



INTERIM SITUATION REPORT, 08 SEPTEMBER 2023

(based on laboratory testing data up until 04 September 2023)

Issued by the National Institute for Communicable Diseases based on laboratory testing data

Highlights

- The NICD has tested 6816 serum samples for measles since epidemiological week 40, 2022, of which 1160 (17%) were confirmed positive. In the past weeks (week 34 up until week 35, 02/09/2023), 17 laboratory-confirmed measles cases were detected across the country from four of the eight provinces where Measles outbreak was confirmed; Gauteng reported most of the cases (11), Limpopo reported three, Kwa-Zulu Natal reported two and North West reported one case.
- Since epidemiological week 32, there has been an increase in the number of reported cases. The cases in recent weeks are mostly from Gauteng. All cases reported in week 35 are from Gauteng province.
- To declare the measles outbreak over, the following criteria should be achieved: Absence of newly detected measles cases for more than two incubation periods (42 days). The criteria for declaring the measles outbreak over was met in the Northern Cape province in week 15, the North West province in week 24, and the Free State province in week 25.

Outbreak overview

From epidemiological week 40, 2022 to week 35, 2023, the NICD tested 6816 serum samples for measles of which 1160 (17%) were confirmed measles cases. The number of samples submitted and the percentage of laboratory-confirmed measles positive cases are shown in Figure 1. From epidemiological week 40 of 2022 to week 35 of 2023, 1151 laboratory-confirmed cases were reported from eight provinces with declared measles outbreaks; Limpopo (522 cases), Mpumalanga (113 cases), North West (221 cases), Gauteng (200 cases), Free State (33 cases), Western Cape (18), KwaZulu-Natal (37) and Northern Cape (7) (Table 1). The number of blood samples and throat swabs submitted to the NICD for measles serology and PCR testing decreased from 61 in week 34 to 30 test in week 35.

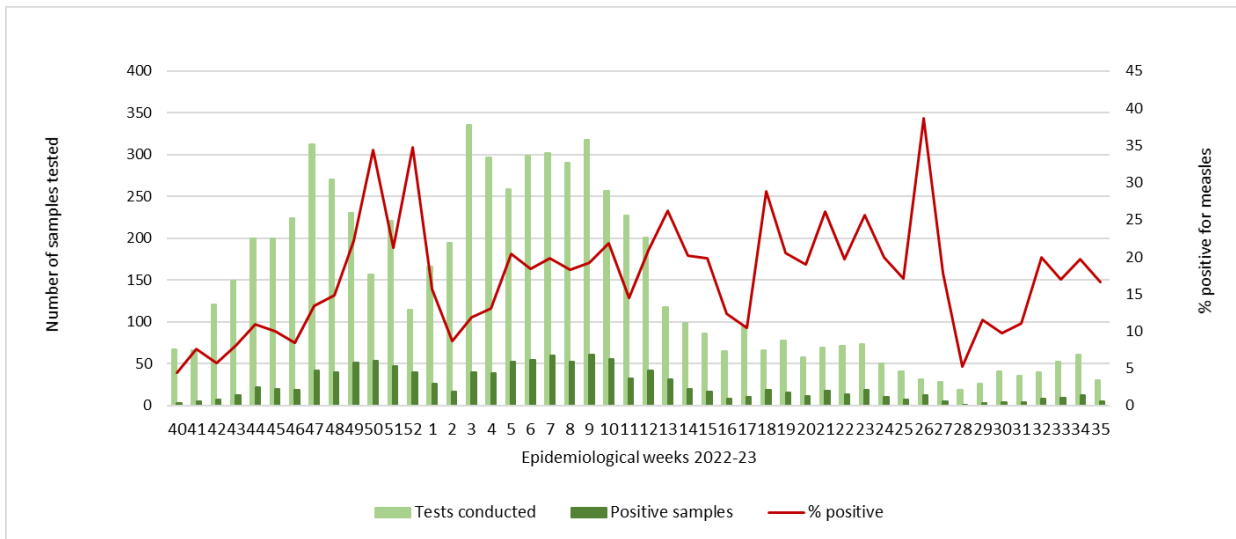


Figure 1. Number of serum samples submitted to the NICD for measles, week 40 2022, until week 35 2023, and the number (dark green) and % tested positive (red line), by epidemiological week using the date the specimen was collected. *Data from week 35 represent partial data and will be updated in next week's situation report when complete data from samples collected that week becomes available.

