

# Republic of South Sudan

## Measles Outbreak and Response Weekly Situation Update

Issue number	16
Issue Date	29 April 2024
Epidemiological week	Week 16 (15 – 21 April, 2024)

<h3 style="margin: 0;">Suspected Measles Cases</h3> <p style="margin: 0;">New (2) cases with date of onset in week 16</p> <p style="margin: 0;">Cumulative (14,376)</p>	<h3 style="margin: 0;">Lab Confirmed Cases</h3> <p style="margin: 0;">New (0)</p> <p style="margin: 0;">Cumulative (1,154)</p>	<h3 style="margin: 0;">Deaths</h3> <p style="margin: 0;">New (0)</p> <p style="margin: 0;">Cumulative (267)</p> <p style="margin: 0;">CFR 1.9</p>
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\* The above data is cumulative from 2022

### Background

As of Epi week 16, 2024, a total of 2,271 suspected measles cases were reported, with 146 (6.4%) lab-confirmed, 39 suspected Measles death, and a case fatality rate of (1.7).

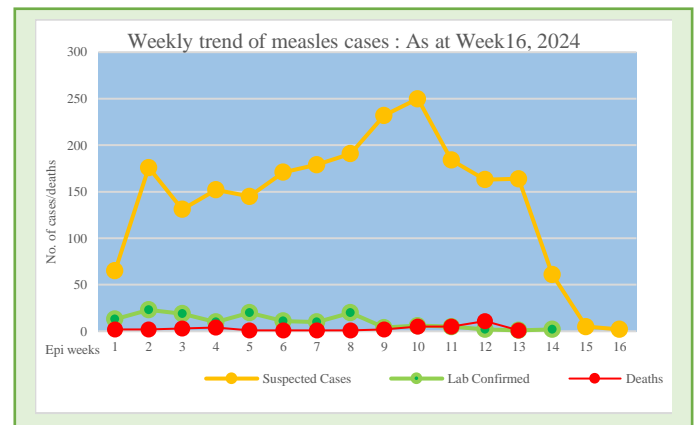
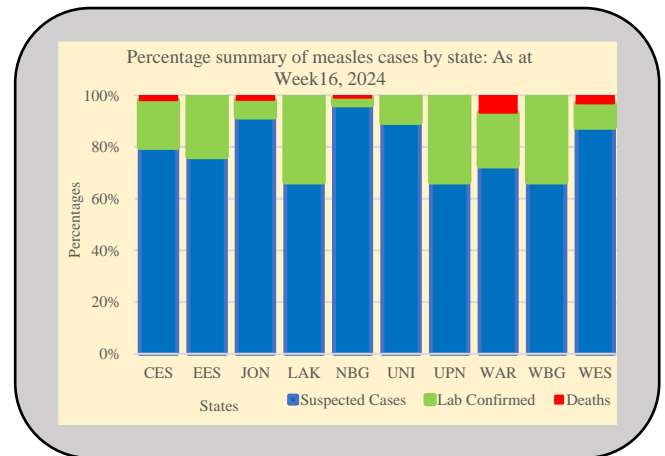
The observed surge in suspected Measles cases with a peak in week 10 and a steady decline since then, indicates an effective increase in interruption efforts.

The high discrepancy between suspected and confirmed cases highlights a critical need for enhanced sample collection and robust laboratory testing to ensure accurate diagnosis. Improving these aspects will aid in more precise outbreak investigation and reporting, allowing for more targeted public health interventions and resource allocation.

As of Epi week 16 in 2024, reactive vaccination efforts have led to county-wide campaigns in Maridi, Mundri East, Tonj North and Tonj South, vaccinating 138,844 children against Measles. Preparation for the reactive vaccination campaign in all 5 counties of Northern Bahir El Ghazal state is complete and implementation scheduled from 25<sup>th</sup> of April 2024.

Preparation is underway for 5 outbreak affected counties in Western Equatoria State to be implemented in the 2<sup>nd</sup> week of May 2024. Details are in Annexes 1 and 2.

Epi week 16 data shows no ongoing outbreak, but twelve (12) counties reporting suspected/confirmed cases yet to reach the outbreak threshold, warranting further investigation and laboratory validation.



