NOTIFIABLE MEDICAL CONDITIONS SURVEILLANCE SYSTEM

the National Institute for Communicable Diseases

Introduction

This report summarizes data from the National Notifiable Medical Conditions Surveillance System (NMCSS) on cases diagnosed and reported in **September 2023**. Additionally, this report includes information on the distribution of case notifications by sources, such as clinical or laboratory notifications, merged cases (**see Appendix no. 3**), and the number of reported deaths. It monitors the use of the electronic NMC Reporting Application (App) for notification, data quality, specifically the completeness and timeliness of clinical diagnosis and notifications over time, and back-captured cases notified in September 2023 (**see Appendix nos. 1 and 3**). Category 4 NMCs, COVID-19, and multi-system inflammatory syndrome (MIS-C) have been excluded from this report.

Highlights

- A total of 7517 cases were notified in September 2023 and the majority were category 2 conditions.
- There were 396 average active users of the NMC App in September 2023
- Category 1 cases were reported in median of **one** day (IQR: 0 – 2 days).

NMC Reporting application

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

NOTES: For any additional information contact the NMC national technical team: 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.

NMC data summary, September 2023

A total of n=8 588 notifications were made to the NMCSS in September 2023 **(See Appendix no.3 for definitions)**. There were 7 517 current notifications; the majority (6 687, 89%) were category 2 conditions. The provinces with the highest number of notifications were KwaZulu-Natal (1 962, 26%), Gauteng (1 764, 23%), and Western Cape (1 409, 19%). The provinces with the least number of notifications were Northern Cape (282, 3.8%), and North West (293, 3.9%). (**Figure 1**) There were 1 071 back captured clinical notifications diagnosed between June 2015 and September 2023 and only notified in September 2023. The majority (737, 69%) of those notifications were cases pulmonary TB notifications. (**See Appendix no.1**).

Table 1: Description of NMC notifications by case source

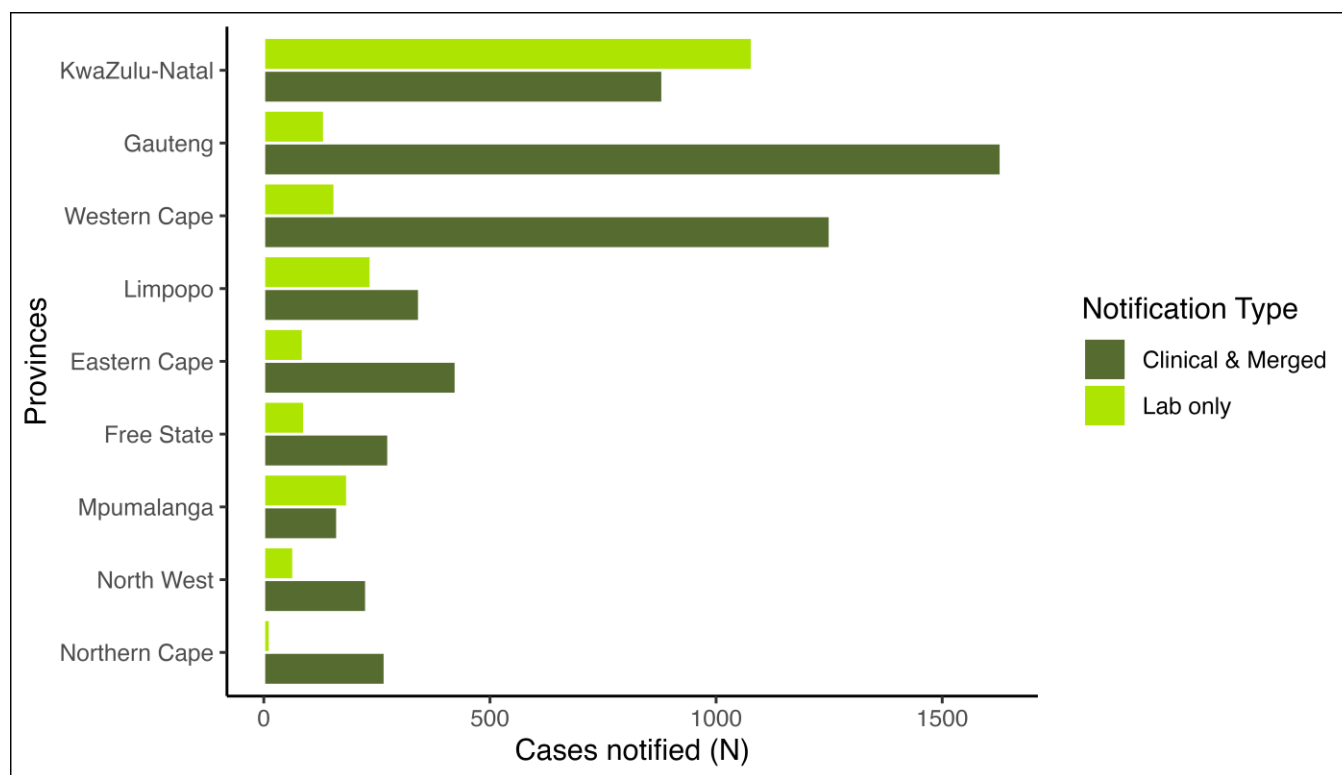| NMC Category	Overall, N = 7 517	Clinical notifications, n = 5 278	Laboratory notifications, n = 2 050	Merged Cases, n = 189
Category 1	745 (9.9%)	335 (6.3%)	332 (16%)	78 (41%)
Category 2	6 687 (89%)	4 943 (94%)	1 644 (80%)	100 (53%)
Category 3	85 (1.1%)	0 (0%)	74 (3.6%)	11 (5.8%)

Figure 1: Distribution of notifications by province and notification type

There were 568 (10%) clinical notifications from the private sector (i.e. private hospitals, private practice and mining industry) compared to 4 899 (90%) in the public sector. Clinical notifications using the NMC Reporting Application made up 5 193 (98%) (see Table 2).

Table 2: Clinical notifications notified by provinces, reporting platform, and sector

Province	Overall, N = 5 322	App - Private, n = 564	App - Public, n = 4 629	Paper-based - Private, n = 4	Paper-based - Public, n = 125
GP	1 599 (100%)	178 (11%)	1 417 (89%)	1 (<0.1%)	3 (0.2%)
WC	1 217 (100%)	76 (6.2%)	1 075 (88%)	1 (<0.1%)	65 (5.3%)
KZN	836 (100%)	122 (15%)	708 (85%)	0 (0%)	6 (0.7%)
EC	422 (100%)	31 (7.3%)	371 (88%)	0 (0%)	20 (4.7%)
LP	335 (100%)	22 (6.6%)	312 (93%)	1 (0.3%)	0 (0%)
FS	274 (100%)	45 (16%)	228 (83%)	1 (0.4%)	0 (0%)
NC	264 (100%)	22 (8.3%)	240 (91%)	0 (0%)	2 (0.8%)
NW	227 (100%)	47 (21%)	157 (69%)	0 (0%)	23 (10%)
MP	148 (100%)	21 (14%)	121 (82%)	0 (0%)	6 (4.1%)

Hospital Form Completeness

Table 3: Completion of hospitalisation form for patients diagnosed with category 1 conditions who were reported as in-patents using the Web-based application (Not iOS, Android or Huawei)

Hospital Form Completed	Complete, n = 16 (12%)	Incomplete, n = 103 (75%)	Not attempted, n = 18 (13%)
Acute Flaccid Paralysis	2 (13%)	3 (2.9%)	0 (0%)
Diphtheria	0 (0%)	0 (0%)	1 (5.6%)
Enteric fever (typhoid or paratyphoid fever)	1 (6.3%)	0 (0%)	0 (0%)
Food borne illness outbreak	0 (0%)	7 (6.8%)	0 (0%)
Listeriosis	1 (6.3%)	0 (0%)	1 (5.6%)
Malaria	0 (0%)	16 (16%)	4 (22%)
Measles	4 (25%)	16 (16%)	1 (5.6%)
Meningococcal Disease	1 (6.3%)	5 (4.9%)	1 (5.6%)
Pertussis	7 (44%)	54 (52%)	10 (56%)
Rabies	0 (0%)	1 (1.0%)	0 (0%)
Rubella	0 (0%)	1 (1.0%)	0 (0%)

The hospitalization form may only be completed for Category 1 conditions reported as in-patients when notifying on the Web-based application. There were137 notifications were reported in this way; 18 (13%) notifications did not have a hospital form completed. Hospital forms were attempted but not well completed for 103 (75%) compared to 16 (12%) that were well completed.

Distribution of Category 1 NMCs by province and number of deaths

Table 4: Distribution of Category 1 NMC by Province and Case Type

Condition	Provinces, n									Case Type, n(%)		
	EC	FS	GP	KZN	LP	MP	NC	NW	WC	Clinical notifications	Laboratory notifications	Merged Cases
Acute Flaccid Paralysis	1	0	6	6	3	0	0	0	6	22 (100%)	0 (0%)	0 (0%)
Cholera	0	0	1	0	0	0	0	0	0	1 (100%)	0 (0%)	0 (0%)
Congenital rubella syndrome	0	0	0	3	1	0	0	0	0	0 (0%)	3 (75%)	1 (25%)
Diphtheria	0	0	0	1	0	0	0	0	4	3 (60%)	0 (0%)	2 (40%)
Enteric fever (typhoid or paratyphoid fever)	1	0	3	0	0	0	0	1	2	0 (0%)	5 (71%)	2 (29%)
Food borne illness outbreak	0	0	9	4	0	3	0	0	1	17 (100%)	0 (0%)	0 (0%)
Listeriosis	1	0	0	0	0	0	0	0	3	1 (25%)	1 (25%)	2 (50%)
Malaria	2	6	49	18	134	52	3	5	20	51 (18%)	195 (67%)	43 (15%)
Measles	1	4	35	22	4	7	1	0	34	86 (80%)	16 (15%)	6 (5.6%)
Meningococcal Disease	2	2	4	1	0	1	0	1	11	17 (74%)	3 (13%)	3 (13%)
Pertussis	27	35	74	31	16	9	3	9	33	128 (54%)	90 (38%)	19 (8.0%)
Rabies	0	0	0	3	1	0	0	0	0	3 (75%)	1 (25%)	0 (0%)
Rubella	4	2	1	7	0	0	0	0	11	7 (28%)	18 (72%)	0 (0%)
Waterborne illness outbreak - UNDEFINED	0	0	0	0	0	0	0	0	1	1 (100%)	0 (0%)	0 (0%)

The majority of category 1 notifications were for Malaria (289,39%). The majority of Malaria cases were notified in LP (34, 46.4%).

