

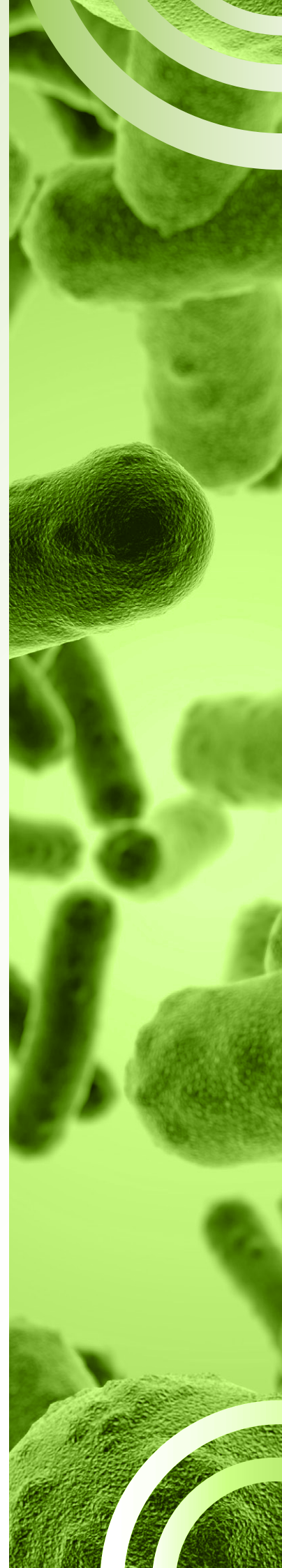
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COMMUNICABLE
DISEASES
COMMUNIQUÉ

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EDITORIAL

Dr Kimantha Moodley

As we enter into spring and warmer months, we are pleased to report that the 2023 influenza season is over. In this month's issue, we reflect on the flu season, the efficacy of the vaccine, as well as the need for continued surveillance. We also provide an update on the increase in pertussis cases that has been observed in South Africa since July 2022. Although the incidence of cases seems to have peaked in May 2023, there is still ongoing transmission and emphasis should be placed on ensuring vaccinations are up to date.

The measles outbreak which began in October 2022 is effectively over, however, some provinces are still reporting sporadic cases. Full updates on the measles and cholera outbreaks in the country can be found using the links provided in the "Quick Updates" section of the Communiqué.

Sadly, we report on two new human rabies cases in children from two districts in KwaZulu-Natal Province. Despite ongoing efforts to eliminate the disease, rabies is still endemic in South Africa and emphasis should be placed on vaccinating dogs and providing adequate post-exposure prophylaxis (PEP) to exposed individuals. Rabies is 100% fatal, but preventable with good wound management and timely administration of PEP.

In this month's issue, we reflect on hepatitis A cases reported to the Notifiable Medical Conditions (NMC) surveillance system for the year so far. We also report on hepatitis C seroprevalence from laboratory testing data from 2017 – 2022. The report highlights the need for viral load testing in those with positive hepatitis C virus antibody tests.

An interesting addition to this month's Communiqué is a review of vaginal candidiasis (VC) infections from sexually transmitted infections (STI) sentinel surveillance sites. The abstract provides insight into VC prevalence and coinfection with other vaginal discharge-causing pathogens.

Looking beyond our borders, we provide an update on the cholera outbreaks in the African Region. With ongoing transmission, especially in the Southern African Region, the risk of further importation of cases to South Africa remains high. We urge all healthcare workers to maintain a high index of suspicion for cholera in anyone presenting with acute watery diarrhoea. We also reflect on the ongoing global transmission of dengue fever, a disease classified by the World Health Organization (WHO) as one of the top 10 threats to public health.

On behalf of the Communiqué editorial team, we thank you for your continued support and hope you enjoy this month's issue!

QUICK UPDATES

Measles, South Africa

The ongoing measles outbreak which began in October 2022, has resulted in a cumulative total of 1 130 laboratory-confirmed cases (as of 18 August 2023).

The outbreak has been declared over in the following provinces: Northern Cape, North West and Free State. Although the other five affected provinces have not met the criteria to officially

declare the end of the outbreak, the outbreak is effectively over, as only sporadic cases have been reported in recent weeks.

For updated case numbers and more information on the outbreak, please visit the NICD alerts page (<https://www.nicd.ac.za/media/alerts/>).

Source: <https://www.nicd.ac.za/south-african-measles-outbreak-update-2023-18-august-2023/>

Cholera, South Africa

Since the cholera outbreak was declared in February 2023, the country has recorded a cumulative total of 199 laboratory-confirmed cases, 1 073 suspected cases and 47 deaths. The latest confirmed case was reported on 25 July 2023. The five affected provinces are as follows: Gauteng, Free State, Limpopo, Mpumalanga and North West.

Healthcare workers are urged to maintain a high index of suspicion for cholera in anyone presenting with acute diarrhoeal disease. All suspected cases should be notified immediately using the Notifiable Medical Conditions (NMC) mobile application or website (<https://mstrmobile.nicd.ac.za/>

nmc/), and samples should be submitted to local laboratories for testing. Healthcare workers attending to persons with suspected or confirmed cholera should observe strict contact precautions and hand hygiene, including isolation where possible.

Comprehensive guidelines on management can be accessed using the following link: <https://www.nicd.ac.za/assets/files/2014%20SA%20Cholera%20Guidelines.pdf>.

For additional information please visit the NICD website (<https://www.nicd.ac.za/diseases-a-z-index/cholera/>).

Sources: <https://www.health.gov.za/wp-content/uploads/2023/07/Health-Department-provides-update-on-cholera-outbreak-in-SA-05-July-2023.pdf>, <https://www.health.gov.za/wp-content/uploads/2023/07/Health-Minister-announces-another-imported-cholera-case-25-July-2023.pdf>

ZOONOTIC & VECTOR-BORNE DISEASES

Human rabies in South Africa

During August 2023, two human rabies cases were reported from the Zululand and eThekweni districts of KwaZulu-Natal Province, respectively.

The first case involved a child who was bitten by a dog in the Emadwaleni area of Nongoma in May 2023. He reportedly did not receive any rabies post-exposure prophylaxis (PEP). He was only brought to a neighbouring clinic when he started to feel lethargic, itchy, and experienced loss of appetite. He started to develop further symptoms of clinically suspected rabies, including hypersalivating, irregular jerky movements, anxiety, and hyperactivity. He was eventually taken to a hospital in the uMkhanyakude District in northern KwaZulu-Natal. By

performing a RT-PCR test on a nuchal sample taken from the medulla at the base of the brain, this diagnosis of rabies was laboratory-confirmed after the child demised.

