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

October 2024

Table of Contents

Introduction 3
Highlights 3
NMC Reporting Application 3
Current Notification Trends 4
Confirmed Notifications 4
All Category 1 Conditions at a Glance 6
NMC Data Summary, October 2024 7
Category 1 Notifications 8
Table 8
Plot 9
Category 2 Notifications 10
Table 10
Plot 11
Statistic of the Usage of the NMC App 12
Table 5: Description of NMC Notifications by Case Source 12
Notification Types and Merging 13
The Average Active Users on The NMC App 15
Newly Registered Users 16
Data Quality 17
Completeness 17
ID Number Completeness 17
Hospital Form Completeness 18
Timeliness 19
Disease Of The Month – Agricultural or Stock Remedy Poisoning 20
Conclusion 22
Recommendations 22
Appendices 23
Appendix No. 1: Back-Captured Clinical Notifications 23
Appendix No.2: Summary of NMCSS Data Flow 24
Appendix No.3: NMC Categories, And Case Classification Definitions 25
Appendix No.4: IDSR Reporting Template for IDSR Conditions Existing on NMC By Under-5 and 5-and-Over Years and Vital Status. 26
Appendix No.5: Trends and Epi-Table of All Category 1 Notifications From 2022 to October 2024. 27
All Notifications 27

Introduction

Data used in this report was drawn from the NMC-SS on **18 November 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-week is used.

Highlights

- A total of 19 256 cases were notified in October 2024 and most were category 2 conditions.
- Category 1 cases were reported in a median (IQR) of 0 (0, 1) days.
- There are increased fever rash (Measles + Rubella) and Bilharzia (schistosomiasis notifications during October).
- The NMC recorded 561 active users - the highest recorded to date.

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. All notifications are shown after and include notifications that can be considered suspected cases. These are presented to show the sensitivity of the surveillance system in recognising disease signals.

Confirmed Notifications

Epi-table

Table 1: *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]	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**
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	0.0295	1.0, 1.0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
Botulism	0.0066	NA, NA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cholera	0.75	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	0.0164	NA, NA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
Covid-19	312	21, 186	6	0	1	0	0	0	0	2	2	2	3	3	2	2	0	8	0	1	1	0
Crimean-Congo viral haemorrhagic fever (human)	0.0164	NA, NA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diphtheria	0.12	1.0, 1.5	2	0	0	0	0	0	1	0	1	2	4	0	3	0	2	0	0	0	0	0
Enteric fever (typhoid or paratyphoid fever)	1.33	1.5, 2.0	0	0	0	0	0	1	0	1	2	0	2	4	4	5	3	2	1	1	1	0
Foodborne illness outbreak	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
Listeriosis	0.54	1.0, 1.5	1	0	0	0	0	0	0	0	2	1	1	0	0	2	0	2	1	1	0	1
Malaria	102	80, 97	62	27	56	62	73	57	30	48	59	57	48	48	44	45	32	46	49	50	38	32
Measles	1.75	2.5, 3.5	4	1	1	4	1	3	0	0	3	4	10	17	10	1	2	8	3	2	0	0
Meningococcal disease	1.03	1.5, 2.0	3	1	2	6	4	1	4	0	4	3	1	6	4	4	1	0	5	1	3	0
Mpox	0.0820	1.0, 4.0	5	4	5	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0
Pertussis	10	10, 14	0	1	6	7	9	7	5	6	4	3	3	4	1	1	0	8	3	9	6	1
Rabies	0.09	1.0, 1.0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Respiratory disease caused by a novel respiratory pathogen	0.0066	NA, NA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rubella	1.40	2.5, 4.5	7	1	0	0	0	0	0	0	0	0	4	0	7	4	5	16	6	5	2	5

[1]CI = Confidence Interval

Trends Plot

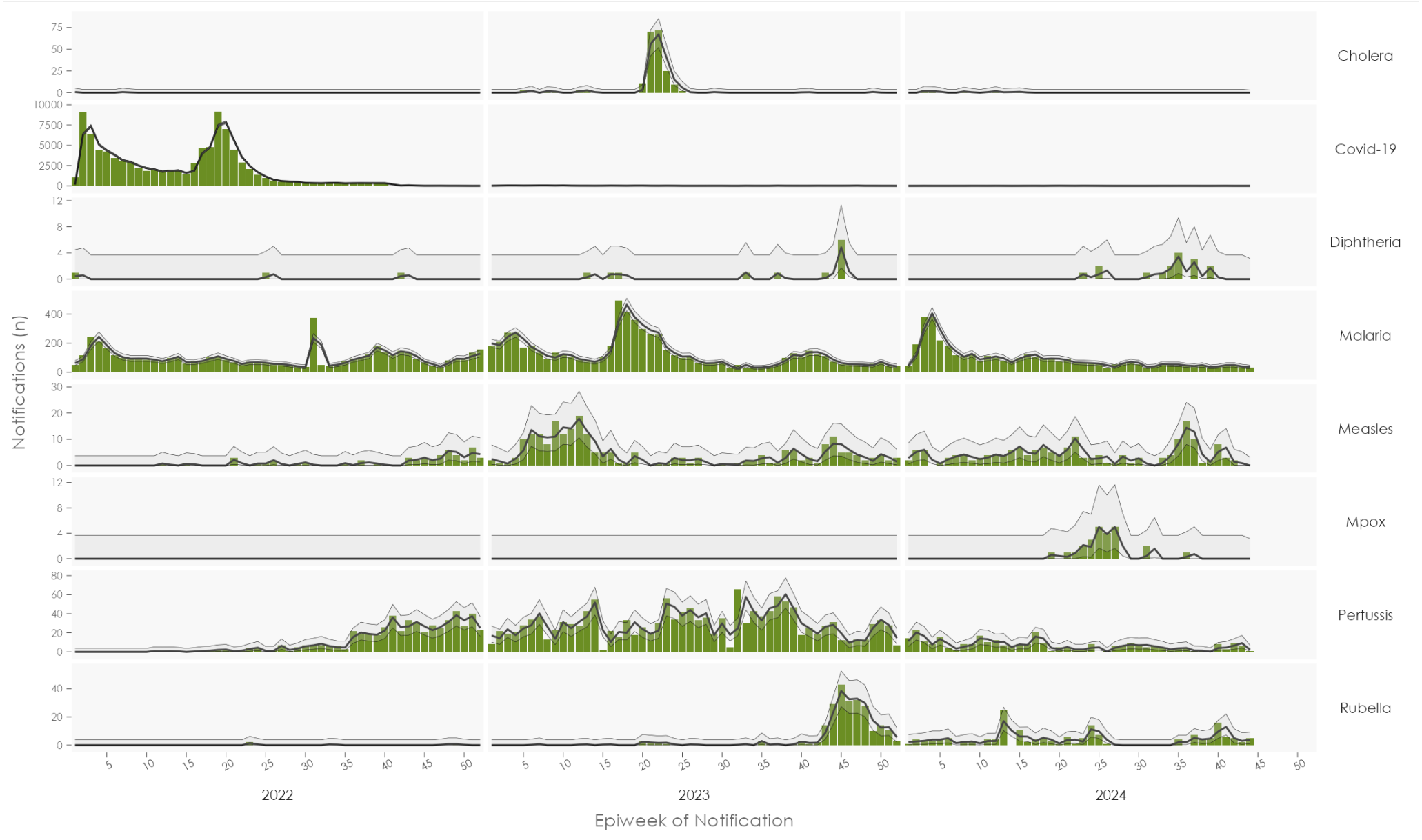


Figure 1: Trend of weekly number of confirmed notifications for selected category 1 conditions reported to the NMC, in South Africa; January 2022-October, 2024

All Category 1 Conditions at a Glance

While measles was the most common notification to NMC, preliminary data verification has shown that most of the measles notifications are of patients whose final laboratory diagnosis is Rubella.

The most accurate info on measles and rubella is the sitrep.