### Key weekly Situation Update as of 21 April 2024

- A total of thirty-two (32) additional cases were reported from Abyei (1), Aweil East(36), Aweil North(25), Aweil South(15) Ezo(2), Fangak(3), Fashoda(1), Kajo-Keji(1), Lainya(1), Mvolo(6), Nagero(4), Pariang(7), Pigi(1), Rumbek Centre(2) and Yirol West(3) since the last update, where 6 were lab confirmed for measles and 11 for rubella, out of 26 discarded cases.
  - Two (2) suspected cases in week 16
  - No newly confirmed cases this week
  - No additional deaths reported in the week under review
- No county has an ongoing outbreak

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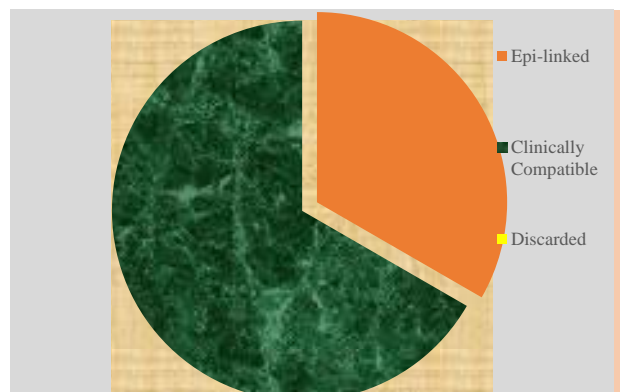
- Aweil North, Aweil West, Abyei, Bor South, Fashoda, Fangak, Lainya, Mvolo, Ibba, Tonj East, Yirol West and Yambio continue to report suspected/confirmed cases yet to reach the outbreak threshold and need more investigation and samples collection for testing as per the revised SOP

#### Summary of cases as of 21 April 2024

Table 1: Distribution of cases by final classification 2024

FINAL CLASSIFICATION	2024	
	NO. OF CASES	%
Lab confirmed	146	6.4
Epi-linked	772	34.0
Clinically Compatible	1,254	55.2
<b>Total</b>	<b>2,172</b>	<b>95.5</b>
Discarded (-ve)	99	4.5
<b>Grand Total</b>	<b>2,271</b>	<b>100.0</b>

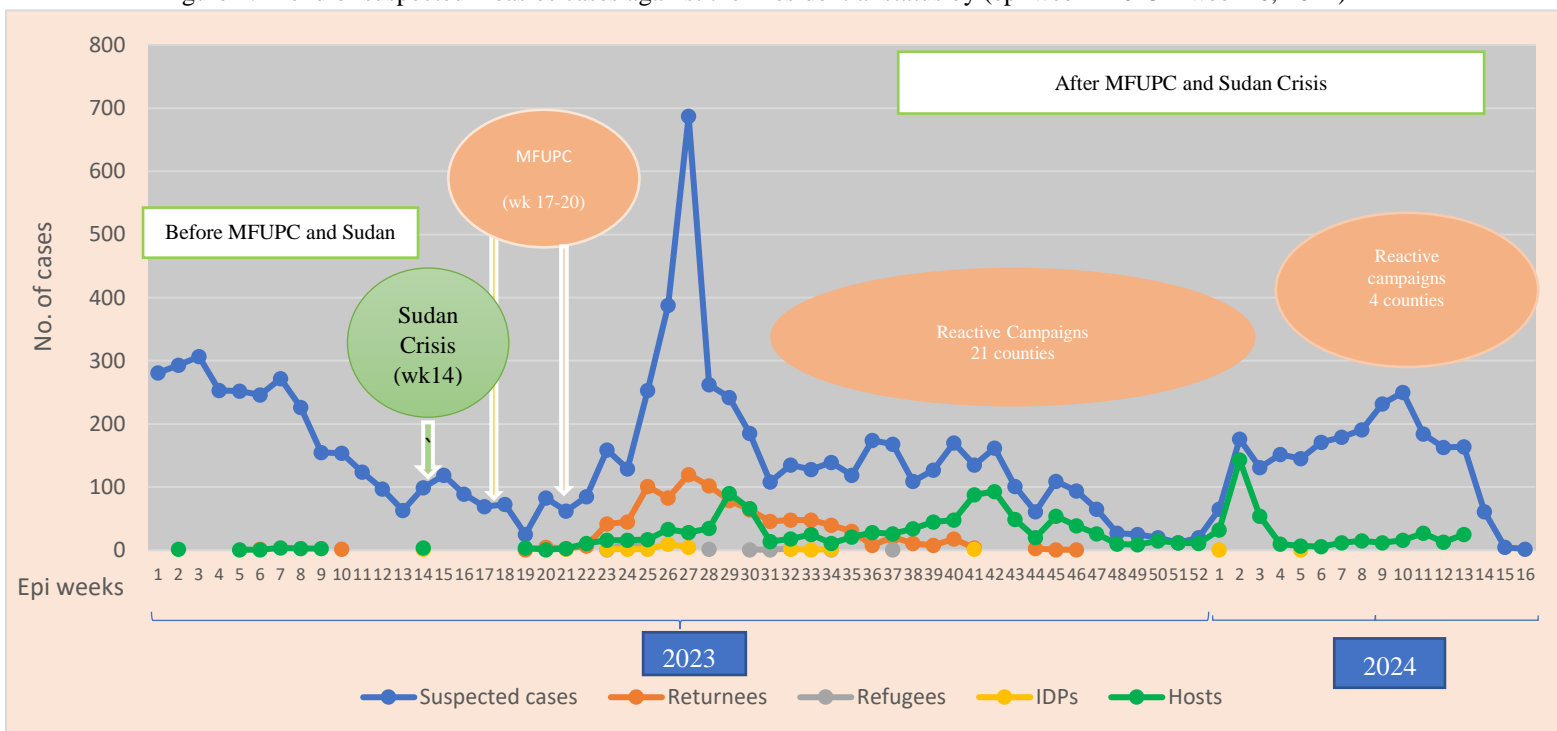
Figure 1: Distribution of deaths by final classification: 2024



