NATIONAL INSTITUTE FOR COMMUNICABLE DISEASES
Division of the National Health Laboratory Service

The National Institute for Communicable Diseases

Division of Public Health, Surveillance and Response

NOTIFIABLE MEDICAL CONDITIONS SURVEILLANCE SYSTEM

July 2024 Report

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Introduction

Data used in this report was drawn from the NMC-SS on **08 August 2024**. The most recent report should always be viewed and can be found in NMCSS surveillance reports

The purpose of this report is to describe the number of notifications received by the Notifiable Medical Conditions Surveillance System (NMCSS). The report is publicly available and can be used by health professionals, researchers, the public, or any other stakeholder. The purpose of disseminating this information is to inform any public health action - NMCSS data has limitations (see NMCSS interpretation.), but serves as a public health signal that may warrant further investigation.

This report also monitors some surveillance system attributes. Including average notifications by facilities, data quality and timeliness of clinical diagnosis and notifications over time. (**See Appendix nos. 1 and 3**).

While this information is also publicly available, we aim this section of the report at those involved in notifying. These include Infection Prevention Control practitioners at facilities, Nurses, Doctors, pathologists, and laboratory staff.

Category 4 NMCs, COVID-19, and multi-system inflammatory syndrome (MIS-C) have been excluded from this report. Where weeks are presented, the Epi-week according to the CDC Epi-weeks are used.

Highlights

- Due to unforeseen circumstances, the laboratory notifications system was offline and no laboratory notifications are included in this report. Information will be shared once it is available.
- A total of 7 069 cases were notified in July 2024; most were category 2 conditions.
- Category 1 cases were reported in a median (IQR) of 0 (0, 1) days.
- There were 377 average active users of the NMC App in July 2024.

NMC Reporting application.

- NMC Reporting App. is available on both web and mobile platforms
- Use recommended browsers to access the NMC reporting App for notifications, and searching of cases and reports.
- Register if you have no NMC account and you can reset the password if you have not used the application for over 12 months.

NOTES: For any additional information contact the NMC national technical team: NMCAppSupport@nicd.ac.za or NMC hotline 072 621 3805. Please refer to Appendices for NMC data flow, definitions and interpretation of epidemiology data in this report.

DATA IS CONTINUOUSLY CLEANED, DE-DUPLICATED, AND UPDATED, HENCE IS SUBJECT TO CHANGE. ALL NUMBERS REPORTED ARE PRELIMINARY UNLESS OTHERWISE STATED. DATE OF DIAGNOSIS IS USED FOR REPORTING.

Current notification trends
Trends of notifications of selected conditions are presented below. Notifications that are confirmed are shown first. Confirmed notifications are verified and confirmed by the relevant centre at the NICD and can be considered confirmed cases.

Confirmed notifications
Epi-table

Table 1: *Number of confirmed notifications on NMCSS per Epi-week in 2024. The average weekly notifications are calculated based on notifications received in 2022 and 2023 with a confidence interval.*

	Average Notifications		Epi-weeks																			
Characteristic		**95% CI[1]**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**
Acute flaccid paralysis	0.11	1.0, 2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Acute rheumatic fever	0.0240	1.0, 1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Botulism	0.0068	NA, NA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cholera	0.78	1.5, 3.0	2	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Congenital rubella syndrome	0.0137	NA, NA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Covid-19	325	24, 235	6	3	1	4	7	4	4	16	8	7	4	11	2	3	0	0	0	0	0	0
Crimean-Congo viral haemorrhagic fever (human)	0.0171	NA, NA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diphtheria	0.08	1.0, 1.0	0	0	0	0	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Enteric fever (typhoid or paratyphoid fever)	1.25	1.5, 2.0	3	0	1	1	2	0	0	4	1	1	2	0	0	0	0	0	0	0	1	0
Foodborne illness outbreak	0.11	1.0, 2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Listeriosis	0.53	1.0, 1.5	1	0	0	0	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0
Malaria	99	77, 95	52	34	40	42	55	53	51	63	44	59	35	28	29	26	9	8	13	22	16	2
Measles	1.38	2.0, 2.5	3	0	1	2	1	2	3	3	1	1	2	9	3	3	0	0	0	0	0	0
Meningococcal disease	0.92	1.5, 2.0	0	1	3	1	2	2	2	6	2	6	5	2	1	2	0	2	5	2	0	0
Mpox	0.0753	1.0, 4.0	0	0	0	0	0	0	0	1	0	1	1	2	2	5	4	6	0	0	0	0
Pertussis	10	11, 15	10	11	6	5	12	7	21	3	4	3	4	1	5	5	1	6	7	8	6	2
Rabies	0.09	1.0, 1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
Respiratory disease caused by a novel respiratory pathogen	0.0068	NA, NA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rubella	1.27	2.0, 4.5	4	25	0	10	2	4	5	3	1	5	1	5	14	7	1	0	0	0	0	0

[1]CI = Confidence Interval

Trends Plot

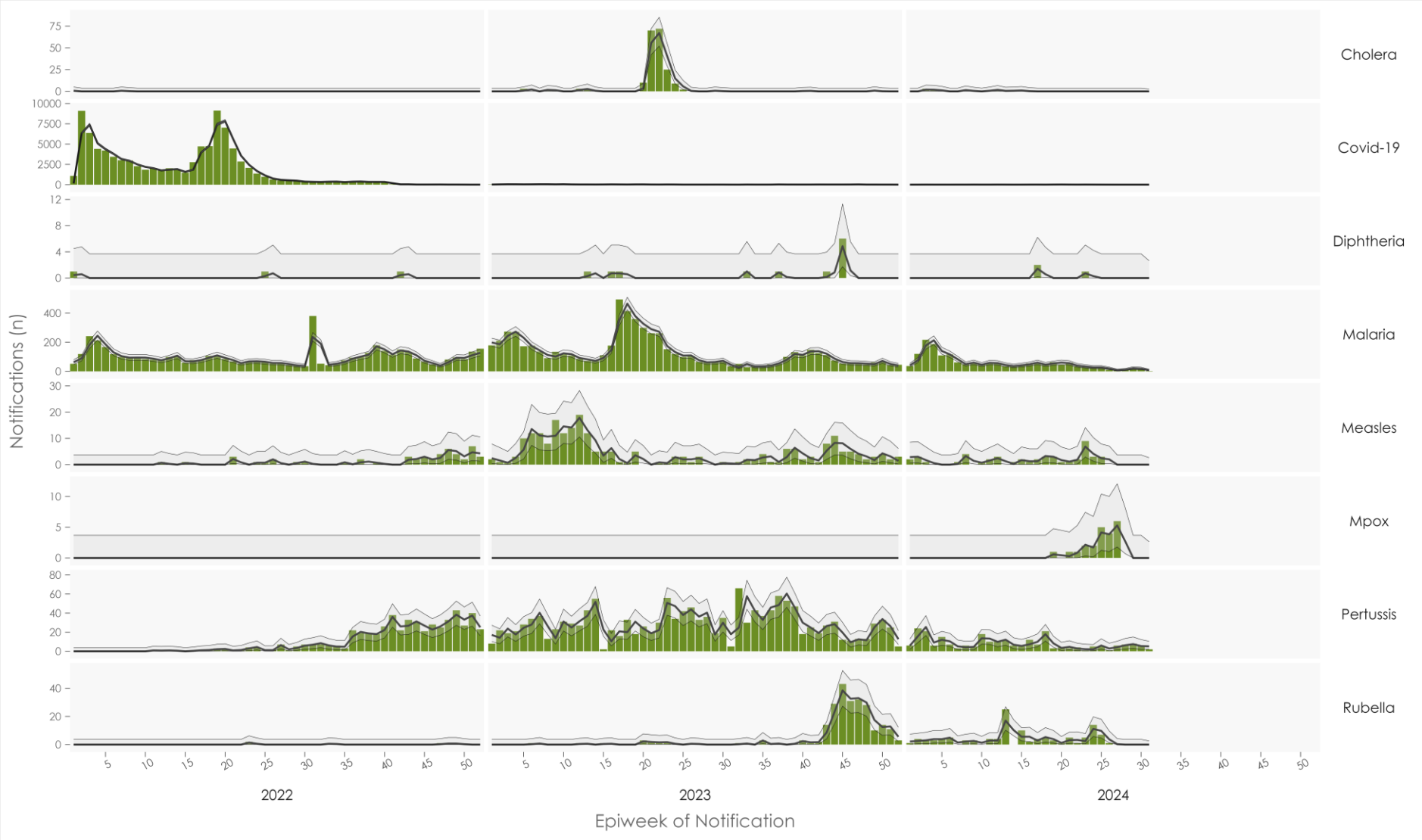


Figure 1: Trend of weekly number of confirmed notifications for selected category 1 conditions reported to the NMC, in South Africa; January 2022-July, 2024

