



Republic of South Sudan Measles Outbreak & Response Weekly Situation Update



World Health
Organization
South Sudan

Issued Number: 26 Issued Date: 20 August 2024, Epi Week: 32 (12-18 August 2024)

Background

As of Epi week 32, 2024, 3,160 suspected measles cases were reported, 173 (5.5%) lab-confirmed, 41 reported measles deaths, and a case fatality rate of (1.3).

The observed surge in suspected measles cases peaked in week 10 with a steady decline, and no confirmed cases have been reported since week 27.

The high discrepancy between suspected and confirmed cases indicates the critical need for enhanced surveillance, sample collection, and robust laboratory testing. These are crucial to ensuring accurate diagnosis and effective control of the outbreak.

As of Epi week 32 in 2024, reactive vaccination efforts have led to county-wide campaigns in 15 counties (Maridi, Mundri East, Tonj North, Tonj South, Aweil East, Aweil South, Aweil Center, Aweil North, Aweil West, Yambio, Nzara, Ibba, Tambura, Ezo and Rumbek Center) with 544,104 (93%) children vaccinated against measles virus, of which 2% are returnees. The details of the results are in the annex below. Preparation is ongoing for the six counties targeting the extended age group.

Epidemiological Overview

Suspected Measles Cases

New: 0

Cumulative: 15,260

Lab Confirmed Cases

New: 0

Cumulative: 1,178

EPI - Linked Cases

New: 0

Cumulative: 5,229

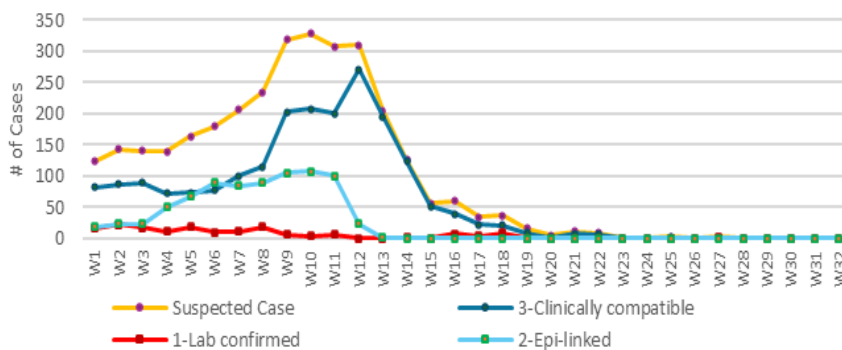
Death

New: 0

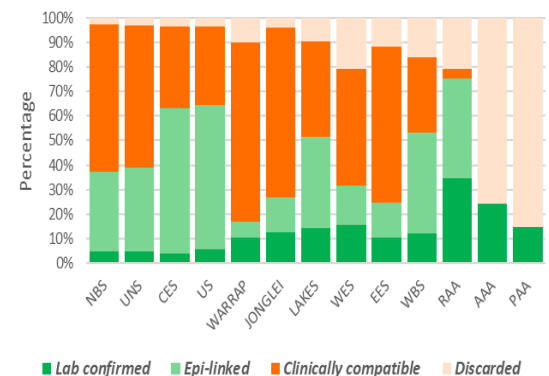
Cumulative: 269

CFR: 1.76

Weekly trend of Measle suspected cases by clasfication as of Week 32 (19, Agust 2024)



Overview of Suspected Measles Cases by Final Classification and State as of Epi-Week 32, 2024



Key weekly Situation Update as of 04 August 2024

- ♦ Epi week 32 data shows no ongoing outbreaks nor newly lab confirmed cases.

Data Source: RSS MOH, Data 2022– 2024 (Cumulative)

Summary of cases as of Epi-Week 32 (19 August 2024)

As of Epi-Week 32, 2024				
Final Classification	# of Cases	Dead	% Cases	% Death
Lab confirmed	173	1	5.5%	2.4%
Epi-linked	789	13	25.0%	31.7%
Clinically compatible	2060	26	65.2%	63.4%
Discarded	138	1	4.4%	2.4%
Grand Total	3160	41		

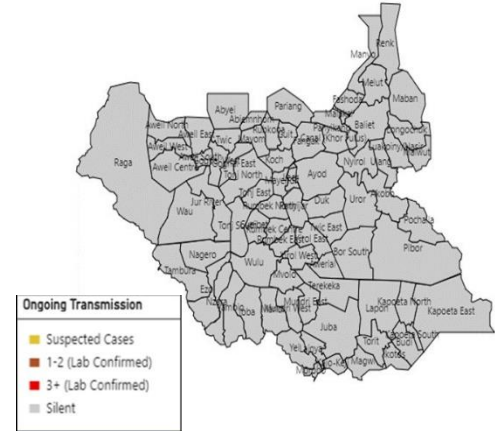
As of Epi Week 32, 2024, the data reveals that most measles cases and deaths fall under the clinically compatible category, which accounts for 65.2% (2,060 out of 3,160) of cases and 63.4% (26 out of 41) of deaths.