Table 1. Cases of laboratory-confirmed measles tested by the NICD from all provinces in South Africa from epidemiological week 40, 2022 to week 35, 2023. Outbreak-associated cases are contained within the red bordered cells* (FS=Free State; GP=Gauteng; KZN=KwaZulu-Natal; LP=Limpopo; MP=Mpumalanga NW=North West; NC=Northern Cape, WC = Western Cape). *Data from week 35 represents partial data and will be updated in next week's situation report when complete data from samples collected that week becomes available.

Epi Week	EC	FS	GP	KZN	LP	MP	NW	NC	WC	Total
40, 2022			1		2					3
41, 2022					5					5
42, 2022			1		4		1		1	7
43, 2022	1				11					12
44, 2022				1	19	2				22
45, 2022		1	1		12	3	1	1	1	20
46, 2022			1	1	9	8				19
47, 2022		1	2		18	15	4	1	1	42
48, 2022			1		18	17	4			40
49, 2022		3	2	2	10	14	18	1	1	51
50, 2022			3		16	6	30			55
51, 2022		3	3	1	7	5	28			47
52, 2022		2	1		7	5	24	1		40
01, 2023		3	1		7	1	13		1	26
02, 2023		1	2		3	4	7			17
03, 2023	1	4	9		9	5	11		1	40
04, 2023	1	2	10	2	9	5	9		1	39
05, 2023		2	12	2	20	2	14		1	53
06, 2023	1	1	17	3	19	3	10		1	55
07, 2023			19	3	26	2	9	1	1	61
08, 2023	2	1	14	1	20	5	8	2		53
09, 2023		3	19	1	26	4	8		1	62
10, 2023		1	17		27		11			56
11, 2023		1	9	1	22					33
12, 2023			7		29	1	4		1	42
13, 2023			6	1	22		2			31
14, 2023			2	1	17					20
15, 2023			3		11	1			2	17
16, 2023			3		5					8
17, 2023					10					10
18, 2023		1	4		13		1			19
19, 2023		2	2		12					16
20, 2023			1		9				1	11
21, 2023			2	1	14	1				18
22, 2023			2		12					14
23, 2023	2		3		13	1				19
24, 2023			2		7	1				10
25, 2023			1		5				1	7
26, 2023			4	1	5	1			1	12
27, 2023				2	2				1	5
28, 2023									1	1
29, 2023	1			2						3
30, 2023			1		2		1			4
31, 2023		1	1		1	1				4
32, 2023			2	5	1					8
33, 2023			3	1	3		2			9
34, 2024			6	2	3		1			12
35, 2025			5							5
Total	9	33	200	37	522	113	221	7	18	1160

Overview of the measles outbreak in South Africa

A total of 1151 cases of laboratory-confirmed measles were reported between epidemiological week 40, 2022 to week 35 2023, in South Africa. In epidemiological week 35, a total of five cases were reported. All the cases were from Gauteng province.

