Updated Monitoring Guidance and Vaccine Eligibility for Individuals Exposed to Monkeypox Virus

Purpose

This document guides public health officials in monitoring individuals who have been in contact with an mpox case. Monitoring exposed individuals for fever and other symptoms helps ensure that an exposed individual who becomes ill is identified as soon as possible so that they can be rapidly isolated and evaluated. This document includes instructions on assessment of an identified contact's risk of exposure, contact self-monitoring, and determining restrictions and post-exposure prophylaxis (PEP).

Introduction

Mpox is a rare disease caused by the *Monkeypox virus* which belongs to the same genus (*Orthopoxvirus*) and family *(Poxviridae*) as the causative agents of smallpox, vaccinia, cowpox, and others. Currently, there are two recognized clades of the *Monekypox virus*: Clade I (formerly known as the Central African or Congo Basin clade) and Clade II (formerly known as the West African clade). Clade I has historically caused more severe disease, higher mortality, and is thought to be more transmissible person-to-person. Cases from this outbreak appear to be due to infection with *Monkeypox virus* from Clade II.

The incubation period for mpox is usually 3 to 17 days but can range from 3 to 21 days. The typical presentation of mpox begins with a prodrome of fever (≥100.4°F or 38°C), which might include malaise, chills, headache, or lymphadenopathy. Within 1 to 3 days of fever developing, or sometimes longer, a rash appears. Atypical presentations can also occur, where a rash is either the first or only symptom to develop. Lesions progress through the following stages before falling off: enanthem, macules, papules, vesicles, pustules, and scabs. The illness typically lasts for 2 to 4 weeks, and the patient is no longer considered infectious once scabs fall off and a new layer of skin has formed.

Until now, mpox has spread chiefly from animals to humans. Although the animal reservoir is unknown, evidence of mpox infection has been found in many species, including rope squirrels, tree squirrels, Gambian pouched rats, dormice, prairie dogs, monkeys, and others. Human-to-human transmission can also spread the virus. This transmission occurs primarily through direct contact with infectious sores, scabs, respiratory droplets, mucous secretions, or contact with contaminated materials such as bedding.

The current outbreak of mpox has demonstrated a new pattern of spread. Various types of close intimate contact between people, including sharing linens, wrestling, kissing, touching, hugging, or sex, have been common exposures reported by recent mpox cases. It is currently unknown if mpox is spread directly through seminal or vaginal fluids. Though any person without a prior history of mpox infection can contract the virus, this outbreak has been largely, though not exclusively, among men who have sex with men.

Monitoring Overview

People under monitoring for mpox determined to be at high, intermediate, or lower risk may self-monitor for symptoms without the need for daily contact with their public health jurisdiction. Public health should contact the person on the first and final day of monitoring. People in the high risk category continue to be restricted from long-distance travel, public transportation, large congregate settings, and any unnecessary visitors for the duration of the monitoring period.

People can be vaccinated after exposure to *Monkeypox virus* to help prevent mpox disease (i.e., PEP). CDC recommends that the vaccine be given within 4 days of exposure for the best chance to prevent onset of disease. If given between 4 and 14 days after the date of exposure, vaccination may reduce the symptoms of disease, but may not prevent the disease.

JYNNEOS vaccine is FDA-approved for prevention of smallpox and mpox. It is given as a two-dose series. The two doses should be given 4 weeks apart.

Postexposure Prophylaxis (PEP) Vaccine Recommendations
Accurate determination of exposure risk is critical in determining whether PEP vaccination is warranted (Table below).

- PEP is recommended for all high risk exposures. In these cases, the risk of exposure outweighs the risk of vaccination.
- PEP may be recommended for intermediate or lower risk exposures on a case-by-case basis.
- PEP may also be considered for people with presumed exposure to mpox because they had close contact with other people at an event or location where there was known mpox transmission.

