



INTERIM SITUATION REPORT, 7 July 2023

(Based on laboratory testing data up until 27 June 2023)

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

Highlights

- The NICD has tested 6460 serum samples for measles since epidemiological week 40, 2022, of which 1100 (17%) were confirmed positive. In the past weeks (week 25 up until week 26, 01/07/2023) there have been 10 laboratory-confirmed measles cases detected across the country, most of which were from Limpopo (6).
- The percentage of samples testing positive (PTP) increased from 17% (7/41) of samples tested in week 25 to 43% (3/7) of samples tested in week 26.
- In week 25 (week ending 25/06/2023), Limpopo province reported a total of five (5) new measles cases, while sporadic cases were reported in Gauteng (1) and Western Cape (1).
- 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 outbreak was declared over for the Northern Cape in week 15, North West in week 24 and Free State in week 25. Unfortunately, due to the ongoing sporadic cases, the outbreak cannot be declared over in Gauteng, Limpopo, Mpumalanga and the Western Cape.
- In week 25 Limpopo province reported a total of 5 cases, Waterberg (2) Greater Sekhukhune (2) and one (1) case from Capricorn district. Only one case from the Capricorn district has been reported for week 26
- The vaccination campaign in Limpopo province targeting the 5-15 years age group has come to an end with overall vaccination coverage of 56%. To achieve a higher coverage rate, the NICD is informed that a mop-up campaign will be conducted from 24 July 2023 to 31 August 2023.

Outbreak overview

From epidemiological week 40 2022 to week 26 2023, the NICD has tested 6460 serum samples for measles of which 1100 (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 26 of 2023, 1092 laboratory-confirmed cases were reported from eight provinces with declared measles outbreaks; Limpopo (506 cases), Mpumalanga (111 cases), North West (217 cases), Gauteng (182 cases), Free State (32 cases), Western Cape (16), KwaZulu-Natal (21) 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 41 in week 25 to 7 tests in week 26.

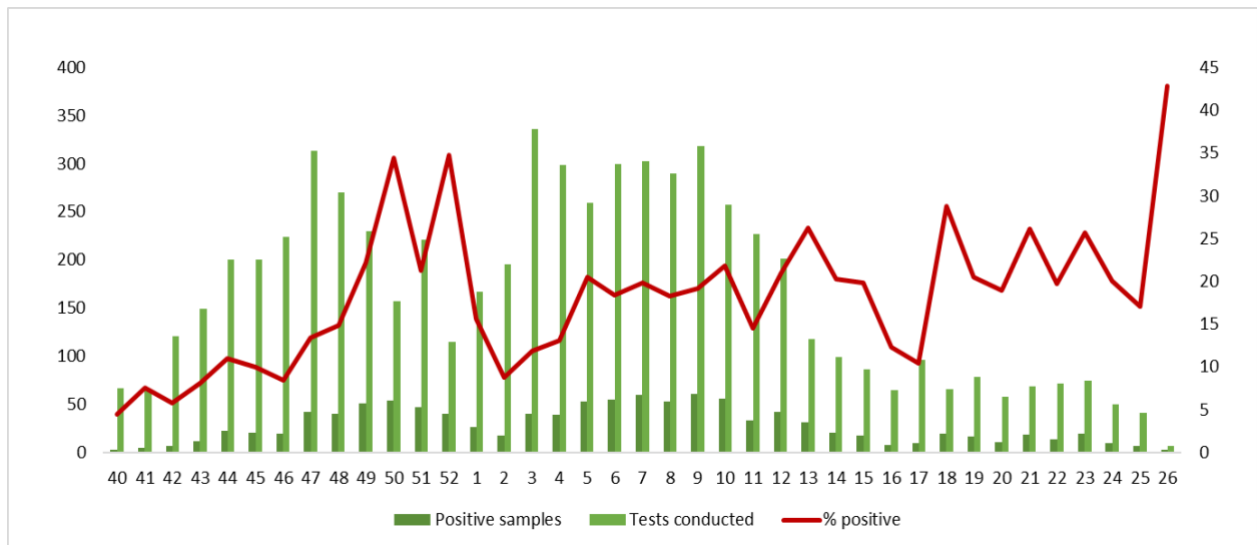


Figure 1. Number of serum samples submitted to the NICD for measles, week 40 2022, until week 26, 2023, and the number (dark green) and % tested positive (red line), by epidemiological week using the date the specimen was collected. *Data from week 26 represent partial data and will be updated in next 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 26, 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 26 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			2		1					3
Total	8	32	182	21	506	111	217	7	16	1100