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

Condition	**Overall**, N = 3 186[1]	**Suspected**, N = 2 913[1]	**Confirmed**, N = 273[1]
Acute flaccid paralysis	21	21	0
Acute rheumatic fever	1	0	**1**
Anthrax	0	0	0
Botulism	1	1	0
Cholera	1	1	0
Congenital rubella syndrome	33	32	**1**
Covid-19	0	0	0
Crimean-Congo viral haemorrhagic fever (human)	1	1	0
Diphtheria	2	2	0
Ebola virus (VHF)	0	0	0
Enteric fever (typhoid or paratyphoid fever)	16	12	**4**
Foodborne illness outbreak	198	198	0
Haemolytic uraemic syndrome (HUS)	0	0	0
Listeriosis	6	2	**4**
Malaria	196	0	**196**
Marburg virus (VHF)	0	0	0
Measles	2 225	2 218	**7**
Meningococcal disease	17	9	**8**
Mpox	27	27	0
Pertussis	42	15	**27**
Plague	0	0	0
Poliomyelitis	0	0	0
Rabies	4	4	0
Respiratory disease caused by a novel respiratory pathogen	0	0	0
Rift Valley fever (human)	0	0	0
Rubella	395	370	**25**
Smallpox	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, October 2024

A total of 19,256 current and delayed cases were notified to the NMCSS during October 2024 **(See Table 9 for further breakdowns and Appendix no.3 for definitions)**. There were 18,705 current notifications; the majority (15,302, 82%) were category 2 conditions. The provinces with the highest number of notifications were KZN (4 749, 25%), GP (3 831, 20%), and WC (2 592, 14%). The provinces with the least number of notifications were MP (814, 4.4%), and FS (922, 4.9%). There were 551 back-captured clinical notifications diagnosed between June 2024 and October 2024 and only notified during October 2024. The majority (412, 75%) of those notifications were Measles. (**See Appendix no.1**).

Most of the notified cases were females (10 743, 57%). Individuals in the 5–9-year age group represented the majority (1 849, 11%) of notified cases. At the time of notification, 3 170 (17%) of the notified cases were hospitalised, while 99 (0.5%) were transferred to another healthcare facility. There were 171 deaths notified during the reporting period.

Category 1 Notifications

Measles was the most common (2 225, 70%) category 1 notification **(suspected and confirmed)**. The province with the highest number of notifications for Measles was GP (668,30%). **Malaria** was the most common (196, 72%) category 1 notification **confirmed**. The province with the highest number of confirmed notifications for Malaria was GP (42,340.8%), followed by MP (41, 20.9%).

Table

Table 3: *The number of notifications by province and number of notifications that are suspected and confirmed by vital status, October 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	2	0	6	6	1	1	0	0	5	0	21	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	0	0	0	0	1	0	1	0	0
Cholera §	0	0	0	0	0	1	0	0	0	0	1	0	0
Covid-19	0	0	0	0	0	0	0	0	0	0	0	0	0
Congenital rubella syndrome	0	4	5	14	1	3	0	1	5	1	32	0	0
Diphtheria *	0	0	1	0	0	0	0	0	1	0	2	0	0
Enteric fever (typhoid or paratyphoid fever)	2	0	4	1	0	4	0	3	2	4	12	0	0
Foodborne illness outbreak	26	4	82	34	45	3	0	0	4	0	198	0	7
Haemolytic uraemic syndrome (HUS)	0	0	0	0	0	0	0	0	0	0	0	0	0
Listeriosis	1	0	2	0	1	0	0	0	2	4	2	1	1
Malaria	5	10	42	37	21	41	2	12	26	196	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	30	88	668	278	51	206	378	372	154	7	2 218	0	0
Meningococcal disease	3	2	3	0	0	0	0	0	9	8	9	0	2
Mpox	4	0	10	7	2	2	1	0	1	0	27	0	0
Pertussis	3	1	6	6	0	4	1	1	20	27	15	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	0	2	0	1	0	0	0	0	4	0	0
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	8	57	64	95	4	53	13	62	39	25	370	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	1	0	0	0	0	1	0	0
Yellow fever	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	85	166	893	480	126	320	395	451	270	273	2 913	1	10

[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

Plot

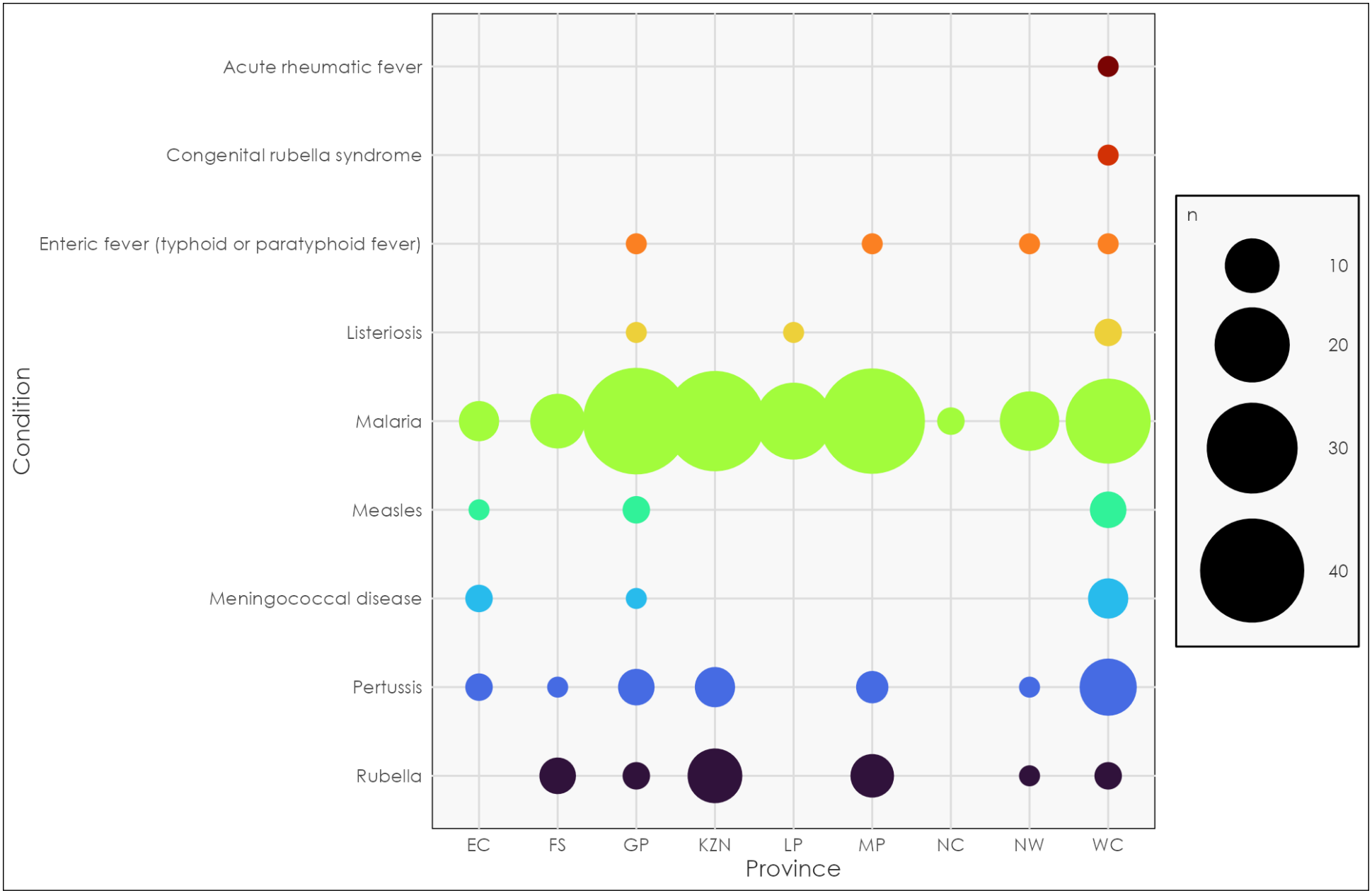


Figure 2: Distribution of all Category 1 NMCs notifications by province notified during October 2024. *All notifications include both suspected and confirmed cases

Category 2 Notifications

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

Table

There were 15 302 Category 2 notifications in October 2024. Bilharzia (schistosomiasis) was the most common category 2 notification (2 380, 15.6%). The province with the highest number of notifications for Bilharzia (schistosomiasis) was LP (1607, 68%).

