Mpx symptoms
Mpx virus belongs to the Orthopoxvirus genus that includes variola (smallpox) virus as well as the vaccinia virus that is used in the smallpox vaccine. Mpx often starts with symptoms like the flu, with fever, low energy, swollen lymph nodes, and general body aches. Usually within the first three days of these generalized symptoms, the person will often develop a rash or sores. The sores go through several stages, including scabs, before healing. They can look like pimples or blisters and might be painful and itchy. The rash or sores may be located on or near the genitals or anus but could also be on other areas like the hands, feet, chest, and face, or inside the mouth. They may be limited to one part of the body. People with mpx may experience all or only a few of these symptoms. Most people with mpx will develop the rash or sores. Some people report developing a rash or sores before (or without) the flu-like symptoms.

Infectious period
A person with mpx can spread the mpx virus from illness onset until all sores have healed, scabs have fallen off, and a fresh layer of skin has formed underneath, which can take several weeks. There is a growing body of scientific evidence that shows some people can spread mpx virus to others from one to four days before symptoms of mpx appear (CDC). To date, there is no evidence that people who never develop symptoms have spread the virus to others.

Mpx Transmission Modes
Mpx can be spread by:
- Direct skin-to-skin contact with the sores or scabs of people with mpx and people that are in the monitoring period due to previous mpx exposure.
- Direct contact with body fluids of people with mpx, such as drainage from skin sores or saliva that was in contact with mouth sores.
- Contact with respiratory secretions of people with mpx, such as saliva, during prolonged, face-to-face contact or intimate physical contact, such as kissing, cuddling, or sex.
- Touching items (e.g., bedding, towels, clothing, cups and utensils) that previously touched the sores or body fluids of people with mpx.

Incubation and monitoring period
The time from exposure to symptom onset ranges from approximately 3 days to 3 weeks (CDC Signs and Symptoms, CDC Science Brief, Emerging Infectious Diseases). Avoiding sexual contact with others during the 21-day monitoring period is highly recommended for those exposed to mpx.

CSTE/CDC Epidemiologic criteria
Within 21 days of illness onset:
- Contact with a person with a similar appearing rash or who was diagnosed with probable or confirmed mpx; OR
- Close or intimate in-person contact with individuals in a social network experiencing mpx activity, including partners who meet partners through an online website, digital application, or social event; OR
- Travel outside the U.S. to a country with confirmed cases of mpx; OR
- Had contact with wild animal or exotic pet, alive or dead, that is an African endemic species, or used a product derived from such animals.

CSTE/CDC Case classification
- Confirmed: Presence of mpx virus DNA by PCR or Next-Generation sequencing of clinical specimen; OR isolation of mpx in culture from clinical specimen
- Probable: No suspicion of other recent Orthopoxvirus exposure AND demonstration of:
  - Orthopoxvirus DNA by PCR, OR
  - the identification of Orthopoxvirus via immunohistochemical or electron microscopy testing, OR
  - the presence of Orthopoxvirus IgM antibodies during the period of 4-56 days after rash onset.
- Suspect: New characteristic rash; OR meets one of the epidemiologic criteria and high clinical suspicion for mpx.
Specimen collection for PCR and virus isolation
A PCR assay can detect mpox from lesions. Testing is available at CDPH and other public health laboratories as well as many clinical laboratories. Specimens should be collected from 2-3 lesions, preferably from different locations on the body and that differ in appearance.

- Specimen collection guidance includes:
  - Collector should wear appropriate personal protective equipment.
  - Use two sterile synthetic swabs for each lesion.
  - Vigorously swab the lesion to collect adequate DNA. Do not de-roof the lesion before swabbing.
  - Place swab in a sterile container that has a gasket seal and can be shipped under the required conditions.
  - Swabs from different lesions and any other specimens (e.g., scabs) should be placed in different containers.

- See: CDC Guidelines for Collecting and Handling Specimens for Mpox Testing.

Post-exposure prophylaxis
Available post-exposure prophylaxis (PEP) for mpox is vaccination with JYNNEOS vaccine. PEP is most effective at preventing mpox if the vaccine is administered within four days of exposure. If given 4-14 days after exposure, vaccination may help reduce symptoms but might not prevent infection from developing. Additional information and any updates to PEP recommendations can be found on the CDC website.