The second case also involved a child but from the Ntinyane area of Umbumbulu. The source of the exposure in this case is unclear, but rabies in dogs has been reported from the area. The child was diagnosed with clinically suspected rabies after she was hospitalised with symptoms of malaise, anxiety, aerophobia, anorexia, and hydrophobia. Rabies virus was also detected in antemortem saliva and cerebrospinal fluid samples taken before the child died on 10 August 2023.

ZOONOTIC & VECTOR-BORNE DISEASES

For the year 2023, eight confirmed human rabies cases have been recorded in South Africa as of 23 August 2023. Cases, including those described here, were identified in the provinces of KwaZulu-Natal (n=4), Eastern Cape (n=3) and Limpopo (n=1). The distribution of confirmed cases this year to date is shown in Figure 1. For the same period in 2022, 10 human rabies cases were confirmed, with just two from KwaZulu-Natal Province, five from Eastern Cape Province and three from Limpopo Province. There were also an additional five probable cases identified from Eastern Cape Province last year. Only these three provinces—KwaZulu-Natal, Eastern Cape and Limpopo—have documented human cases in recent years.

Due to a lack of public awareness of the disease, low dog vaccination rates, and sometimes inadequate PEP given to bite

victims, rabies deaths continue to occur in South Africa. Despite the fact that once symptoms manifest, rabies is invariably fatal, it is completely preventable after contact with rabid animals. To prevent rabies, thorough wound cleaning is followed by a dose of rabies immunoglobulin (RIG) and rabies vaccine given on the day of exposure for category 3 wounds (breach of skin, any bleeding, contact with mucosal membranes, or broken skin). The remainder of vaccine doses are then given on days 3, 7, and between 14 and 28. Successful community rabies prevention depends on rabies risk education, community engagement, vaccination of dogs and cats, appropriate wound care, and prompt PEP intervention. Visit www.nicd.ac.za for additional information and full PEP guidelines.

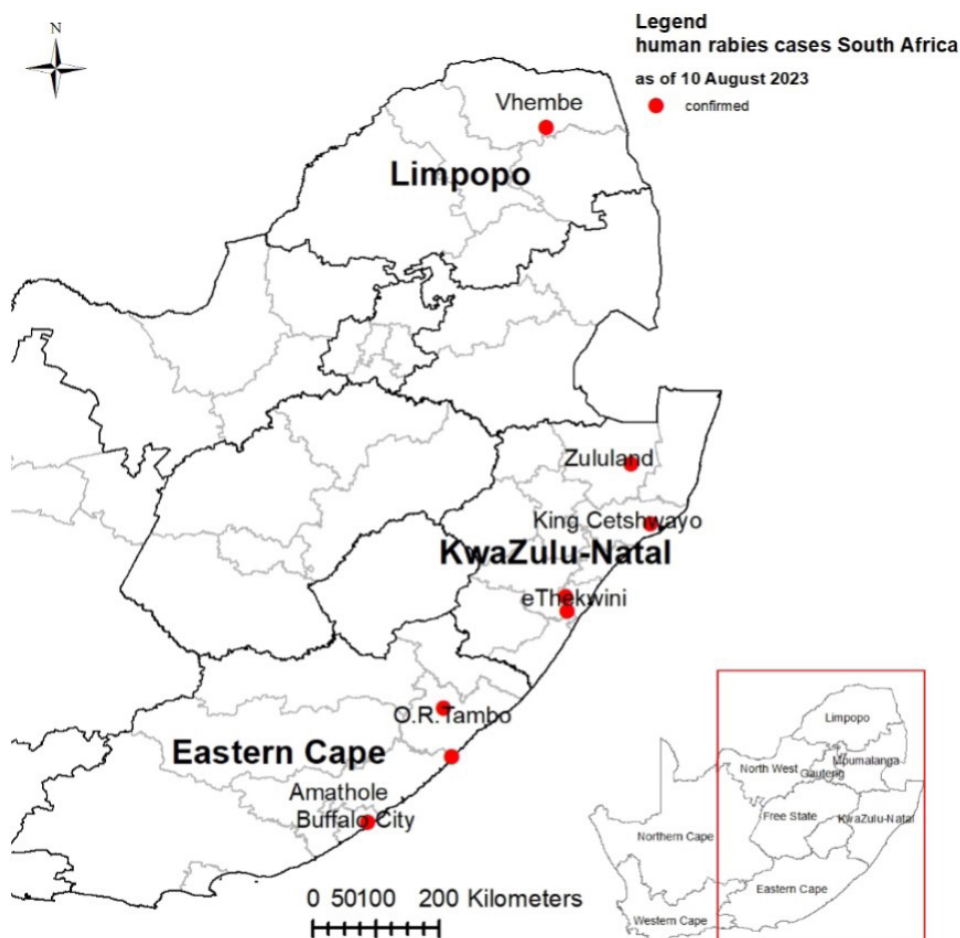


Figure 1. Confirmed human rabies cases for South Africa as of 10 August 2023.

Source: Centre for Emerging Zoonotic and Parasitic Diseases, NICD-NHLS; veerlem@nicd.ac.za, jacquelinew@nicd.ac.za

RESPIRATORY DISEASES

End of influenza season 2023

The 2023 influenza season has ended. The season started in week 17 (week starting 24 April 2023) when the influenza detection rate (3-week moving average) breached the seasonal threshold, peaked in week 22 (week starting on 4 June 2023) and ended in week 27 (week starting 3 July 2023) (Figure 2). In previous years, there has often been a second wave of influenza transmission usually predominated by influenza B, after the peak of the dominant circulating strain, therefore ongoing monitoring is important.

As of week 32 of 2023 (week starting 7 August 2023), 942 influenza cases were detected through the three sentinel, syndromic surveillance programmes, of which 912 (96.8%) samples were typed and assigned a subtype or lineage. Among the 912 cases with influenza subtype or lineage, 98.6% (899/912) were influenza A(H3N2), 0.8% (7/912) were A(H1N1) pdm09, and 0.7% (6/912) were B/Victoria. Of the remaining 30 samples, subtype/lineage was inconclusive for 24 cases due to low viral load, and six cases had pending subtype results.

Of the 98 influenza A(H3N2) specimens for which a virus was isolated and antigenically characterised by the

haemagglutination inhibition (HAI) assay, 93.9% (92/98) showed good recognition of A/Delaware/01/2021 (vaccine-like) antisera, suggesting the H3N2 component of the current vaccine was a good match to the A(H3N2) viruses circulating this season.

During the 10 weeks of the 2023 influenza season, influenza was detected in 314/614 (50.8%) of specimens from Viral Watch (VW) surveillance sites, of which influenza A(H3N2) accounted for the majority of those that were typed (97.9%, 292/298).

