



INTERIM SITUATION REPORT, 14 SEPTEMBER 2023

(based on laboratory testing data up until 12 September 2023)

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

Highlights

- The NICD has tested 6894 serum samples for measles since epidemiological week 40, 2022, of which 1171 (17%) were confirmed positive. In the past weeks (week 35 up until week 36, 09/09/2023), 16 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 one, Kwa-Zulu Natal reported two and Mpumalanga reported two cases.
- The number of reported cases started increasing in week 32 after reporting less than five cases for the past five weeks (week 27-31). However, there has been a noteworthy increase in the number of cases reported from weeks 34-36. Since week 34 the number of cases reported is a total of 28 cases. 61% (17/28) of the cases 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 6894 serum samples for measles of which 1171 (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 36 of 2023, 1162 laboratory-confirmed cases were reported from eight provinces with declared measles outbreaks; Limpopo (523 cases), Mpumalanga (115 cases), North West (221 cases), Gauteng (206 cases), Free State (33 cases), Western Cape (18), KwaZulu-Natal (39) and Northern Cape (7) (Table 1). The number of blood samples and throat swabs submitted to the NICD for measles serology and PCR testing increased from 51 in week 35 to 56 tests in week 36.

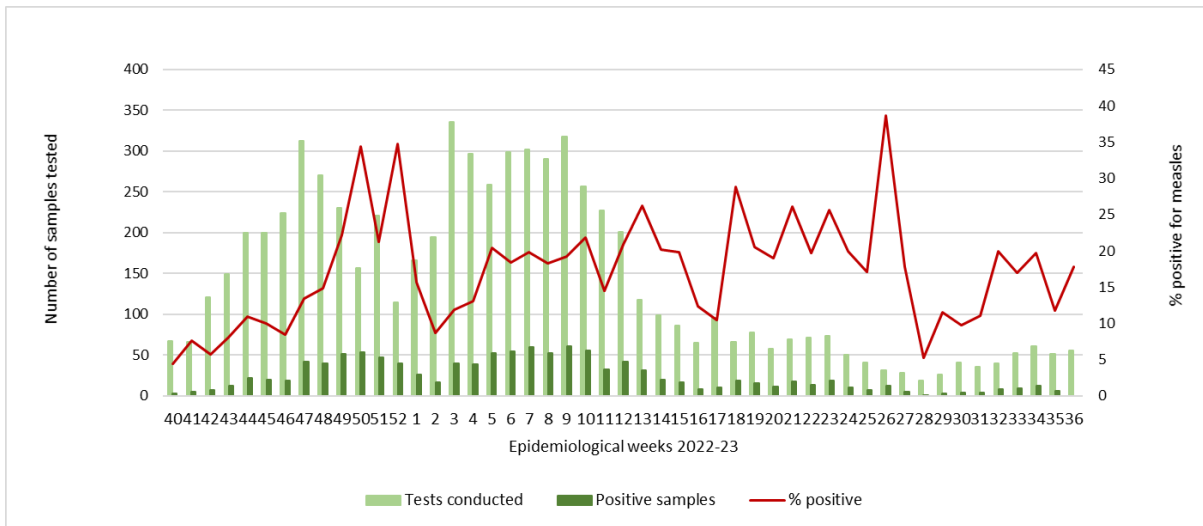


Figure 1. Number of serum samples submitted to the NICD for measles, week 40 2022, until week 36 2023, and the number (dark green) and % tested positive (red line), by epidemiological week using the date the specimen was collected. *Data from week 36 represent partial data and will be updated in next 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 36, 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			1				6
36, 2025			6	2	1	1				10
Total	9	33	206	39	523	115	221	7	18	1171

Overview of the measles outbreak in South Africa

A total of 1162 cases of laboratory-confirmed measles were reported between epidemiological week 40, 2022 to week 36, 2023, in South Africa. In epidemiological week 36, a total of ten cases were reported. Six of the reported cases are from Gauteng, two from KwaZulu-Natal and Mpumalanga and Limpopo reported one case each.

