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

August 2024

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Introduction

Data used in this report was drawn from the NMC-SS on **16 September 2024** and provinces information on notifications received over **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 general 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

- A total of 10 524 cases were notified in August 2024; most were category 2 conditions.
- Category 1 cases were reported in a median (IQR) of 0 (0, 1) days.

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 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]**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Acute flaccid paralysis	0.10	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	0.0236	1.0, 1.0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Botulism	0.0067	NA, NA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cholera	0.77	1.5, 3.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Congenital rubella syndrome	0.0135	NA, NA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Covid-19	320	24, 235	4	4	16	8	7	4	11	2	3	0	0	0	0	0	0	0	0	0	0	0
Crimean-Congo viral haemorrhagic fever (human)	0.0168	NA, NA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diphtheria	0.09	1.0, 1.0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	2	0
Enteric fever (typhoid or paratyphoid fever)	1.24	1.5, 2.0	0	0	4	1	1	2	0	0	0	0	0	0	0	1	0	0	2	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	0.52	1.0, 1.5	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0
Malaria	97	76, 94	53	51	63	44	59	35	28	29	26	9	8	13	22	16	9	13	13	14	14	0
Measles	1.35	2.0, 2.5	2	3	3	1	1	2	9	3	3	0	0	0	0	0	0	0	0	0	0	0
Meningococcal disease	0.93	1.5, 2.0	2	2	6	2	6	5	2	1	2	0	2	5	2	0	3	1	2	1	1	0
Mpox	0.0808	1.0, 4.0	0	0	1	0	1	1	2	2	5	4	6	0	0	0	2	0	0	0	0	0
Pertussis	10	10, 15	7	21	3	4	3	4	1	5	5	1	6	7	8	6	5	5	4	3	3	0
Rabies	0.09	1.0, 1.0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
Respiratory disease caused by a novel respiratory pathogen	0.0067	NA, NA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rubella	1.25	2.0, 4.5	4	5	3	1	5	1	5	14	7	1	0	0	0	0	0	0	0	0	0	0

[1]CI = Confidence Interval

Trends Plot

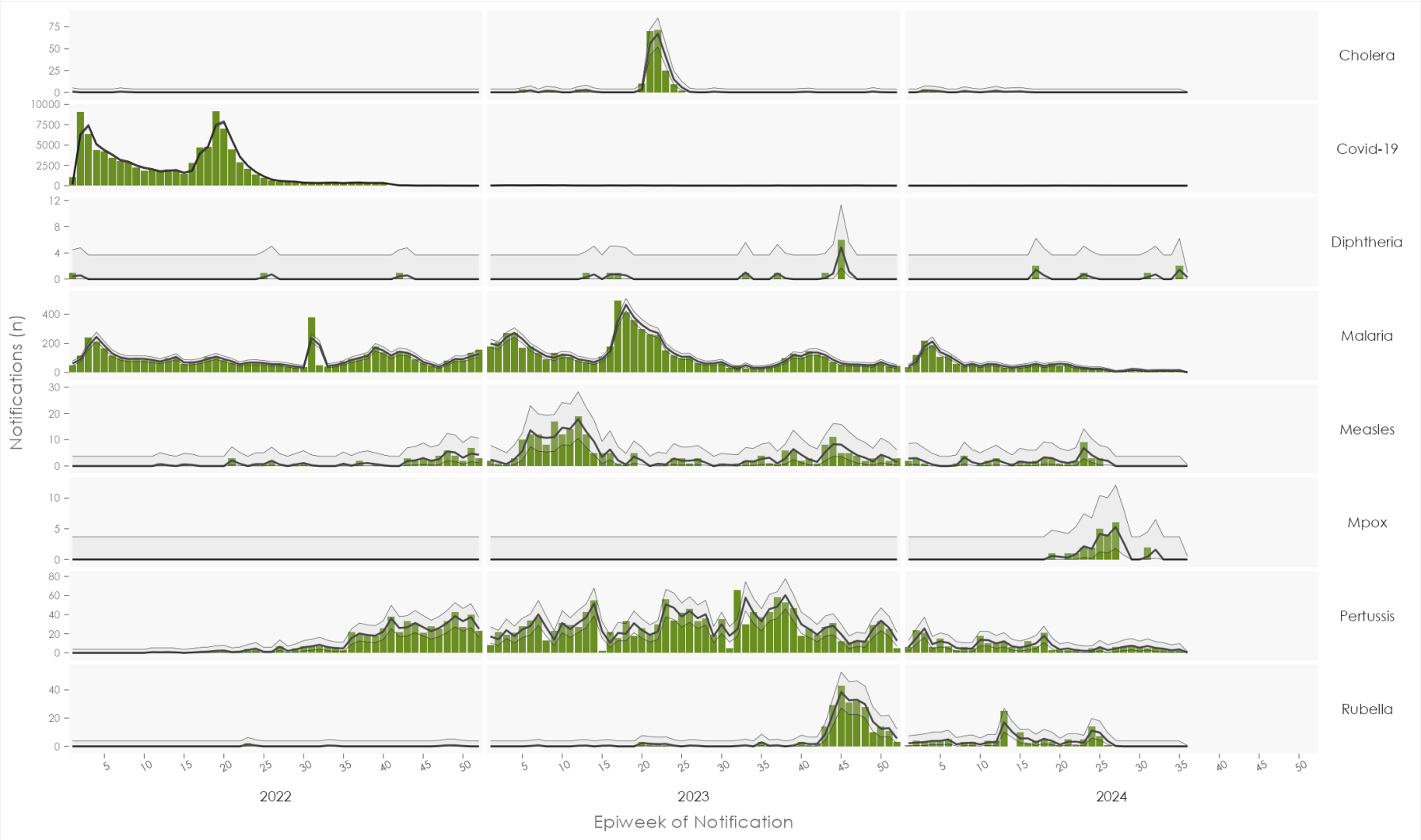


Figure 1: *Trend of weekly number of confirmed notifications for selected category 1 conditions reported to the NMC, in South Africa; January 2022-August, 2024*

All Category 1 Conditions Overview

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

Condition	**Overall**, N = 1 542[1]	**Confirmed**, N = 84[1]	**Suspected**, N = 1 458[1]
Acute flaccid paralysis	18	0	**18**
Acute rheumatic fever	1	0	**1**
Anthrax	0	0	0
Botulism	0	0	0
Cholera	2	0	**2**
Congenital rubella syndrome	1	0	**1**
Diphtheria	9	2	**7**
Enteric fever (typhoid or paratyphoid fever)	8	2	**6**
Foodborne illness outbreak	56	0	**56**
Haemolytic uraemic syndrome (HUS)	1	0	**1**
Listeriosis	3	1	**2**
Malaria	54	54	0
Ebola virus (VHF)	0	0	0
Marburg virus (VHF)	0	0	0
Measles	1 179	0	**1 179**
Meningococcal disease	19	6	**13**
Mpox	55	2	**53**
Pertussis	29	17	**12**
Plague	0	0	0
Poliomyelitis	0	0	0
Rabies	2	0	**2**
Respiratory disease caused by a novel respiratory pathogen	0	0	0
Rift Valley fever (human)	0	0	0
Rubella	105	0	**105**
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, August 2024

A total of 10 524 current and delayed cases were notified to the NMCSS during August 2024 **(See Table 9 for further breakdowns and Appendix no.3 for definitions)**. There were 10 468 current notifications; the majority (8 926, 85%) were category 2 conditions. The provinces with the highest number of notifications were GP (2 960, 28%), KZN (1 991, 19%), and WC (1 898, 18%). The provinces with the least number of notifications were MP (353, 3.4%), and NW (452, 4.3%). There were 56 back-captured clinical notifications diagnosed between June 2024 and August 2024 and only notified during August 2024. The majority (17, 30%) of those notifications were Measles. (**See Appendix no.1**).

