



**LAC DPH Monkeypox Update:
Severe Disease, Testing, and Vaccine
Eligibility**

September 9, 2022



*This message is intended for all Los Angeles County healthcare providers.
Please distribute as appropriate.*

Key Messages

Monkeypox Patients with Severe Disease or at Risk for Severe Disease

- Patients with severe monkeypox disease and those at risk of severe disease should be treated with tecovirimat.
- Intravenous tecovirimat should be used in patients who are unable to take oral therapy, who may have impaired oral drug absorption, or who are failing to improve on oral therapy.
- Severe outcomes have been observed in people with inadequately treated HIV; both CD4 count and viral load should be considered when assessing risk.
- Clinicians must [report](#) hospitalizations due to monkeypox to LAC DPH. In addition, they are asked to call the LAC DPH consultation line if a hospitalized patient is worsening clinically, such as being admitted to the ICU. LAC DPH will provide clinical consultation and access to additional therapeutic options.

Please see below for more details.

Testing

- To expedite testing, providers are asked to submit specimens for testing to the LAC Public Health Laboratory (PHL) from suspect monkeypox cases who are experiencing homelessness, pregnant, or children with known exposure.
- False-positive monkeypox tests can occur. This is more likely when testing is performed in people, especially children, who are unlikely to have the infection.

Please see below for more details.

Vaccine

- The JYNNEOS vaccine eligibility has been expanded to include persons who may be at future risk for exposure (i.e., pre-exposure prophylaxis) in addition to post-exposure prophylaxis.

Please see below for more details.

Updates

- LAC DPH [Isolation Instructions for People with Monkeypox](#) were updated to align with CDPH guidance.
- CDPH has released [Supportive Care Suggestions for Patients with Monkeypox](#).

Situation

The Centers for Disease Control and Prevention (CDC) reports over 21,500 confirmed monkeypox/orthopoxvirus cases in the U.S. In Los Angeles County, as of September 8, 2022, more than 1,800 monkeypox/orthopoxvirus cases have been confirmed.

Direct skin-to-skin contact, including sexual contact, with a person with monkeypox continues to be the most significant risk factor associated with transmission. In the current multinational outbreak, most of the reported cases have been among gay, bisexual, or other men who have sex with men (MSM). However, anyone, regardless of sexual orientation or gender identity, is at risk if they have been in close, personal contact with someone who has monkeypox.

Visit the 2022 Monkeypox Outbreak Data websites for most information on cases:

- [LA County Monkeypox Data](#)
- [CDPH Monkeypox Data in California](#)
- [CDC 2022 Outbreak Cases and Data](#)

Monkeypox Patients with Severe Disease or at High Risk for Severe Disease

Many people infected with monkeypox virus have a [mild, self-limiting disease course](#) in the absence of specific therapy. However, the prognosis for monkeypox depends on multiple factors, such as previous vaccination status, initial health status, concurrent illnesses, and comorbidities, among others. Severe outcomes have been observed in people with inadequately treated HIV.

Treatment with tecovirimat (TPOXX) is recommended for patients with monkeypox who have severe disease (including lesions or pain that interferes with the activities of daily living) or are at [high risk for severe disease](#).

Reporting and Consultation

Clinicians are required to report all cases of monkeypox to LAC DPH, including hospitalizations and deaths due to monkeypox. Reports should be made online via the LAC DPH secure [monkeypox reporting portal](#).

If hospitalized patients are worsening clinically, such as being admitted to the ICU, providers are asked to please contact the LAC DPH healthcare provider line (see below) for clinical consultation and to access additional therapeutic options.

Monkeypox in People with HIV

People with advanced or uncontrolled HIV are at risk of life-threatening disease. In previous outbreaks, the majority of monkeypox deaths have been reported in this [population](#). Both CD4 count and viral load should be considered when assessing the risk of severe disease, however there is insufficient data to define actionable thresholds. Clinical judgment should be used to best determine the degree of risk and guide treatment decisions. Tecovirimat may affect the drug levels of some antiretroviral

treatments (ART), but some experts believe neither dose adjustments nor additional ART are needed. Further information is available through the [CDC, Liverpool HIV Drug Interaction Database](#), and the [Johns Hopkins HIV Guidelines](#).

Tecovirimat

Tecovirimat (also known as TPOXX or ST-246) is an FDA-approved antiviral medication for the treatment of human smallpox disease. The CDC holds an expanded access Investigational New Drug (EA-IND) protocol that allows for the use of stockpiled tecovirimat to treat monkeypox disease during an outbreak.

Data are not available on the effectiveness of tecovirimat in treating monkeypox infections in people, but studies using a variety of animal species have shown that tecovirimat is effective in treating disease caused by orthopoxviruses. Clinical trials in people showed the drug was safe and had only minor side effects.

Informed consent is required for all patients treated with tecovirimat, and providers must follow the CDC EA-IND protocol. Tecovirimat is available in oral and intravenous formulations. In addition to its use in patients unable to take oral medication, intravenous tecovirimat should be considered in patients where oral drug absorption may be impaired, including those failing to improve on oral therapy.

Tecovirimat has now been positioned at Disaster Resource Center umbrella hospitals and with most major medical networks. Providers who do not have access through these systems can use the LAC DPH [TPOXX Treatment Checklist for Providers](#) to prescribe TPOXX through an outpatient community pharmacy. LAC DPH has developed [Guidance for the Treatment of Monkeypox-Tecovirimat](#) to support clinicians in obtaining and using tecovirimat. Healthcare providers may also call the DPH healthcare provider line for logistical and clinical consultation regarding tecovirimat.

Second Line Treatments for Monkeypox

In severe disease not improving with tecovirimat, [additional treatment options](#) are available including cidofovir and vaccinia immune globulin.

