Health Advisory: Monkeypox Virus Infection in the United States and Other Non-endemic Countries—Enhancing Surveillance in California as of May 20, 2022

NOTE THAT THIS IS A RAPIDLY EVOLVING SITUATION. UPDATES AND MODIFICATION TO THE BELOW GUIDANCE WILL BE PROVIDED AS THEY BECOME AVAILABLE.

Situation Summary

The California Department of Public Health (CDPH) is issuing this advisory to supplement the information contained in the Health Alert issued by the U.S. Centers for Disease Control and Prevention (CDC) to provide additional guidance to California local health jurisdictions (LHJs) and health care providers. Health care providers should notify their LHJ immediately of any potential cases and LHJs should report any suspected monkeypox cases immediately to CDPH.

CDC issued a Health Advisory on May 20, 2022 regarding a confirmed case of monkeypox virus infection in Massachusetts as well as multiple clusters of monkeypox virus infections in other countries. On May 18, the Massachusetts Department of Public Health (MDPH) in coordination with the Centers for Disease Control and Prevention (CDC), confirmed a case of monkeypox virus infection in an adult male with recent travel to Canada. Contact tracing to identify persons who may have been exposed during the patient’s infectious period is ongoing.

Cases of monkeypox outside of Western and Central Africa are extremely rare. In 2021 there were two travel associated cases identified in the US, and prior to that the most recent cases were identified in 2003 during an outbreak of 47 cases associated with imported small mammals. Cases of monkeypox have been identified in several non-endemic countries since early May 2022; many of the cases have involved men who have sex with men (MSM) without a history of travel to an endemic country. Clinical details on these cases, including any hospitalizations or deaths, are currently unknown.

Recommendations for the evaluation of a suspected monkeypox case

For LHJs
In order to enhance surveillance for the spread of potential cases of monkeypox in California, we propose the following case definitions, as of 5/20/22. Please note that these case definitions, especially for a suspect case, are subject to change based on additional information.

**Confirmed case**: Patient with monkeypox virus detected from a clinical sample.

**Probable case**: Patient with orthopox virus detected from clinical sample.

**Suspect case**: Patient with an unexplained rash (unlikely to be secondary syphilis, herpes, varicella, molluscum contagiosum, or other diagnosis) that is consistent with monkeypox (firm, well circumscribed, deep-seated, and umbilicated lesions; progresses from macules to papules to vesicles to pustules to scabs) especially in patients who 1) report close contact with a person or people with confirmed or suspected monkeypox and/or with a similar rash; and/or 2) report travel in the past month to an area where confirmed cases have been reported; and/or 3) is an MSM.

Monkeypox is currently an extremely rare diagnosis. Therefore, when evaluating patients with rash, other more common causes of rash, such as herpes, syphilis, molluscum contagiosum, varicella zoster, etc., should be considered first. LHJs with cases highly suspected to be monkeypox disease but not meeting the above criteria should contact CDPH.

We ask that the LHJs coordinate with the healthcare providers in their jurisdiction. If a suspect case is identified, please review the clinical findings (see [Signs and Symptoms | Monkeypox | Poxvirus | CDC](https://www.cdc.gov/monkeypox/about/signs_and_symptoms.html)) with the care team (including looking at pictures of the rash if possible). If there is a high suspicion for monkeypox, please initiate testing and infection control (see below), and call CDPH IDB (510-620-3434) during normal business hours, or the DCDC Duty Officer of the Day (DOD) or CDPH DOD (916-328-3605) after hours or on weekends. CDC will also be contacted through the CDC Emergency Operations Center at 770-488-7100.

A standardized monkeypox case investigation form is under development by CDC, and should be available by the week of May 23, 2022.

**For health care providers**

CDPH requests that health care providers report cases of persons meeting the suspect case definition (please see above) immediately to their LHJ: [LHD Contact Information (ca.gov)](https://www.cdph.ca.gov 影音/Diseases/CDPH/HealthCareProviders/LHD-Contact-Information/LHD-Contact-Information.cfm).

