



**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**

**1. Measles Surveillance**

- A total of 1317 laboratory-confirmed measles cases were reported between epidemiological week 40 2022 to week 47 2023 in South Africa. Limpopo had reported the most number of cases (532), followed by Gauteng (256) and then North West (226).
- Eastern Cape and Northern Cape Provinces reported the lowest number of confirmed measles cases with 10 and 20 cases, respectively. KwaZulu-Natal, Mpumalanga, and Free State have reported 65, 121, and 39 cases, respectively. Table 1.

**Table 1:** Cases of laboratory-confirmed measles tested by the NICD from all provinces in South Africa from epidemiological week 40, 2022 to week 47, 2023. (FS=Free State; GP=Gauteng; KZN=KwaZulu-Natal; LP=Limpopo; MP=Mpumalanga NW=North West; NC=Northern Cape, WC = Western Cape).

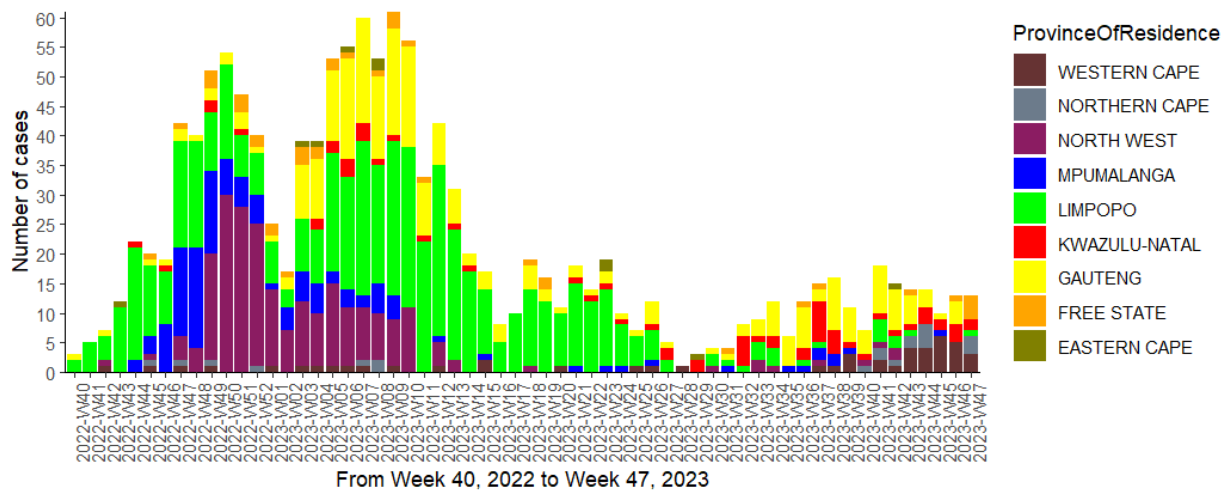
Month	EC	FS	GP	KZN	LP	MP	NW	NC	WC	Total
Sep-22	0	0	2	0	11	0	1	0	1	15
Oct-22	1	1	2	2	51	13	1	1	1	73
Nov-22	0	4	8	2	62	52	56	2	2	188
Dec-22	0	9	7	1	24	15	72	1	1	130
Jan-23	3	9	48	7	57	15	44	0	4	187
Feb-23	2	5	69	5	99	11	36	3	2	232
Mar-23	0	1	24	3	90	1	6	0	1	126
Apr-23	0	1	12	0	51	1	1	0	3	69
May-23	2	0	8	1	48	2	0	0	0	61
Jun-23	0	0	7	3	19	2	0	0	4	35
Jul-23	1	0	7	7	3	1	2	0		21
Aug-23	0	1	16	6	7	1	4	0	0	35
Sep-23	0	2	14	14	2	6	2	0	4	44
Oct-23	1	2	24	4	7	0	0	6	7	51
Nov-23	0	4	8	10	1	1	1	7	18	50
<b>Total</b>	<b>10</b>	<b>39</b>	<b>256</b>	<b>65</b>	<b>532</b>	<b>121</b>	<b>226</b>	<b>20</b>	<b>48</b>	<b>1317</b>

**Table 2: Measles laboratory-confirmed cases by age group, November 2023**

Epi month	≤1 year	1-4 years	5-9 years	10-14 years	≥15 years	Total
November	1	12	18	11	16	50

In November 2023, a total of 50 measles cases (Table 2) were reported from all provinces except Eastern Cape. Most of the cases were from the Western Cape (18) KwaZulu-Natal (10), Gauteng (8), and Northern Cape (7), Figure 1.

In the last week 46 (week ending 18/11/2023), a household cluster of measles-positive cases was reported in Bloemfontein, Free State province. The index case was a 2-year-old male who was admitted to the hospital. The index case had a travel history from Zimbabwe on the 13<sup>th</sup> of November and was admitted on the 16<sup>th</sup>. Four of her siblings also tested positive for measles. The ages range from two years to 14 years old. The Free State outbreak response team is currently investigating the cluster.



**Figure 1.** The epidemiological curve of the number of laboratory-confirmed measles cases by Province in South Africa, from epidemiological week 40 2022 –week 47 2023 by specimen collection dates.