Most notified cases were males (6 021, 58%). Individuals in the 35–39-year age group represented the majority (1 211, 12%) of notified cases. At the time of notification, 2 904 (28%) of the notified cases were hospitalized, while 84 (0.8%) were transferred to another healthcare facility. There were 146 deaths notified during the reporting period.

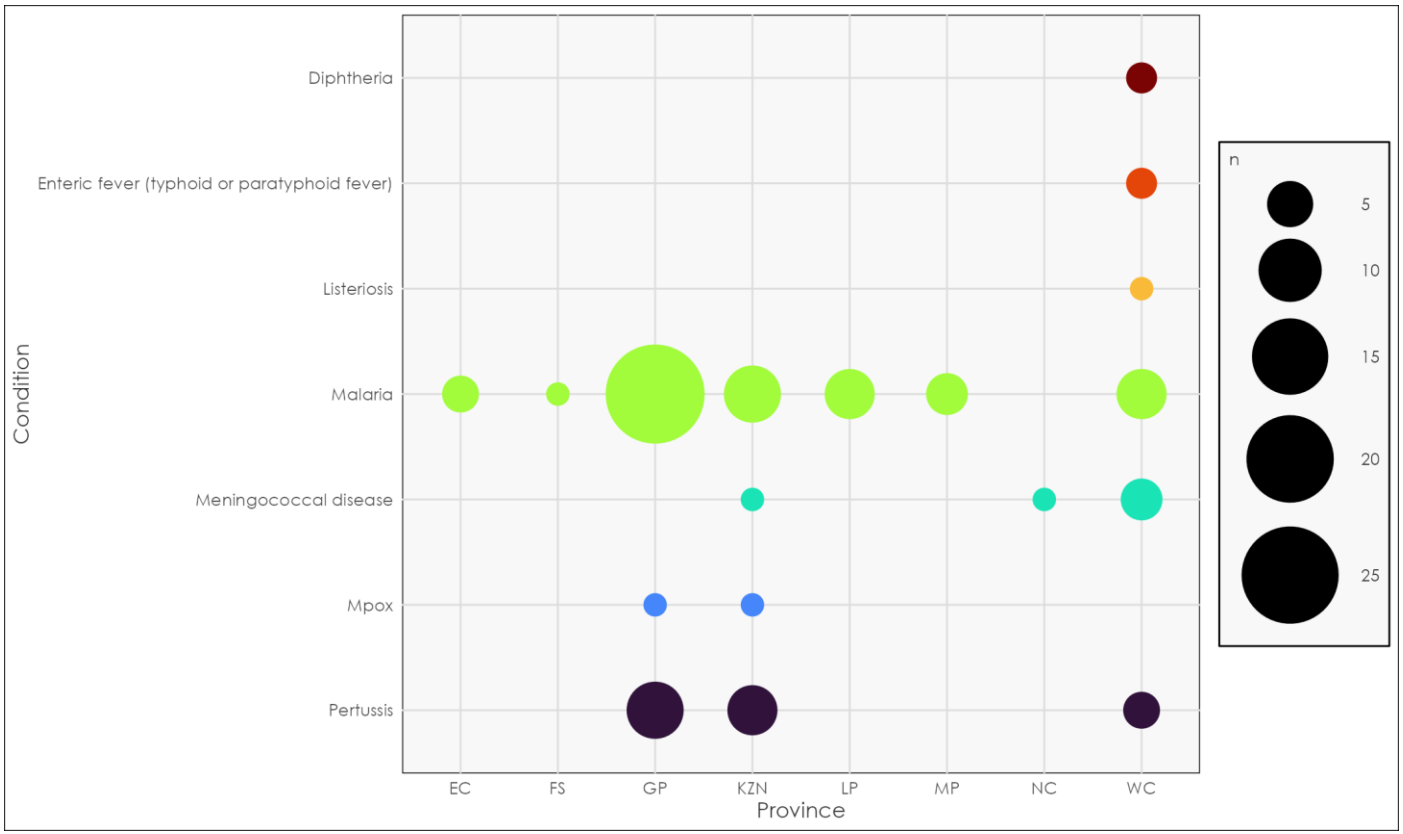


Figure 2: *Distribution of all confirmed category 1 NMCs notifications by province notified during August 2024. *All notifications include both suspected and confirmed cases*

Category 1 Notifications

Measles was the most common (1 179, 76%) category 1 notification **(suspected and confirmed)**. The province with the highest number of notifications for Measles was GP (365,31%). **Malaria** was the most common (54, 64%) category 1 notification **confirmed**. The province with the highest number of confirmed notifications for Malaria was GP (26,48.1%).

***Table 3**: The number of notifications by province and number of notifications that are suspected and confirmed by vital status, August 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	1	0	5	3	2	1	1	1	4	0	18	0	0
Acute rheumatic fever	0	0	1	0	0	0	0	0	0	0	1	0	0
Anthrax	0	0	0	0	0	0	0	0	0	0	0	0	0
Botulism	0	0	0	0	0	0	0	0	0	0	0	0	0
Cholera §	0	0	1	0	0	1	0	0	0	0	2	0	0
Congenital rubella syndrome	0	0	0	1	0	0	0	0	0	0	1	0	0
Diphtheria *	0	0	0	1	0	0	0	0	8	2	7	0	2
Enteric fever (typhoid or paratyphoid fever)	0	0	4	0	0	0	0	0	4	2	6	0	1
Foodborne illness outbreak	10	1	28	6	5	3	0	1	2	0	56	0	5
Haemolytic uraemic syndrome (HUS)	0	0	0	0	0	0	0	0	1	0	1	0	0
Listeriosis	0	0	1	1	0	0	0	0	1	1	2	0	0
Malaria	3	1	26	8	6	4	0	0	6	54	0	0	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	21	26	365	315	23	65	157	43	164	0	1 179	0	1
Meningococcal disease	3	2	0	2	1	0	1	0	10	6	13	1	5
Mpox	3	1	22	14	3	10	0	2	0	2	53	0	0
Pertussis	1	0	11	6	2	1	0	0	8	17	12	0	1
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	0	0	1	1	0	0	0	0	0	0	2	0	1
Respiratory disease caused by a novel respiratory pathogen	0	0	0	0	0	0	0	0	0	0	0	0	0
Rift Valley fever (human)	0	0	0	0	0	0	0	0	0	0	0	0	0
Rubella	3	5	9	11	0	40	11	6	20	0	105	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													
1	45	36	474	369	42	125	170	53	228	84	1 458	1	16

[1]n (%);
* Toxin-producing results not available on NMC;
§ Serotype information not available on NMC;
** Merged case represents a clinical and laboratory notification of the same person and was successfully linked and made into a single notification

Category 2 Notifications Overview

Category 2 conditions must be notified within 7 days of diagnosis. They are important to monitor disease burden trends, **Pulmonary TB** was the most common (6 690, 75%) category 2 notification. The province with the highest number of notifications for Pulmonary TB was GP (1678, 18.8%).

