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

September 2024

Table of Contents

Introduction

Data used in this report was drawn from the NMC-SS on **17 October 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 12 856 cases were notified in September 2024 and most were category 2 conditions.
- Category 1 cases were reported in a median (IQR) of 0 (0, 0) days.
- Laboratory notifications are still excluded until the backlog of data has been verified.

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

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

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]	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**
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
Acute rheumatic fever	0.0233	1.0, 1.0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	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
Cholera	0.53	1.5, 5.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Congenital rubella syndrome	0.0133	NA, NA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Covid-19	23	19, 35	8	5	13	5	6	0	1	0	0	0	0	2	2	2	3	3	2	2	0
Crimean-Congo viral haemorrhagic fever (human)	0.0133	NA, NA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diphtheria	0.10	1.0, 2.0	0	0	1	0	2	0	0	0	0	0	1	0	1	2	4	0	3	0	2
Enteric fever (typhoid or paratyphoid fever)	0.99	1.5, 1.5	1	1	1	0	0	0	0	0	0	1	0	1	2	0	2	4	4	5	3
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
Listeriosis	0.53	1.0, 1.5	1	0	0	0	1	0	0	0	0	0	0	0	2	1	1	0	0	2	0
Malaria	39	32, 39	66	50	51	45	52	23	51	55	66	48	22	33	49	42	32	34	28	26	20
Measles	1.52	2.0, 3.0	3	5	3	3	4	1	1	4	1	3	0	0	3	4	10	17	10	1	2
Meningococcal disease	0.75	1.5, 2.0	3	5	2	3	3	1	2	6	4	1	4	0	3	3	1	6	4	4	1
Mpox	0.0831	1.0, 4.0	1	1	2	3	5	4	5	0	0	0	2	0	0	0	0	1	0	0	0
Pertussis	6	7.0, 10	3	2	1	2	0	1	6	7	8	7	5	5	4	3	3	3	0	0	0
Rabies	0.09	1.0, 1.0	0	0	0	0	0	0	0	0	2	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
Rubella	1.31	2.5, 4.5	6	1	5	14	7	1	0	0	0	0	0	0	0	0	4	0	7	4	5

[1]CI = Confidence Interval

Trends Plot

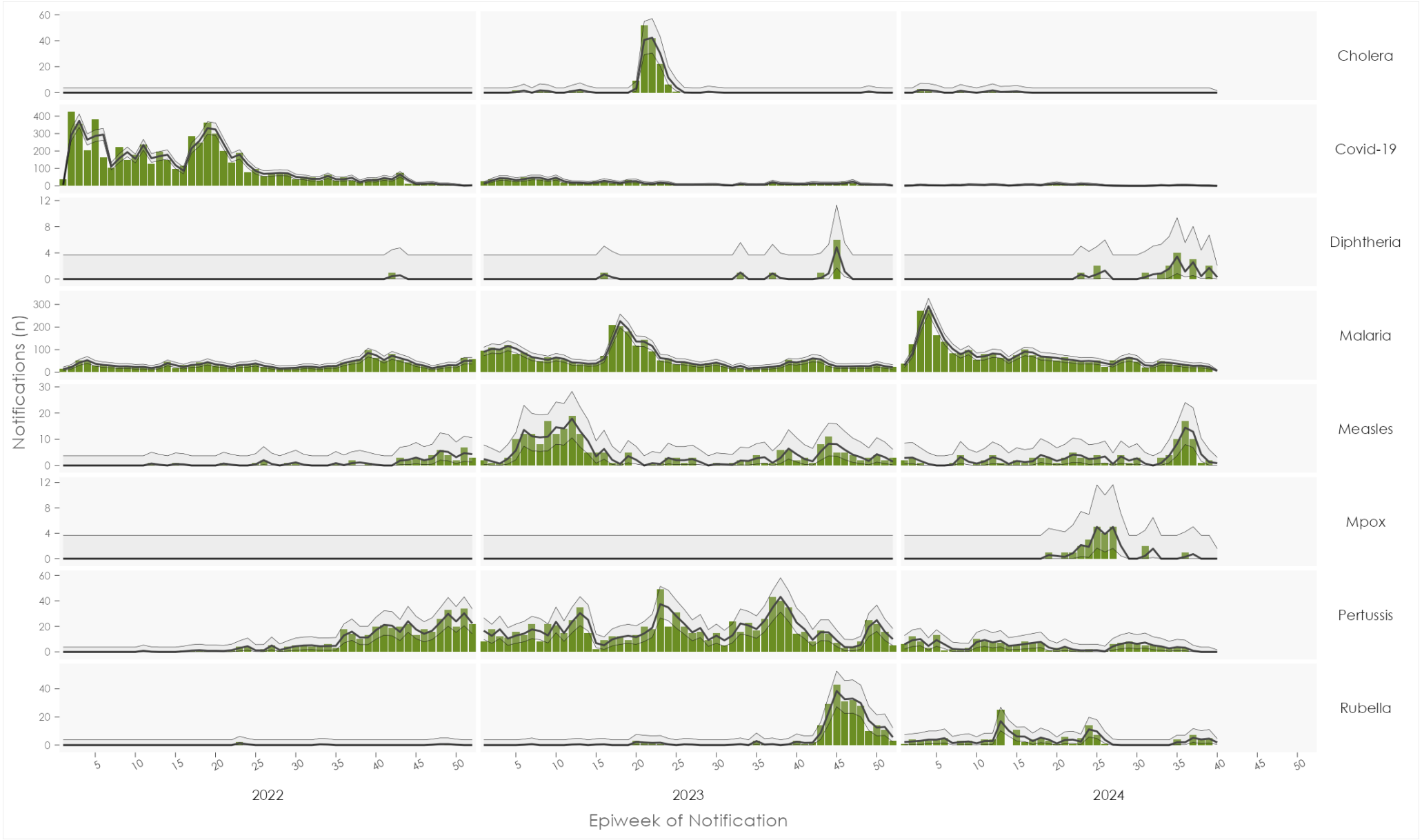


Figure 1: Trend of weekly number of confirmed notifications for selected category 1 conditions reported to the NMC, in South Africa; January 2022-September, 2024

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 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 September 2024

