Mpox Quicksheet

December 2025

Clade I Mpox Update: *As of October 2025, there is community transmission of clade Ib mpox within California—see CDPH Health Advisory: Community Spread of Clade I Mpox Within California. Since 2024, there have also been sporadic travel-associated cases of clade Ib mpox have been reported in the U.S. and other countries outside of central Africa—including in California.*

1. Notify CDPH immediately if clade I mpox is suspected (do not wait for lab confirmation). This includes symptomatic patients who have:

- *History of international travel or close contact to an international traveler in the prior 21 days, or*
- *Close contact to a case of clade I mpox or*
- *Preliminary mpox test results that suggest clade I MPXV:*
  - *Positive orthopoxvirus (NVO+, OPXV+) with negative clade II MPXV*
  - *Positive orthopoxvirus (NVO+, OPXV+) with indeterminate clade II MPXV*

2. Send specimens to the state public health lab for expedited clade I MPXV testing:

- *Mpox Testing at CDPH Viral and Rickettsial Disease Laboratory (VRDL).*

3. See page 8 for interim LHJ recommendations for initial cases with suspected clade I mpox.

Mpox Basics

Infectious agent

Mpox (formerly known as monkeypox) is a viral infection caused by the monkeypox virus (MPXV), a type of *Orthopoxvirus.* Mpox is zoonotic disease endemic to certain regions in Africa. Mpox typically causes contagious lesions or rash; sometimes, it may cause more severe illness.

There are two clades of MPXV: clade I MPXV and clade II MPXV. The mpox vaccine is expected to protect against mpox from either clade.

Epidemiology

Clade II MPXV: Since 2022, there has been a global outbreak of mpox from a subtype of clade II (clade IIb). This outbreak has been novel with the extent of human-to-human transmission in non-endemic areas. Deaths in this outbreak have been rare.

- Clade IIb continues to circulate at low levels in California. Most cases have been among gay, bisexual, and other men who have sex with men and their social networks.
- Most exposures have been associated with sexual or other intimate contact.

Clade I MPXV: There has been an outbreak of clade I mpox in central and eastern Africa since 2023. A new subtype of clade I (clade Ib) emerged in this outbreak. It has primarily spread through sexual networks, including via heterosexual contact. Since then, sporadic travel-associated cases of clade I mpox have been identified in the U.S. and other countries outside the African continent. And as of

October 2025, public health investigation indicates there is community transmission of clade I MPXV within gay, bisexual, and other men who have sex with men and their social networks in California.

- Recent international travel or close contact to a traveler remains a risk factor—most cases in California and the U.S. to date have been travel related.
- Preliminary data suggest that the death rate for clade Ib is < 0.5% when patients receive adequate clinical care. Risk of severe disease and hospitalization are highest for people with weakened immune systems.
- At this time, clade I MPXV has not been shown to be more transmissible than clade II. Transmission studies are ongoing.

Modes of transmission
MPXV is primarily spread through close, personal contact to someone with mpox:

- Direct skin-to-skin contact with the rash or scabs
- Intimate contact (e.g., kissing, massages, cuddling) or sex (oral, anal, or vaginal)
- Direct contact to body fluids (e.g., drainage from skin sores or saliva near oral lesions)
- Transmission from pregnant person to the fetus during pregnancy or to the newborn during delivery

Symptoms may not be visible or obvious at the time of exposure. MPXV can also spread within shared households, by touching contaminated materials used by a person with mpox, or by respiratory secretions.

In endemic regions, both clades of MPXV may also be transmitted through exposure to infected wild mammals, their fluids, and/or waste (e.g., while hunting).

Infectious period
For contact tracing, mpox is considered contagious from 4 days *prior* to first onset of symptoms (including a prodrome, if present) until all lesions have healed (i.e., scabs have fallen off and a fresh layer of skin has formed underneath—this can take several weeks). To date, there is no clear evidence of transmission from people who never develop symptoms.

Incubation period
Incubation period (from time of exposure to symptom onset) is up to 21 days.

Reinfections and post-vaccination infections
Mpox infections can still occur after someone has received vaccination against mpox. And while very rare, mpox reinfections have also been documented. Post-vaccine infections and reinfections are often less severe.

Clinical Recognition

Symptoms
Most people with mpox infection will develop a rash or lesion(s), which may be painful or itchy. Mpox may present as only a single lesion, several lesions localized to one area, or spread (disseminated) across the body. Lesions near the genitals, anus, and/or mouth as well as proctitis symptoms (e.g.,

rectal pain or bleeding) have been common. Lesions often progress through four stages—from flat (macular), raised (papular), blister-like (vesicular), to pus-filled (pustular)—before scabbing over.

