

## Context

Middle East Respiratory Syndrome-coronavirus (MERS-CoV), a novel coronavirus related to SARS, is an emerging viral pathogen that can cause Severe Acute Respiratory Illness (SARI).<sup>1</sup> Globally, since September 2012, the World Health Organization has recorded 1,570 confirmed cases of infection with MERS-CoV from 25 countries, predominantly Saudi Arabia, including at least 555 related deaths. In the spring of 2015 a single imported case in South Korea recently initiated an outbreak with 186 cases and 36 deaths, all associated with transmission in health care facilities. No cases of MERS-CoV have been reported in Canada.

While the methods of MERS transmission continue to be clarified, it does not appear to be spread easily from person to person in the community. Those at increased risk are household contacts of a case, co-workers, and healthcare workers. As increased travel to Saudi Arabia is expected for the week of the Hajj pilgrimage (September 21 - 26), healthcare providers are reminded to maintain a high index of suspicion for SARI in returned travellers and should be prepared to identify and control potential cases.

### Consider a diagnosis of MERS-CoV if both exposure & illness criteria are met:

Exposure criteria: Within 14 days of symptom onset the patient has a travel history to countries in or near the Arabian Peninsula<sup>2</sup> OR has had close contact<sup>3</sup> with a confirmed or probable case.

Illness criteria: Patients who develop fever over 38°C (or have a history of fever) AND new onset (or exacerbation of chronic) cough or breathing difficulty AND clinical and radiological evidence of pulmonary parenchymal disease requiring hospitalization.

### If you consider a diagnosis of MERS-CoV, please:

- Implement Infection Prevention and Control measures **immediately**, including [contact and droplet precautions](#)<sup>4</sup> for any patient meeting the exposure and illness criteria. See the AHS triage algorithm at [www.albertahealthservices.ca/assets/info/hp/ipc/if-hp-ipc-ebola-triage.pdf](http://www.albertahealthservices.ca/assets/info/hp/ipc/if-hp-ipc-ebola-triage.pdf).
- **Contact the Medical Officer of Health (MOH) at 780 433-3940** ASAP to report and coordinate testing
- When aerosol-generating procedures are performed implement<sup>5</sup> airborne precautions. Wear a fit-tested and fit-checked N95 respirator and use a negative pressure room.

### Laboratory testing:

- All requests for MERS-CoV testing at ProvLab must be coordinated through the Zone MOH.
- Collect the appropriate clinical specimens and write “Suspect MERS-CoV” on ProvLab requisitions:
  - One nasopharyngeal swab (in viral transport media) for respiratory viral panel.
  - One viral throat swab (in viral transport media).
  - A lower respiratory specimen should be collected as clinically indicated and possible: Sputum (Consider induced sputum (using airborne precautions) if patients do not have productive cough and cannot produce a sputum sample), or endotracheal secretions or bronchoalveolar lavage (BAL) in sealed sterile containers.
- For more information on specimen collection/transport refer to the recent ProvLab bulletin at: <http://www.provlab.ab.ca/LabBulletin2015%5Cwf-lab-bulletin-pl-Lab-Guidance-Testing-Emerging-Respiratory-Viruses-pt-SARI-June-18-2015.pdf>

This letter has been posted on the AHS-MOH external webpage <http://www.albertahealthservices.ca/7082.asp>.

<sup>1</sup> For more information on SARI, see <http://www.phac-aspc.gc.ca/eri-ire/saricd-dciras-eng.php>

<sup>2</sup> MERS CoV: Affected countries in the Middle East include Jordan, Saudi Arabia, United Arab Emirates (UAE), and Qatar. Affected areas subject to change; see <http://www.who.int/emergencies/mers-cov/en/> for up to date information.

<sup>3</sup> A **close contact** is defined as a person who provided care for the patient, including health care workers, family members or other caregivers, or who had other similarly close physical contact **OR** who stayed at the same place (e.g. lived with or otherwise had close prolonged contact within two metres) as a probable or confirmed case while the case was ill.

<sup>4</sup> **Contact and droplet precautions** - see [www.albertahealthservices.ca/ipc/hi-ipc-contact-and-droplet-precautions-info.pdf](http://www.albertahealthservices.ca/ipc/hi-ipc-contact-and-droplet-precautions-info.pdf)

<sup>5</sup> **Airborne Precautions for AGMP** - see [www.phac-aspc.gc.ca/eri-ire/coronavirus/guidance-directives/nCoV-ig-dp-eng.php](http://www.phac-aspc.gc.ca/eri-ire/coronavirus/guidance-directives/nCoV-ig-dp-eng.php)