

VACCINES AND IMMUNOLOGY

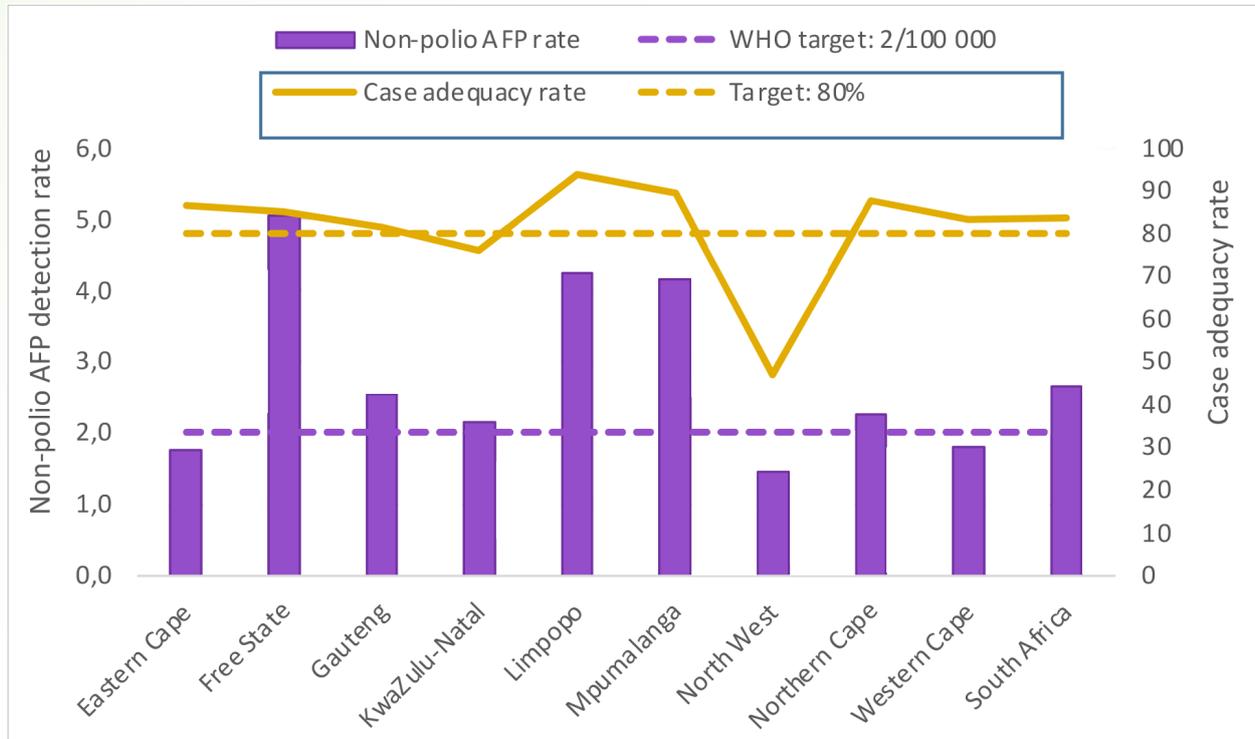


Figure 9. Surveillance indicators of non-polio AFP detection and case adequacy rates in South Africa, 2022

Source: Centre for Vaccines and Immunology, NICD-NHLS, shelinam@nicd.ac.za

BEYOND OUR BORDERS

The ‘Beyond our Borders’ column focuses on selected and current regional and international diseases that may affect South Africans travelling outside the country.

Ebola – Uganda

On 11 January 2023, the Ugandan Ministry of Health (MoH) declared the end of the Ebola disease outbreak caused by the Sudan ebolavirus (SUDV). As per the WHO recommendations, the declaration was made after 42 days (twice the maximum incubation period for SUDV infections) had passed since the last admitted case tested negative and the last confirmed death was given a safe and dignified burial.

The outbreak, which began in September 2022, resulted in a cumulative total of 164 cases (142 confirmed, 22 probable),

77 deaths (55 among confirmed cases, 22 among probable cases) and 87 recoveries. The overall case fatality rate amongst confirmed cases was 38.7%.

Although the outbreak has been declared over, surveillance activities are ongoing to rapidly detect and respond to re-emergence. A follow-up programme to provide ongoing support to survivors has also been put in place.

Sources: <https://www.afro.who.int/countries/uganda/publication/ebola-virus-disease-uganda-sitrep-93>; <https://www.who.int/emergencies/disease-outbreak-news/item/2023-DON433>

BEYOND OUR BORDERS

Mpox

According to WHO, as of 27 January 2023, the multi-country mpox outbreak has resulted in a cumulative total of 85 189 laboratory-confirmed cases, 1 370 probable cases and 86 deaths in 110 countries worldwide. With the exception of countries in West and Central Africa, the ongoing outbreak of mpox continues to primarily affect men who have sex with men. At present, there is no data suggesting sustained transmission beyond these networks.