***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	5	11	59	3	3	5	0	4	5	0	95	0	6
Bilharzia (schistosomiasis)	1	0	12	26	54	5	0	0	3	0	101	0	0
Brucellosis	0	0	0	0	0	0	0	0	0	0	0	0	0
Congenital syphilis	11	6	12	21	5	5	1	1	33	0	95	0	5
Haemophilus influenzae type B	0	0	0	0	0	0	0	0	1	1	0	1	0
Hepatitis A	11	5	33	31	4	9	4	0	27	0	124	0	1
Hepatitis B	9	4	45	35	12	2	2	3	8	0	120	0	4
Hepatitis C	0	0	8	1	1	0	0	0	0	0	10	0	0
Hepatitis E	0	0	0	0	0	0	0	0	0	0	0	0	0
Lead poisoning	0	0	0	0	0	0	0	0	0	0	0	0	0
Legionellosis	0	0	0	1	0	0	0	1	5	6	1	0	0
Leprosy	0	0	0	0	0	0	0	0	0	0	0	0	0
Maternal death (pregnancy, childbirth and puerperium)	0	0	1	0	0	0	0	0	0	0	1	0	1
Mercury poisoning	0	0	1	0	0	0	0	0	1	0	2	0	0
Soil-transmitted helminths	0	0	0	2	0	0	0	0	0	0	2	0	0
Tetanus	0	0	1	1	1	0	0	1	0	0	4	0	2
Tuberculosis: extensively drug-resistant (XDR -TB)	0	0	1	4	1	0	0	0	4		0		0
Tuberculosis: multidrug- resistant (MDR - TB)	32	9	39	42	10	0	1	1	33		0		0
Tuberculosis: extra-pulmonary	144	108	596	275	49	32	38	57	198		0		0
Tuberculosis: pulmonary	847	419	1 678	1 180	345	170	368	331	1 352		0		0
Total													
1	1 060	562	2 486	1 622	485	228	414	399	1 670	7	8 919	1	128

[1]n;

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

Plot

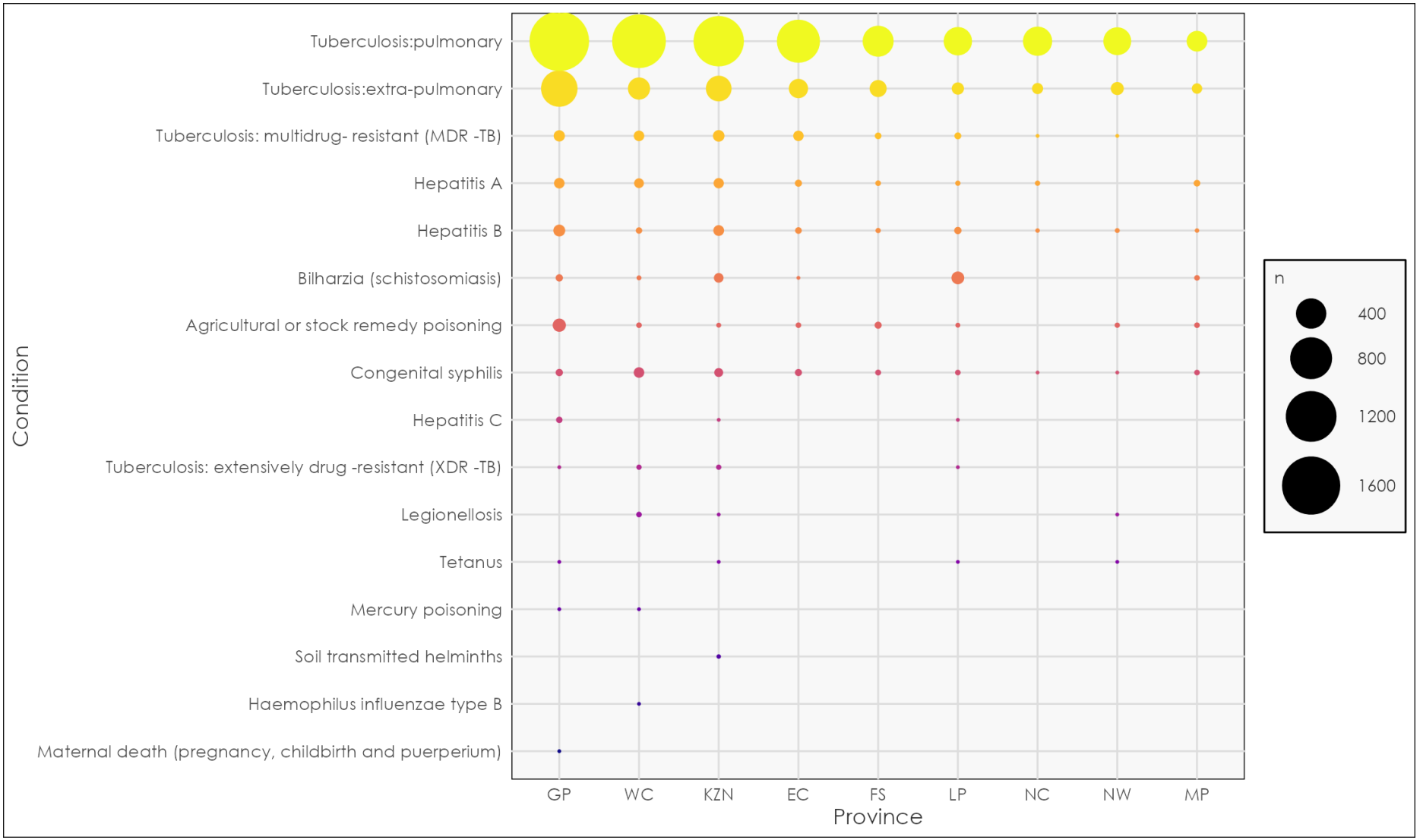


Figure 3: *Distribution of all category 2 NMCs notifications by province notified during August 2024. *All notifications include both suspected and confirmed cases*

Disease of the month: Schistosomiasis (Bilharzia)

Descriptive Demographics

Table of Schistosomiasis cases notified to NMC from 2019 to 2024. Demographics of cases in 2024 are compared to cases before 2024.

	Period		
	Notifications before 2024 N = 63 339[1]	**Notifications in 2024** N = 898[1]	**p-value**[2]
Age	15 (12, 20)	12 (8, 17)	<0.001
Unknown	3 419	28	
Sex			0.050
Female	15 268 (24%)	251 (28%)	
Male	48 068 (76%)	647 (72%)	
Self-Defined	1 (<0.1%)	0 (0%)	
Unknown	2 (<0.1%)	0 (0%)	
Province			
EC	4 921 (7.8%)	30 (3.3%)	
FS	44 (<0.1%)	0 (0%)	
GP	2 132 (3.4%)	54 (6.0%)	
KZN	26 318 (42%)	262 (29%)	
LP	17 439 (28%)	428 (48%)	
MP	11 168 (18%)	105 (12%)	
NC	19 (<0.1%)	0 (0%)	
NW	136 (0.2%)	4 (0.4%)	
WC	1 162 (1.8%)	15 (1.7%)	
Case definition			0.016
Confirmed	2 642 (4.2%)	23 (2.6%)	
Suspected	60 697 (96%)	875 (97%)	

[1]Median (Q1, Q3); n (%)
[2]Wilcoxon rank sum test; Fisher's exact test; Pearson's Chi-squared test

