

# NOTIFIABLE MEDICAL CONDITIONS SURVEILLANCE SYSTEM

The National Institute for Communicable Diseases

April 2025

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# Introduction

Data used in this report was drawn from the NMC-SS on **15 May 2025**. The most recent report should always be viewed and can be found at 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 9 863 cases were notified in April, 2025 and most were category 2 conditions.
- Category 1 cases were reported in median (IQR) of 0 (0, 1) days.

#### **NMC Reporting Application**

- NMC Reporting App. is available on both web and mobile platforms
- Use recommended browsers in order to access NMC reporting App for notifications, 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 over 12 months.

NOTES: For any additional information contact the NMC national technical team: <a href="NMCAppSupport@nicd.ac.za">NMCAppSupport@nicd.ac.za</a> or NMC hotline <a href="0.726213805">0.726213805</a>. 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 (Table 1). Confirmed notifications are verified and confirmed by the relevant centre at the NICD. All notifications are shown and include notifications that can be considered as suspected cases. These are presented to show the sensitivity of the surveillance system in recognising disease signals.

## **Confirmed Notifications**

Table 1: Number of confirmed notifications on NMCSS per epi-week in 2025. The Average notifications are calculated based on notifications received in 2022 and 2023 with a confidence interval.

		rerage fications											Epi-	weeks									
Characteristic		95% CI	50	51	52	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
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	0
Acute rheumatic fever	0.0205	1.0, 1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Agricultural or stock remedy poisoning	0.11	1.0, 1.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Botulism	0.0061	NA, NA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cholera	0.54	1.5, 2.0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	0
Congenital rubella syndrome	0.0102	NA, NA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Covid-19	195	14, 161	6	5	1	5	5	5	8	2	6	4	4	5	2	1	3	0	1	0	0	0	0
Crimean-Congo viral haemorrhagic fever (human)	0.0307	1.0, 1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diphtheria	0.20	1.0, 2.0	2	12	1	2	1	1	1	1	1	14	3	4	0	3	1	1	2	6	2	2	0
Enteric fever (typhoid or paratyphoid fever)	1.02	1.5, 2.0	4	1	1	2	3	1	5	3	5	2	2	1	1	3	1	1	2	1	1	0	0
Foodborne illness outbreak	0.0676	1.0, 2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Listeriosis	1.18	1.5, 2.0	1	1	1	2	2	3	1	1	0	2	0	2	2	3	0	0	0	0	0	4	0
Malaria	149	99, 120	60	89	58	42	61	77	148	115	101	106	112	105	125	165	112	152	106	123	102	117	41
Measles	1.47	2.5, 3.5	1	3	5	5	3	2	2	3	3	1	3	1	4	5	5	10	1	9	5	3	2
Meningococcal disease	0.89	2.0, 2.0	0	0	0	0	0	1	5	2	0	1	3	2	3	3	1	2	2	4	0	0	0
Mpox	0.0656	1.0, 3.0	0	0	0	0	0	0	0	0	0	1	2	0	0	1	3	0	0	0	1	0	0
Pertussis	7	9.0, 12	0	3	3	3	8	4	2	9	4	2	5	5	2	5	4	0	1	8	4	2	3
Rabies	0.09	1.0, 1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
Respiratory disease caused by a novel respiratory pathogen	0.0041	NA, NA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rift Valley fever (human)	0.0123	1.0, 1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rubella	1.22	2.5, 4.0	2	6	1	1	0	1	2	1	1	4	0	2	4	4	0	2	1	2	5	4	0

Abbreviation: CI = Confidence Interval

### Trends Plot

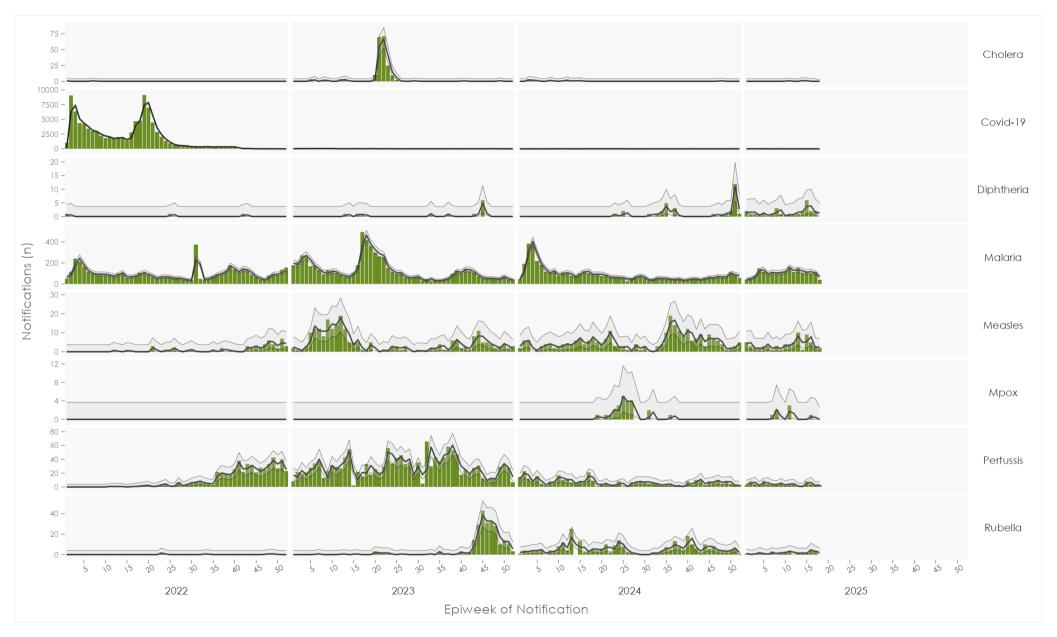


Figure 1: Trend of weekly number of confirmed notifications for selected category 1 conditions reported to the NMC, in South Africa; January 2022-April, 2025

# **All Category 1 Conditions**

Table 2: The number of confirmed notifications that are suspected and confirmed for category 1 conditions notified during April 2025.

