



INTERIM SITUATION REPORT, 07 AUGUST 2023

(Based on laboratory testing data up until 25 July 2023)

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

Highlights

- The NICD has tested 6552 serum samples for measles since epidemiological week 40, 2022, of which 1118 (17%) were confirmed positive. In the past weeks (week 29 up until week 30, 29/07/2023) Three laboratory-confirmed measles cases were detected across the country, two of the cases were from KwaZulu-Natal and one from the Eastern Cape province.
- The percentage of samples testing positive (PTP) decreased from 2.4% (3/122) of samples tested in week 29 to 0% of samples tested in week 30.
- 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, only KwaZulu-Natal has reported two cases in week 28. The rest of the provinces where the outbreak was declared have not reported any cases since week 27 including Limpopo and Gauteng provinces who were the drivers of the outbreak since week 10, 2023.

Outbreak overview

From epidemiological week 40, 2022 to week 30, 2023, the NICD tested 6552 serum samples for measles of which 1118 (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 30 of

2023, 1109 laboratory-confirmed cases were reported from eight provinces with declared measles outbreaks; Limpopo (512 cases), Mpumalanga (112 cases), North West (217 cases), Gauteng (182 cases), Free State (32 cases), Western Cape (18), KwaZulu-Natal (29) 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 22 in week 29 to 1 test in week 30.

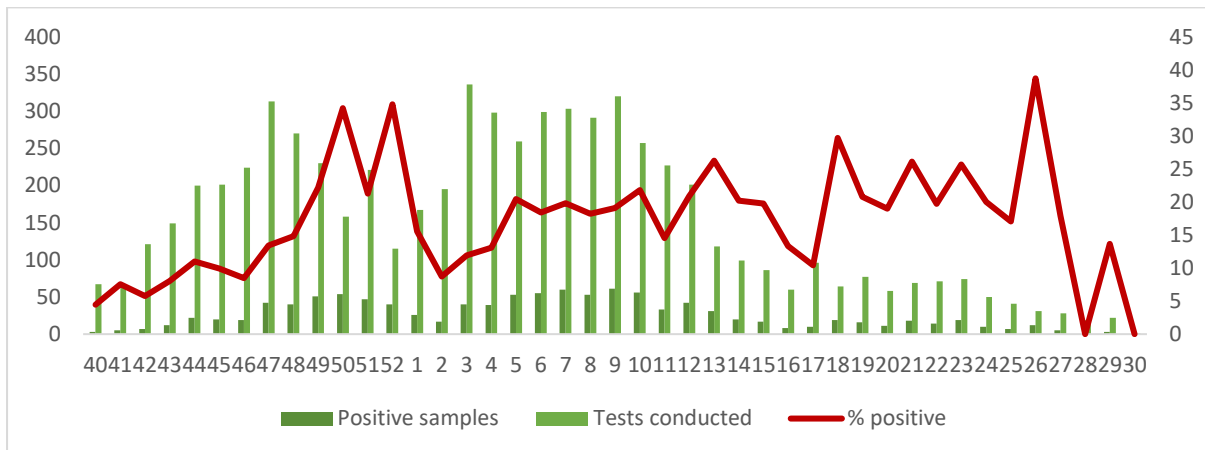


Figure 1. Number of serum samples submitted to the NICD for measles, week 40 2022, until week 30 2023, and the number (dark green) and % tested positive (red line), by epidemiological week using the date the specimen was collected. *Data from week 30 represent partial data and will be updated in next 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 30, 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 30 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			1	10
25, 2023			1		5				1	7
26, 2023			4	1	5	1			1	12
27, 2023				2	2					5
28, 2023										1
29, 2023	1			2						3

Total	9	32	182	29	512	112	217	7	18	1118
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Overview of the measles outbreak in South Africa

A total of 1109 cases of laboratory-confirmed measles were reported between epidemiological week 40, 2022 to week 30, 2023 in South Africa. From Epi week 26 most reported cases were primarily from Limpopo and Gauteng provinces (Figure 2). No cases were reported in week 30 in South Africa.