Condition	**Overall**, N = 3 517[1]	**Suspected**, N = 3 335[1]	**Confirmed**, N = 182[1]
Acute flaccid paralysis	15	15	0
Acute rheumatic fever	0	0	0
Anthrax	0	0	0
Botulism	0	0	0
Cholera	1	1	0
Congenital rubella syndrome	4	4	0
Covid-19	0	0	0
Crimean-Congo viral haemorrhagic fever (human)	0	0	0
Diphtheria	1	0	**1**
Ebola virus (VHF)	0	0	0
Enteric fever (typhoid or paratyphoid fever)	19	3	**16**
Foodborne illness outbreak	62	62	0
Haemolytic uraemic syndrome (HUS)	1	1	0
Listeriosis	2	0	**2**
Malaria	102	0	**102**
Marburg virus (VHF)	0	0	0
Measles	2 918	2 891	**27**
Meningococcal disease	19	5	**14**
Mpox	29	28	**1**
Pertussis	25	22	**3**
Plague	0	0	0
Poliomyelitis	0	0	0
Rabies	7	7	0
Respiratory disease caused by a novel respiratory pathogen	0	0	0
Rift Valley fever (human)	0	0	0
Rubella	312	296	**16**
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, September 2024

A total of 12 856 current and delayed cases were notified to the NMCSS during September 2024 **(See Table 9 for further breakdowns and Appendix no.3 for definitions)**. There were 12 650 current notifications; the majority (9 133, 72%) were category 2 conditions. The provinces with the highest number of notifications were GP (3 492, 28%), KZN (2 590, 20%), and WC (1 915, 15%). The provinces with the least number of notifications were MP (508, 4.0%), and NW (578, 4.6%). There were 206 back-captured clinical notifications diagnosed between March 2024 and September 2024 and only notified during September 2024. The majority (116, 56%) of those notifications were measles. (**See Appendix no.1**).

Most of the notified cases were males (7 128, 56%). Individuals in the 5–9-year age group represented the majority (1 981, 16%) of notified cases. At the time of notification, 2 662 (21%) of the notified cases were hospitalised, while 75 (0.6%) were transferred to another healthcare facility. There were 124 deaths notified during the reporting period.

Category 1 Notifications

Measles was the most common (2 918, 83%) category 1 notification **(suspected and confirmed)**. The province with the highest number of notifications for measles was GP (1004,34.4%). **Malaria** was the most common (102, 56%) category 1 notification **confirmed**. The province with the highest number of confirmed notifications for Malaria was GP (1004,984.3%).

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 diagnosis is rubella.

Table

Table 3: The number of notifications by province and number of notifications that are suspected and confirmed by vital status, September 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	1	6	1	1	1	1	1	2	0	15	0	0
Acute rheumatic fever	0	0	0	0	0	0	0	0	0	0	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	0	0	0	0	0
Cholera §	0	0	0	1	0	0	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	0	3	0	0	0	0	0	1	0	4	0	0
Diphtheria *	0	0	0	1	0	0	0	0	0	1	0	0	0
Enteric fever (typhoid or paratyphoid fever)	0	0	11	0	0	0	0	0	8	16	3	0	1
Foodborne illness outbreak	18	2	12	4	5	15	0	1	5	0	62	0	3
Haemolytic uraemic syndrome (HUS)	0	0	1	0	0	0	0	0	0	0	1	0	0
Listeriosis	0	0	0	1	0	0	0	0	1	2	0	1	0
Malaria	1	2	25	11	22	36	0	1	4	102	0	2	0
Ebola virus (VHF)	0	0	0	0	0	0	0	0	0	0	0	0	0
Marburg virus (VHF)	0	0	0	0	0	0	0	0	0	0	0	0	0
Measles †	37	164	1 004	714	51	129	416	128	275	27	2 891	0	0
Meningococcal disease	1	0	3	0	0	0	0	1	14	14	5	1	1
Mpox	4	1	8	5	2	2	0	1	6	1	28	0	1
Pertussis	2	1	9	3	0	1	2	1	6	3	22	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	1	2	1	0	0	0	7	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 †	6	34	91	35	0	50	28	36	32	16	296	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	71	205	1 173	778	82	236	448	170	354	182	3 335	4	6

[1]n (%);

* Toxin-producing results not available on NMC;

§ Serotype information not available on NMC;

† Due to the loss of lab feed, few measles and rubella notifications are confirmed on NMC and can be misleading. Fever-rash notifications can be visualised in appendix no.5 table 12 and figure 8.

** Merged case represents a clinical and laboratory notification of the same person and was successfully linked and made into a single notification

