Health Update: Monkeypox

August 10, 2022
(Version 2, includes correction to section on children/adolescents)

Situational Update

Monkeypox case counts in San Francisco are posted daily and case demographics are updated weekly.

To date, San Francisco has received 19,104 doses of monkeypox vaccine (Jynneos) from the California Department of Public Health (CDPH). Doses arriving in SF have been rapidly distributed to our vaccination partners, who in turn have administered nearly all their doses within the week after receipt.

An additional allotment of Jynneos vaccine to SF is expected to be made available in mid-August, enabling partners to continue vaccinating during this month. Future allotments of Jynneos vaccine to SF are in the pipeline, but not yet defined as to timing and scope. SFPDH is preparing for the possibility of gaps in vaccine supply by maintaining a small reserve of doses for post-exposure prophylaxis of contacts with the highest-risk exposures.

On 8/9/2022 FDA issued an Emergency Use Authorization (EUA) for Jynneos vaccine. The EUA allows healthcare personnel to administer the vaccine to persons at high risk for monkeypox infection:

- By intradermal (ID) injection of a dose of 0.1 mL in persons age \( \geq 18 \) years.
- By subcutaneous (SQ) injection of a dose of 0.5 mL in persons age \(< 18\) years.

See: EUA Fact Sheet for Providers and EUA Fact Sheet for Recipients and Caregivers.

CDC has begun to update its monkeypox vaccination guidance to incorporate provisions of the new EUA. The current, FDA-approved regimen of 0.5 mL SQ in persons age \( \geq 18 \) years remains valid.

SFPDH is actively working to align with CDPH and CDC on policy and operational planning for implementation of the new Jynneos EUA and will continue to provide information and guidance as it evolves.
Update to San Francisco 2nd Dose Jynneos Vaccine Eligibility

In accordance with CDPH policy, SFDPH continues to prioritize first doses of Jynneos vaccine and defer second doses. Effective 8/4/22, SFDPH updated its local guidance on Jynneos eligibility so that persons with moderate or severe immune compromise, who may not be able to mount a full immune response to the first dose, are eligible for a second Jynneos dose starting 4 weeks after their first dose. See our Monkeypox page for Providers under Vaccination for details on Jynneos eligibility.

Moderate or severe immune compromise is defined as for COVID vaccination and includes persons with advanced or untreated HIV infection among other conditions. In situations where patient medical records are unavailable or incomplete, the patient’s attestation of moderate to severe immune compromise is acceptable.

Recent Updates to Vaccination Guidance

CDC has recently improved its detailed guidance for monkeypox vaccination including clarification on contraindications and precautions to vaccination with Jynneos.

- Those with prior severe allergic reaction (e.g., anaphylaxis) to gentamicin or ciprofloxacin may be vaccinated with a 30-minute observation period
- Those with prior severe allergic reaction (e.g., anaphylaxis) to chicken or egg protein AND who are currently avoiding exposure to all chicken or egg products can be vaccinated with a 30-minute observation period
- Alternatively, in both situations above, referral for consultation with an allergist-immunologist is appropriate if the delay of vaccination is acceptable given the person’s risk of acquiring monkeypox.

Recent CDC Updates on Monkeypox in People with HIV and Other Groups

See CDC Advisory (HAN 7/30/22).

People Living with HIV. See also MMWR 8/5/22. HIV infection is present among up to 51% of persons diagnosed with monkeypox. It is currently unknown whether HIV affects risk of acquiring monkeypox infection, but it is likely that persons with advanced or uncontrolled HIV are at higher risk for severe or prolonged monkeypox disease, particularly in those with CD4 counts ≤350 per μL. CDC also cites reports that patients with HIV on effective antiretroviral therapy (ART) have no reported deaths or rates or of excess hospitalization. Specific recommendations for those with HIV:
- Initiate or continue ART and opportunistic infection prophylaxis as indicated

- Consider tecovirimat as first-line treatment, taking into account disease severity, degree of immunosuppression, or vulnerable sites of infection (e.g., genitals or anus). Second-line agents include cidofovir, brincidofovir, and vaccinia immune globulin (see table of drug interactions).