Epi-linked cases, representing 25% of the total, have reported a high death rate (31.7%). However, the results should be interpreted cautiously, given the difficulty of epi-linking in most cases.

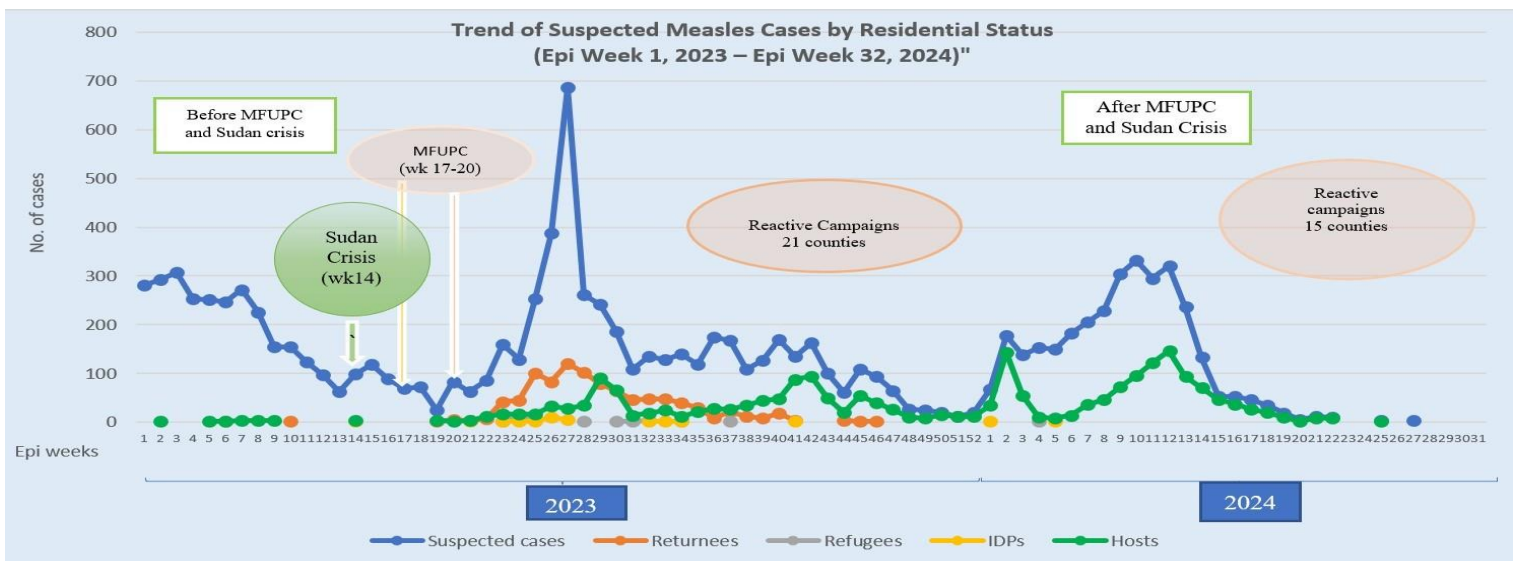
Lab-confirmed cases, while fewer, have a lower death rate (2.4%), likely reflecting more targeted care and accurate diagnosis.

Discarded cases contribute minimally to the overall case count and deaths, underscoring the importance of accurate classification in outbreak management. Overall, the data emphasizes the critical need for improved diagnostic accuracy and timely intervention, particularly for clinically compatible and epi-linked cases, to reduce the fatality rate.

Figure 3: Map showing lab-confirmed outbreak counties in



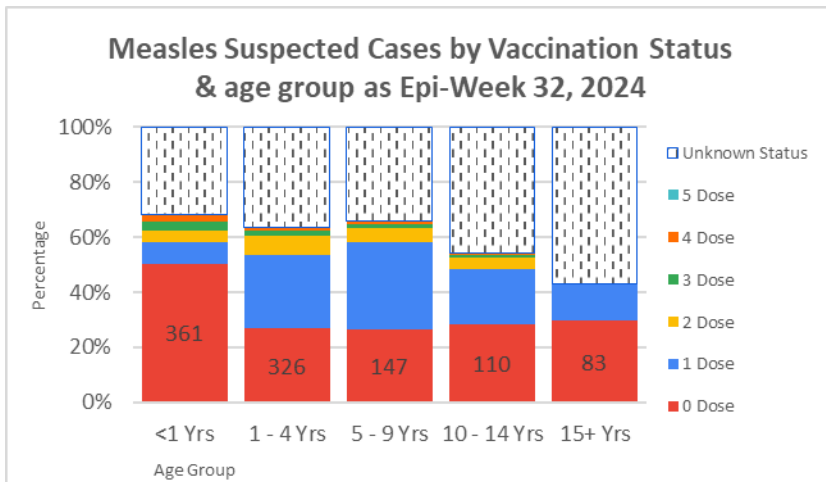
From the map, all regions in South Sudan are shaded gray, indicating that there have been no reported measles cases during the last four weeks (EP Week 28 to 32 in 2024). This suggests that no suspected or confirmed measles cases were reported across the country during this period.



