UCSF Health

UCSF Monkeypox Control Plan

I. Purpose

The purpose of this control plan is to establish safety and infection prevention guidance for the management of suspected and/or confirmed monkeypox patients.

II. Situation summary

- On May 20, 2022, The California Department of Public Health (CDPH) issued a Health Advisory notifying California providers about a confirmed case of monkeypox, an orthopox virus, in the United States in an individual without known infected contacts or travel to endemic areas. Many additional suspected cases in the US are currently being investigated by the Centers for Disease Control (CDC). Additionally, since April, clusters of monkeypox cases have occurred in Europe in patients without travel to endemic areas, with some epidemiologically linked through households and among men who have sex with men.
- California providers, especially those caring for patients presenting for evaluation of dermatologic lesions or sexually transmitted infections, are advised to be vigilant for signs and symptoms consistent with monkeypox, including characteristic rash and lymphadenopathy, with or without fever.

  There are two different clades of Monkeypox: the West African clade and the Central African clade. To date, the recently reported cases are caused by the West African clade. The West African clade has previously been associated with milder disease and fewer deaths when compared to the Central African clade.

III. Notification

- Immediately report any suspected or confirmed monkeypox case 24/7 to:
  i. UCSF Hospital Epidemiology and Infection Prevention (HEIP), and
  ii. SF Department of Health Communicable Disease Control Unit at (415) 554-2830. Do not wait to report until the diagnosis is confirmed by testing

IV. Case definition

- **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 that is consistent with monkeypox (firm, well circumscribed, deep-seated, and umbilicated lesions; progresses from macules to papules to vesicles to pustules to scabs).

i. Clinicians should also consider and rule out, if possible, other more common etiologies of rash illness such as herpes simplex, varicella zoster, syphilis, molluscum contagiosum, chancroid, disseminated fungal infections including cryptococcus, disseminated gonococcus.

V. Transmission and Clinical presentation

- Transmission
  i. Monkeypox spreads between people primarily through direct contact with infectious sores, scabs, or body fluids.
    1. Monkeypox can spread during intimate contact between people, including during sex, as well as activities like kissing, cuddling, or touching parts of the body with monkeypox sores. At this time, it is not known if monkeypox can spread through semen or vaginal fluids.
  ii. It also can be spread by respiratory secretions during prolonged, face-to-face contact.
  iii. For more information refer to this guidance.
- Clinical Presentation
  i. The incubation period is usually 7-14 days but can range from 5-21 days.
  ii. The development of initial symptoms (e.g., fever, malaise, headache, weakness) marks the beginning of the prodromal period.
  iii. Within 1-3 days after a fever develops, the patient develops a rash, often beginning on the face and then spreading to other parts of the body that can last 2-4 weeks. The rash develops and progresses from macules, to papules, to vesicles, and then to pustules, followed by umbilication, scabbing, desquamation. A patient may be infectious during the prodrome period and are infectious once they have the onset of the rash and until the lesions have crusted and a fresh layer of skin has formed.
  iv. Recent cases are presenting atypically including no prodrome and localized lesions in the genital and perianal area.
  v. For a more detailed list of signs and symptoms of monkeypox, refer to this guidance.
  vi. With the patient's consent, take pictures of the lesions/rash and provide to SFDPH if requested.

VI. Patient transport

- Mask the patient (unless there are medical contraindications or patient is <2 years of age) and cover lesions with a clean sheet.
- Healthcare personnel transporting the patient that will have direct contact with the patient must wear all required PPE (fit-tested N95/eye protection (or PAPR), gloves, gown).

VII. Bed placement

- Isolate the patient in a single exam room with the door closed. If available, place the patient in an Airborne Infection Isolation Room (AIIR). If the patient is getting an Aerosol Generating Procedure, an AIIR is required.
- Ensure that the patient remains masked (unless medically contraindicated or patient is <2 years of age) and cover any exposed skin lesions with a gown or sheet.