Please consider and rule out, if possible, other more common etiologies of rash illness such as herpes, syphilis, molluscum contagiosum, and varicella zoster.
**Testing Recommendations**

The CDPH Viral and Rickettsial Disease Laboratory (VRDL) and the Los Angeles County Public Health Laboratories are Laboratory Response Network laboratories with capacity to provide orthopoxvirus testing on lesion specimens that clinicians obtain from suspected patients; confirmatory monkeypox virus-specific testing at CDC requires a dry lesion swab specimen. As monkeypox disease is typically very rare and testing requires specialized safety protocols, testing capacity is currently limited. VRDL working on increasing this testing capacity.

If a patient is evaluated and monkeypox is considered to be high on the differential diagnosis in consultation with the LHJ, collect multiple specimens for preliminary and confirmatory testing as follows: 1) Vigorously swab or brush lesion with two separate sterile dry polyester or Dacron swabs; 2) Break off end of applicator of each swab into a sterile 1.5- or 2-mL screw-capped tube with O-ring or place each entire swab in a separate sterile container. Do not add or store in viral or universal transport media.

Please see attached specimen submission guidelines for detailed information.

**Infection Control Considerations**

Patients presenting with suspected monkeypox should be placed as soon as possible in a single-person exam room with door closed, or an airborne infection isolation room, if available. The patient should remain masked, as tolerated (as currently required for all persons in healthcare settings) and any exposed skin lesions should be covered with a sheet or gown.

Healthcare personnel (HCP) evaluating patients with suspected monkeypox should wear the following personal protective equipment (PPE): gloves, gown, eye protection (goggles or faceshield) and a N95 or equivalent or higher-level respirator. HCP should don PPE before entering the patient’s room and use for all patient contact. HCP should remove and discard gloves, gown and eye protection, and perform hand hygiene prior to leaving the patient’s room; the N95 respirator should be removed, discarded and replaced with a mask for source control after leaving the patient’s room and closing the door.

Any EPA-registered hospital-grade disinfectant should be used for cleaning and disinfecting environmental surfaces

**Treatment and Management Considerations**
Management and treatment of monkeypox disease includes nonspecific supportive care and treatment of symptoms.

Antiviral treatments and prophylaxis are available from CDC after case-by-case evaluation. Additional guidance from CDC on their use in the outbreak is anticipated shortly. Please contact CDPH for clinical consultation on potential therapy or prophylaxis.

Bacterial superinfections should be appropriately treated, but may be difficult to distinguish from viral inflammation.

**Background**

Monkeypox is a viral zoonosis with symptoms very similar, though clinically less severe, to those seen in the past with smallpox infections. Monkeypox virus belongs to the *Orthopoxvirus* genus which also includes the variola (smallpox) virus. Monkeypox occurs primarily in Central and West Africa and has been rarely exported to other regions. Nigeria, in particular, has had a large outbreak of monkeypox, with hundreds of cases to date. The wild animal reservoir is unknown.

After an average incubation period of 6 to 13 days (range, 5 to 21 days), flu-like symptoms may appear, and may include fever, headache, lymphadenopathy, myalgia, and fatigue. This is followed approximately 1 to 3 days later with rash that may affect the face and extremities (including palms and soles). Mucous membranes and genitalia may be involved. The appearance and progression of the rash is very characteristic, evolving sequentially from macules (lesions with a flat base) to papules (slightly raised firm lesions), vesicles (lesions filled with clear fluid), pustules (lesions filled with yellowish fluid), and crusts which dry up and fall off.

In the most recent reported cases, flu-like symptoms may not have always occurred; some recent cases have begun with characteristic, monkeypox-like lesions in the genital and perianal region, in the absence of subjective fever and other flu-like symptoms. A person is considered infectious from the onset of symptoms and is presumed to remain infectious until lesions have crusted, those crusts have separated, and a fresh layer of healthy skin has formed underneath.

Human-to-human transmission occurs through large respiratory droplets and by direct contact with body fluids or lesion material, as well as through fomites.
(such as clothing or bedding) contaminated by the virus. Confirmatory laboratory diagnostic testing for monkeypox is performed using real-time polymerase chain reaction assay on lesion-derived specimens.

There is no specific treatment for monkeypox virus infection, but particularly in the outbreak setting, post-exposure smallpox vaccine and antivirals may be considered after consultation with CDPH and CDC. Monkeypox is usually self-limited with disease symptoms lasting 2 to 4 weeks. Complications, including secondary infections, are possible. In Africa, a case fatality rate of 1-11% has been reported.

**Additional Information**

HAN Archive - 00466 | Health Alert Network (HAN) (cdc.gov)