Distribution of Category 2 NMCs by province and number of deaths

Table 5: Distribution of Category 2 NMC by Province and Case Type

Condition	Provinces, n									Case Type, n(%)		
	EC	FS	GP	KZN	LP	MP	NC	NW	WC	Clinical notifications	Laboratory notifications	Merged Cases
Agricultural or stock remedy poisoning	2	5	62	0	6	3	1	5	3	87 (100%)	0 (0%)	0 (0%)
Bilharzia (schistosomiasis)	9	0	16	370	116	120	0	3	19	31 (4.7%)	600 (92%)	22 (3.4%)
Congenital syphilis	0	1	1	10	0	0	1	0	9	12 (55%)	2 (9.1%)	8 (36%)
Haemophilus influenzae type B	0	0	3	0	0	0	1	0	1	4 (80%)	1 (20%)	0 (0%)
Hepatitis A	10	18	58	83	31	21	9	14	109	48 (14%)	248 (70%)	57 (16%)
Hepatitis B	37	48	47	694	5	8	17	49	13	111 (12%)	792 (86%)	15 (1.6%)
Hepatitis C	0	1	4	1	0	0	0	0	1	6 (86%)	1 (14%)	0 (0%)
Maternal death (pregnancy, childbirth and puerperium)	0	0	4	0	3	0	0	1	0	8 (100%)	0 (0%)	0 (0%)
Soil transmitted helminths	0	0	1	0	0	0	0	0	0	1 (100%)	0 (0%)	0 (0%)
Tuberculosis: extensively drug -resistant (XDR -TB)	0	0	2	3	0	0	0	0	0	5 (100%)	0 (0%)	0 (0%)
Tuberculosis: multidrug- resistant (MDR -TB)	16	6	48	29	1	1	5	1	23	130 (100%)	0 (0%)	0 (0%)
Tuberculosis:extra-pulmonary	95	42	468	202	39	17	42	54	219	1 178 (100%)	0 (0%)	0 (0%)
Tuberculosis:pulmonary	366	218	1 268	684	249	119	297	170	1 018	4 389 (100%)	0 (0%)	0 (0%)

The majority of category 2 notifications were for Tuberculosis:pulmonary (4 389,57%). The majority of Tuberculosis:pulmonary cases were notified in GP (1 268, 28.9%).
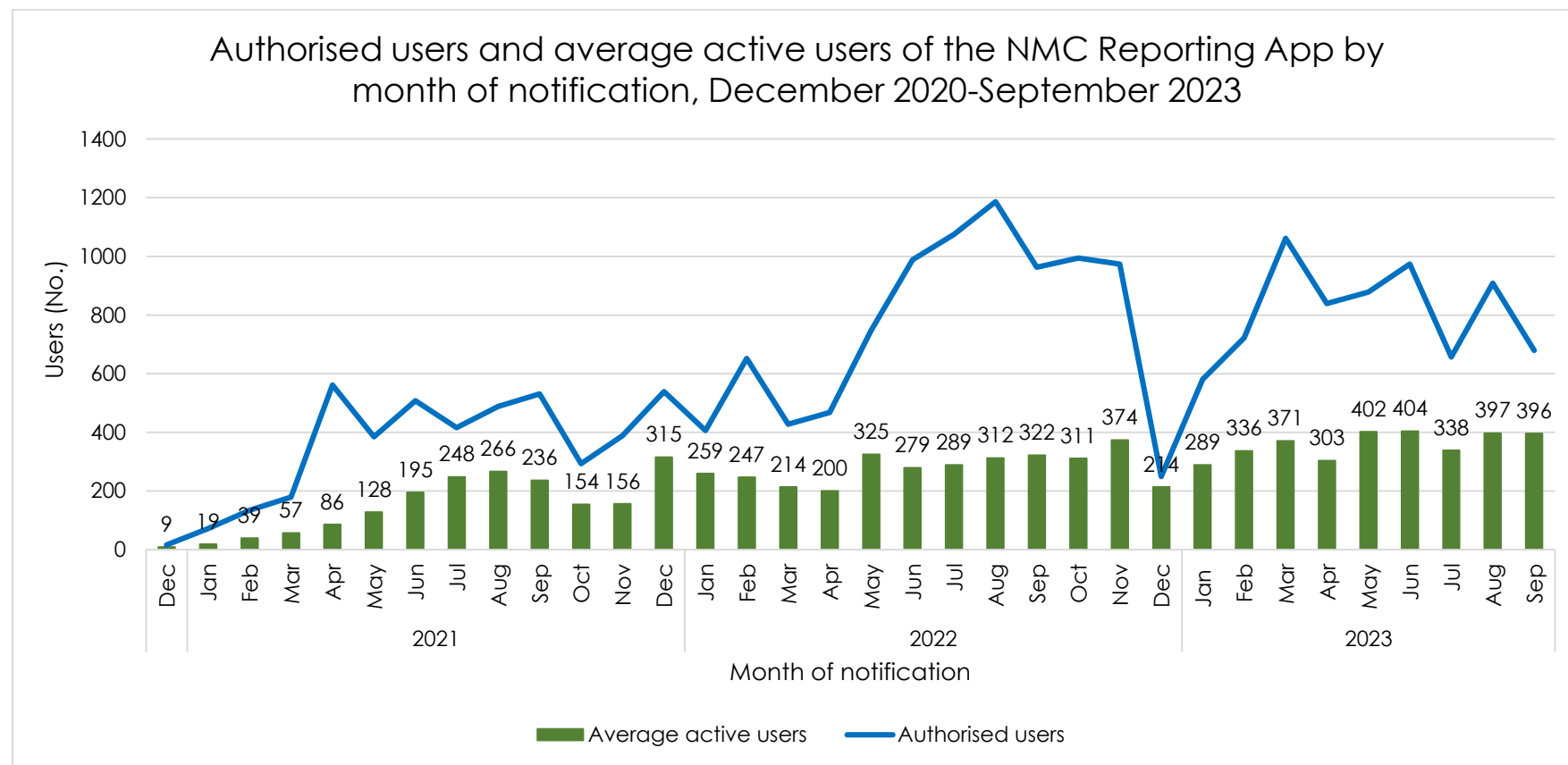
The average active users on the NMC App

Figure 2: The average active user of the NMC reporting Application, December 2020-September 2023.

Data quality

Completeness refers to the proportion of complete data entries per variable in the dataset among clinical and merged notifications. In September 2023 demographic information has been filled in, except for symptom onset date.

Timeliness 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 of 1 ((IQR):0-2) days to report category 1 NMCs.

Table 6: NMC data completeness on both reporting platforms for clinical notifications,

	App, N = 5 193	**Paper-based**, N = 129
Folder Number	5 193 (100%)	129 (100%)
First Name	5 193 (100%)	129 (100%)
Surname	5 193 (100%)	129 (100%)
Symptom Onset Date	5 059 (97%)	123 (95%)
Date of Diagnosis	5 193 (100%)	129 (100%)
Outcome	5 193 (100%)	129 (100%)

ID number completeness

Table 7: Length of ID numbers entered on NMCSS

Length of ID number	Android, N = 1 767[1]	Microstrategy/SDW, N = 2 195[1]	Paper-based, N = 129[1]	Web, N = 3 030[1]	iOS, N = 396[1]
0	663 (38%)	2 165 (99%)	81 (63%)	967 (32%)	180 (45%)
2	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (0.3%)
6	0 (0%)	1 (<0.1%)	0 (0%)	224 (7.4%)	24 (6.1%)
8	0 (0%)	0 (0%)	0 (0%)	36 (1.2%)	3 (0.8%)
9	0 (0%)	0 (0%)	0 (0%)	11 (0.4%)	0 (0%)
10	0 (0%)	0 (0%)	0 (0%)	46 (1.5%)	2 (0.5%)
11	0 (0%)	0 (0%)	0 (0%)	2 (<0.1%)	0 (0%)
12	0 (0%)	0 (0%)	0 (0%)	16 (0.5%)	0 (0%)
13	1 104 (62%)	29 (1.3%)	48 (37%)	1 728 (57%)	186 (47%)
Unknown	0	0	0	0	0

[1]n (%)

The length of the South African ID number is 13 digits and this is a useful variable to identify duplicate notifications, or to link clinical and laboratory information (making a merged case). Most of the notifications from Microstrategy/SDW have no ID number (2 165, 99%).

Symptomatology

Table 8: Symptoms of patients clinically notified and merged with laboratory notifications to the NMC

Characteristic	Overall, N = 5 467[1]	Category 1, N = 413[1]	Category 2, N = 5 043[1]	Category 3, N = 11[1]
Cough	2 674 (49%)	61 (15%)	2 613 (52%)	0 (0%)
No Symptoms Reported	1 595 (29%)	120 (29%)	1 467 (29%)	8 (73%)
Loss of weight	1 592 (29%)	0 (0%)	1 592 (32%)	0 (0%)
Loss of appetite	1 142 (21%)	8 (1.9%)	1 134 (22%)	0 (0%)
Night Sweats	1 002 (18%)	0 (0%)	1 002 (20%)	0 (0%)
Fever	911 (17%)	113 (27%)	798 (16%)	0 (0%)
Chest pains	891 (16%)	0 (0%)	891 (18%)	0 (0%)
Shortness of breath	455 (8.3%)	0 (0%)	455 (9.0%)	0 (0%)
Flu like symptoms	384 (7.0%)	9 (2.2%)	375 (7.4%)	0 (0%)
Weakness	364 (6.7%)	0 (0%)	364 (7.2%)	0 (0%)
Muscle weakness	356 (6.5%)	16 (3.9%)	340 (6.7%)	0 (0%)
Other	326 (6.0%)	6 (1.5%)	317 (6.3%)	3 (27%)
Maculopapular rash	76 (1.4%)	76 (18%)	0 (0%)	0 (0%)
Paroxysmal coughing	76 (1.4%)	76 (18%)	0 (0%)	0 (0%)
Vomiting	47 (0.9%)	47 (11%)	0 (0%)	0 (0%)
Headache	46 (0.8%)	46 (11%)	0 (0%)	0 (0%)
Conjuctivitis	43 (0.8%)	43 (10%)	0 (0%)	0 (0%)
Inspirational whoop	42 (0.8%)	42 (10%)	0 (0%)	0 (0%)

Characteristic	Overall, N = 5 467[1]	Category 1, N = 413[1]	Category 2, N = 5 043[1]	Category 3, N = 11[1]
Tiredness / Body malaise	25 (0.5%)	25 (6.1%)	0 (0%)	0 (0%)
Acute febrile illness	24 (0.4%)	24 (5.8%)	0 (0%)	0 (0%)
Rice-water stools	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Coryza (running nose)	0 (0%)	0 (0%)	0 (0%)	0 (0%)

[1]n (%)

Conclusion

The majority of notifications were clinical notifications. The increase in average active users and newly registered users over time is an indication of an increase in the acceptance of the NMC App in the provinces. Application of mandatory fields on the NMC App have improved completeness of clinical details however ID numbers are not well captured among notifications from Microstrategy/SDW.