Plot

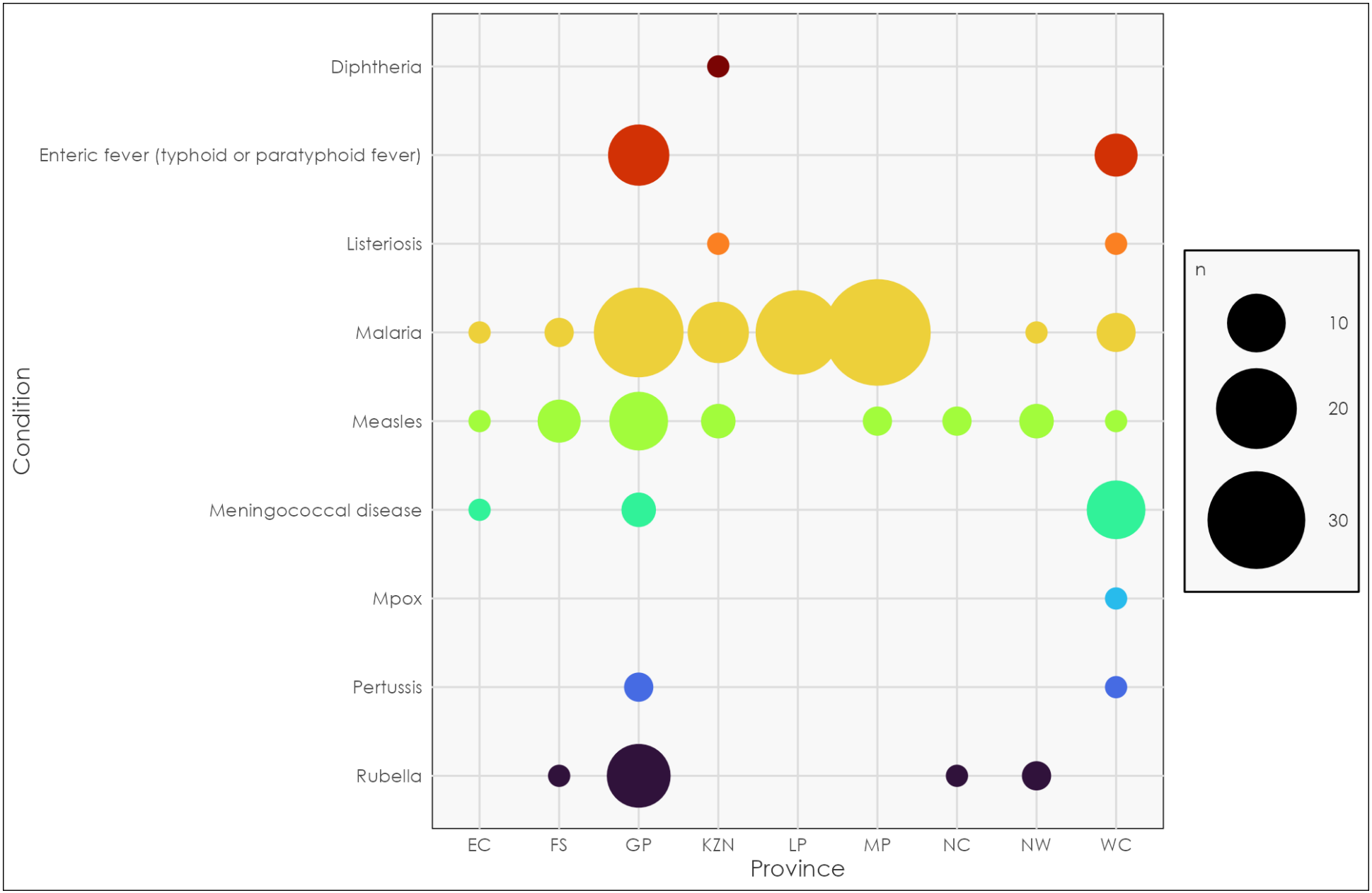


Figure 2: Distribution of all Category 1 NMCs notifications by province notified during September 2024.

Category 2 Notifications

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 (6 737) category 2 notification. The province with the highest number of notifications for **Pulmonary TB** was GP (1004, 14.9%).

Limpopo showed a marked increase in Bilharzia (schistosomiasis) notifications during September.

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	0	7	35	0	11	0	0	5	7	0	65	0	6
Bilharzia (schistosomiasis)	0	1	7	24	387	9	0	0	0	135	293	0	0
Brucellosis	2	0	0	0	0	0	0	0	0	1	1	0	0
Congenital syphilis	5	4	18	26	1	10	5	0	27	21	75	1	8
Haemophilus influenzae type B	0	0	1	0	0	0	0	0	0	1	0	0	0
Hepatitis A	11	2	16	20	4	6	4	0	17	39	41	0	2
Hepatitis B	15	3	50	44	10	11	1	6	10	15	135	0	2
Hepatitis C	1	0	10	1	0	0	0	0	0	0	12	0	0
Hepatitis E	0	0	0	0	0	0	0	0	0	0	0	0	0
Lead poisoning	0	0	0	0	0	1	0	0	0	0	1	0	0
Legionellosis	1	1	3	0	0	0	0	0	0	5	0	1	0
Leprosy	0	0	0	0	0	0	0	0	0	0	0	0	0
Maternal death (pregnancy, childbirth and puerperium)	0	0	3	0	0	0	0	0	0	0	3	0	3
Mercury poisoning	0	0	0	0	0	0	0	0	0	0	0	0	0
Soil-transmitted helminths	1	0	0	0	0	0	0	0	0	0	1	0	0
Tetanus	0	0	0	1	0	0	0	0	0	0	1	0	0
Tuberculosis: extensively drug-resistant (XDR -TB) *	0	0	9	2	0	3	0	0	2				
Tuberculosis: multidrug- resistant (MDR - TB) *	30	5	40	50	5	1	1	2	20				
Tuberculosis: extra-pulmonary*	129	63	519	303	45	28	33	63	198				
Tuberculosis: pulmonary*	780	392	1 608	1 341	373	203	428	332	1 280				
Total	975	478	2 319	1 812	836	272	472	408	1 561	217	8 916	2	112

[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

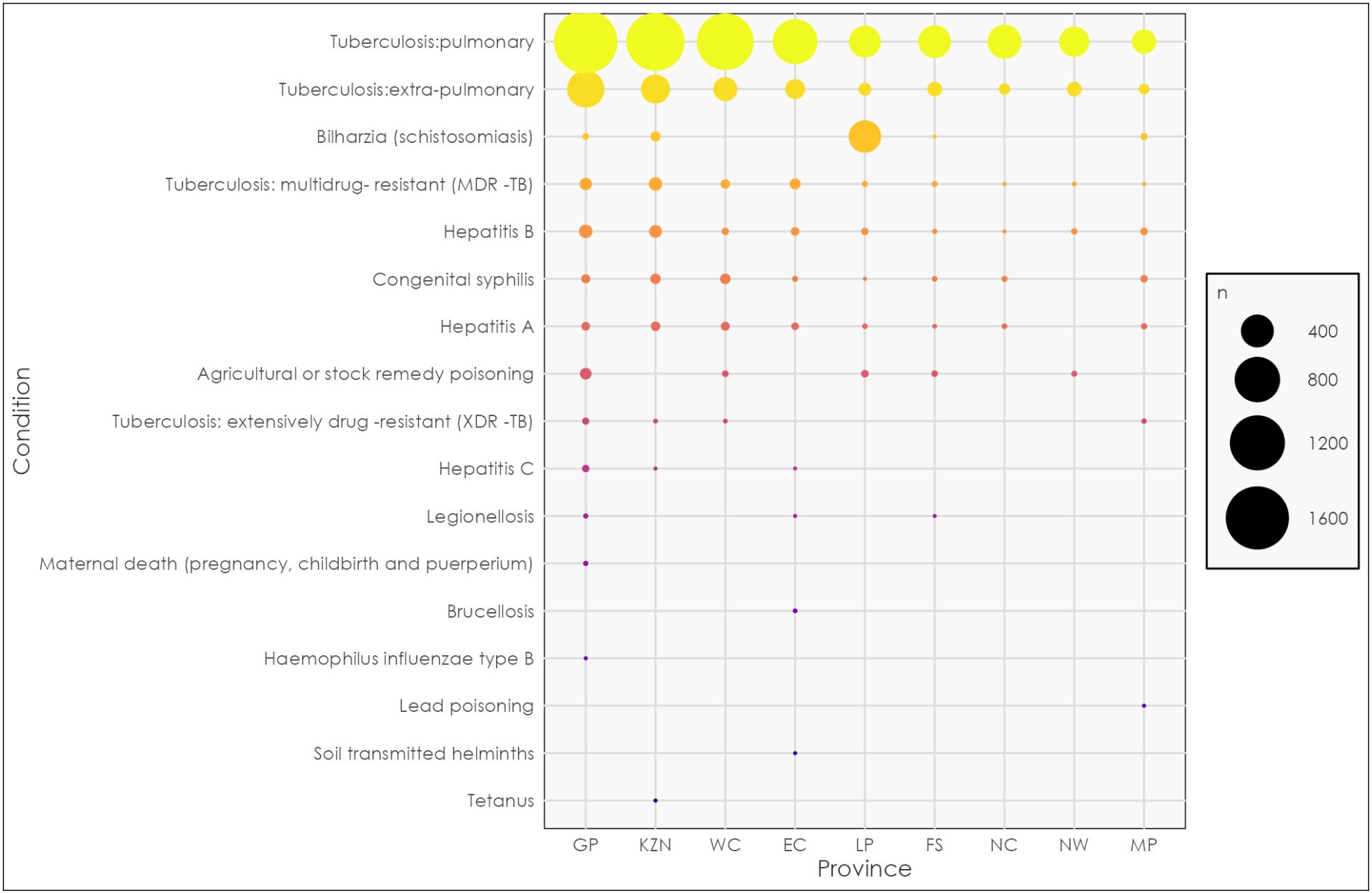


Figure 3: Distribution of all Category 2 NMCs notifications by province notified during September 2024. *All notifications include both suspected and confirmed cases

