



INTERIM SITUATION REPORT, 02 OCTOBER 2023

(based on laboratory testing data up until 24 September 2023)

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

Highlights

- The NICD has tested 7054 serum samples for measles since epidemiological week 40, 2022, of which 1199 (17%) were confirmed positive. In the past weeks (week 37 up until week 38, 24/09/2023), 26 laboratory-confirmed measles cases were detected across the country from seven of the eight provinces where measles outbreak was confirmed; Gauteng and KwaZulu-Natal reported most of the cases, ten and eight each. Mpumalanga reported four cases, while Limpopo, North West, Free State and Western Cape reported one case each.
- 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 cases reported from week 34 to 38. Since week 34, the total number of cases reported was 56. Of the cases, 51% (26/56) were from Gauteng and 21% (12/56) were 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 38, 2023, the NICD tested 7054 serum samples for measles of which 1199 (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 38 of 2023, 1190 laboratory-confirmed cases were reported from eight provinces with declared measles outbreaks; Limpopo (524 cases), Mpumalanga (119 cases), North West (222 cases), Gauteng (217 cases), Free State (35 cases), Western Cape (19), KwaZulu-Natal (47) 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 82 in week 37 to 38 tested in week 38.

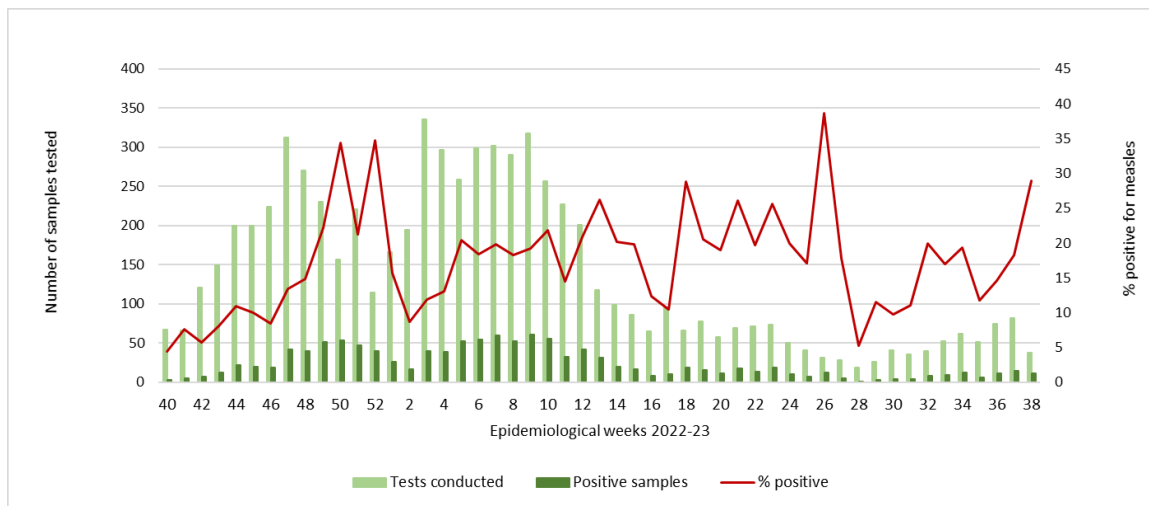


Figure 1. The number of serum samples submitted to the NICD for measles, week 40 2022, until week 38 2023, and the number (dark green) and % tested positive (red line), by epidemiological week using the specimen collected. *Data from week 38 represent partial data and will be updated in next week's situation 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 38, 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 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	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				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	2	7	1	2	1		1	15
38, 2023			8	1		2				11
Total	9	35	217	47	524	119	222	7	19	1199

Overview of the measles outbreak in South Africa

A total of 1190 cases of laboratory-confirmed measles were reported between epidemiological week 40, 2022 to week 38 2023, in South Africa. In epidemiological week 38, a total of eleven cases were reported. Eight of the reported cases were from Gauteng. Two were from Mpumalanga and one from KwaZulu-Natal.

