

The National Institute for Communicable Diseases The Division of Public Health, Surveillance, and response NOTIFIABLE MEDICAL CONDITIONS SURVEILLANCE SYSTEM February 2024 report

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Introduction

Data used in this report was drawn from the NMC-SS on **09 July 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 11 303 cases were notified in February 2024 and most were category 2 conditions.
- Category 1 cases were reported in a median (IQR) of 0 (0, 2) days.
- There were 475 average active users of the NMC App in February 2024

NMC Reporting application

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

NOTES: For any additional information contact the NMC national technical team: <u>NMCAppSupport@nicd.ac.za</u> or NMC hotline <u>072 621 3805</u>. 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 as 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 confirmed notifications on NMCSS per Epi-week in 2024. The average weekly notifications are calculated based on notifications received in 2022 and 2023

 with a confidence interval.

			Average Notifications								
Characteristic		95% CI1	1	2	3	4	5	6	7	8	9
Acute flaccid paralysis	0.0321	1.0, 2.0	0	0	0	0	0	0	0	0	0
Cholera	0.99	1.5, 6.5	0	0	3	2	0	0	0	2	0
Congenital rubella syndrome	0.0092	NA, NA	0	0	0	0	0	0	0	0	0
Covid-19	435	32, 490	0	3	5	2	1	3	3	3	5
Crimean-Congo viral haemorrhagic fever (human)	0.0183	NA, NA	0	0	0	0	0	0	0	0	0
Diphtheria	0.09	1.0, 1.0	0	0	0	0	0	0	0	0	0
Enteric fever (typhoid or paratyphoid fever)	1.24	1.5, 2.0	2	1	2	6	3	1	2	2	2
Foodborne illness outbreak	0.0872	1.0, 3.0	0	0	0	0	0	0	0	0	0
Listeriosis	0.51	1.0, 1.5	0	1	1	3	2	1	1	2	0
Malaria	91	71,90	35	120	217	187	109	116	61	48	45
Measles	1.42	2.0, 3.5	2	3	1	0	0	0	1	4	0
Meningococcal disease	0.79	1.5, 2.0	1	3	4	5	1	0	2	2	1
Pertussis	10	14, 19	6	24	21	6	15	7	3	6	0
Rabies	0.10	NA, NA	0	0	0	0	0	1	0	0	0
Respiratory disease caused by a novel respiratory pathogen	0.0092	NA, NA	0	0	0	0	0	0	0	0	0
Rubella	1.25	2.0, 7.5	1	4	3	3	4	5	0	3	3

¹CI = Confidence Interval

Trends Plot

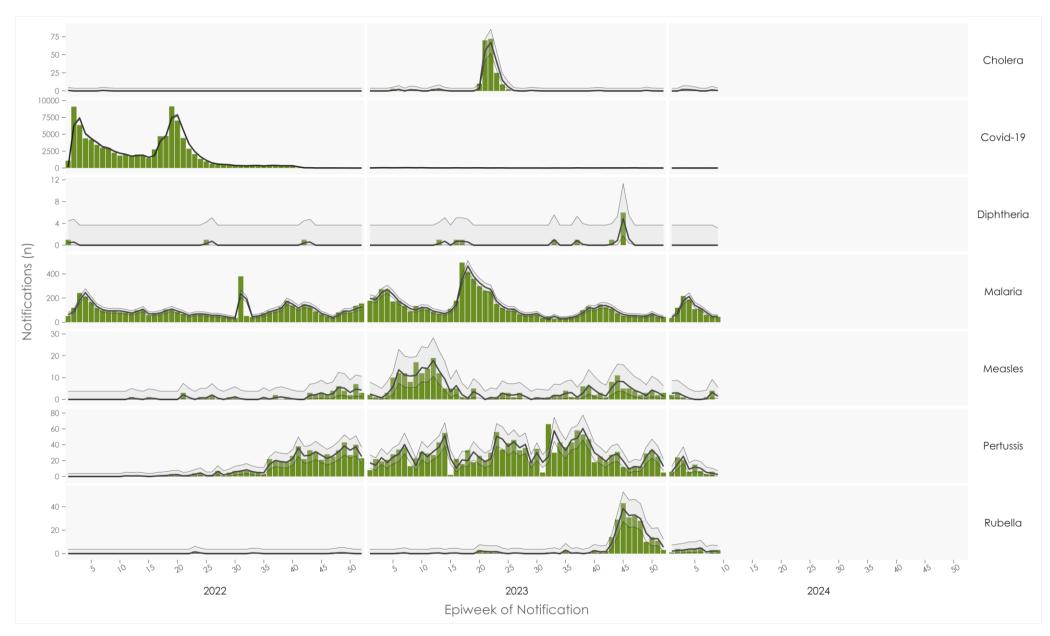


Figure 1: Trend of weekly number of confirmed notifications for selected category 1 conditions reported to the NMC, in South Africa; January 2022-February, 2024

