#### **PHSA Laboratories**

**BCCDC Public Health Laboratory** 

August 17, 2022

**RE: Monkeypox virus Laboratory Testing Updates** 

### Test availability

The BCCDC Public Health Laboratory (PHL) offers a monkeypox virus nucleic acid test (NAT) with a turnaround time of ~24 hours from specimen receipt in the laboratory. Positive and indeterminate results are reported to public health as a Reportable Communicable Disease. Indeterminate results occur when the result is beyond the validated range or not reproducible. The BCCDC PHL is also performing weekly monkeypox surveillance testing on a subsample of specimens submitted for HSV/VZV testing. Regional laboratories may also offer local monkeypox testing.

# Indications for testing

Any individual meeting the suspect or probable monkeypox case definitions (<a href="http://www.bccdc.ca/health-professionals/clinical-resources/case-definitions/monkeypox">http://www.bccdc.ca/health-professionals/clinical-resources/case-definitions/monkeypox</a>) should be offered testing. Clinicians should be aware of the differential diagnosis as lesions associated with monkeypox can resemble several other infections, including from herpesviruses, enterovirus, syphilis, bacteria, and other poxviruses like molluscum contagiosum.

Please note that individuals presenting with monkeypox in the current epidemic often do not exhibit classically described lesion distribution or progression, but rather lesions occur at points of skin/mucosal contact.

Please refer to available testing guidelines for more detailed information:

- CPHLN: <a href="https://nccid.ca/wp-content/uploads/sites/2/2022/08/CPHLN-Best-Practices-for-Responding-to-Monkeypox-Cases-in-Canada.pdf">https://nccid.ca/wp-content/uploads/sites/2/2022/08/CPHLN-Best-Practices-for-Responding-to-Monkeypox-Cases-in-Canada.pdf</a>
- CDC: https://emergency.cdc.gov/han/2022/han00471.asp
- WHO: https://apps.who.int/iris/bitstream/handle/10665/354488/WHO-MPX-Laboratory-2022.1-eng.pdf

# **Specimen Collection and Testing Guidelines**

Detailed information on sample types and containers for testing at BCCDC can be found by searching eLabhandbook for Monkeypox (<a href="http://www.elabhandbook.info/phsa/">http://www.elabhandbook.info/phsa/</a>). Monkeypox testing should be specified on the BCCDC PHL requisition in the PATIENT STATUS/TRAVEL HISTORY/EXPOSURE box.



#### Illness Stage: rash/lesions present

The highest yield sample type is from skin/mucosal lesions. Swab 2-3 lesions, unroof vesicles and/or vigorously swab dry or crusted lesions using a single swab. Use the same swab that is normally used to sample lesions for HSV/VZV. Place the swab in Universal Transport Medium (UTM). Multiple viruses (e.g., HSV/VZV/enterovirus/monkeypox) can be detected from a single collection.

• Illness Stage: prodromal (no evidence of skin lesions)

Consult a regional or BCCDC microbiologist when only prodromal symptoms without a rash are present to ensure that the wide differential of agents is considered. Collecting both oropharyngeal swabs as well as a rectal swab (where clinically indicated) will provide the optimal sensitivity.

Please note that all biomedical waste can be disposed of as regular Category B waste.

### **Transport Requirements**

Collected specimens should be stored and shipped refrigerated. Monkeypox virus is a Risk Group 3 pathogen. In accordance with a Transport Canada exemption, all patient samples collected for diagnostic purposes can be shipped as Category B by either land or air. Packages have to be clearly labeled with "TU 0886.1".

Sincerely,

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