Condition	<b>Overall</b> , N = 9351	Suspected, $N = 409^{1}$	<b>Confirmed</b> , $N = 526^{1}$
Acute flaccid paralysis	24	24	0
Acute rheumatic fever	0	0	0
Agricultural or stock remedy poisoning	96	96	0
Anthrax	0	0	0
Botulism	0	0	0
Cholera	2	0	2
Congenital rubella syndrome	24	24	0
Covid-19	0	0	0
Crimean-Congo viral haemorrhagic fever (human)	0	0	0
Diphtheria	36	26	10
Ebola virus (VHF)	0	0	0
Enteric fever (typhoid or paratyphoid fever)	11	7	4
Foodborne illness outbreak	26	26	0
Haemolytic uraemic syndrome (HUS)	0	0	0
Listeriosis	5	1	4
Malaria	455	0	455
Marburg virus (VHF)	0	0	0
Measles	124	106	18
Meningococcal disease	15	10	5
Mpox	16	15	1
Pertussis	29	13	16
Plague	0	0	0
Poliomyelitis	0	0	0
Rabies	6	5	1
Respiratory disease caused by a novel respiratory pathogen	2	2	0
Rift Valley fever (human)	0	0	0
Rubella	64	54	10
Smallpox	0	0	0
Yellow fever	0	0	0

<sup>&</sup>lt;sup>1</sup>Suspected and confirmed cases are independent and are not totalled - suspected and confirmed cases are distinct.

# NMC Data Summary, April 2025

A total of 9,863 current and delayed cases were notified to the NMCSS during April 2025 (See table 9 for further breakdowns and Appendix no.3 for definitions). There were 9,834 current notifications; the majority (8,766, 89%) were category 2 conditions. The provinces with the highest number of notifications were KZN (2,415, 25%), GP (2,229, 23%), and WC (1,680, 17%). The provinces with the least number of notifications were NC (373, 3.8%) and NW (390, 4.0%). There were 29 back-captured clinical notifications diagnosed between September 2024 and April 2025, and only notified during April 2025. The majority (8, 28%) of those notifications were Measles. (See Appendix no.1).

Most of the notified cases were males (5,738, 58%). Individuals in the 35–39-year age group represented the majority (1,061, 12%) of notified cases. At the time of notification, 2,414 (25%) of the notified cases were hospitalised, while 86 (0.9%) were transferred to another healthcare facility. There were 99 deaths notified during the reporting period.

# **Category 1 Notifications**

Malaria was the most common (455 (54%)) category 1 notification (suspected and confirmed). The province with the highest number of notifications for Malaria was GP (140 (31%)). Malaria was the most common (455 (87%)) category 1 notification confirmed. The province with the highest number of confirmed notifications for Malaria was MP 140 (31%).

Table 3: The number of confirmed notifications by province and the number of notifications that are suspected and confirmed by vital status, April 2025

				P	rovin	ces				Co	ıse	Deaths		
Condition	EC	FS <sup>1</sup>	<b>GP</b> <sup>1</sup>	KZN <sup>1</sup>	LP1	MP1	NC <sup>1</sup>	NW <sup>1</sup>	WC1	Confirmed <sup>1</sup>	Suspected <sup>1</sup>	Confirmed <sup>1</sup>	Suspected	
Acute flaccid paralysis	1	1	8	2	1	4	3	1	3	0	24	0	0	
Acute rheumatic fever	0	0	0	0	0	0	0	0	0	0	0	0	0	
Agricultural or stock remedy poisoning	5	9	55	2	7	10	0	4	4	0	96	0	16	
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	1	0	0	0	0	2	0	0	0	
Covid-19	0	0	0	0	0	0	0	0	0	0	0	0	0	
Congenital rubella syndrome	4	3	5	9	0	0	1	2	0	0	24	0	1	
Diphtheria *	0	0	2	5	10	13	0	0	6	10	26	1	0	
Enteric fever (typhoid or paratyphoid fever)	1	0	5	1	1	2	0	1	0	4	7	0	0	
Foodborne illness outbreak	2	0	15	1	5	2	0	0	1	0	26	0	0	
Haemolytic uraemic syndrome (HUS)	0	0	0	0	0	0	0	0	0	0	0	0	0	
Listeriosis	1	0	3	0	0	0	0	0	1	4	1	2	0	
Malaria	8	7	103	48	108	140	5	16	20	455	0	7	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	3	39	53	6	0	6	5	2	10	18	106	0	0	
Meningococcal disease	1	0	7	2	1	0	0	0	4	5	10	0	1	
Mpox	1	0	10	0	0	1	0	2	2	1	15	0	1	
Pertussis	2	0	11	5	0	2	0	1	8	16	13	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	3	1	1	0	0	0	0	1	5	0	1	
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	4	15	3	11	0	4	4	17	6	10	54	1	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	Ō	Ō	0	0	0	0	0	0	0	0	
Total	34	74	286	93	135	184	18	46	65	526	409	11	20	

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<sup>\*</sup> Toxin-producing results not available on NMC;