Of the 516 surveillance cases enrolled in the VW programme during the 2023 influenza season and included in vaccine effectiveness (VE) analysis (individuals aged ≥ 6 months with known vaccination and influenza status), 276 (53.5%) were classified as cases (influenza test positive) and 240 (46.5%) as controls (influenza test negative). Adjusted vaccine effectiveness (factor timing within season and age) for any influenza was 81.4% (95% confidence interval (95% CI) 28.6 - 95.1) and for influenza A(H3N2) was 76.1% (95% CI 9.5 - 93.7) (Table 1).

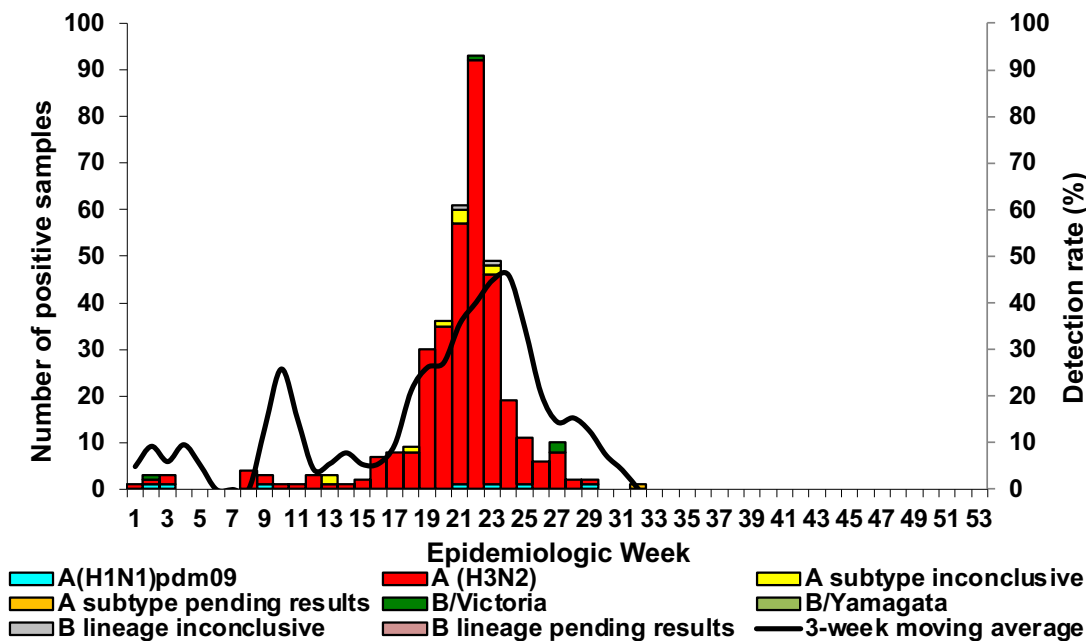


Figure 2. Number of positive patients by influenza subtype and lineage and 3-week moving average detection rate by week, influenza-like illness surveillance - Viral Watch, 1 January 2023- 13 August 2023, South Africa

RESPIRATORY DISEASES

Table 1. Vaccine coverage and vaccine effectiveness by influenza type and subtype, Viral Watch, 24/04/2023-13/08/2023

Influenza type/subtype	Vaccine coverage			Percentage adjusted VE (95% Confidence Interval) *
	Cases n/N (%)	Controls n/N (%)	Total n/N (%)	
All specimens				
Any influenza	3/276 (1.1)	11/240 (4.6)	14/516 (2.7)	81.4 (28.6; 95.1)
A(H3N2)	3/256 (1.2)	11/260 (4.2)	14/516 (2.7)	76.1 (9.5; 93.7)
Children aged <18 Years				
Any influenza	1/88 (1.1)	4/60 (6.6)	5/148 (3.4)	79.8 (-117.3; 98.1)
A(H3N2)	1/81 (1.2)	4/67 (0.6)	5/148 (3.4)	72.1 (-193.1; 97.3)
Adults aged 18 – 64 Years				
Any influenza	2/175 (1.1)	5/159 (3.1)	7/334 (2.1)	78.9 (-12.5; 96.1)
A(H3N2)	2/164 (12.2)	5/170 (2.9)	7/334 (2.1)	74.1 (-37.8; 95.1)
Adults aged ≥65 years				
Any influenza	0/13 (0.0)	2/21 (9.5)	2/34 (5.9)	Not determined
A(H3N2)	0/11 (0.0)	2/23 (8.7)	2/34 (5.9)	Not determined

* Adjustment factor timing within season (early, med, late) and age group (all specimens estimate)

Source: Centre for Respiratory Diseases and Meningitis, NICD-NHLS; thendor@nicd.ac.za

Update on increase in pertussis cases in South Africa

For the period from 1 July 2022 to 21 August 2023, 300/10 795 (3.0%) cases of *Bordetella pertussis* (pertussis) of all ages were reported through the Pneumonia Surveillance Program (PSP). In the same period, the detection rate of pertussis in children aged <1 year was 4.5% (158/3 483).

Initially, most cases were reported from Western Cape Province and the province still accounts for a large proportion of the total cases overall (43.0%, 129/300). However, since the beginning of 2023, cases (n=164) have been reported more widely across the provinces with Gauteng reporting the highest number of cases in 2023 (28.0%, 46/164), followed by North West (22.6%, 37/164), Mpumalanga (17.7%, 29/164) and Western Cape (14.6% 24/164) provinces.

From 1 July 2022, five deaths have been reported (case fatality ratio (CFR) 1.8%, 5/300). There was one death in a child <3 months of age from Mpumalanga Province. There were four deaths in adults (all male), a 49-year-old from Gauteng Province, a 16-year-old from North West Province, and a 34-year-old and 44-year-old from Western Cape Province. All individuals aged >5 years who died had significant

underlying comorbid conditions. Of the 199 pertussis positive cases aged <5 years, 80.5% (159/199) had a documented vaccination status available and 39.6% (63/159) were vaccinated up-to-date.

Similar to the PSP, an increase in reported cases started on the Notifiable Medical Conditions Surveillance System (NMC-SS) from 1 July 2022 through 21 August 2023 (n=2 834), with a peak in May 2023. Western Cape Province reported the highest number of cases initially and overall (30.0%, 850/2 834), similar to cases in the PSP. In 2023, cases (n=2 089) have been spread across the provinces, specifically Gauteng (30.7%, 641/2 089), Western Cape (19.2%, 401/2 089) and KwaZulu-Natal (14.9%, 312/2 089). Other provinces contributed <11% of cases (Figure 4). The majority of cases in 2023 (56.7%, 1 185/2 087) were in children aged <5 years and of those, 66.1% (783/1 185) were children aged <3 months. Among the 164 pertussis positive cases in 2023 reported to the NMC-SS database with data available on outcome, seven deaths were reported (CFR 4.3%, 7/164). Of the seven individuals who died, 71.4% (5/7) were children aged <5 years and of these, 60.0% (3/5) were children aged <3 months.