VIII. Isolation Precautions and Personal Protective Equipment (PPE)

- Isolation
    i. Inpatient: Place an order for Airborne, Droplet, and Contact Isolation
    ii. Ambulatory: Observe Airborne, Droplet, and Contact Isolation
    iii. Avoid the use of portable fans
    iv. Duration of isolation
        1. Isolation Precautions should be maintained until all lesions have crusted, those crusts have separated, and a fresh layer of healthy skin has formed underneath.
        2. Maintain isolation until cleared by Infectious Diseases, UCSF Hospital Epidemiology and Infection Prevention (HEIP), and SFDPH.
        3. Patients who do not require hospitalization, but remain potentially infectious to others, should be isolated at home.
- PPE
    i. Required PPE:
        1. Fit-tested N95 respirator (or PAPR)
        2. Eye protection
        3. Gown
        4. Gloves
    ii. Donning PPE
        1. Healthcare personnel should don all the personal protective equipment (PPE) before entering the patient's room and use PPE during all contact with the patient including during transport.
    iii. Doffing PPE
        1. Healthcare personnel must remove and discard gloves and gown and perform hand hygiene prior to leaving the patient's room.
        2. Fit-tested N95 respirator (or PAPR) and eye protection should be removed and discarded outside of the patient's room after every room exit (not in anteroom if one is present). Do not re-use or follow extended use of the N95s. Place a trashcan outside of the patient's room to discard the N95s and if disposable, the eye protection. If a PAPR, or re-usable eye

protection is worn, clean it with hospital-approved disinfectant after every room exit.

3. Refer to 'Transport Patient' for PPE guidance for this scenario.

- The patient should remain in the room at all times with the doors closed unless diagnostic or therapeutic procedures (e.g., CAT scan, surgery, etc.) are required and cannot be performed in the patient's room. When leaving the room, the patient must disinfect hands, put on a clean hospital gown, put on a medical mask (if safe and patient is >2 years of age), and a clean sheet placed over the patient (See "Transport of Patient"). If the patient is a younger child, cover the crib with a clean sheet during transport if safe.

IX. Hand hygiene

- Hand hygiene is essential, as monkeypox is primarily spread through contact with sores, scabs, or body fluids as well as fomites.
- Hospital-approved hand hygiene products including alcohol-based hand rubs and soap and water are effective.

X. Specimen collection and testing guidance

- Immediately report suspect cases to SFDPH at (415) 554-2830 and determine whether specimens should be collected for testing.
- Notify the UCSF Microbiology Laboratory (415) 353-1268 prior to collecting specimens.
    i. Enter into Apex an order 'Microbiology-Test Not Listed (Special sendout) P319,' specify monkeypox as test.
    ii. Any other microbiology tests sent for this patient should include in the comment that this patient is a monkeypox suspect.
    iii. Refer to the lab manual for more information.
- Collect the specimens following CDPH guidance
    i. At least two samples should be collected and packaged as Category B infectious substances and shipped directly to the CDPH Viral and Rickettsial Disease Laboratory (VRDL).
    ii. Unroofed lesions should be vigorously brushed with Dacron, nylon, or polyester swabs with plastic or aluminum shafts, placed individually in dry, sterile containers with NO TRANSPORT MEDIUM OR ANY OTHER FLUID.
    iii. All specimens should be stored at 4°C if shipping within 24-72 hours, and at -80°C if shipping will be delayed.
- Provider or designee must complete the paper version of the VDRL General Purpose Specimen Submittal form for each specimen.
- Take necessary steps to prevent leaking and ensure that the primary specimen container if closed tightly.

- Use an appropriate, sealed secondary bag or container with absorbent material included. Do not use the pneumatic tube system for specimen delivery.

XI. Clinical Lab Control

- Refer to the recommendations in this guidance for appropriate lab procedures.

XII. Treatment

- Manage and treat based on guidance from the clinical infectious disease services and SFDPH.
- Vaccine and antiviral treatment and prophylaxis will be available at UCSF in coordination with SFDPH, CDPH, and the CDC after a case-by-case evaluation.
    i. For more detailed information, review this guidance.