Age-Sex Pyramid

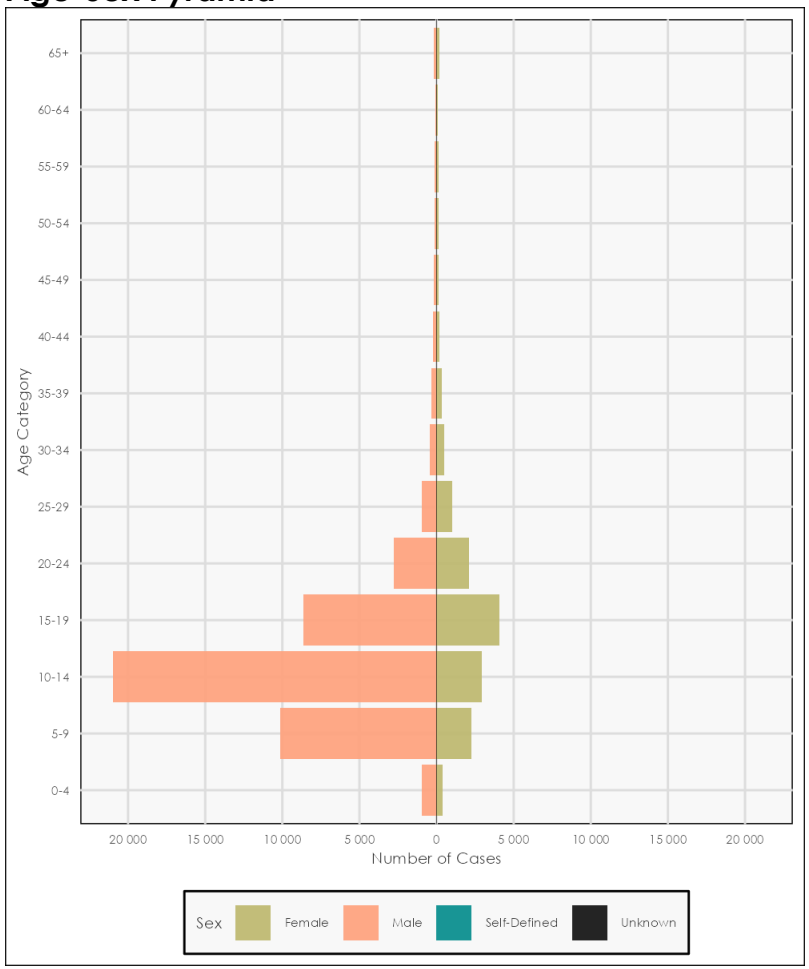


Figure of Bilharzia (schistosomiasis) cases by age category and sex South Africa 2019-2024

Epi-Curve

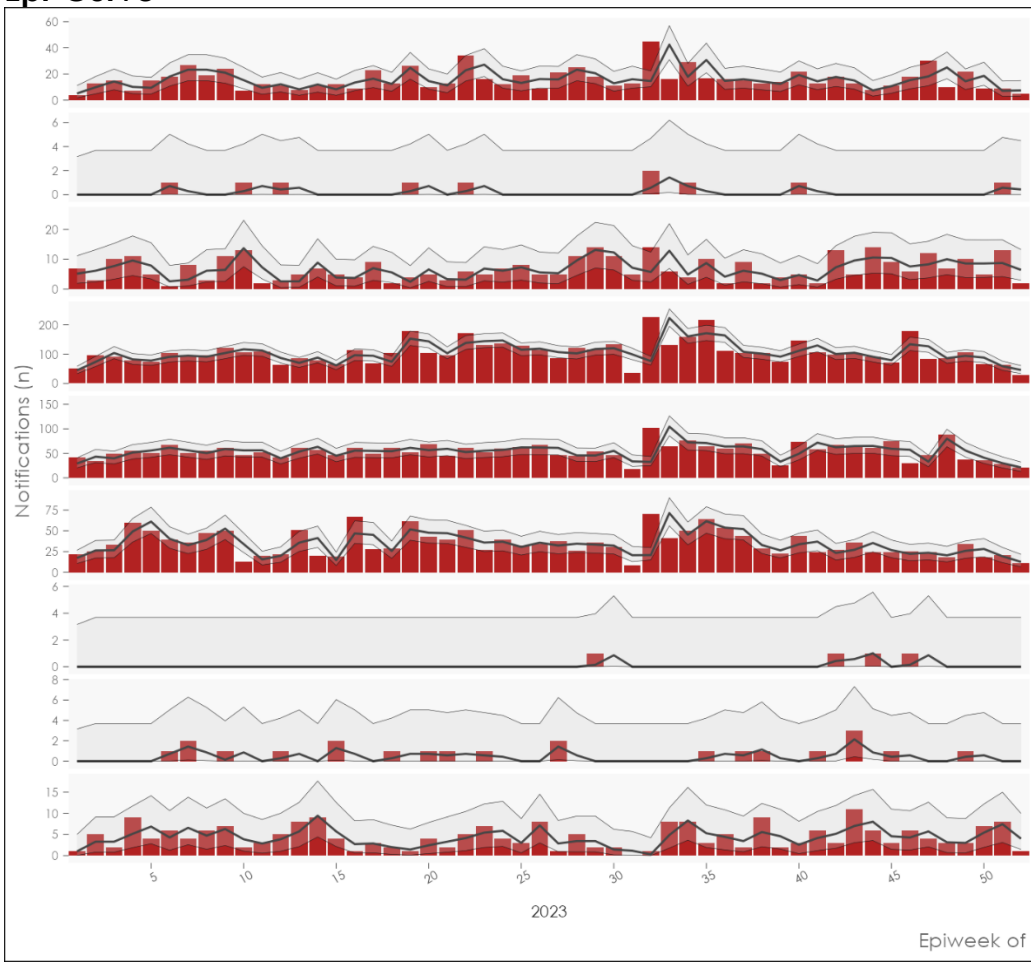


Figure of: Trend of weekly number of Bilharzia (schistosomiasis) notifications for selected conditions reported to the NMC, in South Africa, 2022-2024

Statistics of the Usage of the NMC App

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

NMC Category	**Overall** N = 10 468	**Clinical notifications**, n = 10 468	**Merged Cases**, n = 0	**Laboratory notifications**, n = 0
Category 1	1 542 (15%)	1 542 (15%)	0 (-%)	0 (-%)
Category 2	8 926 (85%)	8 926 (85%)	0 (-%)	0 (-%)

