefing for Providers Who Care for Pediatric Populations | HHS](#)
- [Select Agent Regulations | Biosafety Laboratory Guidance for Handling and Processing Mpox Specimens | CDC](#)
- [Information for Clinical/Diagnostic Laboratories, Healthcare Facilities, and Other Entities Not Registered with the Federal Select Agent Program | FSAP](#)
- Health Department Contacts: [After Hours/Epi-on-Call Contact Lists](#) | Council of State and Territorial Epidemiologists

More Information for the Public

- [Mpox in the United States and Around the World: Current Situation | Mpox | CDC](#)
- [About Mpox | Mpox | CDC](#)
- [Mpox Vaccination | Mpox | CDC](#)
- [Preventing Mpox | Mpox | CDC](#)
- [Preventing Mpox While Traveling | Mpox | CDC](#)
- [Clade I Mpox in Central and Eastern Africa | September 2024 Travel Health Notice | CDC](#)
- General inquiries: CDC-INFO (1-800-232-4636)

References

1. World Health Organization. 2022-24 Mpox (Monkeypox) Outbreak: Global Trends. [2022-24 Mpox \(Monkeypox\) Outbreak: Global Trends](#). Accessed November 17, 2024.
2. Rao AK. "Use of JYNNEOS During Mpox Outbreaks: Clinical Guidance." Advisory Committee on Immunization Practices (ACIP) presentation. Atlanta, GA, June 23, 2023. <https://www.cdc.gov/acip/downloads/slides-2023-06-21-23/03-mpox-Rao-508.pdf>
3. Rao AK. "Evidence to Recommendations Framework: Vaccination with JYNNEOS During Mpox Outbreaks." Advisory Committee on Immunization Practices (ACIP) presentation. Atlanta, GA, February 22, 2023. <https://www.cdc.gov/acip/downloads/slides-2023-02-22-24/Mpox-07-Rao-508.pdf>
4. Kibungu, E. M., Vakaniaki, E. H., Kinganda-Lusamaki, E., Kalonji-Mukendi, T., Pukuta, E., Hoff, N. A., Lushima, R. S. (2024). Clade I–Associated Mpox Cases Associated with Sexual Contact,

the Democratic Republic of the Congo. Emerging Infectious Diseases, 30(1), 172-176.
<https://doi.org/10.3201/eid3001.231164>.

5. Yinda CK, Koukouikila-Koussounda F, Mayengue PI, et al. Genetic sequencing analysis of monkeypox virus clade I in Republic of the Congo: a cross-sectional, descriptive study. Lancet. 2024; 404:1815-1822. [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(24\)02188-3/abstract](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(24)02188-3/abstract)

For questions, please call your local health department or DOH at 1-877-PA-HEALTH (877-724-3258).

Individuals interested in receiving future PA-HANs can register at:
<https://ondemand.mir3.com/han-pa-gov/login/>.

Categories of Health Alert messages:

Health Alert: conveys the highest level of importance; warrants immediate action or attention.

Health Advisory: provides important information for a specific incident or situation; may not require immediate action.

Health Update: provides updated information regarding an incident or situation; unlikely to require immediate action.

This information is current as of November 26, 2024 but may be modified in the future. We will continue to post updated information regarding the most common questions about this subject.