

Republic of South Sudan

Measles Outbreak and Response Weekly Situation Update

Issue number: 18
 Issue Date: 09 May 2024
 Epidemiological week: Week 18 (28 April – 05 May, 2024)

Suspected Measles Cases New (0) cases with date of onset in week 18 Cumulative (14,474)	Lab Confirmed New (0) Cumulative (1,160)	Epi-linked Cumulative (5,212)	Deaths New (0) Cumulative (267) CFR (1.8)
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* The above data is cumulative from 2022

Background

As of Epi week 18, 2024, a total of 2,369 suspected measles cases were reported, with 152 (6.4%) lab-confirmed, 39 suspected measles deaths, and a case fatality rate of (1.6).

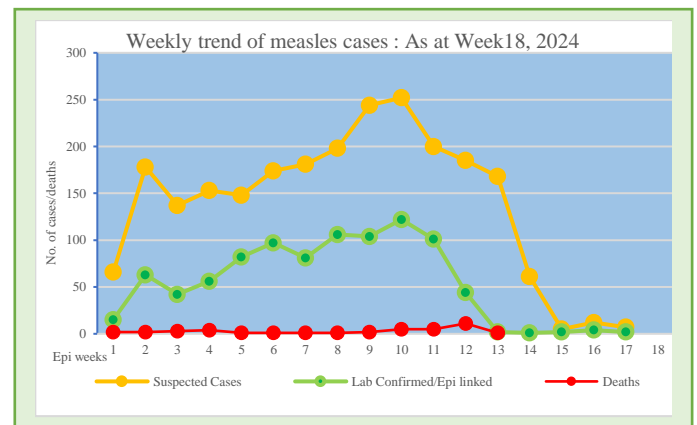
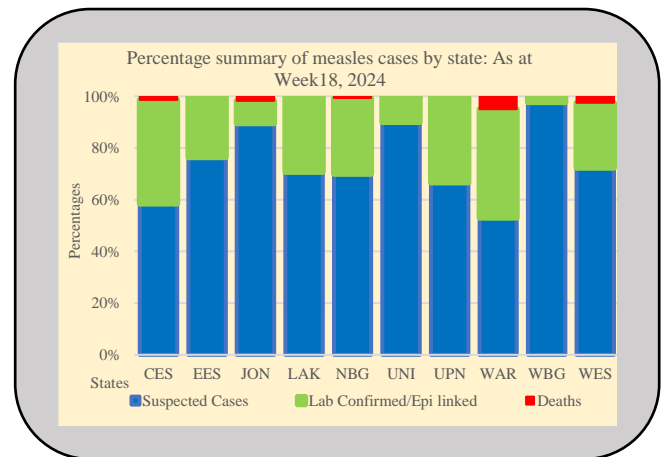
The observed surge in suspected measles cases with a peak in week 10 and a steady decline since then, indicates an effective increase in interruption efforts.

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 18 in 2024, reactive vaccination efforts have led to county-wide campaigns in 9 counties (Maridi, Mundri East, Tonj North, Tonj South, Aweil East, Aweil South, Aweil Center, Aweil North, and Aweil West) vaccinating 347,812 (86%) children against Measles, of which 9,119 (2.6%) are returnees. The final Vaccination data from 5 counties of NBG is yet to be submitted.

Preparation is underway for 5 outbreak affected counties in Western Equatoria State to implement campaign from 7th to 14th of May 2024. Details are in Annexes 1 and 2.

Epi week 18 data shows ongoing outbreaks in **Fangak-Hai mozobin** and **Wulu-Manyol**, but six (6) counties reporting suspected/confirmed cases yet to reach the outbreak threshold and warranting further investigation and laboratory validation.