- Studies cited by CDC indicate that persons with HIV infection and CD4 counts >100 per μL can mount immune responses similar to those of healthy persons after 2 doses of Jynneos vaccine.

**Children and Adolescents.** Reports involving pediatric infection from the Congo Basin suggest increased risk of severe disease in children younger than 8 years of age infected with monkeypox virus. To date, there have been no monkeypox cases in San Francisco among persons under 18 years of age, but pediatric providers should be aware of the risk of possible transmission in households, childcare, and other close contact situations including in sexually active LGBT+ youth.

CDC offers [additional guidance on therapeutics for pediatric monkeypox cases](#).

See information on [pediatric eligibility for Jynneos vaccine based on 8/9/2022 EUA](#).

**People who are Pregnant or Breastfeeding.** It is unknown whether monkeypox illness is more severe during pregnancy (as is the case with other poxviruses) or whether monkeypox virus is present in breast milk. However, monkeypox virus can be transmitted to the fetus during pregnancy and to the newborn by close contact during and after birth, including during breastfeeding.

While most adults with monkeypox virus infection experience self-limiting infection and recover within 2-4 weeks, treatment with tecovirimat should be offered and pregnant and breastfeeding persons should be prioritized for medical treatment, if needed, due to the probable increased risk of severe disease during pregnancy, risk of transmission to the fetus or the newborn, and risk of severe infection in newborns.

Treatment options and additional information on management of monkeypox in pregnant and breastfeeding individuals is available on this CDC page.

CDC offers [additional guidance regarding monkeypox in pregnant and breastfeeding people](#).
**Testing Update**

The San Francisco Public Health Laboratory (SFPHL) has sufficient capacity to meet current demand for monkeypox testing and has added capability to determine monkeypox virus clade, which eliminates the need to spend duplicate swabs to CDC. **Beginning 8/15/22, providers sending specimens to SFPHL only need to send a single swab per lesion. Specimens should be submitted to SFPHL in viral transport media (VTM).** Universal transport media (UTM) or other media are not acceptable, however a dry swab in an empty sterile container may be used. Turnaround time for results through SFPHL is around 48 hours.

Providers sending specimens to commercial reference laboratories (e.g., LabCorp, Quest, ARUP) should follow their lab’s specific collection and submittal instructions.

Detailed information for providers can be found in the updated [link: Provider Guidance for Evaluation]. Please note that all suspect monkeypox cases, regardless of facility/lab, must be reported within 24hrs via CMR.

**Treatment Update**

Tecovirimat (TPOXX) has an FDA indication for treating smallpox and is available to treat cases of monkeypox via Expanded Access Investigational New Drug (EA-IND) protocol. Tecovirimat efficacy for treatment of monkeypox disease in humans is unknown and undergoing evaluation. **Criteria used in SF as indications for tecovirimat** are aligned with those used in other jurisdictions with high case numbers.

**Prescribing tecovirimat** requires regulatory paperwork and patient informed consent. **On 7/22/2022, CDC released an amendment to the tecovirimat protocol which simplifies the process for prescribing tecovirimat.** SF clinicians seeking assistance to become a prescriber can email monkeypox@sfdph.org, and additional information can be found on the [CDC website](https://www.cdc.gov). SF clinicians seeking assistance to become a prescriber can email monkeypox@sfdph.org, and additional information can be found on the [CDC website](https://www.cdc.gov).

Many patients experience subjectively severe symptoms of monkeypox disease that do not meet current criteria for tecovirimat administration. Provider experience supports the use of supportive care and symptomatic treatment for what is in most cases a self-limited illness, including pain relievers, topical cortisone, and benzocaine/lidocaine gels for painful proctitis.

**Additional Resources**

To view or sign up for SFDPH Health Alerts, Advisories, and Updates visit [www.sfcdcp.org/healthalerts](http://www.sfcdcp.org/healthalerts)