RESPIRATORY DISEASES

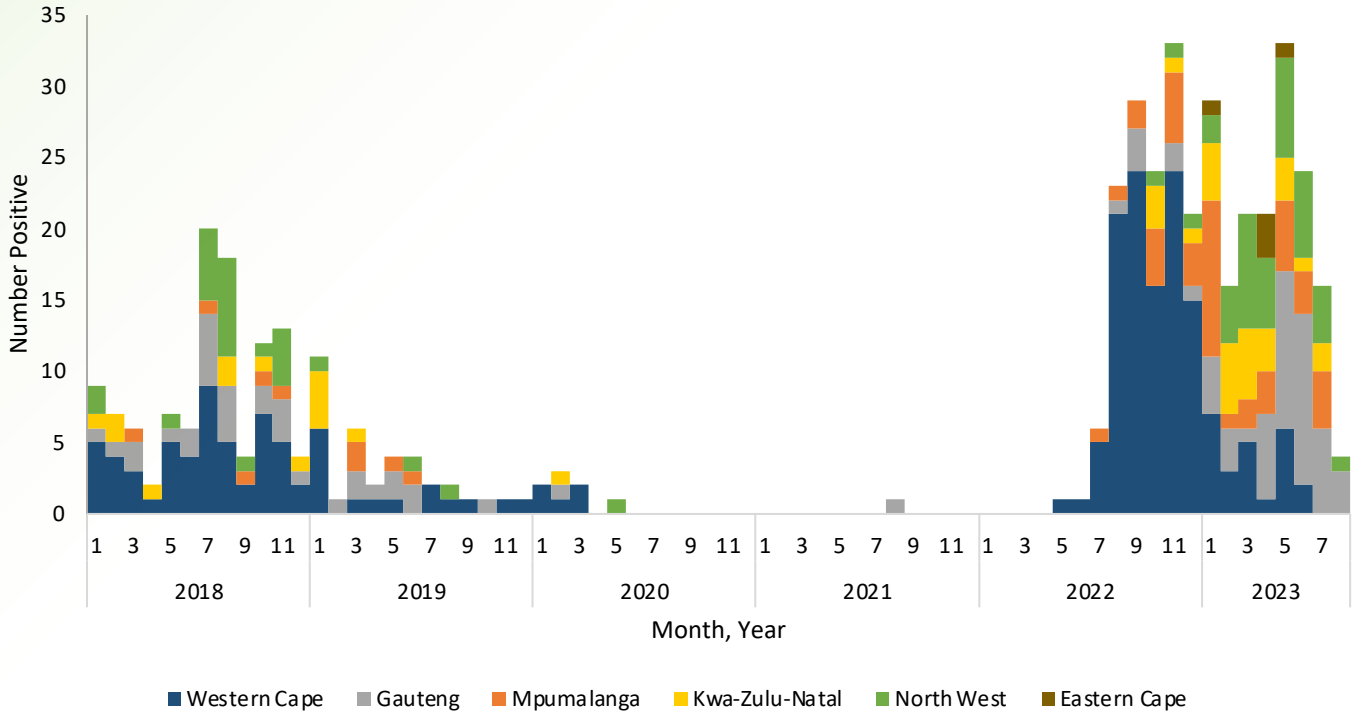


Figure 3. Number of laboratory-confirmed pertussis cases from Pneumonia Surveillance Programme by year, month and province, South Africa 2018-2023

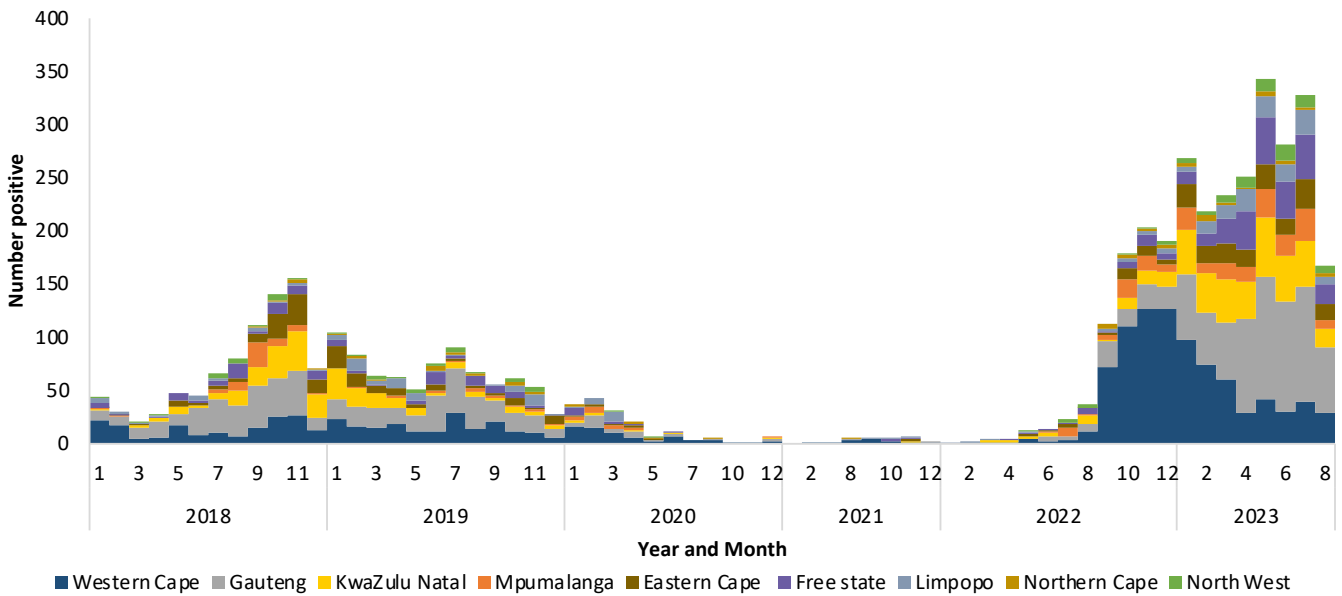


Figure 4. Number of notified pertussis cases from Notifiable Medical Conditions Surveillance System (NMC-SS) by year, month and province, South Africa, 2018-2023

Source: Centre for Respiratory Diseases and Meningitis, NICD-NHLS; thendor@nicd.ac.za

VACCINES AND IMMUNOLOGY

Hepatitis A

Hepatitis A is a notifiable medical condition (NMC) in South Africa. The virus causes an acute liver infection but if severe, can lead to liver disease and cirrhosis, which can eventually lead to death. A total of 2 651 hepatitis A infections were reported to the NMC surveillance system from January to July 2023. The incidence of hepatitis A was highest in Western Cape Province (37.1%), followed by Gauteng (18.3%) and KwaZulu-Natal (17.6%) provinces (Figure 5). The remaining provinces in South Africa had a prevalence of <8.0%. Of the reported cases, 37.3% of cases were <10 years of age, 52.4% were in the <15-year-old age group, and 76.7% were in the <30-year-old age group. The mean age of cases was 18 years old. Hepatitis A is endemic

in South Africa and surveillance needs to be strengthened to identify risk factors for effective public health intervention.