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	11	21	38	2	5	1	0	4	12	0	94	0	15
Bilharzia (schistosomiasis)	47	1	25	580	1 607	152	3	8	20	63	2 380	0	1
Brucellosis	0	0	0	0	0	0	0	0	3	0	3	0	0
Congenital syphilis	66	17	68	471	4	24	18	10	89	62	705	3	6
Haemophilus influenzae type B	0	0	1	1	0	0	0	0	0	1	1	1	0
Hepatitis A	28	26	75	225	32	31	9	11	59	58	438	0	2
Hepatitis B	163	45	80	1 154	19	10	19	68	14	69	1 503	1	1
Hepatitis C	0	1	5	0	0	0	0	0	3	0	9	0	0
Hepatitis E	0	0	0	0	0	0	0	0	1	0	1	0	0
Lead poisoning	0	0	0	0	0	0	0	0	0	0	0	0	0
Legionellosis	0	1	0	6	0	0	0	1	2	9	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	2	1	1	0	0	0	0	0	4	0	4
Mercury poisoning	0	0	0	1	0	0	1	0	0	0	2	0	0
Soil-transmitted helminths	0	0	0	0	0	0	0	0	0	0	0	0	0
Tetanus	0	0	1	1	0	0	0	0	0	0	2	0	0
Tuberculosis: extensively drug-resistant (XDR -TB) *	3	1	2	3	0	5	0	0	0		-		-
Tuberculosis: multidrug- resistant (MDR -TB) *	20	10	67	30	6	3	0	6	35		-		-
Tuberculosis: extra-pulmonary*	148	79	581	297	62	30	60	56	242		-		-
Tuberculosis: pulmonary*	888	548	1 945	1 457	388	237	497	433	1 758		-		-
Total	1 374	750	2 890	4 229	2 124	493	607	597	2 238	262	15 040	5	155

[1]n;

* 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

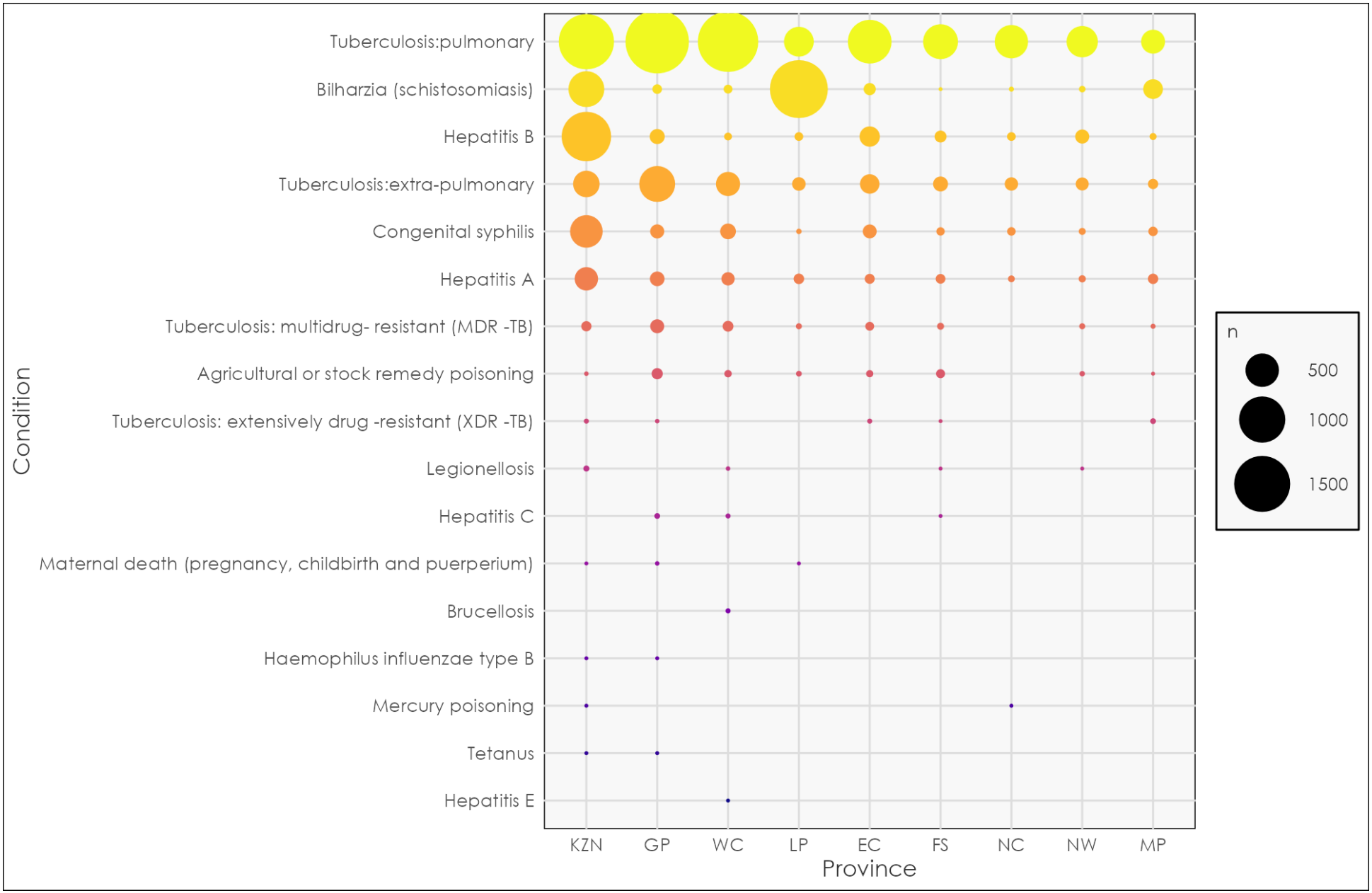


Figure 3: Distribution of all Category 2 NMCs notifications by province notified during October 2024. *All notifications include both suspected and confirmed cases

Statistic of the Usage of the NMC App

Table 5: Description of NMC Notifications by Case Source

NMC Category	**Overall** N = 18 705	**Clinical notifications**, n = 13 326	**Laboratory notifications**, n = 5 030	**Merged Cases**, n = 349
Category 1	3 186 (17%)	2 816 (21%)	284 (5.6%)	86 (25%)
Category 2	15 302 (82%)	10 510 (79%)	4 538 (90%)	254 (73%)
Category 3	217 (1.2%)	0 (0%)	208 (4.1%)	9 (2.6%)

Notification Types and Merging

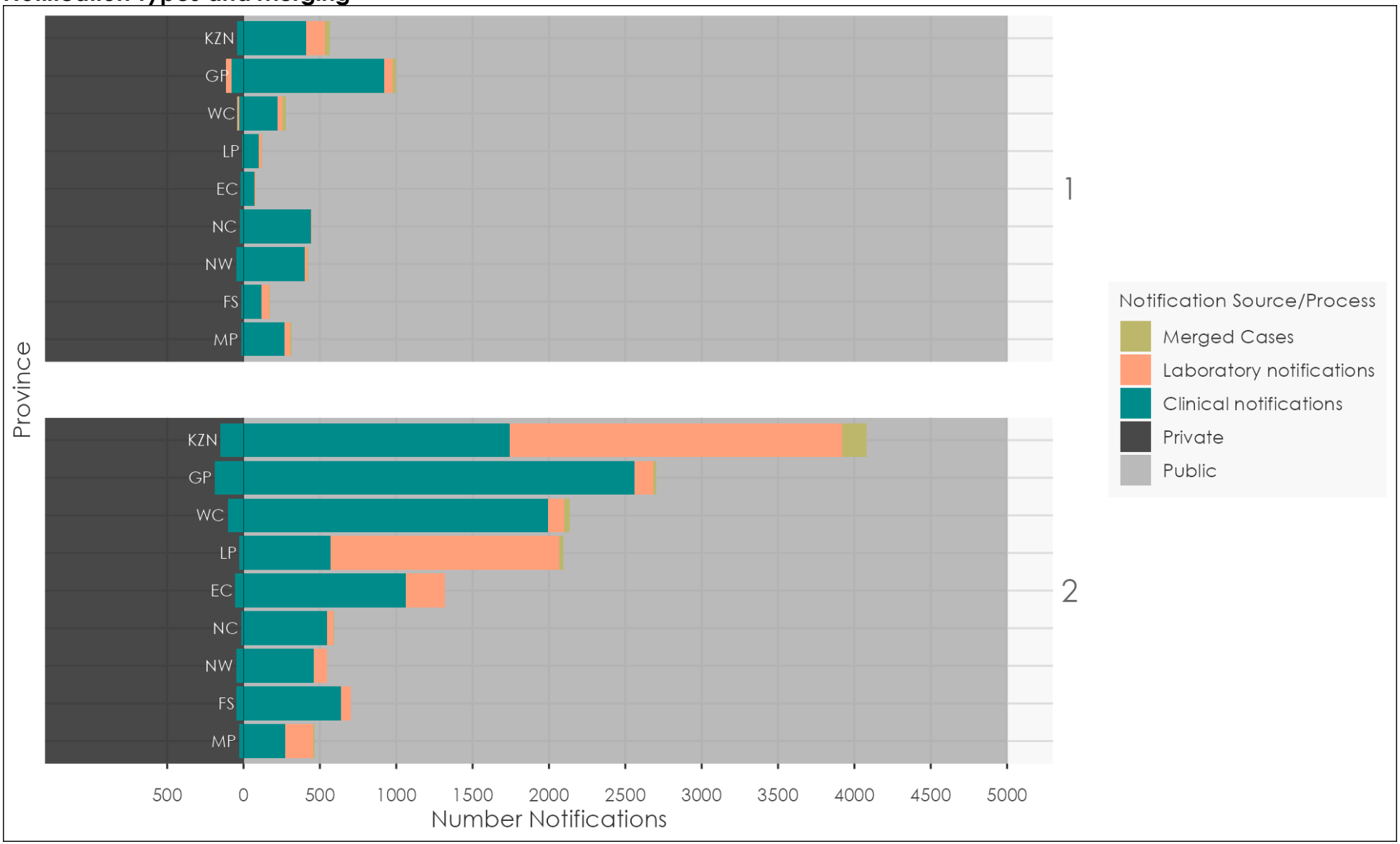


Figure 4: Distribution of Category 1 notification type by the province during October 2024