Key weekly Situation Update as of 05 May 2024

- A total of 98 additional cases (weeks 1-17) have been reported this week from **Fangak (3)**, **Jur River (40)**, **Rubkona (1)**, **Terekeka (2)**, **Wau (41)**, **Wulu (11)**.
 - Seventeen (17) samples were tested, 6 measles confirmed cases from **Wulu** and **Fangak**, 11 discarded and 1 rubella confirmed case from **Rubkona**
- Two (2) ongoing outbreaks in **Fangak-Hai mozobin** and **Wulu-Manyol**
 - **Abyei, Fashoda, Rubkona, Lainya, Terekeka and Yirol West** 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

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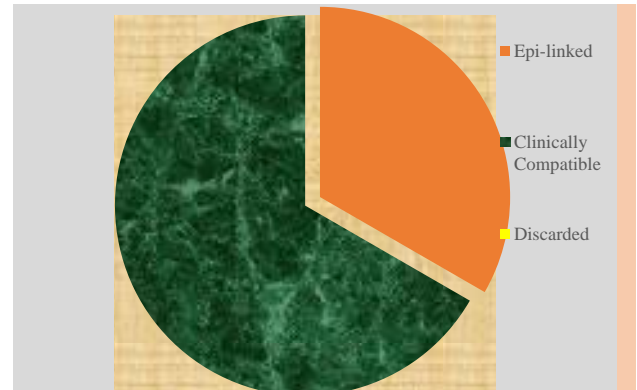
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Summary of cases as of 05 May 2024

Table 1: Distribution of cases by final classification 2024

FINAL CLASSIFICATION	2024	
	NO. OF CASES	%
Lab confirmed	152	6.4
Epi-linked	772	32.6
Clinically Compatible	1,335	56.4
Total	2,259	95.4
Discarded (-ve)	110	4.6
Grand Total	2,369	100.0

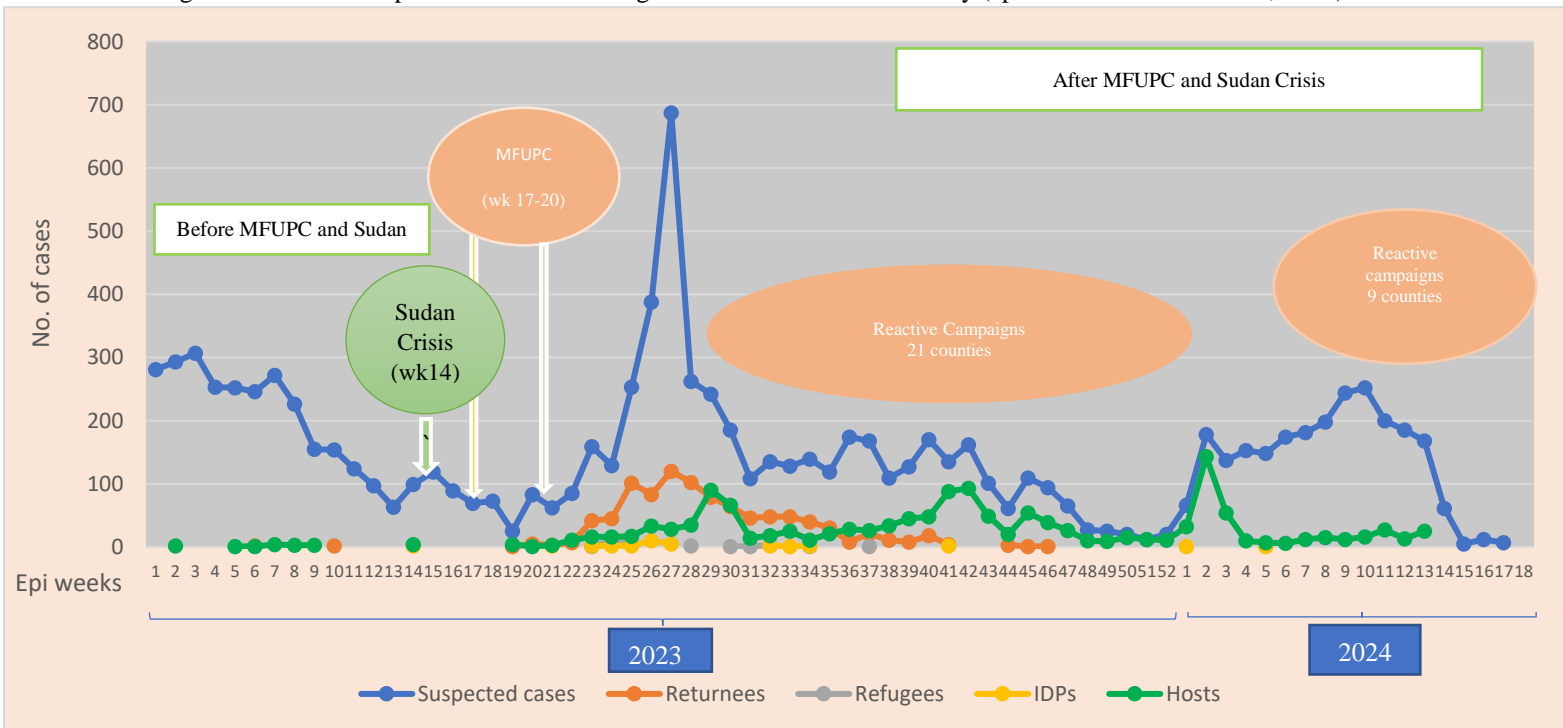
Figure 1: Distribution of deaths by final classification: 2024