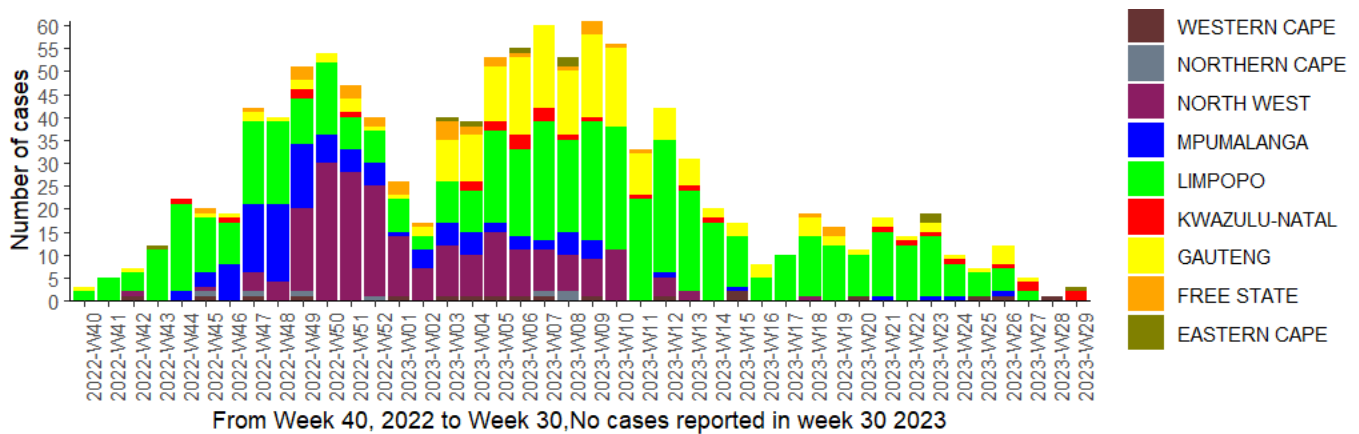


Figure 2. The epidemiological curve of the number of laboratory-confirmed measles cases by Provinces in South Africa, from epidemiological week 40, 2022 to week 30, 2023 by specimen collection dates.

Overview of the measles outbreak in the Limpopo Province

In total, 512 cases of laboratory-confirmed measles were reported between epidemiological week 40, 2022 to week 30, 2023 with the majority of the measles cases reported in the Waterberg, Greater Sekhukhune, and Mopani districts. Figure 3 shows an epidemiological curve from week 40, 2022 to week 30 of 2023 in Limpopo province. Waterberg district reported the highest (224) number of measles cases. Mopani district reported 99 cases. Greater Sekhukhune district reported 142 cases. Vhembe district reported 35 cases and Capricorn district reported 12 cases. Limpopo last reported measles cases in week 27.

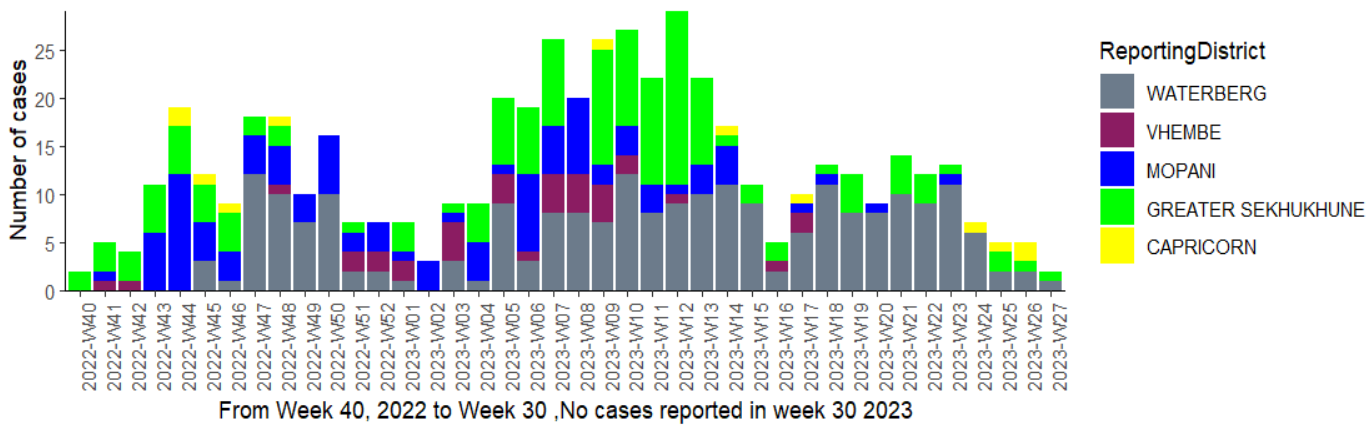


Figure 3. The epidemiological curve of the number of laboratory-confirmed measles cases by districts of Limpopo Province from epidemiological week 40, 2022 to week 30, 2023 by specimen collection dates.

Overview of the measles outbreak in Gauteng

A total of 182 laboratory-confirmed measles cases have been reported from epidemiological week 40, 2022 to week 30, 2023 in Gauteng province (Figure 4). The majority of cases, 110, have been reported from the City of Ekurhuleni, 44 from the City of Tshwane, 17 cases from the City of Johannesburg, and 11 cases from West Rand. The last measles case in the West Rand district was reported in week 18. Gauteng last reported a Measles case in week 27.

