

# **Monkeypox Disease: Information for Providers**



### **Step 1: Preparing for Possible Cases of Monkeypox**

- Make sure you have testing supplies on hand.
  - Sterile, dry polyester, nylon, or Dacron swabs with a plastic, wood, or thin aluminum shaft (do not use other types of swabs and do not use cotton swabs)
  - Individual, sterile, screw cap tube containers to place swabs (do not use tubes with Viral Transport Media)
  - Category B shippers with ice packs
    - o In the less likely scenario that the patient travelled to central Africa in the 21 days prior to symptom onset, specimens would need to be shipped using Category A shippers with ice packs.
    - o Information on Packaging and Shipping.
  - Universal Specimen Submission Forms to submit specimens to the Kansas Health and Environmental Laboratories
    - o See the Universal Submission Form Guide on how to fill out the form.
    - o See the Requisition for Laboratory Specimen Kits to order Universal Submission Forms.
  - Refrigerator that can keep samples between 2 and 8 degrees Celsius or freezer that can keep samples at –20 degrees Celsius or lower
  - Disinfecting supplies from EPA list of Disinfectants for Emerging Viral Pathogens (EVPs): List Q
  - · Personal protective equipment:
    - o Gown
    - o Gloves
    - o Eye protection (for example: goggles or a face shield that covers the front and sides of the face)
    - o Fit tested particulate respirator equipped with N95 filters or higher, as approved by NIOSH
- Pre-identify a single person room that will be used for evaluation and sampling (consider a room with a phone available).
- Be ready to call the Kansas Department of Health and Environment 24/7 Epidemiology Hotline.
  - Monkeypox must be reported to KDHE within 4 hours of suspicion by calling 877-427-7313, option 5.
     K.A.R. 28-1-2 requires exotic diseases such as monkeypox to be reported to KDHE within four hours of suspicion.
  - The ideal scenario is to call KDHE while the patient is still in the office so the most accurate information can be collected and KDHE can help arrange for testing and therapeutics as needed.
    - o KDHE Epidemiology approval is needed to test samples through the state laboratory. Approval is not needed to test through a commercial laboratory.



### **Step 2: Recognizing Monkeypox**

### Prodrome Recognition

- People with monkeypox typically report flu-like symptoms such as a fever, body aches, and swollen lymph nodes before a characteristic rash appears.
  - o Lymphadenopathy may occur in the neck, armpits, or groin and occur on both sides or just one. Lymphadenopathy typically occurs with fever onset, 1-2 days before rash onset or, in rare cases, with rash onset.
- During the current outbreak, some patients have developed a rash or lesions around the genitals or anus before any other symptoms.
- Some patients have not developed/not reported any prodrome symptoms.

### Rash Recognition

- Lesions are well circumscribed, deep seated, and often develop umbilication (resembles dot on top of the lesion).
- Often starts in a mucosal area, including the mouth, anogenital or rectal areas, and may remain in a limited area or become more widespread to the face, torso, or extremities (including palms or soles).
- In typical presentation, synchronized progression occurs on specific anatomic sites with lesions in each stage of development; however, in atypical presentations, lesions in varying stages of development may appear on the same anatomical site (for example, a papular rash next to a vesicular lesion).
  - o Macules (flat lesions that are less than 1cm in size)
  - o Papules (small, well-defined bump in the skin)
  - o **Vesicles** (thin-walled sac filled with a fluid, usually clear and small)
  - o **Pustules** (pus/yellowish fluid-filled bump)
  - o **Scabs** (crusted over or healing lesion)

### Epidemiological Criteria (within 21 days of symptom onset):

- Reports having contact with a person or people with a similar appearing rash or who received a diagnosis of confirmed or probable monkeypox OR
- Member of a cohort (as defined by public health) experiencing MPX transmission
  - o Current cohorts:
    - Close or intimate contact with individual(s) in a social network experiencing MPX transmission who meet partner(s) through a website, app, or social event (e.g., bar, party)
    - Persons experiencing homelessness
    - Persons who inject drugs
- Residence in or travel to a country outside the US with confirmed cases of Monkeypox or where Monkeypox is endemic, OR
  - o MPX endemic countries are in Central and West African counties (full list available at: <a href="https://www.who.int/emergencies/disease-outbreak-news/item/2022-DON390">https://www.who.int/emergencies/disease-outbreak-news/item/2022-DON390</a>)
- Contact with a dead or live wild or exotic pet animal of an African species, or used or consumed a
  product derived from such animals (e.g., game meat, powders), OR
- Contact with items that could serve as fomites such as bedding and clothing that have been in contact with a person with suspect or known MPX infection, OR
- · Work in a non-clinical laboratory that handles MPXV