Recommendations
- We recommend the expedition of NMC App "whitelisting" on the provincial departmental intranet to make the electronic notification platform more accessible to health facilities.
- NMC Trainers to emphasize the importance of timeous reporting of Category 1 and 2 NMCs, in order to ensure real-time availability of data for public health action.
- We encourage both paper-based and NMC App notifiers to fill out the date of symptom onset.
- We recommend completion of the hospitalisation form for patients who were admitted in hospital. NMC Trainers to emphasize the importance of timeous reporting of Category 1 and 2 NMCs, in order to ensure real-time availability of data for public health action.
- We encourage clinicians and data capturers to report the full ID number of patients on laboratory forms and when capturing electronically.

Appendix no.1: Back captured clinical notifications

*Table 9: Back captured notifications by reporting province*

Condition	Overall	Province									Case Source				
	Overall, n = 1071	EC, n = 78	FS, n = 27	GP, n = 409	KZN, n = 213	LP, n = 29	MP, n = 15	NC, n = 98	NW, n = 20	WC, n = 182	Android, n = 222	Microstrategy/SDW, n = 1	Paper-based, n = 10	Web, n = 790	iOS, n = 48
Agricultural or stock remedy poisoning	3 (0.3%)	0	0	1	0	0	0	0	2	0	1	0	0	2	0
Bilharzia (schistosomiasis)	10 (0.9%)	0	0	0	2	8	0	0	0	0	9	0	0	1	0
Hepatitis A	1 (<0.1%)	0	0	1	0	0	0	0	0	0	0	1	0	0	0
Hepatitis B	25 (2.3%)	2	0	7	12	1	0	1	1	1	4	0	0	12	9
Hepatitis C	1 (<0.1%)	0	0	1	0	0	0	0	0	0	1	0	0	0	0
Malaria	1 (<0.1%)	0	0	0	0	1	0	0	0	0	1	0	0	0	0
Maternal death (pregnancy, childbirth and puerperium)	3 (0.3%)	0	0	1	0	2	0	0	0	0	0	0	0	2	1
Pertussis	1 (<0.1%)	0	0	0	0	1	0	0	0	0	0	0	0	1	0
Tuberculosis: extensively drug -resistant (XDR -TB)	1 (<0.1%)	0	0	0	1	0	0	0	0	0	0	0	0	1	0
Tuberculosis: multidrug-resistant (MDR -TB)	27 (2.5%)	1	1	16	8	0	0	1	0	0	10	0	0	17	0

Condition	Overall										Province	Case Source				
	Overall, n = 1071	EC, n = 78	FS, n = 27	GP, n = 409	KZN, n = 213	LP, n = 29	MP, n = 15	NC, n = 98	NW, n = 20	WC, n = 182	Android, n = 222	Microstrategy/SDW, n = 1	Paper-based, n = 10	Web, n = 790	iOS, n = 48
Tuberculosis:extra-pulmonary	261 (24%)	12	3	114	63	5	0	9	4	51	41	0	1	215	4
Tuberculosis:pulmonary	737 (69%)	63	23	268	127	11	15	87	13	130	155	0	9	539	34

Table 10: Back captured notifications by reporting case source

	Overall	Case Source				
	N = 1 071	**Android**, N = 222	**Microstrategy/SDW**, N = 1	**Paper-based**, N = 10	**Web**, N = 790	**iOS**, N = 48
Agricultural or stock remedy poisoning	3 (0.3%)	1	0	0	2	0
Bilharzia (schistosomiasis)	10 (0.9%)	9	0	0	1	0
Hepatitis A	1 (<0.1%)	0	1	0	0	0
Hepatitis B	25 (2.3%)	4	0	0	12	9
Hepatitis C	1 (<0.1%)	1	0	0	0	0
Malaria	1 (<0.1%)	1	0	0	0	0
Maternal death (pregnancy, childbirth and puerperium)	3 (0.3%)	0	0	0	2	1
Pertussis	1 (<0.1%)	0	0	0	1	0
Tuberculosis: extensively drug -resistant (XDR -TB)	1 (<0.1%)	0	0	0	1	0
Tuberculosis: multidrug- resistant (MDR -TB)	27 (2.5%)	10	0	0	17	0
Tuberculosis:extra-pulmonary	261 (24%)	41	0	1	215	4
Tuberculosis:pulmonary	737 (69%)	155	0	9	539	34

Appendix no.2: Summary of NMCSS Data Flow
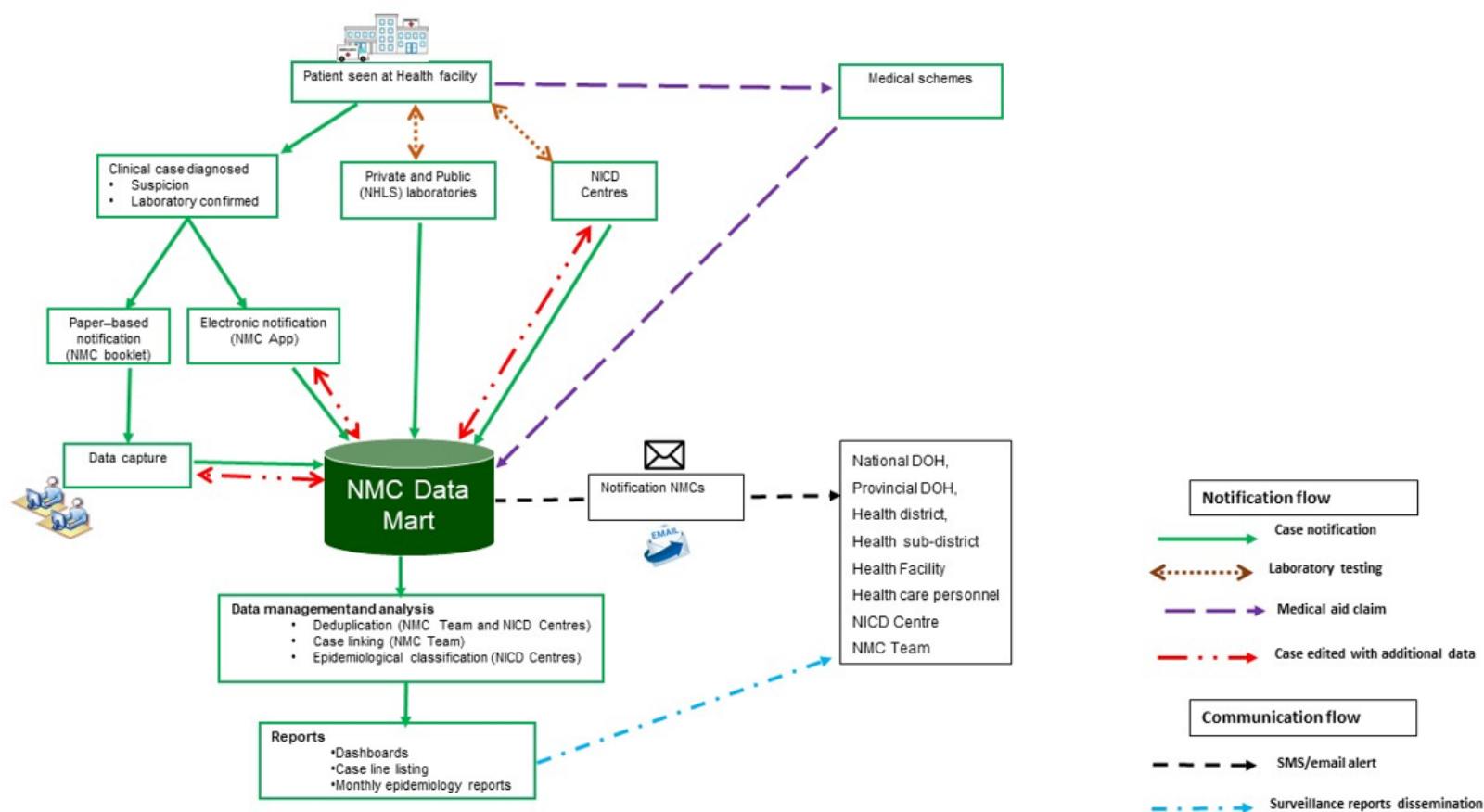
Appendix no.3: NMC Categories, and Case Classification definitions

NMC categories

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

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

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

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

Case Classification definitions

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

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

Merged cases: are cases where a case was notified by 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 defintions

Current notification: All cases diagnosed and notified in the current month

Delayed notification: All cases diagnosed in the last 14 days from the previous month

Back capture notification: All cases diagnosed in previous months and before the last 14 days of the previous month.

Appendix no.4: Incidence analysis based on notification data

Methodological note: Population estimates are taken from StatSA. A multiple linear regression model with natural splines (4 degrees of freedom) to estimate the population for the reporting month was implemented for incidence calculations. Incidence is taken as the number of notificatiosn reported to the NMC after cleaning and deduplication. Case definitions are not strictly applied.