Statistic of the Usage of the NMC App

Table 5: Description of NMC notifications by case source

NMC Category	**Overall** N = 12 650	**Clinical notifications**, n = 12 368	**Laboratory notifications**, n = 0	**Merged Cases**, n = 282
Category 1	3 517 (28%)	3 446 (28%)	0 (-%)	71 (25%)
Category 2	9 133 (72%)	8 922 (72%)	0 (-%)	211 (75%)
Category 3	0 (0%)	0 (0%)	0 (-%)	0 (0%)

No lab notifications are included in this report. While some lab notifications are being received and notifications are being sent via e-mail and SMS, the backlog of data is still being verified. The NMC still produced many notifications from health workers notifying them of clinical suspicion. This has been invaluable in monitoring fever-rash (measles and rubella) and mpox notifications.

Notification Types and Merging

There were 713 (5.6%) clinical notifications from the private sector (i.e. private hospitals, private practice and mining industry) compared to 11 870 (94%) in the public sector (more details in Table 6).

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

Province	**Overall** N = 12 583	**App - Private**, n = 681	**App - Public**, n = 11 650	**Paper-based - Private**, n = 32	**Paper-based - Public**, n = 220
GP	3 480	207 (5.9%)	3 244 (93%)	9 (0.3%)	20 (0.6%)
KZN	2 588	164 (6.3%)	2 392 (92%)	7 (0.3%)	25 (1.0%)
WC	1 906	91 (4.8%)	1 757 (92%)	1 (<0.1%)	57 (3.0%)
EC	1 045	63 (6.0%)	907 (87%)	8 (0.8%)	67 (6.4%)
NC	920	21 (2.3%)	876 (95%)	2 (0.2%)	21 (2.3%)
LP	912	34 (3.7%)	874 (96%)	0 (0%)	4 (0.4%)
FS	683	33 (4.8%)	648 (95%)	2 (0.3%)	0 (0%)
NW	550	40 (7.3%)	489 (89%)	3 (0.5%)	18 (3.3%)
MP	499	28 (5.6%)	463 (93%)	0 (0%)	8 (1.6%)

The Average Active Users on The NMC App

There were 505 average active users of the NMC App in September 2024

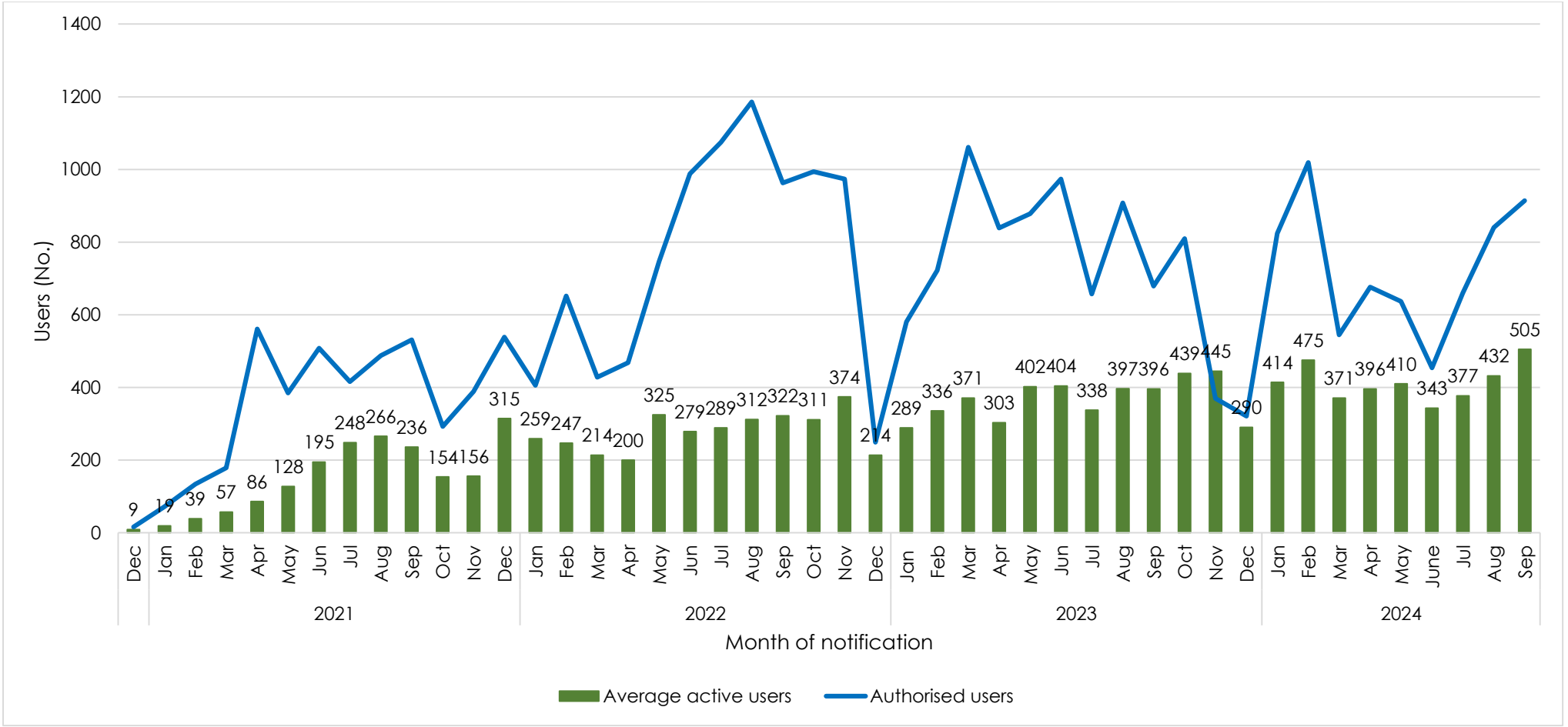


Figure 4: Authorized users and average active users of the NMC Reporting App by month of notification, December 2020-September 2024

