

# *Mpox Update for Clinicians*

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Division of HIV and STD Programs  
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## Overview

- DPH Clinical resources
- Epidemiology
- Clinical presentation
- Testing and reporting
- Treatment
- Infection Control
- Vaccination

# LAC DPH Mpox Provider Resources

- Division of HIV and STD Programs  
Provider Consult Line: 213-368-7441
- Provider Mpox webpage
- <http://publichealth.lacounty.gov/acd/mpox/>

The screenshot shows the 'MPOX Information for Health Professionals' webpage. At the top, there is a dark blue header with the word 'MPOX' in a white box, followed by icons for a hand, a head with a brain, a person, and a head with a star. Below the header, a grey box contains a disclaimer: 'This webpage is specifically intended for the medical community. Click [here](#) to visit DPH's mpox webpage for the general public. Please be sure to refresh your browser to see the latest updates and versions of this webpage.' A 'Page updated 6-10-24' badge is in the top right of this box. The main content area is divided into two columns. The left column, titled 'Content', lists links for 'New and Noteworthy', 'Background', 'Clinical Consultation-Provider Line Reporting', 'Mpox Testing', 'Specimen collection', and 'Resources'. The right column, titled 'Quick Links', lists links for 'Mpox Online Confidential Morbidity Report (CMR)', 'Instructions for patients: Isolation | Exposure', 'Provider Hub subpages: Vaccine | Treatment', 'CDC Mpox Information for Health Professionals', and 'CDPH Mpox Information for Healthcare Providers'. At the bottom, a 'New and Noteworthy' section features a link for 'CDC Health Advisory: Mpox Caused by Human-to-Human Transmission of Mpox Virus with Geographic Spread in the Democratic Republic of Congo (12-7-23)'. On the left side of the webpage, there is a vertical navigation menu with links for 'MPOX Provider Hub', 'Treatment', 'Vaccine', 'Infection Control', 'Info for the General Public', 'Resources', 'Sitemap', 'Los Angeles Health Alert Network', and 'COVID-19 Provider Hub'. Below this menu is a 'Contact DHSP' section with the address: 'County of Los Angeles, Department of Public Health, Division of HIV and STD Programs'.



## **LAC DPH Mpox Clinical Support**

### **Provider Lines:**

Division of HIV and STD Programs Provider Consult Line:

Weekdays, 8:00am-4:30pm: call (213) 368-7441

Weekends and holidays, 8:00am-5pm: (213) 974-1234 and ask for the physician on call.

Evening/night –emergent patients only, (213) 974-1234 and ask for the physician on call.

### **Tpoxx specific questions:**

Email: [TPOXX@ph.lacounty.gov](mailto:TPOXX@ph.lacounty.gov)



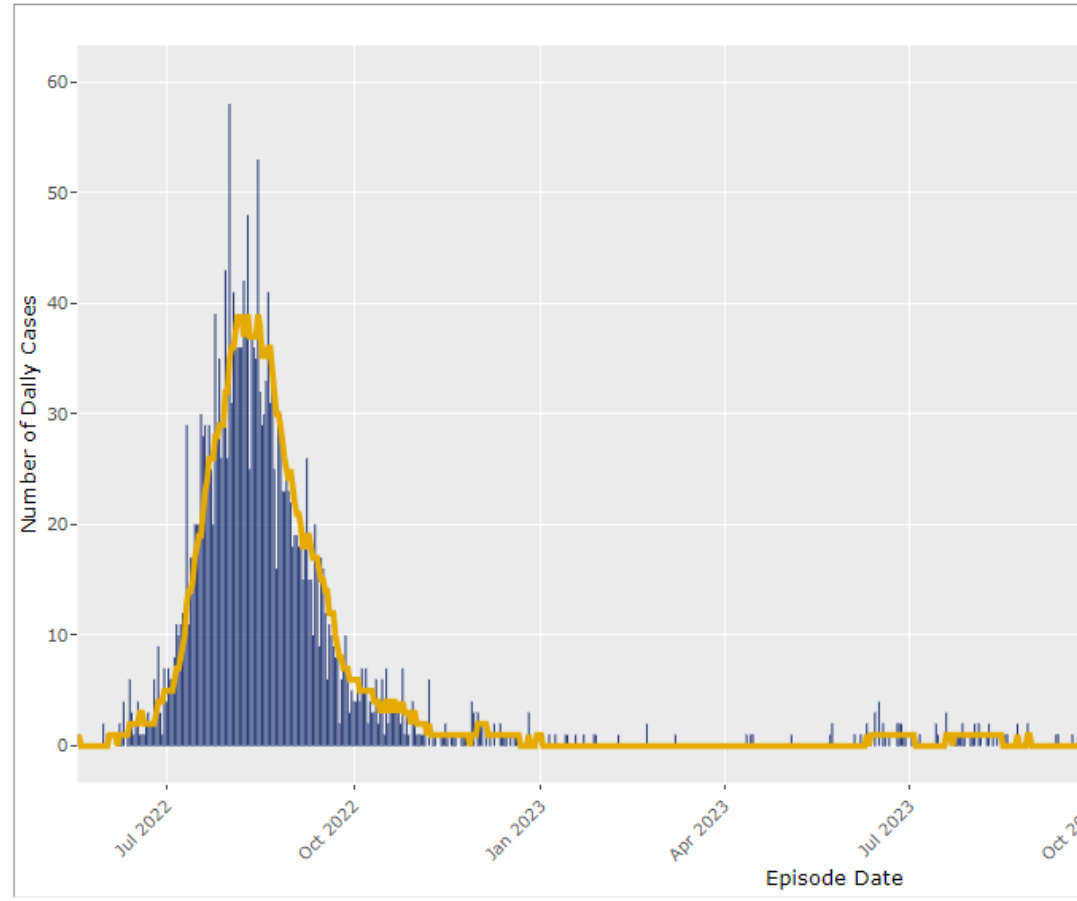
# Epidemiology





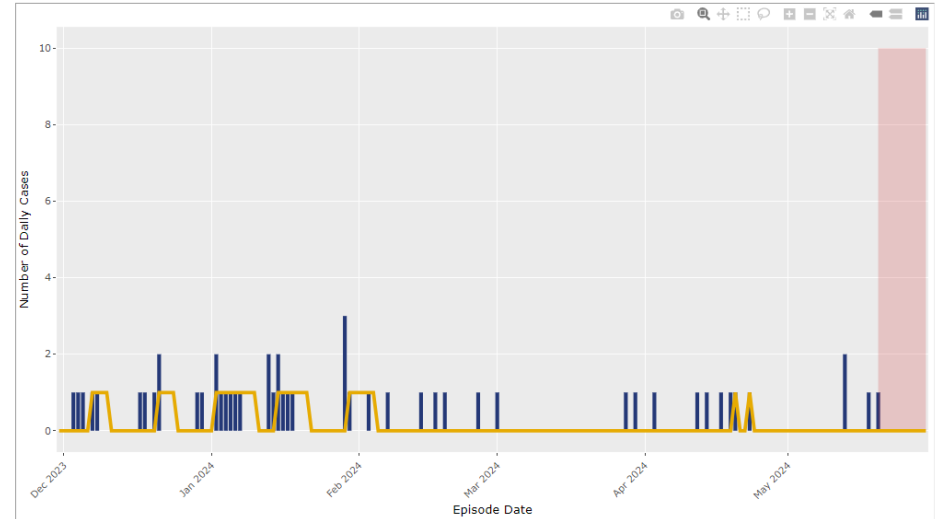
### CASE<sup>1</sup> COUNTS BY EPISODE DATE