- Cidofovir is an intravenous antiviral medication approved for the treatment of CMV retinitis with in vitro and animal efficacy against orthopoxviruses.
- Vaccinia immune globulin is licensed for complications of vaccinia vaccination.

There are no data to inform whether a patient with severe monkeypox would benefit from either treatment, but their use may be considered. CDC holds expanded access protocols for the treatment of orthopoxviruses (including monkeypox) for both medicines, and access can be arranged through LAC DPH.

Brincidofovir is an oral pro-drug of cidofovir without the renal toxicity and other adverse effects observed with cidofovir. It is approved for the treatment of smallpox. It is not currently available, but an order was recently placed for the strategic national stockpile.

See CDC [Monkeypox Treatment Information](#) for more details.

Testing Updates

Testing should be performed on persons for whom monkeypox is suspected based on risk factors for monkeypox exposure and clinical suspicion (see CDPH [Clinical Decision Guide](#)). Providers should submit specimens through commercial labs if possible (with the exception for priority populations-see below).

Considerations for Testing Pediatric Patients

False-positive test results have been [reported](#). This is more likely when testing is performed in people who are unlikely to have the infection, such as children and non-sexually active adolescents.

At this time, providers are encouraged to only test children when there is a known or likely exposure, or a clinical presentation very consistent with monkeypox disease. As described by the [American Academy of Pediatrics \(AAP\)](#), the risk of children getting infected with monkeypox is low. While pediatric cases have been confirmed in the U.S., including in LA County, they are rare. The AAP recommends testing patients with suspicious lesions if there is a history of close, personal contact with someone who has monkeypox. This may include living with or having intimate or sexual contact with someone who has monkeypox.

Rashes and skin lesions are common among children and adolescents and are caused by a variety of infectious and non-infectious conditions, including varicella, herpes simplex virus, hand, foot, and mouth disease caused by enteroviruses, acne, molluscum, scabies, drug-related rashes, allergic reactions, and insect bites. Coxsackie A-6 (CAV-6), a type of enterovirus, is well known to cause atypical hand, foot and mouth rashes and is circulating in California at this time. Children with eczema are particularly likely to have the atypical rash with CAV-6 and are also at risk for eczema herpeticum.

While it is important to consider monkeypox in any person with compatible symptoms, a rash alone should not necessarily prompt testing. If a provider decides to test for monkeypox, a plausible risk for exposure should be identified, unless the child has one or more lesions that are [highly characteristic](#) of monkeypox (i.e. characteristic progression over 2-4 weeks from pustular to deep-seated, umbilicated lesions).

Priority Populations for Testing at the Public Health Lab

To expedite testing, providers with a suspect monkeypox case in one of the following priority populations are asked to submit specimens to the PHL:

- Persons experiencing homelessness (PEH)
- Pregnant persons
- Children with a history of close, personal contact with someone who has monkeypox

In addition, providers that do not have access to commercial orthopoxvirus testing may submit specimens to PHL.

Please note: Consultation from LAC DPH is required before [submitting specimens for testing](#) at the PHL.

For more detailed information on monkeypox testing, including a list of commercial labs, see [Monkeypox Virus Testing](#).

Clinical Consultation or Monkeypox Testing Approval--Provider Line

Providers who need clinical consultation (including for hospitalized monkeypox patients who are clinically worsening), access to treatment, or who are requesting approval for monkeypox testing at PHL can call:

Los Angeles County DPH Acute Communicable Disease Control

- Weekdays 8:30am–5pm: call 213-240-7941.
- Weekend days, holidays, and evenings (if urgent) call 213-974-1234 and ask for the physician on call.

Monkeypox Vaccine Update

Due to limited vaccine supply, LAC DPH is continuing to offer JYNNEOS vaccine in phases. Eligibility for JYNNEOS vaccine will expand as vaccine supply increases or the epidemiology of the outbreak changes.

Vaccine has been prioritized for persons with high risk of exposure to monkeypox through an expanded post-exposure prophylaxis (PEP) strategy. In order to reach more people at risk for monkeypox, JYNNEOS vaccine eligibility now includes persons who may be at future risk for exposure (i.e., pre-exposure prophylaxis or PrEP).

Monkeypox vaccine is now available to the following groups:

- Gay or bisexual men, or any men or transgender people who have sex with men or transgender people.
- Persons of any gender or sexual orientation who engage in commercial and/or transactional sex (e.g., sex in exchange for money, shelter, food, or other goods or needs)
- Persons living with HIV, especially persons with uncontrolled or advanced HIV disease
- Persons who had skin-to-skin or intimate contact with someone with suspected or confirmed monkeypox, including those who have not yet been confirmed by Public Health

People who are immunocompromised (including those with uncontrolled or advanced HIV) should be prioritized for vaccination.

LAC DPH is also directly communicating with the following groups to provide vaccination:

- People who have had [high- or intermediate-risk contact](#) with someone with monkeypox (as defined by CDC and confirmed by DPH).
- People who attended an event or venue where there was high risk of exposure

- through skin-to-skin or intimate contact to individual(s) with monkeypox.
- Persons experiencing homelessness (PEH) with high-risk behaviors.
 - People in high-risk cohorts identified by clinical staff in the LA County Jail system.
 - Other community groups at high risk of exposure to monkeypox

See the [Monkeypox Provider Vaccine webpage](#) for more information. Providers should reference this webpage frequently for the most current vaccine eligibility and vaccine referral guidance.

[Monkeypox Provider Hub](#)

This communication was sent by Sharon Balter, MD Director Division of Communicable Disease Control and Prevention, Los Angeles County Department of Public Health

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