



**South Sudan
Ministry of Health**

**Integrated Disease surveillance
and response (IDSR)**



**World Health
Organization**
South Sudan

**Epidemiological Bulletin Week 33, 2023
(August 14– 20 August)**



Major epidemiological highlights in week 33 of 2023

- In week 33, 2023, the IDSR reporting timeliness and completeness were at 79% and 88% respectively, while EWARNS sites were both 84%
- A total of 132 alerts were triggered in week 33, 2023, and most of the alerts were for measles 27% (36/132), malaria, 17% (21/132), and AWD 11% (15/132)
- Ongoing measles outbreak response (reactive/mop-up campaigns) in prioritized counties
- As of 22 August 2023, South Sudan received 243,940 individuals (56,669 households) who have entered South Sudan since 16 April 2023 with 39,061 total returnees in Renk.
- Malaria and acute respiratory illnesses are the top cause of morbidity in Renk County as of week 33, 2023

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 33 & 32 of 2023



States Ranking	Implementing Partners	States	Total Numer of Functional Health Facilities	No. of HF's Reported on Time in WK 33	Timeliness Percentage of WK 33	No. of HF's Reported on Time in WK 32	Timeliness Percentage of WK 32
1st	HLSS, SSUHA, Concern WW, IHO,GOAL,TRI-SS,SPEDP,IMA-WH,SSHCO,IMC,MSF,CARE	CES	129	128	99%	125	97%
2nd	Doctors with Africa (CUAMM),IMA-WH,YCSS,LiveWell-SS	Lakes	112	109	97%	84	75%
3rd	ForAfrika, Medair	GPAA	15	14	93%	13	87%
4th	Malaria Consortium, Healthnet TPO, IRC, CEDS, IHO	NBGZ	89	79	89%	74	83%
5th	AMREF, World Vision, CUAMM, CDTY, OPEN,Rescue	WES	183	151	83%	174	95%
6th	Cordaid, HLSS,OPEN,AMREF-CCMF,IRW	EES	107	88	82%	82	77%
7th	IHO,IOM,CARE,IMC,IRW,MHA	WBGZ	83	66	80%	71	86%
8th	Cordaid, IMC, IRC, CASS,IOM,Samaritan's Purse,Medair,MSF-H,WR,HFO, CH,AFAA	Unity	88	69	78%	64	73%
9th	GOAL,,HFO,UNKEA,SCI,AMREF-CCMF,TADO,HAASS,WVI,IRW	Warrap	113	86	76%	96	85%
10th	CMA,Medair,MDM,Medicair,CRSF,CARE,LiveWell-SS,WR,HFO,AAH,IOM,MSF,SCI,CIDO,IMC,CRESA	Jonglei	112	73	65%	74	66%
11th	IMC,CRES-Aid,Concern WW,Health Link,RI,Cordaid,CASS,SPEDP,NIDO,UNKEA,GOAL,MSF-E,WVI	Upper Nile	138	78	57%	71	51%
12th	Care International	RAA	16	4	25%	8	50%
13th	GOAL,SMC	AAA	17	3	18%	3	18%
		South Sudan	1202	948	79%	939	78%

KEY

	<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 33 stands at 79% while in week 32 it was at 78% and 6 states and 1 AA are above the National target of 80% .

Reporting Challenges in the poorly performed States are; insecurity, internet inaccessible; Turnover of Partners.



IDSR Completeness performance at State level for week 33 & 32 of 2023

States Ranking	Implementing Partners	States	Total Numer of Functional Health Facilities	No. of HF's Reported regardless of Time in WK 33	Completeness Percentage of WK 33	No. of HF's Reported regardless of Time in WK 32	Completeness Percentage of WK 32
1st	Care International	RAA	16	16	100%	16	100%
2nd	HLSS, SSUHA, Concern WW, IHO,GOAL,TRI-SS,SPEDP,IMA-WH,SSHCO,IMC,MSF,CARE	CES	129	128	99%	126	98%
3rd	Cordaid, HLSS,OPEN,AMREF-CCMF,IRW	EES	107	105	98%	90	84%
4th	Doctors with Africa (CUAMM),IMA-WH,YCSS,LiveWell-SS	Lakes	112	109	97%	111	99%
5th	Malaria Consortium, Healthnet TPO, IRC, CEDS, IHO	NBGZ	89	86	97%	85	96%
6th	GOAL,,HFO,UNKEA,SCI,AMREF-CCMF,TADO,HAASS,WVI,IRW	Warrap	113	109	96%	100	88%
7th	ForAfrika, Medair	GPAA	15	14	93%	13	87%
8th	AMREF, World Vision, CUAMM, CDTY, OPEN,Rescue	WES	183	163	89%	183	100%
9th	Cordaid, IMC, IRC, CASS,IOM,Samaritan's Purse,Medair,MSF-H,WR,HFO, CH,AFAA	Unity	88	73	83%	64	73%
10th	IHO,IOM,CARE,IMC,IRW,MHA	WBGZ	83	66	80%	72	87%
11th	CMA,Medair,MDM,Medicair,CRSF,CARE,LiveWell-SS,WR,HFO,AAH,IOM,MSF,SCI,CIDO,IMC,CRESA	Jonglei	112	88	79%	83	74%
12th	IMC,CRES-Aid,Concern WW,Health Link,RI,Cordaid,CASS,SPEDP,NIDO,UNKEA,GOAL,MSF-E,WVI	Upper Nile	138	94	68%	85	62%
13th	GOAL,SMC	AAA	17	3	18%	4	24%
		South Sudan	1202	1054	88%	1032	86%