Total ▾



### CASE<sup>1</sup> COUNTS BY EPISODE DATE

Past 6 months ▾



Episode date is defined as the earliest existing value of: Date of Onset, Date of Diagnosis, Date of Death, Date Received, Specimen Collection Date.  
Recent dates may be incomplete due to lags in data reporting. The red box corresponds to dates that are likely not yet reported completely.  
In order to Zoom in on the plot, left click on the plot and drag your cursor over the area you would like to Zoom.

1.LAC DPH Mpx Dashboard is available at <http://publichealth.lacounty.gov/media/monkeypox/data/index.htm>



## Mpox epidemiology

- Global outbreak of mpox since 2022 has been Mpox Clade II
- Regional clusters, waxing and waning across the US and LAC since 2023
- Waning immunity is an unlikely reason
- Increasing 2-dose vaccination coverage and counseling re: other prevention strategies are best ways to prevent cases
- Deaths still being reported nationally, none in LAC since 2022

## Clade I Mpox

- Potentially more virulent strain, data suggestive of higher case fatality rate in children
- At this time, no clade I cases identified outside of countries known to be endemic
- Endemic: DRC, Central African Republic, Republic of Congo, Cameroon, Gabon
- Similar to clade II, clade I requires close/sustained contact for transmission (sexual contact is an efficient mode of transmission)
- Jynneos vaccination would be protective
- For pts with suspected mpox and history of travel to DRC, contact LAC DPH so we can facilitate expedited clade specific testing at public health lab







# Clinical Presentation

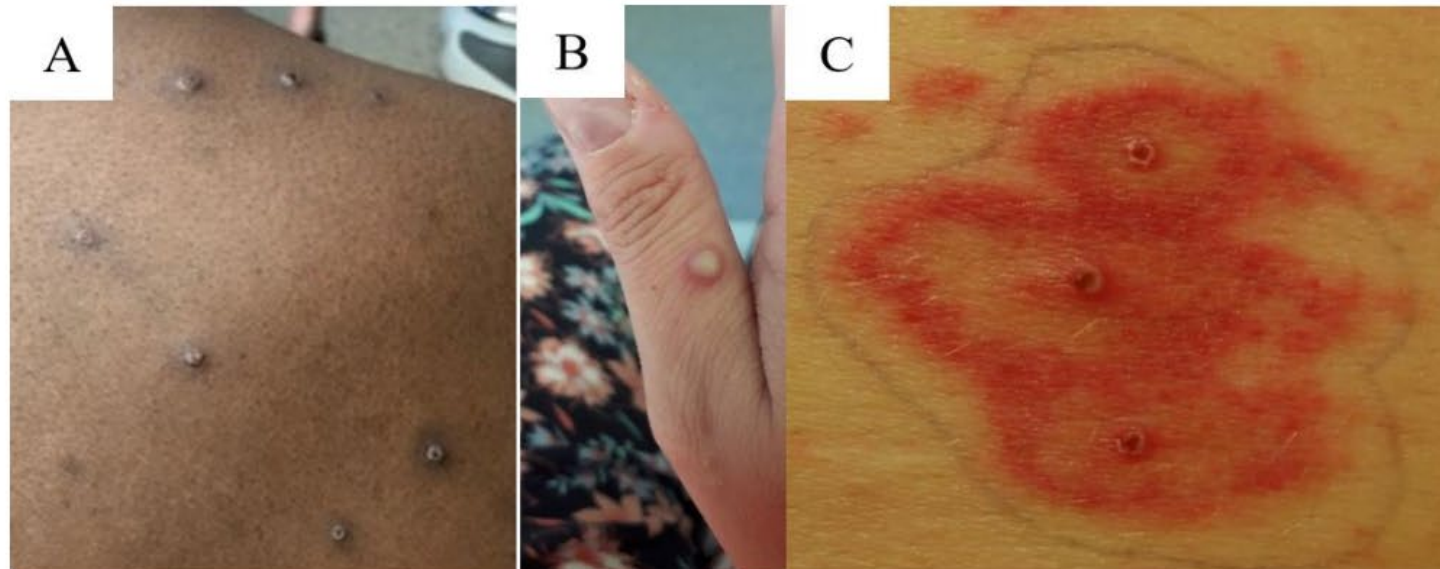


## Clinical Symptoms

- Skin rash or exanthem in all patients
- Lesions in different phases of development seen side-by-side
- Rash either scattered or diffuse; sometimes limited to one body site and mucosal area (e.g., anogenital region or lips/face)
- Presenting complaint sometimes anorectal pain or tenesmus; physical examination yields visible lesions and proctitis
- Prodromal symptoms mild or not occurring, or occurring after lesions/rash appears
- Fever, lymphadenopathy not occurring in all patients
- Some co-infections with sexually transmitted infections (STI)

## Lesions observed during May and June 2022\*

- Firm, deep-seated, well-circumscribed, painful, itchy, sometimes umbilicated
- Small lesions; often not distributed diffusely
- May rapidly progress through stages (papules, vesicles, pustules, and scabs)
- Papulovesicular and pustular lesions may be seen on same body site



For additional images:

- 1) Ogoina D et al. Clinical course and outcome of human monkeypox in Nigeria. *Clin Infect Dis.* 2020; 71(8): 210-214
- 2) Antinori A et al. Epidemiological, clinical, and virological characteristics of four cases of monkeypox support transmission through sexual contact, Italy, May 2022. *Euro Surveill.* 2022 June; 27(22).