There were 934 (6.8%) clinical notifications from the private sector (i.e. private hospitals, private practice and the mining industry) compared to 12 661 (93%) in the public sector. 18 299 clinical notifications were using the NMC Reporting Application (more details in Table 7).

Table 6: *Notifications by source and health sector in South Africa, October 2024*

	App		Paper-based	
Province	**Private** N = 963[1]	**Public** N = 17 336[1]	**Private** N = 44[1]	**Public** N = 282[1]
EC	73 (5.2%)	1 335 (95%)	4 (5.2%)	73 (95%)
FS	62 (6.8%)	852 (93%)	2 (33%)	4 (67%)
GP	297 (7.8%)	3 487 (92%)	20 (63%)	12 (38%)
KZN	189 (4.0%)	4 528 (96%)	7 (50%)	7 (50%)
LP	40 (1.8%)	2 177 (98%)	2 (5.9%)	32 (94%)
MP	44 (5.5%)	761 (95%)	0 (0%)	3 (100%)
NC	36 (3.6%)	954 (96%)	2 (13%)	14 (88%)
NW	85 (8.6%)	900 (91%)	4 (9.1%)	40 (91%)
WC	137 (5.5%)	2 342 (94%)	3 (3.0%)	97 (97%)

[1]n (%)

Table 7: *Clinical notifications notified by provinces, reporting platform, and sector*

Province	**Overall** N = 13 595	**App - Private**, n = 890	**App - Public**, n = 12 379	**Paper-based - Private**, n = 44	**Paper-based - Public**, n = 282
GP	3 589	240 (6.7%)	3 317 (92%)	20 (0.6%)	12 (0.3%)
KZN	2 442	181 (7.4%)	2 247 (92%)	7 (0.3%)	7 (0.3%)
WC	2 367	132 (5.6%)	2 135 (90%)	3 (0.1%)	97 (4.1%)
EC	1 192	71 (6.0%)	1 044 (88%)	4 (0.3%)	73 (6.1%)
NC	956	35 (3.7%)	905 (95%)	2 (0.2%)	14 (1.5%)
NW	923	85 (9.2%)	794 (86%)	4 (0.4%)	40 (4.3%)
FS	800	62 (7.8%)	732 (92%)	2 (0.3%)	4 (0.5%)
LP	734	40 (5.4%)	660 (90%)	2 (0.3%)	32 (4.4%)
MP	592	44 (7.4%)	545 (92%)	0 (0%)	3 (0.5%)

The Average Active Users on The NMC App

There were 561 average active users of the NMC App in October 2024, the highest recorded to date.

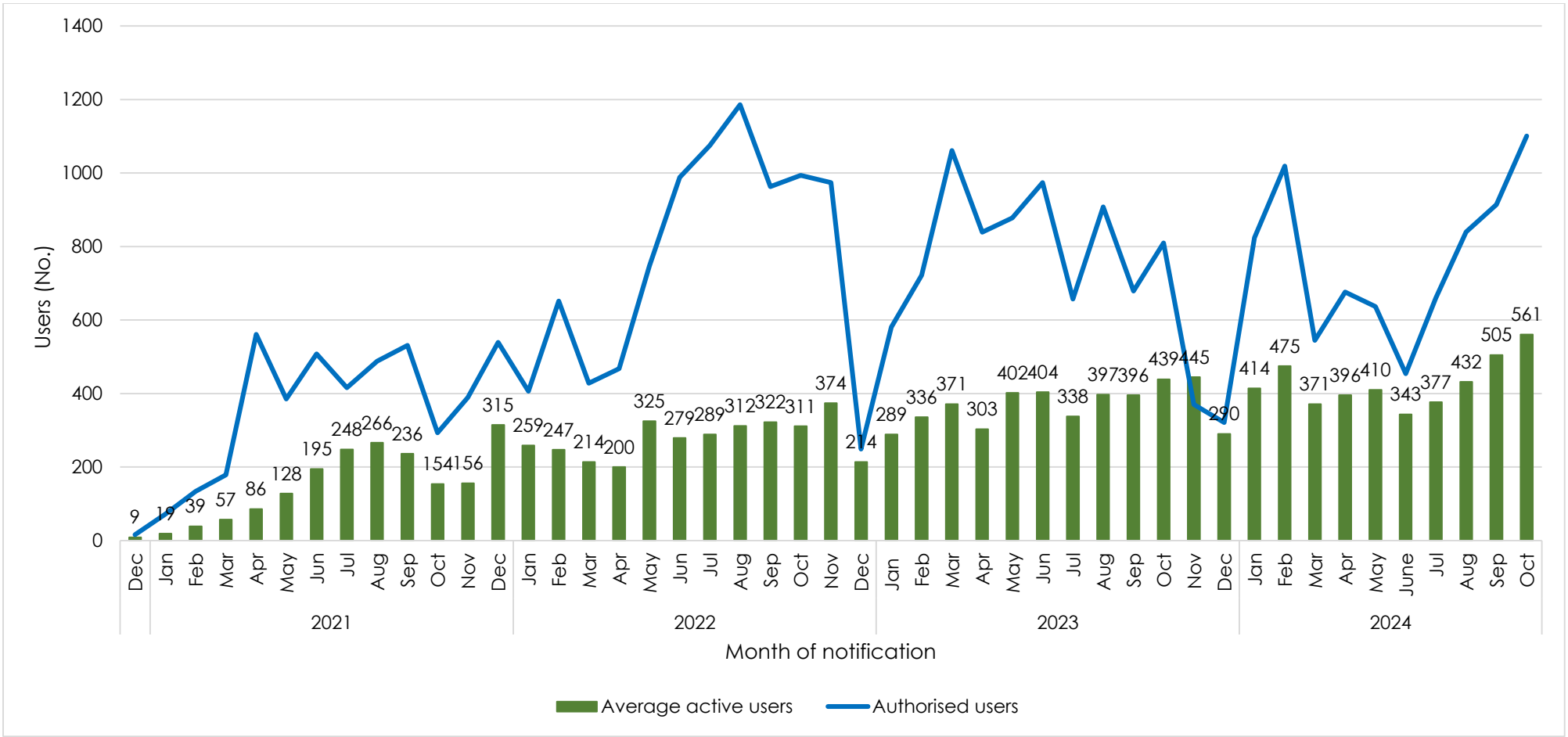


Figure 5: Authorised users and average active users of the NMC Reporting App by month of notification, December 2020-October 2024

