Ebola virus disease (EVD) in West Africa

Key messages

• An outbreak of Ebola virus disease (EVD) has been confirmed in Sierra Leone, Liberia, and Guinea. In addition, the Ministry of Health of Nigeria has reported the first case of EVD in that country.

• EVD is a quarantinable disease in Australia.

• The risk of infection is extremely low unless there has been direct exposure to the bodily fluids of an infected person or animal (alive or dead). This includes unprotected sexual contact with a case up to seven weeks after they have recovered.

• Returned travellers from affected areas of West Africa who feel unwell are being encouraged to seek urgent medical attention. Check travel histories or possible exposures in returned travellers from affected areas of West Africa.

• Suspected cases must be notified IMMEDIATELY to the Communicable Disease Prevention and Control Section on 1300 651 160.

What is the issue?

EVD is a severe, highly infectious and often deadly illness that can occur in humans and primates. It is caused by an Ebolavirus. Ebolaviruses are part of the family Filoviridae, which also includes Marburg virus. Fruit bats of the Pteropodidae family are considered to be a likely natural host.

Who is at risk?

Travellers who have visited Sierra Leone, Liberia, and Guinea. Consideration needs to be given to all travellers including: tourists and business people returning from affected areas, families and relatives and health care workers who have worked in affected areas.

Transmission is a risk if the individual has had:

• contact with blood or bodily fluids of a person or corpse infected with the Ebola virus
• contact with or handling of wild animals (alive or dead) or their raw or undercooked meat
• sexual intercourse with a sick person or a person recovering from EVD for at least 7 weeks
• contact with any object, such as needles, that has been contaminated with blood or bodily fluids.
Symptoms and transmission

Symptoms initially include a sudden fever as well as joint and muscle aches and then typically progress to vomiting, diarrhoea and, in some cases, internal and external bleeding.

Ebola is spread through close contact with the blood, secretions, organs or other bodily fluids of infected animals (often therefore through hunting or preparation of ‘bushmeat’). Ebola virus then spreads through person-to-person transmission via contact with the blood, secretions, organs or other bodily fluids of infected people, and indirect contact with environments contaminated with such fluid, including in healthcare settings. The risk for infection in healthcare settings can be significantly reduced through the appropriate use of infection control precautions and adequate barrier procedures.

Transmission through sexual contact may occur up to seven weeks after clinical recovery. Airborne transmission, as occurs for measles, has never been documented. Physical contact with a sick person without contact with blood or secretions appears not to be sufficient for contracting EVD. Transmission through heavily contaminated fomites is possible. Burial ceremonies are a known high-risk activity for transmission.

Standard, contact and droplet precautions should be used in managing suspected or confirmed cases. Gowns, gloves, face shields and masks should be used in the care of all cases.

Aerosol-generating procedures should not take place unless airborne precautions, including P2 masks, gloves, gowns and negative-pressure rooms, are in place.

Prevention/treatment

There are no specific prophylactic (vaccine) or therapeutic (antiviral drugs) options available for EVD. Care is largely supportive.

Where there is clinical need for an ambulance, this should precede contact with the Communicable Disease Prevention and Control Section at the Department of Health on 1300 651 160 (24/7). Ambulance personnel and receiving facilities must be made aware of the possible diagnosis and advised to use strict barrier precautions.

Diagnosis

Laboratory diagnosis can be done on blood specimens and may include virus isolation, PCR or serology.

All specimens should be sent to the Victorian Infectious Diseases Reference Laboratory (VIDRL) at the Peter Doherty Institute. Ensure prior notification to VIDRL on (03) 8344 5689 before receipt of specimens.

Collection of specimens requires significant precautions and the document Laboratory Precautions for Samples Collected from Patients with Suspected Viral Haemorrhagic Fevers (<http://www.health.gov.au/internet/main/publishing.nsf/Content/cda-pubs-other-vhf.htm/$FILE/vhf_guide.pdf>) should be referred to if the Department is involved in any specimen collection. This may be found at: Department of Health and Ageing - Laboratory precautions for samples collected from patients with suspected viral haemorrhagic fevers (<http://www.health.gov.au/internet/main/publishing.nsf/Content/cda-pubs-other-vhf.htm>). Phone VIDRL for information on specimen transfer.

More information

Clinical information

Notifications - Telephone Communicable Disease Prevention and Control at the Department of Health on 1300 651 160 (24/7).

Australian Government information on Ebola -


WHO website - WHO website (http://www.who.int/csr/don/en/)

Further information - contact the Communicable Disease Prevention and Control Section at the Department of Health on 1300 651 160 (24/7).

Consumer information
See the Better Health Channel fact sheet:

Yours sincerely

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