Newly Registered Users

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

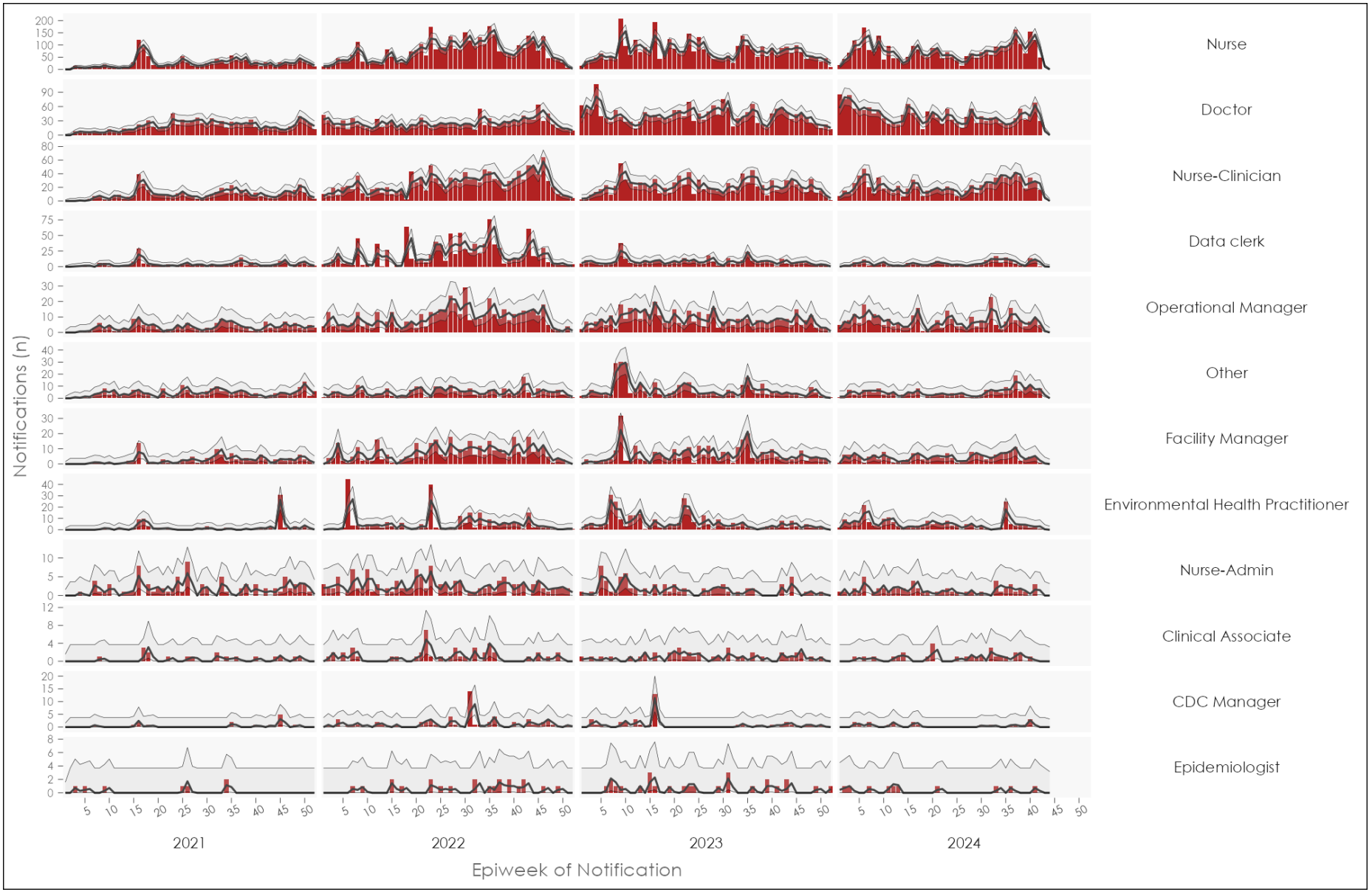


Figure 5: Trends of new users registered by occupation in South Africa, Jan 2022- May 2024

Data quality

Completeness

ID number completeness

Table 7: Length of ID numbers inputted on the NMC system during September 2024

Length of ID number	Android N = 4 671[1]	iOS N = 830[1]	MicroStrategy/SDW N = 11[1]	Paper-based N = 256[1]	Web N = 6 882[1]
Not complete	2 378 (51%)	384 (46%)	9 (82%)	141 (55%)	2 554 (37%)
1	0 (0%)	1 (0.1%)	0 (0%)	0 (0%)	0 (0%)
3	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (<0.1%)
5	0 (0%)	1 (0.1%)	0 (0%)	0 (0%)	0 (0%)
6	5 (0.1%)	114 (14%)	0 (0%)	1 (0.4%)	891 (13%)
7	0 (0%)	0 (0%)	0 (0%)	0 (0%)	7 (0.1%)
8	1 (<0.1%)	5 (0.6%)	0 (0%)	0 (0%)	103 (1.5%)
9	0 (0%)	0 (0%)	0 (0%)	0 (0%)	5 (<0.1%)
10	0 (0%)	5 (0.6%)	0 (0%)	0 (0%)	173 (2.5%)
11	0 (0%)	1 (0.1%)	0 (0%)	0 (0%)	0 (0%)
12	0 (0%)	2 (0.2%)	0 (0%)	0 (0%)	31 (0.5%)
13	2 287 (49%)	317 (38%)	2 (18%)	114 (45%)	3 117 (45%)

[1]n (%)

Hospital Form Completeness

Table 8: Completion of hospitalisation form for notifications reported as inpatients with category 1 conditions. September, 2024

Complete refers to >80% of variables completed.

Hospital Form Completed	**Complete**, n = 33 (13%)	**Incomplete**, n = 48 (19%)	**Not Attempted**, n = 66 (27%)	**Only Symptoms completed**, n = 102 (41%)
Acute flaccid paralysis	2 (6.1%)	0 (0%)	0 (0%)	10 (9.8%)
Acute rheumatic fever	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Anthrax	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Botulism	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Cholera §	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Covid-19	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Congenital rubella syndrome	0 (0%)	0 (0%)	1 (1.6%)	0 (0%)
Diphtheria *	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Enteric fever (typhoid or paratyphoid fever)	2 (6.1%)	0 (0%)	7 (11%)	6 (5.9%)
Foodborne illness outbreak	6 (18%)	10 (21%)	6 (9.4%)	10 (9.8%)
Haemolytic uraemic syndrome (HUS)	0 (0%)	0 (0%)	1 (1.6%)	0 (0%)
Listeriosis	0 (0%)	0 (0%)	2 (3.1%)	0 (0%)
Malaria	4 (12%)	13 (27%)	10 (16%)	10 (9.8%)
Ebola virus (VHF)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Marburg virus (VHF)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Measles	5 (15%)	9 (19%)	13 (20%)	51 (50%)
Meningococcal disease	6 (18%)	5 (10%)	6 (9.4%)	0 (0%)
Mpox	1 (3.0%)	0 (0%)	9 (14%)	0 (0%)
Pertussis	4 (12%)	5 (10%)	4 (6.3%)	7 (6.9%)
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%)	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	3 (9.1%)	6 (13%)	5 (7.8%)	8 (7.8%)
Smallpox	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Crimean-Congo viral haemorrhagic fever (human)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Yellow fever	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Unknown	0	0	2	0

The completeness of the hospital form for notifications in 2023 was <5%. The number of complete notifications in September 2024 is 33% which shows improvement.