Notification Types and Merging

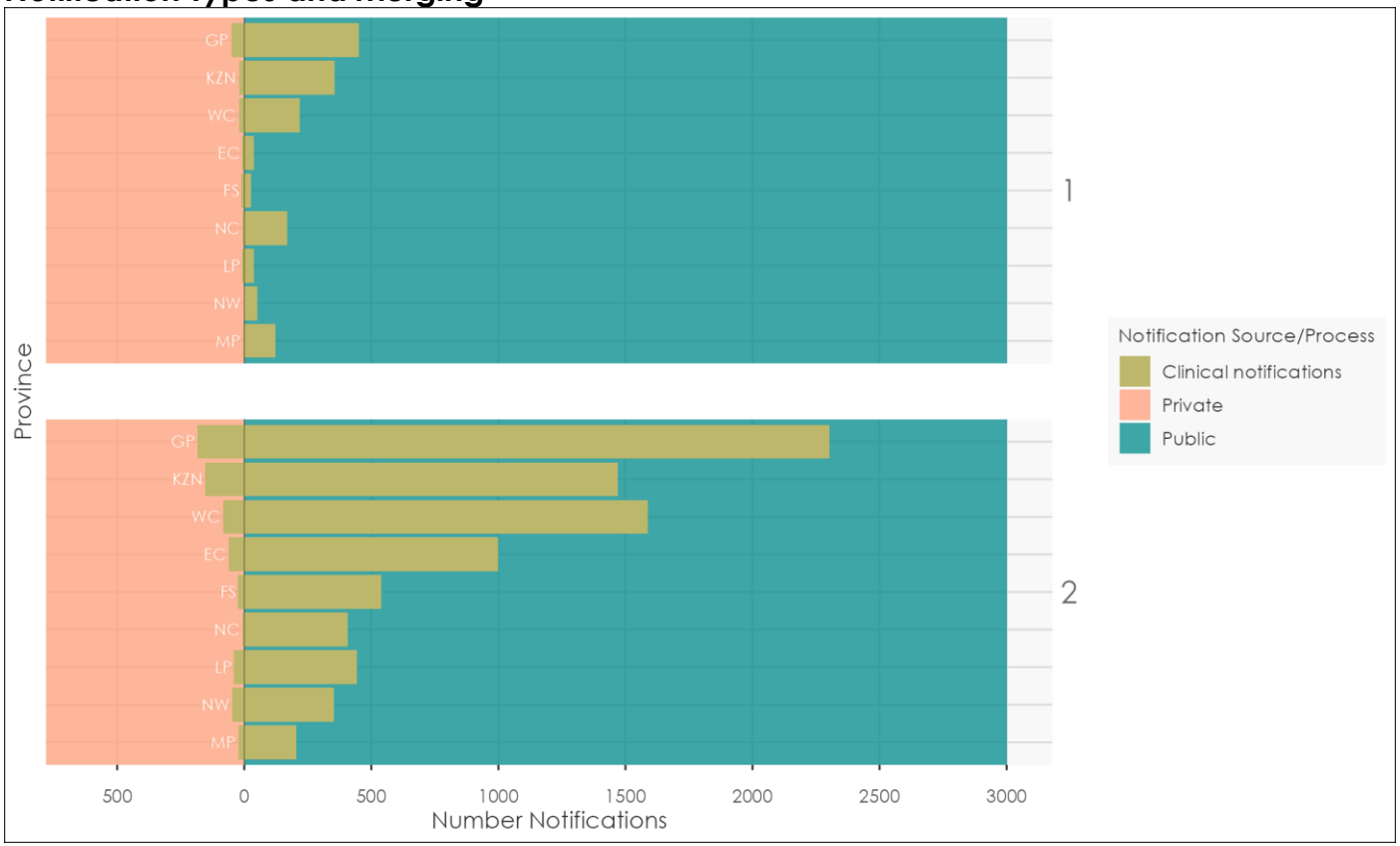


Figure 4: *Distribution of Category 1 notification type by province during August 2024*

There were 744 (7.1%) clinical notifications from the private sector (i.e. private hospitals, private practice and the mining industry) compared to 9681 (92%) in the public sector. Clinical notifications using the NMC Reporting Application made up 0 (0%) (more details in Table 6).

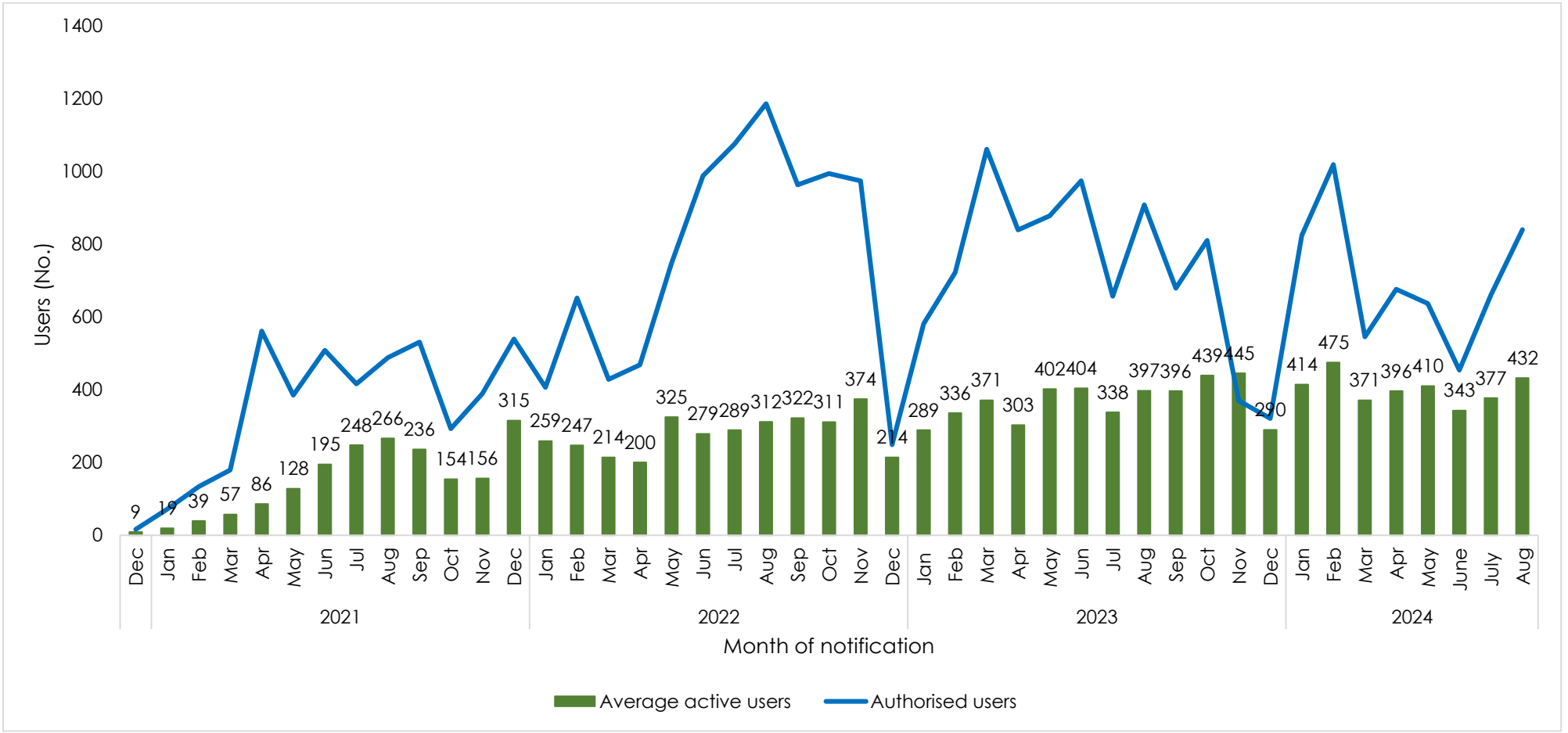
Table 6: *Clinical notifications notified by provinces, reporting platform, and sector.*

Province	**Overall** N = 10 425	**App - Private**, n = 734	**App - Public**, n = 9 422	**Paper-based - Private**, n = 10	**Paper-based - Public**, n = 259
GP	2 941	229 (7.8%)	2 703 (92%)	2 (<0.1%)	7 (0.2%)
KZN	1 991	173 (8.7%)	1 793 (90%)	1 (<0.1%)	24 (1.2%)
WC	1 898	97 (5.1%)	1 680 (89%)	3 (0.2%)	118 (6.2%)
EC	1 105	69 (6.2%)	970 (88%)	1 (<0.1%)	65 (5.9%)
FS	597	32 (5.4%)	561 (94%)	2 (0.3%)	2 (0.3%)
NC	584	12 (2.1%)	566 (97%)	0 (0%)	6 (1.0%)
LP	514	49 (9.5%)	460 (89%)	0 (0%)	5 (1.0%)
NW	447	46 (10%)	372 (83%)	1 (0.2%)	28 (6.3%)