Out of the 2,271 suspected measles cases, 146 (6.4%) were lab-confirmed, 772 (34.0%) epi-linked, 1,254 (55.2%) clinically compatible, and 99 (4.5%) discarded cases have been reported as of epidemiological week 16, 2024. A total of 25 rubella positive cases from the discarded (negative measles cases)

A total of 39 reported deaths, 26 (66%) from the clinically compatible cases and 13 (34%) from the epi-linked cases.

Figure 2: Trend of suspected measles cases against their residential status by (epi week 1 2023 – week 16, 2024)



**Note:** Measles cases have been reported from different counties throughout 2023-2024. The observed peaks are driven by other counties that experienced a surge in measles cases at various times. The Sudan crisis started in week 14 of 2023, with the influx of returnees and refugees since then. The nationwide MFUPC also took place from week 17-20.

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Figure 3: Map showing lab-confirmed outbreak counties in February (week13 to Week16, 2024)

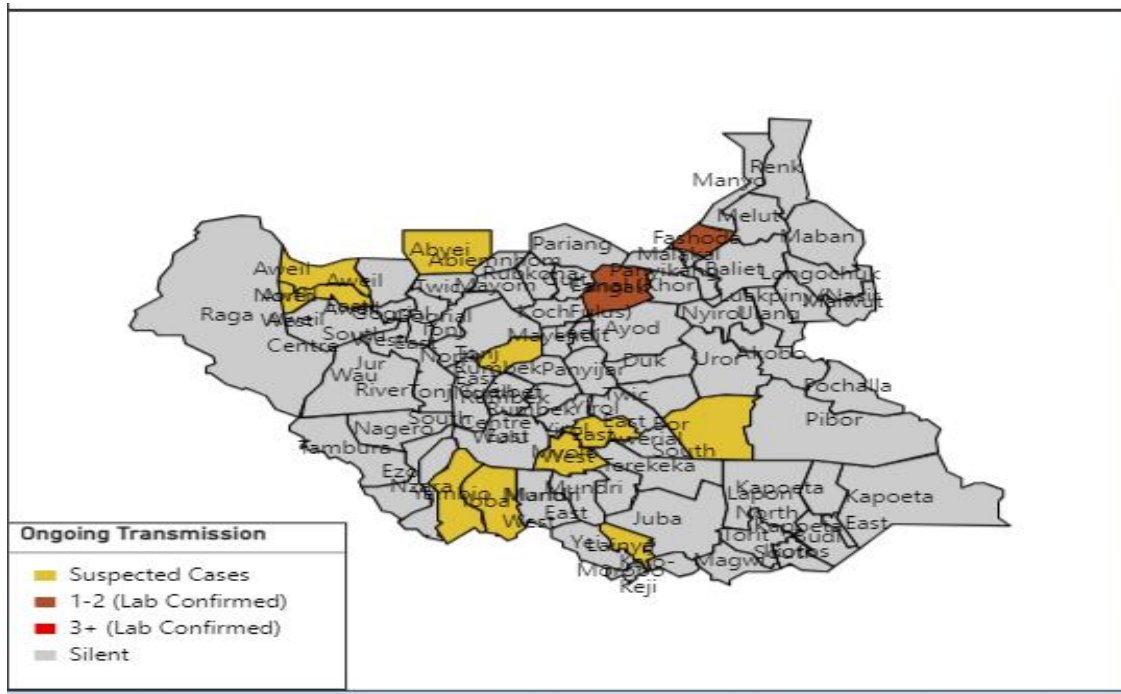
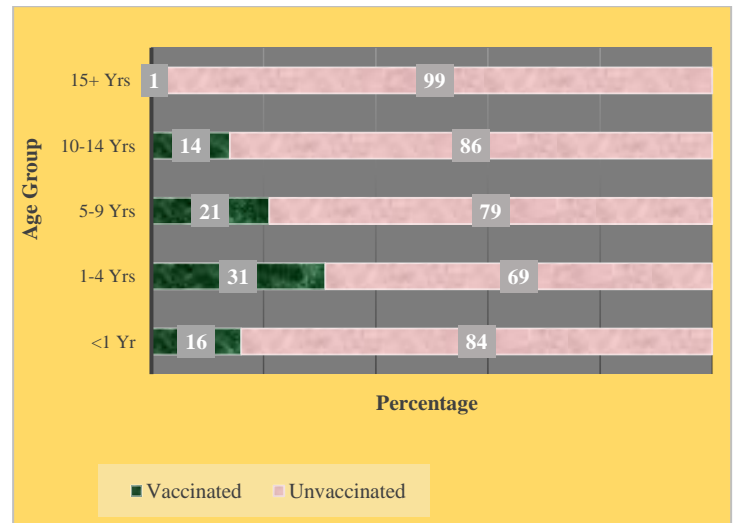