Some people report a prodrome of flu-like symptoms several days before lesions develop and/or may experience other symptoms during illness such as:

- Fever or chills
- Swollen lymph nodes (lymphadenopathy)
- Exhaustion or fatigue
- Muscle aches (myalgias), headaches, or backaches
- Sore throat or respiratory symptoms (e.g., nasal congestion, cough)

Hospitalization may be required for more severe presentations and/or secondary complications. Some conditions may increase risk of severe illness from mpox (e.g., immunocompromise).

Clinical evaluation

Patients with mpox symptoms should be evaluated by a healthcare provider.

- Mpox testing should be considered in patients with compatible symptoms, regardless of vaccination status or previous infection. Risk assessments for recent sexual exposures, international travel, or contact with such travelers can help guide clinical decision making.
- See Mpox Clinical Recognition and Testing (PDF) for information about mpox presentation with common differential diagnoses.
- CDC recommends sexually active persons being tested for mpox also be tested for HIV, syphilis, herpes, gonorrhea, and chlamydia as STI co-infections have been common.
- All patients being tested for mpox should be advised to isolate pending results.

Treatment of mpox

There is no approved treatment specifically for mpox. Most patients with mpox have a mild, self-limited infection* that can be managed with supportive care and pain management with their healthcare provider.

For patients with severe or complicated mpox infections (e.g., immunocompromise, lesions affecting the eyes), additional treatment may be recommended:

- Tecovirimat (TPOXX) remains available for compassionate use in certain patients who meet CDC's protocol-defined clinical criteria for severe disease or risk for severe disease. It may be recommended in combination with other antivirals in consultation with CDPH and CDC.
- LHJs may need to assist providers who request consultations or therapeutics from CDPH and CDC as medications must be requested through specific channels.
- See CDPH Mpox Treatment Information for Providers for more information.

**Of note, the antiviral Tecovirimat (TPOXX) is no longer routinely recommended/available for most uncomplicated infections. Clinical trials showed it was not effective in treating mild-to-moderate mpox. Studies regarding the use of TPOXX in immunocompromised individuals are ongoing.*

Mpox Laboratory Testing

Test types and results

Mpox testing is available through most commercial laboratories and some local public health laboratories. It is done via polymerase chain reaction (PCR) assays performed on swabs of lesion(s).

Depending on the laboratory, different PCR assays may be used:

- Orthopoxvirus (OPXV) or non-variola orthopoxvirus (NVO): Detects many orthopoxviruses, including both clades of MPXV, but results do not specify which clade.
- Generic MPXV: Detects both mpox clades, but results do not specify which clade.
- Clade-specific MPXV testing:
  - Clade II MPXV: Detects *only* clade II MPXV.
  - Clade I MPXV: Detects *only* clade I MPXV.
    Clade I testing is only available at certain public health labs; assays at CDPH VRDL can detect both clade I subtypes (clade Ia and Ib).

Local health jurisdictions (LHJs) should be aware of incoming mpox test results with result patterns that may suggest clade I MPXV. These should be reported to CDPH as a suspected case of clade I mpox and specimens should be sent to CDPH VRDL for testing:

Orthopoxvirus (OPXV), non-variola orthopoxvirus (NVO), or monkeypox virus generic (MPXV)	Clade II MPXV	Interpretation of results
Positive	Not done	Likely mpox, unknown which clade
Positive	Positive	Clade II mpox
Negative	Negative	Negative for mpox
Positive	Indeterminate	Suspicious for clade I mpox
Positive	Negative	

As of October 17, 2025 – commercial labs have been advised to not discard certain positive orthopoxvirus specimens so specimens can be forwarded for clade-specific testing at the appropriate public health laboratory for enhanced surveillance.

Testing for suspected clade I mpox

If clade I mpox is suspected: Notify your local health department and CDPH immediately. Specimens should be processed through the local public health lab (rather than commercial labs) and/or sent to the CDPH VRDL state public health lab for expedited, comprehensive testing.

- See page 8 of this document for reporting if clade I mpox is suspected.
- See CDPH VRDL - MPXV PCR Test Order for information on specimen submission and lab contact information.

Specimen Collection

Providers should follow specimen collection guidelines to sample lesions for mpox:

1. Collector should wear appropriate personal protective equipment (PPE), including a gown, gloves, eye protection, and fit-tested NIOSH-approved particulate respirator (N95 or higher).
2. Review lab submission criteria* to ensure correct testing media and swab supplies.
3. Do not use antiseptic or other topicals before swabbing as these can interfere with results.
4. Vigorously swab the lesion with 2 sterile, synthetic swabs (e.g., polyester, nylon, or Dacron).

- Do not de-roof or aspirate lesion(s)—swabbing vigorously is sufficient to collect adequate DNA.
- Do not use cotton swabs.