KEY

	<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 week33 stands at 88% while in week 32 it was 86% and 8 states, and 2 AAs are above the National target of 80% .

Reporting Challenges in the poorly performed States are; insecurity, internet inaccessible; Turnover of Partners.



Surveillance: EWARS Timeliness performance indicator by partner for week 33 and 32 of 2023



Partner	HF's	Reporting	Performance		
PARTER	Total Number of Mobile Sites	# of reports received on Time in Week 33	Percentage of Timeliness in WK 33	# of reports received on Time in Week 32	Percentage of Completeness in WK 32
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%	0	0%
SCI	2	2	100%	0	0%
IOM	1	1	100%	0	0%
HFO	5	3	60%	3	60%
WVI	2	1	50%	1	50%
CIDO	1	0	0%	1	100%
TOTAL	25	21	84%	17	68%

The Timeliness of EWARS in partners' supported sites stands at 84% in week 33 while in week 32 it was at 68%



Surveillance: EWARS completeness performance indicator by partner for week 33 and 32 of 2023



Partner	HF's	Reporting	Performance		
PARTER	Total Number of Mobile Sites	# of reports received on Time in Week 33	Percentage of Timeliness in WK 33	# of reports received on Time in Week 32	Percentage of Completeness in WK 32
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%
SCI	2	2	100%	2	100%
IOM	1	1	100%	1	100%
UNH	2	2	100%	0	0%
HFO	5	3	60%	3	60%
WVI	2	1	50%	1	50%
CIDO	1	0	0%	1	100%
TOTAL	25	21	84%	20	80%

The Timeliness of EWARS in partners' supported sites stands at **84%** in week **33** while in week **32** it was at **80%**

INDICATOR AND EVENT-BASED SURVEILLANCE



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



Alert by Status and States in week 33 of 2023 [a total of events-specific alerts generated by state



State	Acute jaundice syndrome	Acute Respiratory Infections (ARI)	Acute Watery Diarrhoea	Bloody Diarrhoea	Malaria (Confirmed)	Measles	Guinea Worm	Meningitis	EBS	Total alerts
WES	4	4	4	4	5	1				18
WBGZ		4	4	1	4		1			10
Warrap		1	1	2	1	4				9
Upper Nile		2		2	3	6				13
Unity	3	1		4	1	15		1		25
RAA		1				1			3	5
NBGZ		2		1	1					4
Lakes					1		13			14
Jonglei	1	2	2	3	1	4				13
EES		1	4	5	2					12
CES		1		1	2	5				9
Total alerts	4	15	15	23	21	36	14	1	3	132

Legend		
0 to 3 alerts	Measles alerts are the highest alerts for the week with majority been from Unity state and Upper Nile	
4 to 6 alerts	Lake State has reported 13 alerts of Guinea Work while 1 alert of meningitis was seen in Unity State	
7 to 15 alerts	3 EBS were triggered from Abiemnhom PHCC in Ruweng Administrative Area and 4 AIS from Unity and Jonglei	

Event-based Surveillance; Animal deaths in Cueibet county

- On 24 August, a community report of a dead animal in Tiap-tiap Payam of Cueibet County of Lakes State.
- According to the local report, around 52 vultures and other birds believed to have eaten the carcasses of dead animals were found dead around it.
- There was no human health problem related to the contact with a dead animal.

