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Laboratory Bulletin

DATE:	2022 October 14
TO:	All Physicians and Clinicians
FROM:	Alberta Precision Laboratories (APL) – Public Health Laboratory
RE:	**Viral haemorrhagic fever testing and outbreaks**

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Key Message

- **There is an evolving outbreak of Ebola virus haemorrhagic fever in the country of Uganda, located in East Central Africa.**
- **It is important that clinicians consider the possibility of travel-associated haemorrhagic fevers PRIOR ordering any laboratory testing in a patient who has recently returned from an affected area.**
- **Should there be concern for any viral haemorrhagic fever epidemiologically, it is critical that all clinicians (especially those evaluating patients at first points of entry to the health system such as urgent care, emergency departments, primary care, etc.) consult with the Medical Officer of Health (MOH) on-call in their zone.**

Background

On September 20, 2022, health authorities in the East Central African country of Uganda declared an outbreak due to Ebola virus haemorrhagic fever (https://www.who.int/emergencies/disease-outbreak-news/item/2022-DON410; https://www.cdc.gov/vhf/ebola/outbreaks/uganda/2022-sep.html). As of October 9, 2022, there have been in total 48 confirmed cases of Ebola virus disease (EVD) in the areas of Mubende, Kyegegwa, Kasanda, Bunyangabu, Kagadi in the western part of the country, as well as cases now reported from the capital city of Kampala. There have been at least 37 deaths associated with this outbreak to date.

The outbreak has been determined to be due to the Ebola virus (Sudan strain). This virus belongs to a group of haemorrhagic fever viruses called filoviridae (which also includes Marbug virus) that can cause severe disease in humans with haemorrhagic manifestations. The virus can transmit easily upon exposure to body fluids of an infected individual. More information on EVD can be found at https://www.canada.ca/en/public-health/services/diseases/ebola/health-professionals-ebola.html.

With increased global travel, there continues to be a risk of potential exported cases of EVD (and other pathogens causing outbreaks) in travelers who return from areas where there are outbreak. These travelers are also at risk for other well-known travel-related infections such as malaria, typhoid, dengue fever, and respiratory infections. Dual infections with these more common travel-associated infections and EVD (in those who have the appropriate epidemiologic risk exposure) have been reported.

Why This Is Important?

- Patients with potential EVD or other viral haemorrhagic fevers (VHFs) can pose an important nosocomial risk for healthcare workers as well as laboratory workers.
- Inadvertent laboratory testing prior to considering the differential diagnosis can place laboratory and also other healthcare workers at risk.

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Action Required

- It is important for clinicians to assess the epidemiologic risk for potential Ebola virus infection in travelers returning from high risk areas in the last 21 days prior to onset of symptoms.
- It is critical this assessment be done **PRIOR TO ORDERING ANY LAB WORK.**
- In the process, obtaining information on exact dates of travels, cities and countries visited, and exposure to known or presumed cases of Ebola virus infection is highly advised.
- **If there may be any potential epidemiologic risk in returning travelers, and concern for Ebola:**
    - **Immediately place the patient in a single room on contact and droplet precautions (put appropriate signage up).**
    - ***It is* CRITICAL *that clinicians consult with the Medical Officer of Health (MOH) on-call* PRIOR *to ordering* ANY *blood work.***
- Collection and or testing will only occur with the approval of the MOH and/or Microbiologist/Virologist on call following special VHF procedures and test menus.

Taking these steps is crucial to avoiding inadvertent laboratory and healthcare worker exposures.

Thank you for your cooperation on this

Inquiries and feedback may be directed to

- Dr. Jamil Kanji, Medical Microbiologist, Public Health Laboratory, Alberta Precision Laboratories (jamil.kanji@ahs.ca).

This bulletin has been reviewed and approved by

- Dr. Graham Tipples, Medical and Scientific Director, Public Health Laboratory, Alberta Precision Laboratories

Relevant References

1. Ebola virus disease: for health professionals and humanitarian aid works. Public Health Agency of Canada. https://www.canada.ca/en/public-health/services/diseases/ebola/health-professionals-ebola.html.
2. Alberta Public Health Disease Management Guidelines: Ebola haemorrhagic fever. https://open.alberta.ca/publications/ebola-haemorrhagic-fever.
3. World Health Organisation (WHO). Fact page on Ebola virus: https://www.who.int/health-topics/ebola#tab=tab_1.
4. Centers for Disease Control (USA). Ebola (Ebola virus disease). https://www.cdc.gov/vhf/ebola/index.html