All Category 1 Conditions Table 2: The number of notifications that are suspected and confirmed for category 1 conditions notified during February 2024

ondition	Overall , N = 863 ¹	Confirmed , $N = 360^1$	Suspected, $N = 503^{1}$
Acute flaccid paralysis	14	0	14
Acute rheumatic fever	0	0	0
Anthrax	0	0	0
Botulism	0	0	0
Cholera	67	2	65
Congenital rubella syndrome	12	0	12
Crimean-Congo viral haemorrhagic fever (human)	0	0	0
Diphtheria	3	0	3
Ebola virus (VHF)	0	0	0
Enteric fever (typhoid or paratyphoid fever)	9	6	3
Foodborne illness outbreak	123	0	123
Haemolytic uraemic syndrome (HUS)	0	0	0
Listeriosis	8	3	5
Malaria	309	309	0
Marburg virus (VHF)	0	0	0
Measles	181	5	176
Meningococcal disease	8	6	2
Мрох	0	0	0
Pertussis	81	18	63
Plague	0	0	0
Poliomyelitis	0	0	0
Rabies	4	1	3
Respiratory disease caused by a novel respiratory pathogen	1	0	1
Rift Valley fever (human)	0	0	0
Rubella	43	10	33
Smallpox	0	0	0
Yellow fever	0	0	0

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

NMC data summary, February 2024

A total of 11,303 current and delayed cases were notified to the NMCSS during February 2024 (See Table 9 for further breakdowns and Appendix no.3 for definitions). There were 11 244 current notifications; the majority (10 248, 91%) were category 2 conditions. The provinces with the highest number of notifications were KZN (2 864, 25%), GP (2 842, 25%), and WC (1 779, 16%). The provinces with the least number of notifications were NW (408, 3.6%), and NC (423, 3.8%). There were 59 back-captured clinical notifications diagnosed between February 2023 and February 2024 and only notified during February 2024. The majority (15, 25%) of those notifications were Foodborne illness outbreaks. (See Appendix no.1).

Most of the notified cases were males (6 666, 59%). Individuals in the 35–39-year age group represented the majority (1 210, 12%) of notified cases. At the time of notification, 2,277 (20%) of the notified cases were hospitalised, while 106 (0.9%) were transferred to another healthcare facility. There were 94 deaths notified during the reporting period.

Category 1 Notifications

Malaria was the most common (309, 36%) category 1 notification (suspected and confirmed). The province with the highest number of notifications for Malaria was GP (119,38.5%).

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

				P	rovir	ices				Co	ise	Deaths		
Condition	EC ¹	FS ¹	GP ¹	KZN ¹	LP ¹	MP ¹	NC1	NW ¹	WC ¹	Confirmed	Suspected ¹	Confirmed ¹	Suspected ¹	
Acute flaccid paralysis	3	1	2	4	0	1	1	1	1	0	14	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	13	2	46	2	0	4	0	2	65	0	4	
Congenital rubella syndrome	2	2	1	3	0	1	0	0	3	0	12	0	0	
Diphtheria *	0	1	0	0	0	0	0	0	2	0	3	0	0	
Enteric fever (typhoid or paratyphoid fever)	0	0	7	0	0	0	0	1	1	6	3	0	0	
Foodborne illness outbreak	9	2	40	43	18	0	0	2	9	0	123	0	0	
Haemolytic uraemic syndrome (HUS)	0	0	0	0	0	0	0	0	0	0	0	0	0	
Listeriosis	0	1	4	1	0	0	0	0	2	3	5	1	1	
Malaria	6	12	119	52	33	43	1	10	33	309	0	3	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	8	3	41	16	6	13	30	1	63	5	176	0	0	
Meningococcal disease	2	1	0	0	0	0	0	0	5	6	2	0	0	
Мрох	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pertussis	7	4	35	12	3	3	0	1	16	18	63	0	1	
Plague	0	0	0	0	0	0	0	0	0	0	0	0	0	
Poliomyelitis	0	0	0	0	0	0	0	0	0	0	0	0	0	
Rabies	1	0	0	2	0	0	1	0	0	1	3	1	2	
Respiratory disease caused by a novel respiratory pathogen	0	0	0	0	0	1	0	0	0	0	1	0	0	
Rift Valley fever (human)	0	0	0	0	0	0	0	0	0	0	0	0	0	
Rubella	2	6	3	6	1	0	4	0	21	10	33	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	40	33	265	141	107	64	37	20	156	360	503	5	8	