Hepatitis A comprises six genotypes, of which the genotypes I, II and III are associated with humans. From March to June 2023, 98 hepatitis A seropositive (IgM) samples received from Western Cape Province have been sequenced. The VP1/P2B junction of hepatitis A was sequenced to identify the genotype circulating. Ninety-one samples (93%) were successfully sequenced, among which genotype IB was detected (Figure 6). Continuous surveillance is being done to monitor the hepatitis A circulating genotypes.

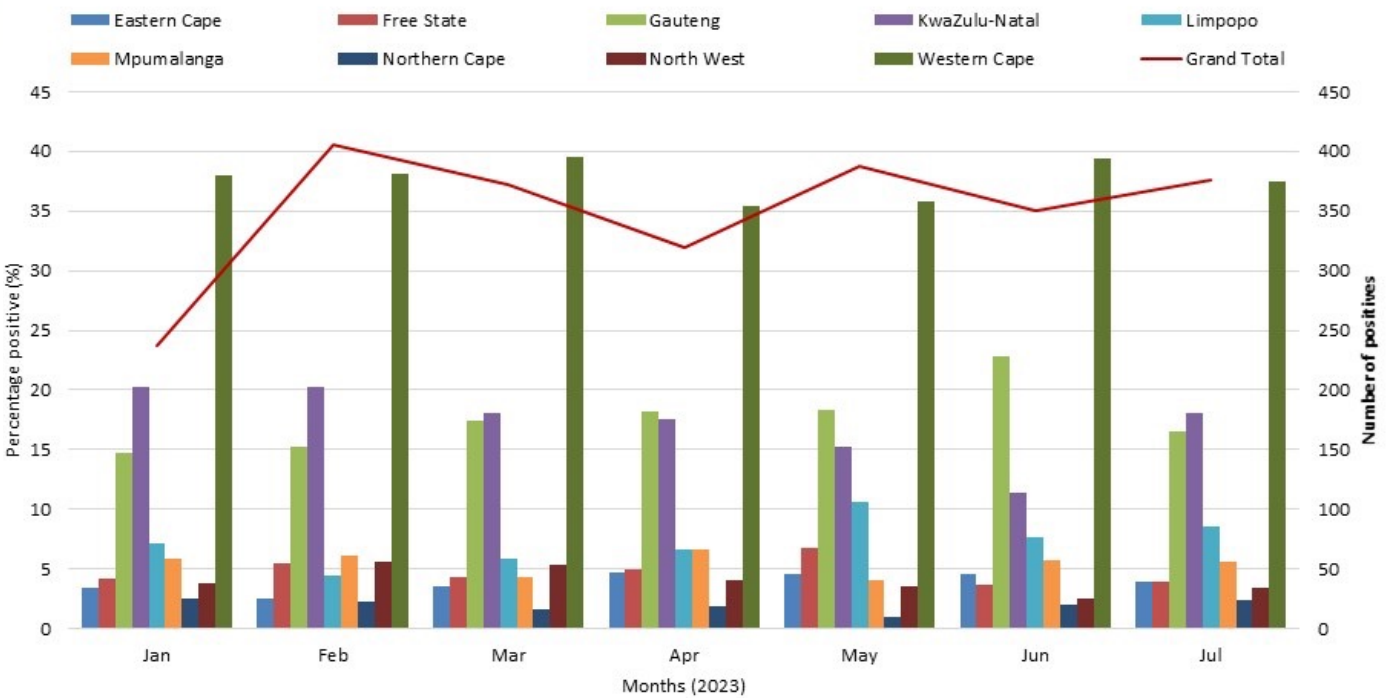


Figure 5. The incidence of hepatitis A across South Africa From January to July 2023

VACCINES AND IMMUNOLOGY

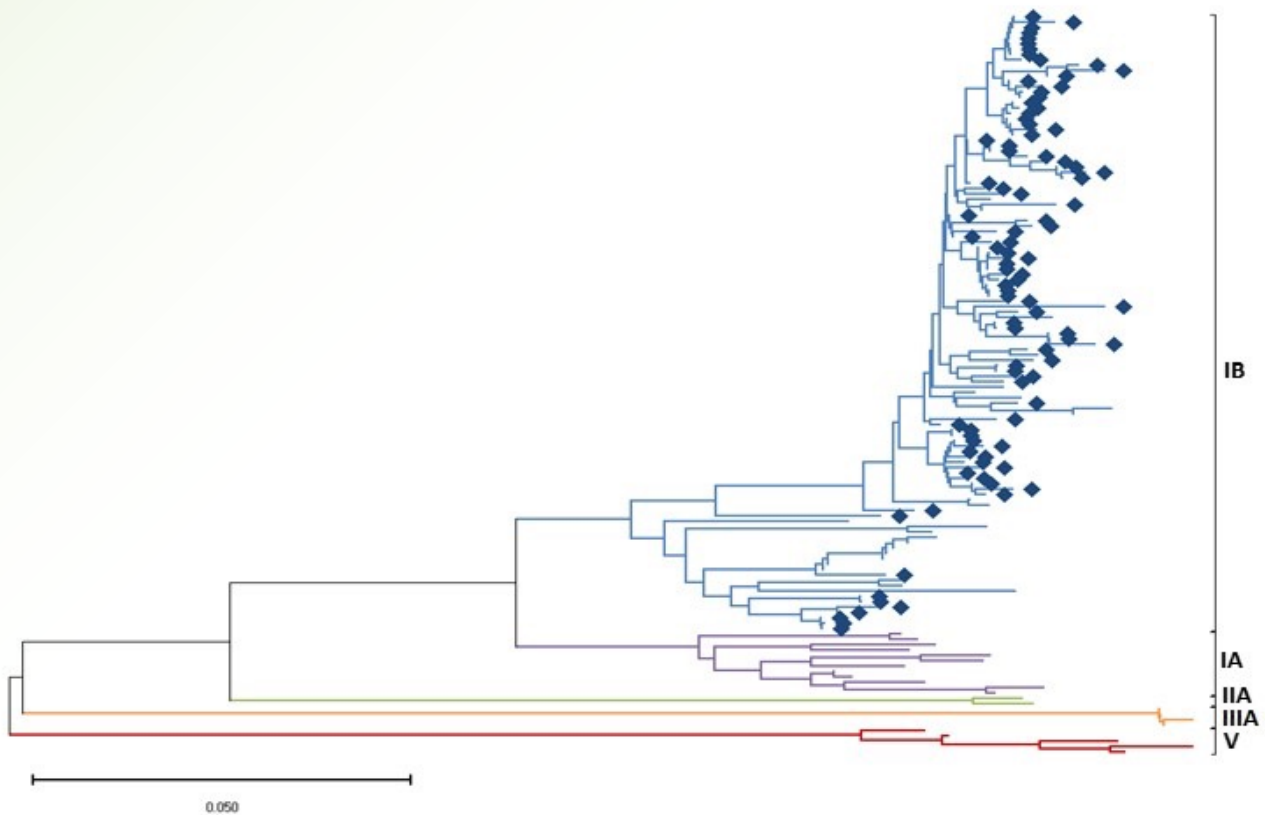


Figure 6. Neighbour-joining tree for hepatitis A samples sequenced from Western Cape. Blue diamond nodes represent our sequence data clustering with genotype IB reference sequences.