<sup>§</sup> Serotype information not available on NMC



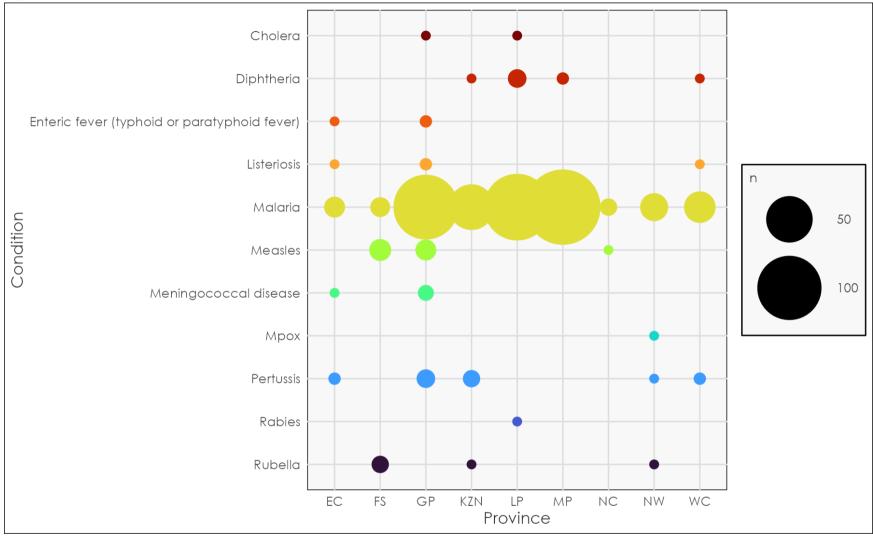


Figure 2: Distribution of all Category 1 NMCs notifications by province notified during April 2025

# **Category 2 Notifications**

Category 2 conditions must be notified within 7 days of diagnosis. **Pulmonary TB** was the most common (5,006 (58%)) category 2 notification **confirmed**. The province with the highest number of confirmed notifications for **Pulmonary TB** was GP 1, 185 (60%).

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

					Provinces	<u> </u>				Co	ase	De	aths
Condition	EC1	FS1	GP <sup>1</sup>	KZN <sup>1</sup>	LP1	MP <sup>1</sup>	NC <sup>1</sup>	NW <sup>1</sup>	WC <sup>1</sup>	Confirmed <sup>1</sup>	Suspected <sup>1</sup>	Confirmed <sup>1</sup>	Suspected <sup>1</sup>
Bilharzia (schistosomiasis)	23	2	18	251	261	77	1	1	19	23	630	1	0
Brucellosis	0	0	0	0	0	0	0	0	0	0	0	0	0
Congenital syphilis	60	20	43	151	11	14	19	12	100	53	377	0	3
Haemophilus influenzae type B	2	0	0	0	0	0	0	1	0	1	2	0	0
Hepatitis A	18	16	88	99	35	41	17	20	63	72	325	0	0
Hepatitis B	124	14	63	482	8	9	15	50	23	26	762	0	0
Hepatitis C	6	0	5	3	1	0	0	0	2	0	17	0	0
Hepatitis E	0	0	0	1	0	0	0	0	2	1	2	0	0
Lead poisoning	0	0	0	0	0	1	0	0	0	0	1	0	0
Legionellosis	1	0	2	2	0	0	0	1	2	5	3	1	0
Leprosy	0	0	0	0	0	0	0	0	0	0	0	0	0
Maternal death (pregnancy,	1	0	4	1	0	0	0	0	0	0	6	0	5
childbirth and puerperium)													
Mercury poisoning	0	0	3	0	0	0	0	0	0	0	3	0	0
Soil-transmitted helminths	0	0	1	1	0	0	0	0	0	0	2	0	0
Tetanus	0	0	0	0	0	0	0	0	1	0	1	0	0
Tuberculosis: extensively drug-	0	3	1	1	0	2	2	0	2	0	0	0	0
resistant (XDR-TB) *													
Tuberculosis: multidrug- resistant	9	5	37	46	2	3	2	3	31		0		0
(MDR -TB) *													
Tuberculosis: extra-pulmonary*	103	83	474	193	63	24	49	32	144		0		0
Tuberculosis: pulmonary*	564	261	1 194	1 086	270	159	242	221	1 143		0		0
Total	911	404	1 933	2 317	651	330	347	341	1 532	18	81		2

<sup>&#</sup>x27;n;

<sup>\*</sup> The TB module is under development to align with laboratory-confirmed TB cases. Only TB cases that are manually notified (no laboratory surveillance) are reported.

### Plot

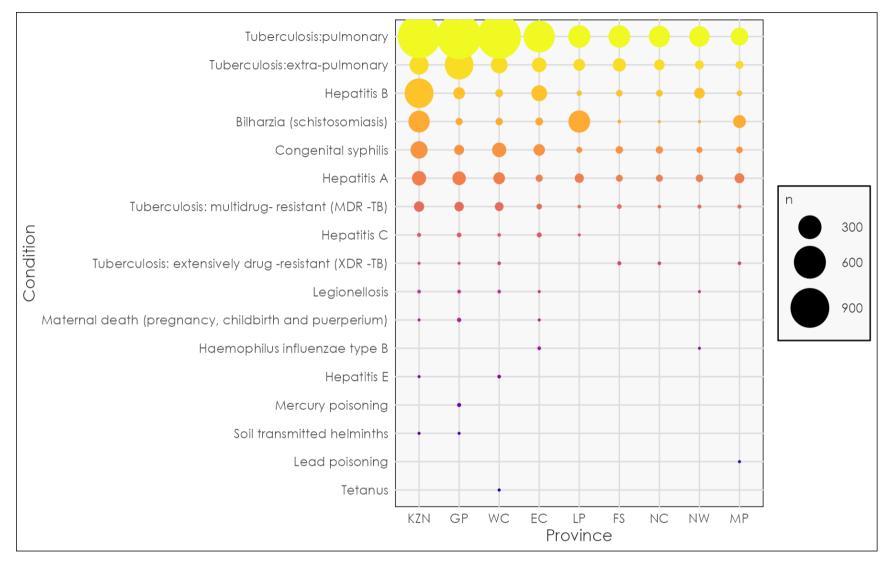


Figure 3: Distribution of all Category 2 NMCs notifications by province notified during April 2025. \*All notifications include both suspected and confirmed cases

