



Medical Health Officers
UPDATE for Physicians

interior health

Ebola Virus Disease (EVD)

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**DUTY MHO LINE
(24/7)**

1-866-457-5648

Situation Update

There is an ongoing epidemic of Ebola Virus Disease (EVD) in West Africa, which began in Guinea in March 2014 and spread to Liberia and Sierra Leone. A separate outbreak was declared in the Democratic Republic of the Congo in August 2014. Widespread transmission is continuing in Guinea, Liberia and Sierra Leone. Two cases have been reported in the US amongst healthcare workers who participated in the care of a Liberian patient who tested positive in Texas and died on October 8.

There have been no cases of EVD in Canada.

Interior Health Status

An Interior Health Ebola Working Group has been focusing on a number of issues related to Ebola preparedness including: triage and assessment; diagnosis and treatment; infection prevention and control; lab processes; workplace health and safety; personal protective equipment; and education and training.

Action and Advice

Any patient returning from an Ebola affected area with a fever $\geq 38^{\circ}\text{C}$ should be isolated in a private room with a dedicated bathroom:

- Contact and droplet precautions should be implemented (gown, facemask, eye protection, gloves).
- Immediately contact the Medical Health Officer for further instructions, 1-866-457-5648. The Medical Health Officer will facilitate a risk assessment of the case to determine next steps, including transfer to the most appropriate facility.
- Testing should not occur until the IH Medical Microbiologist has been consulted (can be reached 24/7 through the hospital switchboard).

If you have an asymptomatic patient returning from an Ebola affected area:

- They should undertake daily self-monitoring for EVD symptoms during contact and for 21 days following last contact. This includes monitoring for fever of $\geq 38.0^{\circ}\text{C}$ (oral).
- Should fever or EVD symptoms develop, they should immediately self-isolate at home and **PHONE** their healthcare provider or Emergency department for further instructions.

Please see the attached algorithms for steps on risk assessment and triage.

Please contact the Medical Health Officer if you have questions about these requested actions.



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Background on EVD

Ebola virus disease is a severe disease that causes haemorrhagic fever in humans and animals. Diseases that cause haemorrhagic fevers, such as Ebola, are often fatal as they affect the vascular system which can lead to significant internal bleeding and organ failure.

The Ebola virus can spread through:

- Contact with infected animals
- Contact with blood, body fluids or tissues of infected persons
- Contact with medical equipment, such as needles, contaminated with infected body fluids

NOTE: Airborne transmission has not been documented as a mechanism of person-to-person spread.

The incubation period of EVD varies from 2 to 21 days - there is no risk of transmission during the incubation period. Cases are not considered to be infectious before the onset of symptoms, however, communicability increases with each stage of illness. The case remains communicable as long as blood and body fluids contain the virus. This includes the post-mortem period.

Clinical symptoms of Ebola present as a severe acute viral illness consisting of sudden onset of fever, malaise, myalgia, severe headache, conjunctival infection, pharyngitis, vomiting, diarrhea that can be bloody, and impaired kidney and liver function. Diagnosis can be difficult, especially if only a single case is involved.

Often a maculopapular or petechial rash may be present that may progress to purpura. Bleeding from gums, nose, injection sites and gastrointestinal tract occurs in about 50% of patients. Dehydration and significant wasting occur as the disease progresses.

In severe cases, the haemorrhagic diathesis may be accompanied by leucopenia; thrombocytopenia; hepatic, renal and central nervous system involvement; or shock with multi-organ dysfunction.

Treatment

There is currently no licensed treatment or vaccine for EVD. Treatment is supportive, and is directed at maintaining renal function and electrolyte balance, and at combatting haemorrhage and shock. Phase 1 clinical trials of Canada's Ebola vaccine have begun in the U.S. with results expected in December 2014.

Suggested Resources

Information on the global situation: <http://www.who.int/csr/don/archive/disease/ebola/en/>

National and provincial guidance documents: <http://www.health.gov.bc.ca/pho/physician-resources.html>
<http://www.phac-aspc.gc.ca/id-mi/vhf-fvh/ebola-professionals-professionnels-eng.php>

Background on Ebola:

<http://www.bccdc.ca/dis-cond/a-z/e/Ebola/default.htm>

<http://www.phac-aspc.gc.ca/id-mi/vhf-fvh/ebola-eng.php>