

Republic of South Sudan

Measles Outbreak and Response Weekly Situation Update

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 Epidemiological week Week 43 (23 - 29 October 2023)

Suspected Measles Cases New (5) cases with date of onset in week 43 Cumulative (11,106)	Lab Confirmed Cases New (0) Cumulative (922)	Deaths New (0) Cumulative (196) CFR 1.8
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* The above data is cumulative from 2022

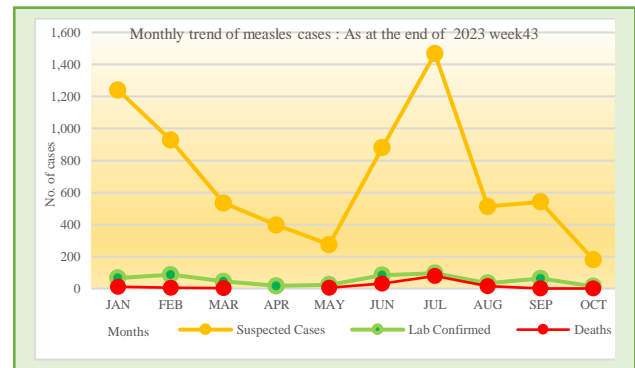
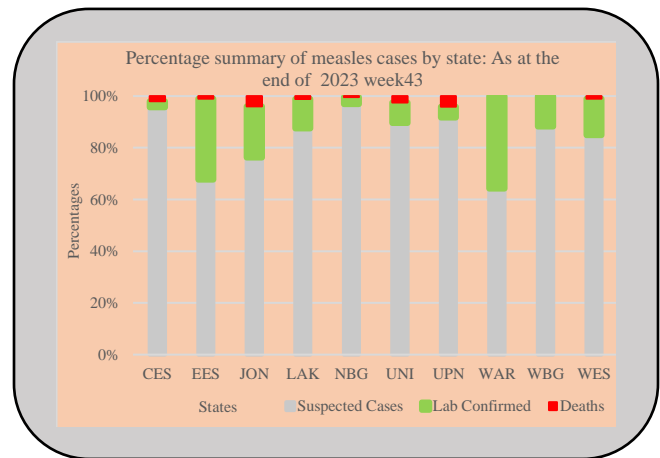
Background

As of Epi week 43, year 2023, 6,958 suspected measles cases were reported, with 530(7.6%) lab-confirmed, 151 deaths, and a case fatality rate of 2.2.

After the nationwide Integrated Measles Follow-up Campaign in May 2023, reactive campaigns were conducted in sixteen (16) counties in two phases: Phase I (Renk, Aweil East, Aweil North, Aweil West) and Phase II (Rubkona, Malakal, Melut, Leer, Juba, Abyei, Gogrial West, Twic, Ayod, Longechuk, Aweial and Yirol East,) in response to the outbreaks reported amongst the returnees from Sudan. 644,877 children (79,909 returnees and 564,968 hosts) have since been vaccinated with the Measles vaccine ([Details in Appendix 1 and 2 below](#)).

Despite observing a downward trajectory in the suspected measles cases since the peak in July 2023, week 27 (refer to figure 2), the persisting outbreak risks demand continued attention.

Epi weeks 40-43 data shows two counties with ongoing outbreaks in October and twelve counties reporting suspected/confirmed cases but are yet to reach the outbreak threshold, warranting further investigation and laboratory validation.



Key weekly Situation Update as of 29 October 2023

- Five (5) new cases reported this week from **Pigi-Canal (Khor Fulus)**
 - Late batch of additional 544 cases in week 4-42 have been reported this week from **Pigi-Canal (Khor Fulus)** (31), **Juba** (13) and **Kapoeta East** (500).
- No newly confirmed lab cases in week 43.
- No new death has been reported this week. However, two additional deaths in weeks 28 and 41 from **Pigi-Canal (Khor Fulus)** were reported.
- No newly confirmed outbreaks, but **Pibor** and **Akobo** still have ongoing measles outbreak as of epi week 40 with no response.
- **Juba, Torit, Wau, Tonj East, Tambura, Nyirol, Maridi, Lafon, Fangak, Pigi-Canal (Khor Fulus), Kapoeta East and Renk** continue to report suspected/confirmed cases that have not reached the outbreak threshold in the last four weeks and need to collect more samples for testing as per the revised SOP.

