

## 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 6 on page 8.**

### 1. Plague: Democratic Republic of Congo (DRC)

New cases of human plague were reported in the Democratic Republic of the Congo (DRC) between mid-February and mid-March 2020, after going several weeks without a reported case. Since the beginning of 2020, a total of 20 suspected bubonic plague cases, with seven deaths (case fatality ratio 35%) was notified in five health zones: Aungba (4 cases and 2 deaths), Linga (7 cases and 5 deaths), Rethy (6 cases and no deaths), Aru (2 cases and no deaths), and Kambala (1 case and no deaths). In 2019, from week 1 to 52, a total of 48 cases of bubonic plague, including eight deaths, was reported in the country.

Pneumonic plague has not been reported in this DRC outbreak, but untreated bubonic plague may progress to the pneumonic form in some patients. The US Centers for Disease Control and Prevention (CDC) guidelines identify contacts within 2 meters of a pneumonic plague case as being at greatest risk. Persons who have been in contact with pneumonic plague patients or handling potentially infectious body fluids or tissues without appropriate protection should receive preventive antimicrobial therapy. The preferred antimicrobial agents for prophylaxis include tetracyclines and fluoroquinolones.

### 2. Japanese encephalitis: India

As if the COVID-19 pandemic is not bad enough, some districts of Assam State, India, are now in the grip of Japanese encephalitis (JE) and floods. Official sources said 82 cases of JE and acute encephalitis syndrome (AES) were reported from districts such as Cachar, Dibrugarh, Sonitpur, Kamrup, and Morigaon. So far, there have been no deaths. Assam has always been vulnerable to JE. The combined number of deaths due to JE and AES last year was 600. Japanese encephalitis alone accounted for 94 deaths in 2018, 87 in 2017, 92 in 2016, 135 in 2015, and 165 in 2014.

It is difficult to know what effect the reported flooding may have on the breeding sites of JE virus vectors. Larvae and pupae may be washed away and new breeding sites created. Vaccination is the most effective measure to prevent JE virus infection.

### 3. Cholera: Kenya, Ethiopia and Somalia

As of 21 May 2020, 13 Kenyans have died from cholera, with 550 confirmed cases. Of the 550 cases, 268 were recorded in Marsabit County, bordering Somalia, while the remaining 222 were currently undergoing treatment in Turkana County. The deaths were reported from Marsabit County (n=12) and in Turkana (n=1); 70% of the deaths are in children aged 10 years and below. Medical supplies have been sent to the area, and efforts are being made to stop the spread of the disease.

The outbreak is being attributed to interaction of locals with residents of Bubua in neighbouring Ethiopia, where hundreds have died due to recurrent waves of cholera since April 2020.

In addition, there was a cholera outbreak in neighbouring Somalia in early 2020. A total of 732 cases was recorded across the country between 23 January 2020 and 25 February 2020 according to the UN Office for the Coordination of Humanitarian Affairs. Seven deaths and 617 cases were reported in the central Hiran region, and at least 115 cases were recorded in a week in the southeastern Banadir region, in which the capital Mogadishu is located.

Cholera is typically spread through infected water supplies and induces acute diarrhoea leading to severe dehydration and often resulting in death. The risk of death is greatest among people with compromised immune systems, such as malnourished children or

those living with HIV. However, even among healthy adults, cholera can be fatal within a matter of hours.

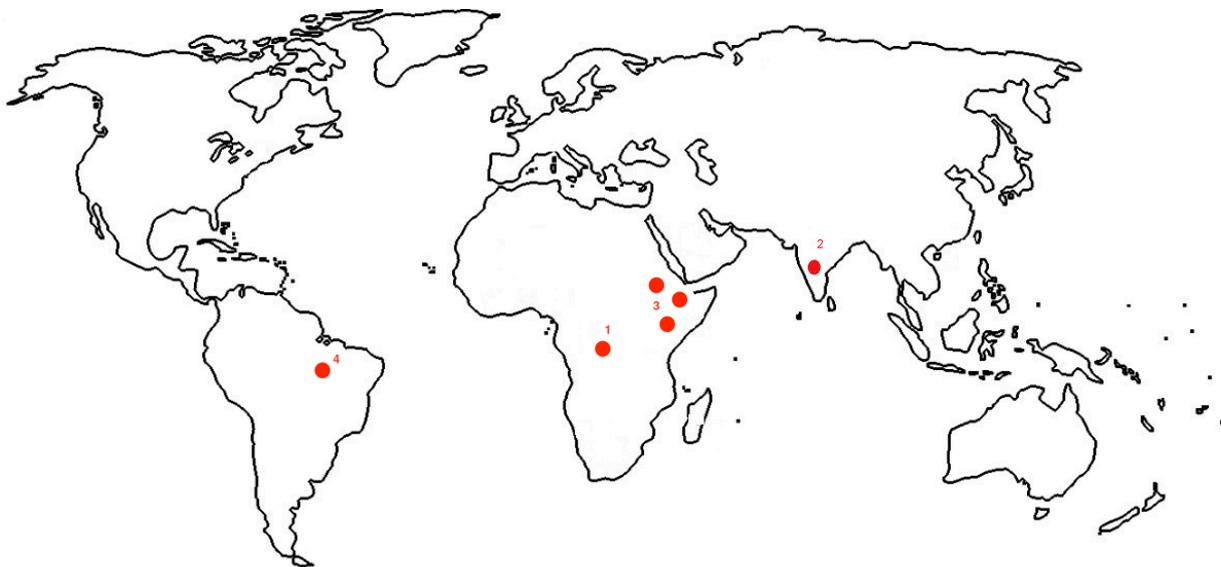
**4. West Nile: Brazil**

As of 28 April 2020, seven cases of West Nile fever had been diagnosed on Piauí, Brazil, since 2013. The seventh case was announced on 28 April 2020. The patient is a young adult who presented with a clinical picture of meningoencephalitis and was hospitalised in the Natan Portela Institute of Tropical Diseases.

The other six cases correspond to patients residing in the municipalities of Aroeiras do Itaim (2014), Picos (2017),

Piripiri (2017), Lagoa Alegre (2019), Teresina (2019), and Amarante (2019). Cases in animals were registered in Brazil in the states of Espírito Santo (2018), Ceará (2019), and São Paulo (2019).

Piauí state Secretariat of Health (SESAPI) stated that since 2013, all confirmed and suspected cases of the disease are actively monitored. The Natan Portela Institute of Tropical Diseases is the reference centre for diagnosis and treatment of cases. The preventive measures recommended are similar to those recommended against dengue, Zika, and chikungunya: avoid the proliferation of breeding sites of mosquito vectors.



**Figure 6.** 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.

**Article source:** Promed ([www.promed.org](http://www.promed.org)), World Health Organization ([www.who.int](http://www.who.int))