Photos A and B from NHS England High Consequence Infectious Diseases Network; photo C from Reed KD, Melski JW, Graham MB et al. The detection of monkeypox in humans in the Western Hemisphere. Page 346. Copyright © 2004. Massachusetts Medical Society. Reprinted with permission



Photo Credit: NHS England High Consequence  
Infectious Disease Network



## Monkeypox lesions, United States 2022



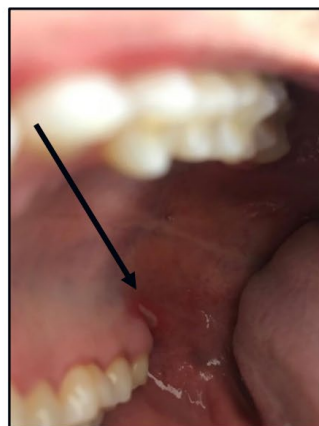
From Basgoz N, Brown CM, Smole SC, et al. Case 24-2022: A 31-Year-Old Man with Perianal and Penile Ulcers, Rectal Pain, and Rash. Epub ahead of print. Copyright © Jun 15 2022. Massachusetts Medical Society. Reprinted with permission from Massachusetts Medical Society

Shared with permission from patients, CDC 2022

# Possible presentations

## ■ Mouth with oral lesion

- Small ulcerated area in upper right rear oral cavity; painful when swabbed



## ■ Chin lesion

- One lesion with white rim, dark center, erythematous base



## ■ Genital exam



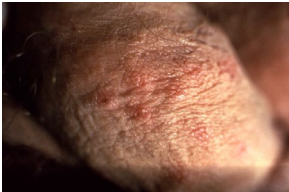


- Uncircumcised; multiple discrete small papules and macules on the glans penis, coronal sulcus, and distal penile shaft
- Some skin lesions were flesh-colored and some were pale; no pustules
- Lesions were firm and slightly rubbery; could not be unroofed
- Lesions were painful
- No inguinal lymphadenopathy





# Comparison of STI Skin Rashes with Mpox



Type of Infection	Incubation Period	Description
<p><b>Secondary Syphilis</b></p> 	<p>Can range from 10 to 90 days</p>	<p>Can appear when the primary chancre (ie, painless ulcer) is healing or several weeks after the chancre heals. <b>Most commonly appears as maculopapular rash on trunk, palms and soles. May be accompanied by mild constitutional symptoms.</b> Usually does not cause itching. Tends to have more of a peeling appearance, not nodular. Other common secondary syphilis presentations to look for: 1) Condyloma lata which are large, raised, gray or white lesions that develop in warm, moist areas like the mouth, underarm or groin/perianal region, 2) mucus patches, and 3) alopecia.</p>
<p><b>Disseminated Gonococcal infection</b></p> 	<p>Not specified</p>	<p>The rash typically has a maculopapular, <b>pustular, petechial</b>, or necrotic appearance and usually occurs in the distal extremities (limbs, hands, and feet). Rarely nodular.</p>
<p><b>Genital Herpes</b></p> 	<p>The average incubation period for an initial herpes infection is 4 days (range, 2 to 12) after exposure</p>	<p>Herpes lesions typically appear as one or more vesicles, or small blisters, on or around the genitals, rectum or mouth. <b>Mostly commonly presents in grouped vesicles (e.g, bunch of grapes).</b> Often described as “dew on a rose petal.” The vesicles break and leave painful ulcers that may take two to four weeks to heal after the initial herpes infection. Can present on buttocks and be confused with Shingles.</p>
<p><b>Molluscum Contagiosum</b></p> 	<p>Two weeks to six months</p>	<p>The lesions, known as Mollusca, are small, raised, and usually white, pink, or <b>flesh-colored with a dimple or pit in the center. They often have a pearly appearance.</b> They’re usually smooth and firm. In most people, the lesions range from about the size of a pinhead to as large as a pencil eraser (2 to 5 millimeters in diameter). They may be asymptomatic or become itchy and irritated. Molluscum contagiosum is a self-limited infection; the papules usually disappear spontaneously within 6 to 12 months but may take as long as 4 years to resolve.</p>
<p><b>Monkeypox</b></p> 	<p>On average 7-14 days</p>	<p>The evolution of lesions progresses through four stages—macular, papular, vesicular, to pustular—before scabbing over and resolving. Lesions are <b>well circumscribed, deep seated, and often develop umbilication</b> (resembles a dot on the top of the lesion), they are relatively the same size and same stage of development on a single site of the body. <b>Fever may occur before rash, and lymphadenopathy is common.</b> Lesions are often described as <b>painful</b> until the healing phase when they become itchy (crusts). Rash is centrifugal (more lesions on extremities, face) and can appear on palms and soles. May present only in genital area; can present as proctitis as well.</p>

### Mpox Clinical Recognition and Testing Quicksheet: Mpox Presentations vs Common Exanthems



Mpox		Mimickers
	Macular/Papular	<p>Secondary Syphilis      Disseminated Gonorrhea</p>
	Vesicular	<p>Herpes      Disseminated Gonorrhea</p>
	Pustule/Scab	<p>Varicella      Acne      Molluscum Contagiosum      Hidradenitis Suppurativa</p>
	Ulcerative Lesions	<p>Primary Syphilis      Hand-foot-mouth</p>
	Oral Lesions	<p>Herpes      Hand-foot-mouth      Aphthous ulcer (canker sore)      Secondary syphilis mucous patch</p>

View image sources on the [California PTC Website \(californiaptc.org\)](https://californiaptc.com)

Revised May 2024 - 1





# Testing and Reporting



## Suspect Mpox?

- Test the rash of any patient with suspected mpox
- Instruct patients to isolate immediately pending test results:  
<http://publichealth.lacounty.gov/acd/docs/MonkeypoxIsolation.pdf>
  - Stay in a private room and ideally have separate bathroom
  - Avoid sharing bedding, towels, or any household items with others
- Notify contacts of exposure:
  - *Infectiousness*: onset of prodromal symptoms through resolution of the rash
- Tell patient that a Public Health Nurse will reach out to them within a few days to check on them and identify any high-risk close contacts so they can receive vaccine PEP
- Can resume limited outside activities if
  - They can completely cover their lesions
  - AND
  - have been fever free for 48+ hours, no new lesions
- Otherwise, must wait for rash to resolve = shedding of crusts and observation of healthy pink tissue at all lesion sites



## Mpox Testing

- All major commercial laboratories offer testing for mpox
  - Quest Diagnostics, Labcorp, Aegis Sciences, and Sonic Healthcare.
- Public Health Lab testing available for the following cases that need rapid turn around (<2 days):
  - Children or pregnant persons
  - Persons with recent travel from western or central Africa (esp DRC) to test for Clade I
  - Persons experiencing homelessness (PEH) if needed to expedite decisions on the individual's placement
- Obtain approval for PHL testing from LAC DPH

## Mpox testing technique

- Use sterile, synthetic swabs (including but not limited to polyester, nylon, or Dacron), to collect two swabs from each lesion; preferably from different locations on the body or from lesions with different appearance. Do not use cotton swabs.
- Vigorously swab the lesion to collect adequate DNA.
- Do not de-roof the lesion before swabbing.
- Lesion swabs may be collected in viral transport media (VTM) or universal transport media (UTM) tubes. Lesion swabs can also be placed in an empty sterile screw cap tube or sterile screw cap specimen cup for transport of a dry swab.