Public health Actions taken include:

1. Advised community-based surveillance team to continue monitoring the situation closely and report any similar situation to the County Health Department team in Cueibet
2. Informed DG for the SMOH to engage Wildlife and Ministry of Animal resources and fishery to increase surveillance in Animals/Cattle
3. Informed FAO to engage Animal Health Workers in Cueibet to monitor animal health in Tiaptiap Payam.
4. Continue to sensitize the communities on the risk of contact to any Carcasses of dead animal in the bush and to report any unusual events in the community to nearest HF, BHWs or WHO Field Assistant in the area.
5. Monitoring the situation closely



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

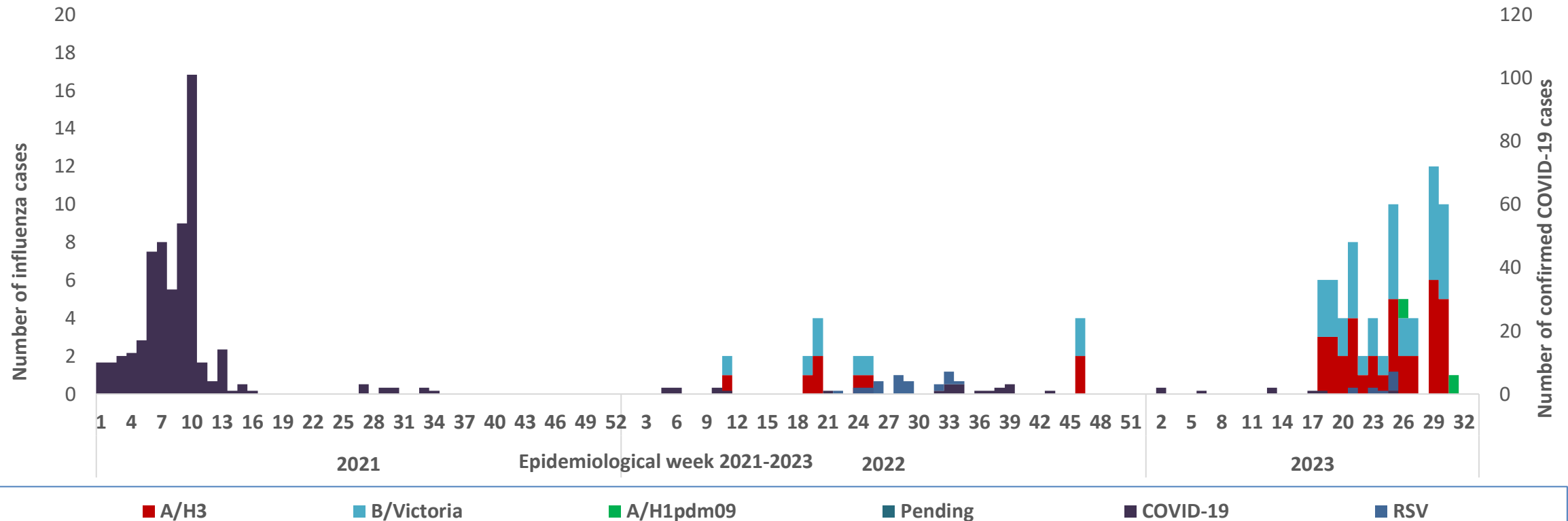
- On 8th June 2023, the WHO field office notified the Ministry of Health through the one health secretariate of the increase in mortality in Aweil due to dog bites (suspected rabies)
- The one health secretariat convened an Adhoc meeting and formed a team to be deployed for investigation
- A multisectoral 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 Temaam 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

Confirmed Influenza ,COVID-19 and RSV cases from sentinel sites in Juba, week 1, 2021 to week 33, 2023



