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Marburg in Guéckédou, Guinea

First known case of Marburg virus disease in West Africa reported in Guinea

On 9 August 2021, the World Health Organization reported a confirmed case of Marburg virus disease (MVD) in a local resident from Guéckédou Prefecture, N’zérékoré Region in south-western Guinea. This area is near both the Sierra Leone and Liberian borders. This is the first known MVD case in Guinea and in West Africa. Measures to control the outbreak and prevent further spread, including contact tracing, are ongoing [1].

MVD is caused by a virus, belonging to the Filovirus family, which causes a severe and often fatal haemorrhagic fever almost indistinguishable from Ebola virus disease. Although MVD is rare, cases and outbreaks have occurred in Angola, Democratic Republic of Congo, Kenya, Uganda, and South Africa (in a person who had recently visited Zimbabwe). Very rarely, sporadic cases are reported in travellers [2].

Human infection initially results from prolonged exposure to mines or caves inhabited by Rousettus (fruit) bat colonies [2, 3]. Subsequent transmission of the virus from person to person requires direct contact (through broken skin or mucous membranes) with the blood or other body fluids (faeces, vomit, urine, saliva and respiratory secretions) of an infected person. Transmission via contaminated injection equipment or sharps injury is associated with more severe disease [2]. Surfaces and materials (bedding or clothing) contaminated with blood and body fluids are also a source of infection [3].

Sexual transmission can occur, and the virus may remain in semen for up to seven weeks after clinical recovery [2]. Close contact with the body or body fluids of people who have died of MVD during preparation for burial is a recognised source of infection [2].

The incubation period (time from initial infection to symptoms appearing) is usually three to ten days, with rare reports of longer incubation periods of up to four weeks. Early symptoms include; severe headache, high fever, malaise, with progressive and rapid debilitation [2, 3].

After approximately three days, abdominal pain, cramping, watery diarrhoea, nausea and vomiting occur. Symptoms then become increasingly severe; with many patients developing severe haemorrhagic fever after five to seven days. Fatal cases usually exhibit some form of bleeding, often from multiple sites [2].

Many early MVD symptoms are similar to other infectious diseases, such as malaria or typhoid. Confirmation of MVD requires laboratory testing [2, 3].

There is no vaccine to prevent MVD [2].

Advice for travellers

Check Guinea’s COVID-19 status under the current United Kingdom (UK) COVID-19 traffic light system and the Foreign, Commonwealth & Development Office travel advice for Guinea before booking your trip.
Check our Guinea Country Information page for other health advice and make sure you get comprehensive travel health insurance.

Most visitors to MVD affected areas face a very low risk of MVD, however certain activities may increase the risk of exposure. If you have planned travel to Guinea, follow enhanced precautions to prevent infection:

- Avoid visiting mines or bat caves and contact with all wild animals; alive or dead, particularly bats.
- Travellers who decide to visit mines or caves inhabited by fruit bat colonies must wear gloves and other appropriate protective clothing (including masks)[3].
- Avoid contact with symptomatic patients/their bodily fluids, corpses and/or bodily fluids from deceased patients.
- Avoid handling, cooking or eating bush/wild meat (meat of wild or feral mammals killed for food).
- Wash and peel fruit and vegetables before consumption.
- Wash hands regularly and carefully using soap and water (or alcohol gel when soap is unavailable).
- Practice safe sex (using barrier contraception).

Get medical advice if you become ill within 21 days of returning home. You should call NHS111 or contact your GP by telephone. Although it is very unlikely you have MVD, you must mention any potential exposure to the virus including dates and itinerary of travel.

Remember also that travellers returning from malaria risk areas who are ill should seek urgent medical advice and inform the health professional that they have travelled to a malarious area in the last six months.

**Advice for health professionals**

Health professionals should remain alert for travellers returning from MVD affected areas who develop symptoms compatible with MVD.

After discussion with their local microbiology, virology or infectious disease consultant, health professionals can contact the Imported Fever Service (IFS) for advice. Health professionals seeking information about testing samples from patients with a possible viral haemorrhagic fever should read: Viral haemorrhagic fever: sample testing advice before contacting the IFS.

In the UK, Public Health England (PHE) has specialised laboratory facilities to provide a definitive diagnosis of MVD at the PHE Rare and Imported Pathogens Laboratory (RIPL).

Measures for prevention of secondary transmission of MVD are similar to those used for other haemorrhagic fever viruses, and focus on avoiding contact with infected bodily fluids. To avoid person to person transmission, healthcare workers must take great care when nursing patients, to avoid contact with infected bodily fluids. Patients should be isolated, and healthcare workers must use strict barrier nursing techniques including wearing masks, gloves and gowns [2].

**Guidance on the management of patients with viral haemorrhagic fever is available from the Advisory Committee on Dangerous Pathogens**

**Resources**

- Public Health England: Ebola and Marburg haemorrhagic fevers: outbreaks and case
References