

LABSTRACT – August 2019

Varicella Zoster Virus Identification from Peripheral Lesions using the Polymerase Chain Reaction (PCR) Method

Audience

Healthcare partners who order varicella zoster virus (VZV) testing from peripheral lesions from the Public Health Ontario (PHO) Laboratory.

Overview

Effective August 6, 2019, PHO Laboratory will introduce polymerase chain reaction (PCR) testing for the detection of VZV in peripheral lesion specimens. The PCR assay will replace both routine VZV culture and electron microscopy test methods.

Change Details

Rationale for the change:

The PCR method will improve turnaround time for VZV identification from up to fourteen days to four days and simplify the current testing algorithm for VZV testing. The multiplex PCR assay tests for VZV, herpes simplex 1 (HSV1) and herpes simplex 2 (HSV2) at the same time.

What this means to you:

Peripheral lesion swabs (non-genital) submitted for VZV detection will be tested using a laboratory developed multiplex real-time PCR, verified for clinical use at the PHO Laboratory, which simultaneously detects VZV, HSV1, and HSV2. All three targets will be tested and reported.

Electron microscopy, which is less sensitive than PCR, will no longer be available for any specimen type.

Genital lesion specimens submitted for HSV detection continue to be tested by the current HSV culture methodology and PCR will not be performed on these specimens.

VZV genotyping is available to differentiate between wild type and vaccine strains of VZV when this clarification is required. Resistance testing is also available when clinically indicated. VZV-positive specimens submitted for either of these tests, or when added to VZV-positive specimens already tested at PHO Laboratory, are initially cultured at PHO Laboratory prior to submission to The National Microbiology Laboratory (NML), Winnipeg for further testing. Please contact PHO Laboratory Customer Service Centre to request VZV genotyping or resistance testing.

For further information

- Specimen collection, submission, testing, and reporting information is available in detail on the Varicella Zoster Virus Test Information Sheet (TIS), located on our website at: [Varicella Zoster Virus Detection TIS](#)
- Contact the PHO Laboratory Customer Service Centre at 416-235-6556 or 1-877-604-4567 (toll-free), or by email at customerservicecentre@oahpp.ca
- For PHO Laboratory specimen collection information and previous Lababstracts, refer to [publichealthontario.ca/test directory](http://publichealthontario.ca/test-directory)
- The current version of the PHO Laboratory General Test Requisition and other forms are available at publichealthontario.ca/Requisitions
- To subscribe to future Lababstracts, [register on our website](#)
- To register for Autofax and receive laboratory reports by fax directly from our laboratory information system as soon as they are released, contact the PHO Laboratory Customer Service Centre.