Ebola Virus Disease (EVD)

What is Ebola Virus Disease (EVD)?

Ebola Virus Disease (EVD) is a serious disease caused by the Ebola virus. There are several strains of the virus. EVD was previously called Ebola Haemorrhagic Fever. EVD is often fatal, however early treatment at a hospital can help people survive. Between 25% and 90% of cases of EVD will die of the disease. The average case fatality rate is approximately 50%.

Fruit bats are considered to be the natural host of Ebola viruses, with outbreaks amongst other species such as chimpanzees, gorillas, monkeys and forest antelope from time to time. There have been over thirty outbreaks in humans of EVD in Central, West and East Africa since the virus was first identified in 1976, including a large one affecting over 28,000 people in 2014-2016.

There is no evidence that EVD is present in Australian bats or in other animals in Australia. There have not been any human cases of EVD in Australia.

What are the symptoms?

It can take up to 21 days for symptoms to appear after contact with the virus. Ebola Virus can cause a serious illness, with a sudden onset of fever, muscle and joint aches, weakness, and headache.

The next stage is characterised by vomiting, diarrhoea, rash, as well as liver and kidney problems. Some people may develop internal and external bleeding, and progress to multi-organ failure.

How is it spread?

Ebola Virus is introduced into the human population through close contact with the blood, secretions, organs or other bodily fluids of infected animals (e.g. through the hunting or preparation of "bushmeat").

A person with EVD is infectious to others only once they have developed symptoms. Ebola Virus then spreads from person to person via contact with the blood and other bodily fluids of infected people (including sweat, vomit, diarrhoea, and other secretions), and with surfaces and materials (e.g. bedding, clothing) contaminated with these fluids. Transmission through sexual contact may occur for as long as 12 months after the person feels well. Traditional burial ceremonies conducted in affected areas of Africa are a known high-risk activity for transmission.

Ebola virus is not airborne and cannot be caught by breathing air in close proximity to a person with EVD.
Who is at risk?

Ebola virus is naturally found in animals in several African countries. The Australian Government Department of Foreign Affairs and Trade operates the [Smart traveller website](https://www.smarttraveller.gov.au) which provides country-specific advice and should be consulted before travelling overseas. People who are living in or travelling to affected areas may be at risk of infection. However, the risk of infection is extremely low unless there has been direct contact with the bodily fluids of an infected person or animal (alive or dead).

Health professionals travelling to African countries should ensure they are familiar with and adhere to strict hygiene and isolation recommendations, and ensure personal protective equipment is used for any suspected EVD cases.

How is it prevented?

Good hygiene and infection control around EVD cases is the only way to prevent spread of disease. Hunting and contact with "bushmeat" in affected areas should be avoided.

There is no vaccine for Ebola virus available for use in Australia. Following the 2014-16 West African Ebola virus outbreak, experimental vaccines have been developed and trialled for potential use in emergency situations and at-risk populations, but these experimental vaccines are not yet widely available and have not been licensed for general use.

What should I do if I become unwell after travel in areas affected by EVD?

If you become ill or feel unwell while travelling in areas affected by EVD, you should not wait until you arrive back in Australia to seek medical assistance. Instead you should see a doctor or go to the local emergency department.

If you have returned from traveling in areas affected by EVD within the last 21 days and develop a fever, vomiting, diarrhoea and other symptoms, you should see your doctor or go to the emergency department to work out why you are ill. It is important that you mention your symptoms and which countries you have visited when you first arrive at the medical practice or hospital emergency department.

You may be separated from others to prevent further spread of infection.

How is it diagnosed?

EVD is diagnosed by a blood test that detects the virus. Testing for EVD is done in a public health laboratory with special biosafety facilities.
How is it treated?

There is currently no specific treatment for people who are sick with EVD. Treatment consists of intensive supportive medical care. Early intervention can be life-saving.

What is the public health response?

Special procedures to prevent the spread of EVD are in place to manage the situation in the event there is a case of EVD in Australia. These procedures include:

- Notification - doctors and laboratories are required to urgently notify state/territory health departments of any suspect cases.
- Isolation - suspected cases must be isolated away from other people and visitors will be restricted.
- Contact tracing - Public Health authorities will identify people who have been in contact with the case so that these people are given information about the risk of infection and monitored for any signs or symptoms of the disease.
- Infection control - Special safety guidelines must be implemented to prevent spread of Ebola Virus to healthcare workers managing the patient and laboratory staff handling specimens. These guidelines will require individuals to wear personal protective equipment and will require specialised disposal of contaminated waste.

In the ACT, staff from the Communicable Disease Control Section will investigate all cases to find out how the infection occurred, identify other people at risk of infection, implement control measures and provide other advice.

Need more information?

For more information or advice about EVD, contact the Health Protection Service, Communicable Disease Control Section on 02 5124 9213 or page 02 9962 4155 after hours.

Communicable Disease Control Section at the Health Protection Service is responsible for the investigation and surveillance of notifiable or infectious conditions in the ACT in order to control or prevent their spread in the community. This includes the promotion of immunisation, education and other strategies that help to limit the spread of diseases.

Ebola Virus disease is a notifiable condition. Cases are notified to ACT Health.

Acknowledgement

**Further information**

- World Health Organization (WHO) EVD updates available from the WHO website.
- Australian Department of Health – EVD website.
- Centers for Disease Control and Prevention (USA) website.
- Australian Department of Foreign Affairs and Trade provides information for travellers on the Smartraveller website.