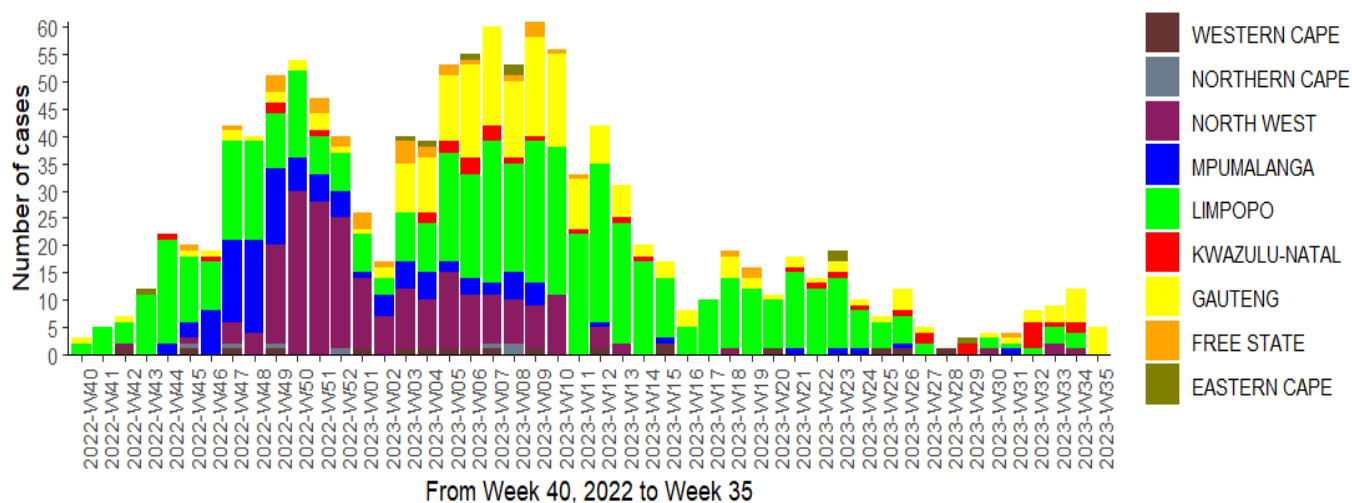


Figure 2. The epidemiological curve of the number of laboratory-confirmed measles cases by Provinces in South Africa, from epidemiological week 40, 2022 to week 35, 2023 by specimen collection dates.

Overview of the measles outbreak in the Limpopo Province

In total, 522 cases of laboratory-confirmed measles were reported between epidemiological week 40, 2022 to week 35, 2023 in Limpopo province. Majority of the measles cases were reported in the Waterberg, Greater Sekhukhune, and Mopani districts. Figure 3 showed an epidemiological curve from week 40, 2022 to week 35 of 2023 in Limpopo province. Waterberg district reported the highest (228) number of measles cases. Mopani district reported 99 cases. Greater Sekhukhune district reported 146 cases. Vhembe district reported 35 cases and Capricorn district reported 14 cases. Three cases were reported in the past week (Week 35), two of the cases were from Greater Sekhukhune and one sporadic case from Capricorn district. Three districts Capricorn, Mopani and Vhembe have met the criteria for declaring the measles outbreak over in Limpopo province.