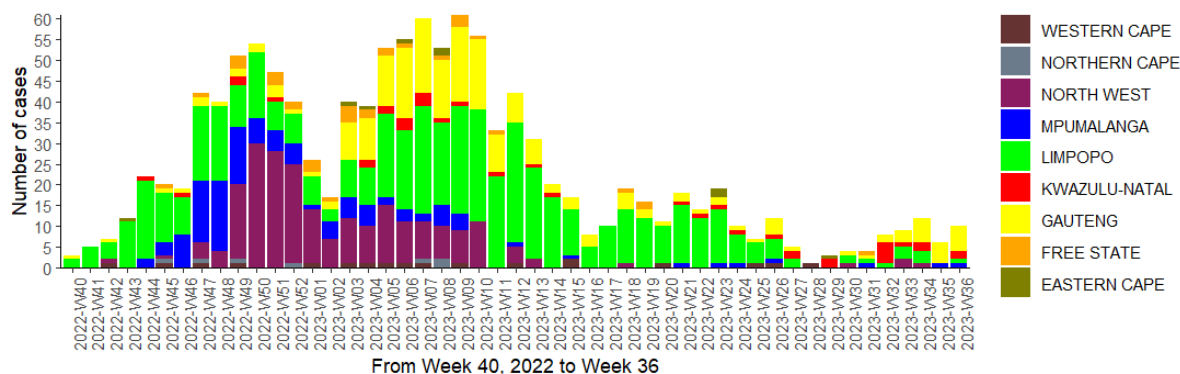


Figure 2. The epidemiological curve of the number of laboratory-confirmed measles cases by Provinces in South Africa, from epidemiological week 40, 2022 to week 36, 2023 by specimen collection dates.

Overview of the measles outbreak in the Limpopo Province

In total, 523 cases of laboratory-confirmed measles were reported between epidemiological week 40, 2022 to week 36, 2023 in Limpopo province. The majority of the measles cases were reported in the Waterberg, Greater Sekhukhune, and Mopani districts. Figure 3 shows an epidemiological curve from week 40, 2022 to week 36 of 2023 in Limpopo province. Waterberg district reported the highest (229) 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. One case from the Waterberg district was reported in the past week (Week 36). Mopani and Vhembe have met the criteria for declaring the measles outbreak over in Limpopo province.

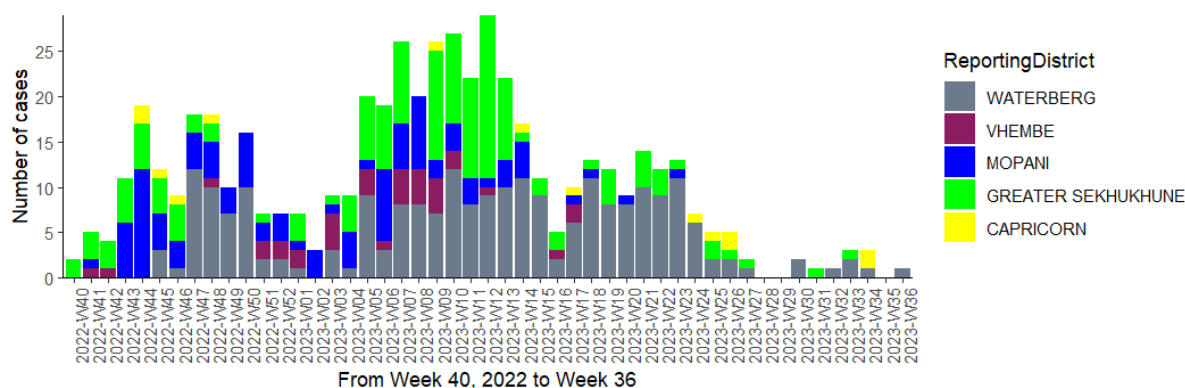


Figure 3. The epidemiological curve of the number of laboratory-confirmed measles cases by districts of Limpopo Province from epidemiological week 40, 2022 to week 36, 2023 by specimen collection dates

Overview of the measles outbreak in Gauteng

A total of 206 laboratory-confirmed measles cases have been reported from epidemiological week 40, 2022 to week 36, 2023 in Gauteng province (Figure 4). The majority of the measles cases, 110, have been reported from the City of Ekurhuleni, 50 from the City of Tshwane, 35 cases from the City of Johannesburg, and 11 cases from the West Rand. In the past three weeks (34 to 36) Gauteng province reported a total of 61% (17/28) cases reported in South Africa. Most of these cases are from the City of Johannesburg. 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.

