

INTERIM SITUATION REPORT, 18 AUGUST 2023

(Based on laboratory testing data up until 10 August 2023)

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

Highlights

- The NICD has tested 6634 serum samples for measles since epidemiological week 40, 2022, of which 1130 (17%) were confirmed positive. In the past weeks (week 31 up until week 32, 12/08/2023) eight laboratory-confirmed measles cases were detected across the country from five provinces. Limpopo, KwaZulu-Natal and Gauteng reported two cases each. Free State and Mpumalanga reported one case respectively.
- The percentage of samples testing positive (PTP increased from 14% (4/28) of samples tested in week 31 to 36% (4/11) of samples tested in week 32.
- 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.
- Although not all provinces have achieved the criteria to declare the outbreak over, the outbreak is effectively over. Since week 27, all provinces where the outbreak was declared, have been reporting sporadic cases. The cases reported in week 31 and 32 are spread across the country.

Outbreak overview

From epidemiological week 40, 2022 to week 32, 2023, the NICD tested 6634 serum samples for measles of which 1130 (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 32 of 2023, 1121 laboratory-confirmed cases were reported from eight provinces with declared measles outbreaks; Limpopo (516 cases), Mpumalanga (113 cases), North West (218 cases), Gauteng (185 cases), Free State (33 cases), Western Cape (18), KwaZulu-Natal (31) 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 28 in week 31 to 11 test in week 32.

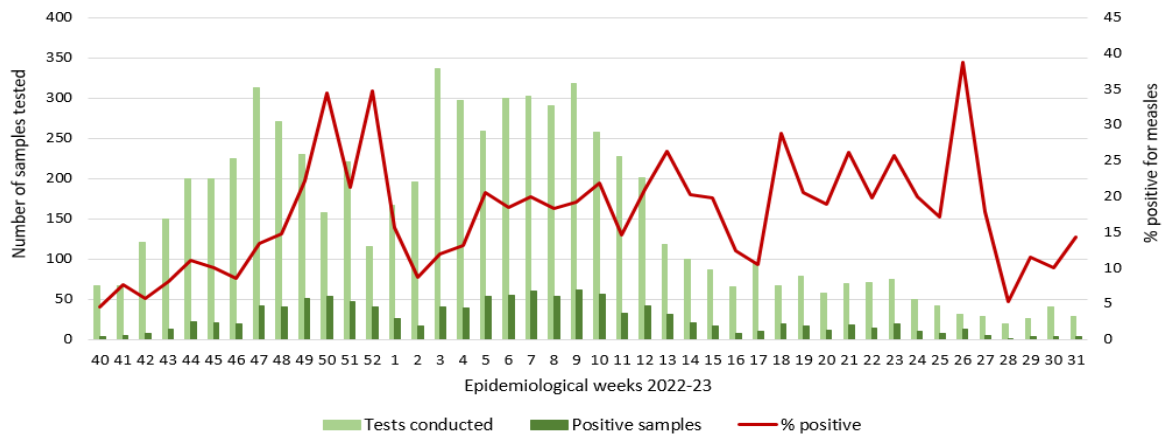


Figure 1. Number of serum samples submitted to the NICD for measles, week 40 2022, until week 32 2023, and the number (dark green) and % tested positive (red line), by epidemiological week using the date the specimen was collected. *Data from week 32 represent partial data and will be updated in next 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 32, 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). * A measles outbreak is classified as three or more confirmed laboratory measles cases reported within 30 days of onset of disease, in a district. *Data from week 32 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	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					5
28, 2023			1							1
29, 2023	1			2					1	3
30, 2023			1		2		1			4
31, 2023		1	1		1	1				4
32, 2023			1	2	1					4
Total	9	33	185	31	516	113	218	7	18	1130

Overview of the measles outbreak in South Africa

A total of 1130 cases of laboratory-confirmed measles were reported between epidemiological week 40, 2022 to week 32 2023, in South Africa. From Epi week 27 the was a noticeable decline in reported measles cases. Contrary to the trend before week 27, where most cases were reported in Limpopo and Gauteng province,

measles cases post week 27 are spread in several provinces across the country. Four cases were reported in week 32. Two of the reported cases were from KwaZulu-Natal, while Gauteng and Limpopo reported one case each.