# Reporting

- Mpox is mandated to be reported by laboratories AND providers.
- Laboratories automatically report to LAC DPH.
- Healthcare providers must complete a Confidentiality Morbidity Report form at <http://publichealth.lacounty.gov/acd/monkeypox/index.htm#reporting>
- Simple online portal to report

## Reporting

**Healthcare provider must report all LA County residents with orthopoxvirus positive and/or presumptive positive test results from commercial laboratories.**

- Providers should report cases on-line via the LAC DPH secure monkeypox reporting portal **Monkeypox Confidential Morbidity Report (CMR)**.

If providers experience technical difficulties with using the on-line report form, reports may be completed using the standard [CMR form](#)  and submitted via fax to (888) 397-3778 or (213) 482-5508. Provider reporting is not necessary for positive tests conducted by the LAC DPH PHL.

[Monkeypox Confidential Morbidity Report](#)



# Treatment



## Suspected or confirmed Mpox: Treatment

- Majority of cases of mpox will resolve without antiviral medication
- Symptom management
  - Oral analgesics (acetaminophen, ibuprofen)
  - Keep lesions clean and dry
  - Itching- calamine lotion, petroleum jelly, antihistamines
  - Oral lesions- salt water rinses, special mouthwashes
  - Painful anorectal lesions- stool softeners, anal gels, sitz baths, topical lidocaine

- Tpoxx formulations: Oral and IV
- **FDA-approved for smallpox treatment in adults and children only**
  - Based on animal efficacy data and safety data in 359 healthy adults
- **No approved treatment by the FDA for mpox**
  - Tpoxx has been shown effective against other orthopoxviruses in animal challenge models
  - Anticipated potential treatment benefit based on animal efficacy uses and previous Tpoxx administration during prior outbreaks
  - **Led to offering access to ORAL stockpiled Tpoxx via the following routes**
    - NIH's STOMP Trial (Study of Tecovirimat for Human Mpox Virus)
    - CDC-Expanded Access Investigational New Drug (CDC EA-IND)/Compassionate use





- Clinical trial (NIH) for oral Tpoxx to evaluate safety and efficacy
- **Preferred strategy for clinicians and local health jurisdictions to access oral Tpoxx**
- Enrollment is critical:
  - Show Tpoxx efficacy against mpox
  - FDA approval
  - Commercial availability



U.S. Department of  
Health and Human Services  
Centers for Disease  
Control and Prevention

- Decline voluntary enrollment in STOMP
- Ineligible for STOMP
  - Prior Tpoxx use
  - Illness duration > 14 days
  - Require IV Tpoxx treatment



## What is STOMP and why refer?

- ✔ STOMP ([www.stomptpoxx.org](http://www.stomptpoxx.org)) is a clinical trial of oral tecovirimat (TPOXX) safety and efficacy.
- ✔ It is the preferred strategy for clinicians and local health jurisdictions to access oral TPOXX.
- ✔ Enrollment is critical to show TPOXX efficacy against mpox for FDA approval and commercial availability.

## Who qualifies?

- ✔ Any patient with presumptive or laboratory-confirmed mpox disease, of any severity, whose symptoms began ≤ 14 days prior to enrollment, and who have ≥1 active lesion(s).
- ✔ Patients without prior use of oral or IV TPOXX, and not likely to need IV TPOXX as therapy.
- ✔ Persons with HIV not planning to initiate cabotegravir/rilpivirine (Cabenuva®) during or within 2 weeks of study completion.

## What to say?

Participation can be in-person and/or 100% remote via video. Travel is not required.

Participants will be compensated with cash and/or gift card(s).

Pregnant people, children and participants with severe mpox, immunosuppression, or specific skin conditions (e.g. eczema) receive TPOXX.

Participants with mild to moderate mpox are randomized to receive TPOXX or placebo, 2:1.

Neither the clinical study team nor the participant will be notified of randomization (double-blinded). If symptoms worsen, participants may be switched to TPOXX open-label study.

Participants are monitored via in-person or video appointments, questionnaires, and symptom diaries.

Participants usually receive TPOXX/ placebo within 24 hours after enrollment.

## How to help patients enroll?

1

**Order/collect confirmatory human mpox virus PCR testing** a positive test result is required for continued participation following enrollment.

2

**Call the Mpox Study Hotline +1 (855) 876-9997** together with your patient or provide the number directly to your patient.

Language services are not available through the hotline, consider using in-clinic interpretation services.

Most study sites can enroll Spanish-speaking participants. Other languages are enrolled in accordance with IRB-approved procedures.

## What else for patients?

- ✔ Offer JYNNEOS® vaccination as post-exposure prophylaxis (PEP) to all patients exposed to mpox who do not yet have symptoms contributable to mpox. It is most effective if provided <14 days of exposure.
- ✔ Provide the patient with return precautions in the case that STOMP enrollment is unsuccessful and symptoms continue.



**Scan to visit the STOMP website**

- All forms will be submitted directly to CDC
- No need to send forms to LACDPH

## Informed Consent

- Explain that Tpoxx is an investigational new drug (IND) and not approved for mpox treatment
- Patient signs and completes form
- **If sending to outpatient community pharmacy:** Fax/email informed consent form
- **Store in patient record (No need to submit to CDC or LACDPH)**

## FDA Form 1572

- **One 1572 form per facility suffices for all Tpoxx treatments**
- Facility completes and signs form
- **Keep on file and send 1 copy to the following organizations within 7 days:**
  - CDC: [regaffairs@CDC.gov](mailto:regaffairs@CDC.gov) or upload via the Sharepoint site
  - Community Pharmacy (if dispensing through them)

## Patient Intake Form (Form A)

- Provider needs to complete this form for each patient
- **Send 1 copy to the following organizations within 7 days:**
  - LACDPH: [TPOXX@ph.lacounty.gov](mailto:TPOXX@ph.lacounty.gov)
  - CDC: [regaffairs@CDC.gov](mailto:regaffairs@CDC.gov) or upload via the Sharepoint site
  - Community Pharmacy (if dispensing through them)

## Clinical Outcome Form (Form B)

- Progress and outcome information post-treatment
- **Send 1 copy to the following organizations:**
  - LACDPH: [TPOXX@ph.lacounty.gov](mailto:TPOXX@ph.lacounty.gov)
  - CDC: [regaffairs@CDC.gov](mailto:regaffairs@CDC.gov) or upload via the Sharepoint site

## Serious Adverse Events Reporting Form

- Report life-threatening or serious adverse events with Tpoxx
- **Send 1 copy to the following organizations within 72 hours of the event:**
  - LACDPH: [TPOXX@ph.lacounty.gov](mailto:TPOXX@ph.lacounty.gov)
  - CDC: [regaffairs@CDC.gov](mailto:regaffairs@CDC.gov) or upload via the Sharepoint site

## Tecovirimat (TPOXX) IND Registry for Providers and Facilities



### Why register?

An online registry is available for providers and affiliated medical facilities providing tecovirimat (TPOXX) under the CDC-held expanded access Investigational New Drug (IND) protocol to register. All providers must register with the TPOXX IND Online Registry.

