



Epidemiological Bulletin Week 34, 2023 (August 21–27 August)



Major epidemiological highlights in week 34 of 2023



- In week 34, 2023, the IDSR reporting timeliness and completeness were at 78% and 89% respectively, while EWARN sites were both 84%
- A total of 151 alerts were triggered in week 34, 2023, and most of the alerts were for measles 26% (39/151), malaria, 20% (30/151), and AWD 21% (32/151)
- Measles scale-up response (reactive/mop-up campaigns) plan to be conducted in an additional 22 prioritized counties as of July 2023
- As of 28 August 2023, South Sudan received 253 023 individuals (58 952 households) who have entered South Sudan since 16 April 2023 with 42 149 total returnees in Renk.
- Total of 611 measles cases have been reported in Renk including 48 deaths since the start of the outbreak

SURVEILLANCE PERFORMANCE



For the Integrated Disease Surveillance (IDSR) network and Early warning alert and response network (EWARN)



IDSR timeliness performance at State level for week 34 & 33 of 2023



States Ranking	Implementing Partners	States	Total Numer of Functional Health Facilities	No. of HFs Reported on Time in WK 34	Timeliness Percentage of WK 34	No. of HFs Reported on Time in WK 33	Timeliness Percentage of WK 33
1st	For Afrika, Medair	GPAA	15	15	100%	14	93%
2nd	GOAL,,HFO,UNKEA,SCI,AMREF- CCMF,TADO,HAASS,WVI,IRW	Warrap	113	106	94%	86	76%
3rd	Malaria Consortium, Healthnet TPO, IRC, CEDS, IHO	NBGZ	89	83	93%	79	89%
4th	Doctors with Africa (CUAMM),IMA- WH,YCSS,LiveWell-SS	Lakes	112	104	93%	109	97%
5th	AMREF, World Vision, CUAMM, CDTY, OPEN,Rescue	WES	183	168	92%	151	83%
6th	CMA,Medair,MDM,Medicair,CRSF,CARE,LiveWell- SS,WR,HFO,AAH,IOM,MSF,SCI,CIDO,IMC,CRESA	Jonglei	112	86	77%	73	65%
7th	Cordaid, IMC, IRC, CASS,IOM,Samaritan's Purse,Medair,MSF-H,WR,HFO, CH,AFAA	Unity	88	67	76%	69	78%
8th	IHO,IOM,CARE,IMC,IRW,MHA	WBGZ	83	63	76%	66	80%
9th	Cordaid, HLSS,OPEN,AMREF-CCMF,IRW	EES	107	80	75%	88	82%
10th	HLSS, SSUHA, Concern WW, IHO,GOAL,TRI- SS,SPEDP,IMA-WH,SSHCO,IMC,MSF,CARE	CES	129	80	62%	128	99%
	IMC,CRES-Aid,Concern WW,Health Link,RI,Cordaid,CASS,SPEDP,NIDO,UNKEA,GOAL						
11th	,MSF-E,WVI	Upper Nile	138	78		78	57%
12th 13th	Care International GOAL,SMC	RAA AAA	16 17	8	50% 12%	4	25% 18%
13(1)		South Sudan	1202			948	79%

KFV

NET		
	<60%	Poor
	61%-79%	Fair
	80%-99%	Good
	100%	Excellent



IDSR Completeness performance at State level for week 34 & 33 of 2023



States			Total Numer of Functional Health Facilities	No. of HFs Reported regardless of Time	Completeness Percentage of WK	No. of HFs Reported regardless of	Completeness Percentage of WK
Ranking	Implementing Partners	States		in WK 34	34	Time in WK 33	33
	Doctors with Africa (CUAMM),IMA-						
1st	WH,YCSS,LiveWell-SS	Lakes	112	112	100%	109	97%
	AMREF, World Vision, CUAMM, CDTY,						
2nd	OPEN,Rescue	WES	183	183	100%	163	89%
3rd	ForAfrika, Medair	GPAA	15	15	100%	14	93%
4th	Cordaid, HLSS,OPEN,AMREF-CCMF,IRW	EES	107	106	99%	105	98%
	HLSS, SSUHA, Concern WW, IHO,GOAL,TRI-						
5th	SS,SPEDP,IMA-WH,SSHCO,IMC,MSF,CARE	CES	129	127	98%	128	99%
	GOAL,,HFO,UNKEA,SCI,AMREF-						
6th	CCMF,TADO,HAASS,WVI,IRW	Warrap	113	111	98%	109	96%
	Malaria Consortium, Healthnet TPO, IRC, CEDS,						
7th	IHO	NBGZ	89	85	96%	86	97%
8th	IHO,IOM,CARE,IMC,IRW,MHA	WBGZ	83	76	92%	66	80%
9th	Cordaid, IMC, IRC, CASS,IOM,Samaritan's Purse,Medair,MSF-H,WR,HFO, CH,AFAA	Unity	88	71	81%	73	83%
10th	CMA,Medair,MDM,Medicair,CRSF,CARE,LiveW ell- SS,WR,HFO,AAH,IOM,MSF,SCI,CIDO,IMC,CRESA	longlei	112	86	77%	88	79%
10111	IMC,CRES-Aid,Concern WW,Health Link,RI,Cordaid,CASS,SPEDP,NIDO,UNKEA,GOAL		112	80	7770	00	73%
11th	,MSF-E,WVI	Upper Nile	138	90	65%	94	68%
12th	Care International	RAA	16	4	25%	16	
13th	GOAL,SMC	AAA	17	2	12%	3	18%
		South Sudan	1202	1068	89%	1054	88%

VEV

NE I		
	<60%	Poor
	61%-79%	Fair
	80%-99%	Good
	100%	Excellent

The Timeliness of IDSR Reporting (Supported by EWARS Web and Mobile) at health facility level in week 34 stands at 89% while in week 33 it was 88% and 8 states, and 1 AA are above the National target of 80%.