Notifications and Notification incidence by province
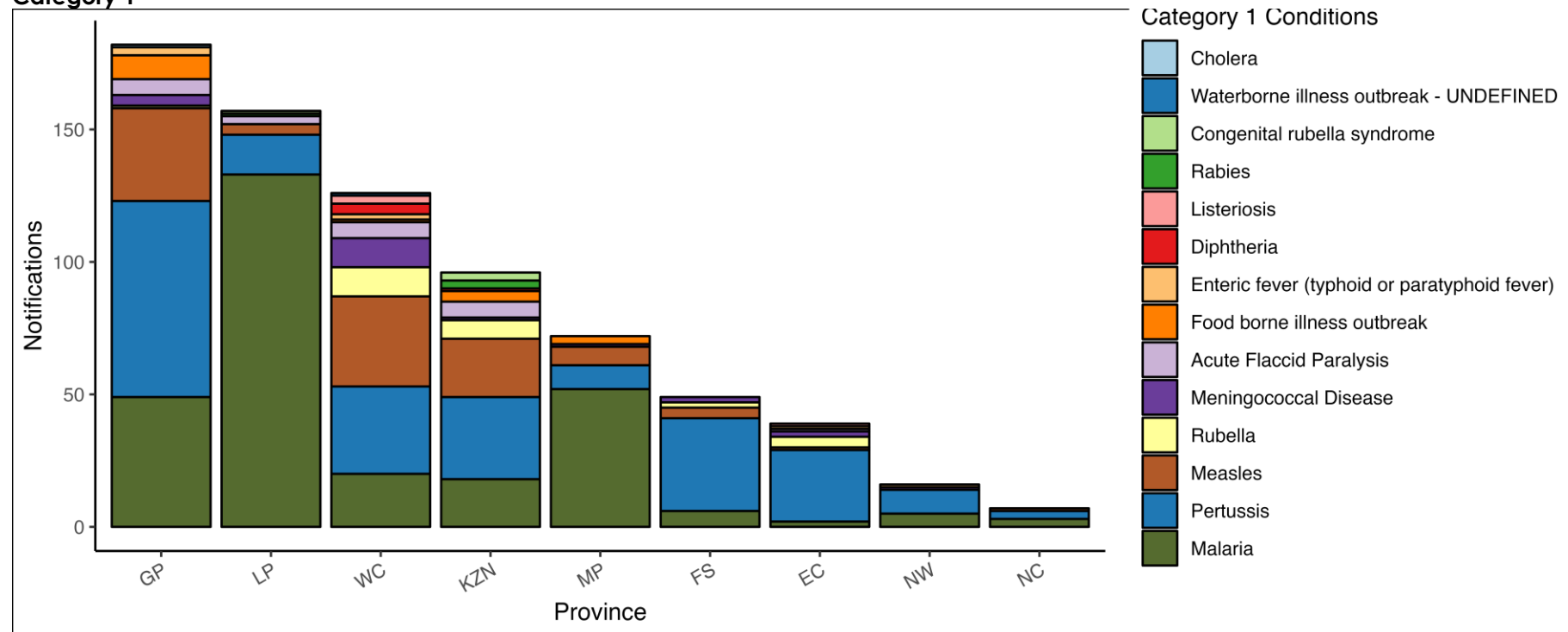
Category 1
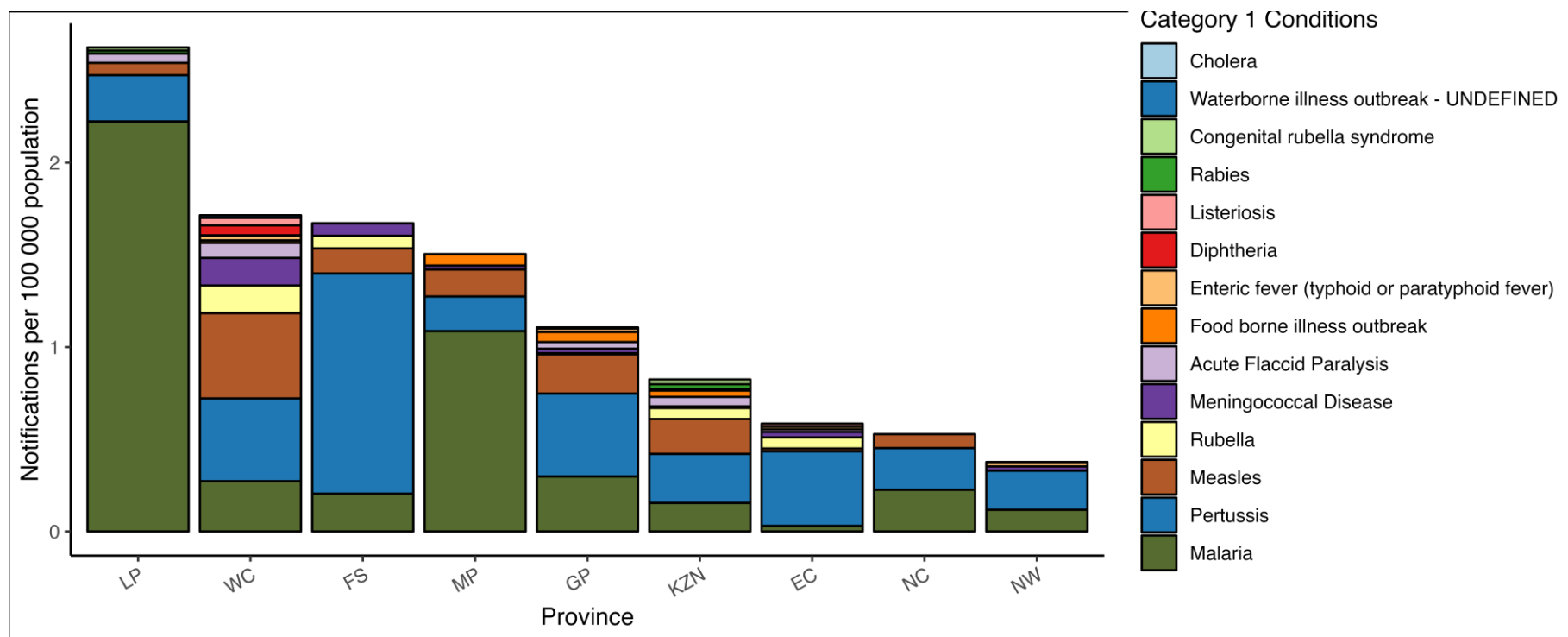

Figure 2: Category 1 Notifications by Province

Figure 3: Category 1 Notifications per 100 000 Population by Province

Table 10: Category 1 Notifications and Notifications per 100 000 Population by Province

Condition[1]	GP pop = 16 451 506		LP pop = 5 981 583		WC pop = 7 348 756		KZN pop = 11 646 522		MP pop = 4 786 528		FS pop = 2 931 570		EC pop = 6 670 455		NW pop = 4 251 241		NC pop = 1 326 746	
	N[1]	NI[1]	N[1]	NI[1]	N[1]	NI[1]	N[1]	NI[1]	N[1]	NI[1]	N[1]	NI[1]	N[1]	NI[1]	N[1]	NI[1]	N[1]	NI[1]
Cholera	1	0.01		-		-		-		-		-		-		-		-
Waterborne illness outbreak - UNDEFINED		-		-	1	0.01		-		-		-		-		-		-
Congenital rubella syndrome		-	1	0.02		-	3	0.03		-		-		-		-		-
Rabies		-	1	0.02		-	3	0.03		-		-		-		-		-
Listeriosis		-		-	3	0.04		-		-		-	1	0.01		-		-
Diphtheria		-		-	4	0.05	1	0.01		-		-		-		-		-
Enteric fever (typhoid or paratyphoid fever)	3	0.02		-	2	0.03		-		-		-	1	0.01	1	0.02		-
Food borne illness outbreak	9	0.05		-	1	0.01	4	0.03	3	0.06		-		-		-		-
Acute Flaccid Paralysis	6	0.04	3	0.05	6	0.08	6	0.05		-		-	1	0.01		-		-
Meningococcal Disease	4	0.02		-	11	0.15	1	0.01	1	0.02	2	0.07	2	0.03	1	0.02		-
Rubella	1	0.01		-	11	0.15	7	0.06		-	2	0.07	4	0.06		-		-
Measles	35	0.21	4	0.07	34	0.46	22	0.19	7	0.15	4	0.14	1	0.01		-	1	0.08
Pertussis	74	0.45	15	0.25	33	0.45	31	0.27	9	0.19	35	1.2	27	0.40	9	0.21	3	0.23
Malaria	49	0.30	133	2.2	20	0.27	18	0.15	52	1.1	6	0.20	2	0.03	5	0.12	3	0.23

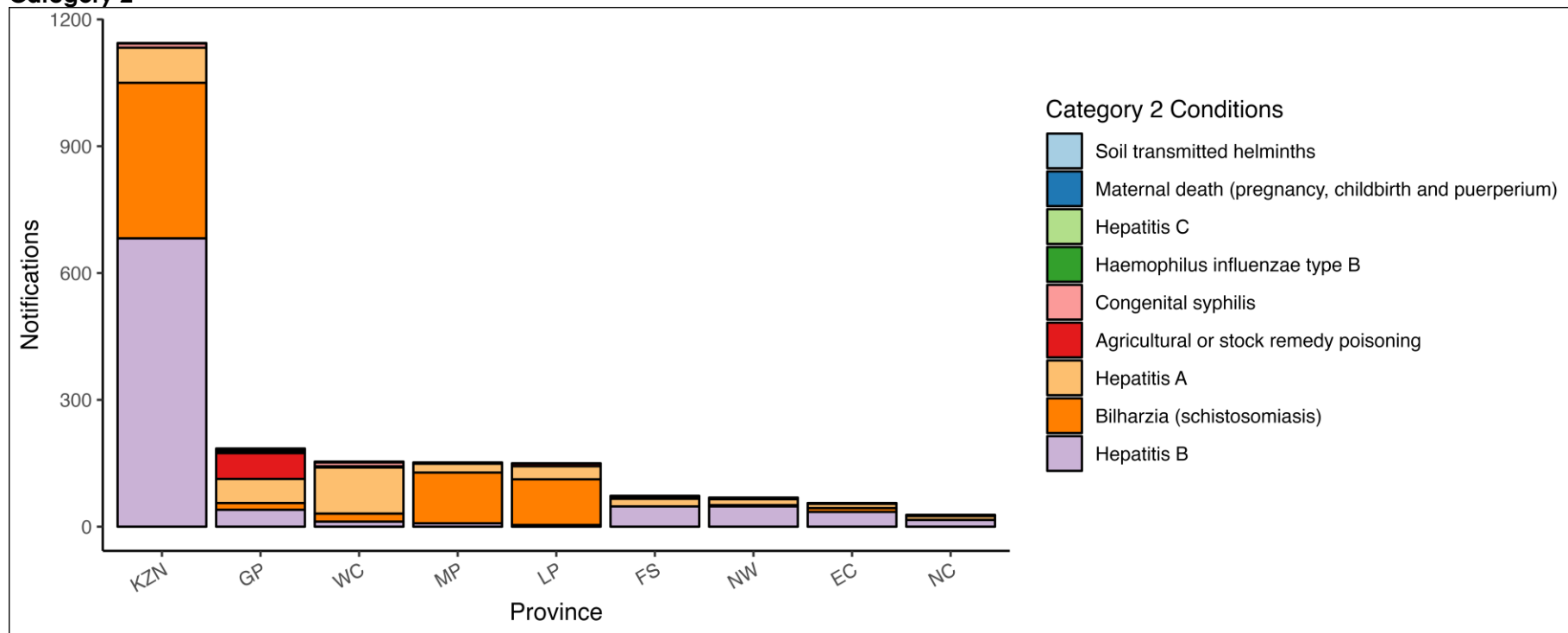[1]N = Notifications, NI = Notification Incidence

Category 2

Figure 4: Cateogry 2 Notifications by Province

Table 11: Category 2 Notifications and Notifications per 100 000 Population by Province

Condition[1]	KZN pop = 11 646 522		GP pop = 16 451 506		WC pop = 7 348 756		MP pop = 4 786 528		LP pop = 5 981 583		FS pop = 2 931 570		NW pop = 4 251 241		EC pop = 6 670 455		NC pop = 1 326 746	
	N[1]	NI[1]	N[1]	NI[1]	N[1]	NI[1]	N[1]	NI[1]	N[1]	NI[1]	N[1]	NI[1]	N[1]	NI[1]	N[1]	NI[1]	N[1]	NI[1]
Soil transmitted helminths		-	1	0.01		-		-		-		-		-		-		-
Maternal death (pregnancy, childbirth and puerperium)		-	3	0.02		-		-	1	0.02		-	1	0.02		-		-
Hepatitis C	1	0.01	3	0.02	1	0.01		-		-	1	0.03		-		-		-
Haemophilus influenzae type B		-	3	0.02	1	0.01		-		-		-		-		-	1	0.08
Congenital syphilis	10	0.09	1	0.01	9	0.12		-		-	1	0.03		-		-	1	0.08
Agricultural or stock remedy poisoning		-	61	0.37	3	0.04	3	0.06	6	0.10	5	0.17	3	0.07	2	0.03	1	0.08
Hepatitis A	83	0.71	57	0.35	109	1.5	21	0.44	31	0.52	18	0.61	14	0.33	10	0.15	9	0.68
Bilharzia (schistosomiasis)	368	3.2	16	0.10	19	0.26	120	2.5	108	1.8		-	3	0.07	9	0.13		-
Hepatitis B	682	5.9	40	0.24	12	0.16	8	0.17	4	0.07	48	1.6	48	1.1	35	0.52	16	1.2