Source: Centre for Vaccines & Immunology, NICD-NHLS; kathleens@nicd.ac.za

Hepatitis C seroprevalence in South Africa, 2017-2022

From laboratory testing data, hepatitis C virus (HCV) antibody positivity rates increased from 2.1% in 2017 to 2.6% in 2022. In KwaZulu-Natal, Western Cape and Eastern Cape provinces, the rate of HCV antibody positivity rates increased from 1.2% to 1.7% for the same years. The highest HCV antibody positivity rates were reported in Gauteng Province (5.0%), Limpopo Province (2.3%) and Mpumalanga Province (2.2%).

The HCV seroprevalence per 100 000 population increased from 2017 to 2022, increasing from 5/100 000 to 6/100 000. Gauteng Province has shown the highest seroprevalence of >10/100 000, while Mpumalanga Province had >5/100 000 over a six-year period. HCV antibody prevalence was high in patients aged between 20-39 years.

The HCV antibody test cannot differentiate between a past or recent and active infection. Hence, the national guidelines recommend that a positive antibody test is followed by a viral load test. Data from laboratory testing showed an increase in the linking of patients with positive HCV antibodies to a subsequent HCV viral load, from 2017 (9%) to 2022 (18%). The majority of people with active HCV infections were in metropolitan areas. There is a need to increase access to HCV viral load testing across provinces to improve the clinical management of patients.

VACCINES AND IMMUNOLOGY

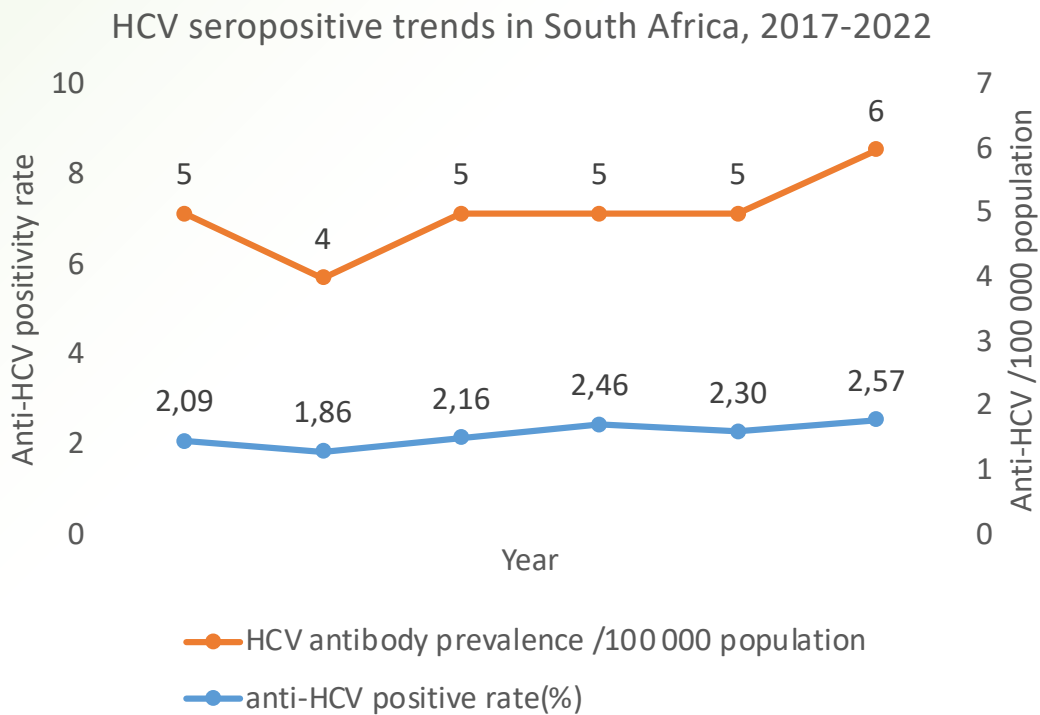


Figure 7. HCV antibody positive rate and prevalence per year, 2017-2022 in South Africa

Source: Centre for Vaccines & Immunology, NICD-NHLS; jackm@nicd.ac.za

HIV & STIs

Vaginal candidiasis among women with vaginal discharge syndrome at STIs sentinel clinics 2019-2022

Vaginal candidiasis (VC) is the second most common cause of vaginal discharge syndrome (VDS) among women of reproductive age. In South Africa, women presenting with VDS are managed syndromically. VC treatment is recommended upon genital examination with signs suggestive of VC. These include: a scratched/inflamed vulva, or the presence of a curd-like discharge. Since 2019, sentinel microbiological sexually transmitted infections (STI) surveillance has been conducted annually in Gauteng, KwaZulu-Natal and Western Cape provinces to provide data on the aetiology of VDS. Vaginal and endocervical swabs, in addition to blood specimens, are collected from each patient for laboratory testing. Gram staining and microscopic examination of vaginal smears, for the identification of yeast cells or hyphae, are performed for VC diagnosis. Descriptive data of VC as a single and mixed

infections with other VDS aetiologies are presented. A total of 870 women were enrolled in the four-year study period, the median age was 29-years (IQR 24-35-years) and 26% were aged <25-years. The average VC prevalence was 24.9% (n=217) across all sites. Among women with VC (n=217), 44% had VC only, 27% had co-infection with bacterial vaginosis (BV) and 17% had co-infection with discharge-causing STIs (*Neisseria gonorrhoeae*, *Chlamydia trachomatis*, *Trichomonas vaginalis* and/or *Mycoplasma genitalium*). Co-infection with all VDS aetiologies (VC, BV and STIs) was observed in 12% of the women (Figure 8). These findings show that the majority of the women with VC had concurrent infections with STIs and non-STI aetiologies. Thus, VC should be included in future aetiological testing algorithms to ensure appropriate treatment is provided to women with VDS.