# **Step 3: Reporting Suspect Cases to the Kansas Department of Health & Environment**

Be ready to provide the following information to the on-call epidemiologist:

| Evaluation Criteria  | Yes        | No | Comments   |  |  |
|--|------------|----|--|--|--|
| 1) Did the patient experience fever (measured or subjective)?  |            |    | Fever onset date:/   |  |  |
| 2) Did the patient experience any of the following?  |            |    |  |  |  |
| Headache   |            |    | Symptom onset date://  |  |  |
| Muscle ache  |            |    |  |  |  |
| Exhaustion   |            |    |  |  |  |
| Lymphadenopathy  |            |    |  |  |  |
| 3) Patients presenting with typical MPX (lesions starting on the face then spreading to other parts of the body)   |            |    |  |  |  |
| Was the rash preceded by any of the following symptoms listed above by 1-3 days?   |            |    | Rash onset date://   |  |  |
| Did the lesions progress from: macules → papules → vesicles → pustules → scabs   |            |    |  |  |  |
| Are lesions of the same anatomical site progressing at the same time?  |            |    |  |  |  |
| 4) Patients presenting with atypical MPX (lesion(s) exclusive to the genital or perianal region)   |            |    |  |  |  |
| Did the patient experience vaginal or rectal (proctitis) pain?   |            |    | Rash onset date://   |  |  |
| Did the lesions progress from: macules → papules → vesicles → pustules → scabs (progression may be asynchronous)   |            |    | Encourage providers to perform STI/HIV testing in concurrence with MPXV testing.  Recommend the clinician perform a skin/mucosal check |  |  |
| Does the clinician or epidemiologist/medical investigator have suspicion of MPX?   |            |    | to identify other lesion locations or perianal lesions.  |  |  |
| 5) Meet epidemiological criteria in the past 21 days from sympt  | tom onset? |    |  |  |  |
| Exposed to confirmed or suspected human or animal MPX case (including contact with materials such as bedding or clothing)?                               |            |    | Travel dates or exposure dates:/to/  |  |  |
| Resides in or traveled to a country where MPX is endemic?  |            |    |  |  |  |
| Work in a non-clinical lab that handles MPXV?  |            |    |  |  |  |
| 6) Patient part of cohort/social network experiencing MPX?   |            |    |  |  |  |
| Close or intimate in-person contact with individuals in a social network experiencing monkeypox transmission who meet partners through social media/apps |            |    | This criterion is not restricted to MSM with intimate contact.   |  |  |
| Persons experiencing homelessness  |            |    |  |  |  |
| Persons who inject drugs   |            |    |  |  |  |

|          | for testing.  |
|----------|---|
|          | ☐ Fever (1) or other prodrome symptoms (2), and   |
|          | ☐ Typical monkeypox rash (3)  |
|          |   |
| <b>Y</b> | Patients with <u>ATYPICAL</u> MPX presentation must have the following to be approved for testing:                                      |
|          | ☐ Pain or itching in the genital/perianal region and rash/lesion(s) consistent with MPX rash (4), and                                   |
|          |   |
|          | Don't forget to screen for STI/HIV in sexually active patients under suspicion for MPX (particularly Syphilis and HSV)                  |
|          | Be ready to discuss the following information with the on-call epidemiologist:  |
|          | <ul> <li>Patient's regular primary care provider (name and contact information) for the purposes of discussing<br/>therapies</li> </ul> |
|          | <ul> <li>Is the patient at high suspicion for MPX?</li> <li>Rash AND</li> </ul>   |
|          | o Intimate or close contact with confirmed or suspected MPX case OR resides in or travel to   |

Patients with TYPICAL MPX presentation must have the following to be approved

- If the patient is at high suspicion for MPX, provide names and contact information for any close household contacts.
- If the patient is at high suspicion for MPX, provide the name and contact information for the primary care provider of the close household contacts for the purposes of discussing post-exposure prophylaxis.

country where MPX is endemic OR close or intimate contact with individuals in a social network

- If you have ordered STI/HIV testing, provide any results or let the on-call epidemiologist know results are pending.
- IMMEDIATELY contact the 24/7 KDHE Epidemiology Hotline at 877-427-7317, option 5 to report the suspect case to the on-call epidemiologist as required by K.A.R. 28-1-2.
  - Monkeypox must be reported to KDHE within 4 hours of suspicion.

experiencing monkeypox activity.

• The ideal scenario is to call KDHE while the patient is still in the office so the most accurate information can be collected and KDHE can help arrange for testing and therapeutics as needed.



## Step 4: Collecting & Shipping Samples for Analysis at the Kansas Health & Environment Labratories

### First Lesion Specimen Instructions:

- Using a synthetic fiber swab (swabs with synthetic or metal shaft), lift the edge (do not need to de-roof) of a lesion and *vigorously* swab or brush lesion.
- Using a new synthetic swab, vigorously swab/brush the SAME lesion. Place each swab into a **separate empty, dry tube** (do not place in transport media, one swab per tube).
- Label each tube and complete <u>one</u> Universal Submission form for both swabs of this lesion and identify on the form and tubes lesion swabbed (e.g. oral cavity).