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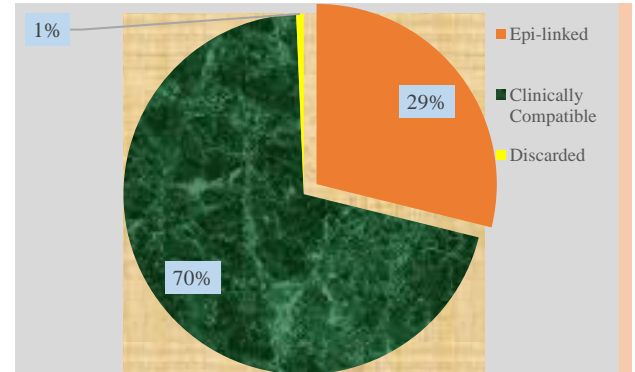
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Summary of cases as of 29 October 2023

Table 1: Distribution of cases by final classification: 2023

FINAL CLASSIFICATION	2023	
	NO. OF CASES	%
Lab confirmed	530	7.6
Epi-linked	1,537	22.1
Clinically Compatible	4,604	66.2
Total	6,670	95.9
Discarded (-ve)	287	4.1
Grand Total	6,958	100.0

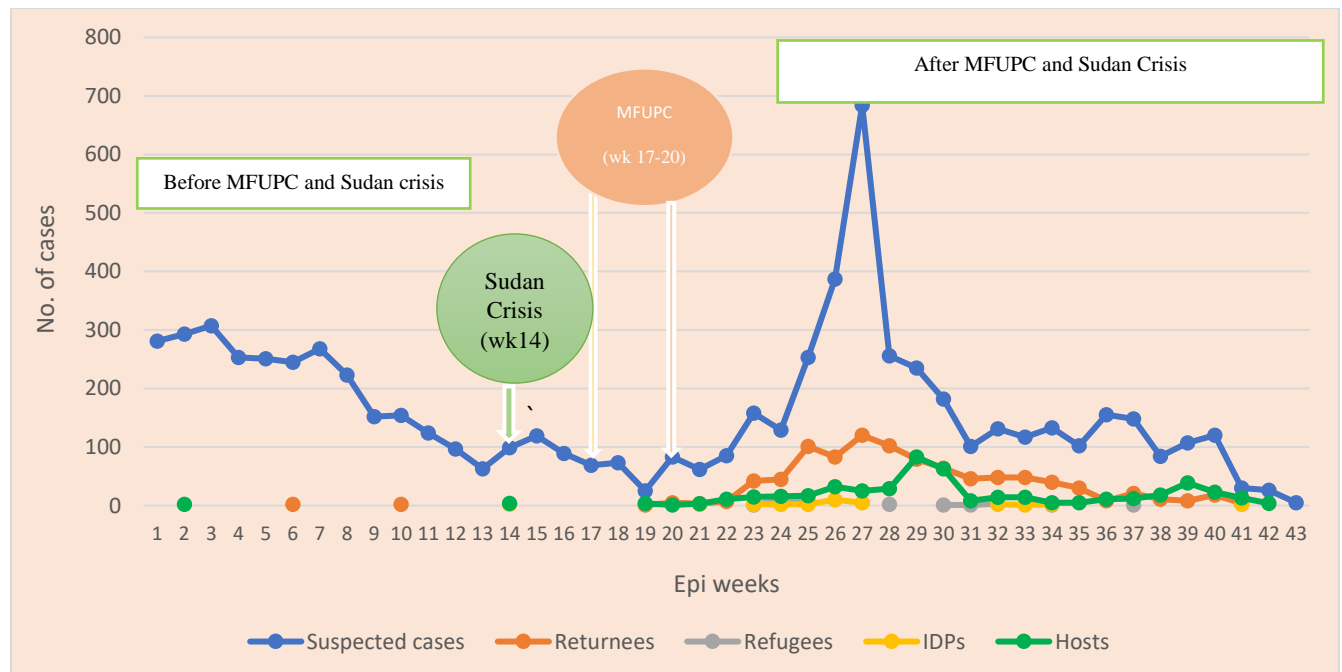
Figure 1: Distribution of deaths by final classification:



Out of the 6,958 suspected measles cases, 530(7.6%) are lab-confirmed, 1,537(22.1%) epi-linked, 4,604(66.2%) clinically compatible, and 287(4.1%) discarded cases have been reported from epidemiological week 1 to week 43, 2023. A total of 44 rubella positive cases from the discarded (negative measles cases)

A total of 151 measles-related deaths were reported since January 2023. 70%(107) were among clinically compatible cases whereas 29%(43) and 1%(1) occurred among the epi-linked and discarded cases respectively.

Figure 2: Trend of suspected measles cases against their residential status by epi weeks: 2023



Note: Measles cases have been reported from different counties throughout 2023. The observed peaks are driven by different counties that experienced a surge in measles cases at different times. The Sudan crisis started in week 14 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: A map showing outbreak counties in the last four weeks (week 40-43):2023

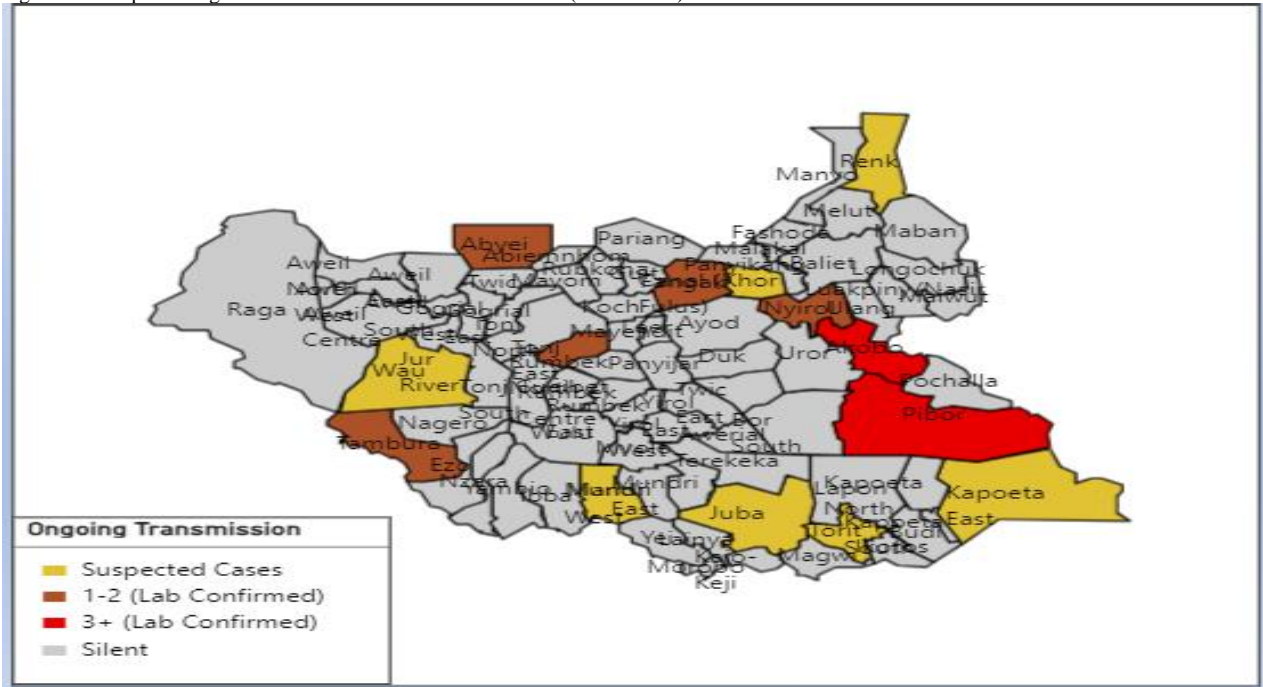
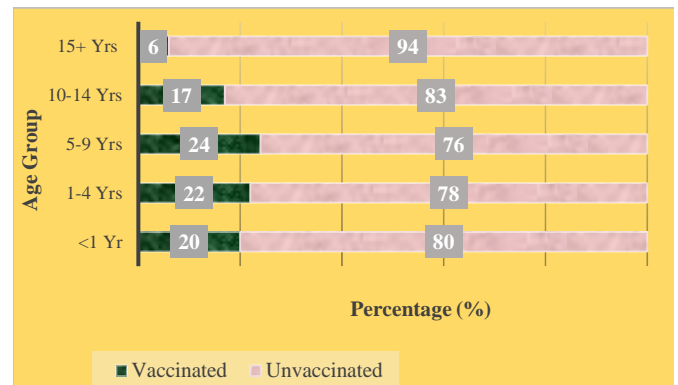