- The TPOXX IND Online Registry enables compliance with IND regulations.
- Providers must be registered to access electronic TPOXX IND forms that are required for completion and submission to CDC. The secure electronic forms include:
  - Form FDA 1572 (Statement of Investigator)
  - Patient Intake Form
  - Clinical Outcome Form
- The online registry provides an up-to-date list of participating providers and facilities under the TPOXX IND protocol.



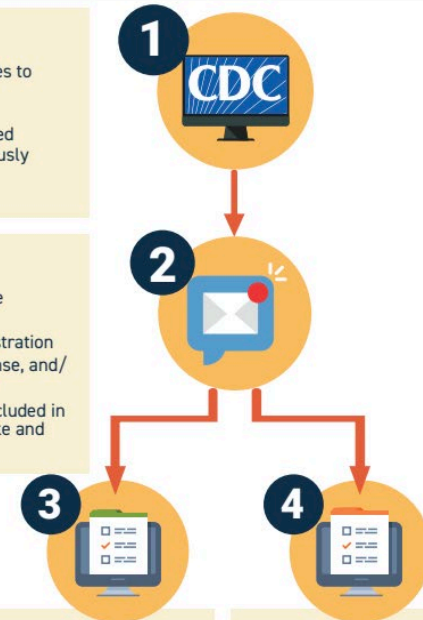
### Steps to Register and Access Electronic Patient Intake and Clinical Outcome Forms

#### Register Online

- Register as participating providers and facilities to be covered under the CDC-held TPOXX IND protocol.
- The electronic Form FDA 1572 can be completed through the online registry if it was not previously submitted to CDC.

#### Complete Verification

- Upon registration, the provider will receive the first email from "CDC TPOXX IND <noreply@dcipher.cdc.gov>" confirming registration as a participating provider to prescribe, dispense, and/or administer TPOXX under the CDC-held IND.
- Please complete the brief verification steps included in the email to access the electronic Patient Intake and Clinical Outcome Forms.



#### Access Patient Intake Form

- Upon verification, a provider will receive a second email with a secure link to electronically fill out the Patient Intake Form.
- The secure link can be accessed multiple times to complete the form for each patient treated.
- For each patient treated with TPOXX, providers must submit this form to CDC within 7 calendar days of therapy initiation.

#### Access Clinical Outcome Form

- Upon verification, a provider will receive a third email with a secure link to electronically fill out the Clinical Outcome Form.
- The secure link can be accessed multiple times to complete the form for each patient treated.
- For each patient treated with TPOXX, providers should submit this form to CDC within 3-7 calendar days of completing tecovirimat treatment.

**Note:** For security reasons, the electronic Patient Intake and Clinical Outcome forms must be completed and submitted in one sitting, and the links to these forms expire **180 days** from issuance. Providers with expired links who need access to these forms can email [regaffairs@cdc.gov](mailto:regaffairs@cdc.gov) to request new secure links.

For any questions regarding the TPOXX IND Online Registry and/or electronic forms, please email [regaffairs@cdc.gov](mailto:regaffairs@cdc.gov).



## Tpoxx Eligibility Categories

- Severe mpox clinical manifestations at presentation
- High risk of severe mpox clinical manifestations
- Special populations

## **Stricter criteria changes under the eligibility categories!**

- Emphasis on protracted/life-threatening illness
- Concern for Tpoxx resistance
  - LA County Tpoxx resistance cluster
- Most patients that were placed on Tpoxx were due to severe pain with 50% of pain resolving in 2 days
  - Tpoxx patient diaries (n = 150) : Got better on 1 dose?
- Utilization of STOMP trial low!
  - Need to have human efficacy data



- Emphasis on criteria that can contribute to **protracted/life-threatening illness**
- Lesions  $\geq$  25% of body surface area = Disseminated infection
- Specific anatomic area listing removed, consider case-by-case between clinician and CDC
- Hospitalization and surgical involvement removed

Severe Mpox clinical manifestations at presentation
<p style="text-align: center;"><b>Revised CDC EA-IND Criteria</b></p> <p style="text-align: center;"><b>People with <u>protracted or life-threatening manifestations</u> of Mpox at presentation</b></p> <ul style="list-style-type: none"> <li>• <b>Severe Disease (1 of the following):</b> <ul style="list-style-type: none"> <li>○ Lesions affected <math>\geq</math> 25% of body surface that may be confluent, necrotic, or hemorrhagic in appearance, and/or cause sepsis</li> <li>○ Ocular or periorbital infection irrespective of the time since infection onset</li> <li>○ Disease resulting in airway compromise or affecting the nervous system</li> <li>○ Cardiac (e.g. myocarditis) or neurologic disease (e.g. encephalitis)</li> </ul> </li> <li>• <b>Tpoxx may be considered on a <u>case-by-case basis</u> for an unusual situation wherein CDC consult team and/or CDC Principal Investigator in discussion with treating clinician deem treatment under the EA-IND may potentially be beneficial</b> <ul style="list-style-type: none"> <li>○ Consideration is expected to be rare</li> <li>○ Intended for unusual situations associated with the disease that could result in clear long-term sequelae (ex: urethral stricture)</li> </ul> </li> </ul>
<p style="text-align: center;"><b>Current CDC EA-IND Criteria: Severe Disease</b></p> <ul style="list-style-type: none"> <li>• <b>Severe Disease</b> <ul style="list-style-type: none"> <li>○ Hemorrhagic disease</li> <li>○ Large number of lesions that are confluent</li> <li>○ Necrotic lesions</li> <li>○ Severe lymphadenopathy (necrotizing or obstructing such as in airways)</li> <li>○ Multiple organ system involvement with associated co-morbidities (ex: pulmonary involvement with nodular lesions, sepsis, encephalitis, myocarditis, ocular or periorbital infections)</li> <li>○ Other conditions requiring hospitalization</li> </ul> </li> <li>• <b>Anatomic areas that result in serious sequelae that include scarring and strictures</b> <ul style="list-style-type: none"> <li>○ Pharynx causing dysphagia, inability to control secretions, need for parenteral feeding</li> <li>○ Penile foreskin</li> <li>○ Vulva</li> <li>○ Vagina</li> <li>○ Urethra</li> <li>○ Anorectum                             <ul style="list-style-type: none"> <li>▪ Lesions interfering with bowel movements (for example: severe pain)</li> </ul> </li> <li>○ Severe infections (incl secondary bacterial skin infections) especially those requiring surgical intervention</li> </ul> </li> </ul>