Surveillance: EWARS Timeliness performance indicator by partner for week 34 and 33 of 2023



Partner	HFs	Reporting			
PARTER	Total Number of Mobile Sites	# of reports received on Time in Week 34	Percentage of Timeliness in WK 34	# of reports received on Time in Week 33	Percentage of Completeness in WK 33
SP	4	4	100%	4	100%
IMC	4	4	100%	4	100%
TRI-SS	2	2	100%	2	100%
SSHCO	1	1	100%	1	100%
SMC	1	1	100%	1	100%
UNH	2	2	100%	2	100%
SCI	2	2	100%	2	100%
HFO	5	4	80%	3	60%
WVI	2	1	50%	1	50%
IOM	1	0	0%	1	100%
CIDO	1	0	0%	0	0%
TOTAL	25	21	84%	21	84%

The Timeliness of EWARS in partners' supported sites stands at 84% in week 34 as well as in week 33



Surveillance: EWARS completeness performance indicator by partner for week 34 and 33 of 2023



Partner	HFs	Reporting			
PARTER	Total Number of Mobile Sites	# of reports received on Time in Week 34	Percentage of Timeliness in WK 34	# of reports received on Time in Week 33	Percentage of Completeness in WK 33
SP	4	4	100%	4	100%
IMC	4	4	100%	4	100%
TRI-SS	2	2	100%	100% 2	
SSHCO	1	1	100%	1	100%
SMC	1	1	100%	1	100%
SCI	2	2	100%	2	100%
UNH	2	2	100%	0	0%
НГО	5	4	80%	3	60%
WVI	2	1	50%	1	50%
CIDO	1	0	0%	1	100%
IOM	1	0	0%	1	100%
TOTAL	25	21	84%	20	80%

The Timeliness of EWARS in partners' supported sites stands at 84% in week 34 while in week 33 it was at 80%

INDICATOR AND EVENT-BASED SURVEILLANCE

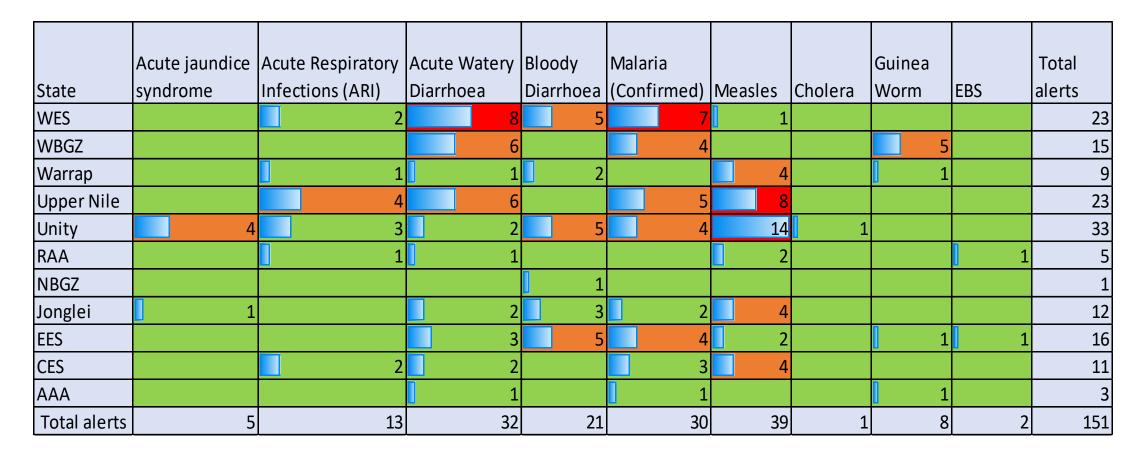


Alert management including detection; reporting; verification; risk assessment; & risk characterization









Most of the alerts generated are for Measles (39), AWD(32), Malaria (30)



Suspect Rabies outbreak in Aweil town, Northern Bahr el Ghazal state



- On 8th June 2023, the WHO field office notified the Ministry of Health through the one health secretariate
 of the increase in mortality in Aweil due to dog bites (suspected rabies)
- The one health secretariat convened an Adhoc meeting and formed a team to be deployed for investigation
- A multisectoral team comprising of eight officers was deployed to Aweil to investigate the alert
- Upon arrival the team found that a total of 725 cases of dog bites were registered in private clinics from January -14th Jul 2023 (Source: Wol Modern Pharmacy, Green World, Abu Temaan and Mathar)
- Huge number of stray dog populations in Aweil town and the surroundings were observed.
- There is inadequate Anti- rabies virus for both human and animal vaccines in the State.
- Increase dog bites in Aweil town and the surroundings, causing communal fight within the communities e.g.,
 Aweil East County
- The One Health secretariate still working with partners such as FAO and WHO to intervene as well as the state authority