Table 2: Distribution of reported measles cases and deaths by age groups in South Sudan, 2023

Age Groups	2023			
	No. of cases	%	Deaths	%
<1 Yr	1,262	18.1	26	2.1
1-4 yrs	3,379	48.6	90	2.7
5-9 yrs	1,341	19.3	18	1.3
10-14 yrs	468	6.7	7	1.5
15+ yrs	508	7.3	10	2.0
Total	6,958	100.0	151	2.2

Note: More than half 4,402(69%) of all the measles cases are children below 5 years of age. The case fatality rate is highest (2.7%) among children age 1-4 years. Most (116)77% out of the 151 reported deaths were among children below age 5 years

Figure3: Percentage distribution of measles cases and their vaccination status: 2023



Note: Generally, 5,522(79%) were unvaccinated (zero, unknown) including 3,641(66%) children <5 years. Among children less than one year old (1,262 cases), 80% (1,011 cases) have not been vaccinated against measles compared with 251(20%) vaccinated. This trend is observed across all the age groups.

Coordination

- The Incident management structure remains in place and lead by the MOH
- The vaccination response and the measles outbreak post-Sudan crisis plan developed and shared with partners.
- The country has finalized a budget for the Measles outbreak component of the Sudan crisis
- IAR done awaiting final report and recommendation.



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Surveillance and Laboratory

- Enhanced surveillance ongoing in silent counties
- Sample collection for all counties that last had measles outbreak confirmed in the last 4 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)

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

- Phase I Measles reactive vaccination campaign had a total of 65,605 children under 15 years vaccinated in 5 counties (Renk, Aweil East, Aweil North, Aweil West and Rubkona)
- A total of 15 counties were targeted for the Phase II reactive measles vaccination campaign, and 14 counties were targeted for POE/Transit post-vaccination
 - Seven counties (Ayod, Leer, Fangak, Abyei, Gogrial West, Bentiu POC, and Malakal) were supported by Partners (MEDAIR, HFO, IHO, MSF, and Save the Children).
 - WHO supported the other counties, while UNICEF supplied all the vaccines required
- As of week 43, a total of 12 counties have implemented the campaign (Ayod, Leer, Juba, Rubkona, Malakal, Melut, Abyei, Longechuk, Gogrial West, Twic, Awerial and Yirol East).
 - Complete data submitted from 10 counties and partial data from 2 counties, which makes a total of 579,272 (87%) of children vaccinated as of 30/10/2023.
- Fangak county received a third of the vaccine and supply on the 17th of Oct and started the campaign for Payams supplied vaccine from Keew airstrip. The remaining dropping points will be supplied once the airstrip is landable.
- Two counties (Maban and Maiwut) are pending implementation due to vaccine stockout at the national level. The implementation will be delayed till stock is replenished.
- Akobo county in Jonglei state prioritized the outbreak response with the available vaccine in the country. The vaccine and supply were ready for delivery on 1st of Nov, 2023. However, it is postponed till the airstrip in Akobo and Walgak is landable.

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 poor 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



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Way Forward

- MOH and partners to support 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 to fill in the anticipated Measles vaccine rupture.
- Prompt detection and management of measles cases
- Addition of Vitamin A in future responses
- Blood samples to be collected from suspected cases in counties that continue to report and the lab confirmation is beyond 4 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 the risk communication and community engagement in health and help-seeking behaviour.