Table. Overview of Public Health Actions According to Risk Categorization

Exposure Category	Monitoring	Restrictions	Postexposure Prophylaxis (PEP) Vaccine Recommendation
High risk	Self-monitoring	Long-distance travel	Recommended
		Public transportation	
		Large congregate settings	
		Unnecessary visitors	
Intermediate risk	Self-monitoring	None	Case-by-case basis
Lower risk	Self-monitoring	None	Case-by-case basis
No risk	None	None	Not recommended

JYNNEOS vaccine is currently under limited supply. Vaccine requests for PEP can be made online through the Vaccine Allocation & Ordering System (VAOS) by a local health department (LHD) or public health region (PHR); these requests will be reviewed by the agency as quickly as possible based on current availability and fulfilled by DSHS contractor, Cold Chain Technology Services. Vaccine deliveries are made on weekdays and are not available on weekends. Healthcare providers should reach out to their local health department or public health region for ordering processes in their area. Urgent questions or requests for vaccine can be emailed to DSHSMPXVax@dshs.texas.gov.

Investigation Process
Three general mechanisms can trigger a monitoring notification to a public health jurisdiction from the Emerging and Acute Infectious Disease Unit (EAIDU): a traveler exposed on a commercial conveyance, transfer of a person under monitoring (PUM) from another state, or identification of an individual that was potentially exposed to *Monkeypox virus* (e.g., exposed to a probable or confirmed case, infected animal, or other exposure).

Notifications of contacts during travel or for transfer of a PUM between states may be communicated via the Centers for Disease Control and Prevention (CDC) secure targeted communication applications Epidemic Information Exchange (Epi-X). Information received via this route will be forwarded by EAIDU to the appropriate PHR for dissemination to the pertinent LHD.

When a case of mpox is identified in Texas, the LHD or PHR will immediately begin the case investigation and identify those exposed to the case and, as appropriate, implement monitoring for signs and symptoms in the exposed individuals. To assist with monitoring of exposed individuals, guidance and forms will be available on the DSHS website which include 1) this monitoring guidance, 2) the Mpox Exposure Risk Assessment Form, 3) the Mpox Symptom Monitoring Log (Excel document), 4) an Mpox Symptom Monitoring Log (Word document) that may be used by the PUM to fill out while they are self-monitoring (in English and Spanish), and 5) a letter explaining monitoring (in English and Spanish). Upon completion of the 21-day monitoring period, the LHD/PHR should email the completed Mpox Symptom Monitoring Log to EAIDUMonitoring@dshs.texas.gov.

Exposure Risk Assessment
The Exposure Risk Assessment Form is used to interview the exposed individual and assign the appropriate exposure risk category. The form is a structured questionnaire that guides the interviewer through a brief history of potential sources of exposure to identify level of risk. This should be completed as soon as possible, and the assessed risk level should inform PEP recommendations and appropriate restrictions.

There are four exposure risk categories:
- High risk
- Intermediate risk
- Lower risk
- No risk

The exposure risk category of any incident may be recategorized to another risk category at the discretion of public health authorities due to the unique circumstances of each exposure incident.

High risk exposure characteristics include:

Community exposures
- Contact between an exposed individual's broken skin or mucous membranes with the skin lesions or bodily fluids from a person with mpox -OR-
- Any sexual or intimate contact involving mucous membranes (e.g., kissing, oral-genital, oral-anal, vaginal, or anal sex [penetrative or receptive]) with a person with mpox -OR-
- Contact between an exposed individual's broken skin or mucous membranes with materials (e.g., linens, clothing, objects, sex toys) that have contacted the skin lesions or bodily fluids of a person with mpox (e.g., sharing food, handling, or sharing of linens used by a person with mpox without having been disinfected or laundered)

Healthcare personnel (HCP) exposures
- Unprotected contact between an exposed individual's broken skin or mucous membranes and the skin lesions or bodily fluids from a patient with mpox (e.g.,

inadvertent splashes of patient saliva to the eyes or mouth of a person), or soiled materials (e.g., linens, clothing) -OR-
- Being inside the patient's room or within 6 feet of a patient with mpox during any medical procedures that may create aerosols from oral secretions (e.g., cardiopulmonary resuscitation, intubation), or activities that may resuspend dried exudates (e.g., shaking of soiled linens), without wearing a NIOSH-approved particulate respirator with N95 filters or higher and eye protection