Province	Overall N = 10 425	App - Private, n = 734	App - Public, n = 9 422	Paper-based - Private, n = 10	Paper-based - Public, n = 259
MP	348	27 (7.8%)	317 (91%)	0 (0%)	4 (1.1%)

The Average Active Users on the NMC App

There were 432 average active users of the NMC App in August 2024



Newly Registered Users

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

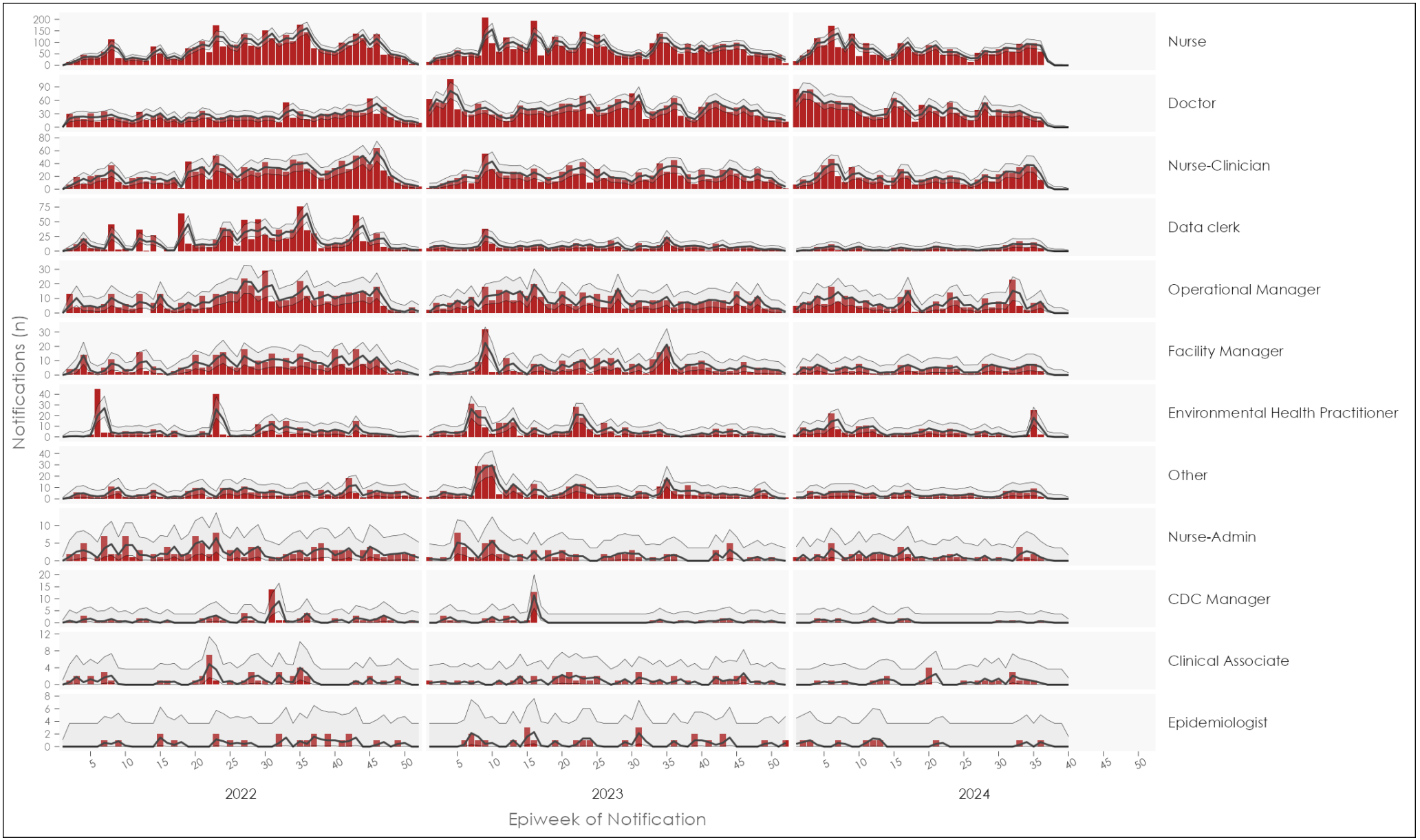


Figure 5: *Trends of new users registered by occupation in South Africa, Jan 2022- May 2024*

Data Quality

Completeness

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

	Android N = 3 621	**iOS** N = 801	**Paper-based** N = 275	**Web** N = 5 771
Folder Number	2 797 (77%)	708 (88%)	205 (75%)	4 568 (79%)
First Name	3 621 (100%)	801 (100%)	275 (100%)	5 770 (100%)
Surname	3 621 (100%)	801 (100%)	275 (100%)	5 770 (100%)
Symptom Onset Date	3 621 (100%)	801 (100%)	275 (100%)	5 753 (100%)
Date of Diagnosis	3 621 (100%)	801 (100%)	275 (100%)	5 771 (100%)
Vital Status	3 474 (96%)	801 (100%)	258 (94%)	5 723 (99%)

ID Number Completeness

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

Length of ID number	Android N = 3 621[1]	iOS N = 801[1]	Paper-based N = 275[1]	Web N = 5 771[1]
Not complete	1 585 (44%)	327 (41%)	166 (60%)	1 859 (32%)
3	0 (0%)	1 (0.1%)	0 (0%)	0 (0%)
4	0 (0%)	0 (0%)	0 (0%)	1 (<0.1%)
5	0 (0%)	0 (0%)	0 (0%)	2 (<0.1%)
6	1 (<0.1%)	71 (8.9%)	0 (0%)	552 (9.6%)
7	0 (0%)	0 (0%)	0 (0%)	4 (<0.1%)
8	0 (0%)	6 (0.7%)	0 (0%)	90 (1.6%)
9	0 (0%)	0 (0%)	0 (0%)	1 (<0.1%)
10	0 (0%)	9 (1.1%)	0 (0%)	128 (2.2%)
11	0 (0%)	2 (0.2%)	0 (0%)	1 (<0.1%)
12	0 (0%)	4 (0.5%)	0 (0%)	41 (0.7%)
13	2 035 (56%)	381 (48%)	109 (40%)	3 092 (54%)

[1]n (%)

