Date: June 18, 2015
To: All Physicians, all Nurses, all Zones, IPC, Public Health Physicians
From: Provincial Laboratory for Public Health (ProvLab)
Re: Laboratory Guidance on Testing for Emerging Respiratory Viruses at ProvLab in Patients with Severe Acute Respiratory Infection (SARI)

PLEASE POST OR DISTRIBUTE AS WIDELY AS APPROPRIATE

Key Messages:

- Your local Medical Officer of Health (MOH) will have recently released a bulletin on Middle Eastern Respiratory Syndrome Coronavirus (MERS-CoV) and Severe Acute Respiratory Infection (SARI) caused by emerging respiratory viruses such as MERS-CoV or variant influenza viruses (e.g. H7N9).
- This current bulletin focuses on specimen type, test ordering, transport of specimens to the laboratory, and laboratory interpretation once you and your MOH have started a SARI investigation process.

Actions Required:

- Contact your local MOH prior to collecting specimens or sending specimens to ProvLab.
- Refer to the recent MOH bulletin on MERS-CoV to address infection control issues with SARI patients who may be infected with an emerging respiratory virus.
  - Collect appropriate respiratory tract specimens. Your MOH will liaise with the ProvLab microbiologist/virologist-on-call (MOC/VOC) to determine which specimens are acceptable.
  - For example, samples from multiple body sites are needed to maximize viral detection:
    - One nasopharyngeal swab in universal transport media (UTM)
    - One throat swab in UTM
    - If possible, one or more specimens collected from the lower respiratory tract.
- Ensure that specimens are appropriately labeled to comply with AHS specimen acceptance criteria.
- Complete a ProvLab Virology requisition for each specimen collected and depending on the need write either “Suspect MERS-CoV” or “Suspect variant influenza” directly on each requisition.
- Transport specimens as a normal diagnostic specimen (see “TRANSPORT OF DIAGNOSTIC SPECIMENS AND INFECTIOUS” in ProvLab Guide to Service [http://www.provlab.ab.ca/guide-to-services.pdf]. However, to ensure prompt processing and tracking, pack specimens separately from other clinical specimens as follows: (1) Place each specimen in its own biosafety bag, with the corresponding completed requisition in the outside flap; (2) Place patient specimens in a dedicated separate transport container - do not mix with specimens from other patients; (3) Ship to your local ProvLab site (either Calgary or Edmonton). Your local MOH or ProvLab MOC/VOC may decide to facilitate special transport in some instances.
- Interpret laboratory results by consulting with the ProvLab MOC/VOC. Following testing, consult with your local MOH to ensure that each patient is no longer under investigation.

Why this is important:

- A suspect case of an emerging respiratory viral pathogen is a public health emergency.
- Laboratory test interpretation – consult the ProvLab MOC/VOC.
- Communication with your MOH at all phases, including after testing, is key in ensuring each suspect case is reported and managed appropriately.

Inquiries and feedback may be directed to:
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This bulletin has been reviewed and approved by:
Dr. Graham Tipples, Medical-Scientific Director, ProvLab