Table 2: Distribution of reported measles cases and deaths by age groups in South Sudan, 2024

Age Groups	2024				
	No. of Suspected Cases	No. of Confirmed Cases	%	Deaths	%
<1 yr	667	23	3.4	21	3.1
1-4 yrs	861	60	7.0	14	1.6
5-9 yrs	286	23	8.0	3	1.0
10-14 yrs	251	12	4.8	0	0.0
15+ yrs	206	28	13.6	1	0.5
<b>Total</b>	<b>2,271</b>	<b>146</b>	<b>6.4</b>	<b>39</b>	<b>1.7</b>

*Note: More than half 1,528 (67%) of all the suspected measles cases are children below 5 years of age. The case fatality rate is (1.7%) while 743 (33%) are among other ages from 5 years and above.*

Figure3: Percentage distribution of measles cases and their vaccination status: 2024



*Note: 1,802(79%) were unvaccinated (zero, unknown) including 1,155(64%) children less than 5 years. Among children less than one year old 667 cases, 557(84%) have not been vaccinated.*

### Surveillance and Laboratory

- Enhanced surveillance ongoing in silent counties
- Sample collection for all counties that last had a confirmed measles outbreak in the last four weeks to track the Measles epidemiology.
- Enhance surveillance for VPDs, especially at the points of entry for the refugees, returnees from Sudan, and in the silent counties
- Ensure weekly reporting (including zero dose reporting where applicable)



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### Case Management

- The MOH, WHO, and partners are intensifying measles case management (including vitamin A administration), surveillance, and risk communication in locations with suspected and confirmed outbreaks
- In collaboration with partners and MOH, WHO is prepositioning kits to support case management in counties with active outbreaks.

### Vaccinations

- The reactive campaign continued in 2024. As of Epi week 16, four counties (Maridi, Mundri East, Tonj North, and Tonj South) implemented a Measles reactive campaign to vaccinate 138,844 (107%) under-five children.
- Currently, the preparation of a Measles reactive campaign in all five counties of Northern Bahir El Ghazal state is complete, and the campaign will kick off on April 25, 2024.
- Preparation is ongoing for an additional five counties in WES (Yambio, Ezo, Nzara, Ibba, and Tambura). Implementation is tentatively scheduled for 7<sup>th</sup> May 2024. The main reason for the delay is multiple activities ongoing in the state (Yellow Fever mass vaccination, nOPV2 vaccination campaign, and COVID-19 vaccination activities in some counties)
  - Vaccine and dry supply already delivered to state Cold chain
  - Operational funds are disbursed to states and targeted counties for training, freezing ice packs, and transportation.
- MOH has yet to secure additional doses of measles vaccine to cover other outbreak-affected counties. Four counties (Rumbek East, Wulu, Juba, and Yei) have reported confirmed outbreaks and submitted revised MPs for the response.
- MoH will work with identified partners to ensure quality campaigns
- POE/Temporary transit post-vaccination activities are ongoing in 13 sites of 7 states with Measles and OPV vaccines targeting children under fifteen years old
  - Operational fund is released to 7 counties to initiate the POE activities in 13 sites.
  - Vaccination activity started in transit posts in Akobo, Melut, Malakal, Aweil East, and Aweil North counties.