¹n (%);

* 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

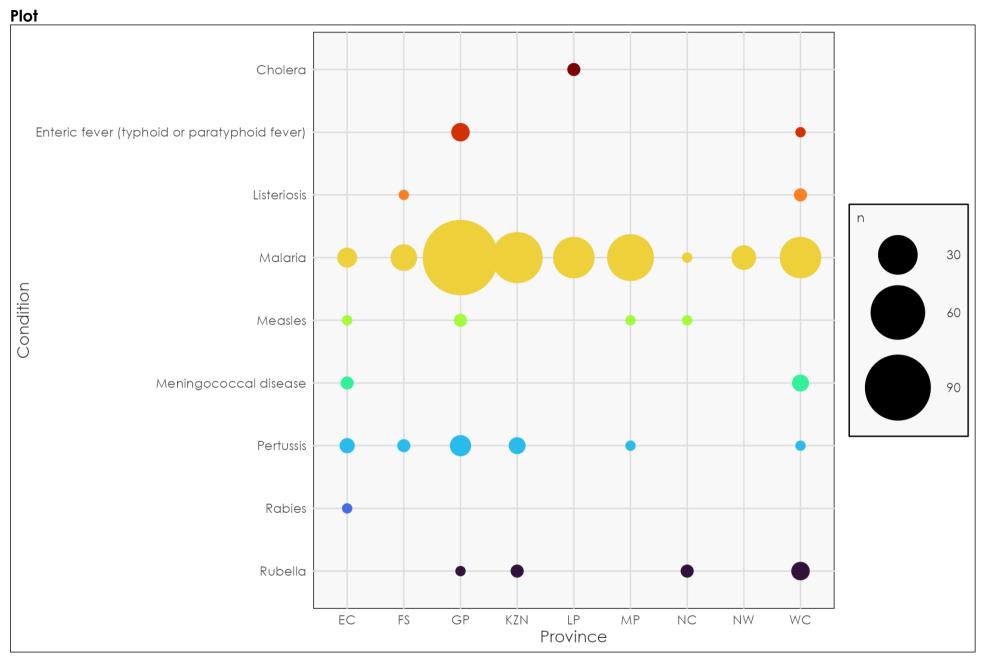


Figure 2: Distribution of selected confirmed category 1 NMCs notifications by province notified during February 2024.

Category 2 notifications

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

Pulmonary tuberculosis was the most common (5400, 53%) category 2 notification. The province with the highest number of notifications for pulmonary tuberculosis was GP (1 434, 26.6%).

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

					Provinces					C	ase	De	aths
Condition	EC ¹	FS ¹	GP ¹	KZN ¹	LP1	MP ¹	NC1	NW ¹	WC1	Confirmed	Suspected ¹		Suspected ¹
Agricultural or stock remedy poisoning	5	6	64	6	3	2	0	0	7	0	93	0	6
Bilharzia (schistosomiasis)	49	1	23	390	219	109	0	3	16	81	729	0	1
Brucellosis	0	0	1	1	0	0	0	0	0	0	2	0	0
Congenital syphilis	58	11	55	253	8	32	18	7	58	73	427	1	1
Haemophilus influenzae type B	2	0	1	0	0	1	0	0	1	3	2	0	0
Hepatitis A	70	36	295	223	60	59	29	31	163	245	721	0	0
Hepatitis B	118	44	72	683	8	16	7	69	21	53	985	0	3
Hepatitis C	1	1	11	3	0	0	0	0	3	0	19	0	0
Hepatitis E	0	0	3	0	0	0	0	0	1	0	4	0	0
Lead poisoning	0	0	1	1	0	0	0	0	0	0	2	0	0
Legionellosis	2	0	2	0	1	0	0	0	2	6	1	0	0
Leprosy	0	0	0	0	0	0	0	0	0	0	0	0	0
Maternal death (pregnancy, childbirth and puerperium)	0	0	3	0	1	0	0	0	0	0	4	0	4
Mercury poisoning	0	0	0	0	0	0	0	0	0	0	0	0	0
Soil-transmitted helminths	0	0	0	0	0	0	0	0	0	0	0	0	0
Tetanus	0	0	1	0	0	0	0	0	0	0	1	0	0
Tuberculosis: extensively drug-resistant (XDR -TB) *	0	0	3	1	0	0	1	0	2		0		0
Tuberculosis: multidrug- resistant (MDR - TB) *	29	2	38	29	4	3	1	3	31		0		0
Tuberculosis: extra-pulmonary*	100	60	552	188	32	34	33	58	193		0		0
Tuberculosis: pulmonary*	800	262	1 434	934	256	152	295	215	1 052		0		0
Total	1 234	423	2 559	2712	592	408	384	386	1 550	461	9 787	1	80