- 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

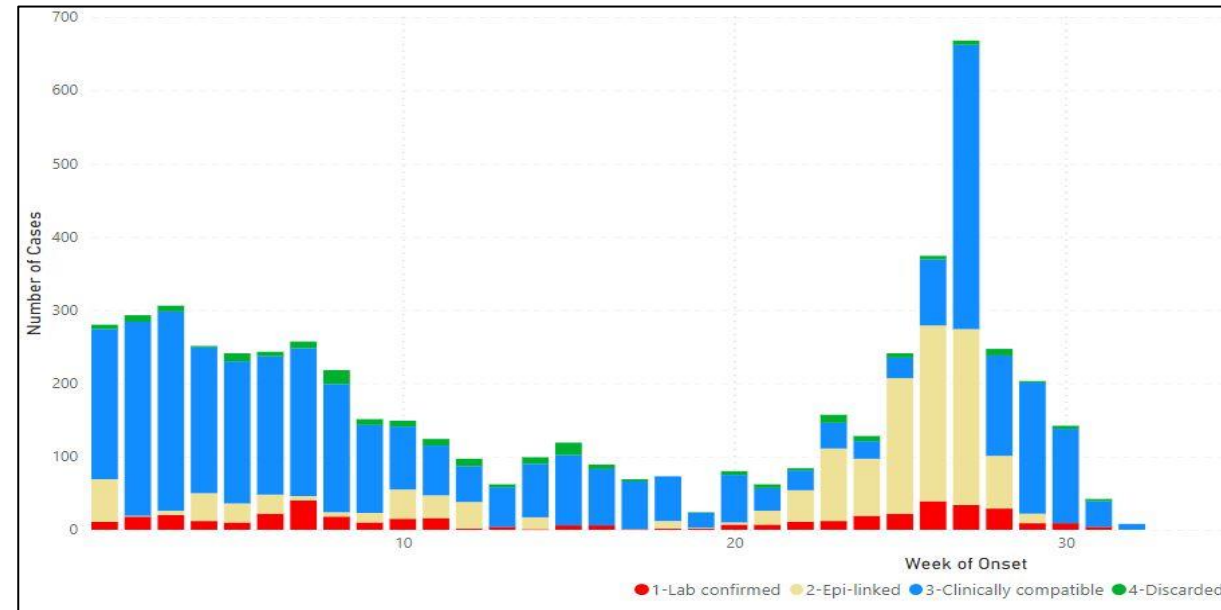
MEASLES ` UPDATES



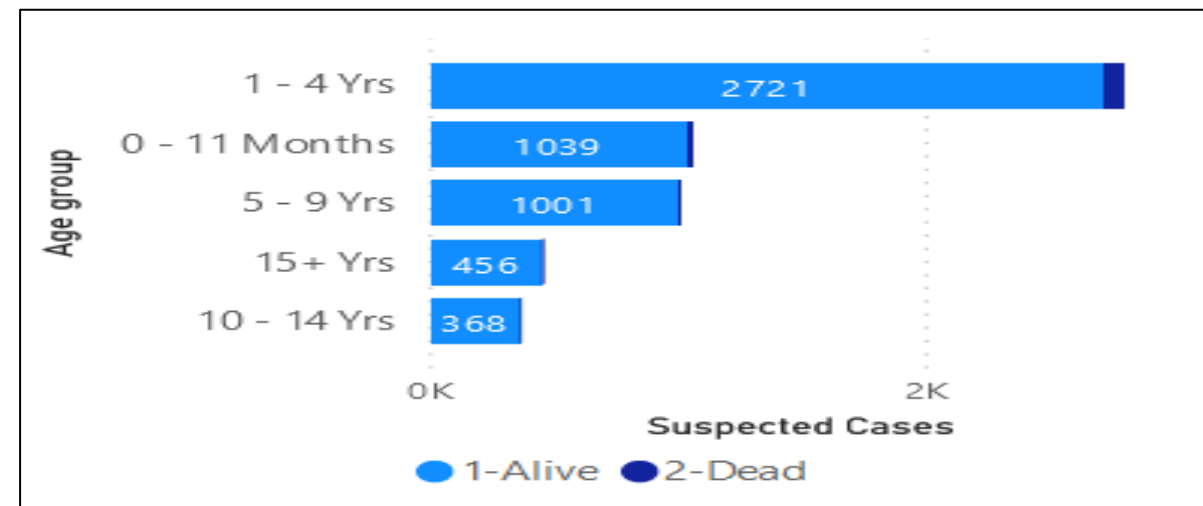
Epi Summary

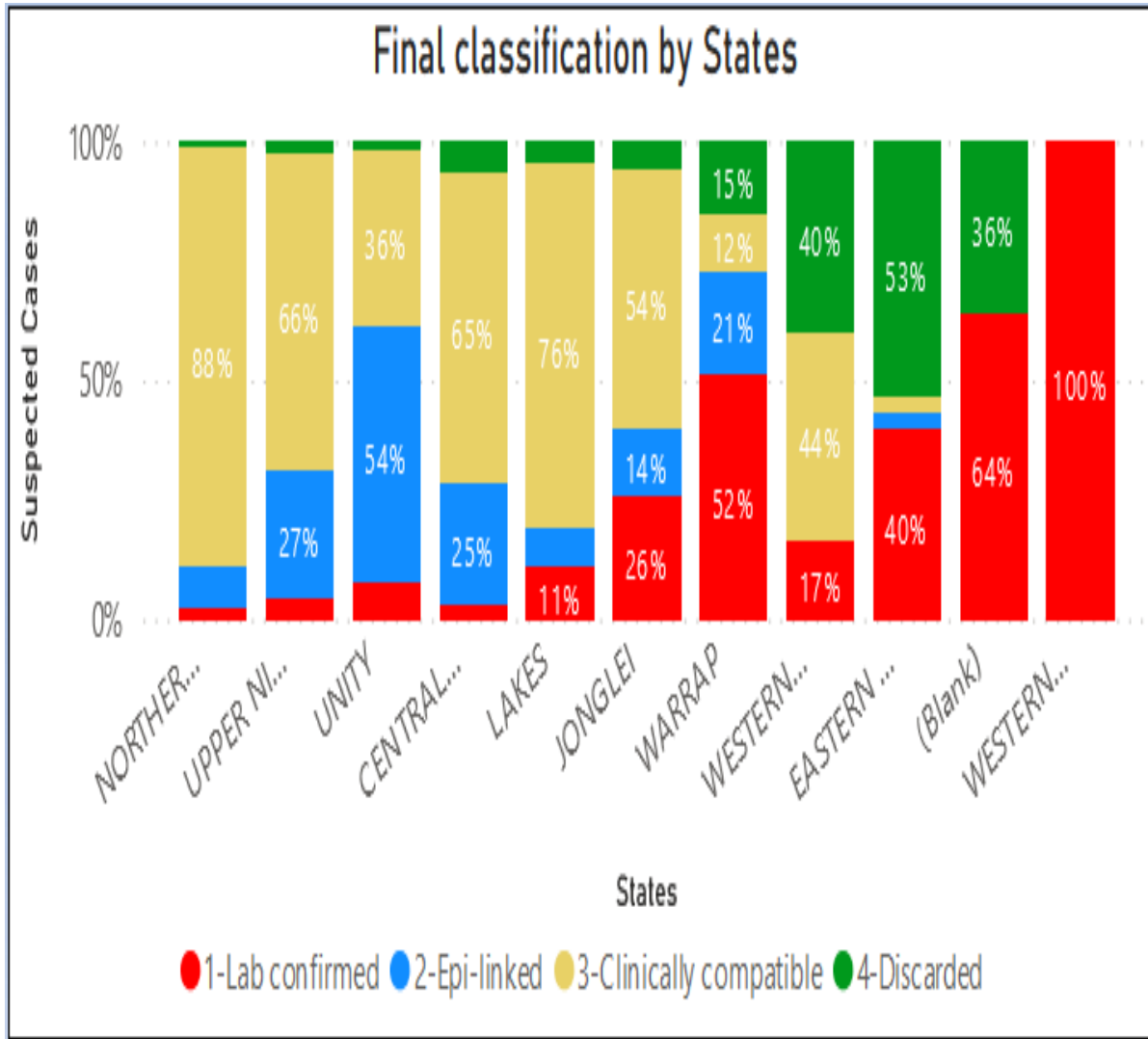
- In 2023, A total of 5,725 with 140 related deaths have been reported with a CFR of 2.4%
- Nine (9) newly suspected cases were reported this week from Renk (1) and Ayod (8), while 135 retrospective cases were received for weeks 28-32. No laboratory-confirmed case has been reported since week 31 (4 cases)