- HIV eligibility criteria has specific CD4 count requirement

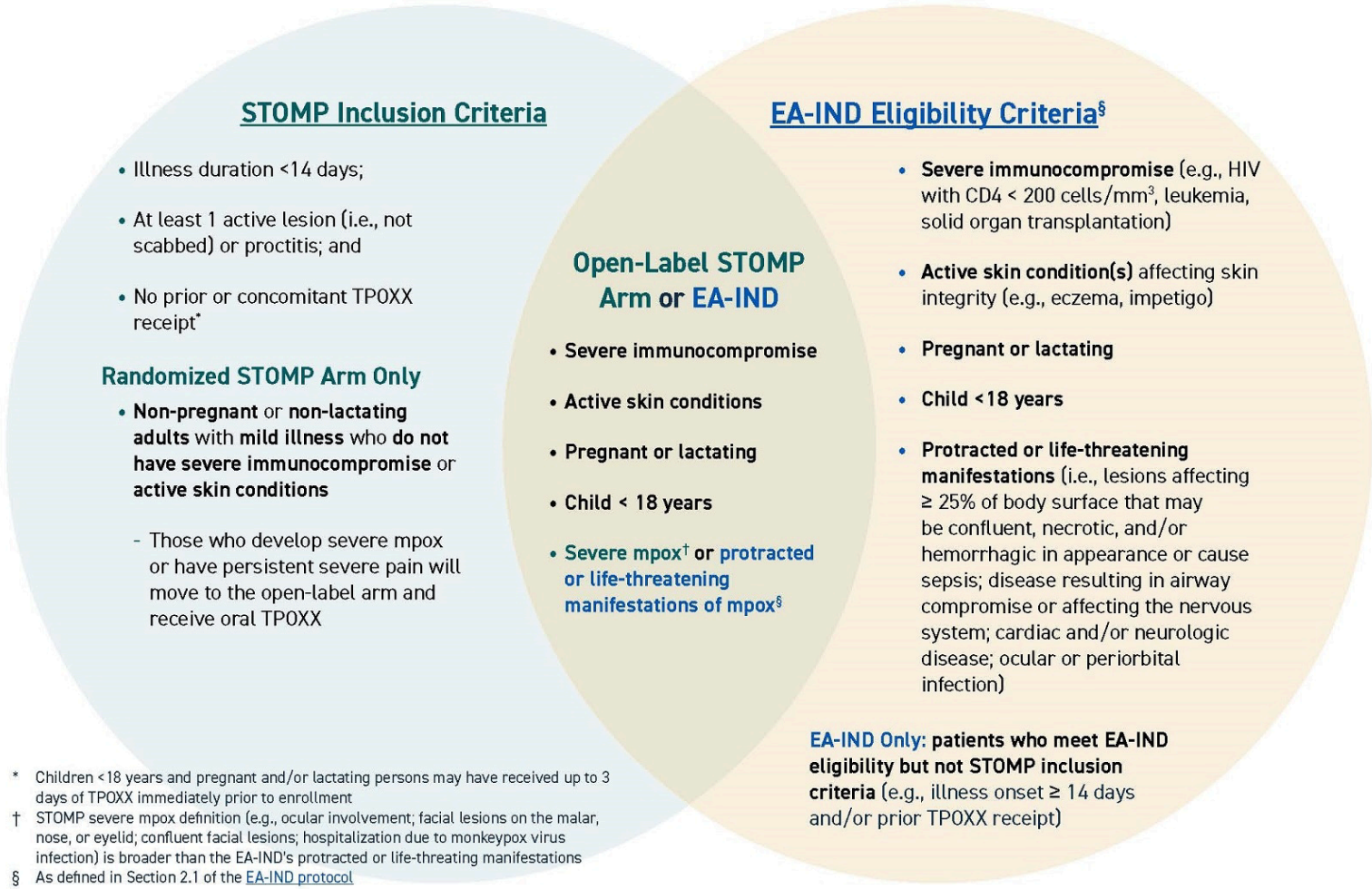
High risk of severe mpox clinical manifestations
<b>Revised CDC EA-IND Criteria</b>
<ul style="list-style-type: none"><li>• <b>Severe immunocompromised conditions defined as:</b><ul style="list-style-type: none"><li>○ HIV with CD4 &lt; 200 or other comparable severe immunocompromise</li><li>○ Leukemia or lymphoma</li><li>○ Generalized malignancy</li><li>○ Solid organ transplantation</li><li>○ Therapy with alkylating agents within 180 days prior to mpox illness onset</li><li>○ Antimetabolites within 180 days prior to mpox illness onset</li><li>○ Radiation therapy within 180 days prior to mpox illness onset</li><li>○ Tumor necrosis factor inhibitors within 180 days prior to mpox illness onset</li><li>○ High-dose corticosteroids (equivalent of 20 mg or greater of prednisone for at least 14 days) within 90 days prior to mpox illness onset</li><li>○ Being a recipient with hematopoietic stem cell transplant &lt; 24 months post-transplant or &gt;= 24 months but with graft-versus-host disease or disease relapse or having a autoimmune disease with immunodeficiency as a clinical component</li></ul></li><li>• <b>Active skin conditions (at higher risk for disseminated infection)</b><ul style="list-style-type: none"><li>○ Atopic dermatitis</li><li>○ Active exfoliative skin conditions (eczema, burns, impetigo, active varicella zoster virus infection, psoriasis, or keratosis follicularis (Darier disease))</li></ul></li></ul>
<b>Current CDC EA-IND Criteria</b>
<ul style="list-style-type: none"><li>• <b>Severe immunocompromised conditions defined as:</b><ul style="list-style-type: none"><li>○ <b>Advanced or poorly controlled HIV</b></li><li>○ Leukemia or lymphoma</li><li>○ Generalized malignancy</li><li>○ Solid organ transplantation</li><li>○ Therapy with alkylating agents within 180 days prior to mpox illness onset</li><li>○ Antimetabolites within 180 days prior to mpox illness onset</li><li>○ Radiation therapy within 180 days prior to mpox illness onset</li><li>○ Tumor necrosis factor inhibitors within 180 days prior to mpox illness onset</li><li>○ High-dose corticosteroids (equivalent of 20 mg or greater of prednisone for at least 14 days) within 90 days prior to mpox illness onset</li><li>○ Being a recipient with hematopoietic stem cell transplant &lt; 24 months post-transplant or &gt;= 24 months but with graft-versus-host disease or disease relapse or having a autoimmune disease with immunodeficiency as a clinical component</li></ul></li><li>• <b>Active skin conditions (at higher risk for disseminated infection)</b><ul style="list-style-type: none"><li>○ Atopic dermatitis</li><li>○ Active exfoliative skin conditions (eczema, burns, impetigo, active varicella zoster virus infection, psoriasis, or keratosis follicularis (Darier disease))</li></ul></li></ul>