An Overview of the Outbreak in the Limpopo Province

In total, 506 cases of laboratory-confirmed measles were reported between epidemiological week 40, 2022 to week 26, 2023 with the majority of the measles cases reported in the Waterberg, Greater Sekhukhune, and Mopani districts. Figure 2, shows an epidemiological curve from week 40, 2022 to week 26 of 2023 in Limpopo province. Waterberg district reported the highest (219) number of measles cases, Mopani district reported 99 cases, Greater Sekhukhune district reported 142 cases, Vhembe district reported 35 cases and Capricorn district reported 11 cases. In week 25 Limpopo province reported a total of 5 cases, Waterberg (2) Greater Sekhukhune (2) and one (1) case from Capricorn district. Only one case from the Capricorn district has been reported for week 26. The age of measles cases across Limpopo ranged from 4 months to 45 years.

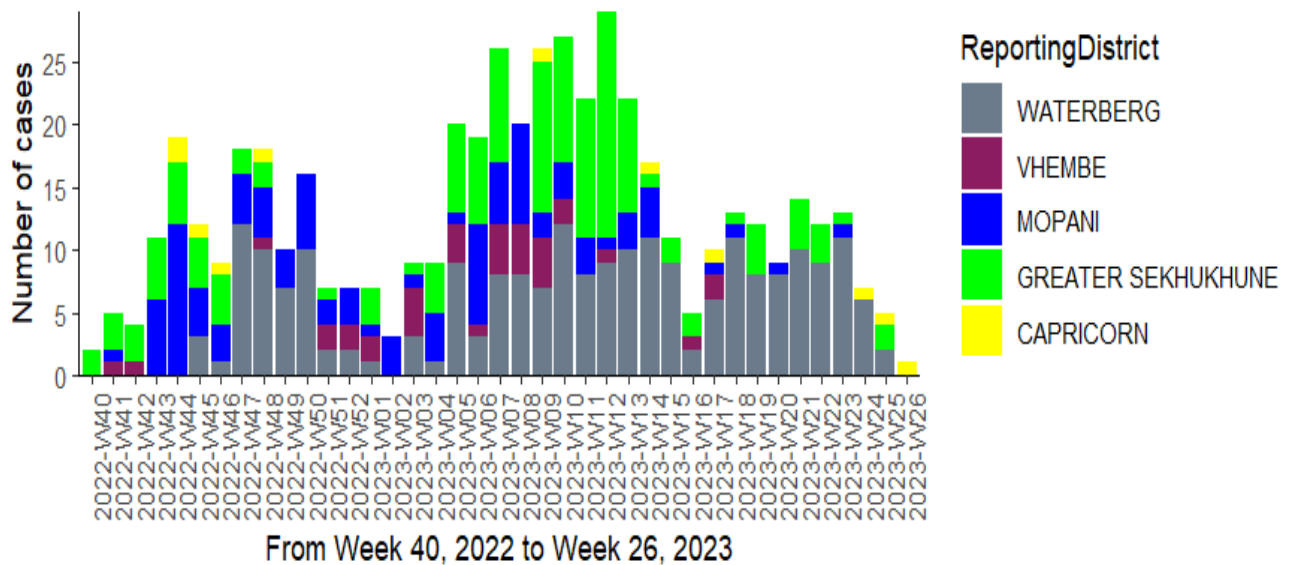


Figure 2. The epidemiological curve of the number of laboratory-confirmed measles cases by districts of Limpopo Province from epidemiological week 40, 2022 to week 26, 2023 by specimen collection dates.

