

INTERIM SITUATION REPORT, 26 SEPTEMBER 2023

(based on laboratory testing data up until 17 September 2023)

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

Highlights

- The NICD has tested 7008 serum samples for measles since epidemiological week 40, 2022, of which 1183(17%) were confirmed positive. In the past weeks (week 36 up until week 37, 16/09/2023), 22 laboratory-confirmed measles cases were detected across the country from six of the eight provinces where measles outbreak was confirmed; Gauteng and KwaZulu-Natal reported most of the cases, eight and seven each. Limpopo, Mpumalanga, Free State reported two cases each (6), while North West reported one.
- 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 week 34-37. Since week 34, the number of cases reported was a total of 38 cases. 50% (19/38) of the cases were from Gauteng and 18.4% (7/38) from KwaZulu-Natal.
- 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. Mpumalanga and North West are reporting sporadic cases.

Outbreak overview

From epidemiological week 40, 2022 to week 37, 2023, the NICD tested 7008 serum samples for measles of which 1183 (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 37 of 2023, 1174 laboratory-confirmed cases were reported from eight provinces with declared measles outbreaks; Limpopo (524 cases), Mpumalanga (116 cases), North West (222 cases), Gauteng (208 cases), Free State (35 cases), Western Cape (18), KwaZulu-Natal (44) 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 76 in week 36 to 52 tested in week 37.

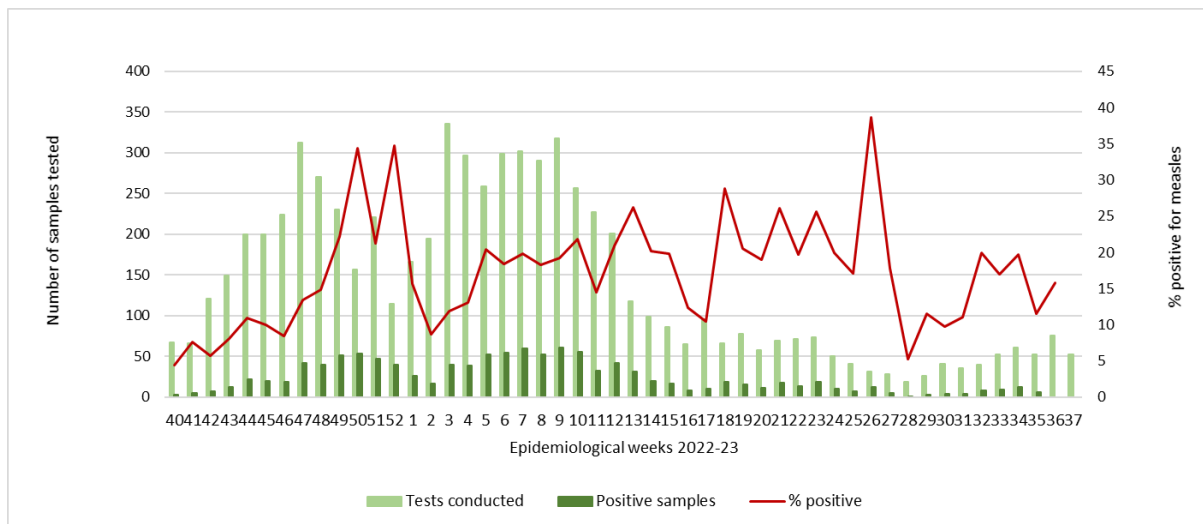


Figure 1. Number of serum samples submitted to the NICD for measles, week 40 2022, until week 37 2023, and the number (dark green) and % tested positive (red line), by epidemiological week using the date the specimen was collected. *Data from week 37 represent partial data and will be updated in next 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 37, 2023. Outbreak-associated cases are contained within the red bordered cells* (FS=Free State; GT=Gauteng; KZN=KwaZulu-Natal; LP=Limpopo; MP=Mpumalanga NW=North West; NC=Northern Cape, WC = Western Cape). *Data from week 37 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				4
32, 2023		1	2	5	1					8
33, 2023			3	1	3		2			9
34, 2023			6	2	3		1			12
35, 2023			5			1				6
36, 2023		1	7	2	1	1				12
37, 2023		1	1	5	1	1	1			10
Total	9	35	208	44	524	116	222	7	18	1183

Overview of the measles outbreak in South Africa

A total of 1174 cases of laboratory-confirmed measles were reported between epidemiological week 40, 2022 to week 37, 2023, in South Africa. In epidemiological week 37, a total of ten cases were reported. Five of the reported cases were from KwaZulu-Natal. Mpumalanga, Limpopo, Free State, Gauteng and North West reported one case each (5).