<b>Special Populations</b>
<b>Revised CDC EA-IND Criteria</b>
<ul style="list-style-type: none"><li>• Pregnant or breastfeeding individuals regardless of illness severity or underlying comorbidities</li><li>• Children (&lt; 18 years) regardless of illness severity or underlying comorbidities</li></ul>
<b>Current CDC EA-IND Criteria</b>
<ul style="list-style-type: none"><li>• Pregnant or breastfeeding people</li><li>• Pediatric populations, particularly patients younger than 1 year of age</li></ul>





## Oral TPOXX Via NIH's STOMP vs. CDC's EA-IND Protocol



\* Children <18 years and pregnant and/or lactating persons may have received up to 3 days of TPOXX immediately prior to enrollment  
 † STOMP severe mpox definition (e.g., ocular involvement; facial lesions on the malar, nose, or eyelid; confluent facial lesions; hospitalization due to monkeypox virus infection) is broader than the EA-IND's protracted or life-threatening manifestations  
 § As defined in Section 2.1 of the [EA-IND protocol](#)



## LACDPH TPOXX PHARMACY NETWORK

Tecovirimat (TPOXX) is the first-line medication mpox treatment under an [EA-IND protocol](#). The below pharmacies are part of LACDPH's TPOXX network and maintain a minimum inventory of TPOXX doses for dispensing monitored by LACDPH. For more information about TPOXX click the link [CDC-TPOXX Treatment Guidance Page](#)

TPOXX dispensing requirements include:

1. Prescription - *Ordering provider to e-prescribe or call in prescription*
2. Patient intake form - *See link below*
3. Patient informed consent form - *See link below*
4. Form 1572 from the provider - *See link below*

Access the electronic form through the [Tecovirimat IND Online Registry](#). To Complete the patient, dispensing requirements include

Please contact one of the pharmacies below for dispensing. For any other questions, contact [PharmProvMgt@ph.lacounty.gov](mailto:PharmProvMgt@ph.lacounty.gov)

### Participating pharmacy locations

**986 PHARMACY  
TEMPLE CITY**  
9612 Las Tunas Dr.  
Temple City, CA 91780  
(626) 309-5052

**Hours:**  
M-F: 9am - 6pm  
Sat: 9am - 4pm  
Sun: Closed

**CARSON PHARMACY**  
21720 S Vermont Ave Ste 101  
Torrance, CA 90502  
(310) 328-0982

**Hours:**  
M-F: 9:30am - 6:30pm  
Sat: 9:30am - 4pm  
Sun: Closed

**COSMED PHARMACY**  
6521 Van Nuys Blvd  
Van Nuys, CA 91401  
(818) 933-2010

**Hours:**  
M-F: 9am - 7pm  
Sat: 9am - 4pm  
Sun: Closed

**EDDIE'S PHARMACY**  
8408 Beverly Blvd  
Los Angeles, CA 90048  
(310) 358-2400

**Hours:**  
M-F: 9am - 6pm  
Sat: 9am - 1pm  
Sun: Closed

**ELEMENTS PHARMACY**  
12602 Ventura Blvd  
Studio City, CA 91604  
(818) 762-2055

**Hours:**  
M-F: 9am - 6pm  
Sat: 9am - 4pm  
Sun: Closed

**HEALTHRX PHARMACY**  
1844 E. RTE 66  
Glendora, Ca 91740  
(626) 335-4777

**Hours:**  
M-F: 9am - 7pm  
Sat: 10am - 3pm  
Sun: Closed

**LA COMPOUNDING PHARMACY**  
8600 W 3rd St #1  
Los Angeles, CA 90048  
(310) 362-4122

**Hours:**  
M-F: 9am - 5pm  
Sat-Sun: Closed

**MEDEX PHARMACY**  
8441 Foothill Blvd  
Los Angeles, CA 91040  
(818) 925-1321

**Hours:**  
M-F: 9am - 7pm  
Sat: 9am - 2pm  
Sun: Closed

**MICKEY FINE PHARMACY**  
433 N Roxbury Dr  
Beverly Hills, CA 90210  
(310) 271-6123

**Hours:**  
M-Th: 8:30am - 6:30pm  
Fri: 8:30am - 6pm  
Sat-Sun: 9am - 2pm

**PRICE CARE PHARMACY**  
10837 Downey Ave  
Downey, CA 90241  
(562) 825-5923

**Hours:**  
M-F: 10am - 5:30pm  
Sat-Sun: Closed

**WHITE MEMORIAL MEDICAL  
PLAZA PHARMACY**  
1701 E Cesar E Chavez Ave Suite 109  
Los Angeles, CA 90033  
(323) 221-6000

**Hours:**  
M-F: 8:30am - 6:30pm  
Sat: 9am - 1:30pm  
Sun: Closed

- Stockpiled Tpoxx at EOC: 5704 bottles
  - One bottle = 42 pills
  - 1 pill = 200mg dosage
  - Ex: 86 to < 264 lbs
    - 600mg q 12 hrs x 14 days
    - 14 days = 84 pills = 2 bottles
- **If STOMP declined**, health care systems/pharmacies/clinics can access through LACDPH DHSP
  - Coordinate with EOC to deliver
- **Please utilize the STOMP study call center phone line**



## Any logistical or clinical TPOXX needs

**Email: [TPOXX@ph.lacounty.gov](mailto:TPOXX@ph.lacounty.gov)**

### Provider Line

Weekdays, 8:00am-4:30pm: call (213) 368-7441

Weekends and holidays, 8:00am-5pm: call (213) 974-1234 and ask for the physician on call.

Evening/night –emergent patients only, call (213) 974-1234 and ask for the physician on call.



# Infection Control



## Mode of transmission & precautions in healthcare facilities

- Practical guidance based upon exposure risk for routine swabbing and care:
  - Surgical mask + Gloves
  - N95, gown & eye protection for aerosol generating procedures
  - Among 313 HCP exposed to mpox in Colorado, none were infected despite low use of recommended PPE or post-exposure prophylaxis through vaccination. Providers wearing appropriate PPE, particularly when in physical contact with mpox patients, are expected to have very low likelihood of mpox acquisition.
  - The majority of occupationally acquired mpox infections in HCP have occurred through sharps injuries from attempts at unroofing mpox lesions. Unroofing lesions is not necessary and not advised.