All Category 1 Conditions at a glance

Table 2: The number of notifications that are suspected and confirmed for category 1 conditions notified during July 2024

Condition	**Overall**, N = 582[1]	**Confirmed**, N = 94[1]	**Suspected**, N = 488[1]
Acute flaccid paralysis	19	0	**19**
Acute rheumatic fever	1	1	0
Anthrax	0	0	0
Botulism	1	0	**1**
Cholera	1	0	**1**
Congenital rubella syndrome	1	0	**1**
Diphtheria	1	0	**1**
Enteric fever (typhoid or paratyphoid fever)	12	1	**11**
Foodborne illness outbreak	71	0	**71**
Haemolytic uraemic syndrome (HUS)	0	0	0
Listeriosis	2	0	**2**
Malaria	52	52	0
Ebola virus (VHF)	0	0	0
Marburg virus (VHF)	0	0	0
Measles	200	0	**200**
Meningococcal disease	26	9	**17**
Mpox	138	4	**134**
Pertussis	31	25	**6**
Plague	0	0	0
Poliomyelitis	0	0	0
Rabies	9	2	**7**
Respiratory disease caused by a novel respiratory pathogen	2	0	**2**
Rift Valley fever (human)	0	0	0
Rubella	15	0	**15**
Smallpox	0	0	0
Crimean-Congo viral haemorrhagic fever (human)	0	0	0
Yellow fever	0	0	0

[1]Suspected and confirmed cases are independent and are not totalled - suspected and confirmed cases are distinct.

NMC data summary, July 2024

A total of 7 069 current and delayed cases were notified to the NMCSS during July 2024 **(See Table 9 for further breakdowns and Appendix no.3 for definitions)**. There were 7,038 current notifications; the majority (6,456, 92%) were category 2 conditions. The provinces with the highest number of notifications were GP (2 138, 30%), KZN (1 437, 20%), and WC (1 255, 18%). The provinces with the least notifications were MP (166, 2.4%), and NW (264, 3.8%). 31 back-captured clinical notifications were diagnosed between May 2024 and July 2024 and were notified during July 2024. The majority (8, 26%) of those notifications were Malaria. (**See Appendix No.1**).

The majority of the notified cases were males (4 136, 59%). Individuals in the 35–39-year age group represented the majority (876, 13%) of notified cases. At the time of notification, 2 291 (33%) of the notified cases were hospitalised, while 61 (0.9%) were transferred to another healthcare facility. There were 115 deaths notified during the reporting period.

Category 1 notifications

Measles was the most common (200, 34%) category 1 notification **(suspected and confirmed)**. The province with the highest number of notifications for Measles was WC (71,35.5%). **Malaria** was the most common (52, 55%) category 1 notification **confirmed**. The province with the highest number of confirmed notifications for Malaria was GP (22,42.3%).

Table

Table 3: *The number of notifications by province and number of notifications that are suspected and confirmed by vital status, July 2024*

	Provinces									Case		Deaths	
Condition	EC[1]	FS[1]	GP[1]	KZN[1]	LP[1]	MP[1]	NC[1]	NW[1]	WC[1]	Confirmed[1]	Suspected[1]	Confirmed[1]	Suspected[1]
Acute flaccid paralysis	3	0	5	2	2	1	1	1	4	0	19	0	0
Acute rheumatic fever	0	0	0	0	0	0	0	0	1	1	0	0	0
Anthrax	0	0	0	0	0	0	0	0	0	0	0	0	0
Botulism	0	0	0	0	1	0	0	0	0	0	1	0	0
Cholera §	0	0	1	0	0	0	0	0	0	0	1	0	0
Congenital rubella syndrome	0	0	0	0	0	0	0	0	1	0	1	0	0
Diphtheria *	0	0	0	1	0	0	0	0	0	0	1	0	0
Enteric fever (typhoid or paratyphoid fever)	0	0	9	1	0	0	0	0	2	1	11	0	0
Foodborne illness outbreak	4	0	41	1	16	4	0	4	1	0	71	0	0
Haemolytic uraemic syndrome (HUS)	0	0	0	0	0	0	0	0	0	0	0	0	0
Listeriosis	0	0	0	0	0	0	0	0	2	0	2	0	1
Malaria	1	4	22	10	5	4	1	0	5	52	0	2	0
Ebola virus (VHF)	0	0	0	0	0	0	0	0	0	0	0	0	0
Marburg virus (VHF)	0	0	0	0	0	0	0	0	0	0	0	0	0
Measles	18	2	55	37	1	5	7	4	71	0	200	0	0
Meningococcal disease	7	0	5	0	0	0	1	1	12	9	17	1	3
Mpox	5	4	38	69	2	9	0	4	7	4	134	0	4
Pertussis	4	2	13	3	2	1	1	1	4	25	6	0	0
Plague	0	0	0	0	0	0	0	0	0	0	0	0	0
Poliomyelitis	0	0	0	0	0	0	0	0	0	0	0	0	0
Rabies	1	0	4	4	0	0	0	0	0	2	7	2	0
Respiratory disease caused by a novel respiratory pathogen	0	0	2	0	0	0	0	0	0	0	2	0	0
Rift Valley fever (human)	0	0	0	0	0	0	0	0	0	0	0	0	0
Rubella	0	1	5	0	0	0	1	0	8	0	15	0	0
Smallpox	0	0	0	0	0	0	0	0	0	0	0	0	0
Crimean-Congo viral haemorrhagic fever (human)	0	0	0	0	0	0	0	0	0	0	0	0	0
Yellow fever	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	43	13	200	128	29	24	12	15	118	94	488	5	8