Newly Registered Users

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

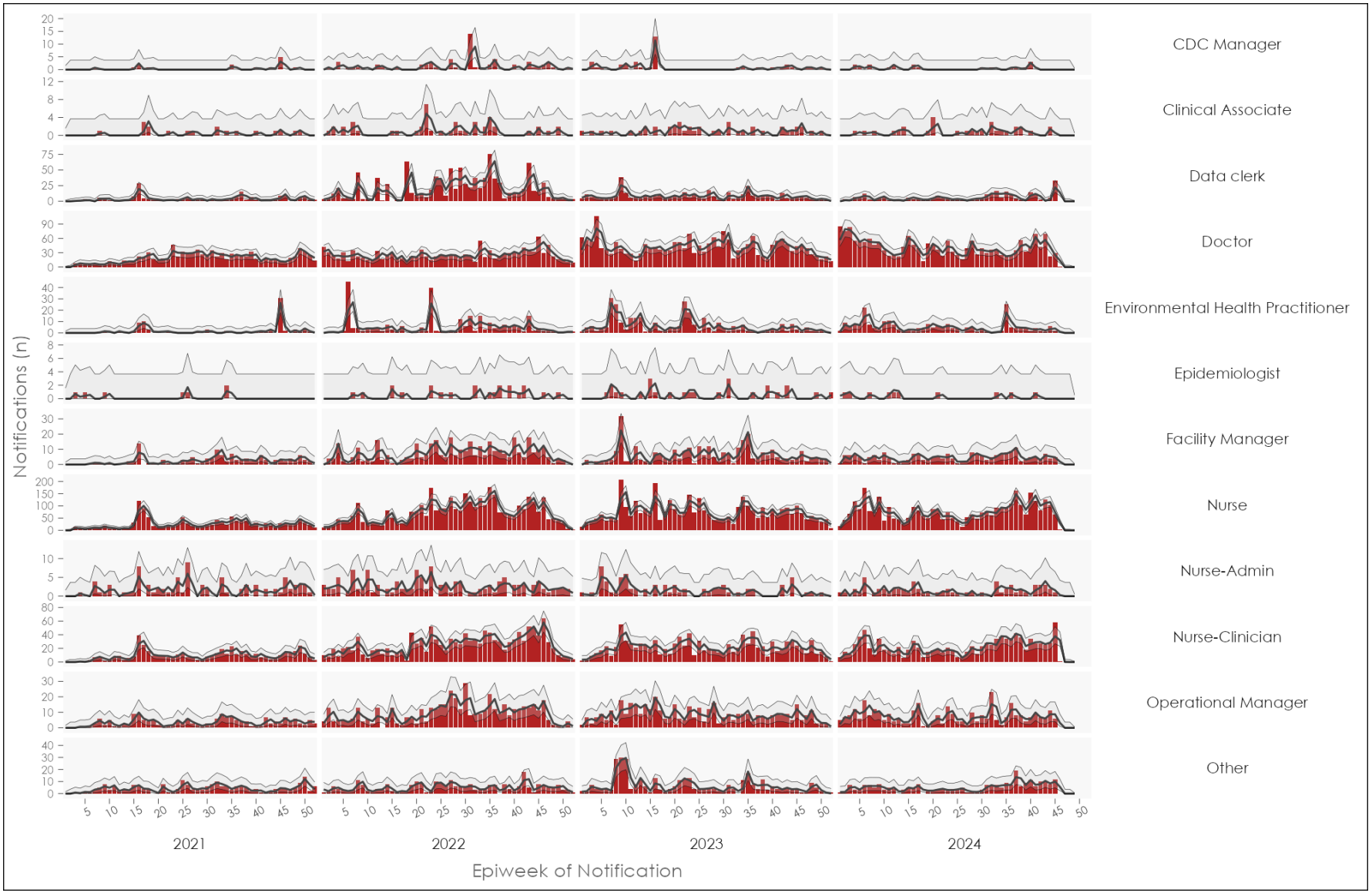


Figure 6: Trends of new users registered by occupation in South Africa, Jan 2022- May 2024

Data Quality

Completeness

ID Number Completeness

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

Length of ID number	Android N = 4 700[1]	iOS N = 1 137[1]	MicroStrategy/SDW N = 5 305[1]	Paper-based N = 333[1]	Web N = 7 230[1]
Not complete	2 190 (47%)	482 (42%)	5 248 (99%)	210 (63%)	2 215 (31%)
2	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (<0.1%)
5	0 (0%)	2 (0.2%)	0 (0%)	0 (0%)	0 (0%)
6	1 (<0.1%)	120 (11%)	7 (0.1%)	0 (0%)	718 (9.9%)
7	0 (0%)	2 (0.2%)	0 (0%)	0 (0%)	6 (<0.1%)
8	1 (<0.1%)	1 (<0.1%)	1 (<0.1%)	0 (0%)	86 (1.2%)
9	0 (0%)	2 (0.2%)	0 (0%)	0 (0%)	18 (0.2%)
10	0 (0%)	19 (1.7%)	0 (0%)	0 (0%)	167 (2.3%)
11	0 (0%)	0 (0%)	0 (0%)	0 (0%)	5 (<0.1%)
12	0 (0%)	1 (<0.1%)	0 (0%)	0 (0%)	53 (0.7%)
13	2 508 (53%)	508 (45%)	49 (0.9%)	123 (37%)	3 961 (55%)

[1]n (%)

Hospital Form Completeness

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

Hospital Form Completed	**Complete**, n = 45 (15%)	**Incomplete**, n = 51 (17%)	**Not Attempted**, n = 57 (19%)	**Only Symptoms completed**, n = 142 (48%)
Acute flaccid paralysis	6 (13%)	0 (0%)	2 (3.6%)	9 (6.3%)
Acute rheumatic fever	0 (0%)	0 (0%)	1 (1.8%)	0 (0%)
Anthrax	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Botulism	1 (2.2%)	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%)	3 (5.5%)	0 (0%)
Diphtheria *	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Enteric fever (typhoid or paratyphoid fever)	1 (2.2%)	2 (3.9%)	2 (3.6%)	2 (1.4%)
Foodborne illness outbreak	4 (8.9%)	5 (9.8%)	11 (20%)	34 (24%)
Haemolytic uraemic syndrome (HUS)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Listeriosis	0 (0%)	1 (2.0%)	2 (3.6%)	0 (0%)
Malaria	9 (20%)	10 (20%)	7 (13%)	31 (22%)
Ebola virus (VHF)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Marburg virus (VHF)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Measles	6 (13%)	19 (37%)	4 (7.3%)	47 (33%)
Meningococcal disease	3 (6.7%)	5 (9.8%)	4 (7.3%)	2 (1.4%)
Mpox	1 (2.2%)	2 (3.9%)	10 (18%)	0 (0%)
Pertussis	9 (20%)	6 (12%)	1 (1.8%)	10 (7.0%)
Plague	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Poliomyelitis	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Rabies	0 (0%)	0 (0%)	0 (0%)	1 (0.7%)
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	5 (11%)	1 (2.0%)	8 (15%)	5 (3.5%)
Smallpox	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Crimean-Congo viral haemorrhagic fever (human)	0 (0%)	0 (0%)	0 (0%)	1 (0.7%)
Yellow fever	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Unknown	0	0	2	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 October 2024*

Characteristic	**Category 1**, n = 3 737	**Category 2**, n = 15 302	**Category 3**, n = 217
Time to Notification	0 (0, 1)	1 (0, 8)	37 (0, 97)
Unknown	320	1	0
Back Capture Classification			
Back capture	231 (7%)	0 (0%)	0 (0%)
Current	2 938 (86%)	11 223 (73%)	87 (40%)
Delayed	248 (7%)	4 079 (27%)	130 (60%)
Unknown	320	0	0

Disease Of The Month – Agricultural or Stock Remedy Poisoning

A pesticide (e.g. an agricultural or stock remedy) is any chemical substance, or mixture of substances, intended to kill, repel, or control forms of plant or animal life considered to be pests or to regulate plant growth. **Pesticides** include herbicides, insecticides, fungicides, rodenticides, and repellents. **Agricultural** or stock remedy poisoning is a category 2 notifiable medical condition and should be notified by the health care provider making the clinical diagnosis within 7 days. A suspected case must be notified after acute pesticide exposure, from a patient or witness, *or* ≥ 2 new post-exposure symptoms with a reasonable cause-effect relationship.