The 10 most affected countries globally are the United States of America (n = 29 860), Brazil (n = 10 709), Spain (n = 7 518), France (n = 4 114), Colombia (n = 4 066), The United Kingdom (n = 3 735), Peru (n = 3 723), Mexico (n = 3 696), Germany (n = 3

690), and Canada (n = 1 460). Together, these countries account for 85.2% of the cases reported globally. In the past 7 days, 18 countries reported an increase in the weekly number of cases, with the highest increase reported in Costa Rica. Seventy-four countries have reported no new cases in the past 21 days.

Overall, the global risk assessment remains moderate, while the Region of the Americas is the only WHO Region to still have a high-risk status. There has been a notable decrease in the number of weekly cases reported since August 2022. In South Africa, the number of mpox cases remains unchanged at a total of five cases to date.

Source: https://worldhealthorg.shinyapps.io/mpx_global/

COVID-19

As of 25 January 2023, there were 1.9 million new cases and over 12 000 deaths reported globally for the week of 16 January 2023 to 22 January 2023. This data does not include the 72 596 deaths reported by China for the period of 08 December 2022 to 19 January 2023, as detailed provincial data disaggregated by week had not yet been provided to WHO. In the last 28 days (26 December 2022 to 22 January 2023), there was a 25% decrease in new cases and 13% increase in deaths reported globally as compared to the previous 28 days.

As of 25 January 2023, the 10 countries that reported the highest number of new cases over the previous seven days were as follows: Japan (n=573890, -40%); United States of America (n=323 721, -25%); Republic of Korea (n=142414, -42%); China (n=128 415, -18%); Brazil (n=90 126, -30%); Germany (n=59 627, -16%); Russian Federation (n=39 598, +18%); France (n=30 427, -21%); Chile (n=15 580, -22%) and Italy (n=14 671, -76%).

The 10 countries that reported the highest number of deaths over the same period were as follows: United States of America (n=3 922, -8%); Japan (n=2 609, -10%); Brazil (n=932, +89%);

China (n=542, -28%); France (n=445, -1%); Spain (n=424, +21%); Russian Federation (n=292, -7%); Canada (n=225, -23%); Republic of Korea (n=213, -32%) and Italy (n=149, -72%).

Omicron XBB.1.5 sublineage: There has been a lot of focus on the USA regarding the spread of the XBB.1.5 Omicron variant in the country. XBB.1.5 is a sublineage of XBB, a subvariant of Omicron, and has already been detected in 38 countries globally. The Technical Advisory Group on Virus Evolution (TAG-VE) in conjunction with WHO, conducted a rapid risk assessment on the XBB.1.5 sublineage based on currently available data from the USA. The preliminary data suggests that the sublineage does have a growth advantage when compared to other circulating Omicron sublineages, although the level of confidence in the assessment was classified as low. It has also been shown to have a higher immune escape when compared to other sublineages, with a moderate classification in terms of confidence in the assessment. It is important to note that there is currently no available information on the clinical severity of XBB.1.5.

BEYOND OUR BORDERS

On 13 January 2023 and in light of the current global situation, WHO updated its guidelines on mask wearing in community settings, isolation periods, COVID-19 treatments and clinical management. WHO now recommends the use of masks by the public in specific situations, regardless of the local epidemiological situation. The specified situations whereby mask-wearing is advised include: following recent exposure to COVID-19, when someone has or suspects they have COVID-19, when someone is at high-risk of severe COVID-19 and for anyone in crowded, enclosed or poorly ventilated spaces. In terms of

isolation, the new recommendation is for patients to isolate for 10 days from the start of symptom onset. For those who test positive but are asymptomatic, WHO now recommends five days of isolation. South African guidelines on COVID-19 isolation periods were last updated by the South African National Department of Health on 17 February 2022. Mask-wearing became optional after the National State of Disaster was lifted on 05 April 2022 and no further recommendations have been made since then.

Sources: <https://www.who.int/publications/m/item/weekly-epidemiological-update-on-covid-19---25-january-2023>; <https://www.who.int/news/item/13-01-2023-who-updates-covid-19-guidelines-on-masks--treatments-and-patient-care>; <https://www.nicd.ac.za/covid-19-update-xbb-1-5-variant/>

Cholera – African Region

Cholera is caused by toxin-producing *Vibrio cholerae* serogroup O1 (and rarely, serogroup O139). It presents as acute watery diarrhoea that, if left untreated, can lead to severe dehydration and death in a matter of hours to days. Transmission is faeco-oral, typically through the ingestion of contaminated food or water. The incubation period is two hours to five days and persons of all age are at risk of infection. Endemic cholera and outbreaks are closely linked to poor access to clean water and sanitation services.