Examples of high risk exposures can include, but are not limited to:
- Any sexual contact or kissing
- Direct contact to broken skin or a mucous membrane with items soiled by the patient (e.g., linens, furniture, or toys)
- Inadvertent splashes of patient saliva to the eyes or oral cavity
- Intubation of a mpox patient when not wearing an N95 respirator and eye protection

Intermediate risk exposures characteristics include:

Community exposures
- Being within 6 feet for a total of 3 hours or more (cumulative) of an unmasked person with mpox without wearing a surgical mask or respirator -OR-
- Contact between an exposed individual's intact skin with the skin lesions or bodily fluids from a person with mpox -OR-
- Contact between an exposed individual's intact skin with materials (e.g., linens, clothing, sex toys) that have contacted the skin lesions or bodily fluids from a person with mpox without having been disinfected or laundered -OR-
- Contact between an exposed individual's clothing with the person with mpox's skin lesions or bodily fluids, or their soiled linens or dressings
- Exposure that, at the discretion of public health authorities, was recategorized as intermediate risk because of unique circumstances
- Being a member of an exposed cohort as defined by public health authorities experiencing an outbreak (e.g., participated in activities associated with risk of transmission in a setting where multiple cases occurred)

HCP exposures
- Being within 6 feet for a total of 3 hours or more (cumulative) of an unmasked patient with mpox without wearing a facemask or respirator -OR-
- Unprotected contact between an exposed individual's intact skin and the skin lesions or bodily fluids from a patient with mpox, or soiled materials (e.g., linens, clothing) -OR-
- Activities resulting in contact between an exposed individual's clothing and the patient with mpox's skin lesions or bodily fluids, or their soiled materials (e.g., during turning, bathing, or assisting with transfer) while not wearing a gown

Examples of intermediate risk exposures can include, but are not limited to:
- Ungloved contact with a patient
- Direct contact to intact skin (NOT a mucous membrane) with shared items soiled by the patient (e.g., linens, furniture, or toys)
- Touching door handles or countertops touched by a case
- Assisting with turning, bathing, or transferring a patient while wearing gloves but not a gown
- Sitting in a plane or car within 6 feet of a case for a flight ≥ 3 hours without a mask

Lower risk exposures characteristics include:

Community exposures

- Entry into the living space of a person with mpox (regardless of whether the person with mpox is present), and in the absence of any exposures above
- Exposure(s) that, at the discretion of public health authorities, was recategorized as lower risk because of unique circumstances

HCP exposures

- Entry into the contaminated room or patient care area of a patient with mpox without wearing all recommended personal protective equipment, and in the absence of any exposures above

Examples of lower risk exposures can include, but are not limited to:

- Failure to wear at least a surgical mask during all patient encounters
- Sitting bedside with a patient without a mask for less than three hours
- Sitting in a plane or car within 6 feet of a case for a flight less than 3 hours without a mask

No risk exposures characteristics include:

Community exposures

- No contact with the person with mpox, their potentially infectious contaminated materials, nor entry into their living space

HCP exposures

- No contact with the patient with mpox, their contaminated materials, nor entry into the contaminated patient room or care area

Monitoring Instructions

For **all contacts:**

- Contact the individual within 24 hours of identification or notification.
    - Ensure HIPAA-approved platforms are used if conducting a visual meeting for monitoring checks (visual monitoring is not required).
- Ensure the individual possesses a reliable thermometer that can be used to take the individual's temperature.
    - This thermometer should ONLY be used by the PUM and by no other members of the household.
    - If there are multiple PUMs in one household, they should each have access to individual thermometers.
    - Ensure the individual is not on any fever-reducing medicines, such as acetaminophen or ibuprofen, when checking temperature. If the individual must take a fever reducing medication, they should check their temperature just prior to taking their next dose.
- At first contact, record the individual's temperature reading and any symptoms on the individual's Mpox Symptom Monitoring Log. The letter for persons under monitoring and the Mpox 21-Day Symptom Monitoring Log (Word document) may be sent to the PUM.
- Interview the individual using the Mpox Exposure Risk Assessment Form to identify potential exposures and assign the appropriate risk category.
- Self-monitoring can be used for high, intermediate, and lower exposure risk categories.