5. Place each swab into appropriate sterile container, labeled with anatomic location. Collect specimens from 2 lesions (different locations and/or stages) using separate swab(s) and tube(s) for each lesion.

**Note: Collecting providers should consult the lab directly to confirm specimen requirements. Test collection materials themselves are not specialized and should be available in most clinical settings, but labs may have different submission requirements (i.e., testing media, swabs) and rejection criteria.*

Mpox Vaccinations

Mpox vaccine

The mpox vaccine (JYNNEOS) is a two-dose series recommended for anyone who may be at risk for mpox—see CDPH mpox vaccine recommendations (updated August 2025).

- JYNNEOS is expected to be protective against both clade I and II of MPXV.
- JYNNEOS may also be given as post-exposure prophylaxis (PEP).
- Vaccination is not recommended for persons who have a current or past mpox infection.
- At this time, third doses (boosters) are not recommended.

Vaccine availability

- JYNNEOS vaccine is broadly available at many chain pharmacies for insured individuals.
- It is commercially available for provider ordering, similar to other FDA-approved vaccines; it may be available at local providers and clinics. It is no longer supplied by the Strategic National Stockpile.
- LHJs and providers should be aware of JYNNEOS availability in their community, including where to refer for vaccination and options for those who are uninsured.
  - *Note: CDPH STDCB purchased a limited supply of JYNNEOS specifically to support LHJ outbreak response and vaccination for those who are uninsured, underinsured, or have other barriers accessing commercial vaccine (e.g., privacy concerns). Email mpoxadmin@cdph.ca.gov for information and availability.*

LHJ Surveillance Case Definitions and Reporting

See CDC Mpox Case Definitions for up-to-date surveillance case definitions for mpox. In addition to routine case reporting, LHJs should report:

1. Report suspected, probable or confirmed case(s) of clade I MPXV to CDPH immediately via phone/email. Working case definitions for clade I mpox in California:
   - *Confirmed clade I mpox = lab-confirmed (+) clade I MPXV*
   - *Probable clade I mpox = both (+) NVO, OPXV, or generic MPXV **and** NEG clade II MPXV*
   - *Suspect clade I mpox = either (+) NVO, OPXV, or generic MPXV **or** mpox signs/symptoms **PLUS** at least one epidemiologic criteria suggestive of clade I MPXV:*

- *Traveled to an area with evidence of local person-to-person transmission of clade I MPXV or where clade I MPXV is endemic, OR*
- *Reports contact with person with confirmed, probable or suspect clade I mpox, OR*
- *Had close or intimate in-person contact with individuals in a social network currently experiencing clade I MPXV activity*

2. Reinfections via CalREDIE
   - ✓ Create new incident ID for suspected reinfection cases and attach ELR
   - ✓ In the clinical tab in CalREDIE for the reinfection incident, under the "Patient Illness Characteristics" section, answer the two questions for suspect reinfections: 1) *Has this patient been diagnosed with mpox before?* and 2) *Did symptoms fully resolve between the patient's previous mpox incident and their current mpox incident?*
   - ✓ Forward specimens that may meet reinfection criteria to CDPH VRDL for whole genome sequencing
3. Suspected or confirmed cluster(s) to CDPH via phone/email. Defined as (1) three or more confirmed or probable mpox cases that (2) are reported within a two-week time period, and (3) associated with a single exposure event

Mpox death reporting

Death certificates should be used to make determinations around cause of death (i.e., if mpox is listed as a primary or significant contributing factor). As a reminder, vital records should not be uploaded in CalREDIE or CalConnect. See CDC MMWR: Epidemiologic and Clinical Features of Mpox-Associated Deaths—United States, May 10, 2022-March 7, 2023.

LHJ Case and Contact Investigation

Mpox case: Home isolation

- Any patients being tested for mpox should be advised to isolate at home pending results.
- Home isolation should continue for the duration of mpox illness, until the rash is healed (i.e., all scabs have fallen off and new skin has formed underneath). Persons unable to work due to an illness may be eligible for paid leave or short-term disability.
- Isolation, disinfection, and other precautions within the household are recommended.

Contact investigation

- Contacts should be identified during the infectious period (i.e., from 4 days *before* onset of first symptom until isolation began)—see CDC Mpox Monitoring and Risk Assessment for Persons Exposed in the Community.
  - Post-exposure prophylaxis (PEP) with JYNNEOS vaccine is recommended for close contacts, including household contacts and recent sexual contacts. PEP can be given within 14 days of last exposure but is most effective when given as soon as possible.
- Healthcare facilities that saw the patient should be notified so they can assess and monitor staff for occupational exposure (e.g., if staff did not wear full PPE for exam or room cleaning).

Post-exposure symptom monitoring

After an exposure, it can take up to 21 days for symptoms develop. Contacts should self-monitor for symptoms during this period and consider avoiding close or intimate contact. If symptoms develop, they should isolate and get tested.

