SEASONAL DISEASES

Malaria notification data, March 2020

A total of 904 malaria cases was notified through the National Notifiable Medical Conditions Surveillance System (NMCSS) for the month of March 2020. This represents a 30% decrease in malaria cases compared to March 2019. Of the 904 notified cases, 191 reports were excluded from further analysis due to missing data (59) or being identified as a duplicate report (132). In contrast to February 2020, the majority of the 713 remaining cases reported in March 2020 were from endemic districts (55%, 390/713). The endemic districts in Limpopo Province accounted for 81% (314/390) of the malaria burden in endemic districts and 57% (39/69) of all notified cases of malaria in children under the age of five. While males (61%, 429/707), predominately between the ages of 20 and 40 years, were the most affected by malaria, their malaria risk was higher in non-endemic districts (67%, 215/320) compared to endemic districts (55%, 214/387). Microscopic examination of blood smears remains the

main method of diagnosis (92%, 656/713) for cases captured by the NMCSS. Although IV artesunate was used to treat 85% (64/75) of the severe malaria patients, health facilities predominately from non-endemic districts (64%, 7/11) continue to use IV quinine. While it was encouraging to note the marked decrease in malaria importation from neighbouring Mozambique, it is of some concern that Limpopo Province reported only locally-acquired cases. Important: Note that these data do not reflect the country's total burden of malaria disease, as most malaria-endemic districts are currently using alternative malaria case recording systems, such as the District Health Information System 2 (DHIS2).

Article source: Centre for Emerging Zoonotic and Parasitic Diseases and the Notifiable Medical Conditions Surveillance System, NICD-NHLS; johnf@nicd.ac.za

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 3 on page 9.

1. Yellow fever: South Sudan

On 3 March 2020, the Ministry of Health of South Sudan reported two presumptive positive cases of yellow fever in Kajo Keni County, Central Equatoria State, South Sudan. Both cases were subsequently confirmed positive by plaque reduction neutralisation testing (PRNT) at the regional reference laboratory in Uganda on 28 March 2020.

The cases were identified through a cross-border rapid response team investigation mounted in response to the recently declared outbreak in the bordering Moyo District, Uganda. During the investigation, the team collected 41 blood samples from five villages bordering Moyo District.

South Sudan rapidly mounted an in-depth multidisciplinary investigation in Kajo Keji County in response to the cross-border notification of the outbreak in Moyo District. The investigations included enhanced surveillance, active case finding and entomological surveys from 12-18 February 2020, supported by WHO Country Office and Headquarters. Surveillance has been enhanced within the context of integrated disease surveillance and response (IDSR) through training of healthcare workers and disseminating yellow fever case definition to health facilities to enhance case detection and reporting. The Ministry of Health, with support from the WHO Country office, has planned a reactive vaccination campaign in Kajo Keji County for which an International Coordination Group (ICG) request has been

submitted. The Ministry of Health has also proposed implementation of preventive mass vaccination campaigns, and introduction of yellow fever vaccination into the routine immunisation schedule by 2022.

Vaccination is the primary means of prevention and control of yellow fever. It provides immunity for life. In urban centres, targeted vector control measures are also helpful to interrupt transmission. Expedited planning and implementation of the vaccination campaign activities to protect the population will help avert risk of future outbreaks.

2. Malaria: Namibia

The ministry of health in Kavango West and Kavango East regions, Namibia, has reported about 827 malaria cases for the period 01 January to 03 April 2020, four times that of last year. In 2019, the two Kavango regions had less than 200 combined cases. Although the numbers have increased, an outbreak has not been declared. The low rainfall the region experienced in 2019 may explain the lower number of malaria cases for that year.

Malaria is endemic in the Kavango regions. According to the WHO's 2019 World Malaria Report, the annual incidence is around 200 to 300 cases per 1 000 population.

To stop the increase of malaria cases, vector control (including indoor residual spraying), with case detection and management, as well as continuous health education in communities, are some of the activities being conducted. Communities are also being encouraged to use mosquito repellents to curb the spread of disease.

3. Lassa fever: Nigeria

In Nigeria, in week 14 (30 March – 05 April 2020), there were 12 new Lassa fever (LF) confirmed cases. These were reported from five States (Edo, Ondo, Ebonyi, Bauchi and Sokoto). The number of new cases is down from 19 in week 13, indicating that LF virus transmission is continuing but declining considerably.

Cumulatively from week 1 to week 14, 2020, 188 deaths have been reported, with a case fatality rate (CFR) of 19.5%, which is lower than the CFR for the same period in 2019 (22.7%). Of all confirmed cases, 72% are from Edo (32%), Ondo (32%) and Ebonyi (8%) states. The predominant age group affected is 21-30 years (median 33 years). The male to female ratio for confirmed cases is 1:1.2. No new healthcare worker was affected in reporting week 14.

The National Emergency Operations Centre (EOC) in Nigeria has been activated to coordinate response activities across states. The states with confirmed cases have activated state-level EOCs. Surge staff (doctors, nurses, laboratorians, and hygienist) have been deployed. In addition, risk communications and community engagement activities have been scaled up across states using television, radio, print, social media, and other strategies.

4. Measles: Democratic Republic of Congo, Mexico and Liberia

The Democratic Republic of the Congo (DRC)'s healthcare system needs urgent support as it struggles with measles and cholera epidemics that kill thousands of children, as well as the mounting threat from the coronavirus disease 2019 (COVID-19) outbreak. Measles cases surged in 2019 – 2020 to reach 332 000 nationwide, making it the worst outbreak in the DRC's

history. Out of more than 6 200 recorded fatalities, around 85% were children under the age of five.

Mexico is also experiencing a measles outbreak. Between 1 January and 2 April 2020, 1 364 probable cases of measles were reported, of which 124 were laboratory confirmed, 991 were discarded, and 328 remain under investigation. The age of the confirmed measles cases ranged from 3 months to 68 years (median of 20 years), and 59% were male. Analysis conducted by the National Reference Laboratory (InDRE) identified the genotype D8 (similar to other countries in the region) for 17 of the confirmed cases. Of the 124 confirmed cases, 105 were in Mexico City, 18 in Mexico State, and one in Campeche State.

Amid the outbreak of coronavirus in Liberia, there is also a report of an outbreak of measles in two districts of Nimba County. The Ministry of Health has begun a routine vaccination campaign in the affected areas. The number of cases has not been reported.

A statement from the Measles & Rubella Initiative indicates that the COVID-19 pandemic could cause dozens of measles immunisation campaigns worldwide to be postponed or suspended. The initiative estimates that more than 117 million children in 37 countries could be at risk of missing their measles vaccinations as a result. In its statement, the initiative pointed to interim guidance (https://apps.who.int/iris/bitstream/ handle/10665/331590/WHO-2019nCoV-immunization_services-2020.1eng.pdf) the WHO issued in March 2020 that states immunisation is a core health service that should be prioritised to prevent communicable diseases and that immunisation services should continue to be provided wherever they can be performed safely.



Figure 3. 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 (<u>www.promed.org</u>), World Health Organization (www.who.int)