



INTERIM SITUATION REPORT, 05 SEPTEMBER 2023

(based on laboratory testing data up until 22 August 2023)

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

Highlights

- The NICD has tested 6774 serum samples for measles since epidemiological week 40, 2022, of which 1148 (17%) were confirmed positive. In the past weeks (week 33 up until week 34, 26/08/2023), 14 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 (six), Limpopo reported four, North West reported three and KwaZulu Natal reported one case.
- Since epidemiological weeks 32, there has been a slight increase in the number of reported cases, when compared to previous weeks (week 27- 31) where <5 cases were reported. The cases in recent weeks are mostly from Gauteng and Limpopo. Although KwaZulu-Natal reported most of the cases in week 32, the cases decreased in week 33 and no case was reported in week 34.
- The outbreak in the North West province was declared over in week 24, one sporadic case was reported in week 30. In the past two weeks (week 33 and 34) three cases have been reported in the province. The three cases reported are from three different districts (Dr Kaunda Kenneth, Bojanala and Ngaka modiri district).
- 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 34, 2023, the NICD tested 6774 serum samples for measles of which 1148 (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 34 of 2023, 1139 laboratory-confirmed cases were reported from eight provinces with declared measles outbreaks; Limpopo (520 cases), Mpumalanga (113 cases), North West (221 cases), Gauteng (192 cases), Free State (33 cases), Western Cape (18), KwaZulu-Natal (35) 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 40 in week 33 to 20 test in week 33.

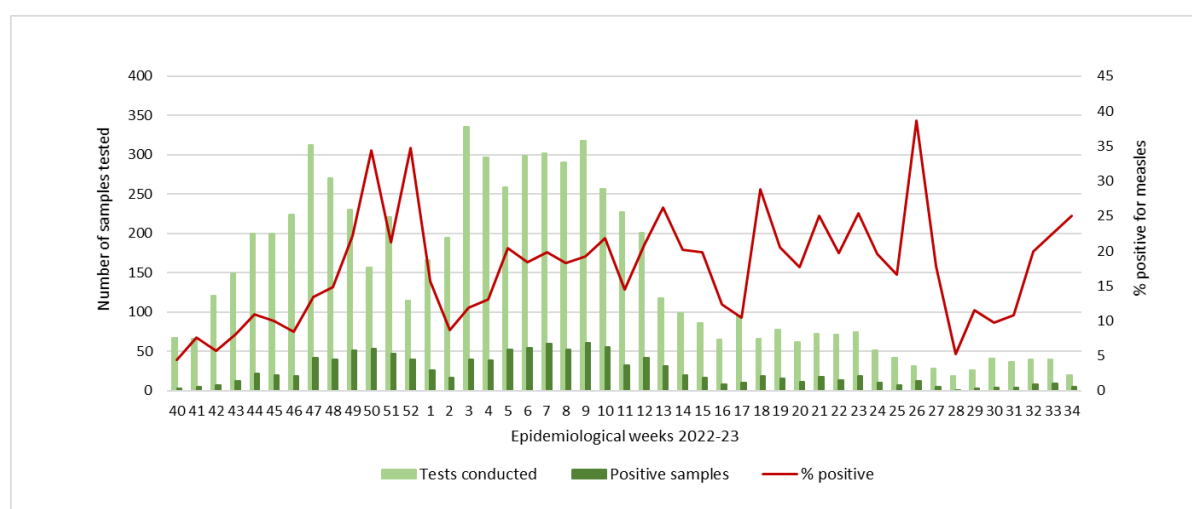


Figure 1. Number of serum samples submitted to the NICD for measles, week 40 2022, until week 34 2023, and the number (dark green) and % tested positive (red line), by epidemiological week using the date the specimen was collected. *Data from week 34 represent partial data and will be updated in next 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 34, 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 34 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	GT	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			3		1		1			5
Total	9	33	192	35	520	113	221	7	18	1148

Overview of the measles outbreak in South Africa

A total of 1148 cases of laboratory-confirmed measles were reported between epidemiological week 40, 2022 to week 34 2023, in South Africa. In the past epidemiological week (week 33) a total of nine cases were reported across the country, with most cases from Gauteng and Limpopo province (3 cases each), North West province reported two cases and KwaZulu-Natal reported one case. In week 34 a total of five cases were reported, three of the cases were from Gauteng, Limpopo and North West reported a case each.