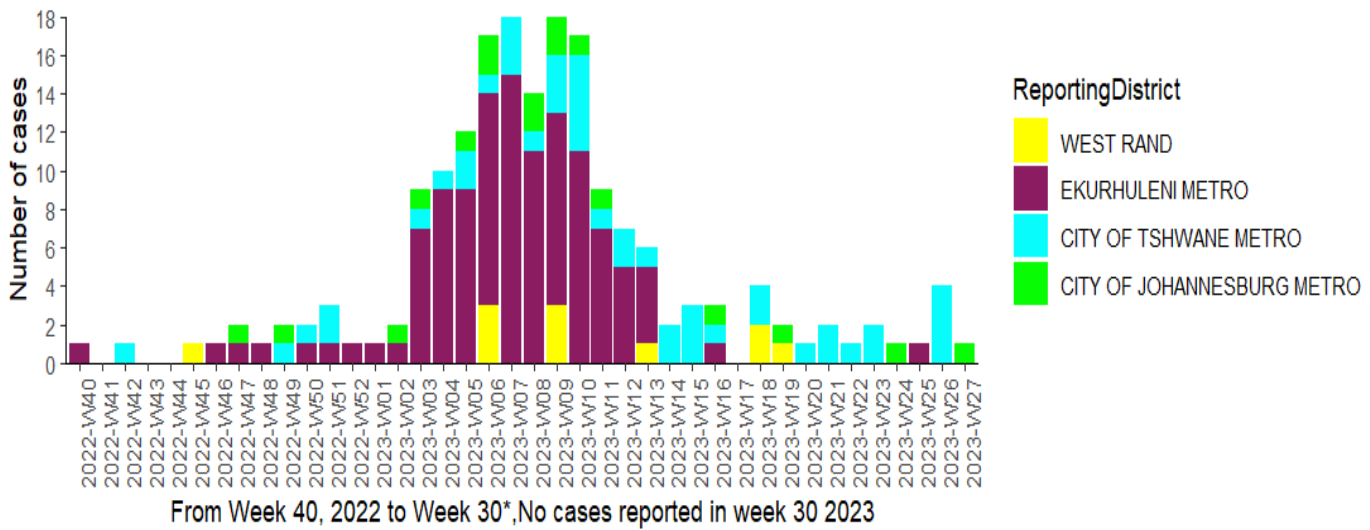


Figure 4. The epidemiological curve of the number of laboratory-confirmed measles cases in districts of Gauteng Province from epidemiological week 40, 2022 to week 30, 2023 by specimen collection dates.

Overview of the measles outbreak in KwaZulu-Natal

A total of 27 laboratory-confirmed measles cases have been reported from epidemiological week 40, 2022 to week 30, 2023 in KwaZulu Natal Province (Figure 5). The most of cases, 13, have been reported from the Ethekwini Metro, Ugu and Umgungundlovu reported three cases each, similarly King Cetshwayo and Uthukela reported two cases each. Most of the sub-district reported one case each since the outbreak (Umkhanyakude, Umzinyathi, Zululand and Amajuba). Since Epi week 22, the KwaZulu-Natal province has been reporting cases in the Ethekwini Metro.

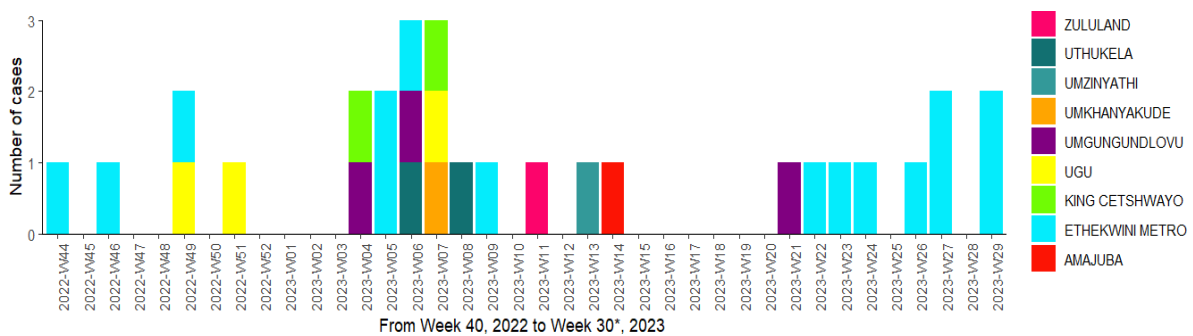


Figure 5. The epidemiological curve of the number of laboratory-confirmed measles cases by districts of KwaZulu_Natal Province from epidemiological week 40, 2022 to week 30, 2023 by specimen collection dates.

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 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.