# NMC App Use Statistics Table 5: Description of NMC notifications by case source

NMC Category	<b>Overall</b> N = 9,834	Clinical notifications, n = 7,384	<b>Laboratory notifications</b> , n = 2,36	<b>Merged Cases</b> , n = 314
Category 1	935 (9.5%)	575 (7.8%)	236 (11%)	124 (39%)
Category 2	8 766 (89%)	6 809 (92%)	1 780 (83%)	177 (56%)
Category 3	133 (1.4%)	0 (0%)	120 (5.6%)	13 (4.1%)

**Notification Types and Merging** App Utilisation by Case Source Over Time 800 600 Private 400 Web Number of Notifications 200 Android 8000 4000 Public 2000 Android iOS Paper-based 2017 Notification Month Case Source Android a iOS a Paper-based Web

Figure 4: Case Source of Clinical Notifications April 2025

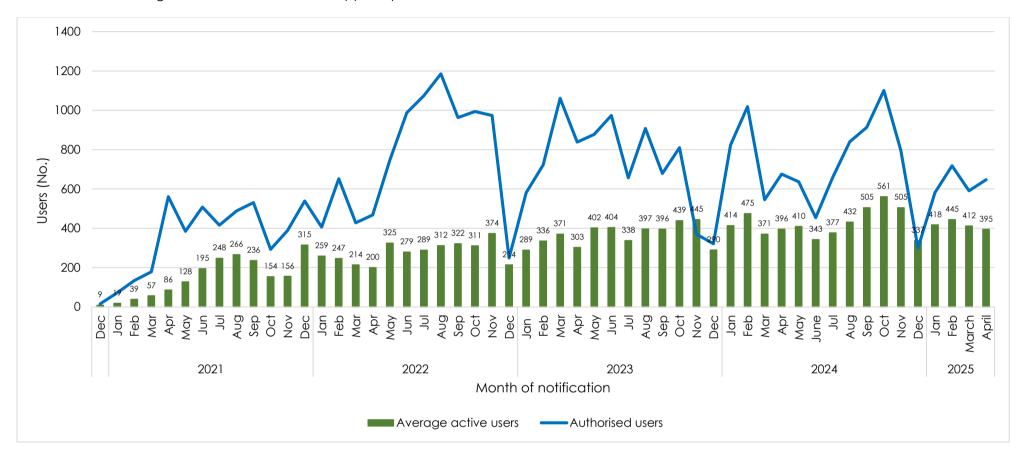
There were 646 (8.6%) clinical notifications from the private sector (i.e. private hospitals, private practice and mining industry) compared to 6,858 (91%) in the public sector. Clinical notifications using the NMC Reporting Application made up 3,515 (36%) (more details in Table 6).

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

Province	Overall	App - Private,	App - Public,	Paper-based - Private,	Paper-based - Public,		
riovince	N = 7,695	n = 639	n = 6,938	n = 10	n = 108		
GP	2 043	195 (9.5%)	1 842 (90%)	3 (0.1%)	3 (0.1%)		
KZN	1 526	101 (6.6%)	1 417 (93%)	1 (<0.1%)	7 (0.5%)		
WC	1 500	101 (6.7%)	1 339 (89%)	2 (0.1%)	58 (3.9%)		
EC	769	84 (11%)	669 (87%)	1 (0.1%)	15 (2.0%)		
LP	484	42 (8.7%)	438 (90%)	0 (0%)	4 (0.8%)		
FS	406	52 (13%)	349 (86%)	0 (0%)	5 (1.2%)		
MP	370	31 (8.4%)	333 (90%)	1 (0.3%)	5 (1.4%)		
NC	316	12 (3.8%)	304 (96%)	0 (0%)	0 (0%)		
NW	281	21 (7.5%)	247 (88%)	2 (0.7%)	11 (3.9%)		

# The Average Active Users on the NMC App

There were 395 average active users of the NMC App in April, 2025



# **Newly Registered Users**

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

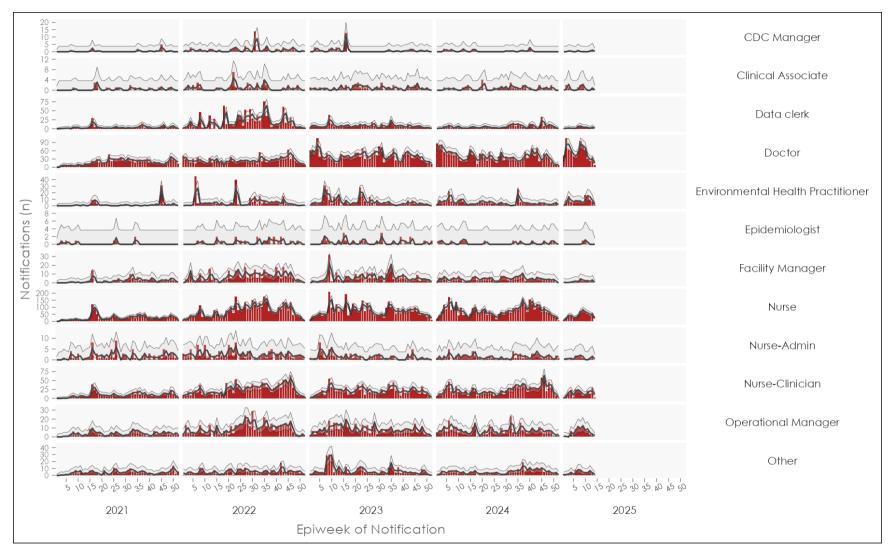


Figure 5: Trends of new users by occupation who registered on NMC, in South Africa, January 2022-April