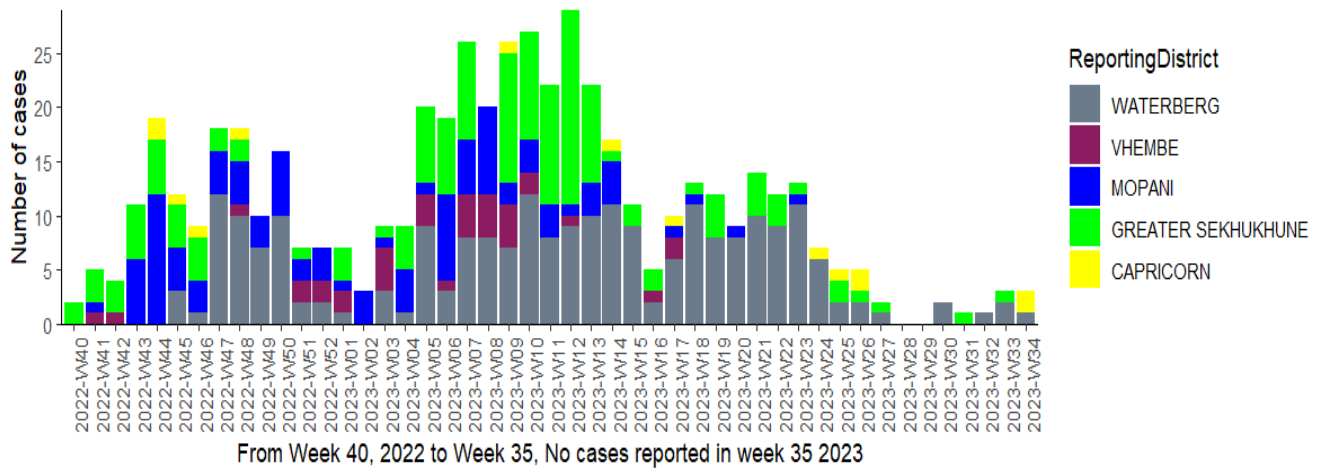


Figure 3. The epidemiological curve of the number of laboratory-confirmed measles cases by districts of Limpopo Province from epidemiological week 40, 2022 to week 35, 2023 by specimen collection dates

Overview of the measles outbreak in Gauteng

A total of 200 laboratory-confirmed measles cases have been reported from epidemiological week 40, 2022 to week 35, 2023 in Gauteng province (Figure 4). The majority of the measles cases, 110, have been reported from the City of Ekurhuleni, 49 from the City of Tshwane, 30 cases from the City of Johannesburg, and 11 cases from West Rand. In Gauteng province, the measles outbreak in Ekurhuleni met the criteria for declaring the outbreak over after week 16 with the last sporadic case reported in week 25. Similarly, the West Rand District met the criteria since week 19. In the past two weeks (34 and 35) Gauteng province reported eleven cases, seven of the cases were from City of Johannesburg and four from City of Tshwane. The reported cases were tested from different facilities. The measles cases were increasing in Tshwane district and emergence of new measles cases is seen in City of Johannesburg. It is recommended that the measles cases in both City of Tshwane and City of Johannesburg be investigated and public health intervention implemented to prevent resurgence of an increase in cases.

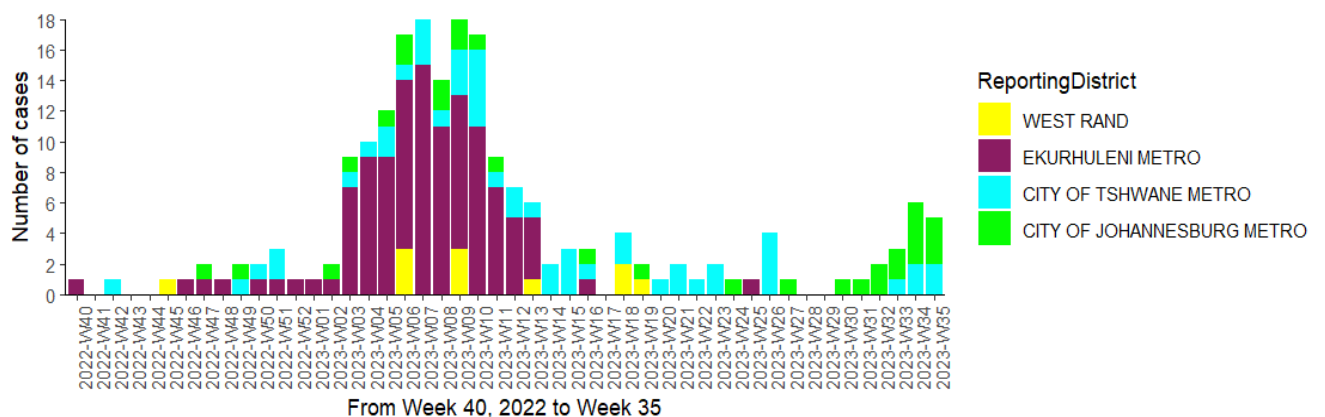


Figure 4. The epidemiological curve of the number of laboratory-confirmed measles cases in districts of Gauteng Province from epidemiological week 40, 2022 to week 35, 2023 by specimen collection dates.