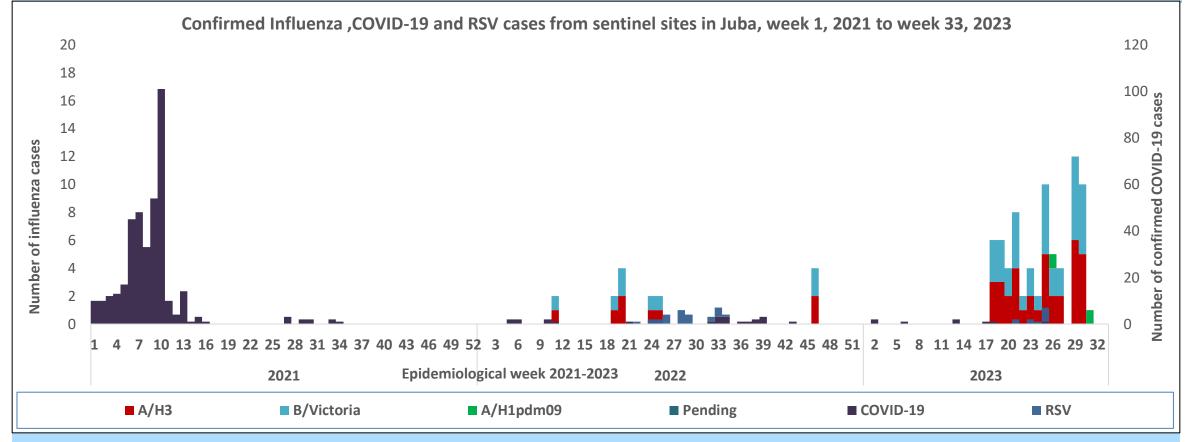
Influenza sentinel Surveillance updates







Routine Sentinel Surveillance | Human Influenza & other Respiratory Pathogens



- There are currently Four designated Influenza sentinel surveillance sites in Juba (Juba Teaching Hospital and Al Sabah Children's Hospital Rumbek State Hospital & Juba Military Hospital) that are collecting epidemiological data and samples from ILI/SARI cases.
- By the end of week 52,2022; a total of 594 ILI/SARI samples were collected,529 samples tested negative, and Cumulatively, 21 tested positive for covid-19,8 positive for Influenza B (Victoria), and 6 were positive for influenza A(H3).26 RSV was confirmed in Week 52
- From weeks 1-33 2023, a total of 512 ILI/SARI were collected all 455 tested negative,7 positives for Covid-19,
 (33)Influenza types A (H3), (2) B (Victoria), 2 for A/H1pdm09 and 13 for RSV in weeks 33,2023

ACTIVE OUTBREAKS AND PUBLIC HEALTH EVENTS

MEASLES ' UPDATES



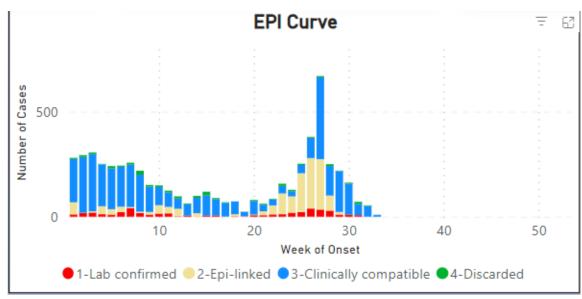
Measles update

World Health Organization South Sudan

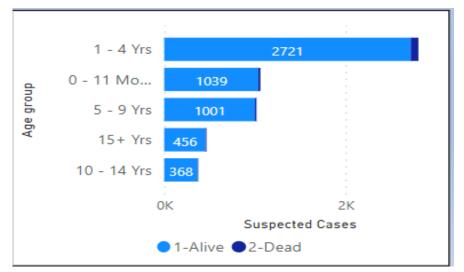
Epi Summary

- In 2023, A total of 5,725 with 142 related deaths have been reported with a CFR of 2.5%
- Nine (9) newly suspected cases were reported this week from Renk (1) and Ayod (8), while 135 retrospective cases were received for weeks 28-32. No laboratory-confirmed case has been reported since week 31 (4 cases)
- Out of the 5,7251 suspected measles cases, 424(7.4%) are lab-confirmed,
 1,306(22.8%) epi-linked, 3,773(65.9%) clinically compatible, and 222(3.9%)
 discarded cases have been reported from epidemiological week 1 to week 33, 2023.
 A total of 25 rubella-positive cases from the discarded (negative measles cases
- The majority more than 65% were reported among children less than 5 years of age with more than 80% having zero/unknown vaccination status in the same age group
- One new death in the reporting week from Ayod. However, data on 11 deaths were received from Juba and Ayod covering weeks 29-32.
- A total of 140 measles-related deaths were reported since January 2023. 72%(101) were among clinically compatible cases whereas 28%(39) occurred among the epilinked cases
- Renk, Ulang, Kajo-Keji, Yei, Koch, Rubkona, Juba, Leer, and Aweil South counties still reporting suspected cases and are advised to collect samples confirmation to guide the response
- This crisis contributed to another round of outbreaks and from EPI week 25 (4 weeks after the last Measles campaign) a total of 1,925 cases have been reported with 25% being returnees.
- The Measles campaign was concluded in May 2023, EPI week 20, with a decline in cases, after which the movement of people due to the Sudan crisis started.

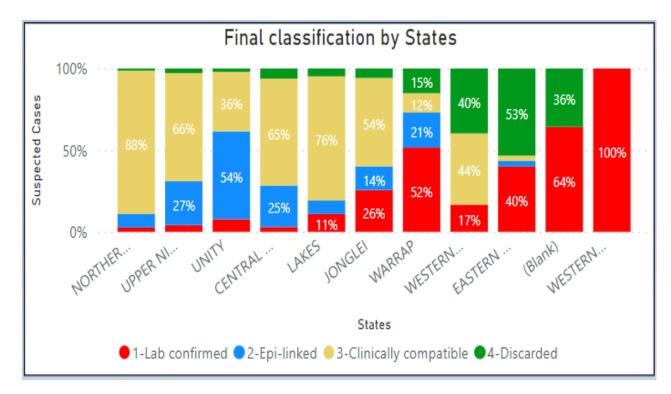
Epi curve of measles cases from week 1 to 33, 2023, South Sudan

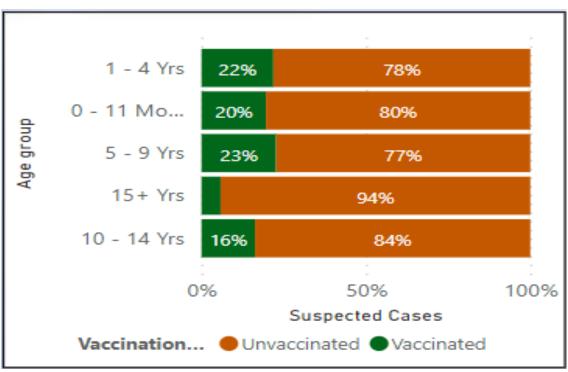


Distribution of cases by age group and outcome











Measles Updates:



Vaccination Updates

- A total of 15 counties were targeted for a reactive campaign, and 14 counties were targeted for POE/Transit post-vaccination
- National EPI TWG endorsed the above plan (4 counties (Juba, Ayod, Longechuk, and Rubkona, with secured funding from WHO, UNICEF, and MEDAIR).
- Approaching partners to support/implement the campaign in the remaining counties, information shared at the HCC and other forums
- Preparation for the implementation in 3 counties is ongoing, with MEDAIR already implementing in Ayod