Plot

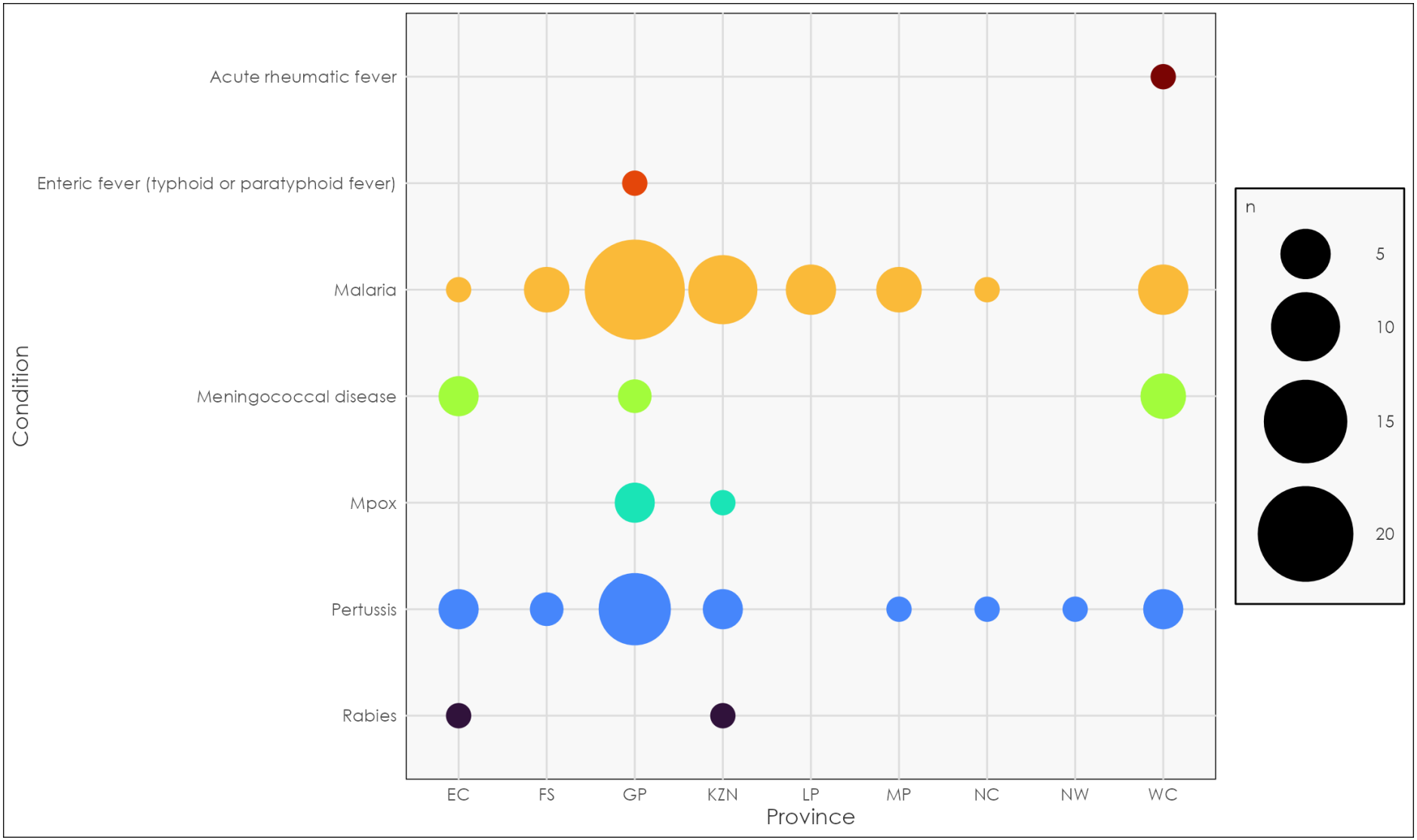


Figure 2: Distribution of all Category 1 NMCs notifications by province notified during July, 2024. *All notifications include both suspected and confirmed cases

Category 2 notifications

Category 2 conditions must be notified within 7 days of diagnosis. They are important to monitor disease burden trends.

Table
Pulmonary TB was the most common (4,724, 73%) category 2 notification. The province with the highest number of notifications for Pulmonary TB was GP (1298, 20.1%).

***Table 4**: The number of notifications by province and number of notifications that are suspected and confirmed by vital status*.

	Provinces									Case		Deaths	
Condition	EC[1]	FS[1]	GP[1]	KZN[1]	LP[1]	MP[1]	NC[1]	NW[1]	WC[1]	Confirmed[1]	Suspected[1]	Confirmed[1]	Suspected[1]
Agricultural or stock remedy poisoning	3	11	47	0	0	5	1	5	11	0	83	0	4
Bilharzia (schistosomiasis)	0	0	14	9	34	1	0	1	2	0	61	0	0
Brucellosis	0	1	0	0	0	0	0	0	1	0	2	0	0
Congenital syphilis	4	5	5	24	0	11	3	1	25	0	78	0	2
Haemophilus influenzae type B	0	1	2	0	0	0	0	0	1	0	4	0	0
Hepatitis A	3	3	18	22	1	4	1	4	19	0	75	0	1
Hepatitis B	16	1	32	13	3	3	0	3	10	1	80	0	1
Hepatitis C	1	0	5	0	0	0	0	0	3	0	9	0	0
Hepatitis E	0	0	0	0	0	0	0	0	0	0	0	0	0
Lead poisoning	0	0	0	0	0	1	0	0	0	0	1	0	0
Legionellosis	0	0	0	1	0	0	1	0	2	4	0	1	0
Leprosy	0	0	0	0	0	0	0	0	0	0	0	0	0
Maternal death (pregnancy, childbirth and puerperium)	1	0	3	0	2	0	0	0	0	0	6	0	6
Mercury poisoning	0	0	0	0	0	0	0	0	0	0	0	0	0
Soil-transmitted helminths	1	0	1	0	0	0	0	0	0	0	2	0	0
Tetanus	0	0	1	0	0	0	0	0	1	0	2	0	0
Tuberculosis: extensively drug-resistant (XDR -TB)	2	0	1	3	3	0	1	1	2	0		0	
Tuberculosis: multidrug- resistant (MDR -TB)	10	7	32	25	0	0	1	0	22	0		0	
Tuberculosis: extra-pulmonary	92	68	479	237	59	17	41	56	165	0		0	
Tuberculosis: pulmonary	504	242	1 298	975	240	100	314	178	873	0		0	
Total													

	Provinces									Case		Deaths	
Condition	**EC**[1]	**FS**[1]	**GP**[1]	**KZN**[1]	**LP**[1]	**MP**[1]	**NC**[1]	**NW**[1]	**WC**[1]	**Confirmed**[1]	**Suspected**[1]	**Confirmed**[1]	**Suspected**[1]
1	637	339	1 938	1 309	342	142	363	249	1 137	5	6 451	1	101

[1]n;

* The TB module is under development to align with laboratory-confirmed TB cases.