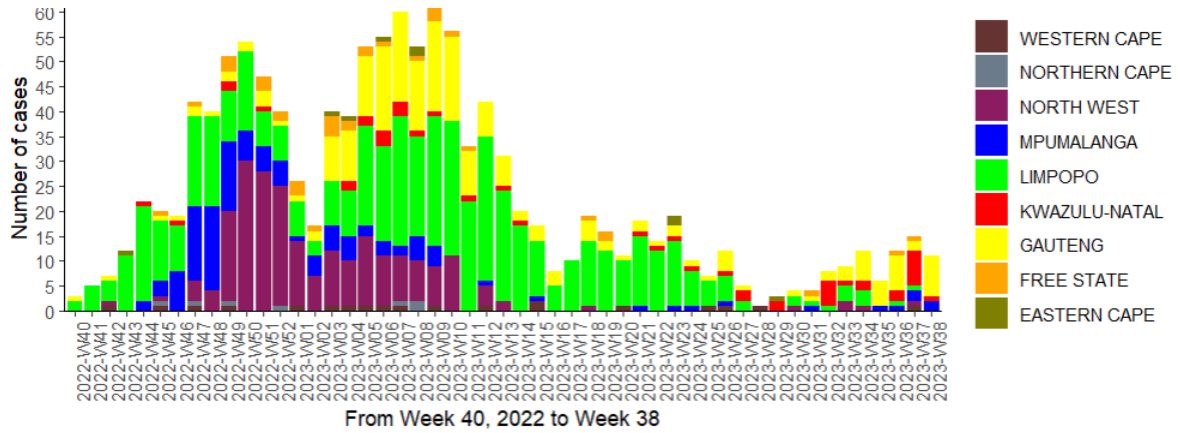


Figure 2. The epidemiological curve of the number of laboratory-confirmed measles cases by Provinces in South Africa, from epidemiological week 40, 2022 to week 38, 2023 by specimen collection dates.

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 38, 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 38 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. No cases were reported in week 38 from Limpopo. Mopani and Vhembe have met the criteria for declaring the measles outbreak over in Limpopo province.

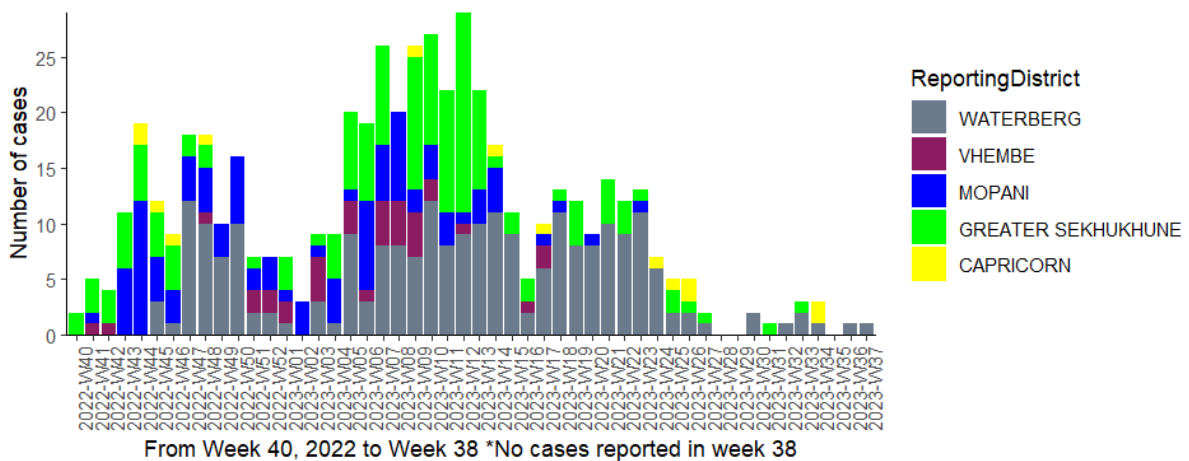


Figure 3. The epidemiological curve of the number of laboratory-confirmed measles cases by districts of Limpopo Province from epidemiological week 40, 2022 to week 38, 2023 by specimen collection dates

Overview of the measles outbreak in Gauteng

A total of 217 laboratory-confirmed measles cases have been reported from epidemiological week 40, 2022 to week 38, 2023 in Gauteng province (Figure 4). The majority of the measles cases, 111, have been reported from the City of Ekurhuleni, 54 from the City of Tshwane, 40 cases from the City of Johannesburg, and 12 cases from the West Rand. In week 38, eight cases were reported. The City of Tshwane Metro and the City of Johannesburg Metro reported three cases each, while Ekurhuleni Metro and the West Rand reported one case each. 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.