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

Out of the 2,369 suspected measles cases, 152 (6.4%) were lab-confirmed, 772 (32.6%) epi-linked, 1,335 (56.4%) clinically compatible, and 110 (4.6%) discarded cases have been reported as of epidemiological week 18, 2024. A total of 26 rubella positive cases from the discarded (negative measles cases)

Figure 2: Trend of suspected measles cases against their residential status by (epi week1 2023 – week18, 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 (Week15 to Week18, 2024)

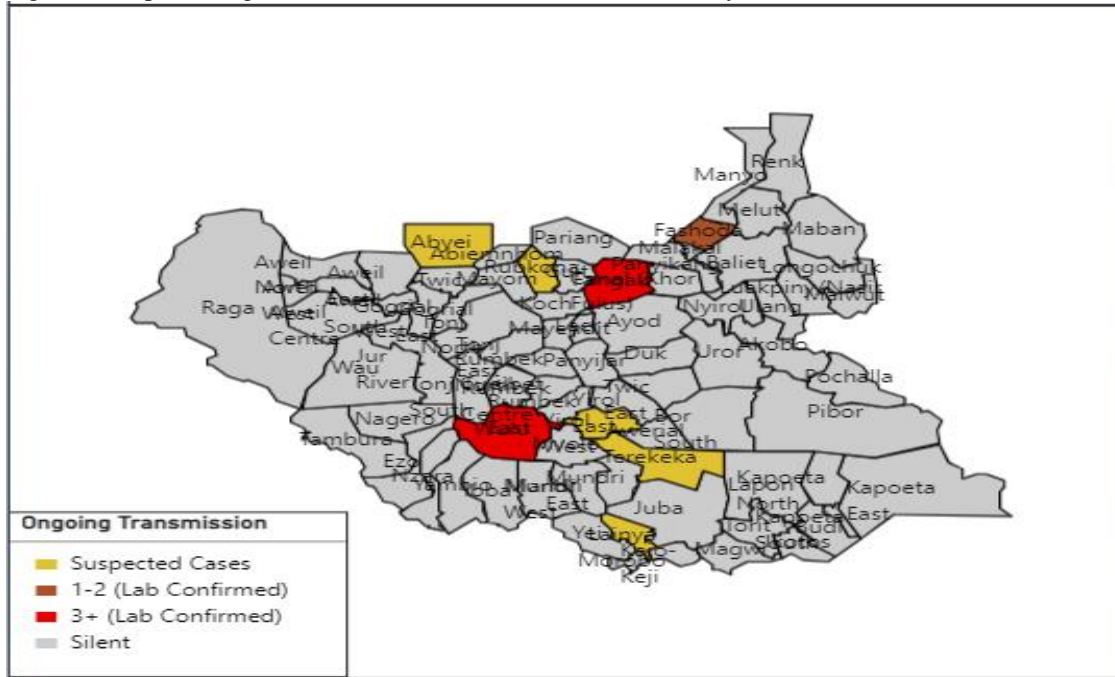
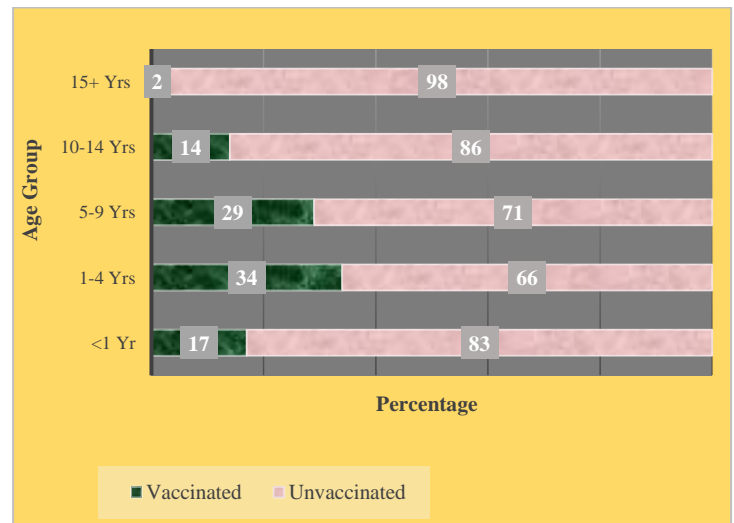