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 9: Symptoms of patients clinically notified and merged with lab notifications to the NMC, notified during September 2024

	Category 1, n = 3 723	**Category 2**, n = 9 133	**Category 3**, n = 0
Time to Notification	0 (0, 1)	3 (0, 11)	- (-, -)
Unknown	59	0	0
Back Capture Classification			
Back capture	147 (4%)	0 (0%)	0 (-%)
Current	3 264 (89%)	6 331 (69%)	0 (-%)
Delayed	253 (7%)	2 802 (31%)	0 (-%)
Unknown	59	0	0

Disease of the month

Lead poisoning is a category 2 NMC. It is lead poisoning awareness week from 20-26 October 2024. Lead exposure is mainly by ingestion or inhalation, with lead being stored in the body for many years. Lead may cause acute toxicity, but more commonly sub-clinical lead exposure leads to chronic toxicity. Clinicians, laboratories and forensic services should notify all cases of lead poisoning they diagnose.

Table 1: Comparison of demographics of confirmed and suspected cases occurring during and before 2024

	Notifications before 2024		Notifications in 2024	
	Confirmed N = 0[1]	**Suspected** N = 9[1]	**Confirmed** N = 0[1]	**Suspected** N = 7[1]
Age				
Median (Q1, Q3)	-	0 (0, 12)	NA (NA, NA)	0 (0, 23)
Sex				
Female	0 (-%)	6 (67%)	0 (-%)	2 (29%)
Male	0 (-%)	3 (33%)	0 (-%)	5 (71%)

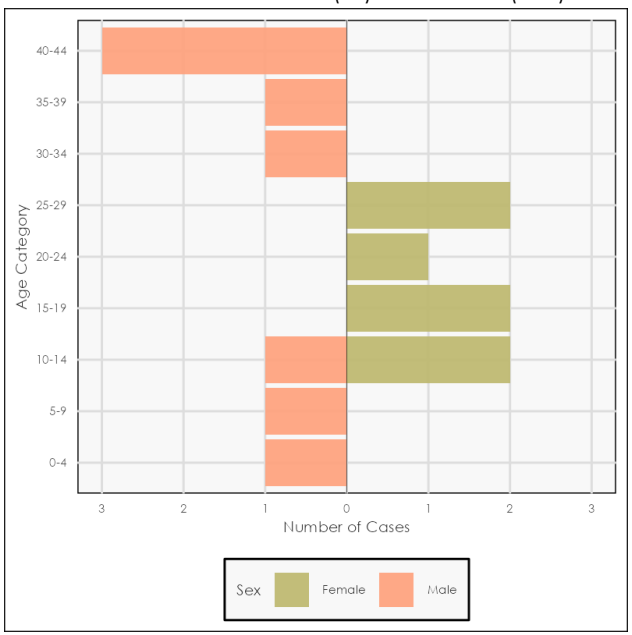


Figure 6: Lead poisoning cases by age category and sex

Table 2: Counts of notifications by province and year

	2022 N = 3[1]	**2023** N = 6[1]	**2024** N = 7[1]
Province			
EC	1 (33%)	1 (17%)	1 (14%)
GP	1 (33%)	2 (33%)	1 (14%)
KZN	0 (0%)	1 (17%)	1 (14%)
MP	0 (0%)	2 (33%)	4 (57%)
WC	1 (33%)	0 (0%)	0 (0%)

[1]n (%)

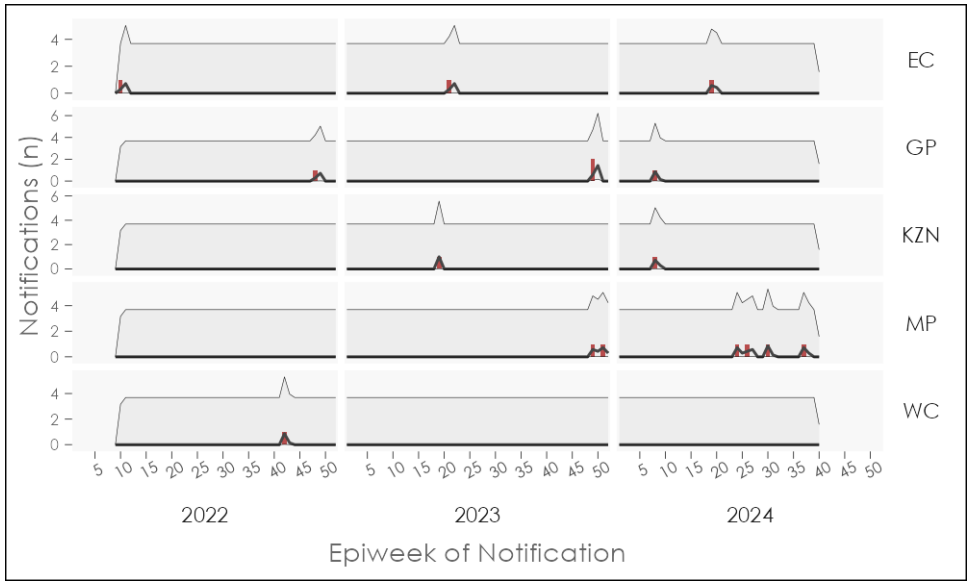


Figure 7: Trend of weekly number of Lead poisoning notifications for selected conditions reported to the NMC, in South Africa

Conclusion

Patients who are hospitalised with a category 1 condition and notified show improving completeness of the hospital form however the majority still only have symptoms completed. ID numbers are poorly completed in notifications from SDW. Despite the loss of laboratory notifications, the NMC still produces notifications through health workers making clinical notifications on suspected conditions. The NMC remains timely.

An increase in Bilharzia (schistosomiasis) cases in LP is being investigated locally. Clinical mpox notifications are lower than in July and August but are stable.