- Out of the 5,725 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 epi-linked 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 32, 2023, South Sudan



Distribution of cases by age group and outcome







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

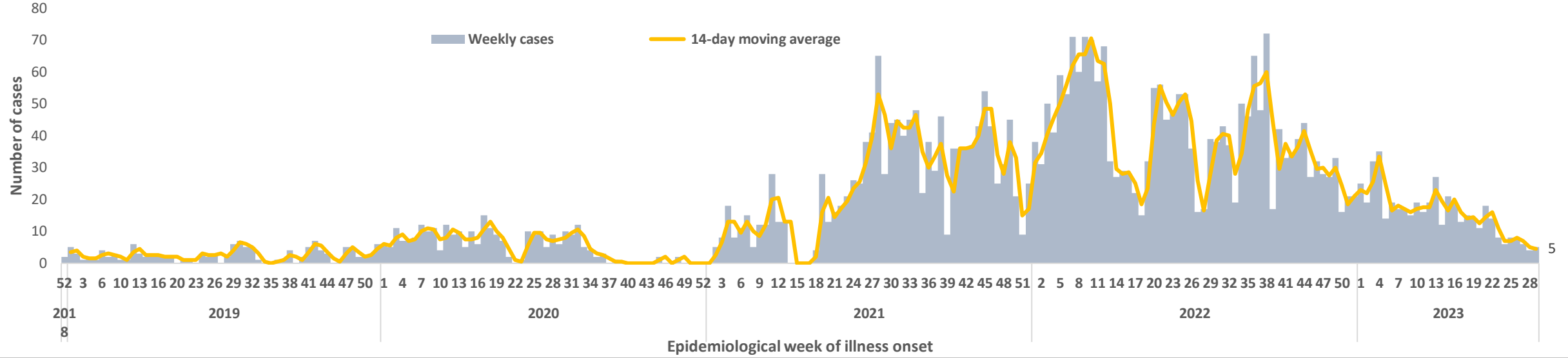
- MOH and partners to support the planned mop-up campaign and other measles activities
- State and County MOH to continue weekly reporting of measles cases (including zero reporting where applicable)
- Prompt detection and management of measles cases
- Blood samples to be collected from suspected cases, 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