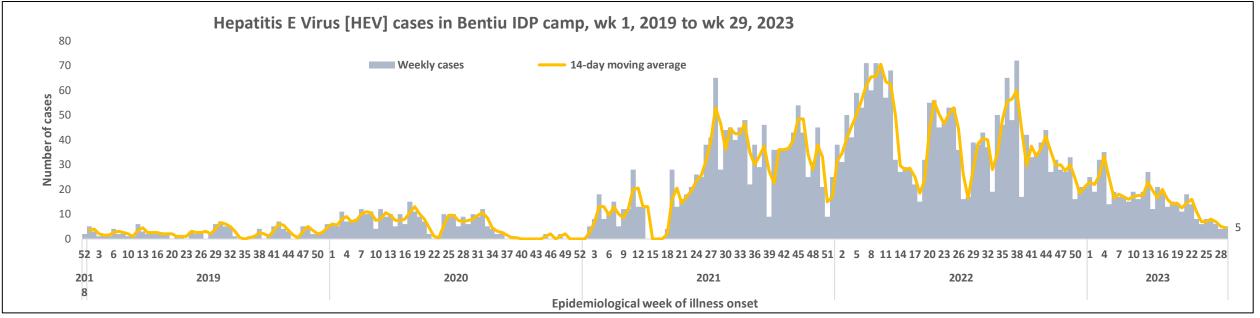
Way forward

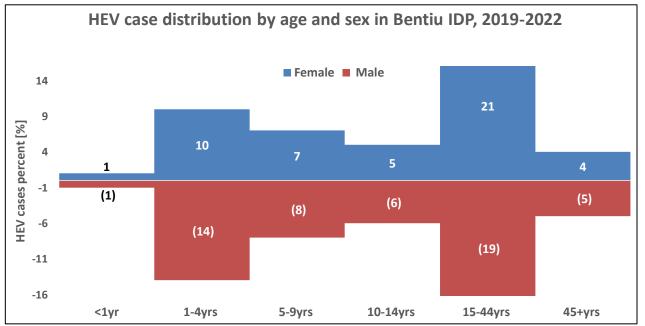
- MOH and partners to support the planned mop-up campaign and other measles activities
- State and County MOH to continue weekly reporting of measles cases (including zero reporting where applicable)
- Prompt detection and management of measles cases
- Blood samples to be collected from suspected cases, 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 risk communication and community engagement in health and help-seeking behavior.

ACTIVE OUTBREAKS AND PUBLIC HEALTH EVENTS

HEPATITIS E ' UPDATES

Hepatitis E Virus/AJS updates Bentiu.





- Total of 4, 253 cases and 27 deaths have been reported since the onset of the outbreak.
- Five AJS cases were reported in week 30
- No new cases reported in week34
- People in the age range of 15 44 years are the most affected age group.

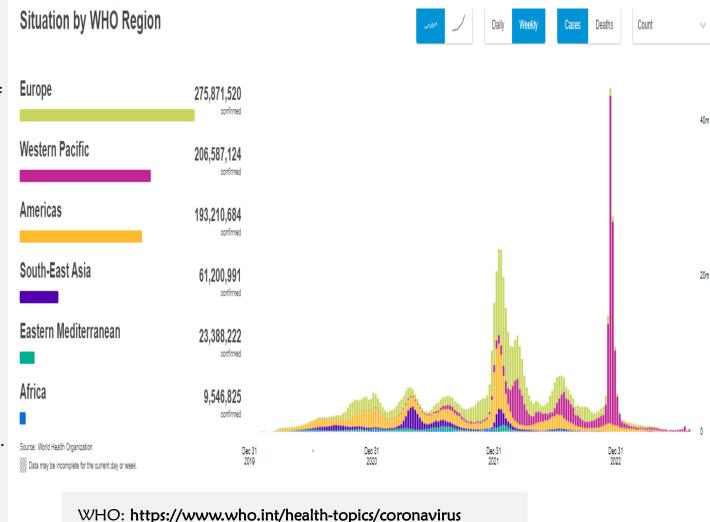
COVID-19 UPDATES The state of the state of

COVID-19 Virus Situation Summary



Situation update as of 30 August 2023

- Globally, as of 30 August 2023, there have been 770,085,713 confirmed cases of COVID-19, including 6,956,173 deaths, reported to WHO. As of 27 August 2023, a total of 13,499,983,736 vaccine doses have been administered.
- In Africa, as of 30 August 2023 there have been 9,547,082
 confirmed cases of COVID-19, including 175,423 deaths reported to the WHO
- In South Sudan, from 3 January 2020 to 16 August 2023, there have been 18,368 confirmed cases of COVID-19 with 138 deaths, reported to WHO. As of 7 May 2023, a total of 4,312,900 vaccine doses have been administered.





HUMANITARIAN RESPONSE

SUDAN CRISIS

Key Figures as of 28 August 2023



Population status

of people tracked at the PoE

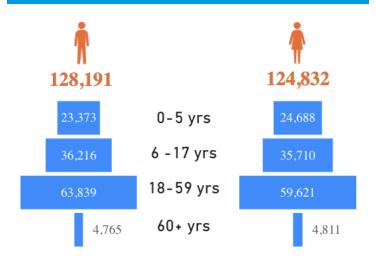
253,023

People moved

132,084



Sex and Age Breakdown



Points of Entries

- Movement for 253,023 individuals has been tracked from various PoEs, 202,517 in Joda alone.
- 128,671 people have been moved.
- The government has assisted the movement of 23% of individuals, humanitarian agencies assisted 44% move, 17% self-organised their movements, 0.4% were moved by assistance through third-country nationalities, and movement for 15% were untracked.
- 84% of the onward movement was from Wunthou/Joda in Renk, Upper Nile State, 15% moved from Panakuch in Unity State, and 1.5% moved from Kiirr Adem in Unity State
- 39,061 individuals (5,874 households) currently are in collective centres and host communities in Renk Town.