Overview of the measles outbreak in KwaZulu-Natal

A total of 35 laboratory-confirmed measles cases have been reported from epidemiological week 40, 2022 to week 34, 2023 in KwaZulu-Natal province (Figure 5). Most (15) of the cases were detected in Ethekekini Metro. In the past two weeks (weeks 33 and 34), only one case was reported in the province from Uthukela district. No laboratory-confirmed measles cases were reported in week 34 from other districts. Measles surveillance needs to be strengthened in Ethekekini Metro which reported more cases compared to other districts in the province.

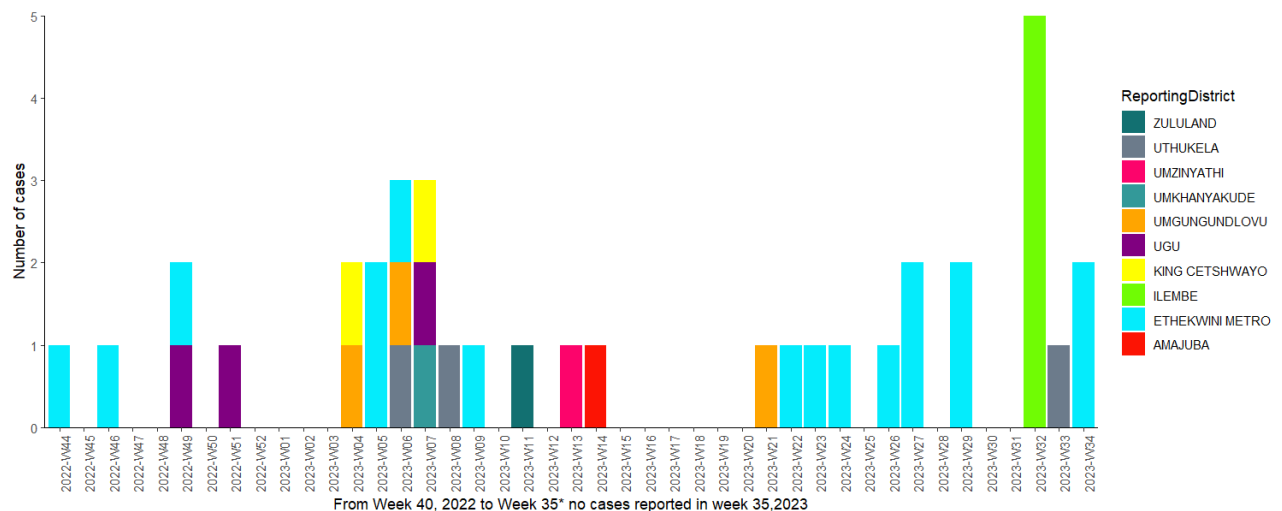


Figure 5. The epidemiological curve of the number of laboratory-confirmed measles cases in districts of Gauteng Province from epidemiological week 40, 2022 to week 35, 2023 by specimen collection dates.

Conclusion

The number of measles cases reported has increased in the last two epidemiological weeks, especially in the Gauteng province. However, it is important to note the slight increase in the number of cases reported in the past two weeks in KwaZulu-Natal and Limpopo Provinces. Strengthening surveillance for measles cases is recommended so as not to miss sporadic cases in the areas where measles cases are not reported after the measles vaccination campaign. Prevention and control of measles outbreaks can only be achieved through vaccination. The national measles vaccination coverage remains low in the population at risk. The NICD continues to report on a large number of cases with unknown vaccination status. We urge the district and province to complete the vaccine status and other information needed for measles indicators on the investigation forms for completeness of data. Clinicians across the country are urged to be on the lookout for measles cases. For more information about measles, case definition, notification, investigation, and guidelines for measles management including vaccination, please refer to our website: <https://www.nicd.ac.za/diseases-a-z-index/measles/>. Healthcare workers are encouraged to submit reports on any adverse events following immunization (AEFI) through the Med Safety application (<https://medsafety.sahpra.org.za/>) or through submitting a case reporting form to their district surveillance office.