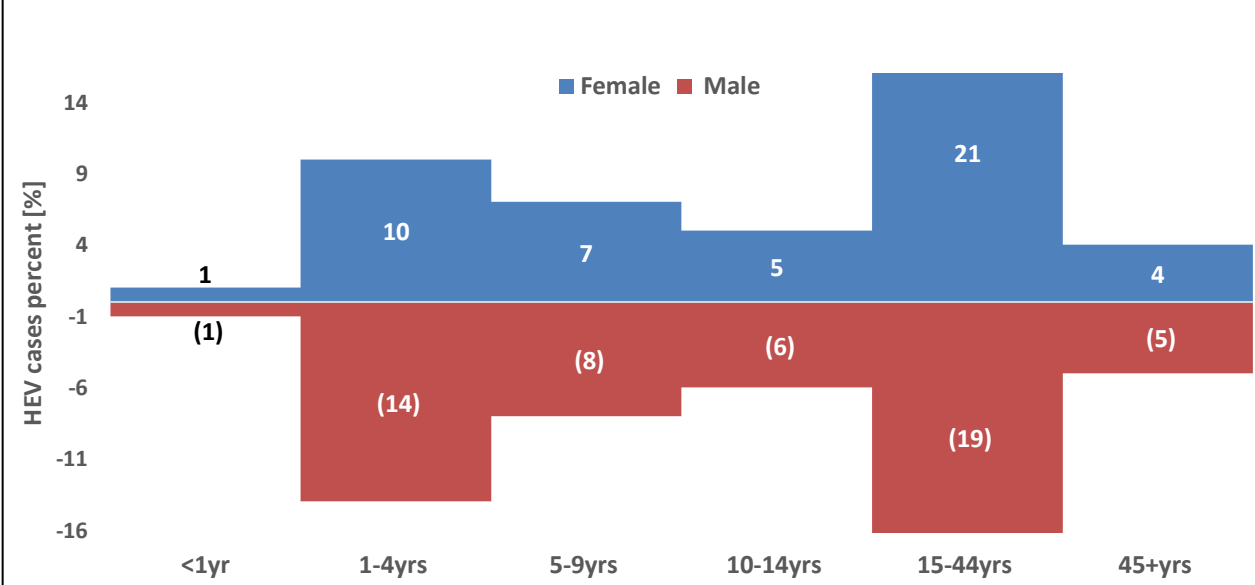
HEPATITIS E - UPDATES

Hepatitis E Virus/AJS updates Bentiu.

Hepatitis E Virus [HEV] cases in Bentiu IDP camp, wk 1, 2019 to wk 29, 2023

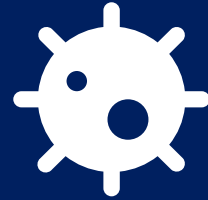


HEV case distribution by age and sex in Bentiu IDP, 2019-2022



- 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
- People in the age range of 15 – 44 years are the most affected age group.