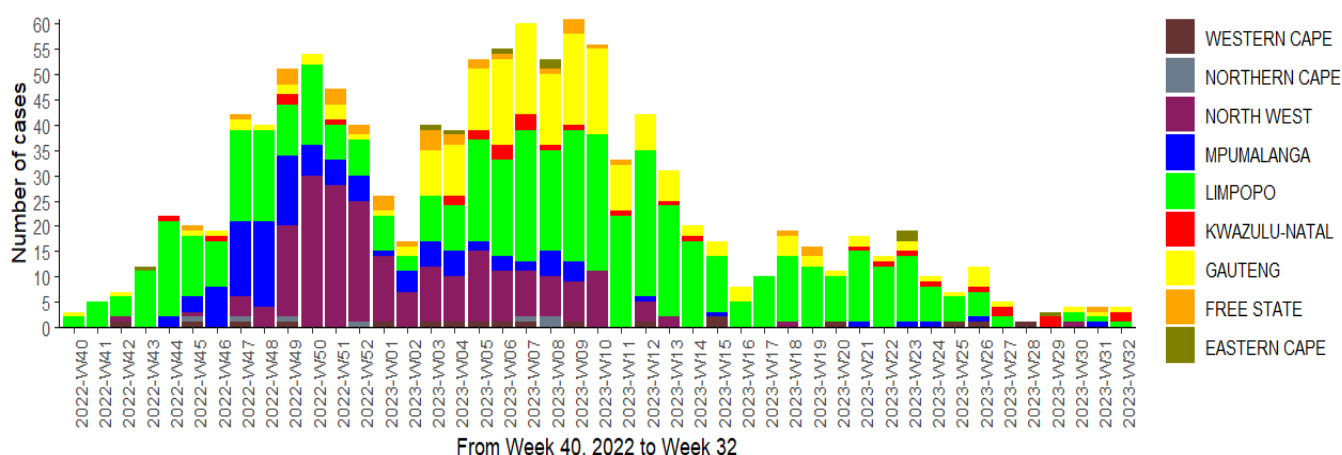


Figure 2. The epidemiological curve of the number of laboratory-confirmed measles cases by Provinces in South Africa, from epidemiological week 40, 2022 to week 32, 2023 by specimen collection dates.

Overview of the measles outbreak in the Limpopo Province

In total, 516 cases of laboratory-confirmed measles were reported between epidemiological week 40, 2022 to week 32, 2023 in Limpopo province. Majority of the measles cases are reported in the Waterberg, Greater Sekhukhune, and Mopani districts. Figure 3 shows an epidemiological curve from week 40, 2022 to week 32 of 2023 in Limpopo province. Waterberg district reported the highest (225) number of measles cases. Mopani district reported 99 cases. Greater Sekhukhune district reported 145 cases. Vhembe district reported 35 cases and Capricorn district reported 12 cases. Mopani and Vhembe district has met the criteria for declaring the measles outbreak over. Two cases were reported in the past two weeks (Week 31 and 32) from Waterberg and Greater Sekhukhune districts.

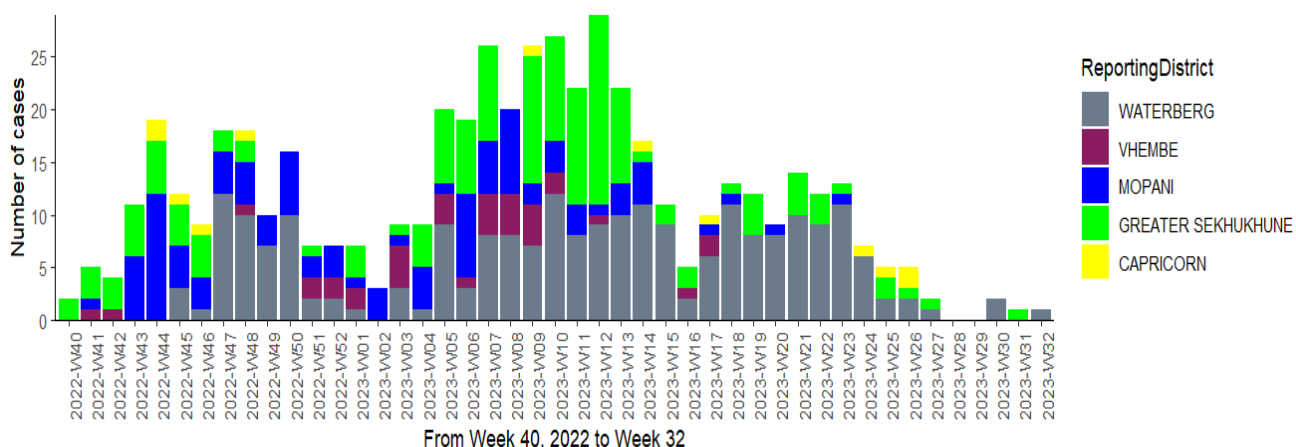


Figure 3. The epidemiological curve of the number of laboratory-confirmed measles cases by districts of Limpopo Province from epidemiological week 40, 2022 to week 32, 2023 by specimen collection dates