The incidence rate of laboratory-confirmed measles cases by age group in Limpopo province

Measles transmission continues in the Limpopo province. Most of the cases were reported in the Waterberg district in the previous weeks (up to week 24), in weeks 25 and 26 a total of six cases were reported in Limpopo from three districts which reported two cases each (Waterberg, Greater Sekhukhune and Capricorn). The cases were evenly shared among the 5-9 age group (3 cases) and the 1-4 years age group (3 cases). For weeks 24 and 25 the age groups 1-4 years have the highest incidence rates of infection. (Figure 3)

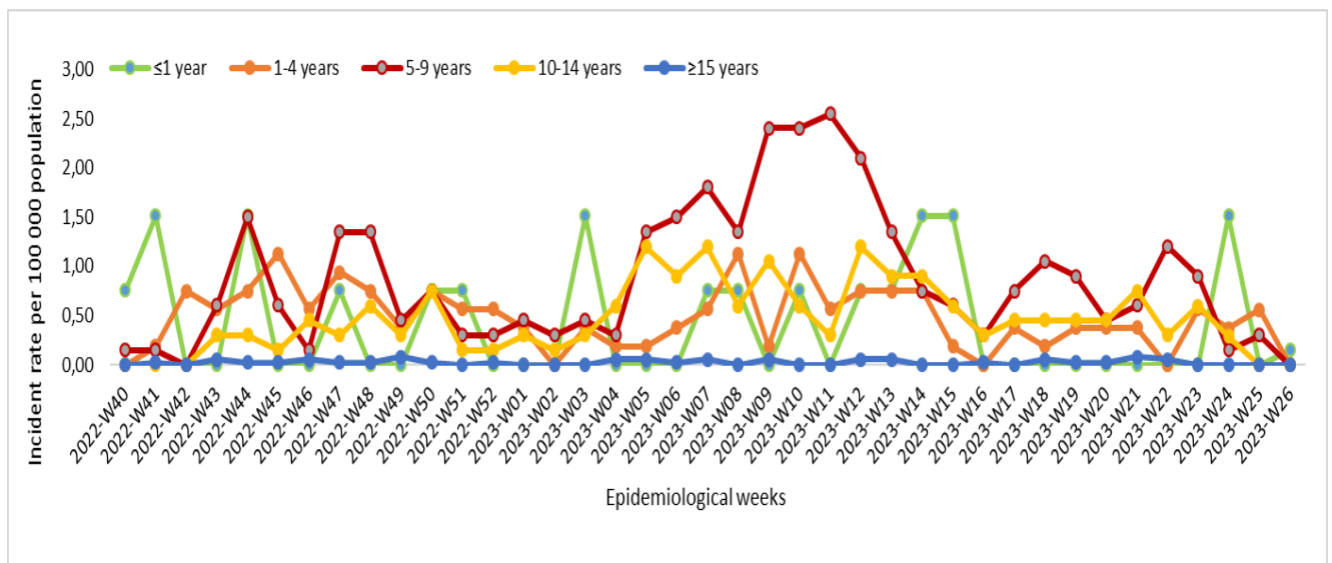


Figure 3: Incidence rate of laboratory-confirmed measles cases by age group in Limpopo Province from epidemiological week 40, 2022 to week 26, 2023 by specimen collection dates.

Summary of Phase 2 (5-15 years) Measles vaccination campaign in the Limpopo Province

The overall vaccination coverage for the province for the 5-15 years age group is 56%. Mopani district has the highest (64.6%) coverage compared to the other districts while Waterberg's vaccination coverage is the least at 50.4% (Table 2). Lephalale municipality is the sub-district with the lowest coverage 30.6% in the Waterberg district (Table 3). Only Greater Sekhukhune had shown a slight increase in vaccination coverage in the last week, while the other districts and the provincial coverage remained the same as reported previously. A mop-up campaign will be conducted from 24 July 2023 to 31 August 2023.