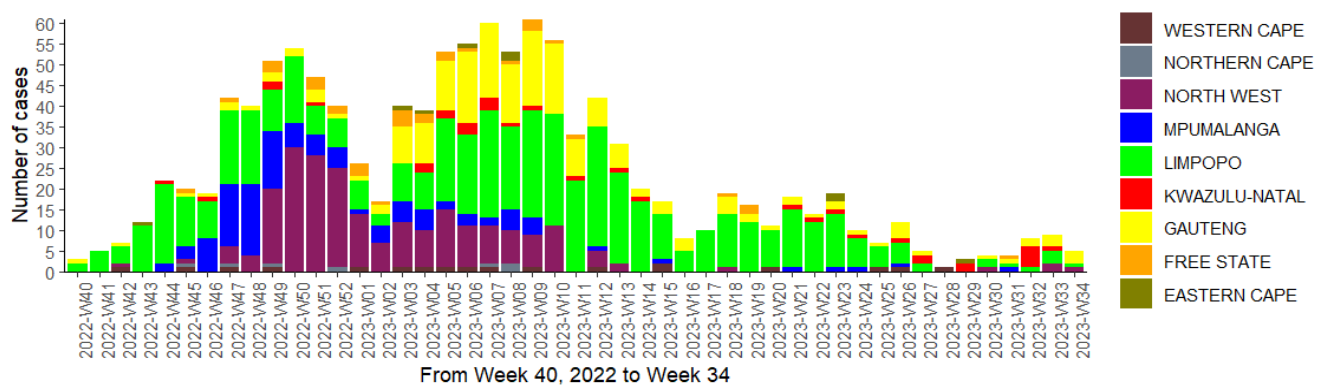


Figure 2. The epidemiological curve of the number of laboratory-confirmed measles cases by Provinces in South Africa, from epidemiological week 40, 2022 to week 34, 2023 by specimen collection dates.

Overview of the measles outbreak in the Limpopo Province

In total, 520 cases of laboratory-confirmed measles were reported between epidemiological week 40, 2022 to week 34, 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 34 of 2023 in Limpopo province. Waterberg district reported the highest (227) number of measles cases. Mopani district reported 99 cases. Greater Sekhukhune district reported 146 cases. Vhembe district reported 35 cases and Capricorn district reported 13 cases. Four cases were reported in the past two weeks (Week 33 and 34), two of the cases were from Waterberg and one from Greater Sekhukhune and Capricorn

district. Three districts Capricorn, Mopani and Vhembe have met the criteria for declaring the measles outbreak over in Limpopo province.

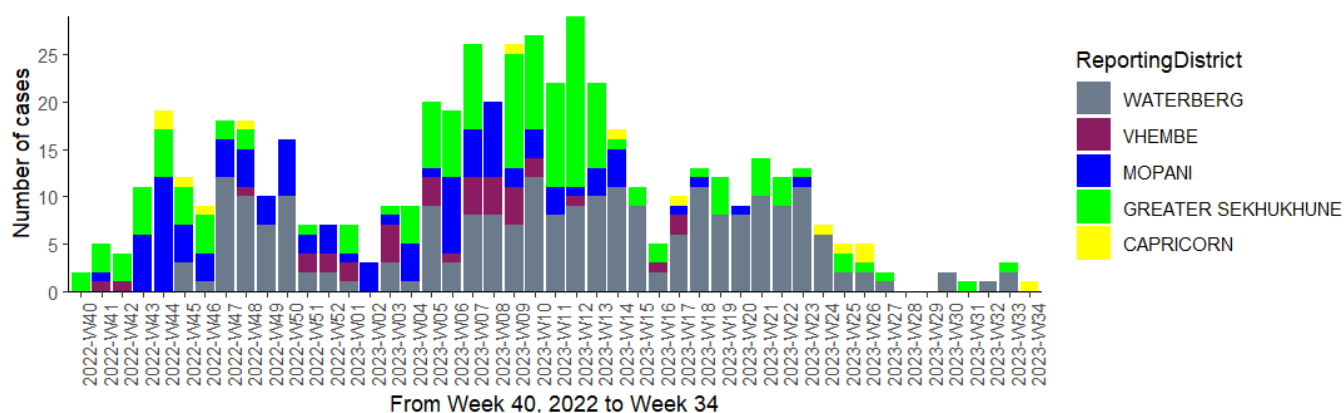


Figure 3. The epidemiological curve of the number of laboratory-confirmed measles cases by districts of Limpopo Province from epidemiological week 40, 2022 to week 34, 2023 by specimen collection dates.