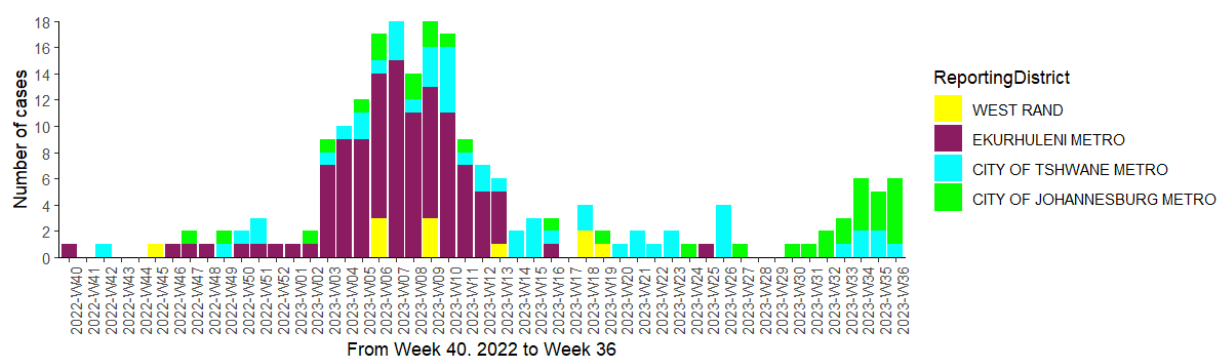


Figure 4. The epidemiological curve of the number of laboratory-confirmed measles cases in districts of Gauteng Province from epidemiological week 40, 2022 to week 36, 2023 by specimen collection dates.

Overview of the measles outbreak in KwaZulu-Natal

A total of 39 laboratory-confirmed measles cases have been reported from epidemiological week 40, 2022 to week 36, 2023 in KwaZulu-Natal province (Figure 5). Most (18) of the cases were detected in EtheKwini Metro. In the past week (week 36), two cases were reported in the province from Amajuba and EtheKwini districts. No laboratory-confirmed measles cases were reported in week 34 from other districts.

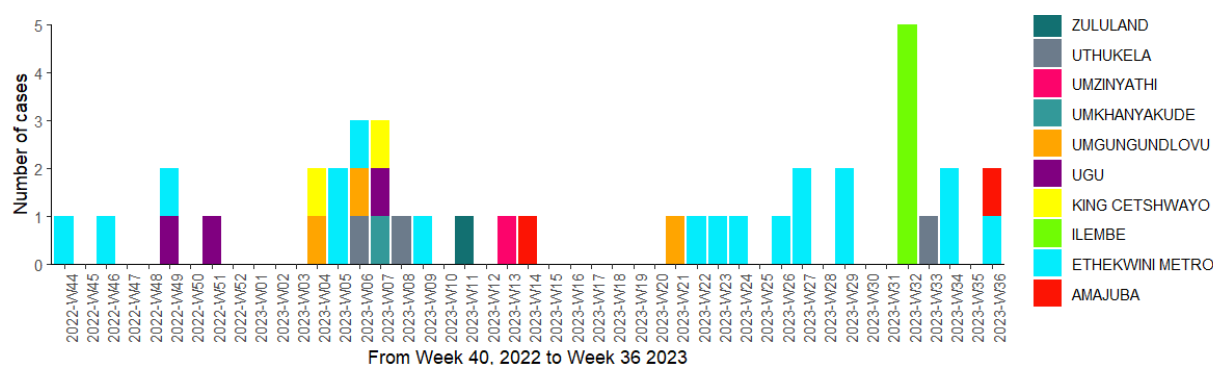


Figure 5. The epidemiological curve of the number of laboratory-confirmed measles cases in districts of Gauteng Province from epidemiological week 40, 2022 to week 36, 2023 by specimen collection dates.

Conclusion

The number of measles cases reported has increased in the last two epidemiological weeks, especially in the Gauteng province. 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.