

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 2 on page 8.

1. Influenza: Asia and Northern America

In the temperate zone of the northern hemisphere, respiratory illness indicators and influenza activity continued to increase in most countries. In the countries of North America, influenza activity further increased. All seasonal influenza subtypes co-circulated in Canada, with a slightly higher proportion of influenza A viruses; the proportion of influenza B viruses (mainly B/Victoria lineage), however, was higher than in previous years for this period of the influenza season. In Canada, the percentage of visits for influenza-like illness (ILI) followed the average trend of previous seasons. In the United States of America, influenza B/Victoria viruses continued to be the predominant influenza subtype detected, followed by influenza A(H1N1)pdm09. ILI activity might have peaked and reached levels above what was reported in the 2014-2015 season, though hospitalisation rates and the percentage of deaths attributed to pneumonia and influenza remained low.

In Central Asia, influenza activity remained elevated with influenza B viruses predominant in all reporting countries. In Western Asia, influenza activity remained elevated overall. Influenza activity continued to increase in Iraq, Israel, Turkey and Yemen, with detections of predominately influenza A(H1N1)pdm09. In the West Bank and Gaza Strip, influenza and severe acute respiratory infection (SARI) activity increased during this period with all subtypes reported. In East Asia, ILI and influenza activity continued

to increase overall. In China, ILI activity continued to increase and was greater than that during the same time period in the three previous seasons; influenza activity also increased, with detections of predominately influenza A(H3N2), followed by a smaller proportion of influenza B/Victoria lineage viruses, especially in the southern provinces. In Japan, the number of influenza cases per sentinel site was higher compared to the same time in the previous three seasons, and influenza A(H1N1)pdm09 virus detections predominated.

There are four types of seasonal influenza viruses, types A, B, C and D. Influenza A and B viruses circulate and cause seasonal epidemics of disease. Only influenza type A viruses are known to have caused pandemics. The most effective way to prevent the disease is vaccination. Immunity from vaccination wanes over time so annual vaccination is recommended to protect against influenza. Injected inactivated influenza vaccines are most commonly used throughout the world. WHO recommends annual vaccination for pregnant women at any stage of pregnancy, children aged between 6 months to 5 years, elderly individuals (aged more than 65 years), individuals with chronic medical conditions and healthcare workers.

2. Measles: Democratic Republic of the Congo (DRC)

Measles outbreaks are currently ongoing in Nigeria, the Democratic Republic of Congo (DRC), the Gaza Strip and Samoa. Recently confirmed cases have occurred in

New Zealand and New South Wales, Australia. On 9 January 2020 the Maldives Health Protection Agency reported a suspected case of measles after being declared measles free by the World Health Organization (WHO) in June 2017.

In the DRC, since January 2019, more than 288 000 people have contracted measles, and more than 5 700 have died from the disease; over 90% of the deaths are children under the age of five. According to the World Health Organization (WHO), this is the largest measles epidemic in the world today and the largest recorded in DRC for decades. Efforts have been made at national level, but more resources must be quickly committed and targeted to areas that are still affected in order to stop this outbreak. Measles is an infectious viral disease spread through respiratory droplets emitted when a patient coughs or sneezes. At the moment in DRC, a measles patient infects on average two to three other people. There is no specific treatment once someone contracts measles, but a well-conducted vaccination campaign is extremely effective to prevent new cases. In areas with low immunisation coverage, vaccination can reduce infant mortality by 50%.

3. Yellow fever: Nigeria

According to the WHO, from 1 January to 10 December 2019, a total of 4189 suspected yellow fever cases was reported from 604 of 774 local government area across all the 36 states and the federal capital territory in Nigeria. Recently, in Plateau State, 141 cases were suspected with 25 cases of yellow fever confirmed, and three deaths in four local government areas have been reported.



Figure 2. 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.

Yellow fever is endemic in tropical areas of Africa as well as Central and South America. It is a viral disease that is transmitted by the *Aedes* and *Haemogogus* mosquitoes. There is an effective yellow fever vaccine, which is usually protective within 10 days of administration and confers lifelong immunity.

4. Lassa fever: Liberia and Nigeria

A recent outbreak of Lassa fever has occurred in Liberia. A total of 20 confirmed cases, including three deaths, has been reported. Liberia does not lie in the usual 'Lassa fever belt'; however, Lassa fever is not new to this country and cases have occurred there sporadically for several years.

In Nigeria, which falls within this belt, in week 3 of 2020 (13 – 19 January), the number of new confirmed cases has increased from 64 cases in week 1 to 81. These new cases were reported from six states (Ondo, Edo, Delta, Taraba, Plateau and Bauchi). Overall, from 1 – 19 January 2020, a total of 163 confirmed cases, with 24 deaths (case fatality rate (CFR) 14.7%) has been reported. This

CFR is lower than the CFR for the same period during 2019 (23.4%). In total for 2020, nine states have recorded at least one confirmed case across 32 Local Government Areas. Most confirmed cases are from three states: Edo (38%), Ondo (38%) and Ebonyi (11%). The predominant age-group affected is 11-40 years. No healthcare worker infection was identified in this reporting week.

Lassa fever is an acute viral haemorrhagic disease, that occurs from contact with urine or faeces of infected *Mastomys natalensis* rats. Person-to-person transmission can also occur, especially in healthcare settings where there are poor infection prevention and control measures. The virus is endemic in *Mastomys* rodents in multiple West African countries. Prevention of Lassa fever relies on promoting good community hygiene to discourage rodents from entering homes. Effective measures include storing grain and other foodstuffs in rodent-proof containers, disposing of garbage far from the home, maintaining clean households and keeping cats.

Article source: Promed; www.promed.org, World Health Organization; www.who.int