Emergency Kits Distribution and Prepositioning

State	No.	Benef	iciaries	County	Recipient/ destination	Amount	%
	Kits	#	%			(USD)	
					IMC, Mubadirum Coordination		
Upper Nile				Renk	Committee, RI, & Goal	227761.83	57%
State	440	106,005	49%	Panikang	IRC	11941.59	3%
				Malakal Hub	Malakal Hub	22474.04	6%
				State total UNL		\$262,177.46	65%
WBG	30	11,325	5%	Raja	WHO Wau Hub	\$13,734.52	3%
NBG	6	32,135	10%	Aweil	WHO Aweil Hub	\$33,189.22	8%
				Rubkona	World Relief & Concern World wide	16749.5	4%
Unity State	91	56,435	26%	Bentiu Hub office	Hub office	\$54,137.90	13%
		,		state total Unity	WHO Bentiu Hub	\$70,887.40	18%
Warrap	62	22,050	10%	Kuajok Hub Office	WHO Kuajok Hub office	\$21,615.98	5%
Grand Total	686	227,950	100%			\$401,604.58	100%

- As of today, WHO managed to distribute or preposition a total of **686** health emergency health kits to six locations that can benefit around **227,950** at the cost of \$\$409,492.58
- Kits issued were mainly; IEHK, Pneumonia, Cholera Investigation & treatment Kits, SAM/MC kits, and field sample collection kits and NCD kits. Other supplies include; Snake Venom antisera & SARS COV-2 Ag RDTs.
- To support WASH activities in health facilities, WHO distributed six handwashing stations and 18 segregation waste bins to Renk.

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Cross Border Support to Health Service Delivery in 2 Areas of Sudan

	Description	Quantity Requested		Total Price	Total # of boxes
1	IEHK 2017, SUPPLEMENTARY) MODULE MEDICINES	3	3	6,292.89	66
2	IEHK 2017, BASIC MODULE, MEDECINES	10	10	1,993.60	10
3	IEHK 2021, SUPPLEMENTARY MODULE, PEP, treatments for 50 adults + 10 children	5	5	4,724.05	5
4	IEHK 2017, SUPPLEMENTARY MODULE, RENEWABLE	3	3	1,725.00	18
5	IEHK 2017, SUPPLEMENTARY MODULE, EQUIPMENT	5	5	3,620.00	10
6	(Kit PED-SAM 2020) MODULE, MEDICINES SAM	10	10	6,244.80	40
7	(Kit PED-SAM 2020) MODULE, MEDICINES PED CONTROLLED	10	0	-	
8	Kit PED-SAM 2020) MODULE, MEDICINES MALARIA	10	10	2,132.70	10
				26,733.04	159

12/09/2023 WHO in South Sudan 24

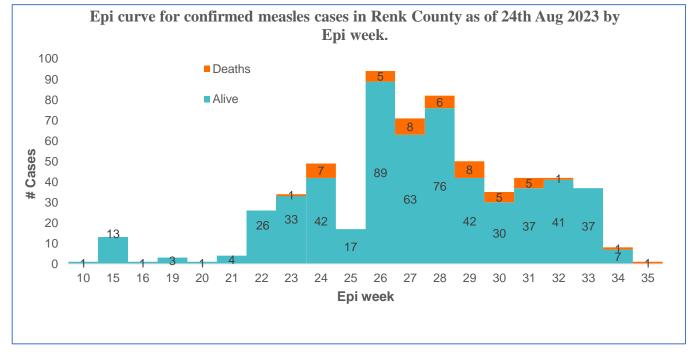
RENK Highlights

- Positive malaria cases are still increasing.
- Currently, IOM has slowed down by 50% on support for onward movement.
- Draft of a humanitarian contingency plan in which a health cluster contributed was developed.
- Construction of the new TC with a capacity of accommodating 4,000 people has started, and World Vision will provide Emergency Clinic medical services at the new TC.
- Floods have affected the Southern part of Renk, which caused a block of access to the airstrip.
- WHO participants in general cleaning in The Renk Civil Hospital.
- 5 days of IDSR training started on Monday.
- Stock out of measle and OPV has affected vaccination at PoE and TC.

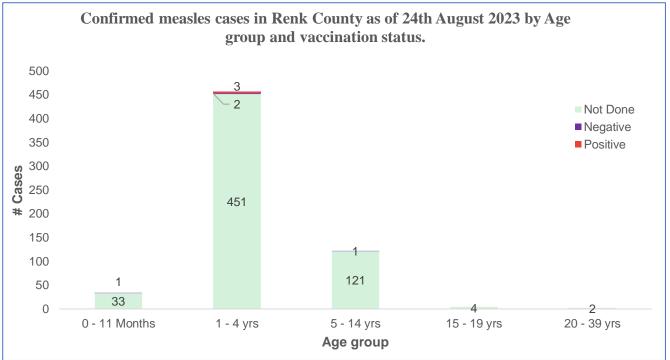
12/09/2023 WHO in South Sudan 25

Measels Updates from Renk

12/09/2023 WHO in South Sudan 26

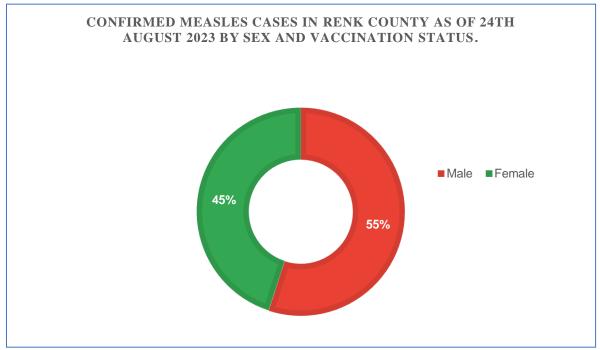


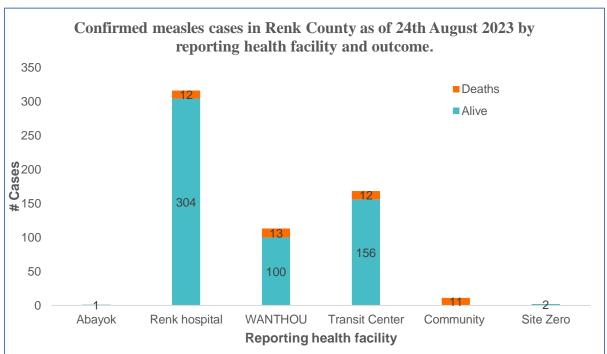
Total of 611 measles cases have been reported including 48 deaths since the start of the outbreak. In week 34 of 2023 there 7 cases and one death reports .Most cases were reported from week 26 and majority of the deaths were recorded in week 27 and 29.