Overview of the measles outbreak in Gauteng

A total of 185 laboratory-confirmed measles cases have been reported from epidemiological week 40, 2022 to week 32, 2023 in Gauteng province (Figure 4). The majority of the measles cases, 110, have been reported from the City of Ekurhuleni, 44 from the City of Tshwane, 20 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. The latest sporadic measles case was reported in week 31 and 32 was from the City of Johannesburg Metro.

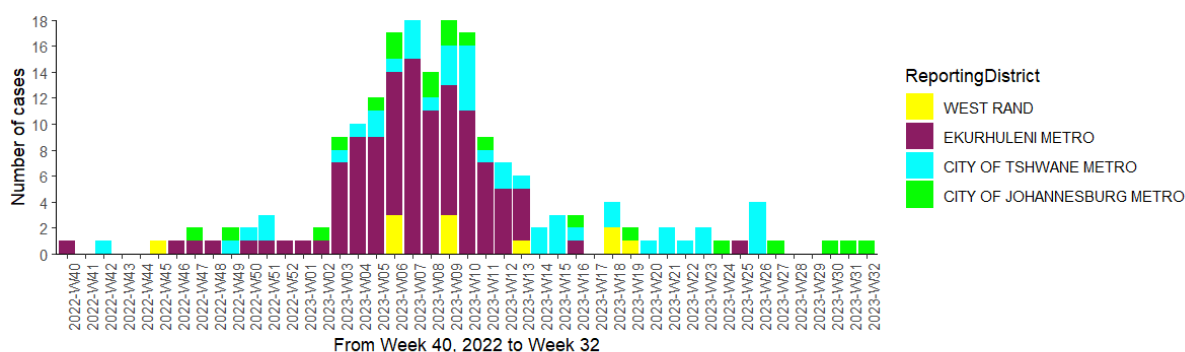


Figure 4. The epidemiological curve of the number of laboratory-confirmed measles cases in districts of Gauteng Province from epidemiological week 40, 2022 to week 32, 2023 by specimen collection dates.

Overview of the measles outbreak in KwaZulu-Natal

A total of 31 laboratory-confirmed measles cases have been reported from epidemiological week 40, 2022 to week 32, 2023 in KwaZulu-Natal province (Figure 5). Most (15) of the cases were detected in EThekweni Metro. Two cases were reported from ILembe in week 32.

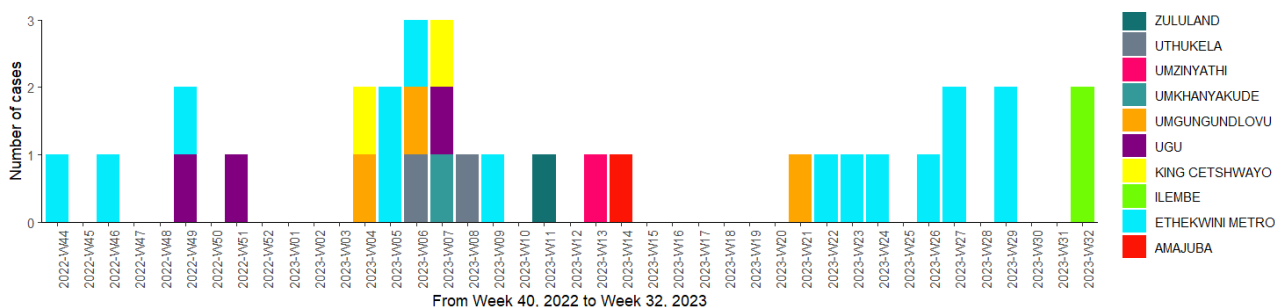


Figure 5. The epidemiological curve of the number of laboratory-confirmed measles cases in districts of KwaZulu-Natal Province from epidemiological week 40, 2022 to week 32, 2023 by specimen collection dates.

Conclusion

The number of measles cases has significantly declined in the past three weeks. 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.