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.



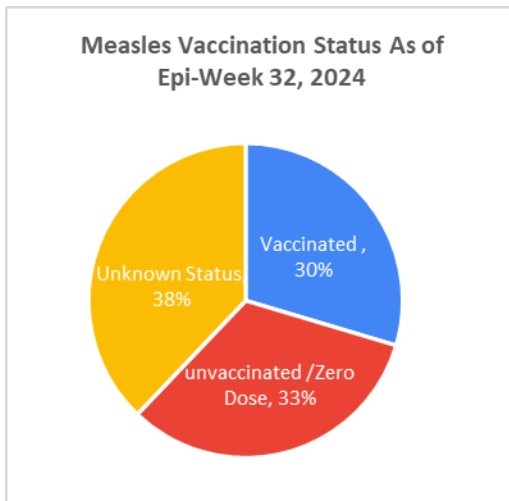
Vaccination Status



The above chart shows the distribution of suspected measles cases by vaccination status and age group as of Epidemiological Week 32, 2024. It indicates that most suspected cases occur in children under five years old, with a significant portion of them either unvaccinated or having received only one dose of the measles vaccine.

The highest number of suspected cases is in the **<1 Year** age group, with a substantial percentage unvaccinated.

The pie chart depicts measles vaccination status across all age groups as of Epidemiological Week 32, 2024. It shows that 38% of the population has an unknown vaccination status, while 33% are unvaccinated, leaving a large portion vulnerable to measles. Only 30% of individuals were vaccinated, indicating that less than a third of the population is protected



against the disease. The high percentage of unvaccinated and unknown cases highlights the potential risk for measles outbreaks and underscores the need for improved vaccination coverage and reporting.

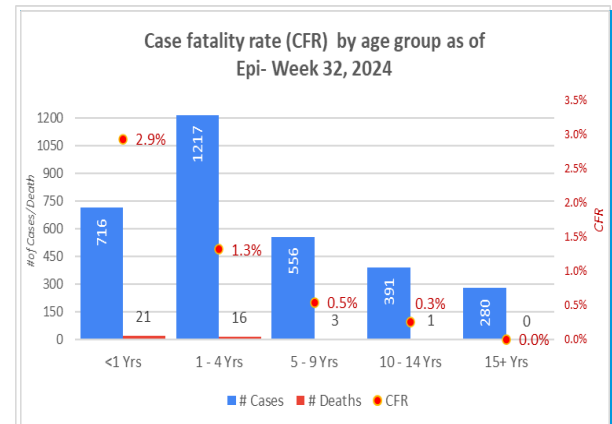


Surveillance and Laboratory



- Enhanced surveillance ongoing in silent counties
- Sample collection for all counties with suspected measles cases.
- 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)

Case Fatality Rate (CFR)



The data indicates that the Under 1 Year age group is the most vulnerable, with a CFR of 2.9%, largely due to a high proportion of unvaccinated individuals. The 1 to 4 years group also shows a significant risk, with a CFR of 1.3%, though slightly lower as some vaccination coverage begins to appear. The 5-9 Years group experiences a further reduction in CFR to 0.5%, reflecting improved outcomes likely linked to higher immunity levels. In the 10-14 Years group, the CFR drops to 0.3%.

The 15+ Years group shows no reported deaths, resulting in a CFR of 0%, indicating this age group is the least at risk for mortality outcomes. Overall, the correlation between age, vaccination status, and CFR emphasizes the critical importance of early and widespread vaccination to prevent severe measles outcomes, particularly in younger children.



Case Management

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



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)



Immunization activities

As of Epi week 31, Fifteen counties implemented a measles reactive campaign, vaccinating 544,104 (93%) under-five children. Out of the total vaccinated, **10,353 (2%)** are returnees from Sudan.

Seven counties in WES (Maridi, Mundri East, Yambio, Nzara, Ibba, Tambura, and Ezo) vaccinated 162,037 (99%) under-five children. Five counties of NBS (Aweil East, Aweil South, Aweil Center, Aweil North, and Aweil West) reached 236,284 (86%) under-five children. Two counties from Warrap (Tonj North and Tonj South) vaccinated **96,832 (109%)** children (6 - 59 months)

One county from Lakes (Rumbek Center) vaccinated **48,951 (83%)**.

