



August 10, 2022

Submitting Specimens to OSPHL for *Orthopox* (monkeypox) Testing

The Oregon State Public Health Laboratory (OSPHL), Laboratory Response Network (LRN) Reference Laboratory, provides diagnostic testing to identify the presence of *Orthopoxvirus* including monkeypox (hMPXV). Clinical laboratories should conduct initial testing to assess for other possible pathogens, such as varicella if capable, in consultation with public health authorities if needed.

Commercial laboratories should be used when available. OSPHL will prioritize *Orthopox* testing for patients and healthcare facilities without access to commercial laboratory testing services. **Specimens tested at OSPHL must meet criteria for testing described below.**

Criteria for *Orthopoxvirus* Testing at OSPHL

Patients with clinical assessment aligning with the [suspect case definition](#)*, as defined by the Centers for Disease Control and Prevention (CDC) qualify for testing at OSPHL.

OSPHL does not collect specimens for testing but accepts specimens from healthcare providers meeting the defined criteria.

If testing at OSPHL is indicated, please follow these steps:

1. **Collect**, prepare, and store specimen(s) for transport to OSPHL. Complete instructions are available on the OSPHL Test Menu for [Orthopoxvirus, Real-Time PCR](#). Also reference the [CDC Biosafety Measures for Suspected Orthopox Cases](#).
 - a. Collect **two dry lesion swabs** from the **same lesion**.
 - Use sterile nylon, polyester, or Dacron swabs with plastic or aluminum shafts.
 - Swab or brush lesion vigorously with two separate dry swabs. Place each swab in a **separate** sterile container (one swab per container).
 - If possible, repeat the collection procedure for an additional lesion site.
 - b. Label each specimen with at least two unique patient identifiers **and** a brief description of the lesion location (e.g., left thumb, anus).
 - c. Refrigerate or freeze within one hour after collection. Refrigerate at 2-8° C.
 - d. If specimens cannot be transported and tested within 7 days of collection, freeze specimens at -20° C or below pending transport.

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2. **Complete** the following form:
 - a. One per specimen: OSPHL Virology/Immunology Test Request Form (www.bitly.com/phl-forms)
 - o Specify the location of the lesion collected in the Specimen Source section.

3. **Transport** specimens to OSPHL for receipt as soon as possible after collection.
 - a. Specimens should be transported using fully frozen cold packs to maintain refrigerated temperatures during transit. Specimens must be *tested* within 7 days of collection.
 - b. If specimens cannot be tested within 7 days, store frozen (-20°C or below) and shipped to OSPHL to maintain frozen temperatures during transit. If shipping on dry ice, store at -70°C prior to shipping.
 - c. Use routine health system laboratory specimen transport options where available. If transport by an alternate courier is needed, contact OSPHL at 503-693-4100 for support to arrange.

Per CDC, specimens may be packaged and shipped to OSPHL as Category B.

Notes:

OSPHL utilizes CDC's *Orthopoxvirus* PCR procedure and CDC's FDA cleared non-variola *Orthopoxvirus* DNA PCR assay. Both assays will detect the members of the *Orthopox* genus such as vaccinia, cowpox, monkeypox, camelpox, ectromelia, and gerbilpox, but neither assay will differentiate between the species. Neither test will detect molluscum or orf virus.

OSPHL *Orthopox* PCR results may be the only result received. OSPHL no longer sends every *Orthopox*-positive PCR to CDC for speciation. CDC notes that monkeypox is currently the only *Orthopoxvirus* virus circulating in the United States. In alignment with CDC guidance, OSPHL will send a sub-set of *Orthopox*-positive specimens to CDC for public health surveillance.

If you have reason to suspect a patient is infected with another *Orthopox* species, contact the OHA Acute and Communicable Disease Prevention Section immediately at 971-673-1111.

This guidance may change as the public health response evolves and more is learned about the transmission and prevention of monkeypox virus.

* <https://www.cdc.gov/poxvirus/monkeypox/clinicians/case-definition.html>