  - Instruct the PUM to check their temperature with a thermometer twice daily (at least 6 hours apart) and self-monitor for symptoms for 21 days following their last exposure.
  - Throughout the 21-day monitoring period, instruct the PUM to immediately contact their PHR/LHD if they develop a fever (≥ 100.4°F or 38°C) or any other mpox-compatible symptoms.
- Arrange to make contact on the final day of monitoring and record the final day's temperature on the PUM's Mpox Symptom Monitoring Log.
- Send the PUM's Mpox Symptom Monitoring Log to EAIDUMonitoring@dshs.texas.gov the day after monitoring is complete.

Monitoring of **no risk** PUMs is not required.

For **HCP** PUMs**:**

- HCP must be alert to the development of symptoms that suggest mpox infection after caring for an mpox patient, especially within the 21-day period after the last date of exposure to a patient with mpox.
- HCP must notify their infection control and/or occupational health program should mpox-compatible symptoms develop. The infection control or occupational health program should notify the LHD of the HCP's clinical status; HCP may also contact the LHD directly to provide this update.
- HCP that experiences a **high risk** exposure do not need to be excluded from work but must undergo self-monitoring for signs and symptoms as indicated above. Prior to reporting to work each day, HCP should be interviewed regarding evidence of fever or rash. This monitoring may be conducted by the HCP's infection control practitioner (ICP) or occupational health program or self-administered with the facility ICP's approval.
- HCP who have cared for or otherwise been in direct or indirect contact with mpox patients and are assigned to the **intermediate or lower risk** exposure category, may self-monitor for fever and symptoms. LHDs should record fever and symptom observations on the initial day of contact and the final day of monitoring as detailed above.

Monitoring Safety Precautions

Though direct active monitoring is not required for any risk level, public health personnel conducting in-person checks should observe basic precautions to protect themselves from mpox exposure. Whenever meeting a PUM in-person:

- Avoid physical contact with the individual.
  - Do not shake hands.
  - Do not handle anything from the individual. Ensure you bring your own pen/pencil and notepad/forms.
  - Do not handle the individual's thermometer. Have the individual hold the thermometer or put it on a table in a place where you can read the temperature.
- Maintain at least 6 feet of distance from the individual.

Restrictions

Contacts who remain asymptomatic are permitted to continue routine daily activities, such as going to work or school. Contacts must not donate blood, cells, tissues, breast milk, or semen during the 21-day monitoring period. Decisions around organ donation and

asymptomatic contacts without evidence of mpox virus infection should be carefully considered.

Movement for those in the **high risk** category is restricted. PUMs in this category are permitted to perform routine activities (e.g., attend school, go to work, and go grocery shopping). However, PUMs in the higher risk category should avoid:

- Long-distance travel.
- Using public transportation (e.g., ridesharing, taxis, buses, rail, cruise ships, and commercial aircraft).
- Large congregate settings (e.g., public sporting events, malls, theaters, and concerts).
- Visits from family, friends, and others that are unnecessary.

If the PUM must relocate, they must notify the LHD/PHR before traveling. The LHD/PHR will:

- Notify EAIDU of pending plans.
- Ensure that appropriate transportation is arranged.

EAIDU will coordinate transfer with the receiving LHD/PHR, as appropriate. For out of state travelers, EAIDU will coordinate with the relocation state and notify the CDC's Division of Global Migration and Quarantine (DGMQ), if necessary. Permanent relocations will be reassigned to the new jurisdiction.

For **high risk** exposures, LHDs may consider requesting a Do Not Board order with DGMQ if there is reasonable belief that the PUM will not adhere to travel restrictions. The LHD should coordinate such requests with the PHR and EAIDU.

Although travel is not restricted for PUMs assigned to the **intermediate and lower risk** categories, all travel plans should be reported to the LHD. If necessary, EAIDU will notify the receiving jurisdiction of any temporary or permanent relocations. Permanent relocations will be reassigned to the new jurisdiction.

