
Date: August 2, 2012

To: Alberta Health, Infectious Diseases Physicians, Intensive Care and Neonatal Intensive Care Physicians, Medical Officers of Health, Ophthalmologists, STI clinics, Transplant Physicians, and Laboratory Directors and Managers

From: Provincial Laboratory for Public Health (ProvLab)

Re: Change in viral testing for HSV and VZV on swabs from lesions or ulcers, and eye swabs

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Key Message:

Effective August 16, 2012, laboratory testing for herpes simplex virus (HSV) 1 and 2, and varicella - zoster virus (VZV) on swabs from lesions or ulcers, and eye swabs, will be performed by a molecular assay – polymerase chain reaction (PCR). There are no changes required for the sample collection and transport.

Background:

Swabs collected from lesions, or ulcers, or eye swabs, which are submitted to ProvLab for detection of HSV or VZV are currently tested by direct fluorescence microscopy (DFA) and isolation in cell culture. Effective August 16, 2012, we will discontinue the routine use of DFA and isolation in cell culture; instead, we will perform a multiplex PCR on the sample. The multiplex assay tests simultaneously for the presence of HSV-1, HSV-2 and VZV and provides the identification of the virus present. Simultaneous testing for these 3 viruses is cost effective, and is clinically useful since there is a significant overlap in the clinical presentation of these viruses.

The turn-around time of the PCR assay will be shorter than that of isolation in cell culture. The sensitivity of the PCR assay is greater than that of the DFA and isolation in cell culture combined.

ProvLab will retain the capacity to perform STAT DFAs for medical emergencies when the turn-around time of the PCR is deemed too long. This must be arranged by consultation with the Virologist-on-Call (VOC); examples of circumstances where this could be indicated are cases where there is a danger of visceral disseminated infection in a vulnerable host AND when there is a contra-indication to initiation of treatment with acyclovir while waiting for the PCR result. Clinicians are reminded that the DFA is less sensitive than the PCR and as such a negative DFA result does not rule out infection.

ProvLab will retain a limited capacity to isolate viruses in cell culture, for cases where further characterization (such as antiviral susceptibility testing) is warranted; such cases must be discussed with the VOC.

The Virologist-on-Call can be contacted as follows:

- Edmonton Site – Phone: 780-407-7121 (ask for Virologist-on-Call)
- Calgary Site – Phone: 403-944-1200 (ask for Virologist-on-Call)

Inquiries and feedback regarding this bulletin may be directed to:

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This bulletin has been reviewed and approved by Dr. Graham Tipples, Medical Director, ProvLab