¹n;

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

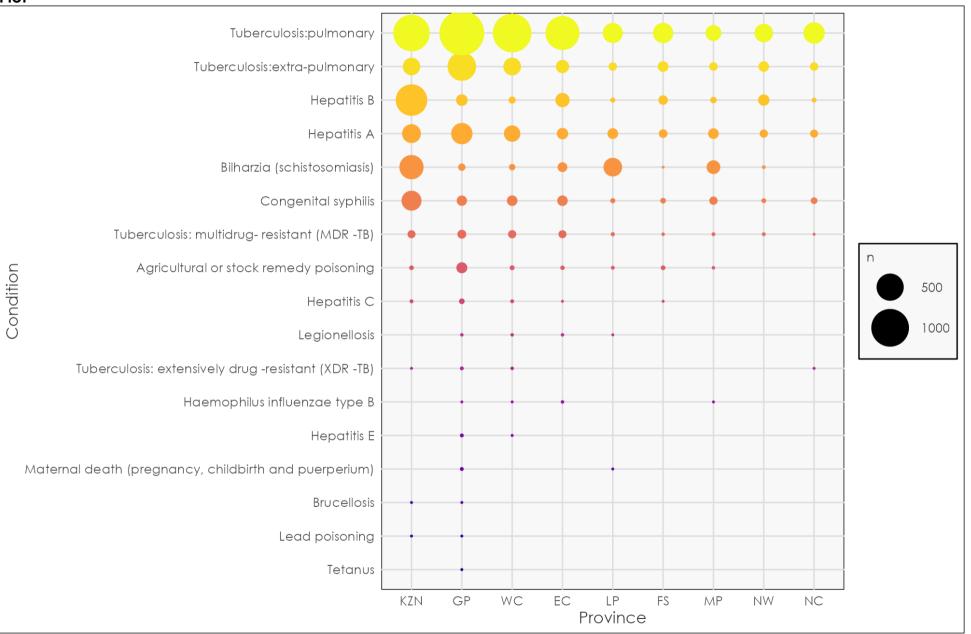


Figure 3: Distribution of all Category 2 NMCs notifications by province notified during February 2024. *All notifications include both suspected and confirmed cases

Plot

NMC App Usage Statistics

Table 5: Description of NMC notifications by case source

NMC Category	Overall , N = 11 244	Clinical notifications , n = 7 823	Laboratory notifications, n = 2 826	Merged Cases , n = 595
Category 1	863 (7.7%)	530 (6.8%)	205 (7.3%)	128 (22%)
Category 2	10 248 (91%)	7 293 (93%)	2 500 (88%)	455 (76%)
Category 3	133 (1.2%)	0 (0%)	121 (4.3%)	12 (2.0%)