Table 7: The occupation of newly registered users in April 2025

	Overall,	2021,	2022,	2023,	2024,	2025,
	$n = 33,688 (100\%)^{1}$	n = 3 762 (11%) <sup>1</sup>	n = 9 122 (27%) <sup>1</sup>	n = 9 153 (27%) <sup>1</sup>	n = 8,763 (26%) <sup>1</sup>	n = 2 888 (8.6%) <sup>1</sup>
Occupation						
Nurse	13 866 (41%)	1 336 (36%)	3 790 (42%)	3 866 (42%)	3 889 (44%)	985 (34%)
Doctor	7 643 (23%)	978 (26%)	1 333 (15%)	2 167 (24%)	2 074 (24%)	1 091 (38%)
Nurse-Clinician	4 445 (13%)	496 (13%)	1 325 (15%)	1 106 (12%)	1 217 (14%)	301 (10%)
Data clerk	2 024 (6.0%)	204 (5.4%)	1,015 (11%)	424 (4.6%)	310 (3.5%)	71 (2.5%)
Operational Manager	1 614 (4.8%)	183 (4.9%)	487 (5.3%)	439 (4.8%)	374 (4.3%)	131 (4.5%)
Other	1 176 (3.5%)	220 (5.8%)	265 (2.9%)	343 (3.7%)	271 (3.1%)	77 (2.7%)
Facility Manager	1 090 (3.2%)	126 (3.3%)	373 (4.1%)	311 (3.4%)	234 (2.7%)	46 (1.6%)
Environmental Health Practitioner	1 072 (3.2%)	91 (2.4%)	274 (3.0%)	317 (3.5%)	253 (2.9%)	137 (4.7%)
Nurse-Admin	395 (1.2%)	88 (2.3%)	131 (1.4%)	73 (0.8%)	75 (0.9%)	28 (1.0%)
Clinical Associate	152 (0.5%)	18 (0.5%)	46 (0.5%)	43 (0.5%)	34 (0.4%)	11 (0.4%)
CDC Manager	140 (0.4%)	15 (0.4%)	61 (0.7%)	38 (0.4%)	19 (0.2%)	7 (0.2%)
Epidemiologist	71 (0.2%)	7 (0.2%)	22 (0.2%)	26 (0.3%)	13 (0.1%)	3 (0.1%)

<sup>&</sup>lt;sup>1</sup>n (%)

# **Data Quality**

# Completeness

ID number completeness

**Table 7:** Length of ID numbers inputted on the NMC system during April 2025

Length of ID number	<b>Android</b> N = 2 361 <sup>1</sup>	<b>iOS</b> N = 762 <sup>1</sup>	MicroStrategy/SDW $N = 2350^{1}$	Paper-based N = 1191	<b>Web</b> N = 4 242 <sup>1</sup>
Not complete	962 (41%)	343 (45%)	2 323 (99%)	75 (63%)	1 247 (29%)
6	1 (<0.1%)	29 (3.8%)	2 (<0.1%)	0 (0%)	472 (11%)
7	0 (0%)	0 (0%)	0 (0%)	0 (0%)	2 (<0.1%)
8	0 (0%)	4 (0.5%)	0 (0%)	0 (0%)	27 (0.6%)
9	0 (0%)	0 (0%)	0 (0%)	0 (0%)	6 (0.1%)
10	0 (0%)	42 (5.5%)	0 (0%)	0 (0%)	55 (1.3%)
12	0 (0%)	1 (0.1%)	0 (0%)	0 (0%)	25 (0.6%)
13	1 398 (59%)	343 (45%)	25 (1.1%)	44 (37%)	2 408 (57%)

¹n (%)

# **Hospital Form Completeness**

**Table 8:** Completion of hospitalisation form for notifications reported as inpatients with category 1 condition, April 2025 Complete refers to >80% of variables completed.

Hospital Form Completed	<b>Complete</b> , n = 31 (10%)	<b>Incomplete</b> , n = 35 (12%)	Not Attempted, n = 97 (32%)	Only Symptoms completed, $n = 136 (45\%)$
Acute flaccid paralysis	4 (13%)	2 (6.1%)	3 (3.2%)	12 (9.5%)
Acute rheumatic fever	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Agricultural or stock remedy poisoning	8 (26%)	7 (21%)	41 (44%)	19 (15%)
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%)
Covid-19	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Congenital rubella syndrome	0 (0%)	0 (0%)	2 (2.2%)	1 (0.8%)
Diphtheria *	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Enteric fever (typhoid or paratyphoid fever)	0 (0%)	1 (3.0%)	1 (1.1%)	3 (2.4%)
Foodborne illness outbreak	0 (0%)	4 (12%)	2 (2.2%)	10 (7.9%)
Haemolytic uraemic syndrome (HUS)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Listeriosis	1 (3.2%)	1 (3.0%)	1 (1.1%)	1 (0.8%)
Malaria	8 (26%)	9 (27%)	24 (26%)	47 (37%)
Ebola virus (VHF)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Marburg virus (VHF)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Measles	1 (3.2%)	3 (9.1%)	9 (9.7%)	6 (4.8%)
Meningococcal disease	3 (9.7%)	0 (0%)	5 (5.4%)	4 (3.2%)
Mpox	0 (0%)	2 (6.1%)	1 (1.1%)	7 (5.6%)
Perfussis	6 (19%)	3 (9.1%)	2 (2.2%)	12 (9.5%)
Plague	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Poliomyelitis	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Rabies	0 (0%)	0 (0%)	1 (1.1%)	0 (0%)
Respiratory disease caused by a novel respiratory pathogen	0 (0%)	0 (0%)	0 (0%)	2 (1.6%)
Rift Valley fever (human)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Rubella	0 (0%)	1 (3.0%)	1 (1.1%)	2 (1.6%)
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	, O	2	4	10