# Preventing Occupational Mpox Transmission in Outpatient Clinics

	<b>CDC guidance</b>	<b>Resource-scarce alternative</b>
<b>Patient Placement</b>	Single-person room upon entry into clinic and throughout visit (no special air handling required)	<ul style="list-style-type: none"> <li>• Shared waiting room until single room available</li> <li>• Patient masked and all lesions covered in shared spaces</li> <li>• Exam Rooms cleaned with standard cleaning and disinfection procedures (using product with an EVP** claim) between patient visits</li> </ul>
<b>Bathroom</b>	Dedicated bathroom for suspect/confirmed mpox patients	Shared bathroom cleaned routinely with standard cleaning and disinfection procedures (using product with an EVP** claim)
<b>PPE</b>	All healthcare personnel (HCP) who enter patient room: gown, gloves, eye protection (goggles or face shield) & N95 or higher respirator	<ul style="list-style-type: none"> <li>• Full PPE used only by HCP who will have physical contact with patient.</li> <li>• In some settings, before donning full PPE, clinician wearing surgical mask briefly enters room to obtain history and visualize lesions. If mpox suspected, provider dons full PPE prior to close inspection or sampling of lesions.</li> </ul>
<b>Waste Management</b>	Per <u>U.S. DOT regulations</u> for Hazardous Materials	Per institutional protocol



Exposure Risk	High Risk	Intermediate Risk	Low/Unknown Risk	No Risk
<b>Definition</b>	<ol style="list-style-type: none"> <li>Unprotected contact between an exposed individual's broken skin or mucous membranes and mpox skin lesion.</li> <li>Inside the patient's room or within 6 feet of a patient with mpox during aerosol-generating procedure from oral secretions (e.g., CPR, intubation), or activities that may resuspend dried exudates (e.g., shaking soiled linens), without wearing an N95 respirator and eye protection.</li> </ol>	<ol style="list-style-type: none"> <li>Being within 6 feet for a total of 3 hours or more (cumulative) of an unmasked patient with mpox without wearing a facemask or respirator.</li> <li>Unprotected contact between an exposed individual's intact skin and the skin lesions or bodily fluids, or soiled materials (e.g., linens, clothing).</li> <li>Activities resulting in contact between clothing and skin lesions or bodily fluids, or soiled materials (e.g., during turning, bathing, or assisting with transfer) while not wearing a gown.</li> </ol>	Healthcare worker not wearing a mask, but the exposure was less than 3 hours.	Healthcare worker was wearing gloves and mask for all contact with patients and did not meet any of the above exposure categories.
<b>Monitoring</b>	Active monitoring x 21 days.	Active monitoring x 21 days	Self-monitoring x 21 days.	None
<b>Post-exposure prophylaxis</b>	<p>Recommended</p> <ul style="list-style-type: none"> <li>Vaccination within 4 days or by 14 days</li> <li>Daily contact with healthcare facility human resources or infection control for 21 days after exposure</li> <li>Symptom screen daily</li> <li>Exposed personnel may continue to work or go outside their homes</li> <li>Any potential symptoms must be reported ASAP to LACDPH</li> </ul>	<p>Discuss risk/benefit with MD</p> <ul style="list-style-type: none"> <li>Vaccination within 4 days or by 14 days</li> <li>Daily contact with healthcare facility human resources or infection control for 21 days after exposure</li> <li>Symptom screen daily</li> <li>Exposed personnel may continue to work or go outside their homes</li> <li>Any potential symptoms must be reported ASAP to LACDPH</li> </ul>	No	No





## Monitoring for Mpox

- No risk = no required monitoring
- Low risk exposures should self-monitor
- Intermediate and high-risk exposures
  - Vaccination within 4 days or by 14 days
  - Daily contact with healthcare facility HR/IC for 21 days after last exposure
  - Symptom screen daily
  - Exposed people may continue to work or go outside their homes
  - Any potential symptoms must be reported ASAP to LACDPH



# Vaccination





# Mpox Vaccination

- October 2023: ACIP recommendation for routine vaccination of adults at risk of mpox
- Persons at risk
  - Gay, bisexual, and other men who have sex with men, transgender people, or non-binary people who, in the past 6 months, have had one of the following:
    - New diagnosis of  $\geq 1$  STI
    - More than one partner
    - Sex at a commercial venue
    - Sex in association with a large public event in a geographic area where mpox transmission is occurring
  - Sexual partners of persons with the risks described above
  - Persons who anticipate experiencing any of the above



## Mpox vaccination

- Two injections, 28 days apart (range 24-35 days)
- Those <18 yo, subcutaneous injection only approved
- Vaccine recommendations unchanged
  - Not recommended for those who recovered from mpox
  - Not recommended for who already received 2 Jynneos doses
- Coverage of eligible population
  - 40% 1 dose coverage, 25% 2 dose coverage



## Mpox Vaccination

- Vaccination currently available free from LAC DPH
- Jynneos commercialization transition to be completed August 1, 2024
  - Full coverage for Medicare or Medicaid beneficiaries
  - Commercial insurance- expect private insurance plans to fully cover within ACIP recs; plans obligated begins 1 plan year after ACIP rec



# DPH Mpox Vaccine Incentive Program- Expanded Eligibility

## Patients in Regular Care

- Patients who are in regular HIV care are eligible for two \$50 gift cards: one given after each of the two-dose series.
- **(NEW)** Patients receiving Pre-Exposure Prophylaxis (PrEP) and Post-Exposure Prophylaxis (PEP) treatment are eligible for two \$50 gift cards: one given after each of the two-dose series

## HIV Patients Out-of-Care $\geq 7$ Months

- Patients who have been out-of-care will be eligible for two \$100 gift cards: one given after each of the two-dose series.



## Interested in Participating?

It's not too late to sign up to participate in the Mpox Vaccine Incentive Program. If you would like to enroll, please register [here](#).

### Contacts

Marcus Carreon [mcarreon2@ph.lacounty.gov](mailto:mcarreon2@ph.lacounty.gov)

Michelle Vazquez Godinez [mvazquezgodinez@ph.lacounty.gov](mailto:mvazquezgodinez@ph.lacounty.gov)



## **Any mpox clinical questions**

### **Provider Lines:**

Division of HIV and STD Programs Provider Consult Line:

Weekdays, 8:00am-4:30pm: call (213) 368-7441

Weekends and holidays, 8:00am-5pm: (213) 974-1234 and ask for the physician on call.

Evening/night –emergent patients only, (213) 974-1234 and ask for the physician on call.

### **Tpoxx specific questions:**

Email: [TPOXX@ph.lacounty.gov](mailto:TPOXX@ph.lacounty.gov)



**QUESTIONS?**

[skulkarni@ph.lacounty.gov](mailto:skulkarni@ph.lacounty.gov)