Hospital Form Completeness

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

Hospital Form Completed	**Complete**, n = 30 (17%)	**Incomplete**, n = 43 (24%)	**Not Attempted**, n = 37 (21%)	**Only Symptoms completed**, n = 66 (38%)
Acute flaccid paralysis	1 (3.6%)	5 (12%)	2 (5.6%)	10 (15%)
Acute rheumatic fever	1 (3.6%)	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	0 (0%)	0 (0%)	1 (2.8%)	0 (0%)
Diphtheria *	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Enteric fever (typhoid or paratyphoid fever)	2 (7.1%)	0 (0%)	2 (5.6%)	0 (0%)
Foodborne illness outbreak	1 (3.6%)	1 (2.4%)	1 (2.8%)	5 (7.6%)
Haemolytic uraemic syndrome (HUS)	0 (0%)	0 (0%)	0 (0%)	1 (1.5%)
Listeriosis	2 (7.1%)	1 (2.4%)	0 (0%)	0 (0%)
Malaria	7 (25%)	8 (20%)	3 (8.3%)	14 (21%)
Ebola virus (VHF)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Marburg virus (VHF)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Measles	3 (11%)	16 (39%)	1 (2.8%)	23 (35%)
Meningococcal disease	6 (21%)	2 (4.9%)	3 (8.3%)	4 (6.1%)
Mpox	0 (0%)	2 (4.9%)	17 (47%)	0 (0%)
Pertussis	5 (18%)	5 (12%)	3 (8.3%)	7 (11%)
Plague	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Poliomyelitis	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Rabies	0 (0%)	0 (0%)	1 (2.8%)	0 (0%)
Respiratory disease caused by a novel respiratory pathogen	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Rift Valley fever (human)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Rubella	0 (0%)	1 (2.4%)	2 (5.6%)	2 (3.0%)
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	2	2	1	0

Timeliness

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

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

Characteristic	**Category 1**, n = 1 598	**Category 2**, n = 8 926
Time to Notification	0 (0, 1)	2 (0, 9)
Back Capture Classification		
Back capture	56 (4%)	0 (0%)
Current	1 405 (88%)	6 440 (72%)
Delayed	137 (9%)	2 486 (28%)

Conclusion

The majority of notifications were clinical notifications. Patients who are hospitalized 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 that clinicians should 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

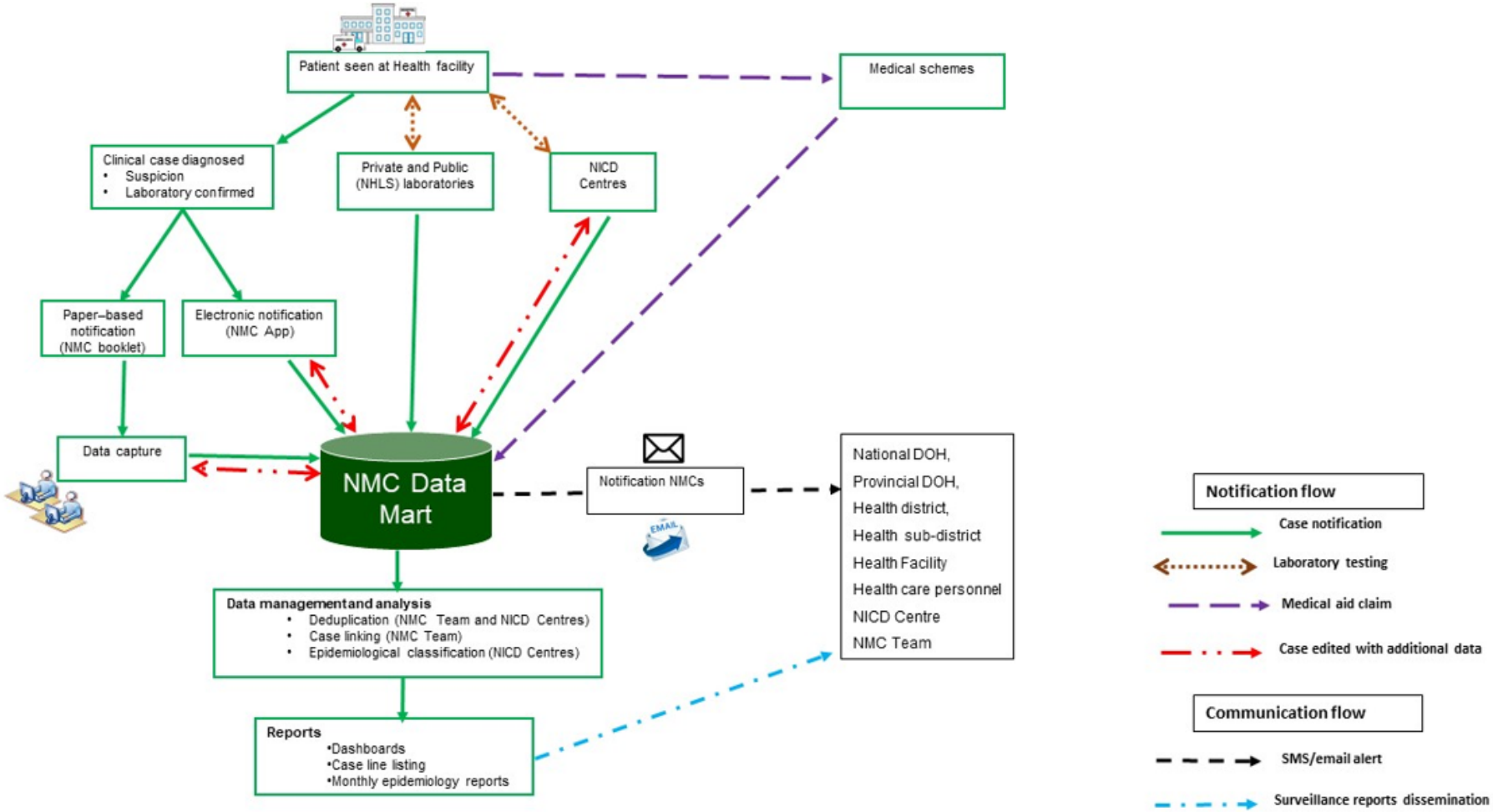
Appendix No. 1: Back-Captured Clinical Notifications

Table 11: Back captured notifications by reporting province notified during August
**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**, (56)	**FS**, (2)	**GP**, (28)	**KZN**, (7)	**LP**, (4)	**MP**, (1)	**NC**, (4)	**WC**, (10)	**Android**, (9)[1]	**iOS**, (2)[1]	**Web**, (45)[1]
Measles	17 (30%)	2	4	5	1	0	3	2	7	0	10
Foodborne illness outbreak	12 (21%)	0	12	0	0	0	0	0	0	0	12
Acute flaccid paralysis	7 (13%)	0	7	0	0	0	0	0	0	0	7
Rubella	6 (11%)	0	0	1	0	1	0	4	1	1	4
Malaria	5 (8.9%)	0	3	0	1	0	0	1	0	1	4
Diphtheria	2 (3.6%)	0	0	0	0	0	0	2	0	0	2
Enteric fever (typhoid or paratyphoid fever)	2 (3.6%)	0	1	1	0	0	0	0	0	0	2
Listeriosis	2 (3.6%)	0	1	0	0	0	0	1	0	0	2
Meningococcal disease	1 (1.8%)	0	0	0	0	0	1	0	1	0	0
Pertussis	1 (1.8%)	0	0	0	1	0	0	0	0	0	1
Rabies	1 (1.8%)	0	0	0	1	0	0	0	0	0	1