Age Group	Cases	Percentage	Cum %
0 - 11 Months	33	5%	5%
1 - 4 yrs	451	74%	79%
5 - 14 yrs	121	20%	99%
15 - 19 yrs	4	1%	100%
20 - 39 yrs	2	0%	100%
Grand Total	611	100%	

By age group children 1-4 years account for (74%) of the total cases. Followed by 5-14 yrs (20%).

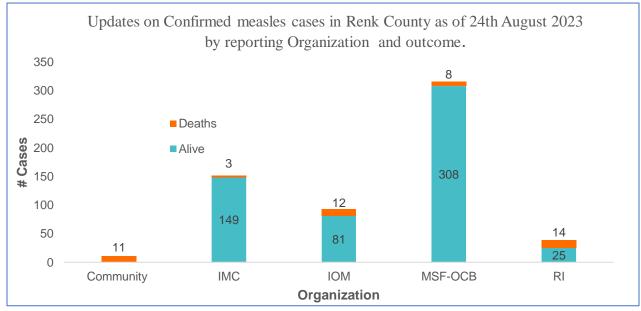


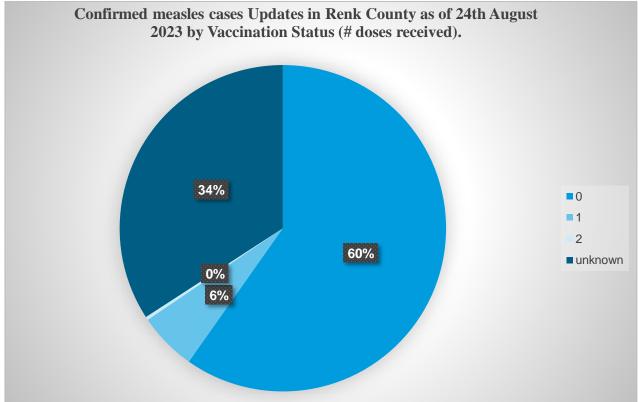


In terms of case distribution by sex, Male account for 55% of the total cases reported more than the female counterparts as shown by the pie chart.

By Location, Renk hospital reported majority of cases and most of the deaths were reported from Wanthou, Renk hospital, TC and in the community, respectively.

NB: Severe Cases from Sudan continued to be referred to Renk Hospital from Wanthou (IOM facility) for further management in MSF-OCB measles isolation unit in Renk hospital.





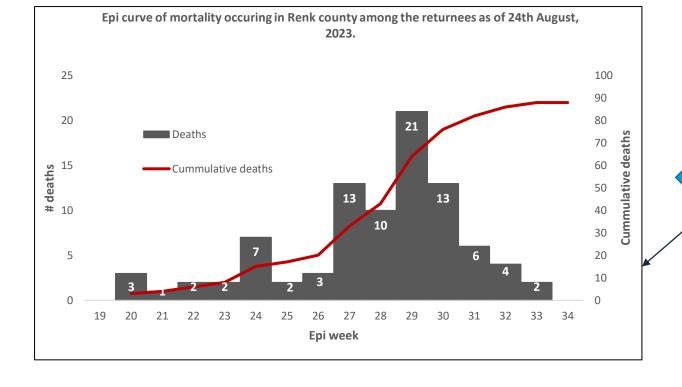
MSF-OCB registered majority of the measles cases (#308 cases & 8 deaths) since the start of the outbreak. Most of the deaths (14 DEATHS) were reported by Relief International (RI).

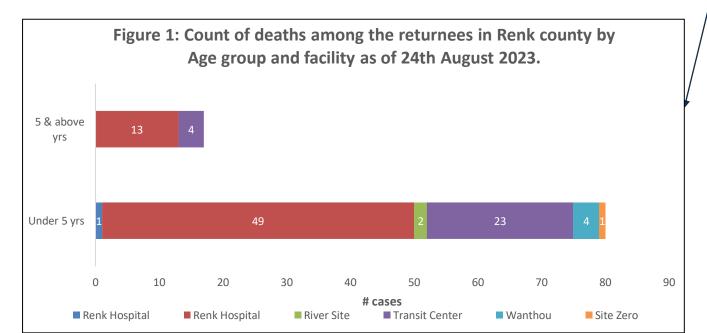
Majority of the cases (60%) received Zero (0) dose and only 6% of the cases received one dose of their vaccine.

Vaccination status of the

34% (# 208) of the total cases were not provided.

# Doses received	Cases	Percentage
0	364	60%
1	35	6%
2	2	0%
unknown	210	34%
Grand Total	611	100%



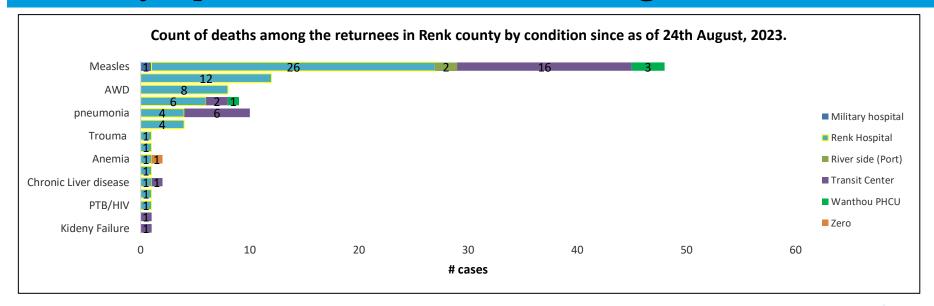


A cumulative of 89 deaths have been reported since week 3 to week34 of 2023.

Measles account for 48 of the total deaths.

- Refer to the table in the next slide for all causes of deaths.
- Death by Age group under
 5 accounts for most of the deaths. Refer to the (figure 1) below.