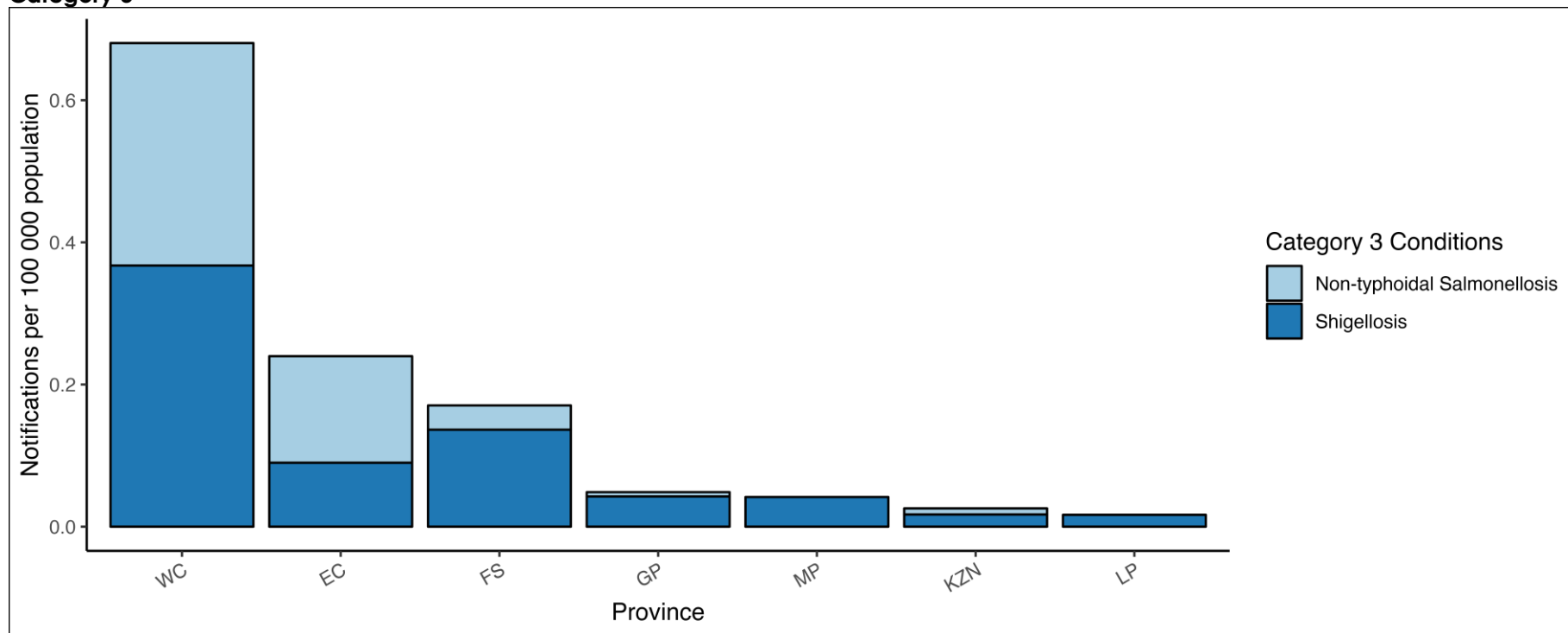[1]N = Notifications, NI = Notification Incidence

Category 3

Figure 6: Category 3 Notifications by Province

Table 12: Category 3 Notifications and Notifications per 100 000 Population by Province

Condition[1]	WC pop = 7 348 756		EC pop = 6 670 455		GP pop = 16 451 506		FS pop = 2 931 570		KZN pop = 11 646 522		MP pop = 4 786 528		LP pop = 5 981 583	
	N[1]	NI[1]	N[1]	NI[1]	N[1]	NI[1]	N[1]	NI[1]	N[1]	NI[1]	N[1]	NI[1]	N[1]	NI[1]
Non-typhoidal Salmonellosis	23	0.31	10	0.15	1	0.01	1	0.03	1	0.01		-		-
Shigellosis	27	0.37	6	0.09	7	0.04	4	0.14	2	0.02	2	0.04	1	0.02

[1]N = Notifications, NI = Notification Incidence

Notifications and Notification incidence by age category
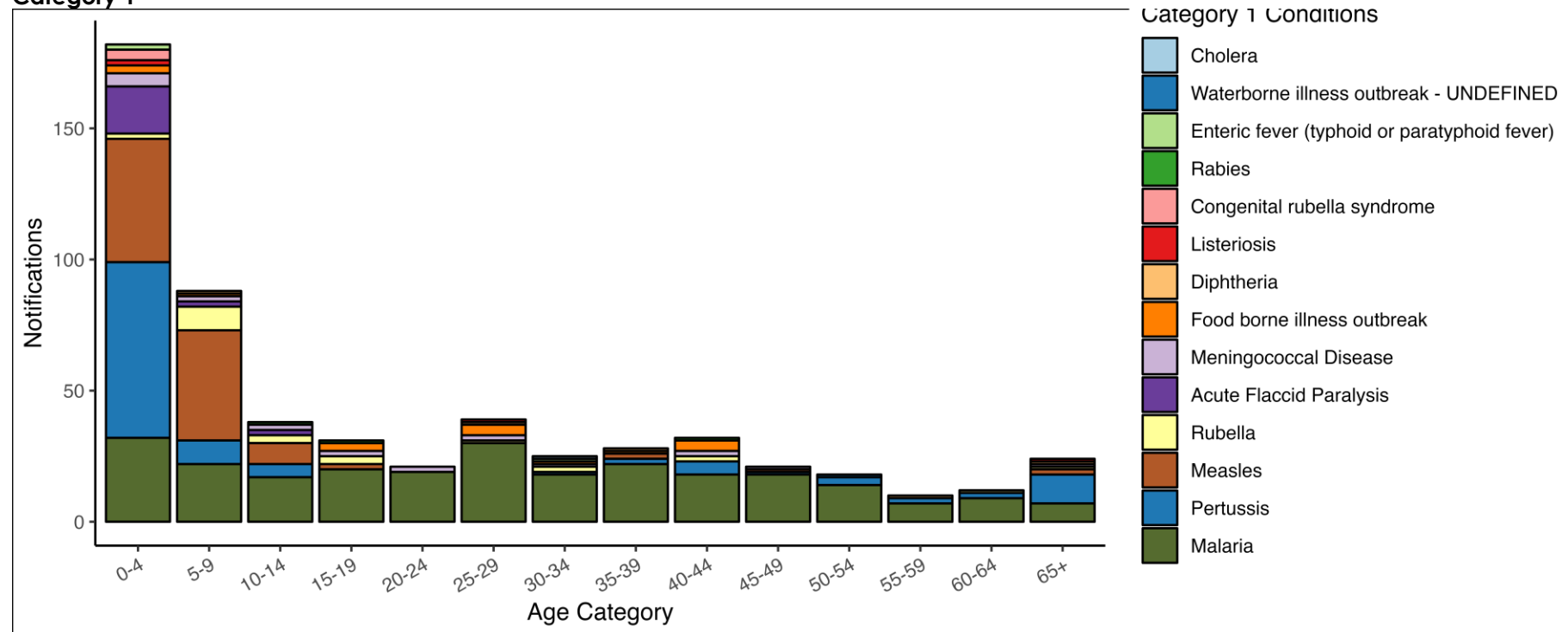
Category 1
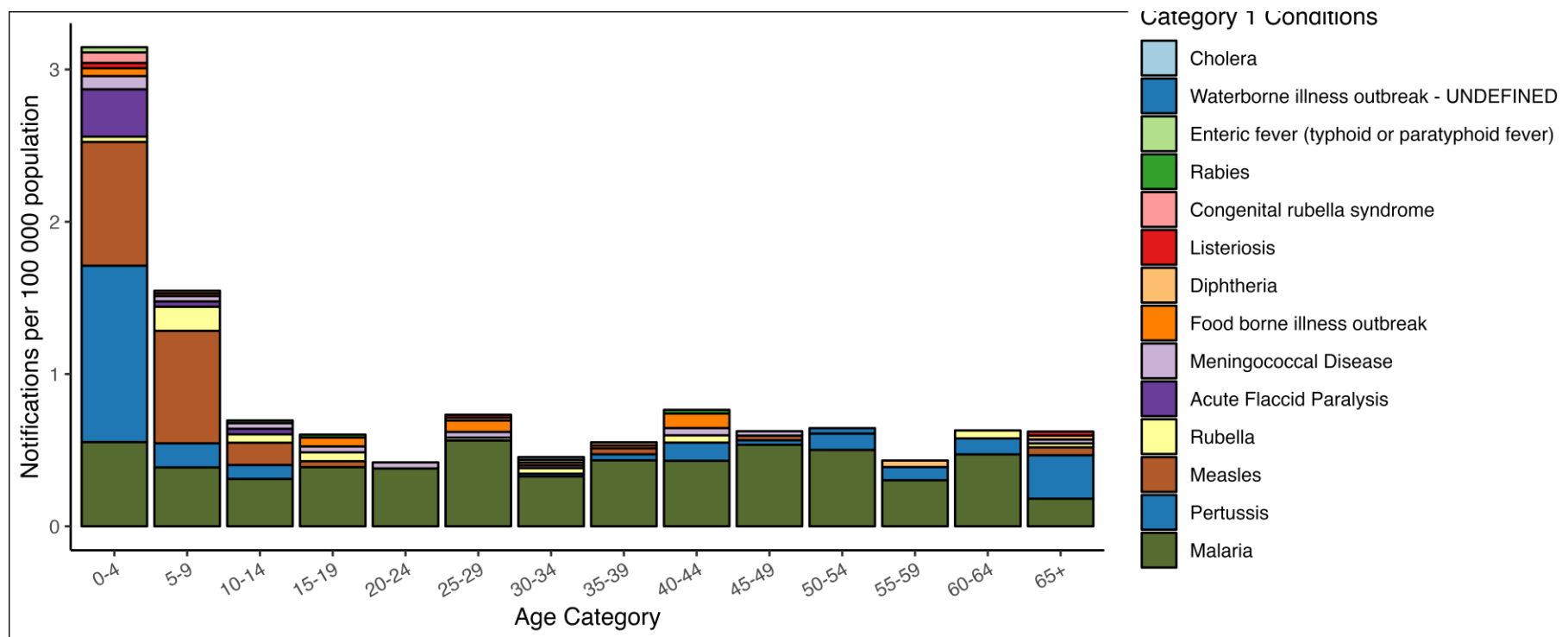