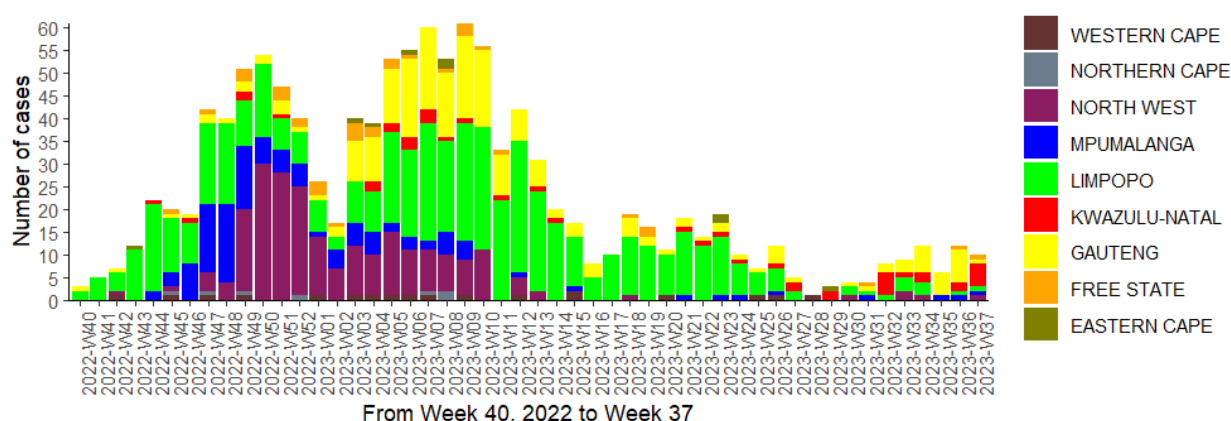


Figure 2. The epidemiological curve of the number of laboratory-confirmed measles cases by Provinces in South Africa, from epidemiological week 40, 2022 to week 37, 2023 by specimen collection dates.

Overview of the measles outbreak in the Limpopo Province

In total, 524 cases of laboratory-confirmed measles were reported between epidemiological week 40, 2022 to week 37, 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 37 of 2023 in Limpopo province. Waterberg district reported the highest (230) 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 37). Mopani and Vhembe have met the criteria for declaring the measles outbreak over in Limpopo province.

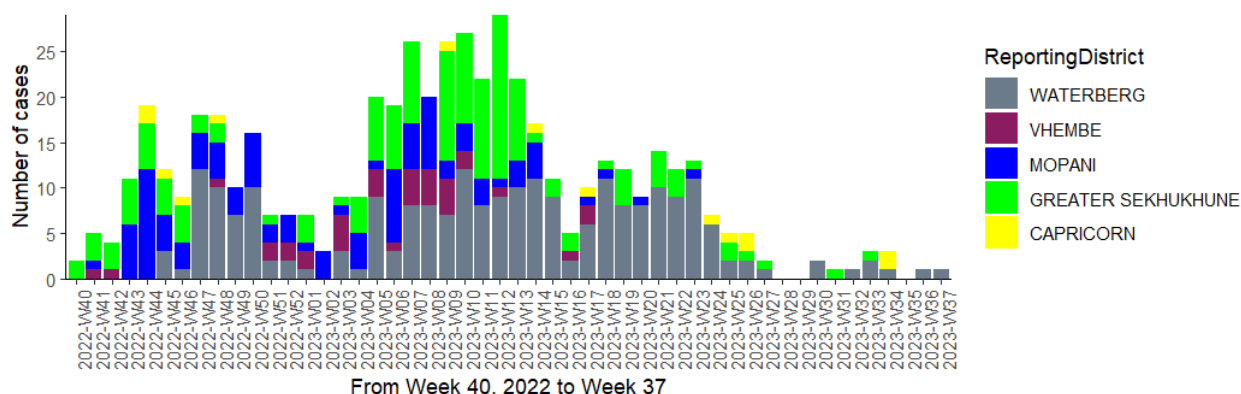


Figure 3. The epidemiological curve of the number of laboratory-confirmed measles

cases by districts of Limpopo Province from epidemiological week 40, 2022 to week 37, 2023 by specimen collection dates

Overview of the measles outbreak in Gauteng

A total of 208 laboratory-confirmed measles cases have been reported from epidemiological week 40, 2022 to week 37, 2023 in Gauteng province (Figure 4). The majority of the measles cases, 110, have been reported from the City of Ekurhuleni, 51 from the City of Tshwane, 36 cases from the City of Johannesburg, and 11 cases from the West Rand. Since week 29, most of the cases were from the City of Johannesburg. In week 37, only one case was reported from the City of Tshwane Metro. Ekurhuleni met the criteria for declaring the outbreak over after week 16 with the last sporadic case reported in week 25 and the West Rand District since week 19.