Mortality Updates in Renk as of 24th August 2023.



AWD	Malaria	Versite	Liver Adisansed	CA Prostate	pneumonia	PTB/HIV	Kideny Failure	TB	SAM	Anemia	Trouma	Stroke	Sepsis	PSN	Grand Total
		1													1
8	6	26	1		4	1		4	12	1	1	1	1	1	67
		2													2
	2	16	1	1	6		1								27
	1	3													4
										1					1
8	9	48	2	1	10	1	1	4	12	2	1	1	1	1	102
Q0/_	00/	47 0/	20/	10/	10%	10/	10/	/ 10/	120/	20/	10/	10/	10/	10/	100%
	8	8 6 2 1	1 8 6 26 2 2 16 1 3 8 9 48	1 8 6 26 1 2 2 16 1 1 3 8 9 48 2	2 16 1 1 1 1 3 8 9 48 2 1	1 4 2 2 16 1 1 6 1 3 8 9 48 2 1 10	1 4 1 8 6 26 1 4 1 2 2 16 1 1 6 1 3 8 9 48 2 1 10 1	1 4 1 8 6 26 1 4 1 2 2 16 1 1 6 1 1 3 3 4 5 6 1 8 9 48 2 1 10 1 1	1 4 1 4 2 2 16 1 1 6 1 1 3 8 9 48 2 1 10 1 1 4	1 8 6 26 1 4 1 4 12 2 16 1 1 6 1 1 3 8 9 48 2 1 10 1 1 4 12	1 8 6 26 1 4 1 4 12 1 2 16 1 1 6 1 1 3 1 1 1 1 8 9 48 2 1 10 1 1 4 12 2	1 8 6 26 1 4 1 4 12 1 1 2 16 1 1 6 1 1 3 1 3 1 1 4 12 2 1 8 9 48 2 1 10 1 1 4 12 2 1	1 8 6 26 1 4 1 4 12 1 1 1 2 16 1 1 6 1	1 8 6 26 1 4 1 4 12 1 1 1 1 2 16 1 1 6 1	8 6 26 1 4 1 4 12 1 1 1 1 1 2 16 1 1 6 1

In term of deaths by location, Renk hospital and Transit site registered the greatest number of the deaths. Deaths due Measles is also alarming (47%) of the total mortality since the crisis began. Refer to the Table and the chart in this slide.

- Measles account for 47% of the total deaths (n=48)
- Followed by pneumonia (10%), malaria (10%), Malaria (9%)

OVERALL CONCLUSIONS AND RECOMMENDATIONS



Conclusions



- In week 34, 2023, the IDSR reporting timeliness and completeness were at 78% and 89% respectively, while EWARN sites were both 84%
- •A total of 151 alerts were triggered in week 34, 2023, and most of the alerts were for measles 26% (39/151), malaria, 20% (30/151), and AWD 21% (32/151)
- Measles scale-up response (reactive/mop-up campaigns) plan to be conducted in an additional 22 prioritized counties as of July 2023
- As of 28 August 2023, South Sudan received 253 023 individuals (58 952 households) who have entered South Sudan since 16 April 2023 with 42 149 total returnees in Renk.
- ■Total of 611 measles cases have been reported in Renk including 48 deaths since the start of the outbreak