Plot

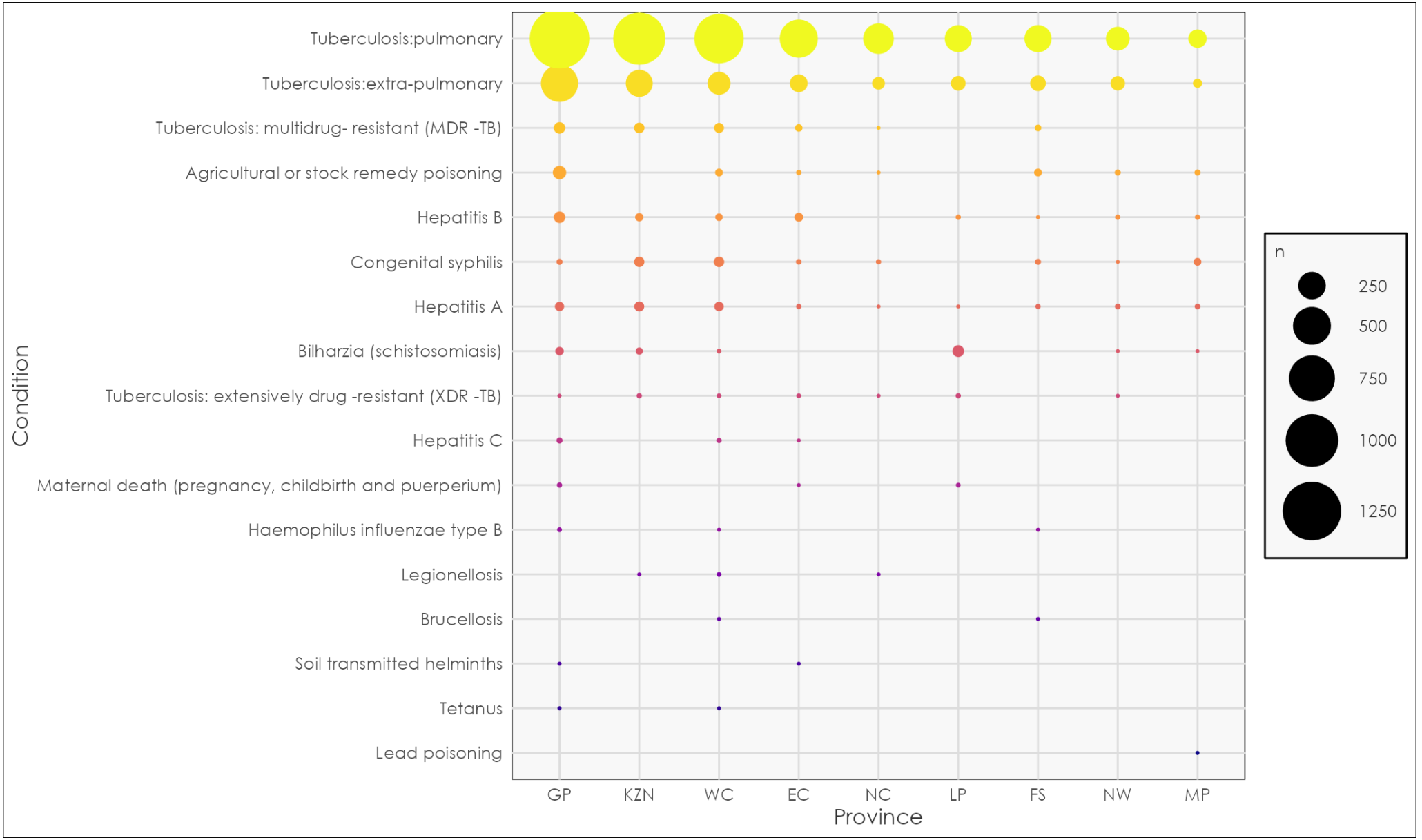


Figure 3: Distribution of all Category 2 NMCs notifications by province notified during July 2024. *All notifications include both suspected and confirmed cases

Table 5: *Description of NMC notifications by case source*

NMC Category	**Overall** N = 7 038	**Clinical notifications**, n = 7 037	**Merged Cases**, n = 1	**Laboratory notifications**, n = 0
Category 1	582 (8.3%)	582 (8.3%)	0 (0%)	0 (NA%)
Category 2	6 456 (92%)	6 455 (92%)	1 (100%)	0 (NA%)

Notification types and merging

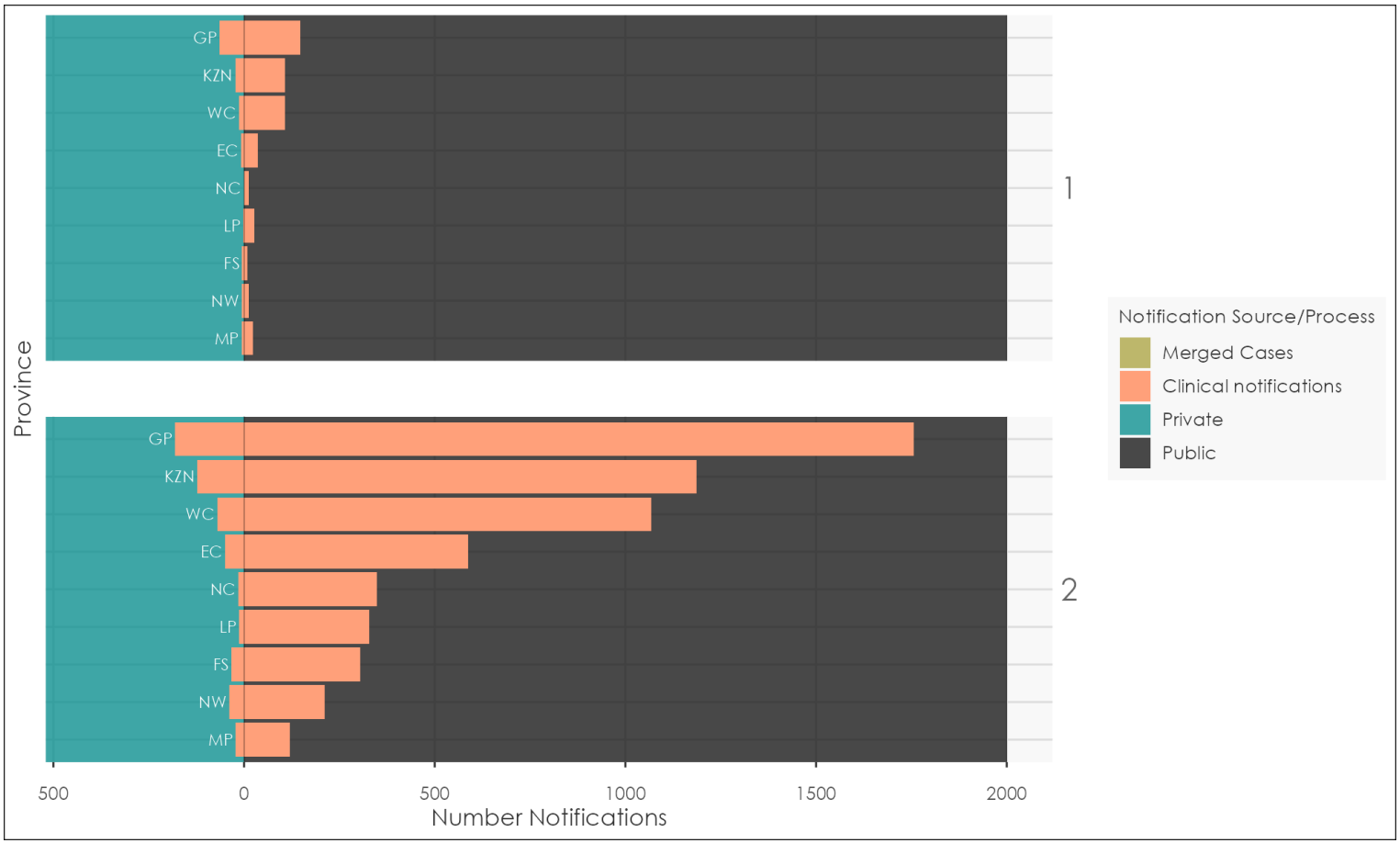


Figure 4: Distribution of Category 1 notification type by province during July, 2024

There were 665 (9.4%) clinical notifications from the private sector (i.e. private hospitals, private practice and the mining industry) compared to 6 355 (90%) in the public sector. Clinical notifications using the NMC Reporting Application made up 0 (0%) (more details in Table 6).