Figure 8: Category 1 Notifications by Age-Group

Figure 9: Category 1 Notifications per 100 000 Population by Age-Group

Table 13: Category 1 Notifications and Notifications per 100 000 Population by Age-Group

Condition[1]	0-4 N[1]	0-4 NI[1]	5-9 N[1]	5-9 NI[1]	10-14 N[1]	10-14 NI[1]	15-19 N[1]	15-19 NI[1]	20-24 N[1]	20-24 NI[1]	25-29 N[1]	25-29 NI[1]	30-34 N[1]	30-34 NI[1]	35-39 N[1]	35-39 NI[1]	40-44 N[1]	40-44 NI[1]	45-49 N[1]	45-49 NI[1]	50-54 N[1]	50-54 NI[1]	55-59 N[1]	55-59 NI[1]	60-64 N[1]	60-64 NI[1]	65+ N[1]	65+ NI[1]
Cholera	-	-	-	-	-	-	-	-	-	-	-	-	1	0.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waterborne illness outbreak - UNDEFINED	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0.04	-	-	-	-	-	-
Enteric fever (typhoid or paratyphoid fever)	2	0.03	-	-	-	-	-	-	-	-	-	-	1	0.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rabies	-	-	-	-	1	0.02	1	0.02	-	-	-	-	-	-	-	-	-	-	1	0.02	-	-	-	-	-	-	-	-
Congenital rubella syndrome	4	0.07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Listeriosis	2	0.03	-	-	-	-	-	-	-	-	1	0.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0.03
Diphtheria	-	-	1	0.02	-	-	-	-	-	-	1	0.02	-	-	1	0.02	-	-	-	-	-	-	1	0.04	-	-	1	0.03
Food borne illness outbreak	3	0.05	1	0.02	-	-	3	0.06	-	-	4	0.08	1	0.02	1	0.02	4	0.10	-	-	-	-	-	-	-	-	-	-
Meningococcal Disease	5	0.09	2	0.04	2	0.04	2	0.04	2	0.04	2	0.04	1	0.02	-	-	2	0.05	1	0.03	-	-	-	-	-	-	1	0.03
Acute Flaccid Paralysis	18	0.31	2	0.04	2	0.04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rubella	2	0.03	9	0.16	3	0.05	3	0.06	-	-	1	0.02	2	0.04	-	-	2	0.05	-	-	-	-	-	-	1	0.05	1	0.03
Measles	47	0.81	42	0.74	8	0.15	2	0.04	-	-	-	-	-	-	2	0.04	-	-	1	0.03	-	-	-	-	-	-	2	0.05
Pertussis	67	1.2	9	0.16	5	0.09	-	-	-	-	-	-	1	0.02	2	0.04	5	0.12	1	0.03	3	0.11	2	0.09	2	0.10	11	0.29
Malaria	32	0.55	22	0.39	17	0.31	20	0.39	19	0.38	30	0.56	18	0.33	22	0.43	18	0.43	18	0.54	14	0.50	7	0.30	9	0.47	7	0.18

[1]N = Notifications, NI = Notification Incidence
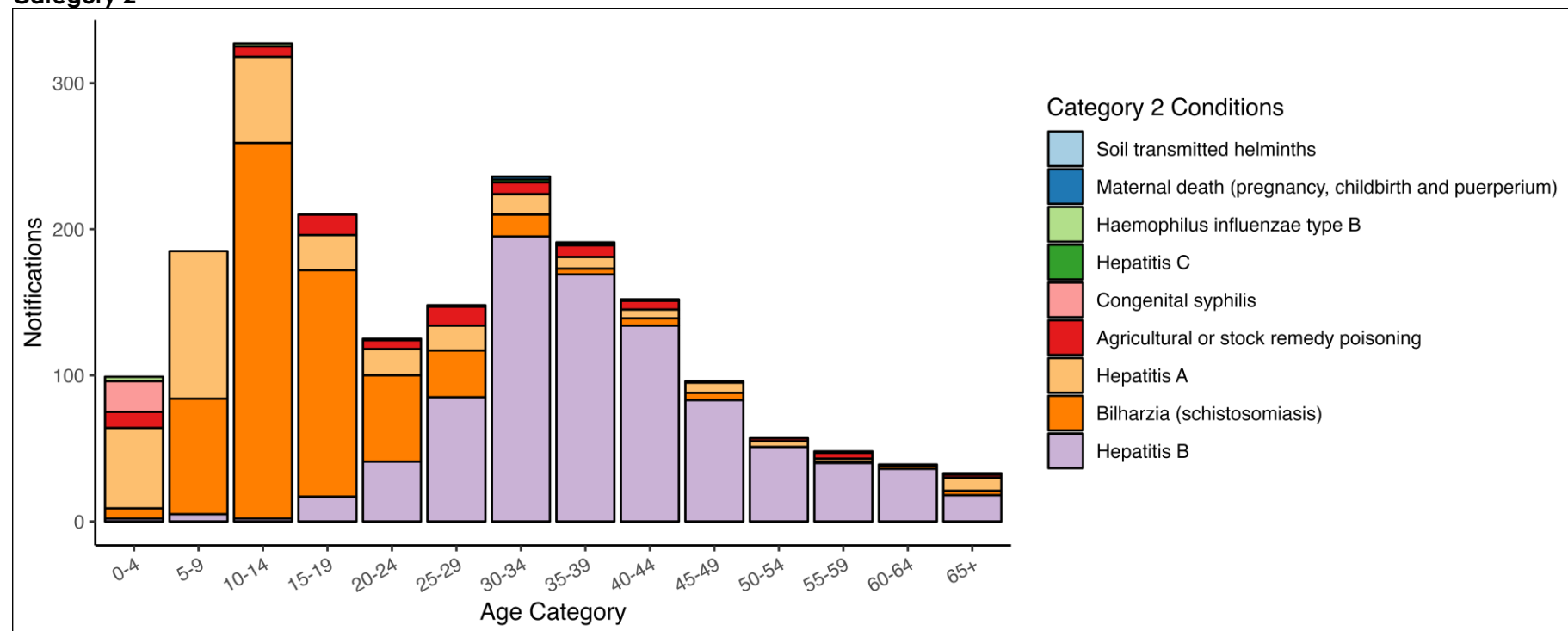
Category 2

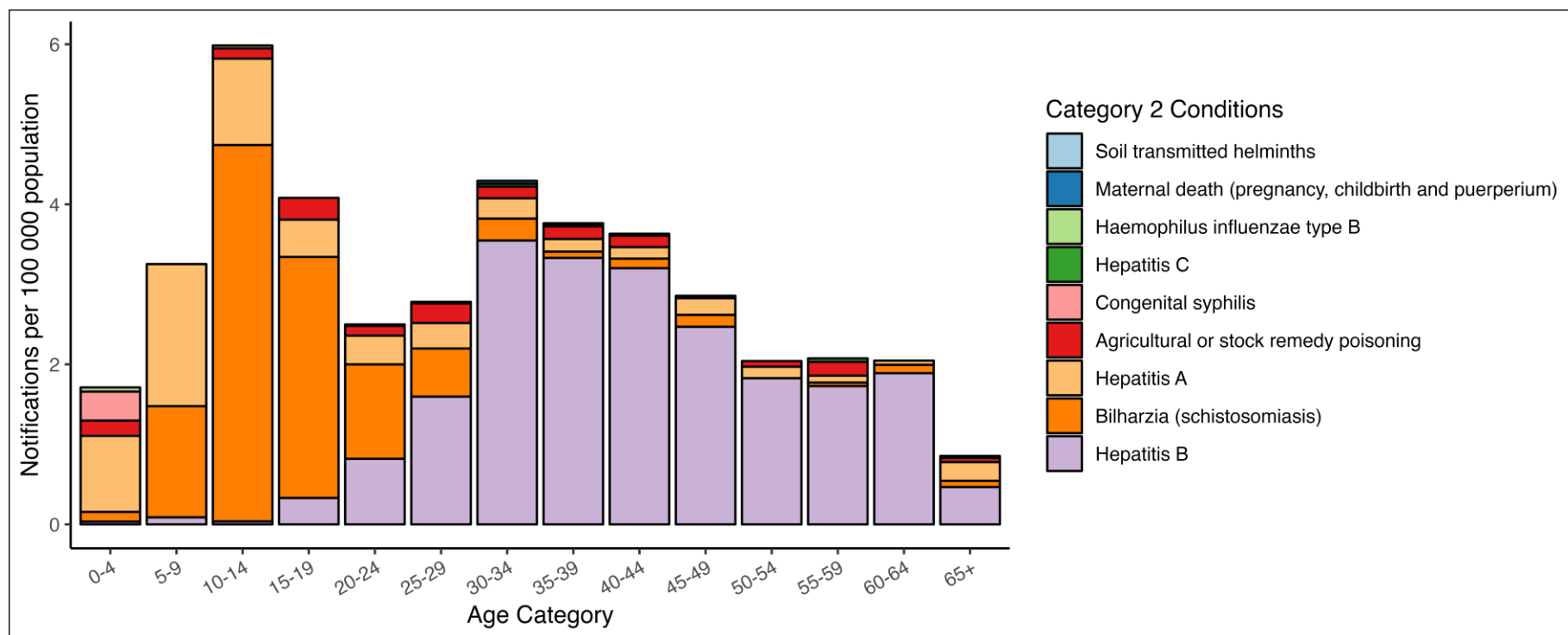

Figure 10: Category 2 Notifications by Age-Group

Figure 11: Category 2 Notifications per 100 000 Population by Age-Group

Table 14: Category 2 Notifications and Notifications per 100 000 Population by Age-Group

