

5 BEYOND OUR BORDERS

The 'Beyond our Borders' column focuses on selected and current international diseases that may affect South Africans travelling abroad. Numbers correspond to Figure 5 on page 7.

1. Yellow fever: Côte d'Ivoire

Yellow fever (YF) is an acute viral haemorrhagic disease transmitted by infected mosquitoes of the *Aedes* and *Haemogogus* species. The virus is endemic in tropical areas in Africa, as well as in Central and South America. The YF virus has a three-to six-day incubation period, after which infected individuals present with fever, headache, jaundice, muscle pain, nausea, vomiting and fatigue, which usually resolve after three to four days. A small percentage then develop toxic symptoms which include jaundice, dark urine, abdominal pain with vomiting, and bleeding. Half of the patients who enter the toxic phase die within 7-10 days.

On 30 July 2019, Côte d'Ivoire ministry of health reported that 89 people have contracted yellow fever in the country's capital of Abidjan in recent weeks. One person is reported to have died of the disease. There is no cure for YF disease; however, a safe, affordable and single-dose vaccination provides effective, lifelong protection against yellow fever disease. The proportion of the population that has been vaccinated against YF (vaccine coverage) has not been reported to date. YF can rapidly spread in an unvaccinated population. The YF outbreak in Côte d'Ivoire occurs in the context of a recent dengue outbreak, a disease also transmitted by the *Aedes* mosquito. Notably, Côte d'Ivoire is at the end of its rainy season, which facilitates mosquito breeding. The vector control measures that have been implemented to deal with the dengue outbreak will also assist in controlling the yellow fever outbreak.

2. Hepatitis E: Namibia

A total of 5 423 cases of hepatitis E virus (HEV) has been reported in Namibia since September 2017, with 45 deaths, including 20 maternal deaths. In June 2019, 113 cases were reported, which was an increase from 56 cases reported in May 2019. Most cases have been reported in the Khomas, Hardap, Erongo, Omusati and Omaheke areas. Though there is a vaccine that has been developed and registered in China, the vaccine has not yet been approved in other countries. The Namibian ministry of health and social services continue to engage public and private stakeholders regarding improved water, sanitation and hygiene in affected areas.

3. MERS Co-V: Saudi Arabia

Middle East respiratory syndrome (MERS) is a respiratory disease caused by a novel zoonotic coronavirus (MERS Co-V) that was first identified in Saudi Arabia in 2012. Though 80% of MERS Co-V cases have been reported in Saudi Arabia, cases have also been reported in 27 other countries. Since 2012 to date, 2 449 cases MERS Co-V have been reported

globally, with 845 deaths (CFR of 34.5%). In the past year, 219 cases were reported in four countries, namely, Saudi Arabia, Oman, South Korea, and the United Kingdom. Of these 219 reported cases, 49 had asymptomatic or mild disease, and 145 had an underlying medical condition such as chronic renal failure, heart disease, diabetes, and hypertension. With the Hajj (annual Islamic pilgrimage to Mecca) taking place in Saudi Arabia, there is a risk of Hajj attendees contracting and transmitting the virus. Although there is no active surveillance of the virus in South Africa, there is a need for awareness in both the travellers and in health facilities, as 4 000 South Africans are expected to be travelling to Saudi Arabia for the Hajj from July to August 2019.

MERS Co-V has been shown to be transmitted by direct or indirect contact with infected dromedary camels. Infection through human-to-human transmission is rare; however, such cases have been reported in hospitals (healthcare workers) and in within families. Symptoms usually occur in the elderly and in people with immunocompromised systems, and typically include cough, fever and shortness of breath. There is no vaccination available for MERS Co-V; however, maintaining good hygiene practices such as handwashing, avoiding contact with animals, especially animals that are sick, eating properly cooked meat and avoiding drinking raw camel milk, may prevent people from contracting the disease.

4. Lassa Fever: Nigeria

Since January 2019, 3 043 suspected Lassa fever cases have been reported from 22 states in Nigeria; 622 of these were confirmed positive. There have been 140 deaths in confirmed cases (23% case fatality ratio). The outbreak is reported to be affecting both men and women aged between 21 and 40 years. A national Lassa fever multi-partner, multi-sectoral technical working group continues to coordinate response activities at all levels in Nigeria.