### Demand Generation/ Communication

- Demand generation activities ongoing for the planned mop-up and reactive campaigns as well as routine immunization (radio talk shows and jingle broadcast)

### Operational challenges and gaps

- Inadequate detailed investigation of suspected measles cases and deaths in counties reporting suspected cases of measles
- Inadequate sample collection for laboratory confirmation and classification cases of suspected measles cases
- A high proportion of unvaccinated/unknown status children (80%) was detected among the cases, noting the inadequate quality of investigations and gaps in immunization, especially among the returnees and refugees.
- Late and constant retrospective reporting of suspected cases
- Incomplete and inaccurate filling of line lists and CIFs

### Way Forward

- Lab-confirmed outbreaks to be followed with detailed outbreak reports
- Root cause analysis planned and led by MOH
- MOH and partners to support the planned mop-up campaign and other measles activities
- State and County MOH to continue weekly reporting of measles cases (including zero reporting where applicable)
- UNICEF will fill in the anticipated Measles vaccine rupture.
- Prompt detection and management of measles cases
- Addition of Vitamin A in future responses and inclusion of nutrition teams

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- Blood samples to be collected from suspected cases in counties that continue to report, and the lab confirmation is beyond four weeks to monitor the epidemiology
- Collection of nasopharyngeal swabs from new cases
- Strengthen routine immunization at POEs and within the community
- Prioritize case management to reduce morbidity and mortality.
- Enhance risk communication and community engagement in health and help-seeking behavior.

#### Appendix: Measles Reactive Vaccination (Jan to April 2024)

#	County	Target age group	Type of vaccination	Supporting Partner	Status of Implementation
1	Maridi	6 to 59 months	Reactive	WHO/Unicef	• Completed (Final data submitted)
2	Mundri East	6 to 59 months	Reactive	WHO/Unicef	• Completed (Final data submitted)
3	Tonj North	6 to 59 months	Reactive	WHO/Unicef	• Complete (Final data submitted)
4	Tonj South	6 to 59 months	Reactive	WHO/Unicef	• Complete (Final data submitted)
5	Aweil West	6 to 59 months	Reactive	WHO/Unicef	• Ongoing
6	Aweil North	6 to 59 months	Reactive	WHO/Unicef	• Ongoing
7	Aweil South	6 to 59 months	Reactive	WHO/Unicef	• Ongoing
8	Aweil Center	6 to 59 months	Reactive	WHO/Unicef	• Ongoing
9	Aweil East	6 to 59 months	Reactive	WHO/Unicef	• Ongoing

#### Annex 1: Measles Reactive Vaccination Data from 4 counties, January to April 2024

County	Measles Target population (6 months to 14 years)					Status
	Target	Host	Returnee	Total	Coverage	
Maridi	24,025	25,858	80	25,938	108%	Complete
Mundri East	16,577	16,074	0	16,074	97%	Complete
Tonj North	63,216	72,714	0	72,714	115%	complete
Tonj South	25,913	24,118	0	24,118	93%	Ongoing
<b>Total</b>	<b>129,731</b>	<b>138,764</b>	<b>80</b>	<b>138,844</b>	<b>107%</b>	



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### Annex 2: POE/Temporary Transit site Measles and OPV vaccination Dec 2023 and Jan 2024

State	County	# of POE/ Transit Post	Measles				OPV			
			6 -11 months	12 - 59 months	6 - 14 Years	Total Vaccinated	0 – 11 months	12 - 59 months	6 - 14 Years	Total Vaccinated
CES	Juba	3	163	621	711	1495	180	553	594	1,327
Jonglei	Akobo	2	923	1201	1902	4026	1617	2000	2360	5,977
Upper Nile	Malakal	1	26	195	417	638	50	201	409	660
	Melut	3	60	249	153	462	75	207	143	425
	Maiwut	2	482	675	637	1794	60	89	39	188
NBG	Aweil East	1	248	1064	1486	2798	287	918	1255	2,460
	Aweil North	2	514	1104	811	2429	472	813	413	1,698
Unity	Rubkona	1	433	594	474	1501	563	579	481	1,623
<b>Total</b>		<b>15</b>	<b>2849</b>	<b>5703</b>	<b>6591</b>	<b>15143</b>	<b>3304</b>	<b>5360</b>	<b>5694</b>	<b>14,358</b>

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