## 2. Rubella surveillance

- Rubella serology testing is conducted at several NHLS laboratories and the NICD. Rubella testing at the NICD is conducted as part of fever-rash surveillance on samples from patients who meet the suspected measles/rubella case definition. Data that are presented here are from these public laboratories.
- A total of 656 laboratory-confirmed rubella cases have been reported in South Africa from week 1 to week 48 2023. The majority (465) of the cases were reported in the Western Cape. Northern Cape reported 120 rubella cases, while the Eastern Cape province reported 36 cases. Sporadic cases were reported in all the other provinces Table 3.
- For November, 387 cases of rubella cases were reported. Western Cape remains the province reporting more (258) cases, followed by the Northern Cape (118) and then the Eastern Cape (10). One sporadic case was reported in Gauteng. (Table 3)

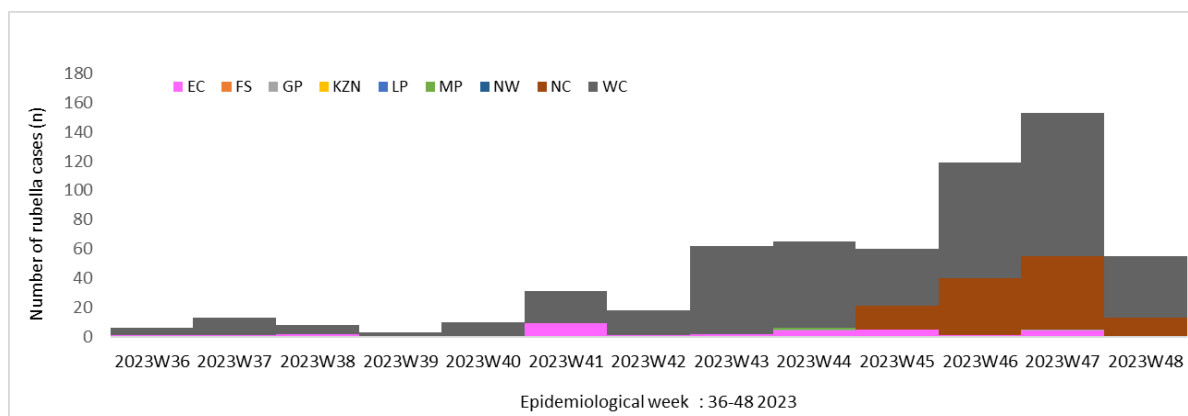
- Since week 36, a total of 603 cases have been reported, mainly from the Western Cape (452). Fourteen cases were reported in the City of Cape Town in the Khayelitsha sub-district. Most of the cases reported in Khayelitsha were among children between 5-9 years.
- The most affected age group is children between the ages of 5-9 years old (352), followed by the 1-4 years old (211) (Table 4).

**Table 3:** Cases of laboratory-confirmed rubella from all provinces in South Africa from epidemiological week 01, 2023 to week 48, 2023.(FS=Free State; GP=Gauteng; KZN=KwaZulu-Natal; LP=Limpopo; MP=Mpumalanga NW=North West; NC=Northern Cape, WC = Western Cape).\*\*Nb!

MONTH	EC	FS	GP	KZN	LP	MP	NW	NC	WC	SA
Jan-Aug	6	1	13	2	3	3	3	2	13	53
September	4	0	0	0	0	0	0	0	36	40
October	16	0	1	0	0	1	0	0	158	176
November	10	0	1	0	0	0	0	118	258	387
<b>Total</b>	<b>36</b>	<b>1</b>	<b>15</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>3</b>	<b>120</b>	<b>465</b>	<b>656</b>

**Table 4:** Rubella Laboratory confirmed cases by age group, epidemiological week 01-48 2023

AGE	EC	FS	GP	KZN	LP	MP	NW	NC	WC	SA
less than 1	0	0	1	0	1	0	1	1	7	11
1-4 Years	7	0	1	1	1	1	4	21	175	211
5-9 Years	23	1	5	0	3	2	2	86	230	352
10-14 Years	4	0	2	1	0	0	1	10	38	56
15+	2	0	5	0	0	1	0	2	16	26
<b>Grand Total</b>	<b>36</b>	<b>1</b>	<b>15</b>	<b>2</b>	<b>5</b>	<b>4</b>	<b>8</b>	<b>120</b>	<b>465</b>	<b>656</b>



**Figure 2.** The epidemiological curve of the number of laboratory-confirmed rubella cases by Province in South Africa, from epidemiological week 36- 48, 2023 by specimen collection dates.

## Conclusion

Sporadic cases of measles were reported in the Western Cape. There was a noticeable increase in rubella-positive cases reported in the Northern Cape.

Measles and rubella are notifiable medical conditions. Strengthening surveillance for measles and rubella is recommended so as not to miss cases in the areas where cases are not reported. Clinicians across the country are urged to be on the lookout for measles and rubella cases. Provinces are encouraged to include the date of the last vaccine dose when reporting measles cases to distinguish between measles vaccine-induced cases from natural measles infection. The only way to prevent and control outbreaks of measles is through vaccination. Parents should be advised to bring the vaccination booklets and cards when taking the children to the healthcare facilities to allow the clinicians to do vaccination catchups for the missed measles vaccine doses. Healthcare workers should be alert to rubella symptoms and report cases immediately. At present, no public health action is required following the identification of rubella cases, as no vaccine is available in the public sector.

Diagnostic testing for fever-rash surveillance includes a completed measles-rubella case investigation form (found at <https://www.nicd.ac.za/wp-content/uploads/2023/10/Measles-Rubella-CIF.pdf>) and blood for serological testing together with a throat swab or urine for PCR testing. These samples should be submitted to the NICD where they will be tested for measles and rubella IgM antibodies. Based on details in the case investigation form, PCR for measles or rubella will be done.

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 immunisation (AEFI) through the Med Safety application (<https://medsafety.sahpra.org.za/>) or through submitting a case reporting form to their district surveillance office.