## INTERIM SITUATION REPORT, 21 DECEMBER 2023

## (based on laboratory testing data up until 12 December 2023)

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

## Highlights

## 1. Measles Surveillance

- A total in South Africa, 1338 laboratory-confirmed measles cases were reported between epidemiological week 402022 to week 50 2023. Limpopo had reported the most number of cases (533), followed by Gauteng (265), North West (226) and Western Cape (56).
- Eastern Cape and Northern Cape Provinces reported the lowest number of confirmed measles cases, with 10 and 20 cases. KwaZulu-Natal, Mpumalanga, and Free State have reported 68, 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 50, 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 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 22-Sep | 0 | 0 | 2 | 0 | 11 | 0 | 1 | 0 | 1 | 15 |
| 22-Oct | 1 | 1 | 2 | 2 | 51 | 13 | 1 | 1 | 1 | 73 |
| 22-Nov | 0 | 4 | 8 | 2 | 62 | 52 | 56 | 2 | 2 | 188 |
| 22-Dec | 0 | 9 | 7 | 1 | 24 | 15 | 72 | 1 | 1 | 130 |
| 23-Jan | 3 | 9 | 48 | 7 | 57 | 15 | 44 | 0 | 4 | 187 |
| 23-Feb | 2 | 5 | 69 | 5 | 99 | 11 | 36 | 3 | 2 | 232 |
| 23-Mar | 0 | 1 | 24 | 3 | 90 | 1 | 6 | 0 | 1 | 126 |
| 23-Apr | 0 | 1 | 12 | 0 | 51 | 1 | 1 | 0 | 3 | 69 |
| 23-May | 2 | 0 | 8 | 1 | 48 | 2 | 0 | 0 | 0 | 61 |
| 23-Jun | 0 | 0 | 7 | 3 | 19 | 2 | 0 | 0 | 4 | 35 |
| 23-Jul | 1 | 0 | 7 | 7 | 3 | 1 | 2 | 0 | 0 | 21 |
| 23-Aug | 0 | 1 | 16 | 6 | 7 | 1 | 4 | 0 | 0 | 35 |
| 23-Sep | 0 | 2 | 14 | 14 | 2 | 6 | 2 | 0 | 4 | 44 |
| 23-Oct | 1 | 2 | 24 | 4 | 7 | 0 | 0 | 6 | 7 | 51 |
| 23-Nov | 0 | 4 | 8 | 11 | 2 | 1 | 1 | 7 | 18 | 52 |
| 23-Dec | 0 | 0 | 8 | 2 | 1 | 0 | 0 | 0 | 8 | 19 |
| Total | $\mathbf{1 0}$ | $\mathbf{3 9}$ | $\mathbf{2 6 5}$ | $\mathbf{6 8}$ | 533 | $\mathbf{1 2 1}$ | $\mathbf{2 2 6}$ | $\mathbf{2 0}$ | $\mathbf{5 6}$ | 1338 |

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

| Epi month | $\leq 1$ year | $1-4$ years | $5-9$ years | $10-14$ years | $\geq 15$ years | Total |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| November | 1 | 7 | 6 | 3 | 2 | 19 |

In December 2023 (up to week 50), 19 measles cases (Table 2) were reported from four provinces. Most of the cases were from the Western Cape (8), Gauteng (8), KwaZulu-Natal (2) and Limpopo (1), Figure 1.


Figure 1. The epidemiological curve of the number of laboratory-confirmed measles cases by Province in South Africa, from epidemiological week 402022 -week 50, 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 893 laboratory-confirmed rubella cases have been reported in South Africa from week 1 to week 50 2023. The majority (658) of the cases were reported in the Western Cape. Northern Cape reported 166 rubella cases, while the Eastern Cape province reported 36 cases. Sporadic cases were reported in all the other provinces Table 3.
- For December, 440 cases of rubella cases were reported. Western Cape remains the province reporting more (323) cases, followed by the Northern Cape (109) and then the Eastern Cape (4). Four sporadic cases were reported in Gauteng and Limpopo each reporting two cases (Table 3).
- Since week 36, a total of 849 cases have been reported, mainly from the Western Cape (646).
- The most affected age group is children between the ages of 5-9 years old (466), followed by the 1-4 years old (299) (Table 4).

Table 3: Cases of laboratory-confirmed rubella from all provinces in South Africa from epidemiological week 01, 2023 to week 50, 2023. (FS=Free State; GP=Gauteng; KZN=KwaZulu-Natal; LP=Limpopo; MP=Mpumalanga NW=North West; $N C=$ Northern Cape, WC = Western Cape).

| MONTH | EC | FS | GP | KZN | LP | MP | NW | NC | WC | SA |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Jan-Aug | 5 | 1 | 12 | 2 | 1 | 1 | 8 | 2 | 12 | 44 |
| September | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 30 |
| October | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 52 | 62 |
| November | 12 | 0 | 2 | 0 | 1 | 1 | 0 | 55 | 246 | 317 |
| December | 4 | 0 | 2 | 0 | 2 | 0 | 0 | 109 | 323 | 440 |
| total | $\mathbf{3 6}$ | $\mathbf{1}$ | $\mathbf{1 6}$ | $\mathbf{2}$ | $\mathbf{4}$ | $\mathbf{2}$ | $\mathbf{8}$ | $\mathbf{1 6 6}$ | $\mathbf{6 5 8}$ | $\mathbf{8 9 3}$ |

Table 4: Rubella laboratory-confirmed cases by age group, epidemiological week 0150, 2023

| AGE | EC | FS | GP | KZN | LP | MP | NW | NC | WC | SA |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| less than 1 year | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 8 | 12 |
| $1-4$ Years | 7 | 0 | 2 | 1 | 1 | 0 | 4 | 30 | 254 | 299 |
| $5-9$ Years | 23 | 1 | 5 | 0 | 2 | 1 | 2 | 115 | 317 | 466 |
| $10-14$ Years | 4 | 0 | 2 | 1 | 0 | 0 | 1 | 18 | 58 | 84 |
| $15+$ | 2 | 0 | 6 | 0 | 0 | 1 | 0 | 2 | 21 | 32 |
| Grand Total | $\mathbf{3 6}$ | $\mathbf{1}$ | $\mathbf{1 6}$ | $\mathbf{2}$ | $\mathbf{4}$ | $\mathbf{2}$ | $\mathbf{8}$ | $\mathbf{1 6 6}$ | $\mathbf{6 5 8}$ | $\mathbf{8 9 3}$ |



Figure 2. The epidemiological curve of the number of laboratory-confirmed rubella cases by Province in South Africa, from epidemiological week 36-50, 2023 by specimen collection dates.

## Conclusion

Sporadic cases of measles were still reported in the Western Cape and Gauteng. Rubella-positive cases are reported in the Western Cape and 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 vaccineinduced 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 immunization (AEFI) through the Med Safety application (https://medsafety.sahpra.org.za/) or through submitting a case reporting form to their district surveillance office.