### **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, 0) days to report category 1 NMCs.

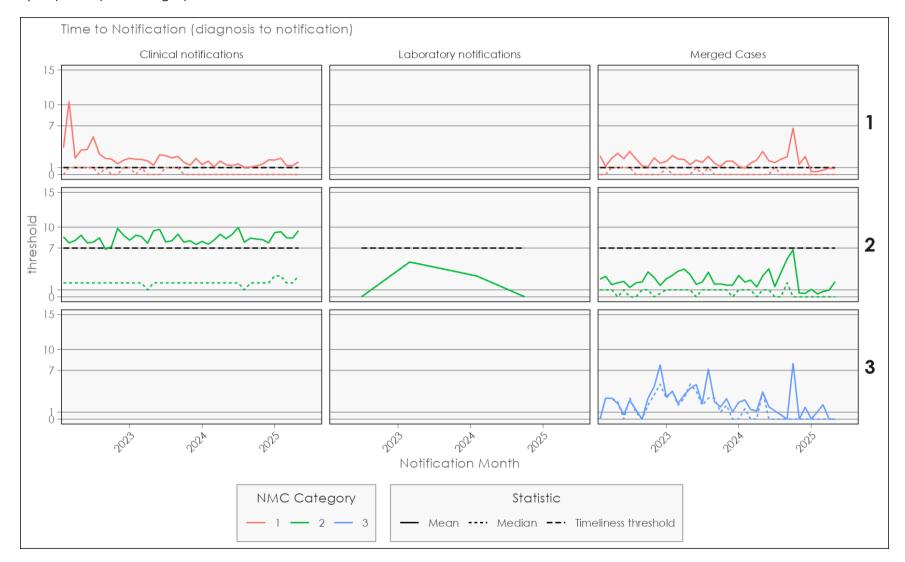


Figure 7: The mean and median number of days from time of diagnosis to notification date of NMC clinically notified conditions, in South Africa, January 2022-April. The hospital form was implemented at the beginning of 2023, but has been hindered by budget constraints.

Table 9: Symptoms of patients clinically notified and merged with lab notifications to the NMC, notified during April 2025

Characteristic	<b>Category 1</b> , n = 964 <sup>1</sup>	<b>Category 2</b> , n = 8 766 <sup>1</sup>	Category 3, n = 1331
Time to Notification	0 (0, 1)	0 (0, 7)	0 (0, 0)
Unknown	5	0	0
Back Capture Classification			
Back capture	24 (3%)	0 (0%)	0 (0%)
Current	855 (89%)	6 740 (77%)	133 (100%)
Delayed	80 (8%)	2 026 (23%)	0 (0%)
Unknown	5	o ,	0

<sup>1</sup>Median (Q1, Q3); n (%)

## Conclusion

Most 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 the symptom completed. ID numbers are poorly completed in notifications from SDW.

# **Recommendations**

- We recommend that 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 sources that existed before the launch of the NMCSS. Feel free to reach out to <a href="mailto:brianb@nicd.ac.za">brianb@nicd.ac.za</a>

# **Appendices**

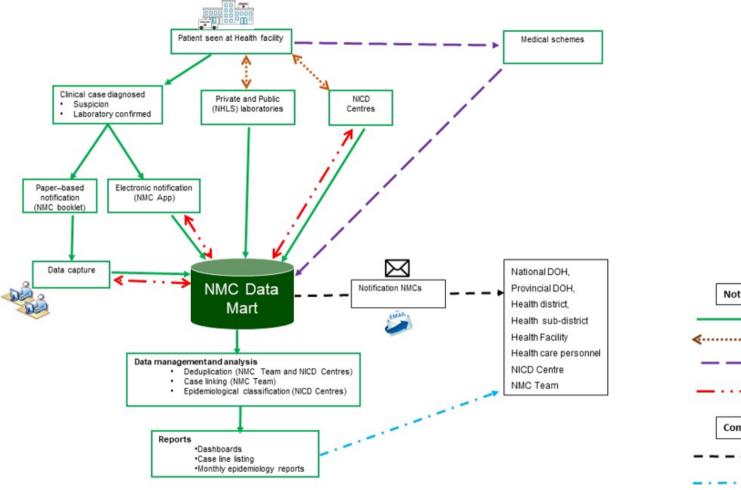
Appendix No.1: Back Captured Clinical Notifications

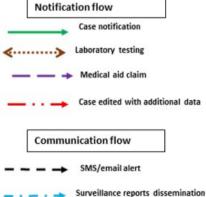
Table 10: Back-captured notifications by reporting province notified during April 2025. Back-captured notifications use the diagnosis date and the recommended time to notify, depending on the NMC category. See Appendix no.3 for details.