Table 1 Descriptive statistics Agricultural and Stock Remedy-Poisoning notifications in South Africa, January 2019 – October 2024

	Notifications before 2024 N = 3 141[1]	**Notifications in 2024** N = 868[1]
Age		
Median (Q1, Q3)	25 (14, 36)	18 (2, 33)
Unknown	52	6
Sex		
Female	1 440 (46%)	420 (48%)
Male	1 698 (54%)	447 (51%)
Self-Defined	2 (<0.1%)	1 (0.1%)
Unknown	1 (<0.1%)	0 (0%)
Province		
EC	170 (5.4%)	51 (5.9%)
FS	406 (13%)	104 (12%)
GP	2 021 (64%)	460 (53%)
KZN	28 (0.9%)	22 (2.5%)
LP	105 (3.3%)	57 (6.6%)
MP	51 (1.6%)	38 (4.4%)
NC	28 (0.9%)	4 (0.5%)
NW	113 (3.6%)	28 (3.2%)
WC	219 (7.0%)	104 (12%)
case definition		
Confirmed	26 (0.8%)	0 (0%)
Suspected	3 115 (99%)	868 (100%)
Vital Status		
Alive	2 840 (90%)	785 (90%)
Deceased	260 (8.3%)	76 (8.8%)
Unknown	41 (1.3%)	7 (0.8%)

[1]n (%)

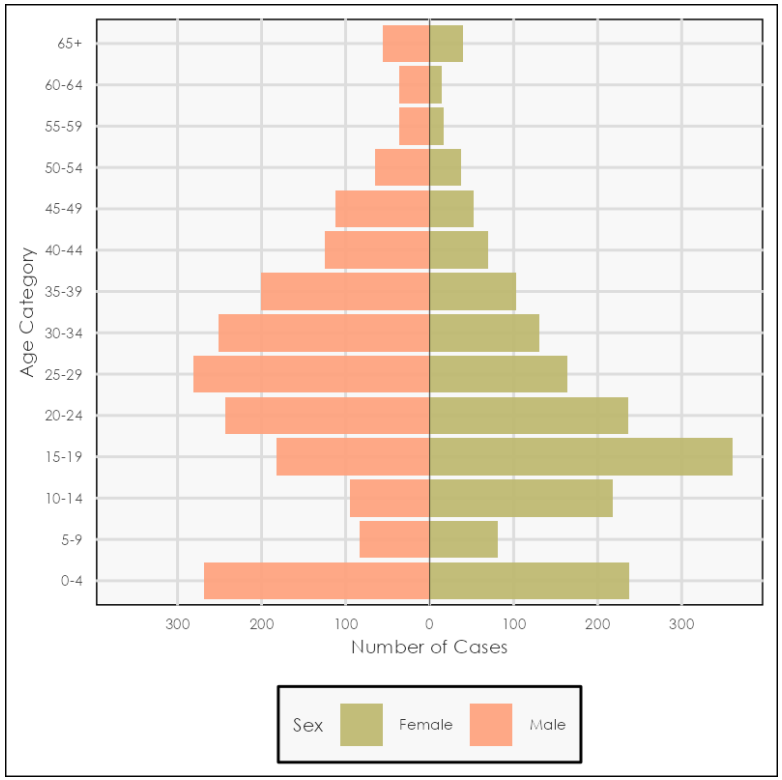


Figure 1: Age and Sex Pyramid of Agricultural and Stock Remedy-Poisoning notifications in South Africa, January 2019 – October 2024

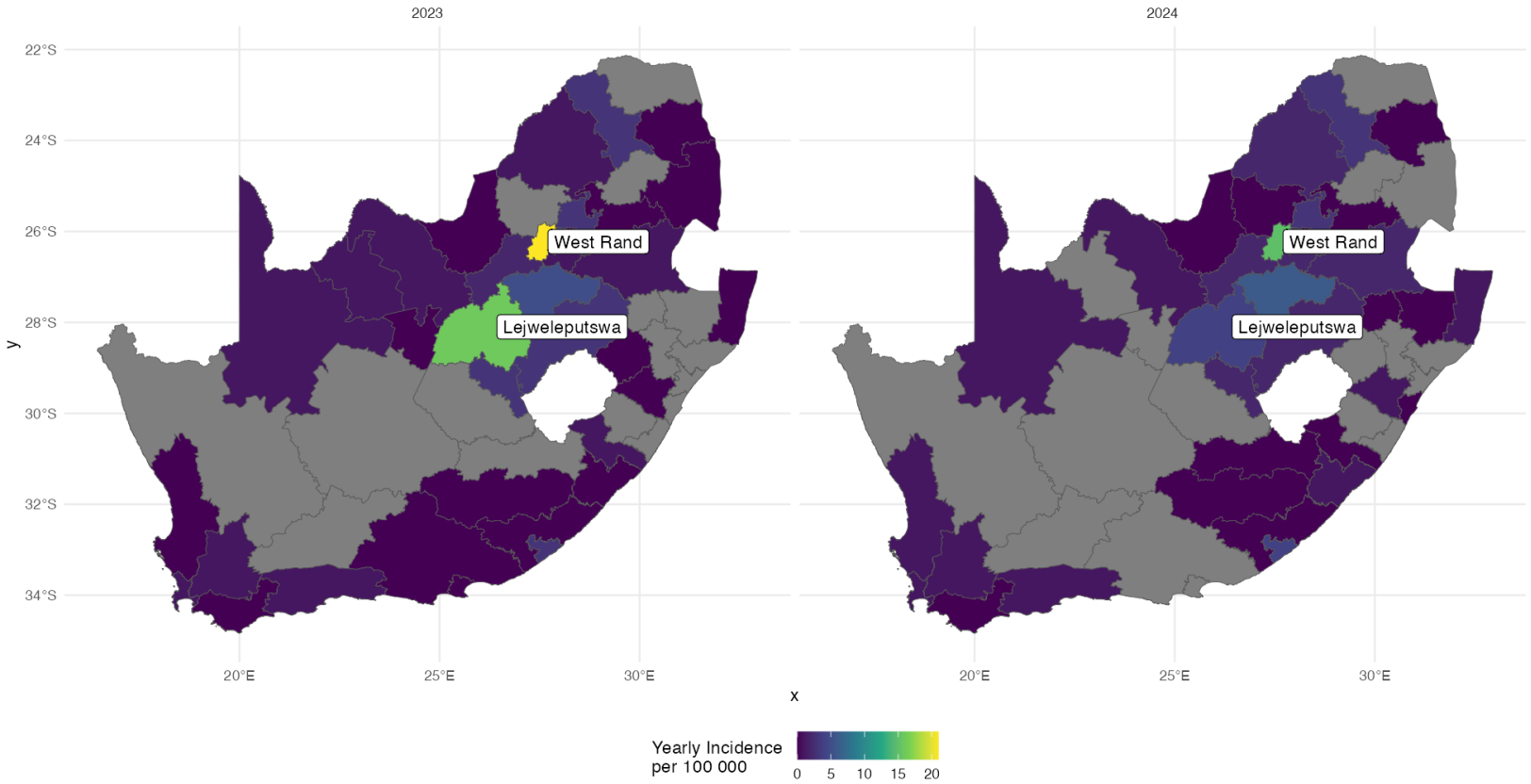


Figure 1: *A map of the yearly incidence of agricultural or stock remedy poisoning notifications in SA. Mid-year population estimates from the appropriate year are used to calculate incidence per district. Notifications are taken from the whole of 2023 and January to October 2024.*

Notable high incidence of agricultural or stock remedy poisoning notifications was noted in the Lejweleputswa district in 2023, and the West Rand district in 2023 and 2024.

We strongly urge all clinicians to notify and cases of suspected agricultural or stock remedy poisoning to the NMC timeously.

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. There are rises in fever rash and Bilharzia (schistosomiasis) notifications. The NMC recorded the highest number of active users.

Lab notifications are being received by the NMC as normal, however, there appear to be gaps that still need to be reconciled. This is a work in progress. Clinical notifications remained robust during and since the cyber security breach at the end of June 2024.

Recommendations

- We recommend that clinicians should complete all patient clinical and demographic details to improve hospital form completeness.
- Hospital forms can be edited and updated when the patient's status changes.
- 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** or **matimbam@nicd.ac.za**.