The targeted vaccination response done in Fangak County was limited to only two Payams, where the outbreak is confined.

Reactive campaign is currently ongoing in 3 Counties Wulu, Wau, and Jur River) for extended age groups. Additional 3 counties, Juba, Yei, and Morobo) planned will target children from 6 months to 59 months of age. The campaign is scheduled to commence on 10th September 2024.

A total of 410,157 children are being targeted for the campaign. Funding for both vaccine procurement and operations has been secured.

POE/Temporary transit vaccination activities are ongoing, with Measles and OPV vaccines targeting children under fifteen years old. Data as of week 31 indicate that the following coverage is provided.

A total of 37,578 children have been vaccinated with measles vaccines, 24,617 of whom were children from 6 months to 59 months and 12,961 of whom were children from 5 years to 14 years old.

A total of 35,200 people have been vaccinated with Polio vaccines, 22,748 of whom are children from birth to 59 months and 12,452 of whom are children from 5 to 14 years.

Operational challenges & Way forward

Challenges

- 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
- Finalize Root cause analysis
- 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)
- Prompt detection and management of measles cases
- Blood samples to be collected from all suspected cases to monitor the measles 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.
- Root Cause Analysis been planned by the NMOH.

Annex: Measles Reactive Vaccination (Jan to August 2024)

State	#	County	Target Population (6 to 59 months)	Children vaccinated			Coverage	Status of Implementation
				Male	Female	Total		
WES	1	Maridi	24,025	12,871	13,067	25,938	108%	Completed
	2	Mundri East	16,577	8,294	7,780	16,074	97%	Completed
	3	Yambio	45,770	20,751	22,424	43,175	94%	Completed
	4	Nzara	19,722	8,851	10,411	19,262	98%	Completed
	5	Ibba	12,652	5,567	5,750	11,317	89%	Completed
	6	Tambura	16,940	8,339	9,015	17,354	102%	Completed
	7	Ezo	27,635	13,610	15,307	28,917	105%	Completed
Warrap	8	Tonj North	63,216	36,203	36,511	72,714	115%	Completed
	9	Tonj South	25,913	12,131	11,987	24,118	93%	Completed
Norther Bair El Ghazal	10	Aweil West	58,672	27,174	27,277	54,451	93%	Completed
	11	Aweil North	46,998	21,097	22,857	43,954	94%	Completed
	12	Aweil South	29,871	17,336	17,885	35,221	118%	Completed
	13	Aweil Center	30,548	15,659	16,532	32,191	105%	Completed
	14	Aweil East	108,621	35,193	35,274	70,467	65%	Completed
Lakes	15	Rumbek Center	58,669	24,111	24,840	48,951	83%	Completed
Total			585,830	267,187	276,917	544,104	93%	

Who to contact for further information

Dr Kediende Chong
DG Preventive Health Services and Emergency Response

MOH Republic of South Sudan
Email: mkedienne@gmail.com
P: +211 928 3553 24

Dr. Joseph Lasu
Emergency Preparedness & Response Director
E: josh2013.lasu@gmail.com
P: +211 921 395 440

South Sudan PHEOC
E: sspheoc@gmail.com
P: +211 925 851 662/
+211 917 235 355

Dr Aggrey Bategereza
EP&R TL, WHO
E: bategerezaa@who.int

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

State	County	# of POE Sites	Measles			OPV		
			6 to 59 Months	5 to 14 Years	Total Vaccinated	0 – 59 months	5 to 14 Years	Total Vaccinated
Central Equatoria	Juba	3	1,412	1,022	2,434	1,460	1,025	2,485
Jonglei	Akobo	2	12,054	6,884	18,938	12,878	6,491	19,369
Upper Nile	Melut	3	3,507	419	3,926	3,531	423	3,954
	Malakal	1	228	326	554	217	323	540
	Maiwut	1	4,486	1,786	6,274	2,608	2,074	4,682
Northern Bahr El Ghazal	Aweil East	1	1,158	2,122	3,280	1,056	1,904	2,960
	Aweil North	2	1,770	402	2,172	998	210	1,210
Total	6	13	24,617	12,961	37,578	22,748	12,452	35,200

Abbreviations

FMOH: Federal Ministry of Health, **WHO CO:** World Health Organization Country Office, **UNICEF:** United Nations Children's Fund, **HQ:** Head Quarter, **NPEV::** Non-polio Enteroviruses, **cVPDV2:** circulating vaccine-derived poliovirus type 2
IPV/YF: Inactivated Poliovirus Vaccine /Yellow Fever, **AFP::** Acute Flaccid Paralysis
SBC: Social & Behavioral Change Communications, **HP:** Health Promotion, **ORPG:** Outbreak Response and Preparedness Group
NTC: National Technical Committee **NITAG:** National Immunization Technical Advisory Groups