Table 6: Clinical notifications notified by provinces, reporting platform, and sector

Province	**Overall** N = 7 020	**App - Private**, n = 655	**App - Public**, n = 6 185	**Paper-based - Private**, n = 10	**Paper-based - Public**, n = 170
GP	2 131	237 (11%)	1 886 (89%)	4 (0.2%)	4 (0.2%)
KZN	1 437	140 (9.7%)	1 289 (90%)	4 (0.3%)	4 (0.3%)
WC	1 252	82 (6.5%)	1 093 (87%)	0 (0%)	77 (6.2%)
EC	674	57 (8.5%)	567 (84%)	1 (0.1%)	49 (7.3%)
NC	375	16 (4.3%)	345 (92%)	0 (0%)	14 (3.7%)
LP	370	17 (4.6%)	351 (95%)	0 (0%)	2 (0.5%)
FS	352	39 (11%)	305 (87%)	1 (0.3%)	7 (2.0%)
NW	263	42 (16%)	210 (80%)	0 (0%)	11 (4.2%)
MP	166	25 (15%)	139 (84%)	0 (0%)	2 (1.2%)

The average active users on the NMC App

There were 377 average active users of the NMC App in July 2024

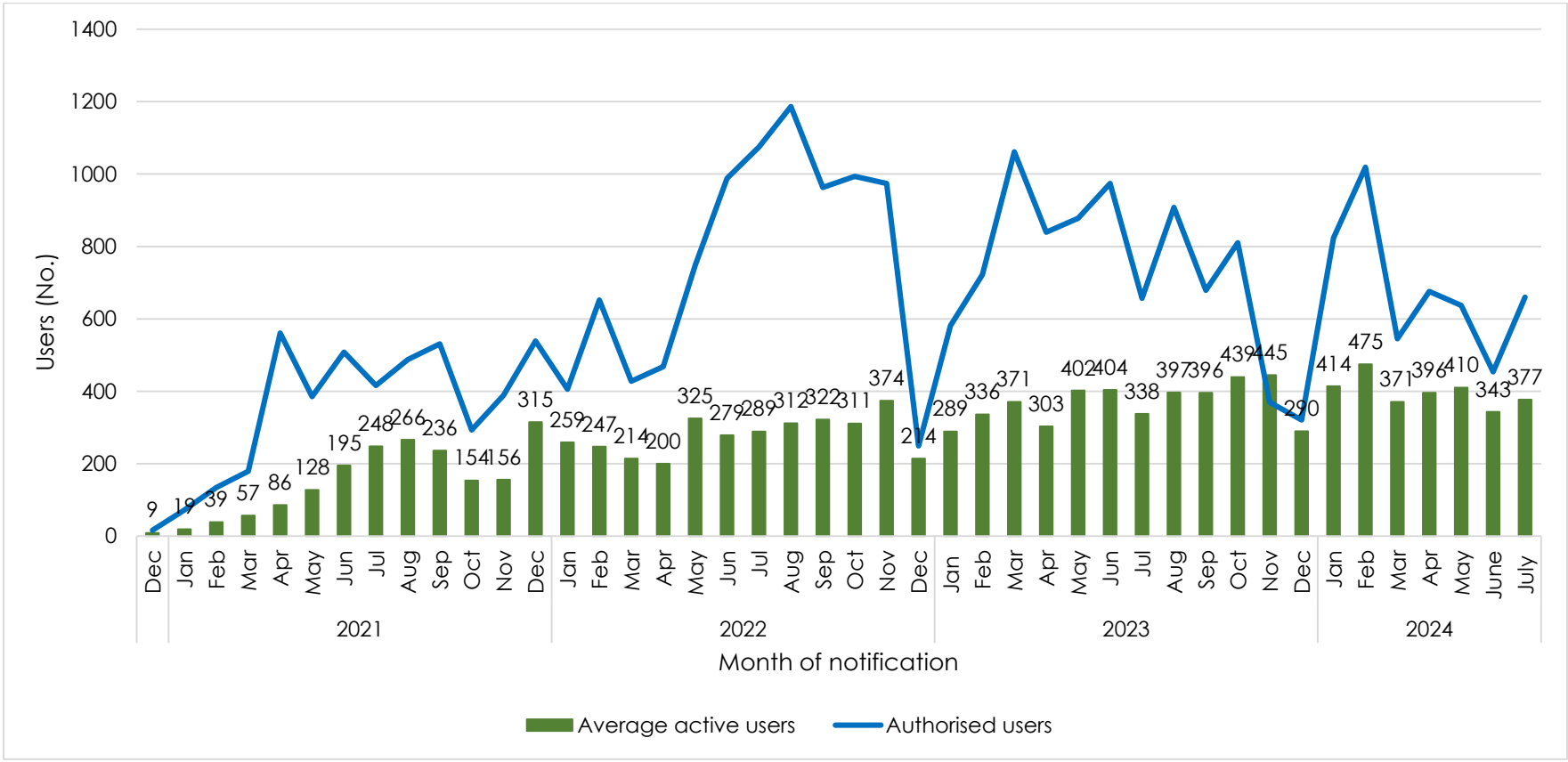


Figure 6: Authorised users and average active users of the NMC Reporting App by month of notification, December 2020-July 2024

Newly registered users

Figure 5 shows the trends of newly registered users and their occupations.

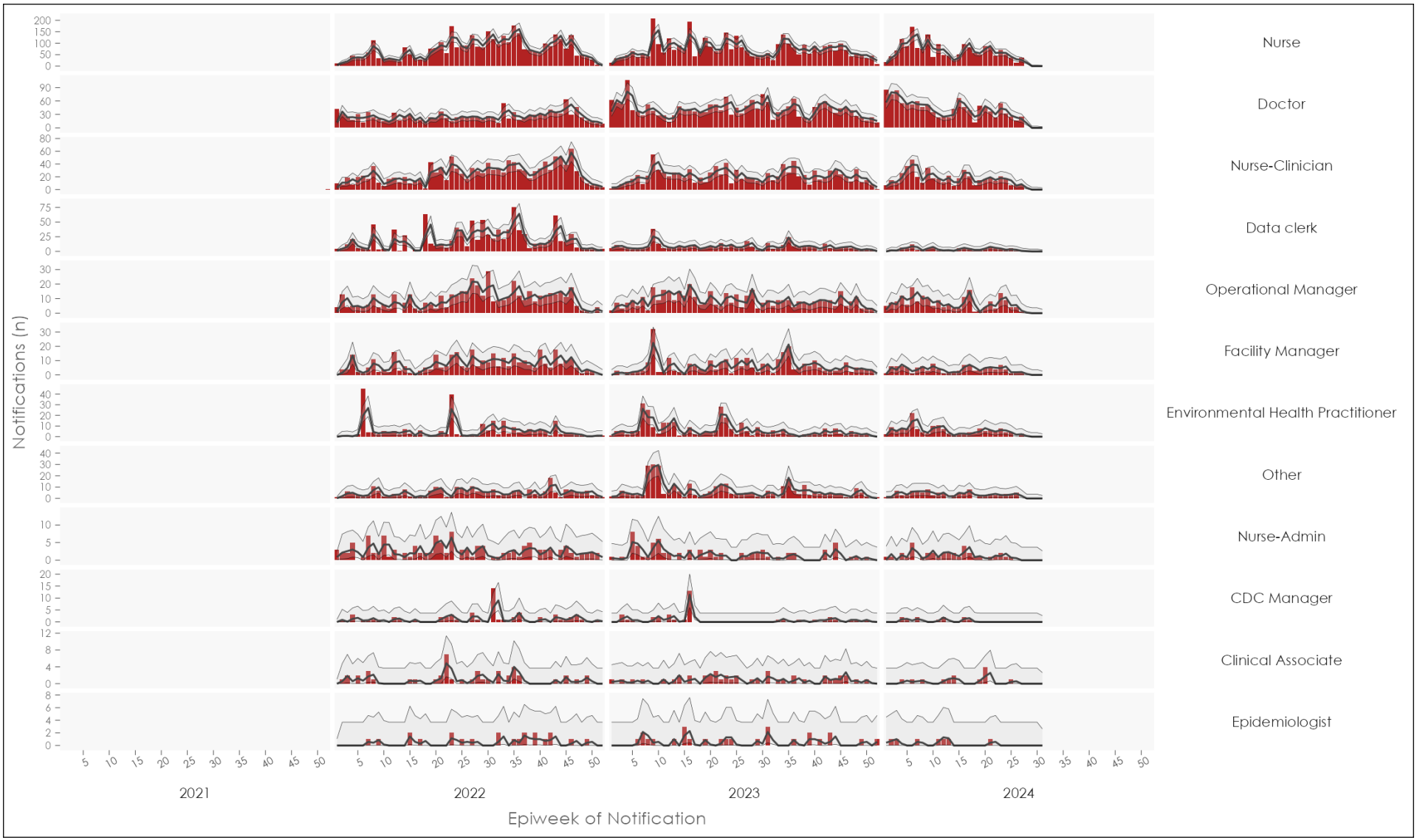


Figure 6: Trends of new users registered by occupation in South Africa, Jan 2022- July 2024

