Mpox Specimen Testing in Washington

Mpox (previously called monkeypox) swab testing and mpox clade determination testing is currently available at Washington State Public Health Laboratories (WSPHL). After approval from your local health jurisdiction or from Washington Department of Health (DOH), mpox testing can be ordered through the Lab Web Portal for patients with a compatible rash. Mpox testing is also available through several academic and commercial laboratories in Washington, but some only perform non-specific mpox testing and some do not have clade determination testing. Clinicians do not need to contact public health for approval before sending mpox tests to academic or commercial labs.

Clinicians should consider mpox testing and clade determination testing for any patient with a compatible rash; CDC provides guidance on clinical recognition. Epidemiologic risk factors will also affect the level of clinical suspicion:

- Recent travel to a country with confirmed cases of mpox or where mpox is endemic *OR*
- Contact with a person with confirmed mpox or similar rash *OR*
- Close or intimate in-person contact with a person in a group experiencing mpox activity *OR*
- Contact with a dead or live animal that is an endemic species or use of a product derived from such animals.

Clinicians should also consider testing for other causes of rashes such as syphilis, herpes, or chickenpox. Dual infections can occur (e.g., herpes and mpox). Clinicians might want to consider HIV/STI testing, Pre-Exposure Prophylaxis for HIV (PrEP), or doxycycline as Post-Exposure Prophylaxis (doxy PEP).

Clinicians should advise patients being tested to self-isolate and avoid contact with people and mammals until testing is completed, especially if the patient is suspected to have clade I mpox.

Specimen types for WSPHL testing (after public health approval is obtained)

- Swabs from a discrete lesion, including a discrete oral or anal lesion; testing is **not** available for swabbing of the oropharynx, nasopharynx, or rectum with no visible lesions.
- Swabs from scabs or entire scabs if no fresh lesions are present.

Note: it is no longer recommended to unroof or aspirate lesion as it is not necessary and carries risk for sharps injury.

Local health jurisdictions should contact DOH (206-418-5500 or mpoxconsult@doh.wa.gov) to discuss next possible steps for alternative specimen types as CDC might be able to accept other specimen types for testing.

Key points for swab specimen collection from lesions

- Use appropriate infection control procedures (gown, gloves, eye protection, NIOSH approved N95 particulate respirator or equivalent/higher respiratory protection).
- Clean a lesion with alcohol. Rub firmly with a swab (need to collect patient cells).
- Use sterile synthetic Dacron, polyester or nylon swabs, with a plastic or wire handle. Vigorously swab a minimum of 2 lesions, each with two swabs (total 4 swabs). Note the body site of the lesions.
- Immediately put each swab tip or scab into a separate screw-top vial (one per vial) with **viral** transport medium (VTM) and aseptically break or cut the handle. A swab can also go into a sterile dry screw-top vial. Close the vial tightly.
    - Do **NOT** use universal transport medium (CDC will not confirm UTM specimens).
- Label **each** vial with patient's name AND a second identifier AND collection date AND body source (e.g., dorsal left hand). Refrigerate vials within an hour of collection.

Storing and shipping of specimens

Specimens must be refrigerated (2°C to 8°C) within an hour of collection and promptly shipped to **arrive** within 24 hours of collection. If the specimen will **not arrive** within 24 hours, specimens should be **frozen** at -70°C to -20°C and shipped on dry ice.

Specimens shipped to the WSPHL must be ordered through the Lab Web Portal after receiving approval from your local health jurisdiction or WA DOH. Complete a WSPHL form for each specimen with name, birthdate, collection date, **and** the collection body site (except for serum). Each specimen should be packed in its own sealed bag and accompanied by its own form. Multiple sealed bags can be placed in a secondary outer bag or container.

All persons shipping packages with medical specimens must have documented shipping training (US Department of Transportation's (DOT) Hazardous Materials Regulations for Packaging and Labeling Infectious Substances). Per DOT regulations, non-variola orthopox diagnostic specimens, including MPXV diagnostic specimens, can be classified as "UN3373, Biological substances, Category B, 6.2" when shipped via ground transportation. As such, MPXV clinical waste may be classified for transportation as "UN3291, Regulated medical waste". However, materials containing or contaminated with higher concentrations of virus, including MPXV Clade I viral cultures, must be classified as "UN2814, Infectious Substances, Category A, 6.2". The International Air Transport Association (IATA) continues to list MPXV as a Category A infectious substance, so Category A shipping will be required for air transportation.

Furthermore, any specimens that have been identified as MPXV (either clade I or clade undetermined) prior to their shipment are considered to be select agent material and cannot be shipped without federal approval per DOT regulations. This does not include specimens that are confirmed to be non-variola orthopox or MPXV specimens that have been confirmed

to be clade II as these are not considered to be select agents.
WSPHL provides instructions on packaging specimens.

Reporting of results

WSPHL and some clinical laboratories can confirm **Orthopoxvirus**, which includes monkeypox virus (MPXV), smallpox virus, smallpox vaccine virus, and various animal poxviruses. Given current epidemiology, this is considered diagnostic for mpox unless there is clinical or epidemiologic suspicion for another poxvirus. WSPHL, CDC, some academic, and some commercial laboratories can confirm **monkeypox virus (MPXV)** specifically and sequence samples for clade determination. At this time, WSPHL developed an assay that can detect mpox clade II and clade Ia. Specimens that are determined to be non-variola orthpoxvirus positive, but MPXV clade II and clade Ia negative, will be sent to CDC or academic laboratories for further sequencing.

For more information:

CDC data on the current outbreak

Local health jurisdiction contact information (for providers who wish to request testing at WSPHL)

CDC mpox clinical resources

CDC guidance on mpox specimens

CDC guidance for laboratory personnel

To request this document in another format, call 1-800-525-0127. Deaf or hard of hearing customers, please call 711 (Washington Relay) or email civil.rights@doh.wa.gov.