



## Missouri Department of Health and Senior Services

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# Missouri State Public Health Laboratory

## MPOX TESTING INFORMATION

Updated 1/2023

### INSTRUCTIONS FOR THE COLLECTION AND SUBMISSION OF SPECIMENS FOR MPOX TESTING TO THE MISSOURI STATE PUBLIC HEALTH LABORATORY:

Please contact the Missouri Department of Health and Senior Services' (DHSS) Bureau of Communicable Disease Control and Prevention (BCDCP) at 573-751-6113 during business hours (or 800-392-0272 after hours) for consultation to determine if specimens should be collected.

#### I. Specimen Collection and Handling

**Note:** Only personnel wearing appropriate barrier protection (gloves, goggles or faceshield, gown, and face mask) should be involved in specimen collection for suspected cases of mpox.

After contacting BCDCP (see above) for approval to send in specimens for testing, the samples should be collected in the manner outlined below and placed in an appropriate biosafety-shipping container. Collection and shipping materials are provided by the Missouri State Public Health Laboratory and are available upon request after approval for testing has been granted. See the following web site for more information on collection, packaging, and transportation of mpox specimens:

<https://www.cdc.gov/poxvirus/monkeypox>

Refrigerate (2–8°C) or freeze (-20°C or lower) specimens within an hour after collection. Store refrigerated specimens for up to 7 days and frozen specimens for up to 60 days. Refrigerated specimens should be sent within 7 days of collection; frozen specimens should be shipped within 60 days of collection on dry ice.

**Note:** Each patient's lesions specimens must be packaged separately from other patient specimens to avoid Cross-contamination.

**Important:** Unroofing or aspiration of lesions is not necessary or recommended. **DO NOT** use any sharp instruments to collect potential mpox specimens, as use of sharp instrumentation during collection can pose a significant risk for sharps injury.

## PROMOTING HEALTH AND SAFETY

The Missouri Department of Health and Senior Services' vision is optimal health and safety for all Missourians, in all communities, for life.

## A. Choose One of the Following Sample Types for Specimen Collection:

### 1. Lesion Swab in Viral Transport Media (VTM)

- Use only sterile Nylon, Polyester, or Dacron swabs with a plastic or aluminum shaft. Do not use other types of swabs
- Do not clean the lesion with ethanol or any other disinfectant prior to swabbing
- Two swabs should be collected from multiple (a minimum of two) lesions, for a total of at least four swabs (two swabs per lesion).
- Swab or brush each lesion vigorously with two separate sterile dry swabs
  - If material is visible on the swab surface (such as skin material or from lesion fluid that is leaking from the lesion), this is indicative of an adequate collection. Please note that material may not always be visible on swabs.
- Break off the end of each swab and place in individual, screw-capped vial of VTM (UTM or MTM **cannot** be used)
- Information on the specimen container must match the information on the test request form. Label each specimen container with the following:
  - Patient Name
  - Date of Birth
  - Collection Date
  - Lesion Location (e.g. right foot, abdomen, left thigh)
- Refrigerate (2–8°C) or freeze (-20°C or lower) specimens within an hour of collection

### 2. Dry Lesion Swabs

- Use only sterile Nylon, Polyester, or Dacron swabs with a plastic or aluminum shaft. Do not use other types of swabs
- Do not clean the lesion with ethanol or any other disinfectant prior to swabbing
- Two swabs should be collected from multiple (a minimum of two) lesions, for a total of four swabs (two swabs per lesion).
- Swab or brush each lesion vigorously with two separate sterile dry swabs
  - If material is visible on the swab surface (such as skin material or from lesion fluid that is leaking from the lesion), this is indicative of an adequate collection. Please note that material may not always be visible on swabs.
- Break off the end of each swab and place in individual, screw-capped sterile tube (e.g. 15 mL conical tube or sterile urine cup) with an O-ring. If a tube with an O-ring is not available, please wrap the cap with Parafilm.
  - DO NOT ADD ANY VIRAL OR UNIVERSAL TRANSPORT MEDIA.
- Information on the specimen container must match the information on the test request form. Label each specimen container with the following:
  - Patient Name
  - Date of Birth
  - Collection Date
  - Lesion Location (e.g. right foot, abdomen, left thigh)

- Refrigerate (2–8°C) or freeze (-20°C or lower) specimens within an hour of collection

### 3. Lesion Crusts

- Use a forceps or other blunt-tipped sterile instrument to remove all or a piece of the crust that is at least 4mm x 4mm
- Place the crust into a dry, sterile 1.5-2 mL screw-cap plastic vial with O-ring
- Cap vial to maintain relative sterility and keep vial in as cool an environment as reasonably possible to preserve virus viability

## II. SHIPPING INSTRUCTIONS

The Missouri State Public Health Laboratory (MSPHL) will supply an mpox collection kit which is suitable for the collection and transportation of mpox dry swab specimens. Specimens should be refrigerated (4°C) and shipped on cold packs (not wet ice). Samples that cannot be shipped immediately should be frozen at -20°C and then shipped on dry ice.

All specimens should be submitted with a completed [Test Request Form](#) to the MSPHL, along with a completed [Poxvirus Human Specimen Submission Form](#). This will ensure proper documentation in the event that the specimen is forwarded to the Centers for Disease Control for confirmatory testing. Both forms can be downloaded on the MSPHL rash website: <https://health.mo.gov/lab/rash.php>

If mailers from the SPHL are not used, specimens should be packaged and shipped in a container suitable for the transportation of etiologic agents.

All shipments must comply with current DOT/IATA shipping regulations.

The MSPHL provides courier services for the transportation of specimens to the laboratory. If the state courier is not used, specimens should be sent by priority shipping for receipt within 24 hours. The MSPHL shipping address is:

**Missouri Dept. of Health and Senior Services  
Missouri State Public Health Laboratory  
Attention: Molecular Unit  
101 N. Chestnut Street  
Jefferson City, MO 65101**