Notification types and merging

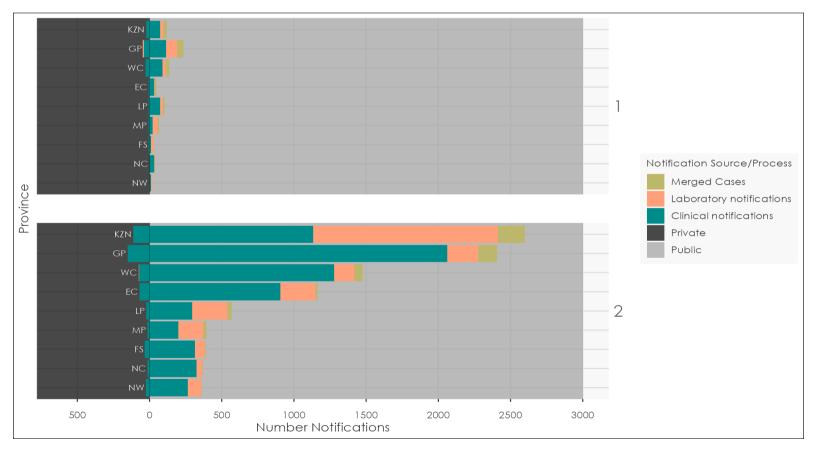


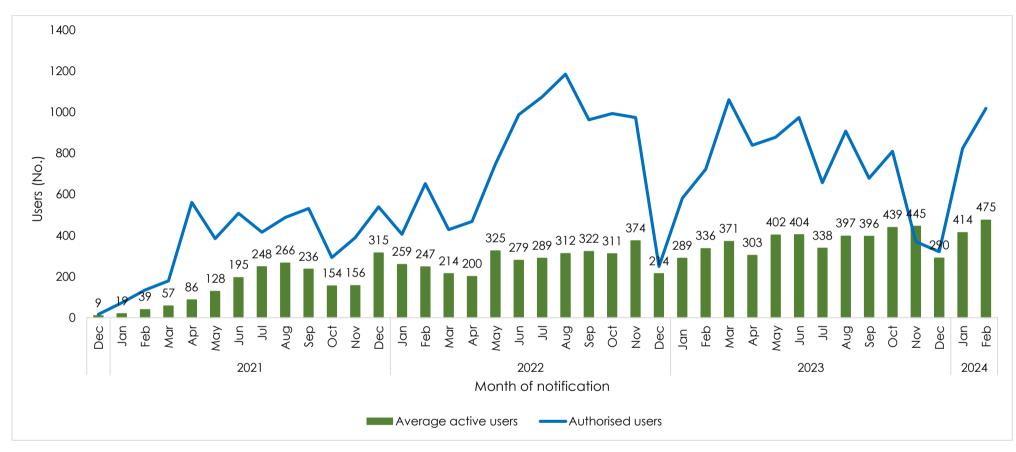
Figure 4: Distribution of Category 1 notification type by province during February 2024

There were 628 (7.5%) clinical notifications from the private sector (i.e., private hospitals, private practice, and mining industry) compared to 7,787 (93%) in the public sector. Clinical notifications using the NMC Reporting Application made up 8223 (73%) (more details in Table 6).

Province	Overall , N = 8 415	App - Private , n = 620	App - Public , n = 7 603	Paper-based - Private , n = 8	ate, Paper-based - Publ n = 184				
GP	2 535	188 (7.4%)	2 342 (92%)	2 (<0.1%)	3 (0.1%)				
KZN	1 556	134 (8.6%)	1 407 (90%)	1 (<0.1%)	14 (0.9%)				
WC	1 552	96 (6.2%)	1 398 (90%)	2 (0.1%)	56 (3.6%)				
EC	1 022	75 (7.3%)	894 (87%)	2 (0.2%)	51 (5.0%)				
LP	437	29 (6.6%)	406 (93%)	0 (0%)	2 (0.5%)				
NC	378	14 (3.7%)	358 (95%)	0 (0%)	6 (1.6%)				
FS	368	39 (11%)	327 (89%)	1 (0.3%)	1 (0.3%)				
NW	301	25 (8.3%)	252 (84%)	0 (0%)	24 (8.0%)				
MP	266	20 (7.5%)	219 (82%)	0 (0%)	27 (10%)				

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

The average active users on the NMC App



There were 475 average active users of the NMC App in February 2024

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

Newly registered users

200 - 150 - 100 - 50 - 0 -		Nurse
90 - 60 - 30 - 0 - 80 -		Doctor
60 - 40 - 20 - 0 -		Nurse-Clinician
75 - 50 - 25 - 0 -		Data clerk
30 - 20 - 10 - 0 -		Operational Manager
Notifications (n)		Facility Manager
40 - 30 - 10 - 10 -		Environmental Health Practitioner
40 - 30 - 20 - 10 - 0 -		Other
10 - 5 - 0 - 20 -		Nurse-Admin
15 - 10 - 5 - 12 -		CDC Manager
8 - 4 - 0 - 8 -	Ath and the and the and the	Clinical Associate
6 - 4 - 2 - 0 -	a de	Epidemiologist
	2021 2022 2023 2024 Epiweek of Notification	

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

Data quality

Completeness

ID number completeness Table 7: Length of ID numbers inputted on NMC system during February, 2024

Android , N = 2 718 ¹	MicroStrategy/SDW, N = 3 376 ¹	Paper-based , $N = 193^{1}$	Web , N = 4 435 ¹	iOS , N = 522 ¹
1 070 (39%)	3 273 (97%)	102 (53%)	1 353 (31%)	209 (40%)
0 (0%)	0 (0%)	0 (0%)	1 (<0.1%)	0 (0%)
0 (0%)	1 (<0.1%)	0 (0%)	0 (0%)	0 (0%)
3 (0.1%)	11 (0.3%)	0 (0%)	389 (8.8%)	50 (9.6%)
0 (0%)	0 (0%)	0 (0%)	4 (<0.1%)	2 (0.4%)
0 (0%)	2 (<0.1%)	0 (0%)	45 (1.0%)	1 (0.2%)
0 (0%)	0 (0%)	0 (0%)	12 (0.3%)	0 (0%)
0 (0%)	5 (0.1%)	0 (0%)	117 (2.6%)	5 (1.0%)
0 (0%)	0 (0%)	0 (0%)	3 (<0.1%)	0 (0%)
0 (0%)	0 (0%)	0 (0%)	24 (0.5%)	1 (0.2%)
1 645 (61%)	84 (2.5%)	91 (47%)	2 487 (56%)	254 (49%)
	1 070 (39%) 0 (0%) 0 (0%) 3 (0.1%) 0 (0%) 0 (0%) 0 (0%) 0 (0%) 0 (0%) 0 (0%) 0 (0%) 0 (0%)	$\begin{array}{c ccccc} 1 & 0.70 & (39\%) & 3 & 273 & (97\%) \\ \hline 0 & (0\%) & 0 & (0\%) \\ 0 & (0\%) & 1 & (<0.1\%) \\ 3 & (0.1\%) & 11 & (0.3\%) \\ 0 & (0\%) & 0 & (0\%) \\ 0 & (0\%) & 2 & (<0.1\%) \\ 0 & (0\%) & 0 & (0\%) \\ 0 & (0\%) & 0 & (0\%) \\ 0 & (0\%) & 5 & (0.1\%) \\ 0 & (0\%) & 0 & (0\%) \\ 0 & (0\%) & 0 & (0\%) \\ \end{array}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