	Overall				Pro	vince	!				Case Source		
Condition	Overall, (29)	<b>EC</b> , (3)	<b>FS</b> , (4)	<b>GP</b> , (7)	<b>KZN</b> , (3)	<b>LP</b> , (3)	NC, (2)	<b>NW</b> ,	<b>WC</b> , (6)	Android, (6) <sup>1</sup>	Paper-based, (2)1	<b>SDW</b> , (3) <sup>1</sup>	<b>Web</b> , (18) <sup>1</sup>
Measles	8 (28%)	3	2	1	0	0	1	0	1	1	2	0	5
Rubella	5 (17%)	0	0	2	2	0	0	0	1	2	0	1	2
Foodborne illness outbreak	4 (14%)	0	2	0	0	0	0	0	2	2	0	0	2
Malaria	4 (14%)	0	0	2	0	1	1	0	0	0	0	1	3
Diphtheria	2 (6.9%)	0	0	0	0	2	0	0	0	1	0	0	1
Pertussis	2 (6.9%)	0	0	0	1	0	0	1	0	0	0	0	2
Congenital rubella syndrome	1 (3.4%)	0	0	1	0	0	0	0	0	0	0	1	0
Listeriosis	1 (3.4%)	0	0	0	0	0	0	0	1	0	0	0	1
Meningococcal disease	1 (3.4%)	0	0	1	0	0	0	0	0	0	0	0	1
Мрох	1 (3.4%)	0	0	0	0	0	0	0	1	0	0	0	1

<sup>&</sup>lt;sup>1</sup>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 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 an 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 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 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 Case: are cases reported to the NMC by health care providers at facilities, either through 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 Case**: 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 the diagnosis date. Category 2 and 3 conditions are notified within 7 days of diagnosis. All lab notifications without a diagnosis date are classified as current.

**Delayed Notification**: Category 1 conditions notified between 3 and 7 days of the 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 before the diagnosis date. Categories 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 11: The number of IDSR conditions laboratory notified to the NMC using the IDSR reporting template of under and 5-and-above years by vital status.

		Notified/Suspected							
Condition	<b>Under 5 A</b> , N = 201 <sup>1</sup>	<b>5 &amp; over A</b> , N = 88 <sup>1</sup>	<b>5 &amp; over D</b> , N = 1 <sup>1</sup>	<b>Under 5 D</b> , N = 3 <sup>1</sup>	N = 522				
Acute flaccid paralysis	17	7	0	0	0				
Acute rheumatic fever	0	0	0	0	0				
Anthrax	0	0	0	0	0				
Botulism	0	0	0	0	0				
Cholera	0	0	0	0	2				
Covid-19	0	0	0	0	0				
Congenital rubella syndrome	15	0	0	1	0				
Diphtheria	21	5	0	0	10				
Enteric fever (typhoid or paratyphoid fever)	5	1	0	0	3				
Foodborne illness outbreak	15	11	0	0	0				
Haemolytic uraemic syndrome (HUS)	0	0	0	0	0				
Listeriosis	0	1	0	0	4				
Malaria	0	0	0	0	455				
Ebola virus (VHF)	0	0	0	0	0				
Marburg virus (VHF)	0	0	0	0	0				
Measles	73	27	0	0	18				
Meningococcal disease	7	2	1	0	5				
Mpox	9	5	0	1	1				
Pertussis	9	1	0	0	16				
Plague	0	0	0	0	0				
Poliomyelitis	0	0	0	0	0				
Rabies	4	0	0	1	1				
Respiratory disease caused by a novel respiratory pathogen	2	0	0	0	0				
Rift Valley fever (human)	0	0	0	0	0				
Rubella	24	28	0	0	7				
Smallpox	0	0	0	0	0				
Crimean-Congo viral haemorrhagic fever (human)	0	0	0	0	0				
Yellow fever	0	0	0	0	0				

A = Cases who are alive.

D = Cases who are deceased.

# Appendix No.5: Trends and Epi-Table of All Category 1 Notifications 2022 to April 2025. All Notifications

Table 12: Number of notifications on NMCSS per epi-week in 2025. The Average notifications are calculated based on notifications received in 2022 and 2023 with a confidence interval.

	Av Notif	Epi-weeks																					
Characteristic		95% CI	50	51	52	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Acute flaccid paralysis	3.7	4.0, 5.0	4	6	4	5	3	9	5	10	6	6	5	9	3	6	5	4	4	5	7	5	5
Acute rheumatic fever	0.22	1.0, 1.0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Anthrax	0.0061	NA, NA	0	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	0	0	0	0	0	0	0	0	0
Cholera	3.22	2.0, 3.0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	2	0	0	0	0
Congenital rubella syndrome	2.33	2.5, 3.0	5	6	4	0	6	3	4	3	8	6	3	7	1	8	4	2	1	11	5	7	1
Covid-19	584	373, 543	151	187	210	248	419	366	355	351	282	228	146	115	82	61	61	47	39	36	24	30	12
Crimean-Congo viral haemorrhagic fever (human)	0.24	1.0, 1.5	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0
Diphtheria	1.11	2.0, 2.5	2	16	3	5	11	8	5	8	4	22	10	8	5	9	2	5	8	12	6	11	3
Ebola virus (VHF)	0.0348	1.0, 1.0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Enteric fever (typhoid or paratyphoid fever)	2.68	3.0, 3.5	4	1	1	3	4	3	6	3	5	2	3	2	5	7	3	2	2	3	4	1	1
Fever-Rash	75	24, 32	128	124	113	73	63	33	59	41	61	33	46	62	77	79	45	79	32	64	60	37	16
Foodborne illness outbreak	10	8.5, 11	22	33	12	19	23	11	19	13	16	4	36	22	94	36	5	16	6	10	7	7	1
Haemolytic uraemic syndrome (HUS)	0.0389	1.0, 1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Listeriosis	3.6	2.5, 3.0	2	3	2	4	3	4	1	1	1	3	0	5	2	4	0	0	0	0	1	5	0
Malaria	149	99, 120	60	89	58	42	61	77	148	115	101	107	113	105	125	165	112	151	106	123	102	117	41
Marburg virus (VHF)	0.0328	1.0, 1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Meningococcal disease	2.60	3.0, 3.5	1	2	2	1	0	1	5	2	0	3	3	3	7	3	1	3	3	5	5	2	1
Mpox	0.82	4.5, 8.5	1	4	1	0	4	0	2	0	0	1	4	0	1	5	4	3	4	6	8	4	0
Pertussis	14	11, 15	2	9	6	6	12	6	3	12	8	6	7	7	7	11	10	12	5	11	7	5	4
Plague	0.0020	NA, NA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Poliomyelitis	0.0225	NA, NA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rabies	0.62	1.5, 1.5	0	2	1	0	0	3	0	1	0	0	1	0	1	0	3	0	3	1	1	1	0
Respiratory disease caused by a novel respiratory	4.1	3.0, 8.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
pathogen																							
Rift Valley fever (human)	0.07	1.0, 1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Smallpox	0.0430	1.0, 2.0	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	0.09	1.0, 1.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yellow fever	0.0266	1.0, 1.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Abbreviation: CI = Confidence Interval