Appendices

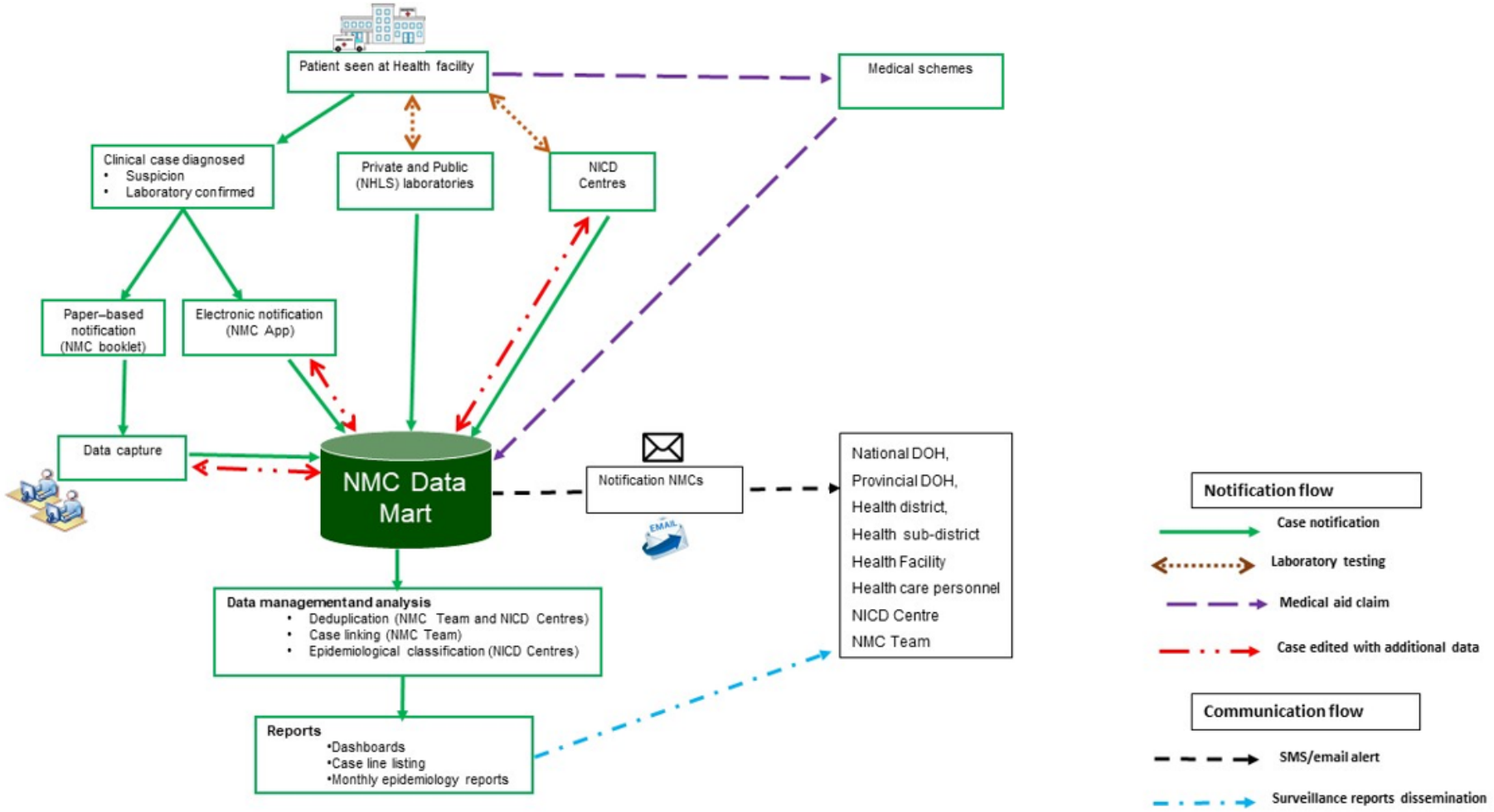
Appendix No. 1: Back-Captured Clinical Notifications

Table 11: *Back captured notifications by reporting province notified during October \ *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**, (551)	**EC**, (17)	**FS**, (25)	**GP**, (221)	**KZN**, (127)	**LP**, (8)	**MP**, (12)	**NC**, (72)	**NW**, (21)	**WC**, (48)	**Android**, (40)[1]	**iOS**, (21)[1]	**Paper-based**, (5)[1]	**SDW**, (130)[1]	**Web**, (355)[1]
Measles	412 (75%)	12	3	198	65	8	7	68	12	39	27	19	4	60	302
Rubella	79 (14%)	1	20	11	34	0	1	2	8	2	10	1	1	25	42
Malaria	17 (3.1%)	2	1	1	9	0	0	2	0	2	1	0	0	14	2
Congenital rubella syndrome	12 (2.2%)	0	1	0	11	0	0	0	0	0	0	0	0	11	1
Enteric fever (typhoid or paratyphoid fever)	12 (2.2%)	0	0	8	1	0	1	0	1	1	2	0	0	10	0
Diphtheria	5 (0.9%)	1	0	1	1	0	0	0	0	2	0	0	0	5	0
Foodborne illness outbreak	4 (0.7%)	0	0	0	1	0	1	0	0	2	0	0	0	0	4
Listeriosis	3 (0.5%)	0	0	0	3	0	0	0	0	0	0	0	0	2	1
Pertussis	3 (0.5%)	0	0	0	1	0	2	0	0	0	0	0	0	3	0
Acute flaccid paralysis	2 (0.4%)	1	0	0	1	0	0	0	0	0	0	1	0	0	1
Acute rheumatic fever	1 (0.2%)	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Meningococcal disease	1 (0.2%)	0	0	1	0	0	0	0	0	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 are notified more than 7 days after the diagnosis date. Category 2 and 3 conditions were notified more than 30 days after 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 = 1 435[1]	**5 & over A**, N = 1 445[1]	**5 & over D**, N = 6[1]	**Under 5 D**, N = 4[1]	**N = 273**[1]
Acute flaccid paralysis	16	5	0	0	0
Acute rheumatic fever	0	0	0	0	1
Anthrax	0	0	0	0	0
Botulism	1	0	0	0	0
Cholera	0	1	0	0	0
Covid-19	0	0	0	0	0
Congenital rubella syndrome	25	2	0	0	1
Diphtheria	1	1	0	0	0
Enteric fever (typhoid or paratyphoid fever)	6	3	0	0	4
Foodborne illness outbreak	154	37	5	2	0
Haemolytic uraemic syndrome (HUS)	0	0	0	0	0
Listeriosis	0	0	1	0	4
Malaria	0	0	0	0	196
Ebola virus (VHF)	0	0	0	0	0
Marburg virus (VHF)	0	0	0	0	0
Measles	1 007	1 202	0	0	7
Meningococcal disease	3	4	0	2	8
Mpox	20	6	0	0	0
Pertussis	13	1	0	0	27
Plague	0	0	0	0	0
Poliomyelitis	0	0	0	0	0
Rabies	3	1	0	0	0
Respiratory disease caused by a novel respiratory pathogen	0	0	0	0	0
Rift Valley fever (human)	0	0	0	0	0
Rubella	185	182	0	0	25
Smallpox	0	0	0	0	0
Crimean-Congo viral haemorrhagic fever (human)	1	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 October 2024.

All Notifications

Epi-table

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

	Average Notifications		Epi-weeks																			
Characteristic		**95% CI**[1]	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**
Acute flaccid paralysis	4.25	4.0, 5.0	9	2	3	4	5	5	6	7	6	2	9	5	7	0	4	6	4	6	6	1
Acute rheumatic fever	0.26	1.0, 1.0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	1	1	0
Anthrax	0.0098	NA, NA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Botulism	0.0492	1.0, 1.0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Cholera	5.0	2.0, 6.0	1	0	0	0	1	0	1	1	0	0	0	0	1	0	0	0	0	1	0	0
Congenital rubella syndrome	2.22	2.5, 3.0	5	3	3	0	2	0	0	1	5	4	10	9	4	17	8	9	6	5	8	6
Covid-19	919	446, 669	196	157	160	127	136	170	206	233	253	213	209	190	172	149	116	102	112	111	118	61
Crimean-Congo viral haemorrhagic fever (human)	0.10	1.0, 1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Diphtheria	0.52	1.0, 1.5	3	1	0	0	1	1	2	2	1	3	6	0	3	0	2	1	1	0	0	1
Ebola virus (VHF)	0.0033	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)	3.40	3.5, 4.0	1	3	0	0	1	7	3	2	3	3	5	8	6	9	4	3	2	7	4	3
Fever-Rash*	62	29, 42	97	66	53	69	56	41	75	104	235	446	654	1 074	1 134	896	568	586	622	621	925	381
Foodborne illness outbreak	10	7.5, 10	8	5	29	5	15	7	41	14	18	18	9	21	7	8	26	2	18	54	91	37
Haemolytic uraemic syndrome (HUS)	0.06	1.0, 1.0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0
Listeriosis	1.62	2.0, 2.0	3	1	2	1	0	1	0	0	3	2	1	0	1	3	3	4	1	2	0	1
Malaria	102	80, 97	62	27	56	62	73	57	30	48	59	57	48	48	44	45	32	46	49	50	38	32
Marburg virus (VHF)	0.0033	NA, NA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Meningococcal disease	2.78	3.0, 3.5	5	1	5	8	5	4	7	1	7	7	5	8	5	5	2	2	7	4	4	2
Mpox	1.09	7.0, 18	28	28	50	27	33	29	14	12	13	13	11	9	9	7	4	8	4	7	5	4
Pertussis	17	15, 21	6	6	8	7	9	10	7	10	10	7	6	11	6	10	4	11	6	12	14	2
Plague	0.0033	NA, NA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Poliomyelitis	0.0197	NA, NA	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	1	0	0	0	3	1	2	0	0	1	2	4	2	1	1	0	0	1	0	3
Respiratory disease caused by a novel respiratory pathogen	7	3.0, 9.0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rift Valley fever (human)	0.0033	NA, NA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Smallpox	0.0656	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	0.14	1.0, 1.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yellow fever	0.0361	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