¹n (%)

Hospital Form Completeness

 Table 8: Completion of hospitalisation form for notifications reported as inpatients with category 1 conditions. February 2024 \ Complete refers to >80% of variables completed.

ospital Form Completed	Complete , n = 42 (17%)	Incomplete , n = 40 (16%)	Not Attempted , n = 66 (26%)	Only Symptoms completed n = 102 (41%)
Acute flaccid paralysis	4 (11%)	1 (2.8%)	2 (3.3%)	5 (5.4%)
Acute rheumatic fever	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Anthrax	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Botulism	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Cholera §	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Congenital rubella syndrome	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Diphtheria *	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Enteric fever (typhoid or paratyphoid fever)	0 (0%)	0 (0%)	1 (1.6%)	0 (0%)
Foodborne illness outbreak	6 (16%)	7 (19%)	7 (11%)	18 (20%)
Haemolytic uraemic syndrome (HUS)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Listeriosis	1 (2.6%)	0 (0%)	3 (4.9%)	0 (0%)
Malaria	14 (37%)	10 (28%)	27 (44%)	42 (46%)
Ebola virus (VHF)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Marburg virus (VHF)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Measles	0 (0%)	4 (11%)	2 (3.3%)	6 (6.5%)
Meningococcal disease	1 (2.6%)	0 (0%)	5 (8.2%)	0 (0%)
Мрох	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Pertussis	10 (26%)	14 (39%)	8 (13%)	21 (23%)
Plague	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Poliomyelitis	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Rabies	1 (2.6%)	0 (0%)	1 (1.6%)	0 (0%)
Respiratory disease caused by a novel respiratory pathogen	0 (0%)	0 (0%)	1 (1.6%)	0 (0%)
Rift Valley fever (human)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Rubella	1 (2.6%)	0 (0%)	4 (6.6%)	0 (0%)
Smallpox	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Crimean-Congo viral haemorrhagic fever (human)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Yellow fever	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Unknown	4	4	5	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 1 (0, 3) day to report category 1 NMCs.

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

Characteristic	Category 1,	Category 2 ,	Category 3 ,
	n = 922	n = 10 248	n = 133
Time to Notification Unknown Back Capture Classification	1 (0, 3) 151	2 (0, 7) 1 061	4 (3, 6) 0
Back capture	59 (6%)	0 (0%)	0 (0%)
Current	712 (77%)	8 181 (80%)	116 (87%)
Delayed	151 (16%)	2 067 (20%)	17 (13%)

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 symptom completed. ID numbers are poorly completed in notifications from Trak/SDW.