Lassa fever is an acute viral haemorrhagic illness that is transmitted to humans via contact with food or household items contaminated with rodent urine or faeces. Person-to-person infections and laboratory transmission can also occur, especially in hospitals lacking adequate infection prevention and control measures. The Lassa fever virus can also be transmitted during burial preparations of infected people. The disease is known to be endemic in some countries in West Africa. Lassa fever has an incubation period of six to 21 days, and 80% of patients are asymptomatic. The 20% of symptomatic patients present with a gradual onset of variable symptoms including fever, general weakness, and malaise. After a few days, headache, sore throat,

muscle pain, chest pain, nausea, vomiting, diarrhoea, cough, and abdominal pain may occur, and can lead to organ damage, including hearing loss. In severe cases, death can occur within 14 days. Severe cases are common in pregnant women and can lead to both maternal and foetal death. There is presently no vaccination for the prevention of Lassa fever and the disease is controlled by improving community hygiene, and strengthening infection prevention control within healthcare settings.

Source: Promed (www.promed.org), World Health Organization (www.who.int)

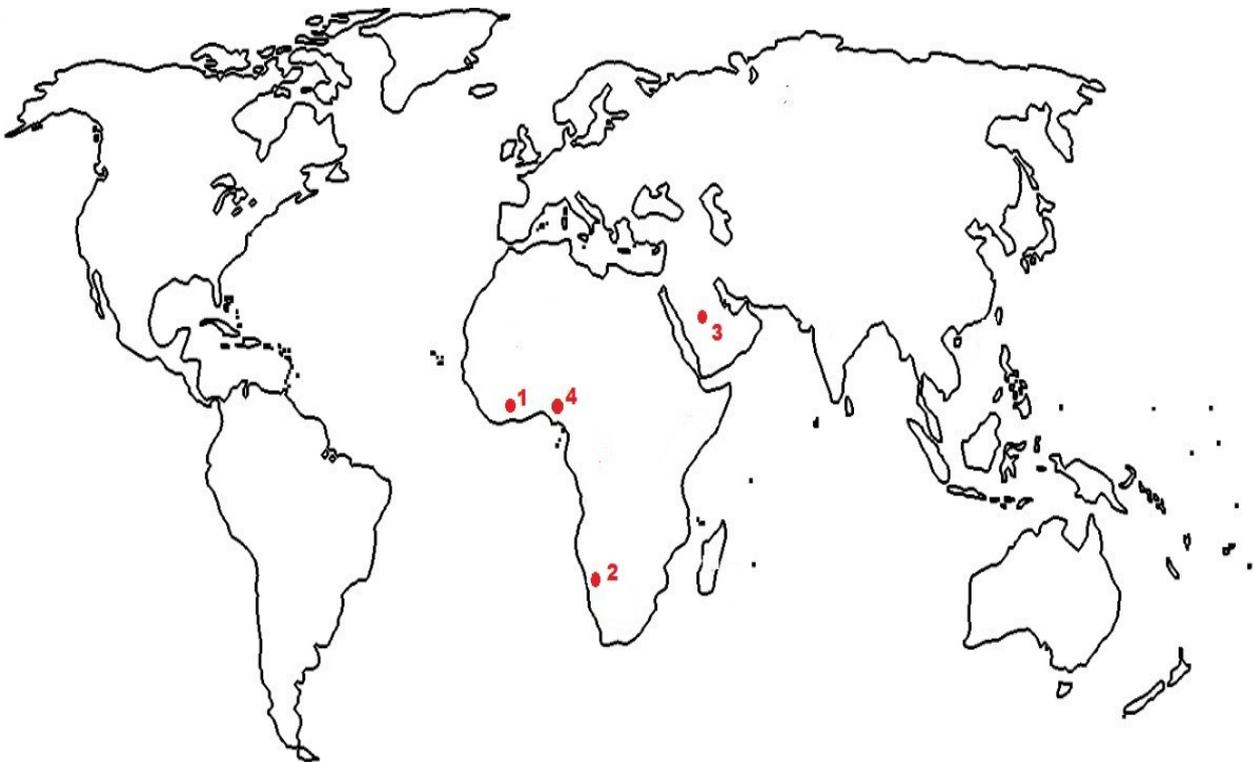


Figure 5. Current outbreaks/events that may have implications for travellers. Numbers correspond to text above. The red dot is the approximate location of the outbreak or event.