COVID-19 UPDATES

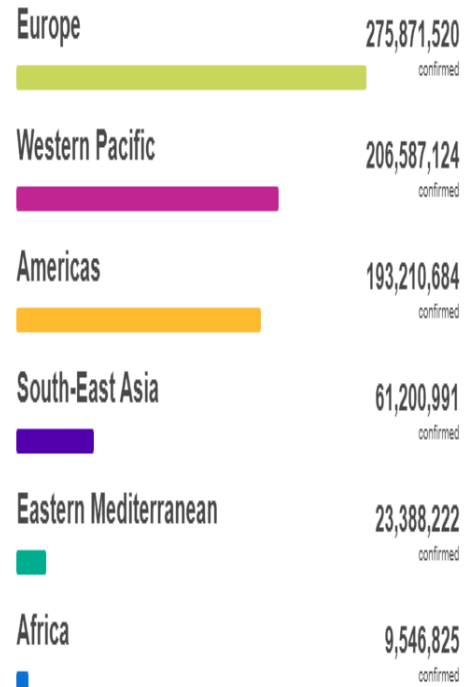




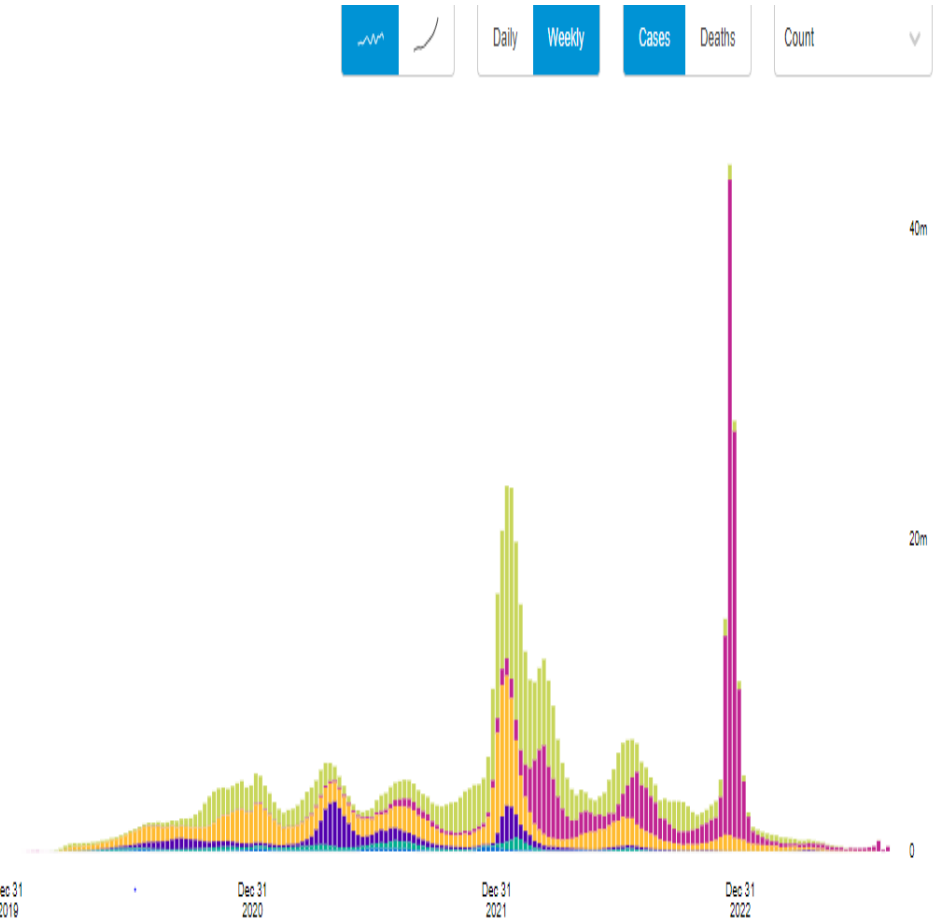
Situation update as of 16 August 2023

- **Globally, as of 16 August 2023, there have been 769,806,130 confirmed cases of COVID-19, including 6,955,497 deaths, reported to WHO. As of 20 August 2023, a total of 13,499,865,692 vaccine doses have been administered.**
- **In Africa, as of 31 May 2023 there have been 9,546,825 confirmed cases of COVID-19, including 175,421 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.**

Situation by WHO Region



Source: World Health Organization
 Data may be incomplete for the current day or week.



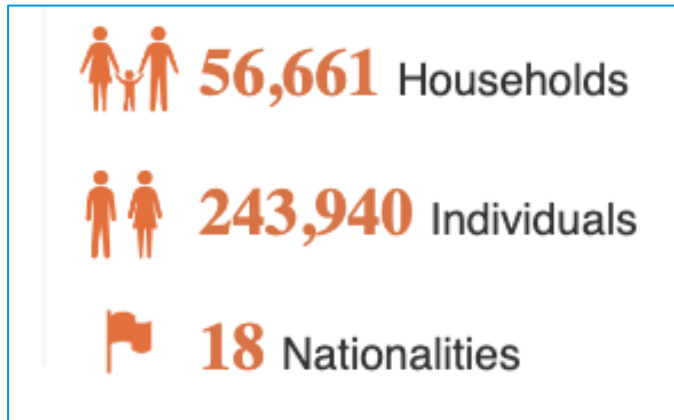
WHO: <https://www.who.int/health-topics/coronavirus>