Condition[1]	0-4 N[1]	0-4 NI[1]	5-9 N[1]	5-9 NI[1]	10-14 N[1]	10-14 NI[1]	15-19 N[1]	15-19 NI[1]	20-24 N[1]	20-24 NI[1]	25-29 N[1]	25-29 NI[1]	30-34 N[1]	30-34 NI[1]	35-39 N[1]	35-39 NI[1]	40-44 N[1]	40-44 NI[1]	45-49 N[1]	45-49 NI[1]	50-54 N[1]	50-54 NI[1]	55-59 N[1]	55-59 NI[1]	60-64 N[1]	60-64 NI[1]	65+ N[1]	65+ NI[1]
Soil transmitted helminths		-		-		-		-		-		-		-		-	1	0.02		-		-		-		-		-
Maternal death (pregnancy, childbirth and puerperium)		-		-		-		-	1	0.02		-	2	0.04	1	0.02		-		-		-		-		-		-
Haemophilus influenzae type B	3	0.05		-	2	0.04		-		-		-		-		-		-		-		-		-		-		-
Hepatitis C		-		-		-		-		-	1	0.02	2	0.04	1	0.02		-		-		-	1	0.04		-	1	0.03
Congenital syphilis	21	0.36		-		-		-		-		-		-		-		-		-		-		-		-		-
Agricultural or stock remedy poisoning	11	0.19		-	7	0.13	14	0.27	6	0.12	13	0.24	8	0.15	8	0.16	6	0.14	1	0.03	2	0.07	4	0.17		-	2	0.05
Hepatitis A	55	0.95	101	1.8	59	1.1	24	0.47	18	0.36	17	0.32	14	0.25	8	0.16	6	0.14	7	0.21	4	0.14	2	0.09	1	0.05	9	0.23
Bilharzia (schistosomiasis)	7	0.12	79	1.4	257	4.7	155	3.0	59	1.2	32	0.60	15	0.27	4	0.08	5	0.12	5	0.15		-	1	0.04	2	0.10	3	0.08
Hepatitis B	2	0.03	5	0.09	2	0.04	17	0.33	41	0.82	85	1.6	195	3.5	169	3.3	134	3.2	83	2.5	51	1.8	40	1.7	36	1.9	18	0.47

[1]N = Notifications, NI = Notification Incidence

Category 3

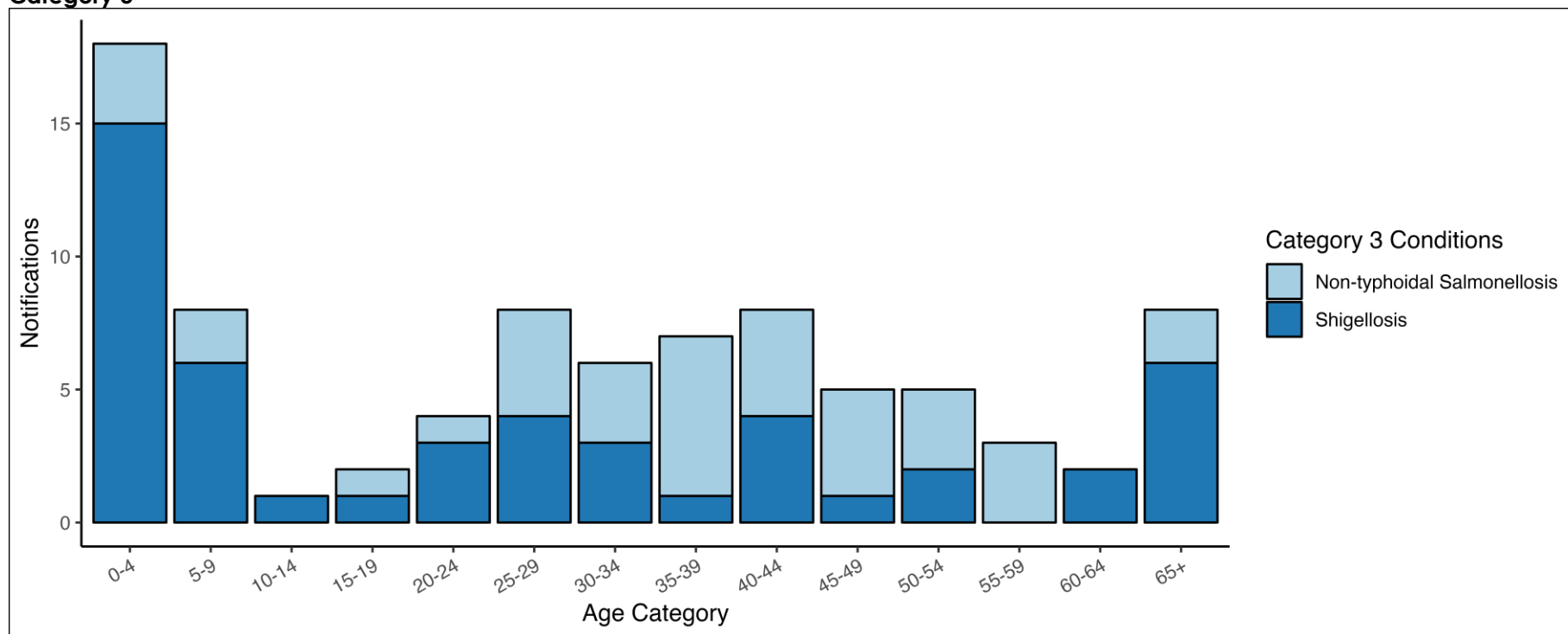*Figure 12: Category 3 Notifications by Age-Group*

Table 15: Category 3 Notifications and Notifications per 100 000 Population by Age-Group

Condition[1]	0-4 N[1]	0-4 NI[1]	5-9 N[1]	5-9 NI[1]	10-14 N[1]	10-14 NI[1]	15-19 N[1]	15-19 NI[1]	20-24 N[1]	20-24 NI[1]	25-29 N[1]	25-29 NI[1]	30-34 N[1]	30-34 NI[1]	35-39 N[1]	35-39 NI[1]	40-44 N[1]	40-44 NI[1]	45-49 N[1]	45-49 NI[1]	50-54 N[1]	50-54 NI[1]	55-59 N[1]	55-59 NI[1]	60-64 N[1]	60-64 NI[1]	65+ N[1]	65+ NI[1]
Non-typhoidal Salmonellosis	3	0.05	2	0.04		-	1	0.02	1	0.02	4	0.08	3	0.05	6	0.12	4	0.10	4	0.12	3	0.11	3	0.13		-	2	0.05
Shigellosis	15	0.26	6	0.11	1	0.02	1	0.02	3	0.06	4	0.08	3	0.05	1	0.02	4	0.10	1	0.03	2	0.07		-	2	0.10	6	0.16

[1] N = Notifications, NI = Notification Incidence

Tuberclusosis

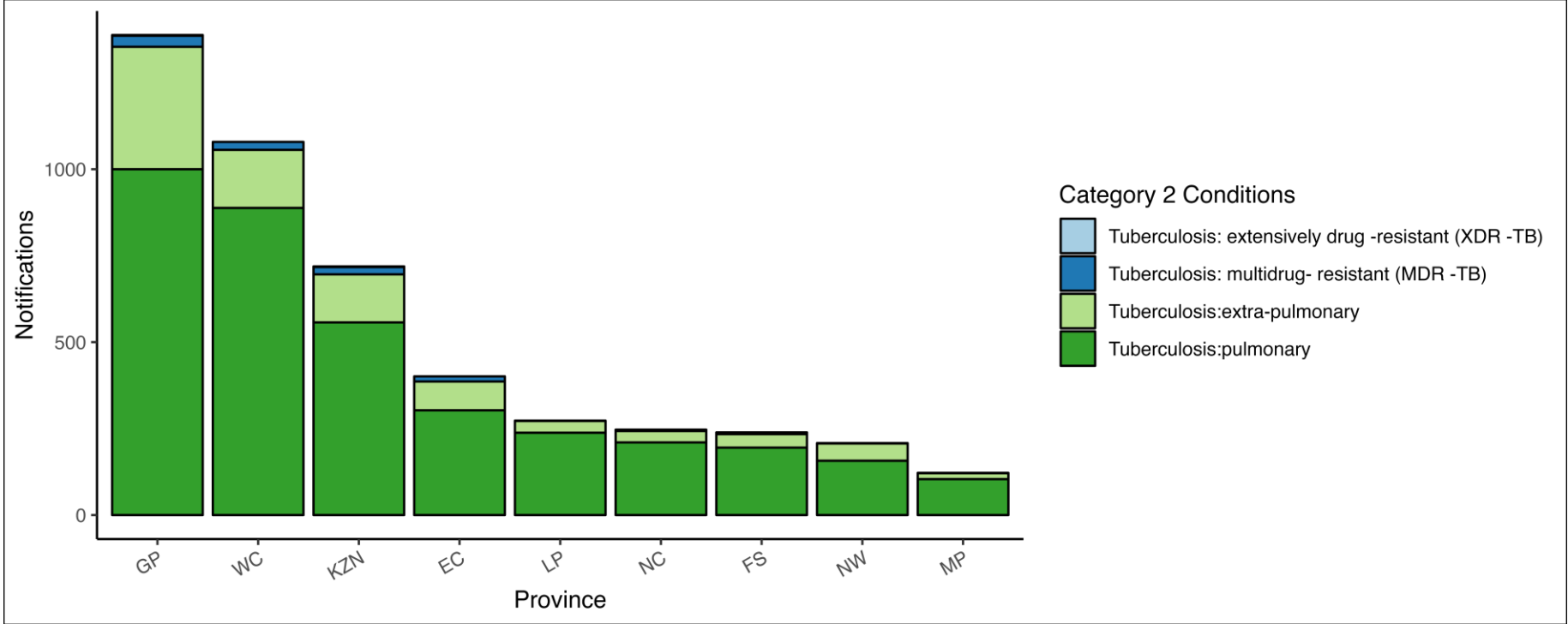**Cases and Incidence by province**

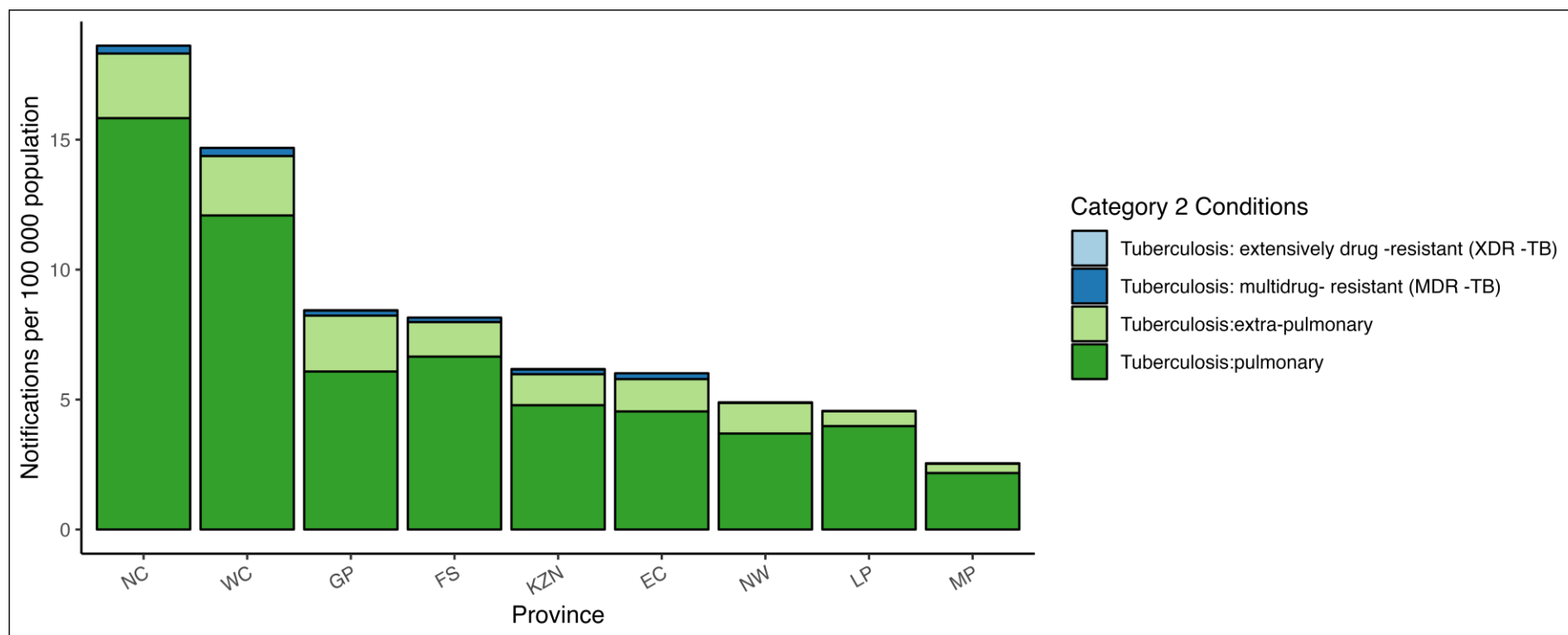*Figure 13: Tuberculosis Notifications by Province*