Recommendations

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

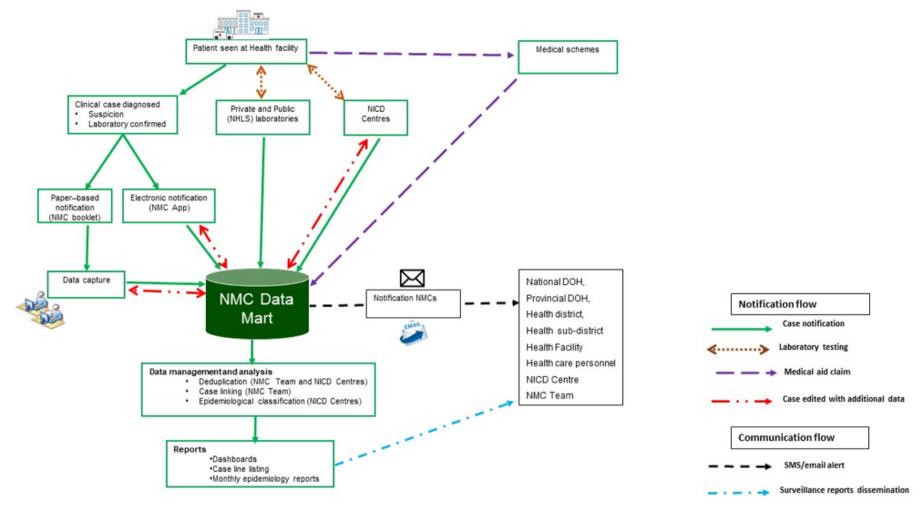
Appendices

Appendix No. 1: Back-captured clinical notifications Table 10: Back captured notifications by reporting province notified during February \ *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 , (59)	EC , (15)	FS , (4)	GP , (16)	KZN , (2)	LP , (2)	MP , (8)	NC, (1)	NW , (3)	WC , (8)	Android, (4) ¹	Paper-based, (2) ¹	SDW , (18) ¹	Web , (33) ¹	iOS , (2) ¹
Foodborne illness outbreak	15 (25%)	12	0	0	0	1	0	0	0	2	0	0	0	14	1
Measles	12 (20%)	1	0	2	0	0	6	1	0	2	1	1	2	8	0
Pertussis	8 (14%)	1	0	2	0	0	2	0	2	1	0	1	6	1	0
Malaria	7 (12%)	0	2	4	1	0	0	0	0	0	1	0	1	5	0
Rubella	7 (12%)	1	0	3	0	1	0	0	0	2	1	0	5	1	0
Acute flaccid paralysis	3 (5.1%)	0	2	1	0	0	0	0	0	0	1	0	0	1	1
Congenital rubella syndrome	2 (3.4%)	0	0	1	0	0	0	0	1	0	0	0	2	0	0
Enteric fever (typhoid or paratyphoid fever)	2 (3.4%)	0	0	2	0	0	0	0	0	0	0	0	2	0	0
Listeriosis	2 (3.4%)	0	0	1	0	0	0	0	0	1	0	0	0	2	0
Cholera	1 (1.7%)	0	0	0	1	0	0	0	0	0	0	0	0	1	0

¹SDW – 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 seven 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 seven 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 one 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 are notified within two days of the diagnosis date. Category 2 and 3 conditions are notified within seven days of diagnosis. All lab notifications without diagnosis date are classified as current.

Delayed notification: Category 1 conditions are notified within between three and seven days of diagnosis date. Category 2 and 3 conditions are notified between eight and 30 days of diagnosis.

Back capture notification: Category 1 conditions are notified more than seven 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.

Condition		Notified/Suspected							
	Under 5 A , N = 350 ¹	5 & over A , N = 141 ¹	5 & over D , N = 2 ¹	Under 5 D , N = 6 ¹	N = 360 ¹				
Acute flaccid paralysis	12	2	0	0	0				
Acute rheumatic fever	0	0	0	0	0				
Anthrax	0	0	0	0	0				
Botulism	0	0	0	0	0				
Cholera	48	13	1	3	2				
Congenital rubella syndrome	11	0	0	0	0				
Diphtheria	3	0	0	0	0				
Enteric fever (typhoid or paratyphoid fever)	1	2	0	0	6				
Foodborne illness outbreak	103	20	0	0	0				
Haemolytic uraemic syndrome (HUS)	0	0	0	0	0				
Listeriosis	1	2	1	0	3				
Malaria	0	0	0	0	309				
Ebola virus (VHF)	0	0	0	0	0				
Marburg virus (VHF)	0	0	0	0	0				
Measles	101	74	0	0	5				
Meningococcal disease	1	1	0	0	6				
Мрох	0	0	0	0	0				
Pertussis	52	10	0	1	18				
Plague	0	0	0	0	0				
Poliomyelitis	0	0	0	0	0				
Rabies	0	1	0	2	1				
Respiratory disease caused by a novel respiratory pathogen	1	0	0	0	0				
Rift Valley fever (human)	0	0	0	0	0				
Rubella	16	16	0	0	10				
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 February 2024. All Notifications Epi-table

Table 12: 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.