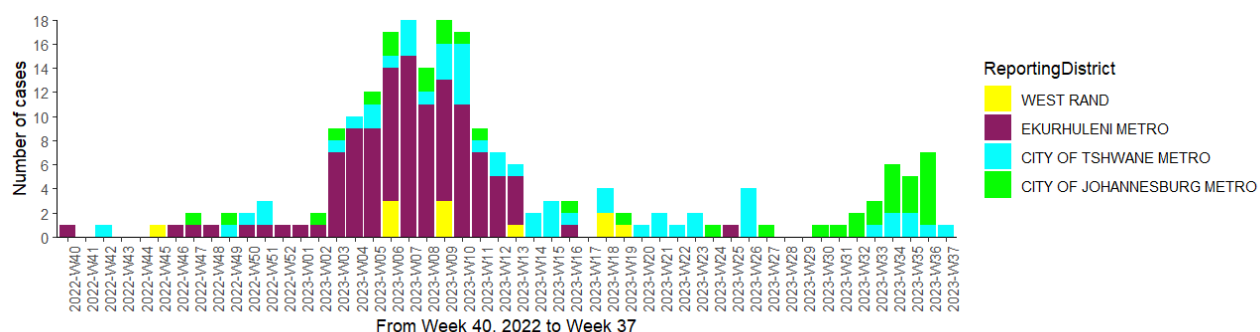


Figure 4. The epidemiological curve of the number of laboratory-confirmed measles cases in districts of Gauteng Province from epidemiological week 40, 2022 to week 37, 2023 by specimen collection dates.

Overview of the measles outbreak in KwaZulu-Natal

A total of 44 laboratory-confirmed measles cases have been reported from epidemiological week 40, 2022 to week 37, 2023 in KwaZulu-Natal province (Figure 5). Most (19) of the cases were detected in EThekweni Metro. In the past week (weeks 37) five cases were reported in the province, four from UThukela district and one from EThekweni Metro.

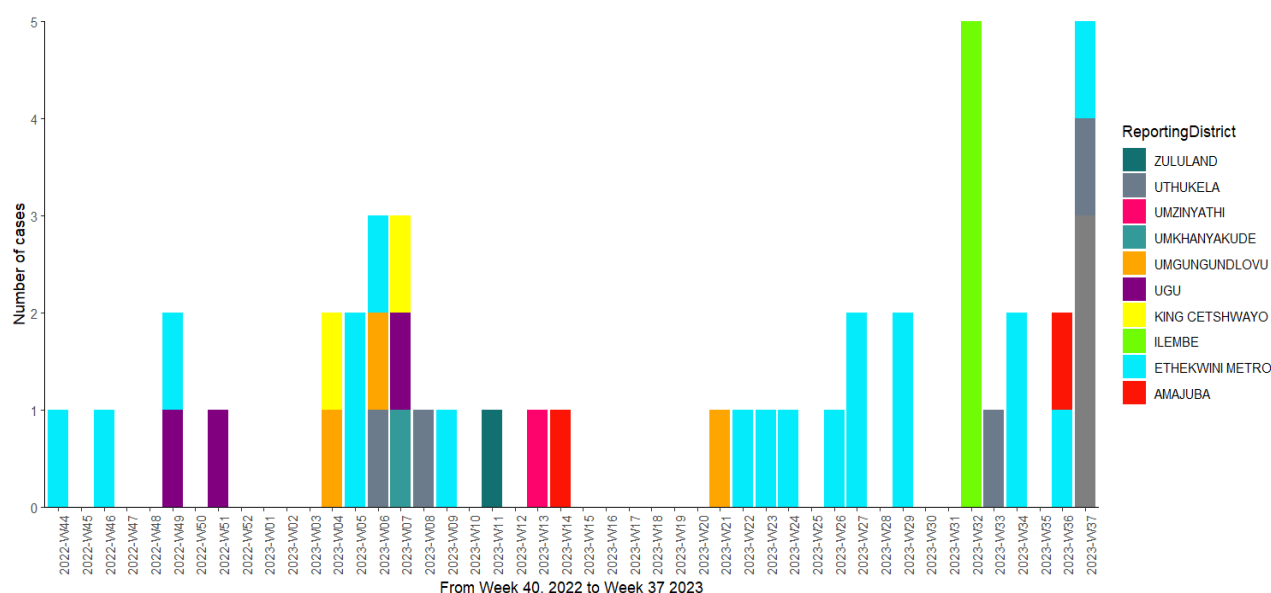


Figure 5. The epidemiological curve of the number of laboratory-confirmed measles cases in districts of KwaZulu-Natal Province from epidemiological week 40, 2022 to week 37, 2023 by specimen collection dates.

Conclusion

The number of measles cases reported continues to increase, especially in the Gauteng and KwaZulu- Natal 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.