Development of Mpox-compatible Signs or Symptoms

PUMs should monitor themselves for 21 days following their last known mpox exposure for the development of rash or other signs and symptoms of mpox.

Community exposures

During the 21-day monitoring period:

- If a rash develops, the PUM should immediately self-isolate and follow CDC's guidance for Isolation and Prevention Practices for People with Mpox. The PUM should contact the LHD as soon as possible.
    - The PUM should be evaluated by a clinician and assessed for testing for mpox.
    - The PUM should continue these prevention practices until they receive a negative test result or their rash is fully healed. See Mpox Investigation Guidance for how to manage mpox cases.
- If other signs and symptoms develop (e.g., chills, fever, or lymphadenopathy) with the absence of a rash, the PUM should self-isolate and follow CDC's guidance for Isolation and Prevention Practices for People with Mpox for 5 days after the onset of symptoms. Depending on when onset occurs, this 5-day period might extend past the original 21-day self-monitoring period.
    - If a rash develops during the five-day period, notify the LHD immediately. The PUM should immediately self-isolate and follow CDC's guidance for Isolation

and Prevention Practices for People with Mpox. They should be evaluated by a clinician for mpox. If the clinician suspects mpox, they should pursue testing.
    - If a new symptom other than rash develops during the 5-day period, a new 5-day isolation period should start from the most recent onset date. The PUM should isolate even if it extends past the original 21-day self-monitoring period.
        - If symptoms persist without a rash developing, the PUM should be evaluated by a clinician. If the clinician suspects mpox, they should pursue mpox testing.
    - If the 5-day period passes without the development of new symptoms and there is no evidence for a rash or lesion, the PUM can stop isolating. If this occurs before the end of the 21-day self-monitoring period ends, they should continue to self-monitor for mpox until the end of the 21-day monitoring period.

Isolation and prevention practices can be ended prior to 5 days if a healthcare provider or public health authority believes the rash, signs, or symptoms are not due to mpox and there is a clear alternative diagnosis made that does not require isolation.

HCP exposures

During the 21-day monitoring period:

- If rash develops, HCP should be excluded from work until the rash is evaluated. If testing for mpox is required, they should provide a negative result prior to returning to work.
- If other symptoms develop (with the absence of rash), HCP should be excluded from work until 5 days post onset. This 5-day period should be observed even if it extends beyond the original 21-day self-monitoring period.
    - If the 5-day period passes without new onset of symptoms and there is no evidence of rash or lesions, they could return to work after consulting with their infection prevention or occupational health program.
    - If a new symptom develops again at any point during the 21-day monitoring period, HCP should be excluded from work and a new 5-day isolation period should begin.

Inability to Reach a PUM

For the initial contact of a PUM following notification, jurisdictions should try the additional steps below if unable to reach the individual:

- Make at least 3 attempts to call the individual on both their primary and secondary telephone numbers (if available). Attempts should be made at different times of the day, with at least one attempt during the evening or weekend hours.
- Send a text and e-mail to the individual with instructions to contact you as soon as practical.
- Attempt to contact the individual's emergency contact(s), if available.
- If the individual cannot be reached by phone, text, or e-mail, an in-person visit can be made if resources are available; this is not mandatory.
    - If an in-person visit is made and the individual is not present, notice of your visit with your contact information and education materials should be left at the residence.
- If an individual remains uncontactable, notify EAIDU to discuss next steps.

If a PUM cannot be reached for their final monitoring day check-in after making initial (successful) contact, follow the procedures below:

- If a day goes by without reaching a PUM:
    - Make at least 3 attempts to call the individual on both their primary and secondary telephone numbers (if available). Attempts should be made at different times of the day, with at least one attempt during the evening or weekend hours.
    - Send a text and email to the individual with instructions to contact you as soon as practical.
    - Attempt to contact the individual's emergency contact(s), if available.
- If a PUM remains uncontactable contact EAIDU to notify them that the PUM is Lost to Follow up.