Table 2: Distribution of reported measles cases and deaths by age groups in South Sudan, 2024

Age Groups	2024				
	No. of Suspected Cases	No. of Confirmed Cases	%	Deaths	%
<1 yr	669	23	3.4	21	3.1
1-4 yrs	909	63	6.9	14	1.5
5-9 yrs	324	23	7.1	3	0.9
10-14 yrs	258	15	5.8	0	0.0
15+ yrs	209	28	13.4	1	0.5
Total	2,369	152	6.4	39	1.6

Note: More than half 1,578 (67%) of all the suspected measles cases are children below 5 years of age. The case fatality rate is (1.6%) while 796 (33%) are among other ages from 5 years and above.

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



Note: 1,817(77%) were unvaccinated (zero, unknown) including 1,159(64%) children less than 5 years. Among children less than one year old 669 cases, 557(83%) 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
- WHO is prepositioning kits to support case management in counties with active outbreaks in collaboration with partners and the MOH.

Vaccinations

- The reactive campaign continued in 2024. As of Epi week 17, nine counties implemented the measles reactive campaign to vaccinate **347,812 (86%)** under-five children. Final data from five counties of NBG is yet to be submitted. Out of the total vaccinated, **9,119 (2.6%)** are returnees from Sudan
 - Four counties (Maridi, Mundri East, Tonj North, and Tonj South) completed the campaign.
 - The campaign is ongoing in five counties of NBG (AWE, AWS, AWC, AWN, and AWW) and is expected to be finalized next week.
- Preparation is ongoing for an additional five counties in WES (Yambio, Ezo, Nzara, Ibba, and Tambura). Implementation is scheduled for 7th 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.
 - National supervisors from MOH deployed to support the state/county during implementation
- 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.
 - As of Epi week 17, a total of 7,711 and 7,407 children under fifteen years were vaccinated with Measles and OPV vaccine in 5 POE sites of Melut and Akobo.

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)

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- 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
- 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 swaps 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%	complete
Aweil West	58,672	49,509	3,004	52,513	90%	Partial
Aweil North	46,998	31,448	2,060	33,508	71%	Partial
Aweil South	29,871	25,564	9	25,573	86%	Partial
Aweil Center	30,548	34,652	20	34,672	113%	Partial
Aweil East	108,621	58,756	3,946	62,702	58%	Partial
Total	404,441	338,693	9,119	347,812	86%	



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Annex 2:Phase II POE/Temporary Transit site Measles and OPV vaccination April 2024

State	County	POE Site	Measles				OPV			
			6 -11 months	12 - 59 months	6 - 14 Years	Total Vaccinated	0 – 11 months	12 - 59 months	6 - 14 Years	Total Vaccinated
Jonglei	Akobo	Akobo Hospital	1,190	1,423	1,228	3,841	1,705	1,426	1,228	4,359
		Old Akobo	890	1,274	1112	3,276	819	890	747	2,456
Upper Nile	Melut	Friendship	20	71	9	100	19	72	7	98
		Palouch PHCC	69	282	53	404	70	308	57	435
		Palouch PHCU	28	58	4	90	19	37	3	59
Total		5	2,197	3,108	2,406	7,711	2,632	2,733	2,042	7,407

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