Data quality

Completeness

Table 7: *NMC data completeness of clinical notifications on both reporting platforms, notified during July 2024*

	Android N = 2 117	**iOS** N = 475	**MicroStrategy/SDW** N = 1	**Paper-based** N = 185	**Web** N = 4 260
Folder Number	1 696 (80%)	433 (91%)	1 (100%)	144 (78%)	3 554 (83%)
First Name	2 117 (100%)	475 (100%)	1 (100%)	185 (100%)	4 259 (100%)
Surname	2 117 (100%)	475 (100%)	1 (100%)	184 (99%)	4 260 (100%)
Symptom Onset Date	2 117 (100%)	475 (100%)	1 (100%)	185 (100%)	4 237 (99%)
Date of Diagnosis	2 117 (100%)	475 (100%)	1 (100%)	185 (100%)	4 260 (100%)
Vital Status	2 066 (98%)	475 (100%)	1 (100%)	175 (95%)	4 212 (99%)

ID number completeness

Table 8: *Length of ID numbers inputted on the NMC system during July 2024*

Length of ID number	**Android** N = 2 117[1]	**iOS** N = 475[1]	**MicroStrategy/SDW** N = 1[1]	**Paper-based** N = 185[1]	**Web** N = 4 260[1]
Not complete	854 (40%)	206 (43%)	1 (100%)	109 (59%)	1 262 (30%)
2	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (<0.1%)
3	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (<0.1%)
5	0 (0%)	0 (0%)	0 (0%)	0 (0%)	3 (<0.1%)
6	0 (0%)	50 (11%)	0 (0%)	1 (0.5%)	504 (12%)
7	0 (0%)	0 (0%)	0 (0%)	0 (0%)	10 (0.2%)
8	0 (0%)	0 (0%)	0 (0%)	0 (0%)	39 (0.9%)
9	0 (0%)	1 (0.2%)	0 (0%)	0 (0%)	6 (0.1%)
10	0 (0%)	12 (2.5%)	0 (0%)	0 (0%)	63 (1.5%)
11	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (<0.1%)
12	0 (0%)	2 (0.4%)	0 (0%)	0 (0%)	24 (0.6%)
13	1 263 (60%)	204 (43%)	0 (0%)	75 (41%)	2 346 (55%)

[1]n (%)

Hospital Form Completeness

Table 9: *Completion of hospitalisation form for notifications reported as inpatients with category 1 conditions. July 2024 / Complete refers to >80% of variables completed.*

Hospital Form Completed	**Complete**, n = 28 (13%)	**Incomplete**, n = 43 (20%)	**Not Attempted**, n = 89 (42%)	**Only Symptoms completed**, n = 50 (24%)
Acute flaccid paralysis	1 (3.6%)	8 (19%)	6 (6.7%)	2 (4.1%)
Acute rheumatic fever	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Anthrax	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Botulism	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Cholera §	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Congenital rubella syndrome	1 (3.6%)	0 (0%)	0 (0%)	0 (0%)
Diphtheria *	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Enteric fever (typhoid or paratyphoid fever)	2 (7.1%)	2 (4.7%)	3 (3.4%)	3 (6.1%)
Foodborne illness outbreak	0 (0%)	3 (7.0%)	16 (18%)	14 (29%)
Haemolytic uraemic syndrome (HUS)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Listeriosis	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Malaria	6 (21%)	9 (21%)	11 (12%)	9 (18%)
Ebola virus (VHF)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Marburg virus (VHF)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Measles	1 (3.6%)	7 (16%)	6 (6.7%)	11 (22%)
Meningococcal disease	9 (32%)	0 (0%)	10 (11%)	2 (4.1%)
Mpox	0 (0%)	6 (14%)	33 (37%)	0 (0%)
Pertussis	8 (29%)	6 (14%)	3 (3.4%)	7 (14%)
Plague	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Poliomyelitis	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Rabies	0 (0%)	1 (2.3%)	1 (1.1%)	1 (2.0%)
Respiratory disease caused by a novel respiratory pathogen	0 (0%)	1 (2.3%)	0 (0%)	0 (0%)
Rift Valley fever (human)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Rubella	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Smallpox	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Crimean-Congo viral haemorrhagic fever (human)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Yellow fever	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Unknown	0	0	0	1

Timeliness

Time to notification is measured by the number of days from the time of diagnosis of the NMC to the time of notification. It took a median (IQR) of 0 (0, 2) days to report category 1 NMCs.

Table 10: *Symptoms of patients clinically notified and merged with lab notifications to the NMC, notified during July 2024*

Characteristic	**Category 1**, n = 613	**Category 2**, n = 6 456
Time to Notification	0 (0, 2)	3 (0, 14)
Back Capture Classification		
Back capture	31 (5.1%)	0 (0%)
Current	489 (80%)	4 209 (65%)
Delayed	93 (15%)	2 247 (35%)

Conclusion

The majority of notifications were clinical notifications. Patients who are hospitalised with a category 1 condition and notified still have poor completeness of the hospital form with the majority of notifications only having symptoms completed. ID numbers are poorly completed in notifications from SDW.

Recommendations

- We recommend clinicians complete all patient clinical and demographic details to improve hospital form completeness.
- We strongly recommend complete ID number capture in the SDW system to improve data quality and the ability for the NMCSS to merge clinical and laboratory notifications.
- We welcome stakeholders to send feedback and suggestions for the report. We also encourage reaching out for ingestion of data from data from data sources that existed before the launch of the NMCSS. Feel free to reach out to BrianB@nicd.ac.za and MatimbaM@nicd.ac.za.