Table 2. Measles vaccination campaign district weekly performance, Limpopo Province: 04 July 2023

District	5 to 15 years target population	70% performance target	Weekly Targeted performance	Cumul. doses admin. @ 04 Jul 2023	Cumul. Campaign coverage @ 04 Jul 2023
Capricorn	329 836	230 885	38 481	169 758	51.5%
Mopani	301 681	211 177	35 196	194 739	64.6%
Sekhukhune	321 767	225 237	37 539	184 402	57.3%
Vhembe	361 313	252 919	42 153	199 311	55.2%
Waterberg	166 620	116 634	19 439	84 501	50.4%
Province	1 481 217	1 036 852	172 809	832 261	56.2

Table 3. The measles vaccination campaign in the Waterberg district weekly performance, Limpopo Province: 04 July 2023

Waterberg sub-District	5 to 15 years target population	70% performance target	Weekly Targeted performance	Cumul. doses admin. @ 04 Jul 2023	Cumul. Campaign coverage @ 04 Jul 2023
Bela-Bela	16 240	11 368	1 896	8 755	54.0%
Lephalale	26 599	18 619	3 103	8 133	30.6%
Mogalakwena	81 011	56 708	9 451	46 070	56.9
Mookgophong/ Modimolle	27 720	19 404	3 234	14 717	53.1%
Thabazimbi	15 050	10 535	1 756	6 366	42.3
District	166 620	116 634	19 439	84 501	50.4%

Gauteng

A total of 182 laboratory-confirmed measles cases have been reported from epidemiological week 40, 2022 to week 26, 2023 in Gauteng Province displayed in Figure 4. The majority of cases, 110, have been reported from the City of Ekurhuleni, 42 from the City of Tshwane, 19 cases from the City of Johannesburg, and 11 cases from West Rand. In weeks 25 and 26, three cases have been reported from Gauteng, two of the cases are from the City of Tshwane and one from Ekurhuleni.

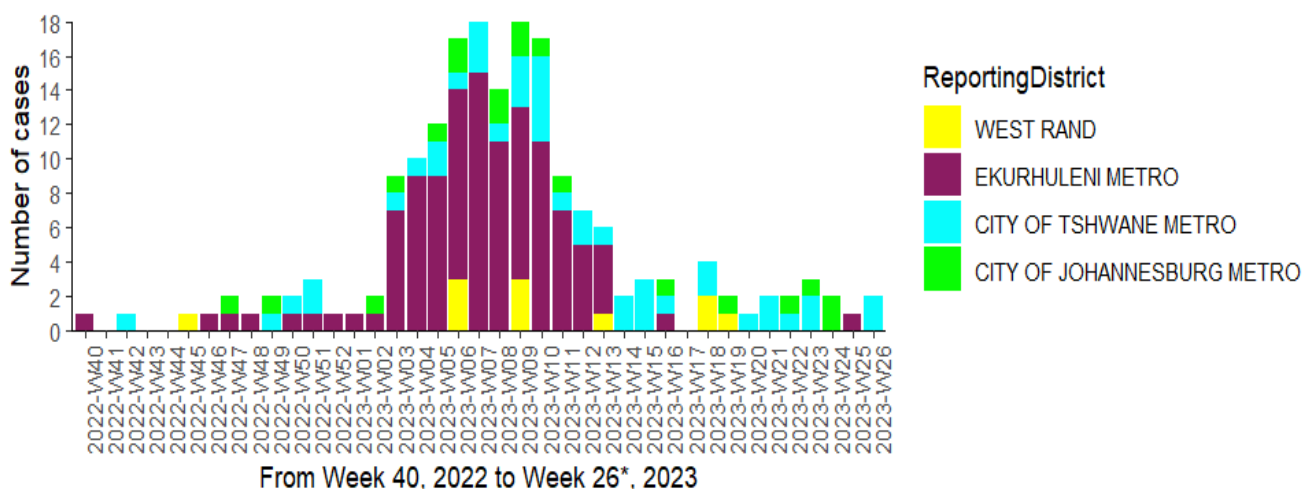


Figure 4. The epidemiological curve of the number of laboratory-confirmed measles cases in districts of Gauteng Province from epidemiological week 40, 2022 to week 26, 2023 by specimen collection dates.

Conclusion

Limpopo province continues to contribute to a significant number of cases. 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 adverse events following immunization (AEFI) through the Med Safety application (<https://medsafety.sahpra.org.za/>) or submit a case reporting form to their district surveillance office.