HIV & STIs

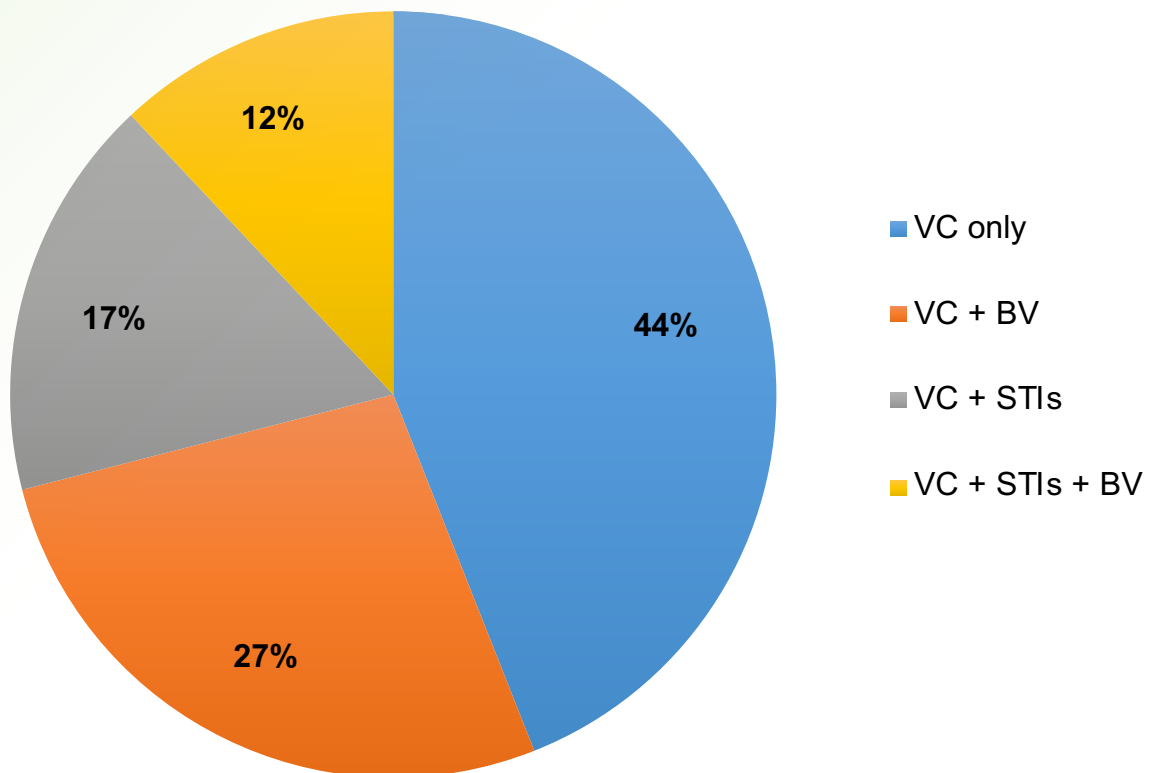


Figure 8. Proportion of women with VC as single and mixed infections with other VDS aetiologies among symptomatic patients enrolled at STI sentinel sites in South Africa, 2019-2022, N=217.

Source: Centre for HIV & STIs, NICD-NHLS; windys@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.

Cholera – African Region

The seventh cholera pandemic has been on the rise worldwide since mid-2021. As of 20 August 2023, this complex public health issue has affected 26 countries globally, with the African Region remaining the most affected. The 15 African countries reporting cholera outbreaks are as follows: Burundi, Cameroon, the Democratic Republic of the Congo, Ethiopia, the Kingdom of Eswatini, Kenya, Malawi, Mozambique, Nigeria, Somalia, South Africa, South Sudan, Tanzania, Zambia and Zimbabwe.

The cholera outbreaks in the African Region are occurring in the context of other public health issues, including natural disasters (cyclones, flooding, drought), conflicts and concurrent

outbreaks of other diseases (mpox, wild polio, measles, COVID-19). Other contributing factors include limited resources, shortage of medical equipment, poor sanitation and water supply as well as increased cross-border movements.

The global capacity to respond to the multiple outbreaks continues to be strained due to resource constraints, including shortages of the oral cholera vaccine (OCV) and cholera response supplies. The World Health Organization (WHO) continues to categorise the global risk of cholera transmission as very high, based on the large number of outbreaks, their geographical expansion and the lack of aforementioned resources.

BEYOND OUR BORDERS

Table 2. Cholera Cases and Deaths in African Region, 1 January 2022 to 30 July 2023

Country	Cumulative Cases	Cumulative Deaths	CFR (%)	Date outbreak started	Last update
Burundi	598	9	1.5	Jan 2023	30 Jul 2023
Cameroon	19 168	448	2.3	Jan 2022	30 Jul 2023
Democratic Republic of Congo	44 468	492	1.0	Jan 2022	23 Jul 2023
Ethiopia	16 824	229	1.4	Aug 2022	30 Jul 2023
Kenya	11 897	194	1.6	Oct 2022	30 Jul 2023
Malawi	58 966	1 768	3.0	Mar 2022	30 Jul 2023
Mozambique	33 534	141	0.4	Sep 2022	30 Jul 2023
Nigeria	25 815	654	2.5	Jan 2022	2 Jul 2023
South Sudan	1 471	2	0.1	Feb 2023	16 May 2023
The Kingdom of Eswatini	2	0	0	Mar 2023	23 Jul 2023
United Republic of Tanzania	376	4	1.1	Feb 2023	30 Jul 2023
Zambia	757	14	1.8	Jan 2023	15 Jun 2023
Zimbabwe	3 800	82	2.2	Feb 2023	30 Jul 2023

Source: https://apps.who.int/iris/bitstream/handle/10665/372273/AFRO-Cholera%20bulletin.23_Final.pdf

Dengue fever – Global

As of 27 July 2023, over three million cases of dengue fever have been reported globally, with over 1 500 dengue-related deaths. Dengue has been classified by WHO as one of the top 10 threats to public health, and is endemic in 129 countries. While most cases are reported in Asia and South America, prevalence in other regions is increasing, due to factors that include rapid urbanisation, globalisation and change in climates. The disease vector is the *Aedes aegypti* mosquito, which has now populated new areas of Asia, South and Central America, Africa, Australia and southern Europe. The following is a summary of dengue reports globally:

- **Region of the Americas:** Between 1 January 2023 and 1 July 2023, 2 997 097 dengue cases and 1 302 dengue related deaths were reported (CFR 0.04%). Brazil had the highest number of reported cases (n=2 376 522) followed by Peru (n=188 326) and Bolivia (n=133 779).
- **Bangladesh:** Between 1 January 2023 and 7 August 2023, 69 483 confirmed dengue cases and 347 dengue-related deaths were reported (CFR 0.5%). Dengue is endemic to Bangladesh however the current outbreak is atypical in terms of seasonality and magnitude compared to previous years. A survey of *Aedes aegypti* populations before the monsoon season showed that mosquito density and number of hotspots were at the highest levels in the past five years.
- **Malaysia:** Between 1 January 2023 and 30 June 2023, 56 721 cases and 39 deaths were reported (CFR 0.1%). For the same period in 2022, 23 183 cases and 16 deaths were reported (CFR 0.7%).
- **Sudan:** Dengue was recorded in the capital city of Khartoum for the first time. Dengue fever is endemic in Sudan, however, previous outbreaks were limited to peripheral provinces.
- **Australia:** Between 1 January 2023 and 9 July 2023, 446 cases were reported. There have been no deaths.
- **France:** As of 4 August 2023, France reported two autochthonous cases of dengue fever. This is the first report of autochthonous cases in Europe for the 2023 calendar year.