Post-exposure prophylaxis (PEP)
PEP with JYNNEOS vaccine is recommended for asymptomatic, unvaccinated persons with higher risk exposures—most commonly sexual partners, household contacts, and some exposed healthcare workers. LHJs should assist contacts with obtaining timely PEP as local access may vary.

- *Within 4 days of exposure*: PEP recommended, it may prevent mpox infection from developing.
- *Within 4-14 days from exposure*: PEP recommended, it may reduce symptom severity if mpox infection develops.
- *After 14 days from exposure*: Vaccine may still be recommended—not as PEP, but as an opportunity to protect persons who may be at risk for mpox from future exposures.

Mpox in healthcare and other ATD-covered settings
Full PPE (gown, gloves, eye protection and fit-tested N95 or higher) should be worn when caring for patients with suspected or confirmed mpox. See CDC Mpox Infection Prevention and Control in Healthcare Settings.

Mpox is an aerosol transmissible disease covered by the Cal/OSHA Aerosol Transmissible Diseases Standard (ATD) and applicable settings should consult those regulations for additional requirements. See Protecting Workers from Mpox for Employers and Workers Covered by the Aerosol Transmissible Diseases Standard (Title 8 Section 5199) (PDF) for more information including precautions, healthcare worker exposure management, and other requirements per the standard.

Cases in congregate settings
There is potential risk of mpox transmission in congregate living settings, which include correctional facilities, homeless shelters, residential substance use treatment facilities, and other similar settings. After establishing an isolation plan, LHJs should assess facility risk and contact CDPH for consultation if needed. See CDPH Mpox Guidance for Congregate Living Settings and CDC Considerations for Reducing Mpox Transmission in Congregate Living Settings.

Cases in schools and childcare facilities
To date, no school-related cases of mpox have been reported in the US. K-12 schools and childcare facilities should follow their everyday operational guidance that reduces transmission of infectious agents. Children with rashes of unknown origin should be evaluated for other more common etiologies of pediatric rashes—especially if no known risk of mpox exposure. See CDPH Mpox Considerations for Childcare and School Settings and contact CDPH for consultation as needed.

CDPH Consultation

At CDPH, the Office of Sexually Transmitted Infections and Hepatitis C Virus (formerly STD Control Branch) oversees mpox and is available for consultation and support: Email mpoxadmin@cdph.ca.gov or submit a STDCB Disease Investigation/Technical Assistance Request. See CDPH Mpox Guidance for other mpox resources and guidance for providers, local health departments, and laboratories.

Interim LHJ recommendations for initial cases with suspected clade I MPXV (December 2025)

Clade I MPXV should be suspected in symptomatic patients who either have:

- History of recent international travel—especially to regions with clade I MPXV transmission—or report close contact to such travelers with the prior 21 days *OR*
- History of close contact to a case of clade I mpox *OR*
- Preliminary mpox test results that suggest clade I MPXV:
  - Positive orthopoxvirus (NVO, OPXV) with a negative clade II MPXV
  - Positive orthopoxvirus (NVO, OPXV) with an indeterminate clade II MPXV

If clade I mpox is suspected:

1. **Notify CDPH immediately:**
   - LHJs should notify CDPH immediately regarding any cases with suspected clade I MPXV: stdcb@cdph.ca.gov and 510-620-3400 (916-328-3605 for off-hours CDPH duty officer).
   - Disease investigators should notify their leadership, including STD controller and/or local health officer, of any initial cases with suspected clade I mpox.
2. **Submit specimens for clade-specific testing:**
   - Ensure providers/staff wear full PPE and that the patient is isolating.
   - Collected specimens should be sent to the CDPH VRDL for expedited, clade-specific testing if your local public health lab does not have this testing capacity.
   - See CDPH VRDL Mpox Testing for more information.
3. **Consult with CDPH regarding investigation and response:**
   More precautionary public health management should be anticipated for initial cases of clade I mpox. In consultation with CDPH, this may include:
   - Strict home isolation for cases with suspected clade I MPXV until clade-specific testing has ruled out clade I MPXV.
   - Intensive contact tracing, with an investigation scope extending beyond typical partner tracing efforts, may be advised. This may include broader exposure risk assessments in the household, healthcare, and other settings. Additional recommendations may include:
     - Quarantine for household contacts, sexual contacts, and other high-risk contacts during their symptom monitoring period.
     - Active symptom monitoring for all high- and intermediate-risk contacts for 21 days from last exposure.
     - JYNNEOS PEP for all high- and some intermediate-risk contacts
     - Prompt notification to healthcare facilities to assess for any healthcare-associated exposures for appropriate post-exposure management.

See CDPH Health Advisory: Community Spread of Clade I Mpox Within California (10/17/25).