[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 based on 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 are notified within 2 days of the 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 notified more than 7 days after 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 = 673[1]	**5 & over A**, N = 760[1]	**5 & over D**, N = 5[1]	**Under 5 D**, N = 10[1]	**N = 84**[1]
Acute flaccid paralysis	17	1	0	0	0
Acute rheumatic fever	0	0	0	0	0
Anthrax	0	0	0	0	0
Botulism	0	0	0	0	0
Cholera	1	1	0	0	0
Congenital rubella syndrome	1	0	0	0	0
Diphtheria	3	2	0	1	2
Enteric fever (typhoid or paratyphoid fever)	5	0	0	1	2
Foodborne illness outbreak	44	7	3	2	0
Haemolytic uraemic syndrome (HUS)	1	0	0	0	0
Listeriosis	0	2	0	0	1
Malaria	0	0	0	0	54
Ebola virus (VHF)	0	0	0	0	0
Marburg virus (VHF)	0	0	0	0	0
Measles	488	686	1	0	0
Meningococcal disease	5	1	1	4	6
Mpox	50	3	0	0	2
Pertussis	8	1	0	1	17
Plague	0	0	0	0	0
Poliomyelitis	0	0	0	0	0
Rabies	1	0	0	1	0
Respiratory disease caused by a novel respiratory pathogen	0	0	0	0	0
Rift Valley fever (human)	0	0	0	0	0
Rubella	49	56	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 August 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																			
		95% CI[1]	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Acute flaccid paralysis	4.24	4.0, 5.0	3	7	9	5	4	6	8	7	9	3	3	4	5	5	6	7	6	2	9	0
Acute rheumatic fever	0.26	1.0, 1.0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0
Anthrax	0.0101	-, -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Botulism	0.0471	1.0, 1.0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Cholera	5.1	2.5, 6.5	0	3	0	0	1	0	0	0	1	0	0	0	1	0	1	1	0	0	0	0
Congenital rubella syndrome	1.95	2.0, 2.5	2	3	1	5	4	2	3	3	3	0	2	0	0	0	0	0	0	1	0	0
Covid-19	935	529, 837	251	250	385	356	364	251	196	208	194	143	148	48	0	0	0	0	0	0	0	0
Crimean-Congo viral haemorrhagic fever (human)	0.11	1.0, 1.0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Diphtheria	0.51	1.0, 1.5	2	0	0	1	1	0	1	0	4	0	0	0	0	1	1	1	1	3	5	0
Ebola virus (VHF)	0.0034	-, -	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)	3.39	3.5, 4.0	2	4	7	4	5	4	2	5	2	2	0	0	3	5	4	3	3	1	3	0
Foodborne illness outbreak	9	7.0, 9.5	3	12	7	21	6	4	3	1	8	5	29	5	15	7	41	14	18	18	9	0
Haemolytic uraemic syndrome (HUS)	0.06	1.0, 1.0	1	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0
Listeriosis	1.59	1.5, 2.0	0	1	2	1	1	1	1	0	2	0	2	0	0	0	0	0	3	1	1	0
Malaria	97	76, 94	53	51	63	44	59	35	28	29	26	9	8	13	22	16	9	13	13	14	14	0
Marburg virus (VHF)	0.0034	-, -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Measles	31	23, 32	91	60	70	80	82	63	75	85	79	46	44	58	48	36	65	79	197	376	518	0
Meningococcal disease	2.73	3.0, 3.5	3	2	6	3	6	6	4	4	4	1	5	9	6	6	7	1	5	6	5	0
Mpox	0.92	7.5, 25	0	0	1	0	1	2	2	10	28	29	49	27	33	29	14	12	13	13	11	0
Pertussis	18	15, 22	16	33	18	10	19	13	11	10	11	6	8	8	8	10	6	8	9	6	5	0
Plague	0.0034	-, -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Poliomyelitis	0.0202	-, -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rabies	0.66	1.5, 2.0	0	0	0	0	0	0	0	2	1	0	1	2	3	2	2	0	0	1	2	0
Respiratory disease caused by a novel respiratory pathogen	7	3.0, 8.0	0	0	0	0	1	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0
Rift Valley fever (human)	0.0034	-, -	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	29	26	27	31	50	16	49	37	32	7	5	4	3	3	2	11	16	35	48	0
Smallpox	0.0673	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	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
Yellow fever	0.0370	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

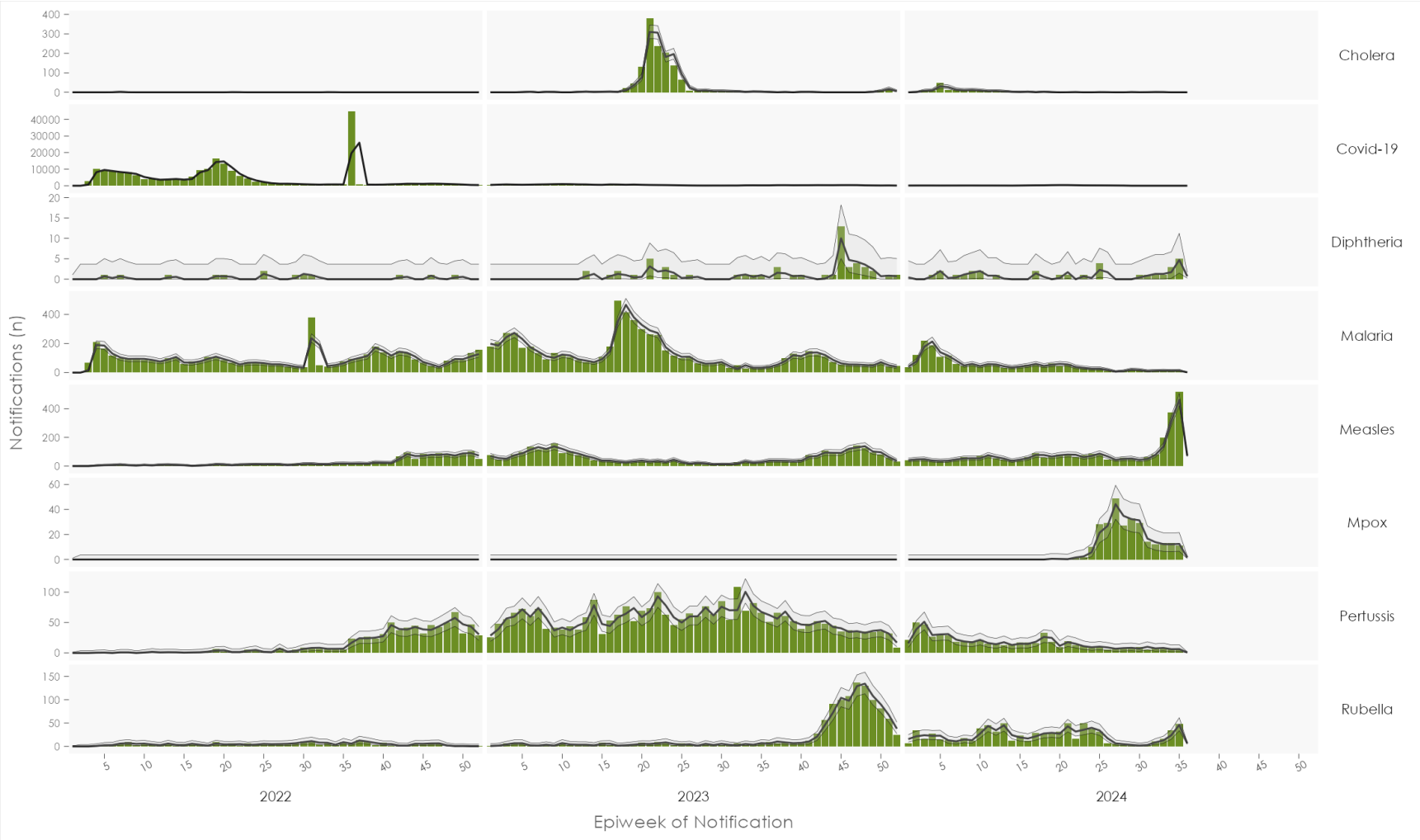


Figure 6: Trend of weekly number of all notifications for selected conditions reported to the NMC, in South Africa, January 2022-August

END