Recommendations

- While the NHLS laboratory system is back online, verifications are still underway for surveillance data. Once verified, a report covering all notifications, including lab notifications since June will be published.
- 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

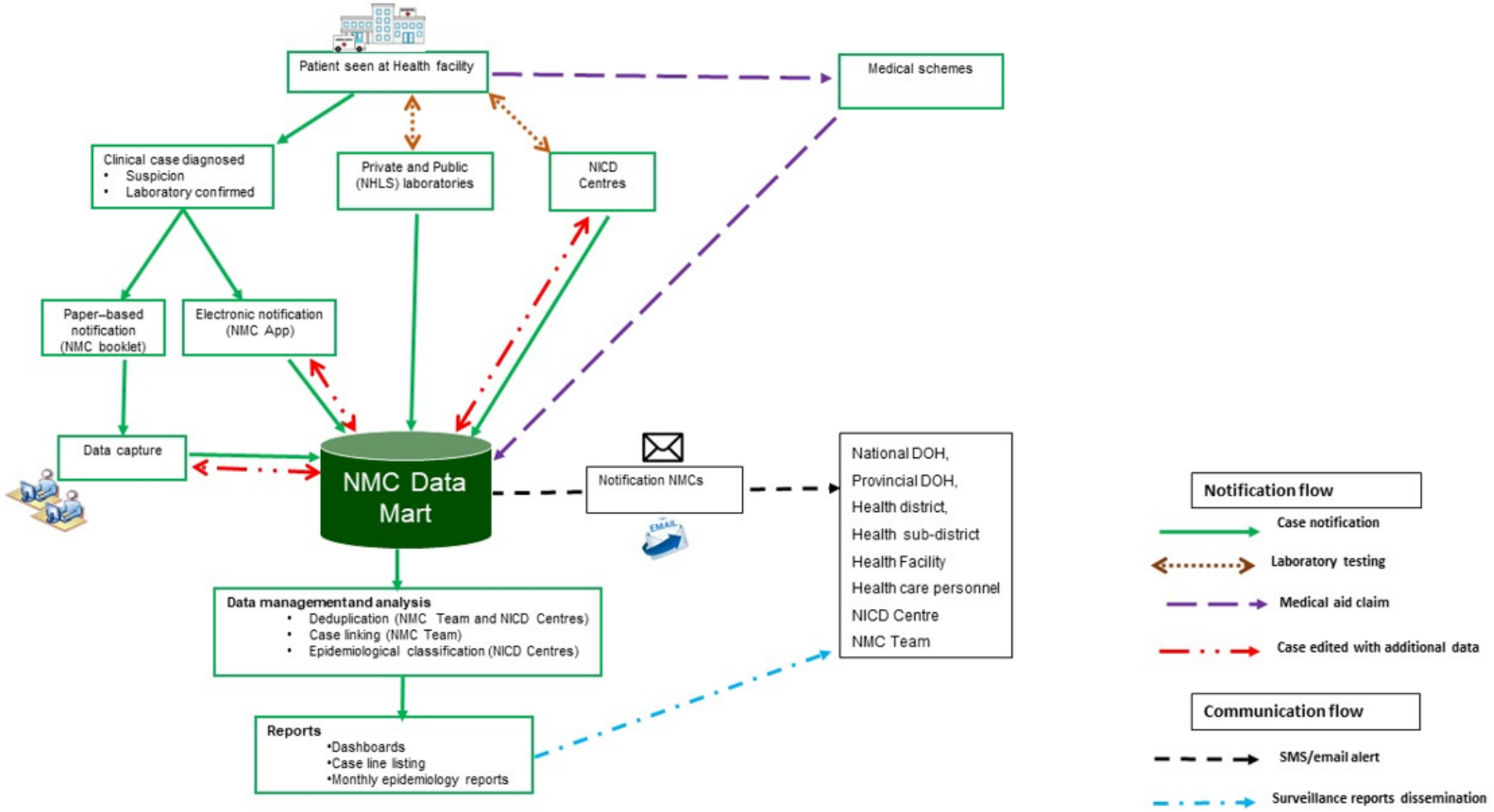
Appendix No. 1: Back-Captured Clinical Notifications

*Table 10: Back captured notifications by reporting province notified during September \ *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**, (206)	**EC**, (6)	**FS**, (36)	**GP**, (68)	**KZN**, (48)	**LP**, (3)	**MP**, (7)	**NC**, (14)	**NW**, (5)	**WC**, (19)	**Android**, (76)[1]	**iOS**, (13)[1]	**Paper-based**, (2)[1]	**Web**, (115)[1]
Measles	116 (56%)	2	7	39	33	0	7	12	3	13	35	5	2	74
Rubella	73 (35%)	2	29	24	12	0	0	2	2	2	39	6	0	28
Malaria	6 (2.9%)	0	0	2	1	3	0	0	0	0	1	1	0	4
Diphtheria	4 (1.9%)	0	0	0	1	0	0	0	0	3	0	0	0	4
Pertussis	2 (1.0%)	0	0	1	0	0	0	0	0	1	0	0	0	2
Acute flaccid paralysis	1 (0.5%)	0	0	1	0	0	0	0	0	0	0	0	0	1
Congenital rubella syndrome	1 (0.5%)	1	0	0	0	0	0	0	0	0	0	1	0	0
Enteric fever (typhoid or paratyphoid fever)	1 (0.5%)	0	0	1	0	0	0	0	0	0	0	0	0	1
Meningococcal disease	1 (0.5%)	1	0	0	0	0	0	0	0	0	0	0	0	1
Rabies	1 (0.5%)	0	0	0	1	0	0	0	0	0	1	0	0	0

[1]SDW – Surveillance data warehouse/ MicroStrategy

Appendix No.2: Summary of NMCSS Data Flow



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

NMC Categories

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

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

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

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

Case Classification definitions

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

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

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

Notification capture times definitions

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

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

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

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

Appendix No.4: IDSR Reporting Template for IDSR Conditions Existing on NMC By Under-5 and 5-and-Over Years and Vital Status.

Table 11: 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.

	Notified/Suspected				Confirmed
Condition	**Under 5 A**, N = 1 337[1]	**5 & over A**, N = 1 985[1]	**5 & over D**, N = 3[1]	**Under 5 D**, N = 3[1]	**N = 182**[1]
Acute flaccid paralysis	10	5	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	0	0	0	0
Covid-19	0	0	0	0	0
Congenital rubella syndrome	1	3	0	0	0
Diphtheria	0	0	0	0	1
Enteric fever (typhoid or paratyphoid fever)	2	0	1	0	16
Foodborne illness outbreak	51	5	2	1	0
Haemolytic uraemic syndrome (HUS)	1	0	0	0	0
Listeriosis	0	0	0	0	2
Malaria	0	0	0	0	102
Ebola virus (VHF)	0	0	0	0	0
Marburg virus (VHF)	0	0	0	0	0
Measles	1 130	1 758	0	0	27
Meningococcal disease	2	1	0	1	14
Mpox	22	5	0	1	1
Pertussis	19	3	0	0	3
Plague	0	0	0	0	0
Poliomyelitis	0	0	0	0	0
Rabies	3	4	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	95	201	0	0	16
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 2022 to September 2024.

