

Date: May 30, 2014

To: Alberta Health, Laboratory Directors and Managers, Medical Officers of Health

From: Provincial Laboratory for Public Health (ProvLab)

Re: Additional molecular testing in suspected measles cases

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Key Messages:

- The clinical presentation of measles typically includes fever, cough, coryza, maculopapular rash and conjunctivitis¹.
- Other agents causing similar clinical picture can include, enterovirus, rubella virus and parvovirus B19. Note:
 - Recent vaccination with MMRV can infrequently result in a measles-like presentation.
 - Fully immunized individuals and those with partial immunity (one dose of MMR) can present with milder signs and symptoms.
- Molecular detection of measles virus is by reverse-transcriptase polymerase chain reaction (RT-PCR) on urine and nasopharyngeal samples^{2,3}.
- The Respiratory Virus Panel (RVP) test performed at ProvLab can detect viral pathogens, such as enterovirus and adenovirus, that have been noted in some suspected measles cases who tested negative for measles virus.

Why this is important:

- Reflex RVP testing on all measles negative cases is very expensive and operationally labor intensive for ProvLab.
- However, in specific cases, identification of another viral etiology can be helpful for public health management.

Action required:

- The Medical Officer of Health or designate should contact the Virologist-on-Call (VOC) to discuss the requirement for RVP testing in those cases where (a) the molecular detection for measles is negative, or (b) if an alternative viral etiology is suspected and RVP testing should be added-on if negative for measles.

Inquiries and feedback may be directed to:

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

Associated documents:

¹ <http://www.health.alberta.ca/documents/Guidelines-Measles-2013.pdf>

² <http://www.provlab.ab.ca/guide-to-services.pdf>

³ http://www.provlab.ab.ca/LabBulletin2010/Measles_Molecular_PCR_Testing.pdf

This bulletin has been reviewed and approved by:

Dr. Graham Tipples, Medical / Scientific Director, Provincial Laboratory for Public Health (ProvLab)