Since January 2022, more than 14 African countries have reported cholera outbreaks. Malawi is currently experiencing an ongoing outbreak that has resulted in a cumulative total of 33 608 cases and 1 093 deaths (CFR 3.3%) between March 2022 and 29 January 2023. As of 29 January 2023, there were 1 087

patients admitted into treatment facilities across the country. The outbreak, which began in March 2022 as a result of cyclones Ana and Gombe, has affected all 29 districts in the country.

The other African countries that have reported cholera outbreaks in the past year are Burundi, Cameroon, the Democratic Republic of the Congo, Ethiopia, Kenya, Mozambique, Nigeria, South Sudan, Tanzania and Zimbabwe.

WHO advises that improved access to clean water, sanitation and health services is critical, supported by outbreak mitigation and prevention through the use of oral cholera vaccine (OCV) and key public health communications is important. Travel and trade restrictions to affected countries are not recommended.

Sources: <https://www.facebook.com/photo/?fbid=490560109922934&set=pcb.490560203256258> (Malawian Ministry of Health official Facebook page); <https://apps.who.int/iris/bitstream/handle/10665/365633/OEW03-915012023-eng.pdf?sequence=1&isAllowed=y>; <https://www.afro.who.int/health-topics/cholera>; <https://www.afro.who.int/countries/democratic-republic-of-congo/news/working-communities- curb-cholera-democratic-republic-congo>

BEYOND OUR BORDERS

Dengue Fever

For the year 2022, there were 3 766 153 cases of dengue fever and 3 582 deaths reported globally (as of 19 December 2022). The countries that reported the highest number of cases were as follows: Brazil (n = 2 182 229), Vietnam (n = 325 604), Philippines (n = 201 509), India (n = 110 473) and Indonesia (n = 94 355). The number of dengue cases reported to WHO has increased eight-fold over the last two decades. For the year 2023 so far, the following countries have reported ongoing dengue outbreaks:

- **Malaysia:** From 08 January 2023 to 14 January 2023, the Malaysian Ministry of Health reported 2 520 new cases of dengue, a 13.6% increase as compared to the previous week. The cumulative number of dengue cases for the first two weeks of 2023 is 4 739, a 23.2% increase compared to the same period in 2022.
- **Sri Lanka:** As of 15 January 2023, Sri Lanka recorded a cumulative total of 4 178 cases of dengue fever in the first two weeks of 2023. The majority of cases were reported in the following districts: Colombo (n = 871), Gampaha (n = 846), Puttalam (n = 533), Jaffna (n = 255), Kalutara (n = 224) and Kandy (n = 190).
- **Bangladesh:** Between 01 January 2023 and 18 January 2023, a total of 438 laboratory confirmed dengue cases have been reported in Bangladesh, including 353 recoveries and five deaths. Approximately 80 cases are currently hospitalised, including 39 cases receiving treatment in Dhaka, the country's capital city.
- **Bolivia:** As of 19 January 2023, Bolivia has recorded 508 laboratory-confirmed cases of dengue fever and five deaths in the first three weeks of 2023. The majority of cases were reported from Santa Cruz (n = 319), followed by Beni (n = 154), Tarija (n = 17), La Paz (n = 11), Pando (n = 6) and Cochabamba (n = 1).

The NICD has already received laboratory-confirmation of four cases of dengue fever in travellers who recently returned from Seychelles in December 2022. Clinicians are urged to maintain a high index of suspicion for dengue fever in anyone returning from dengue-endemic regions, presenting with signs and symptoms of the disease.

Sources: <https://www.malaymail.com/news/malaysia/2023/01/17/dr-noor-hisham-dengue-cases-up-136pc-last-week/50640>; <https://unb.com.bd/category/Bangladesh/bangladesh-reports-2-more-dengue-deaths-14-new-cases/108512>; <https://www.who.int/news-room/fact-sheets/detail/dengue-and-severe-dengue>; <https://www.ecdc.europa.eu/en/dengue-monthly>; <https://www.newsfirst.lk/2023/01/15/already-over-4100-dengue-cases-reported-in-sri-lanka-in-2023/>; <http://outbreaknewstoday.com/bolivia-reports-more-than-500-dengue-cases-in-first-3-weeks-of-2023/>