### Second Lesion Specimen Instructions:

- Using a new synthetic fiber swab (swabs with synthetic or metal shaft), lift the edge (do not need to de-roof) of a lesion and *vigorously* brush lesion.
- Using a new synthetic swab, vigorously swab/brush the SAME lesion. Place each swab into a **separate empty, dry tube** (do not place in transport media, one swab per tube).
- Label each tube and complete <u>one</u> Universal Submission form for both swabs and identity on the form and tubes lesion swabbed (e.g. left hand swab).

| Specimens should be <b>kept refrigerated and shipped with ice packs</b> to keep at   |
|--|
| refrigerated temperatures (2-8 °C). With the hot summer months, make sure to fill the shipping container with enough ice packs to ensure specimens arrive at refrigerated temps. |
| Look tube must be preparly labeled and east with two KHEL universal submission forms   |
| Each tube must be properly labeled and sent with two KHEL universal submission forms   |

- Ship specimens as **Category B** to: Kansas Health and Environmental Laboratories, 6810 SE Dwight Street, Topeka KS 66620. If the patient being tested travelled to central Africa in the 21 days prior to symptom onset, the specimen should be shipped **Category A**.
  - Information on Packaging and Shipping.

per patient (one form per lesion swab).

- Include the form(s) with the specimens and ship to KHEL. If specimens will arrive at the lab after business hours, please notify KDHE Epidemiology at 877-427-7317 or <a href="mailto:kdhe.epihotline@ks.gov">kdhe.epihotline@ks.gov</a>.
  - See the Universal Submission Form Guide on how to fill out the form.
  - See the Requisition for Laboratory Specimen Kits to order Universal Submission Forms.



### **Step 5: Conversation With Patient**

#### Isolation

- People with extensive lesions that cannot be easily covered, draining/weeping lesions, or respiratory symptoms (e.g., cough, sore throat, runny nose) should be isolated at home or in area separate from other family members and pets when possible.
- Avoid contaminating furniture and other non-launderable items by covering them with blankets or other washable or disposable layers.
- People with a test pending for monkeypox should not leave the home except as required for follow-up medical care. If it is necessary to leave the home, cover lesions with clothing or bandages as much as possible.
- People with a test pending for monkeypox should avoid contact with animals, including pets. Other household members should care for pets when possible.
- People with a test pending for monkeypox, especially those who have respiratory symptoms, should wear a surgical mask. If this is not
  feasible (e.g., a child with a pending test for monkeypox), other household members should consider wearing a surgical mask when in the
  presence of the potentially infected person.
- Unexposed people who do not have an essential need to be in the home should not visit.
- · Household members who are not ill should limit contact with the person who has a pending test for monkeypox.
- Home isolation should be maintained until all lesions have crusted, those crusts have separated, and a fresh layer of healthy skin has
  formed underneath. Infected persons should be careful to isolate away from other people, as well as isolate away from animals. Cases
  cannot travel using public transportation during their isolation period.
- · Avoid touching the rash. Touching the rash can spread it to other parts of the body and may delay healing.

### **Supportive Care**

Supportive care includes maintenance of adequate fluid balance, pain management, treatment of bacterial superinfections of skin lesions and treatment of co-occurring sexually transmitted or superimposed bacterial skin infections. Providers should address these symptoms adequately and early to prevent hospitalizations.

- Skin lesions should be kept clean and dry when not showering or bathing to prevent bacterial superinfection. Pruritus can be managed with oral antihistamines and inert, anti-irritant topical agents such as calamine lotion or petroleum jelly.
- For oral lesions, compounds such "magic" or "miracle" mouthwashes (prescription solutions used to treat mucositis) can be used to manage pain. Oral antiseptics can be used to keep lesions clean (e.g., chlorhexidine mouthwash). Topical benzocaine/lidocaine gels can be used for temporary relief, especially to facilitate eating and drinking, but should be limited to recommended doses.
- For painful genital and anorectal lesions, warm <u>sitz baths</u> lasting at least 10 minutes several times per day may be helpful. Topical benzocaine/lidocaine gels or creams at the recommended doses may also provide temporary relief.
- Proctitis can occur with or without internal lesions and, though often manageable with appropriate supportive care, can progress to become
  severe and debilitating. Stool softeners such as docusate should be initiated early. Sitz baths, as described above, are also useful for
  proctitis, and may calm inflammation. Similarly, over the counter pain medications such as acetaminophen can be used.
- Pain from monkeypox proctitis may require prescription medications, use of which should be balanced with the possibility of side effects, like
  constipation. Proctitis may additionally be accompanied by rectal bleeding. Though rectal bleeding has been observed to be self-limited,
  patients with rectal bleeding should be evaluated by a healthcare provider.
- Nausea and vomiting may be controlled with anti-emetics as appropriate. Diarrhea should be managed with appropriate hydration and electrolyte replacement. The use of anti-motility agents is not generally recommended given the potential for ileus.
- People may have extremely itchy or painful rash. Pain may be severe enough to interfere with basic functions such as eating, urination, and defecation and can cause significant patient distress.

#### Vaccine & Antiviral Treatments

- JYNNEOS is a 2-dose vaccine that, if given within 4 days of exposure, can help prevent Monkeypox infection in exposed persons that have not developed MPX infection yet. If given between days 4 and 14, it may help reduce the symptoms of Monkeypox but may not prevent infection.
- Tecovirimat (TPOXX) is an oral or IV antiviral medication that is indicated for use in people infected with Monkeypox virus.
  - o Clinicians can order Tecovirimat through KDHE or directly from the CDC.