Figure 14: Tuberculosis Notifications and Notifications per 100 000 Population by Province

Table 16: Tuberculosis Notifications and Notifications per 100 000 Population by Province

Condition[1]	GP pop = 16 451 506		WC pop = 7 348 756		KZN pop = 11 646 522		EC pop = 6 670 455		LP pop = 5 981 583		NC pop = 1 326 746		FS pop = 2 931 570		NW pop = 4 251 241		MP pop = 4 786 528	
	N[1]	NI[1]	N[1]	NI[1]	N[1]	NI[1]	N[1]	NI[1]	N[1]	NI[1]	N[1]	NI[1]	N[1]	NI[1]	N[1]	NI[1]	N[1]	NI[1]
Tuberculosis: extensively drug - resistant (XDR -TB)	2	0.01		-	2	0.02		-		-		-		-		-		-
Tuberculosis: multidrug- resistant (MDR -TB)	32	0.19	23	0.31	21	0.18	15	0.22	1	0.02	4	0.30	5	0.17	1	0.02	1	0.02
Tuberculosis:extra-pulmonary	354	2.2	168	2.3	139	1.2	83	1.2	34	0.57	33	2.5	39	1.3	50	1.2	17	0.36
Tuberculosis:pulmonary		6.1	888	12	557	4.8	303	4.5	238	4.0	210	16	195	6.7	157	3.7	104	2.2

[1]N = Notifications, NI = Notification Incidence

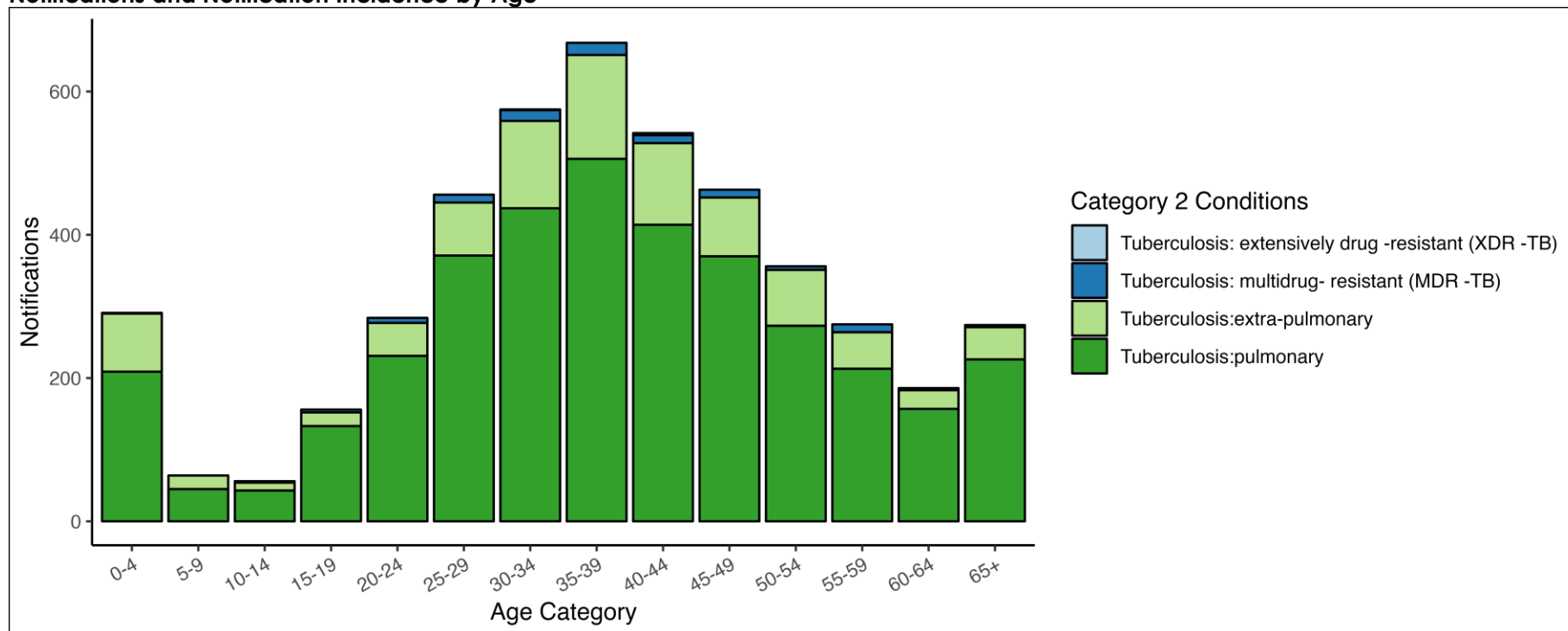# Notifications and Notification Incidence by Age

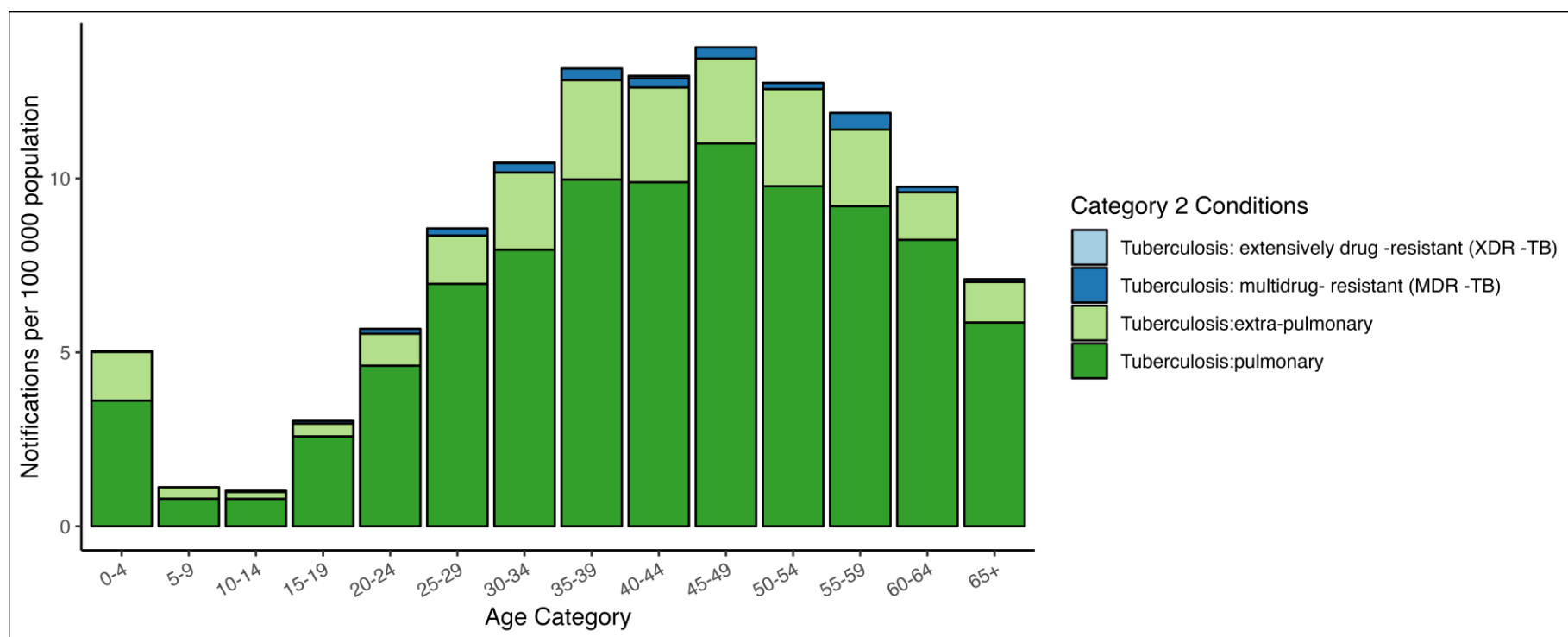*Figure 15: Tuberculosis Notifications by Age-Group*

Figure 16: Tuberculosis Notifications per 100 000 Population by Age-Group

Table 17: Tuberculosis Notifications and Notifications per 100 000 Population by Age-Group

Condition[1]	0-4 N[1]	0-4 NI[1]	5-9 N[1]	5-9 NI[1]	10-14 N[1]	10-14 NI[1]	15-19 N[1]	15-19 NI[1]	20-24 N[1]	20-24 NI[1]	25-29 N[1]	25-29 NI[1]	30-34 N[1]	30-34 NI[1]	35-39 N[1]	35-39 NI[1]	40-44 N[1]	40-44 NI[1]	45-49 N[1]	45-49 NI[1]	50-54 N[1]	50-54 NI[1]	55-59 N[1]	55-59 NI[1]	60-64 N[1]	60-64 NI[1]	65+ N[1]	65+ NI[1]
Tuberculosis: extensively drug -resistant (XDR -TB)		-		-		-		-		-		-	1	0.02		-	3	0.07		-		-		-		-		-
Tuberculosis: multidrug-resistant (MDR -TB)	1	0.02		-	2	0.04	4	0.08	7	0.14	11	0.21	15	0.27	17	0.33	11	0.26	11	0.33	5	0.18	11	0.48	3	0.16	3	0.08
Tuberculosis:extra-pulmonary	81	1.4	19	0.33	11	0.20	19	0.37	46	0.92	74	1.4	122	2.2	145	2.9	114	2.7	82	2.4	78	2.8	51	2.2	26	1.4	45	1.2
Tuberculosis:pulmonary	209	3.6	45	0.79	43	0.79	133	2.6	231	4.6	371	7.0	437	8.0	506	10	414	9.9	370	11	273	9.8	213	9.2	157	8.2	226	5.9

[1]N = Notifications, NI = Notification Incidence

END