Appendices

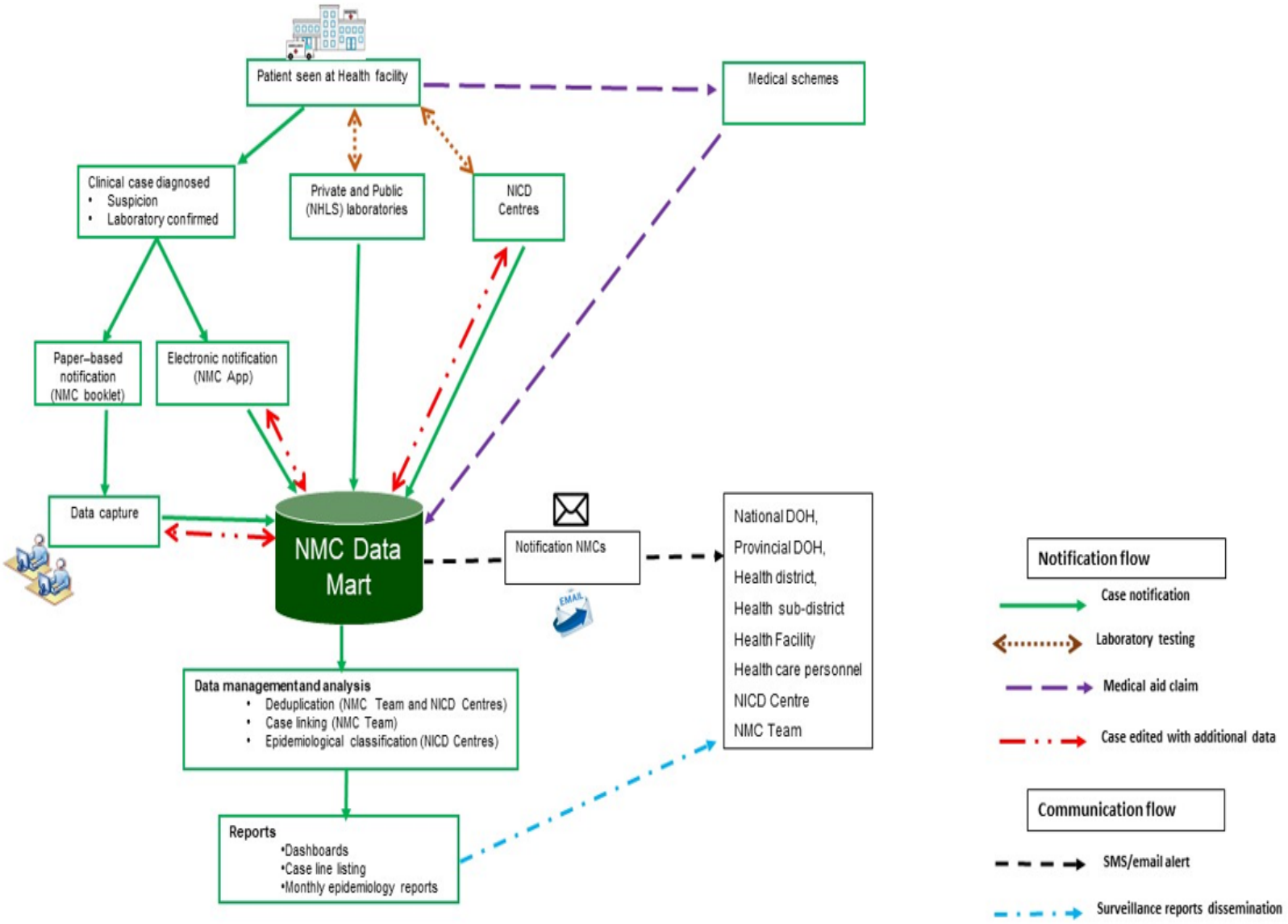
Appendix No. 1: Back-captured clinical notifications

*Table 11: Back-captured notifications by reporting province notified during July / *Back-captured notifications use the diagnosis date, and the recommended time to notification depending on the NMC category. See Appendix No. 3 for details*

	Overall	Province									Case Source			
Condition	**Overall**, (31)	**EC**, (2)	**FS**, (2)	**GP**, (12)	**KZN**, (2)	**LP**, (1)	**MP**, (6)	**NC**, (1)	**NW**, (2)	**WC**, (3)	**Android**, (3)[1]	**iOS**, (6)[1]	**Paper-based**, (1)[1]	**Web**, (21)[1]
Malaria	8 (26%)	1	0	3	1	0	0	0	1	2	0	1	1	6
Measles	6 (19%)	1	1	3	0	0	0	0	0	1	1	1	0	4
Pertussis	5 (16%)	0	0	1	0	1	3	0	0	0	0	0	0	5
Foodborne illness outbreak	4 (13%)	0	0	0	0	0	3	0	1	0	0	3	0	1
Acute flaccid paralysis	3 (9.7%)	0	0	3	0	0	0	0	0	0	0	0	0	3
Meningococcal disease	2 (6.5%)	0	0	1	0	0	0	1	0	0	1	1	0	0
Mpox	2 (6.5%)	0	0	1	1	0	0	0	0	0	0	0	0	2
Congenital rubella syndrome	1 (3.2%)	0	1	0	0	0	0	0	0	0	1	0	0	0

[1]SDW – Surveillance data warehouse/ MicroStrategy

Appendix No.2: Summary of NMCSS Data Flow



Appendix No.3: NMC Categories, and Case Classification Definitions
NMC categories

Category 1: NMCs are notified by the most rapid means available upon diagnosis, followed by a written or electronic notification to the Department of Health within 24 hours of diagnosis by healthcare providers, private health laboratories or public health laboratories. These conditions must be notified based on clinical suspicion irrespective of laboratory confirmation.

Category 2: NMCs notified through a written or electronic notification to the Department of Health of clinical or laboratory diagnosis within 7 days by healthcare providers, private health laboratories or public health laboratories.

Category 3: NMCs are notified through a written or electronic notification to the Department of Health within 7 days of diagnosis by public and private health laboratories.

Category 4: NMCs are notified through a written or electronic notification to the Department of Health within 1 month of diagnosis by public and private health laboratories.

Case Classification definitions

Clinical cases: are cases reported to the NMC by health care providers at facilities, either through the completion of a paper form that is faxed, emailed to the National Institute of Communicable Diseases (NICD), or by direct data entry into the NMC application on a PC, laptop or mobile device. The diagnosis is made by the clinician on the basis of case definitions published on the NICD website.

Laboratory cases: are cases that are downloaded into the NMC database directly from the National Health Laboratory Services (NHLS) laboratory information system. The NMC application applies the case definitions that are published on the NICD website. Private sector data is being sourced.

Merged cases: are cases where a case was notified by a health care provider at the facility (a 'clinical case') AND the laboratory issued a report with a positive result for the same case (a 'laboratory case). The NMC App is set up to automatically detect and link clinical and laboratory case notifications. The NICD specialist Centres and NMC data team review all cases and manually link any remaining clinical and laboratory cases

Notification capture times definitions

Current notification: Category 1 conditions notified within 2 days of diagnosis date. Category 2 and 3 conditions are notified within 7 days of diagnosis. All lab notifications without diagnosis date are classified as current.

Delayed notification: Category 1 conditions are notified within between 3 and 7 days of diagnosis date. Category 2 and 3 conditions are notified between 8 and 30 days of diagnosis.

Back capture notification: Category 1 conditions are notified more than 7 days after the diagnosis date. Category 2 and 3 conditions were notified more than 30 days after the diagnosis date.

Epi-weeks: Epi-weeks used the CDC definition of a week starting on a Sunday and ending on a Saturday. The first Epi-week of the year is the week that contains the first Saturday of January. Epi-week 1 of 2024 started on 31 December 2023 and ended on 6 January 2024.

Appendix No.4: IDSR reporting template for IDSR conditions existing on NMC by under-5 and 5-and-over years and vital status.

Table 12: *The number of IDSR conditions the laboratory notified to the NMC using the IDSR reporting template of under and 5-and-above years by vital status.*

Condition	Notified/Suspected				Confirmed
	Under 5 A, N = 346[1]	**5 & over A**, N = 131[1]	**5 & over D**, N = 0[1]	**Under 5 D**, N = 8[1]	**N = 94**[1]
Acute flaccid paralysis	13	6	0	0	0
Acute rheumatic fever	0	0	0	0	1
Anthrax	0	0	0	0	0
Botulism	1	0	0	0	0
Cholera	1	0	0	0	0
Congenital rubella syndrome	1	0	0	0	0
Diphtheria	1	0	0	0	0
Enteric fever (typhoid or paratyphoid fever)	8	3	0	0	1
Foodborne illness outbreak	59	11	0	0	0
Haemolytic uraemic syndrome (HUS)	0	0	0	0	0
Listeriosis	1	0	0	1	0
Malaria	0	0	0	0	52
Ebola virus (VHF)	0	0	0	0	0
Marburg virus (VHF)	0	0	0	0	0
Measles	118	82	0	0	0
Meningococcal disease	12	1	0	3	9
Mpox	111	18	0	4	4
Pertussis	6	0	0	0	25
Plague	0	0	0	0	0
Poliomyelitis	0	0	0	0	0
Rabies	5	2	0	0	2
Respiratory disease caused by a novel respiratory pathogen	1	1	0	0	0
Rift Valley fever (human)	0	0	0	0	0
Rubella	8	7	0	0	0
Smallpox	0	0	0	0	0
Crimean-Congo viral haemorrhagic fever (human)	0	0	0	0	0
Yellow fever	0	0	0	0	0

[1]A = Cases who are alive.