## **Trends Plot Category 1**

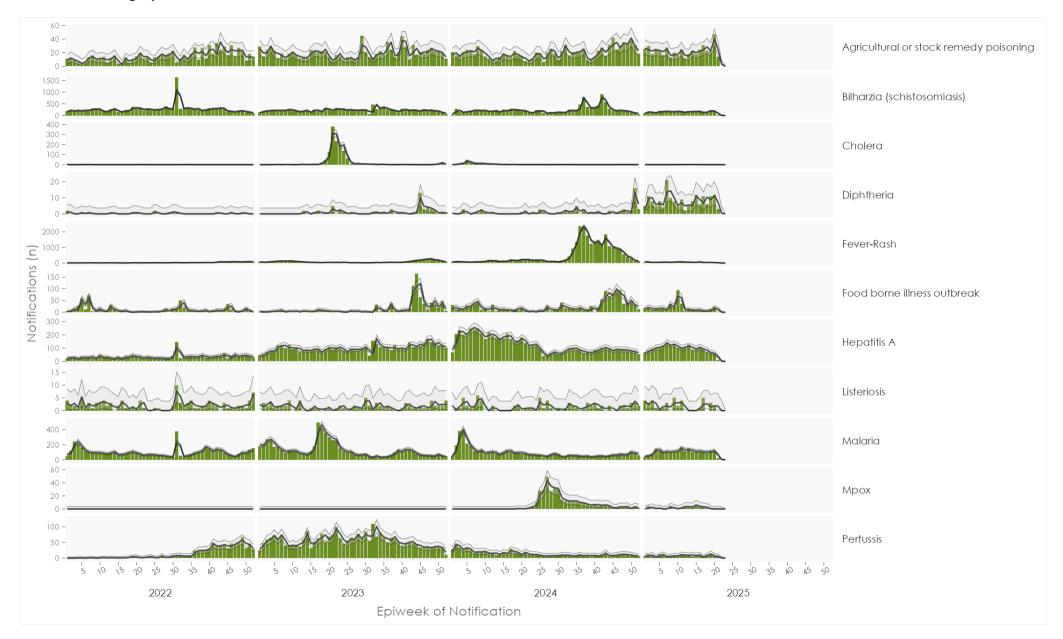


Figure 8: Trend of weekly number of all notifications for selected conditions reported to the NMC, in South Africa, January 2022-April 2025

# Trends Plot Category 2

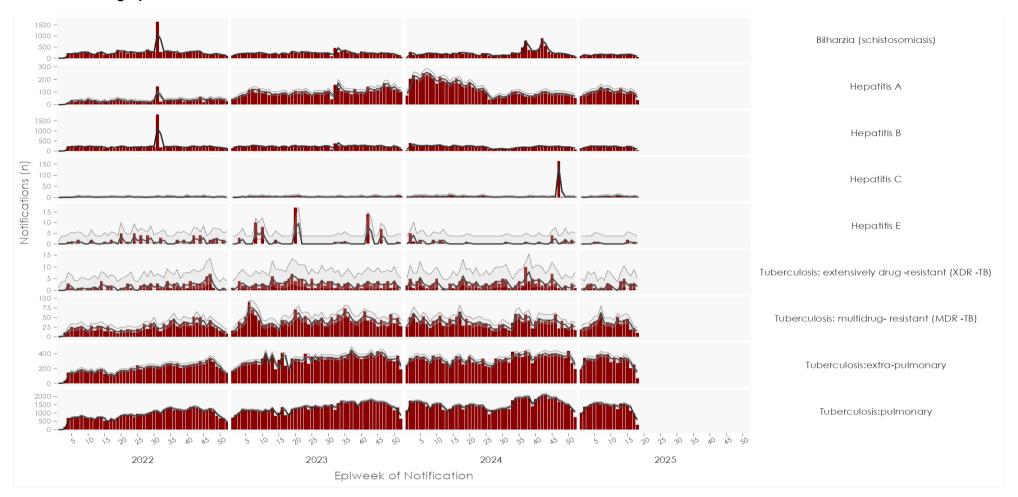


Figure 9: Trend of weekly number of all notifications for selected conditions reported to the NMC, in South Africa, January 2022-April 2025