

Guidelines for Orthopox/Monkeypox Specimen Collection

The first Orthopoxvirus positive patient was identified in Illinois in May 2022, and confirmed monkeypox by CDC in June. Clinicians should immediately report any suspect cases to their local health department (LHD) during or after work hours and take appropriate infection control precautions. LHDs should report promptly to the IDPH Communicable Disease Control Section during or after work hours. The specimen must be delivered to IDPH lab by noon to be tested the same day so prompt courier delivery should be arranged.

Step 1: Testing Approval by IDPH

Deciding whether or not to test: Approval is required before any specimens can be tested for monkeypox. Clinicians should promptly report any suspected cases who are Illinois residents to their LHD and in turn, LHDs notify IDPH by calling 217-782-2016 during business hours or 800-782-7860 after hours.

If monkeypox testing is approved: Testing for Orthopox viruses can be performed on a dry swab of vesicles/pustules, lesion crust, or tissue biopsy at the IDPH laboratories (throat swabs, touch prep slides of lesions) – but should be discussed with IDPH in advance of submitting). Because of the need for both preliminary and confirmatory testing and test multiple lesions, **two specimens should be collected per lesion from 2-3 different anatomic sites**. Orthopox positive specimens at IDPH labs will be sent to CDC labs for monkeypox-specific testing. Specimens should not be submitted to IDPH without health department approval.

Step 2: Specimen Collection Methods

Specimen collection and storage: Specimen collection can occur in outpatient or inpatient settings. If indicated or recommended after consultation with IDPH, testing for other pathogens should be conducted in diagnostic laboratories [per CDC guidance](#).

- Follow appropriate [healthcare infection prevention and control guidelines](#) for suspected monkeypox cases:
 - Optimum personal protective equipment (PPE) for specimen collection is a gown, gloves, eye protection (e.g. goggles or a face shield that covers the front and sides of the face), and a NIOSH-approved particulate respirator equipped with N95 filters or higher.
 - Specimens should be collected in a single-person room, with the door closed (if safe to do so). Special air handling is not required.
- Use a sterile nylon, polyester, or Dacron swab with a plastic or thin aluminum shaft. Do not use other types of swabs. Do not use swabs contained within a media transport system (e.g. ESwab)
- Vigorously swab or brush lesion. If the skin atop the vesicle or pustule is intact, it may be necessary to gently lance and lift the lesion.
- Place each specimen in a separate sterile container (e.g., by breaking off end of applicator of each swab into a 1.5 or 2-mL screw-capped tube with O-ring, placing in a sterile urine cup, or 15cc/50cc conical tube). **Do not add or store in viral, universal, or other transport media**. A dry swab is currently the only acceptable specimen approved for testing.
- Collect two or more specimens per lesion (duplicates are needed for testing at IDPH and CDC).
- Collect from at least two, ideally three, lesions preferably from different locations on the body and/or from lesions with differing appearances. Use a new swab for each specimen. There

should be at least four specimens – at least two lesions with two specimens per lesion. Each specimen should be stored in its own container.

- Label each specimen container with:
 - Patient Name and Date of Birth
 - Medical Record Number
 - Lesion Location. Label duplicates A and B (e.g., left thigh A, left thigh B; perianal A, etc.); if multiple specimens are collected from the same site, number and label them (e.g., Lesion 1. perianal 1A, Lesion 1. perianal 1B, Lesion 2. perianal 2A, Lesion 2. perianal 2B).
 - Collection date
- Refrigerate (2-8°C) or freeze (\leq -20°C) within an hour of collection.
 - Refrigerated specimens may be stored up to 7 Days.
 - Frozen specimens may be stored up to 60 Days.

Step 3: Lab Requisition Forms

Specimens will first be submitted to IDPH for Orthopoxvirus testing by real-time PCR. If positive, they will be referred to CDC for monkeypox-specific testing. **Duplicates should be submitted for all specimens** and labeled as described above.

Requisition forms: There should be at least four specimens (at least two per lesion from two lesions). For each specimen, the [IDPH Communicable Disease Laboratory Test Requisition Form](https://dph.illinois.gov/content/dam/soi/en/web/idph/forms/topics-services/lab-testingservices/clinical-testing/communicable-diseases-laboratory-test-requisition-10182021.pdf) is required to be completed. If four specimens were collected as recommended, four requisition forms must be completed. The IDPH Communicable Disease Laboratory Test Requisition Form can be found at <https://dph.illinois.gov/content/dam/soi/en/web/idph/forms/topics-services/lab-testingservices/clinical-testing/communicable-diseases-laboratory-test-requisition-10182021.pdf>

- No authorization code is required.
- Under Test Request Information, select “Orthopoxvirus” and write OPX on the “*Other Test” line.
- For Source/Specimen type, select the appropriate specimen type (e.g., skin, genital swab) and specify the exact lesion location (e.g., right foot, abdomen, left thigh) on the “**Other Source” line.
- **All Patient Information MUST be identical to labels on the specimen containers or the specimens will be rejected from testing.**

Shipping:

- Specimens should have been frozen or refrigerated within one hour of specimen collection.
- Specimens must be shipped as [Category B Infectious Substances](#).
- Ship on dry ice.
- **Specimens received for diagnostic testing that are $>8^{\circ}\text{C}$ will be rejected from testing.**
- Ship at least two specimens per lesion to:

Attn: Molecular Lab
Illinois Department of Public Health
Division of Laboratories
2121 W. Taylor Street
Chicago, IL 60612
312-793-4760

Attn: Molecular Lab
Illinois Department of Public Health
Division of Laboratories
1155 South Oakland Ave.
Carbondale, IL 62901
618-487-5131

Attn: Molecular Lab
Illinois Department of Public Health
Division of Laboratories
825 North Rutledge Street
Springfield, IL 62702
217-782-6562

- Both IDPH and CDC laboratories are typically open during regular business hours Monday – Friday. IDPH Laboratories hours are 8 a.m. - 4:30 p.m. except on [state designated holidays](#). **However, the samples must be delivered to IDPH laboratory before noon to be tested the same day so prompt courier delivery should be arranged.**
- **Do not ship specimens on Friday afternoons, Saturdays, or Sundays except with prior notification from IDPH that shipping outside of business hours is permitted.**
- If you do not have courier services, contact IDPH and we will try to support.