	Av Noti	Epi-weeks									
Characteristic		95% Cl ¹	1	2	3	4	5	6	7	8	9
Acute flaccid paralysis	3.45	3.5, 4.0	2	9	6	6	7	1	8	4	0
Acute rheumatic fever	0.27	1.0, 1.5	0	0	0	0	0	0	0	0	0
Anthrax	0.0092	NA, NA	0	0	0	0	0	0	0	0	0
Botulism	0.0505	1.0, 1.0	0	0	0	0	0	0	0	0	0
Cholera	6.7	3.0, 9.0	0	2	12	8	48	12	12	11	8
Congenital rubella syndrome	1.88	2.0, 2.5	0	3	2	2	5	3	2	6	2
Covid-19	1 256	633, 1 180	129	118	130	126	107	130	112	143	82
Crimean-Congo viral haemorrhagic fever (human)	0.12	1.0, 1.0	0	0	0	0	0	0	0	0	0
Diphtheria	0.54	1.0, 1.5	0	0	0	1	2	0	1	1	1
Ebola virus (VHF)	0.0046	NA, NA	0	0	0	0	0	0	0	0	0
Enteric fever (typhoid or paratyphoid fever)	3.41	3.5, 4.5	3	2	2	8	4	3	2	4	2
Foodborne illness outbreak	9	6.0, 9.0	30	10	18	11	24	27	36	48	11
Haemolytic uraemic syndrome (HUS)	0.0413	NA, NA	0	0	0	0	0	0	0	0	0
Listeriosis	1.67	2.0, 2.5	0	1	1	5	2	1	1	6	2
Malaria	91	71,90	35	120	217	187	109	116	61	48	45
Marburg virus (VHF)	0.0046	NA, NA	0	0	0	0	0	0	0	0	0
Measles	23	16,26	40	49	44	35	35	42	45	61	36
Meningococcal disease	1.97	2.5, 3.0	3	3	4	5	4	0	3	2	2
Pertussis	19	20, 28	21	50	47	27	30	29	18	18	10
Plaque	0.0046	NA, NA	0	0	0	0	0	0	0	0	0
Poliomyelitis	0.0092	NA, NA	0	0	0	0	0	0	0	0	0
Rabies	0.64	1.5, 2.0	0	0	0	0	0	1	1	1	1
Respiratory disease caused by a novel respiratory pathogen	9	3.0, 9.0	0	1	1	1	0	1	0	0	0
Rubella	8	4.0, 5.5	6	34	16	28	15	13	10	18	7
Smallpox	0.0459	1.0, 2.0	0	0	0	0	0	0	0	0	0
Waterborne illness outbreak - undefined	0.21	1.0, 1.5	Ō	0	Ō	Ō	Ō	Ō	ī	Ō	1
Yellow fever	0.0505	1.0, 1.5	0	0	0	0	0	0	0	0	0

¹CI = Confidence Interval

Trends Plot

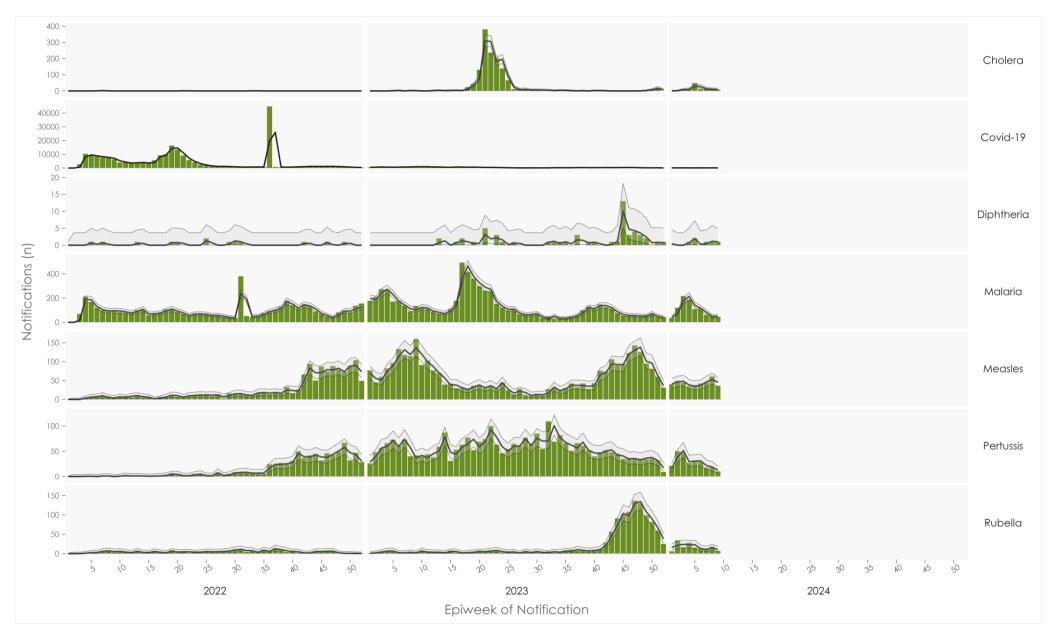


Figure 6: Trend of weekly number of all notifications for selected conditions reported to the NMC, in South Africa, January, and 2022-February

END