Appendix 1: Measles Reactive/Mop-Up Vaccination (Sept to date) 2023

#	County	Target age group	Type of vaccination	Supporting Partner	Status of Implementation
1	Leer	6 to 59 months	Reactive	HFO, /Unicef	Completed (Final data submitted)
2	Rubkona	6 months to 15 years	Reactive	WHO/MSF/ Unicef	Completed (Final data submitted)
3	Malakal	6 months to 15 years	Reactive	MSF- Spain/Unicef	Completed (Final data shared)
4	Juba	6 months to 15 years	Mop up/ Reactive	WHO/Unicef	Completed (Final data shared)
5	Melut	6 months to 15 years	Reactive	WHO/Unicef	Completed (Final data submitted)
6	Abyei	6 to 59 months	Mop Up	Save the children/ Unicef	Completed (Final data submitted but waiting to be uploaded on ODK)
7	Gogrial West	6 to 59 months	Reactive	IHO, /Unicef	Completed (Final data submitted)
8	Twic	6 to 59 months	Reactive	WHO	Completed (Final data yet to be submitted)
9	Yirol East	6 to 59 months	Reactive	WHO	Completed (Final data submitted)
10	Awerial	6 to 59 months	Reactive	WHO	Completed (Final data yet to be submitted)
11	Ayod	6 to 59 months	Mop up	MEDAIR/IMA/ Unicef	<ul style="list-style-type: none"> • Ongoing Waiting for vaccine and supply delivery in the remaining Payams



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12	Longechuk	6 months to 15 years	Reactive	WHO/Unicef	<ul style="list-style-type: none"> Ongoing <p>Jangok, Udier and Chotbora Payams completed Dajo area yet to receive vaccine and supply</p>
13	Fangak	6 to 59 months	Mop Up/Reactive	HFO	<ul style="list-style-type: none"> Ongoing <p>Vaccination started in Payams accessed from Keew Old Fangak, Manajang yet to receive vaccine</p>
14	Maban	6 months to 15 years	Reactive	WHO	<ul style="list-style-type: none"> Preparatory activity is ongoing <p>Vaccine stockout to supply the two counties</p>
15	Maiwut	6 months to 15 years	Mop up	WHO	
	Akobo	6 to 59 months	Reactive	WHO	<ul style="list-style-type: none"> MP developed and submitted <p>Vaccine is prioritized to Akobo due to the ongoing outbreak and influx of returnees from Ethiopia</p>
6 counties with confirmed OBR in the last 2 weeks (Kapoeta East, Kapoeta South, Cuiebet, Guit, Abiemnom and Tonj North)					<ul style="list-style-type: none"> Response not yet planned due to Vaccine shortage <p>Discussion ongoing between targeted Vs County wide campaign</p>



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Appendix 2: Measles Reactive/Mop Up vaccination Data from 12 counties

County	Measles					OPV					Status
	Target	Host	Returnee	Total	Coverage	Target	Host	Returnee	Total	Coverage	
Rubkona	158,970	80,862	15,141	96,003	60%	166,035	88,989	16,505	105,494	64%	Complete
Leer	22,515	20,231	4,837	25,068	111%	24,885	21,012	4,860	25,872	104%	Complete
Abeyi	22,761	19,276	2,242	21,518	95%	-	-	-	-	-	Complete
Juba	96,015	75,756	22,312	98,068	102%	104,851	68,742	10,471	79,213	76%	Complete
Gogrial West	81,376	105,198	1,401	106,599	131%	89,942	112,685	1,216	113,901	127%	Complete
Twic	66,070	51,765	3,702	55,467	84%	73,025	61,283	4,998	66,281	91%	Complete
Ayod	42,997	10,136	-	10,136	24%	-	-	-	-	-	Ongoing
Malakal	29,291	25,654	3,328	28,982	99%	30,592	25,298	3,422	28,720	94%	Complete
Melut	30,470	31,177	652	31,829	104%	31,824	27,795	1,595	29,390	92%	Complete
Longechuk	50,289	33,942	7,189	41,131	82%	52,524	30,331	7,496	37,827	72%	Ongoing
Awerial	33,410	28,230	-	28,230	84%	36,927	20,072	-	20,072	54%	Complete
Yirol East	28,049	35,423	512	35,935	128%	31,001	30,916	597	31,513	102%	Complete
Total	662,213	517,650	61,316	578,966	87%	641,607	487,123	51,160	538,283	84%	

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