Local transmission of dengue has not been reported in South Africa in 2023, however, the *Aedes aegypti* mosquito is present in certain regions of the country, namely the KwaZulu-Natal Province coastline. A lesson from the COVID-19 pandemic is that, as part of the global community, one country cannot feel at ease when other countries are not, especially with the insight that the dengue virus vector territory is expanding and cases are being seen where they have never been reported before. Clinicians are urged to maintain a high index of suspicion for dengue fever in anyone returning from dengue-endemic regions beyond our borders, presenting with signs and symptoms of the disease.

Sources: <https://www.ecdc.europa.eu/en/dengue-monthly>, <https://dndi.org/diseases/dengue/>, https://reliefweb.int/report/argentina/disease-outbreak-news-dengue-region-americas-19-july-2023?gclid=Cj0KCQjwuZGnBhD1ARIsACxbAViLvafCxmf4OF3yuVuKOcv8SGJ9McrbOnqJQG4fuygqj2zRikX3GoUaAi4yEALw_wcB, https://cdn.who.int/media/docs/default-source/wpro---documents/emergency/surveillance/dengue/dengue-20230803.pdf?sfvrsn=5160e027_115, <https://www.malariaconsortium.org/pages/dengue-is-africa-ready-to-respond.htm>, https://www.ecdc.europa.eu/sites/default/files/documents/communicable-disease-threats-report-week-32-2023_0.pdf

WHO AFRO UPDATE

WEEKLY BULLETIN ON OUTBREAKS AND OTHER EMERGENCIES

Week 33: 14 - 20 August 2023
Data as reported by: 17:00; 20 August 2023

World Health Organization
African Region
Emergency Preparedness and Response

1

New events

141

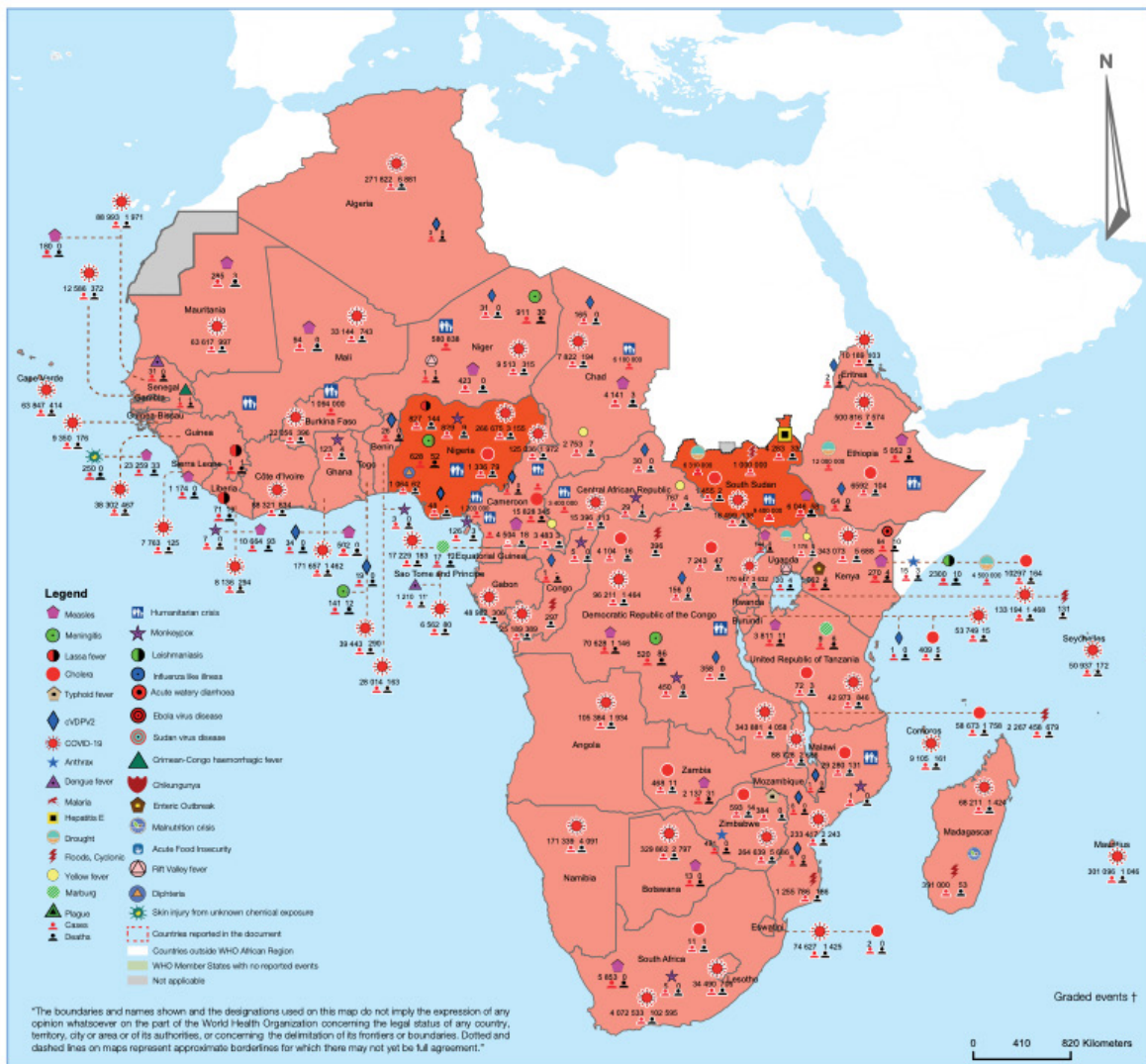
Ongoing events

123

Outbreaks

19

Humanitarian crises



4 Grade 3 events	3 Grade 2 events	0 Grade 1 events	36 Ungraded events
2 Protracted 3 events	6 Protracted 2 events	0 Protracted 1 events	

Figure 9. The Weekly WHO Outbreak and Emergencies Bulletin focuses on selected public health emergencies occurring in the WHO African Region. The African Region WHO Health Emergencies Programme is currently monitoring 141 events. For more information, see link below:
<https://apps.who.int/iris/bitstream/handle/10665/372631/OEW33-1420082023.pdf>