*Fever-Rash represents both Measles and Rubella notifications before confirmation

Trends Plot Category 1

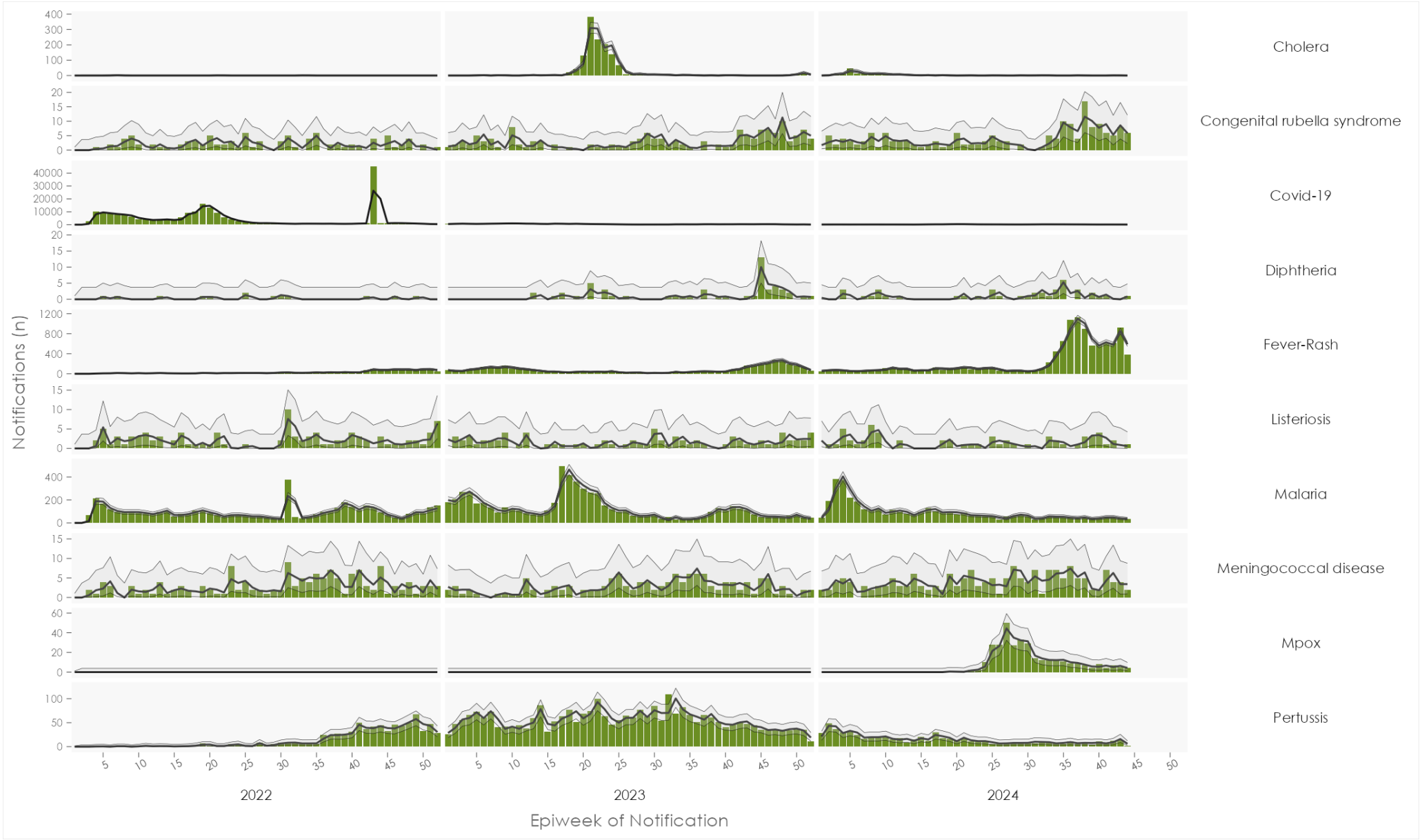


Figure 7: Trend of weekly number of notifications for selected category 1 conditions reported to the NMC, in South Africa, January 2022-October 2024

Trends Plot Category 2

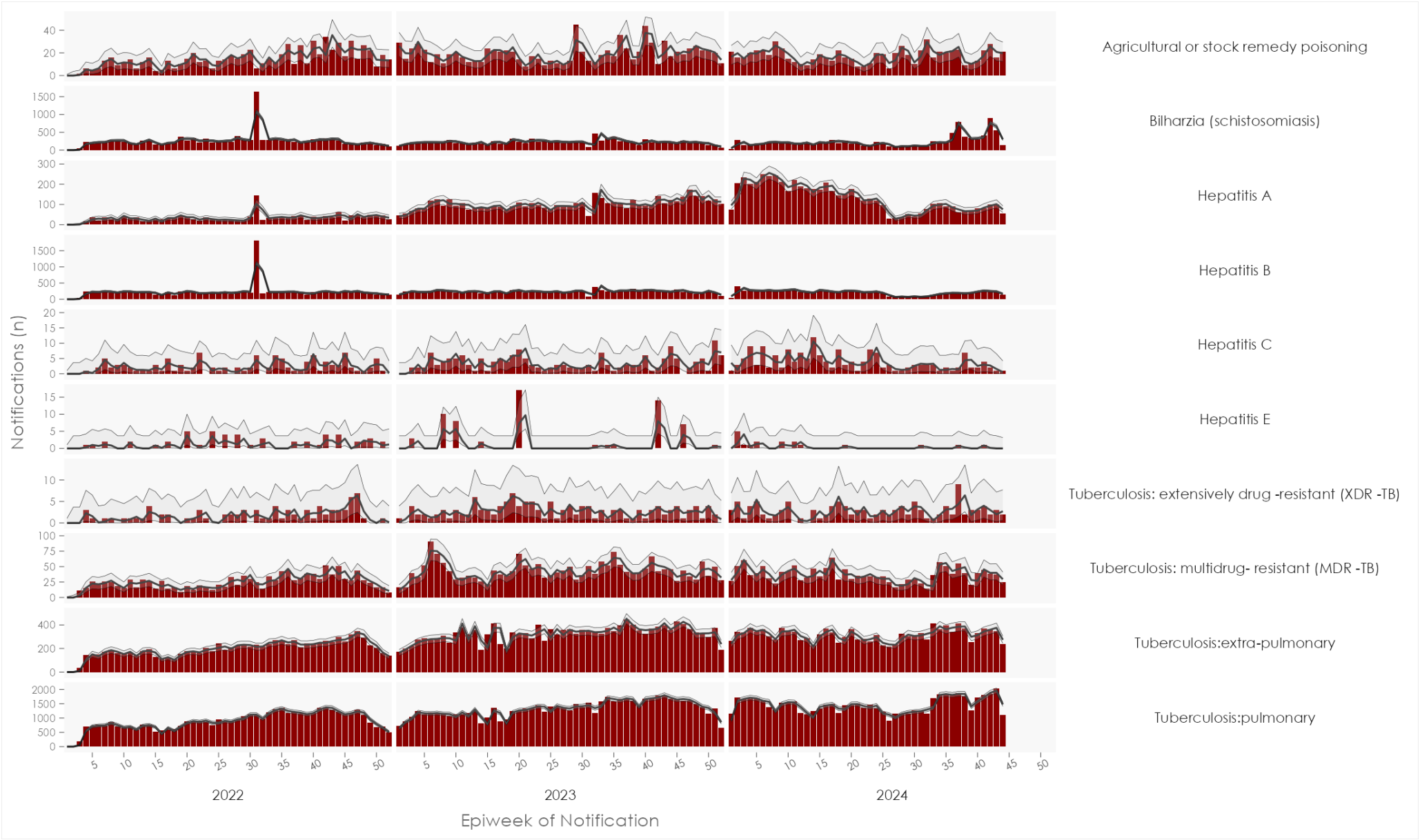


Figure 8: Trend of weekly number of notifications for selected category 2 conditions reported to the NMC, in South Africa, January 2022-October 2024

END