Pre-exposure prophylaxis
Per the Advisory Committee on Immunization Practices (ACIP) guidance, pre-exposure prophylaxis (PrEP) using JYNNEOS vaccine can be considered for all people who may be at risk for mpox and for anyone who requests vaccination. See CDPH Considerations for Mpox Vaccination in California for more information.

Exposed persons and additional testing
Persons exposed to mpox can continue their daily activities if they do not have signs or symptoms of mpox. Known exposed contacts are highly recommended to avoid sexual contact with others during the 21-day monitoring period, regardless of their symptoms. Most exposed individuals can self-monitor for mpox symptoms. People who are immunocompromised due to HIV or other conditions are at higher risk for severe manifestations of mpox. Therefore, CDC recommends that clinicians test all sexually active persons who present with signs and symptoms of mpox for HIV (including acute infection) and other sexually transmitted infections, such as syphilis, herpes, gonorrhea, and chlamydia. Additionally, clinicians should discuss and facilitate access to HIV pre-exposure prophylaxis (PrEP) for people at risk for HIV and assess for other immunocompromising conditions.

Treatment of Mpox
Many people infected with mpox have a mild, self-limited disease course in the absence of therapy. However, prognosis depends on multiple factors, including vaccination, baseline health status, concurrent illness, and comorbidities. Antiviral drugs developed to protect against smallpox, such as tecovirimat (TPOXX), may be used to treat mpox. Treatment may be recommended for people who are at risk of severe illness, people experiencing severe symptoms, or people with rash and sores in areas that are at risk for complications (such as, eyes or genitals).

TPOXX is approved for the treatment of smallpox and is available under expanded access investigational new drug (EA-IND) protocol to treat mpox. Patients for whom treatment is recommended can be found on the CDC website. People at high risk for severe disease include those with a weakened immune system, children younger than 8 years of age, those who are pregnant or breastfeeding, and those with a history of certain skin diseases, like eczema.

Current treatment recommendations are available on the CDC and CDPH websites, including CDC guidance for the treatment of severe manifestations of mpox and immunocompromised people. Supportive care information is also available on the CDC and CDPH websites.

Home isolation guidance
Individuals with confirmed or suspected mpox
should follow the CDPH Mpox Home Isolation Guidance for the General Public.

Persons with mpox who live with other people should take precautions at home until all lesions are fully healed and other symptoms have been fully resolved for at least 48 hours.

**Return to work/school**

Students and workers can return to activities outside the home in settings that are not listed as settings of concern in the CDPH Mpox Home Isolation Guidance for the General Public without medical clearance IF they can avoid physical contact with others at work/school, and IF they also meet certain clinical criteria. Additionally, anyone exiting isolation prior to resolution of all lesions and systemic symptoms should follow certain precautions to reduce the risk of secondary transmission.

Of note in this guidance, children younger than 8 years of age and staff caring for children younger than 8 years of age should not return to work/school prior to lesions being completely healed and systemic symptoms having been resolved. This is based on reports of increased disease severity among younger children and increased risk for close personal contact among younger children in school and childcare settings.

**Congregate living settings**

There is risk of mpox transmission in congregate living settings, which include correctional facilities, homeless shelters, residential substance use treatment facilities, and other similar settings. Homeless service providers can access CDPH Mpox Guidance for Homeless Services Providers for more information.

Please see additional CDPH guidance for correctional facilities and for other congregate living facilities.

**Healthcare settings**

Guidance on mpox infection control in healthcare settings can be found on the CDC website.

CDPH guidance about management of medical waste can be found on the mpox medical waste page.

The Cal/OSHA Aerosol Transmissible Diseases Standard applies to California healthcare personnel and other workers covered by the Standard. Mpox is considered an airborne pathogen per the Standard.

Additional Q&A documents are also available at CDPH Mpox Q&A within the Recommended Infection Control Practices to Prevent Transmission of Mpox in Healthcare Settings section.

**K-12 schools and childcare facilities**

K-12 schools and childcare facilities should follow their everyday operational guidance that reduces transmission of infectious agents. This includes staying home when sick or with a rash of unknown origin (particularly a vesicular or pustular rash), ensuring access to adequate handwashing supplies, maintaining routine cleaning and disinfection practices, identifying private spaces for assessment of an ill child away from others, and providing personal protective equipment (PPE) for staff who care for students with rashes, fevers, or other symptoms concerning for infections.

See CDPH Mpox Consideration for Childcare and School Settings for more information.