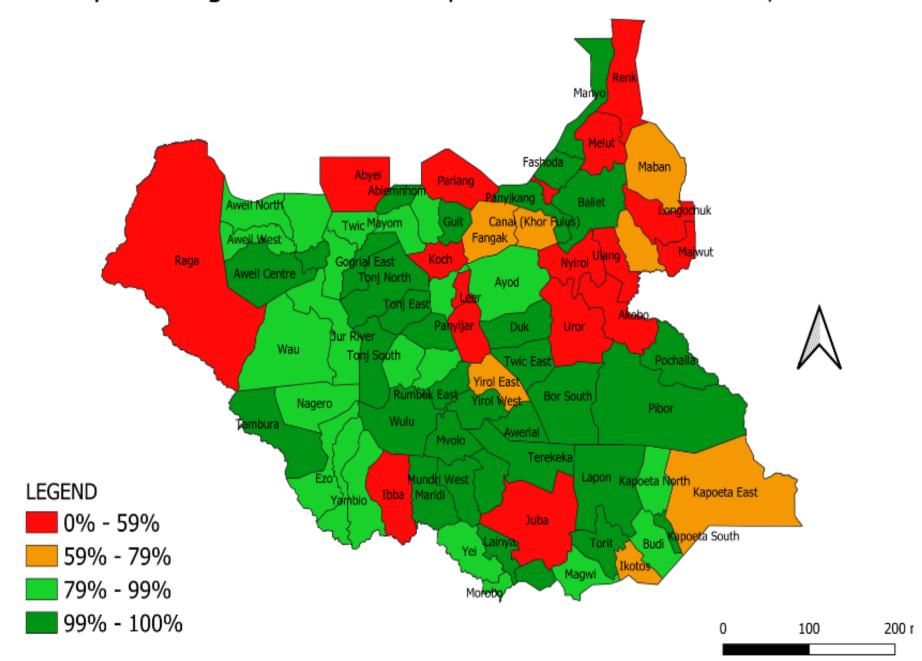


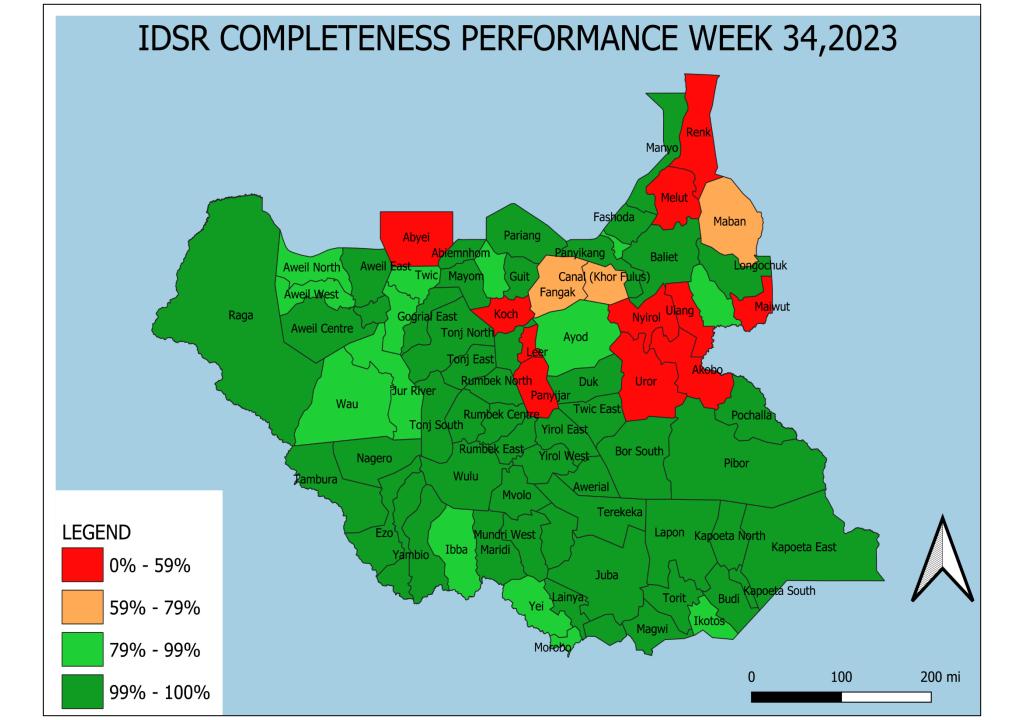
Recommendations

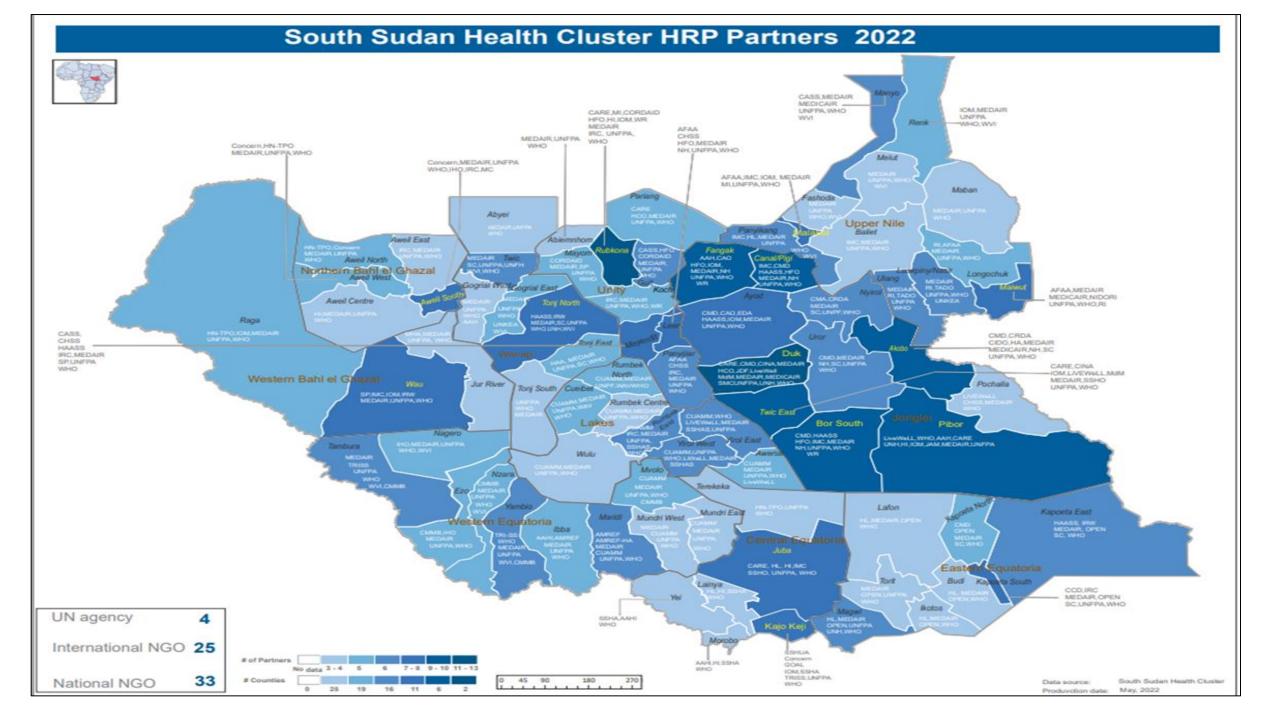


- Partners to continue supporting County Health Departments (CHD) & State Ministries of Health on timely IDSR/EWARN reporting and involve the boma health workers to support community-based surveillance
- Health facilities to conduct an initial investigation on suspected cases of epidemic-prone diseases and collect samples
- Continue with preparedness activities to strengthen surveillance at all levels including conducting afteraction reviews and simulation exercises.
- Continue to support the multicluster response strategy in the reception sites for returnees/refugees' influx due to the Sudan crisis

Map showing IDSR Timeliness performance for week 34,2023







Thanks to the State Surveillance Officers, County Surveillance Officers and Health Facility in-charges for sharing the weekly IDSR data

Thanks to all partners for supporting IDSR weekly reporting and sharing the line lists

To access the IDSR bulletins for 2022 use the link below:

https://www.afro.who.int/publications/south-sudan-weekly-disease-surveillance-bulletin-2023

This bulletin is produced by the Ministry of Health with Technical support from WHO

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Notes

WHO and the Ministry of Health gratefully acknowledge the surveillance officers [at state, county, and health facility levels], health cluster and health pooled fund (HPF) partners who have reported the data used in this bulletin. We would also like to thank ECHO, USAID and World Bank for providing financial support.

The data has been collected with support from the EWARS project. This is an initiative to strengthen early warning, alert and response in emergencies. It includes an online, desktop and mobile application that can be rapidly configured and deployed in the field. It is designed with frontline users in mind, and built to work in difficult and remote operating environments. This bulletin has been automatically published from the EWARS application.

More information can be found at http://ewars-project.org