XIII. Environmental and Equipment Cleaning and Linen handling

- Environmental cleaning
    i. Hospital-approved disinfectant wipes such as Clorox hydrogen peroxide wipes are effective against Monkeypox. Follow appropriate wet times.
    ii. Monkeypox is a Tier 1 (enveloped virus). See this list for a comprehensive list of cleaning agents effective against this virus.
    iii. Standard cleaning and disinfection procedures with hospital-approved disinfectants are effective.
    iv. We cleaning methods are preferable. Activities that could resuspend dried material from lesions, e.g., dry dusting, sweeping, or vacuuming, should be avoided.
    v. Curtains will be changed on transfer or discharge.
- Equipment Cleaning
    i. All equipment entering the patient room will be appropriately cleaned and disinfected using an approved hospital-approved disinfectant and appropriate wet time.
- Linen
    i. Soiled linen (e.g., bedding, towels, personal clothing) should be handled in accordance with standard precautions, avoiding contact with lesion material (e.g., scabs) that may be present on linen while putting the linen in the bag.
    ii. Soiled laundry should be gently and promptly contained in an appropriate laundry bag and should never be shaken or handled in a manner that may disperse infectious material.

XIV. Food service

- Management of food service items should be performed in accordance with routine procedures.

XV. Waste handling

- Standard waste handling is appropriate for the West African Clade (currently circulating clade).
- NOTE: Routine waste handling is specific for the West African Clade. If an additional clade, such as the Central African/Congo Basin Clade, is identified, HEIP will provide notification and update this document as needed.

XVI. Autopsy

- Adhere to the recommendations provided in this guidance for autopsies.

XVII. Discharge planning

- Patients who are confirmed, probable, or suspect cases should not be discharged without approval from HEIP and SFDPH.
    i. If the patient's address is outside of San Francisco, the patient's county of residence DPH must approve the discharge.
- Transfers to another healthcare facility
    i. The healthcare facility will need to be informed of the transfer and monkeypox status.
    ii. Notify Transfer service of the monkeypox status.
    iii. HEIP and SFDPH must be notified and approve prior to transfer.
    iv. If the facility is located in another county, the public health department for that county must be notified.

XVIII. Ambulatory visits for confirmed, probable, or suspect cases

- Schedule an initial video visit if possible. Obtain and upload pictures into Apex.
- Coordinate in-person visits with clinic leadership, ID, and HEIP ahead of time.
- Ensure that the patient is masked and has covered lesions as much as possible prior to arrival.
- Healthcare personnel who will be involved in the encounter should wear PPE as described above.
- Expedite placement of the patient into a room with the door closed.
- If specimens are collected, the provider or designee must complete the VDRL General Purpose Specimen Submittal form for each specimen. Ensure that the form is completed before walking the specimen to the clinical laboratory.
- Clinic staff must stabilize and package the swabs appropriately and ensure that the VRDL form is complete and placed with the specimen.
- If the patient was seen in a standard room (i.e., not an Airborne Infection Isolation Room), allow the room to remain vacant with the door closed for one hour before

environmental cleaning. Hospitality staff should wait one hour to clean the room and wear all required PPE as noted above during cleaning.

- For infection prevention guidance for the home setting, refer to these recommendations

XIX. Occupational Exposure

- Contact Occupational Health Services (OHS) with questions and/or concerns for exposure (415) 885-7580.
    - **i.** A patient may be infectious during the prodrome period and are infectious once they have the onset of the rash and until the lesions have crusted and a fresh layer of skin has formed.
    - **ii.** Exposure risk levels are defined here
- Any healthcare personnel who has cared for a monkeypox patient should be alert to the development of symptoms including fever >=100.4 F (38 C), chills, new lymphadenopathy (periauricular, axillary, cervical, or inguinal), new skin rash, that could suggest monkeypox infection, within the 21 day period after the last date of care, and should notify HEIP, OHS, and SFDPH to be guided about a medical evaluation and evaluation for post-exposure prophylaxis.
    - **i.** Healthcare personnel who have unprotected exposures (i.e., not wearing PPE) to patients with monkeypox do not need to be excluded from work duty but should undergo active surveillance for symptoms which includes measurement of temperature at least twice daily for 21 days following the exposure. Depending on the exposure, the healthcare personnel may be a candidate for post-exposure prophylaxis with monkeypox vaccine. Prior to reporting for work each day, the healthcare personnel should be interviewed regarding evidence of fever or rash.
    - ii. Healthcare personnel who have cared for or otherwise been in direct or indirect contact with monkeypox patients while adhering to recommended infection control precautions may undergo self-monitoring or active monitoring as determined by the health department.
- For more information on occupational exposures refer to this guidance.

XX. Additional Response Guidance

- Any response guidance not outlined in this document will be developed as needed based on risk assessment. Guidance modifications will be reviewed and approved by the UCSF HEIP leadership prior to implementation.