All Notifications

Epi-Table

Table 12: 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]	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**
Acute flaccid paralysis	4.09	4.0, 5.0	4	6	8	7	9	2	3	4	5	5	6	7	6	2	9	5	7	0	4	0
Acute rheumatic fever	0.26	1.0, 1.0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0
Anthrax	0.0100	NA, NA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Botulism	0.0465	1.0, 1.0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Cholera	4.8	2.5, 6.5	1	0	0	0	1	0	0	0	1	0	1	1	0	0	0	0	1	0	0	0
Congenital rubella syndrome	0.37	1.0, 1.5	0	1	2	1	0	0	2	0	0	0	0	0	0	1	0	1	0	4	0	0
Covid-19	443	308, 418	343	227	175	187	180	145	156	124	133	168	198	220	241	192	193	169	162	141	112	0
Crimean-Congo viral haemorrhagic fever (human)	0.09	1.0, 1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diphtheria	0.37	1.0, 1.5	1	0	1	0	3	0	0	0	0	1	1	1	1	2	5	0	3	0	2	0
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)	1.85	2.0, 2.5	2	1	2	1	1	2	0	0	1	5	3	2	3	1	3	4	5	7	4	0
Foodborne illness outbreak	10	7.0, 9.5	5	3	3	1	8	5	29	5	15	7	41	14	18	18	9	21	7	8	26	0
Haemolytic uraemic syndrome (HUS)	0.06	1.0, 1.0	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0
Listeriosis	0.94	1.5, 1.5	1	0	1	0	2	0	2	0	0	0	0	0	3	1	1	0	0	2	0	0
Malaria	39	32, 39	66	50	51	45	52	23	51	55	66	48	22	33	49	42	32	34	28	26	20	0
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
Measles	37	20, 28	79	62	69	81	71	53	44	58	49	36	66	79	197	376	539	931	958	711	422	12
Meningococcal disease	2.21	2.5, 3.0	4	5	3	4	4	1	4	7	5	4	7	1	5	6	3	8	5	5	2	0
Mpox	1.01	7.5, 20	1	2	2	10	28	28	50	27	33	29	14	12	13	13	11	9	9	7	4	0
Pertussis	14	13, 18	16	11	11	7	6	6	8	7	8	10	6	8	9	6	5	10	4	9	4	0
Poliomyelitis	0.0199	NA, NA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rabies	0.54	1.0, 1.5	0	0	0	1	1	0	0	0	3	1	2	0	0	1	2	4	2	1	1	0
Respiratory disease caused by a novel respiratory pathogen	7	3.0, 9.0	0	0	0	0	0	0	1	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
Rubella	5	5.0, 13	37	9	26	20	17	7	5	4	4	3	3	11	16	36	57	46	102	123	114	0
Smallpox	0.0664	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	0.0365	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

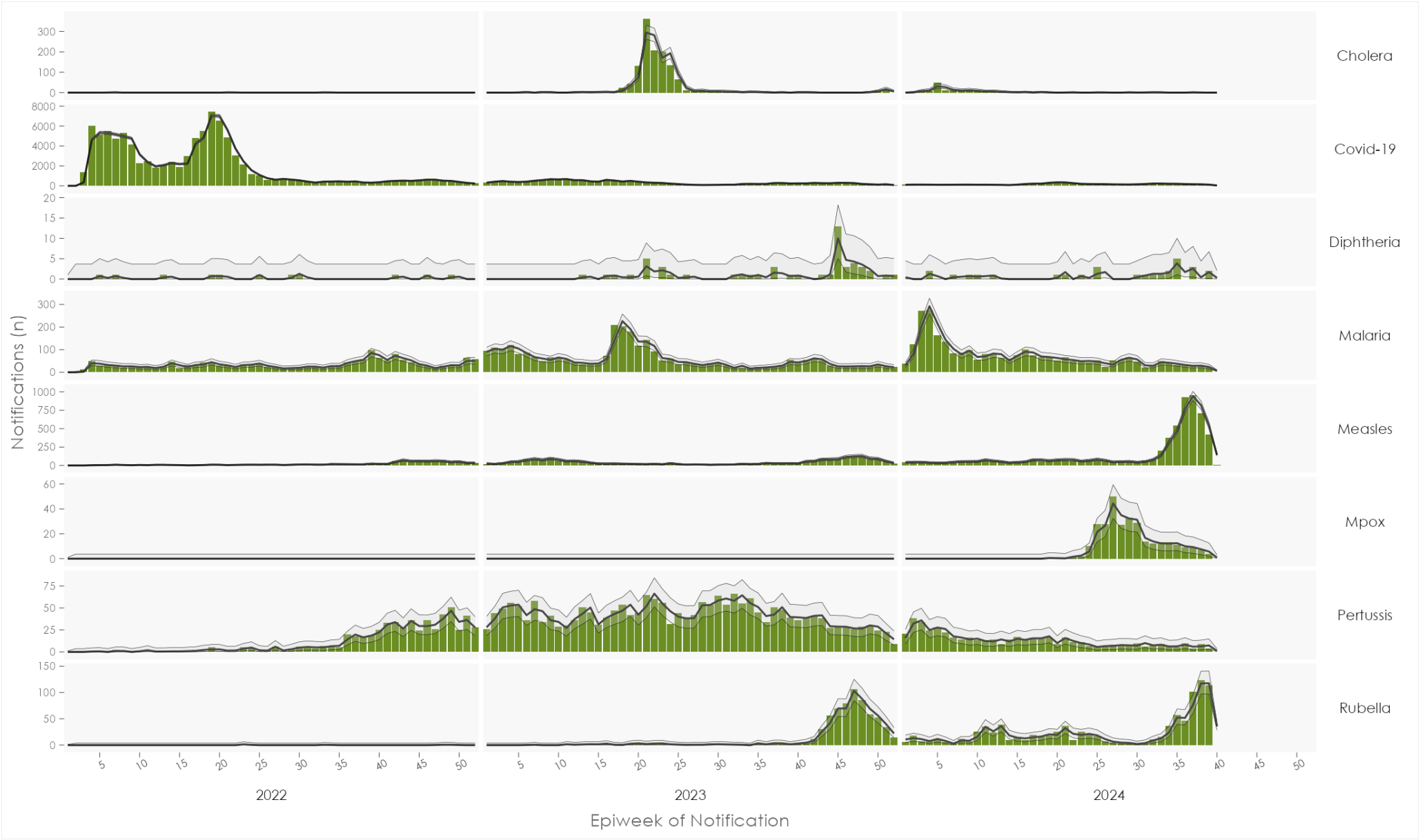


Figure 8: Trend of weekly number of all notifications for selected conditions reported to the NMC, in South Africa, January, 2022-September

END