D = Cases who are deceased.

Appendix No.5: Trends and Epi-table of all Category 1 notifications from 2022 to July 2024.
All Notifications
Epi-table

Table 13: *Number of notifications on NMCSS per Epi-week in 2024. The Average notifications are calculated based on notifications received in 2022 and 2023 with a confidence interval.*

	Average Notifications		Epi-weeks																				
Characteristic		**95% CI**[1]	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**
Acute flaccid paralysis	4.22	4.0, 5.0	5	1	6	4	8	3	7	9	5	4	6	8	7	9	3	3	4	5	5	5
Acute rheumatic fever	0.26	1.0, 1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Anthrax	0.0103	NA, NA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Botulism	0.0479	1.0, 1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Cholera	5.2	2.5, 6.5	6	3	2	2	2	0	3	0	0	1	0	0	0	1	0	0	0	1	0	0
Congenital rubella syndrome	1.98	2.5, 2.5	2	4	1	2	2	2	3	1	5	4	2	3	3	3	0	2	0	0	0	0
Covid-19	951	529, 837	101	99	102	148	218	251	250	385	356	364	251	196	208	194	143	148	48	0	0	0
Crimean-Congo viral haemorrhagic fever (human)	0.11	1.0, 1.0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Diphtheria	0.48	1.0, 1.5	1	0	0	0	0	2	0	0	1	1	0	1	0	4	0	0	0	0	1	0
Ebola virus (VHF)	0.0034	NA, NA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Enteric fever (typhoid or paratyphoid fever)	3.41	3.5, 4.0	6	1	8	4	11	2	4	7	4	5	4	2	5	2	2	0	0	3	5	4
Foodborne illness outbreak	9	7.0, 9.0	31	4	15	9	13	3	12	7	21	6	4	3	1	8	5	29	5	15	7	19
Haemolytic uraemic syndrome (HUS)	0.05	1.0, 1.0	0	0	0	0	0	1	0	1	0	0	0	0	2	0	0	0	0	0	0	0
Listeriosis	1.60	1.5, 2.0	2	0	0	0	0	0	1	2	1	1	1	1	0	2	0	2	0	0	0	0
Malaria	99	77, 95	52	34	40	42	55	53	51	63	44	59	35	28	29	26	9	8	13	22	16	2
Marburg virus (VHF)	0.0034	NA, NA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Measles	27	22, 30	52	46	44	41	64	91	60	70	80	82	63	75	85	79	46	44	58	48	36	21
Meningococcal disease	2.70	3.0, 3.5	3	3	5	3	2	3	2	6	3	6	6	4	4	4	1	5	9	6	6	2
Mpox	0.7432	4.0, 29	0	0	0	0	0	0	0	1	0	1	2	2	10	28	29	49	27	33	29	6
Pertussis	18	15, 23	16	13	14	17	17	16	33	18	10	19	13	11	10	11	6	8	8	8	10	2
Plague	0.0034	NA, NA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	Average Notifications		Epi-weeks																			
Characteristic		**95% CI**[1]	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**
Poliomyelitis	0.0205	NA, NA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rabies	0.667	1.5, 2.0	0	0	2	0	0	0	0	0	0	0	0	0	2	1	0	1	2	3	2	1
Respiratory disease caused by a novel respiratory pathogen	7	3.0, 8.0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	1	0
Rift Valley fever (human)	0.0034	NA, NA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rubella	9	4.5, 6.0	32	49	12	23	12	29	26	27	31	50	16	49	37	32	7	5	4	3	3	0
Smallpox	0.0685	1.0, 2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Waterborne illness outbreak - undefined	0.17	1.0, 1.5	0	0	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
Yellow fever	0.0377	1.0, 1.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

[1]CI = Confidence Interval

Trends Plot

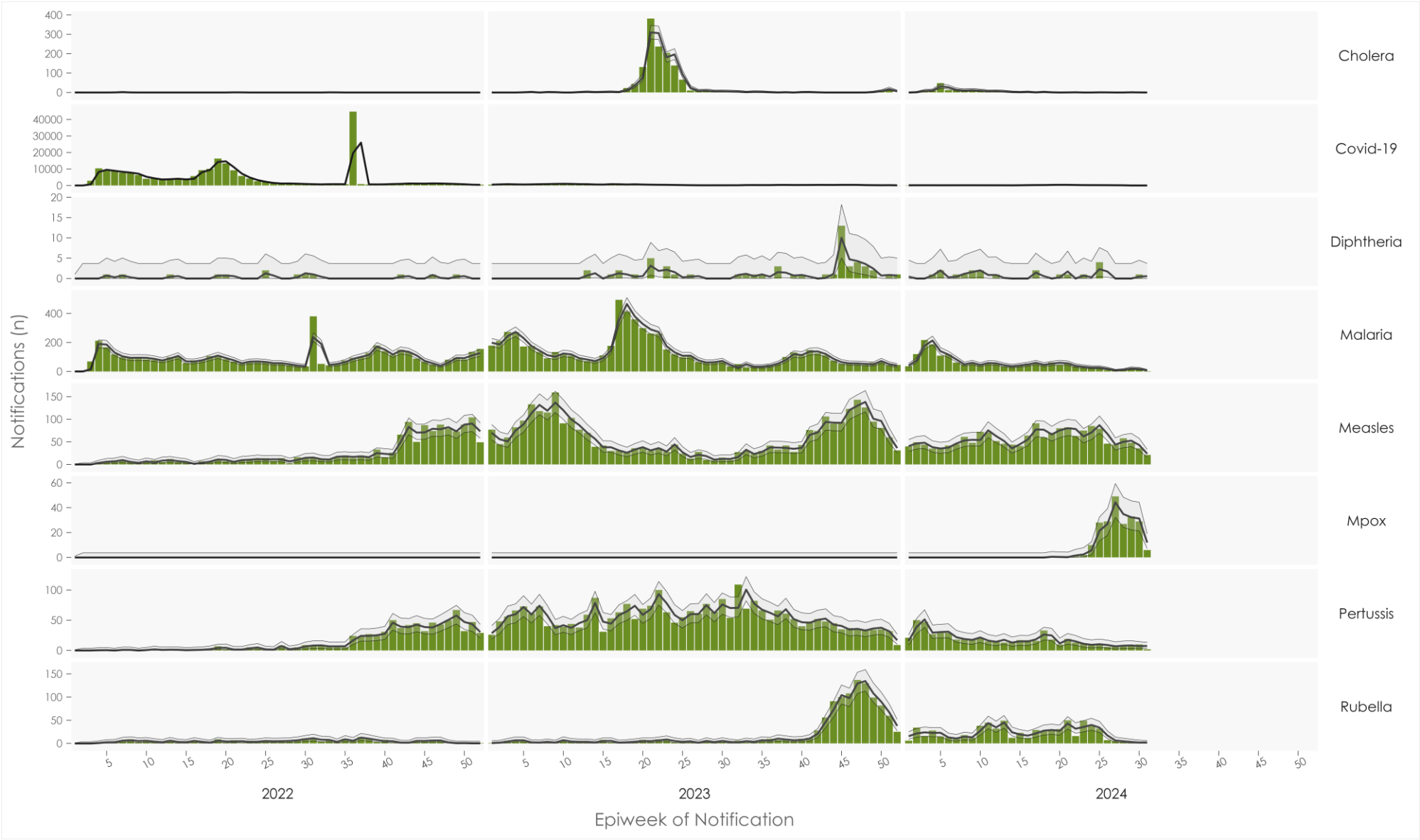


Figure 6: Trend of weekly number of all notifications for selected conditions reported to the NMC, in South Africa, January, 2022-July

END