Overview of the measles outbreak in Gauteng

A total of 192 laboratory-confirmed measles cases have been reported from epidemiological week 40, 2022 to week 34, 2023 in Gauteng province (Figure 4). The majority of the measles cases, 110, have been reported from the City of Ekurhuleni, 46 from the City of Tshwane, 25 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 (33 and 34) Gauteng province reported most of the cases, four of the cases were from City of Johannesburg and two from City of Tshwane.

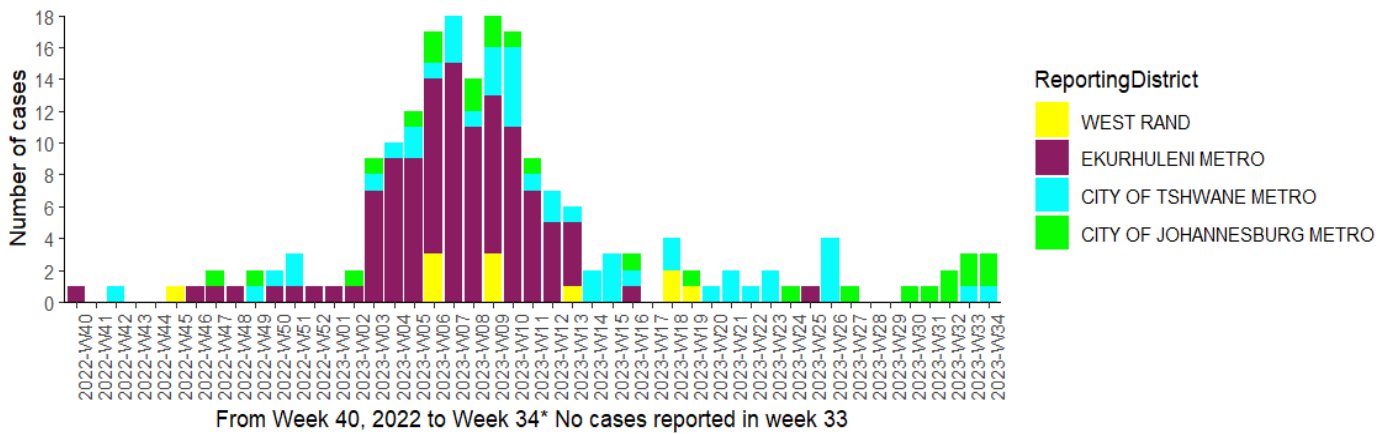


Figure 4. The epidemiological curve of the number of laboratory-confirmed measles cases in districts of Gauteng Province from epidemiological week 40, 2022 to week 34, 2023 by specimen collection dates.

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 Ethekewini Metro. In the past two weeks (week 33 and 34) , only one case was reported in the province from Uthukela district. No laboratory confirmed measles cases were reported in week 34.

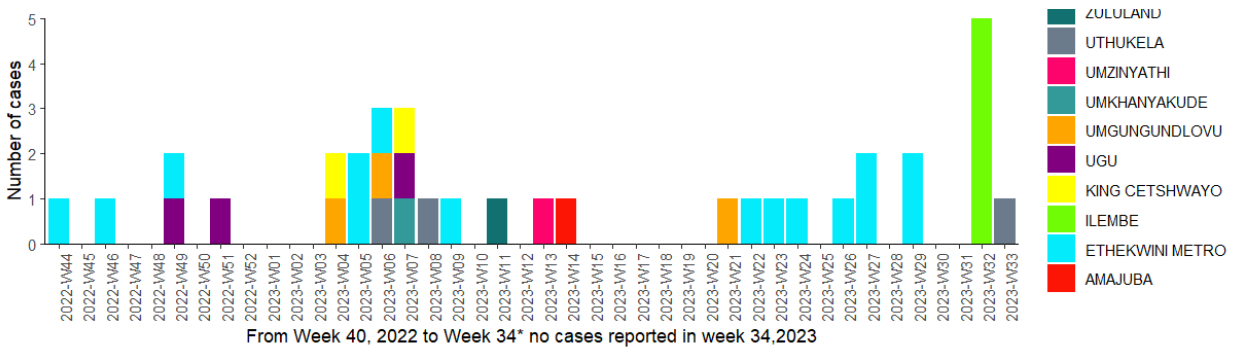


Figure 5. The epidemiological curve of the number of laboratory-confirmed measles cases in districts of Gauteng Province from epidemiological week 40, 2022 to week 34, 2023 by specimen collection dates.

Conclusion

The number of measles cases has significantly declined in the past weeks, however it is important to note the slight increase in the number of cases reported in the past two weeks in Gauteng and Limpopo Province. 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.