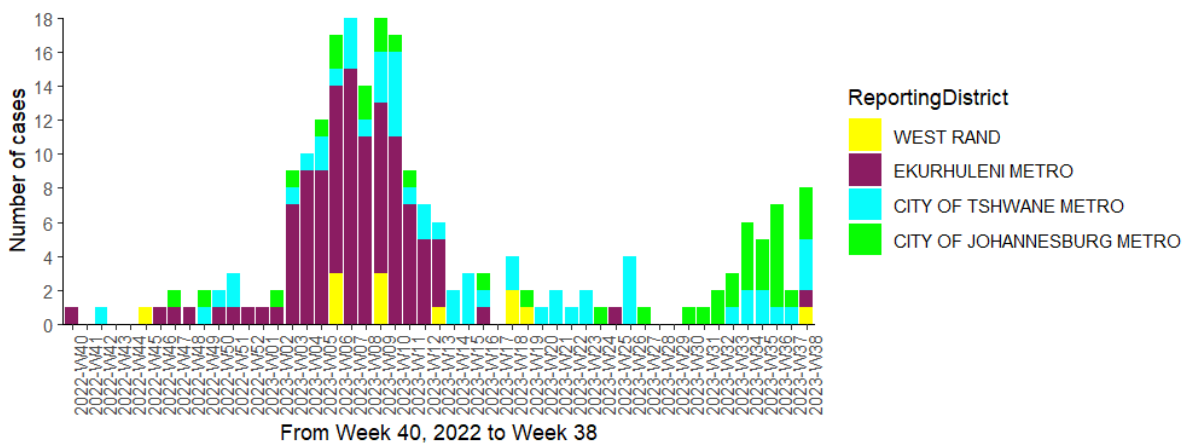


Figure 4. The epidemiological curve of the number of laboratory-confirmed measles cases in districts of Gauteng Province from epidemiological week 40, 2022 to week 38, 2023 by specimen collection dates.

Overview of the measles outbreak in KwaZulu-Natal

A total of 47 laboratory-confirmed measles cases have been reported from epidemiological week 40, 2022 to week 38, 2023 in KwaZulu-Natal province (Figure 5). Most (20) of the cases were detected in Uthekwini Metro. In the past week (week 38) one case was reported in the province from Ethekwini Metro.

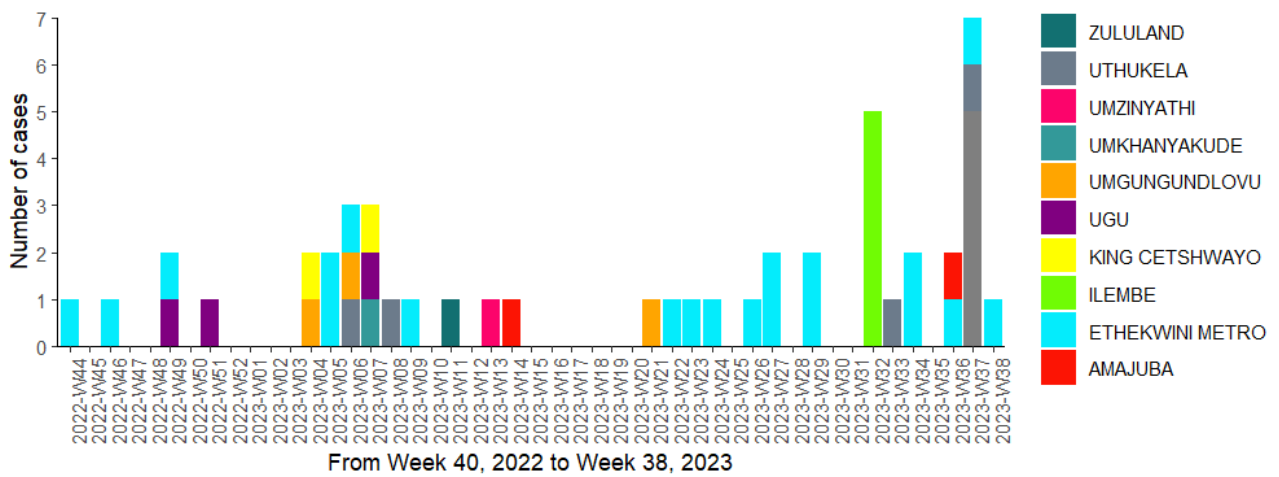


Figure 5. The epidemiological curve of the number of laboratory-confirmed measles cases in districts of KwaZulu Natal Province from epidemiological week 40, 2022 to week 38, 2023 by specimen collection dates.

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. Provinces are also encouraged to investigate the last date of vaccination of reported cases to distinguish between measles vaccine-induced cases from true measles cases. 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.