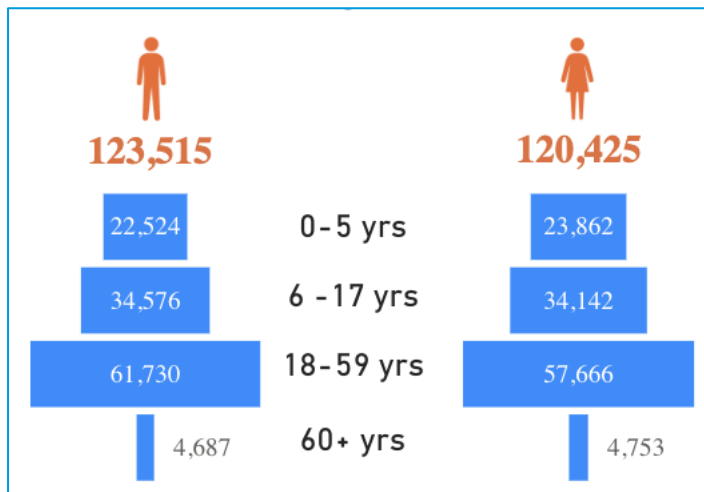
HUMANITARIAN RESPONSE

SUDAN CRISIS

Sudan Crisis; Key Figures as of 22 August 2023



Sex and Age Breakdown



Points of Entries

- Movement for 231 196 individuals has been tracked from various PoEs, 194 480 in Joda alone.
- 126 394 people have been moved.
- The government has assisted the movement of 24% of individuals, humanitarian agencies assisted 46% move, 18% self-organised their movements, and 11% were moved by assistance through third-country nationalities.
- 82% of the onward movement was from Wunthou/Joda in Renk, Upper Nile State, 15% moved from Panakuch in Unity State, and 1.6% 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. Kits	Beneficiaries		County	Recipient/ destination	Amount	%
		#	%			(USD)	
Upper Nile State	440	106,005	49%	Renk	IMC, Mubadirum Coordination Committee, RI, & Goal	227761.83	57%
				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%
Unity State	91	56,435	26%	Rubkona	World Relief & Concern World wide	16749.5	4%
				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.

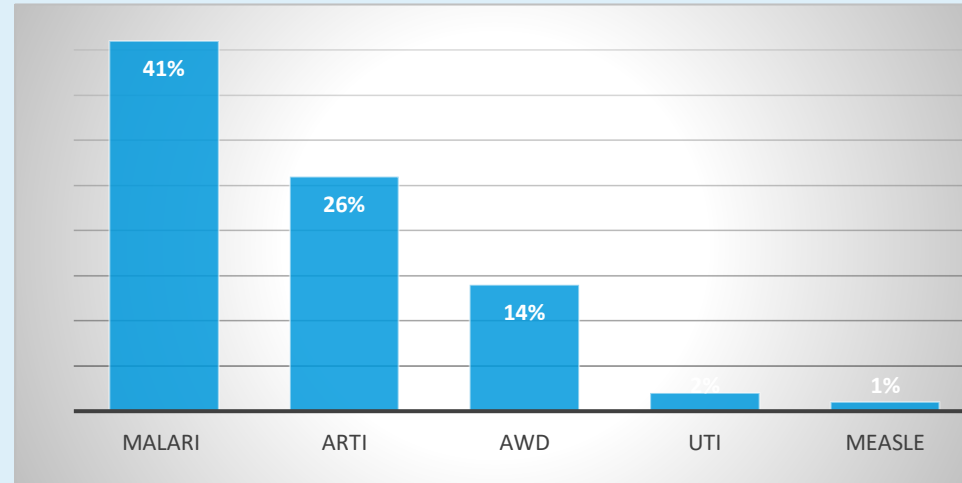
Summary of Morbidity & Mortality (Renk)

- During the week, a total of 6,430 consultations were conducted; cumulatively, 73,758 individuals were reached with curative interventions.
- Malaria was the leading cause of morbidity in **week 33, with 41% (1870)** of all consultations, followed by ARTI at **29% (1174)** Diarrhea at **14% (630)**, and 53 measles cases.
- Children below the age of 5 years account for 27% (1723) of the total consultations.
- Females account for 73% (4684) of the total number of cases

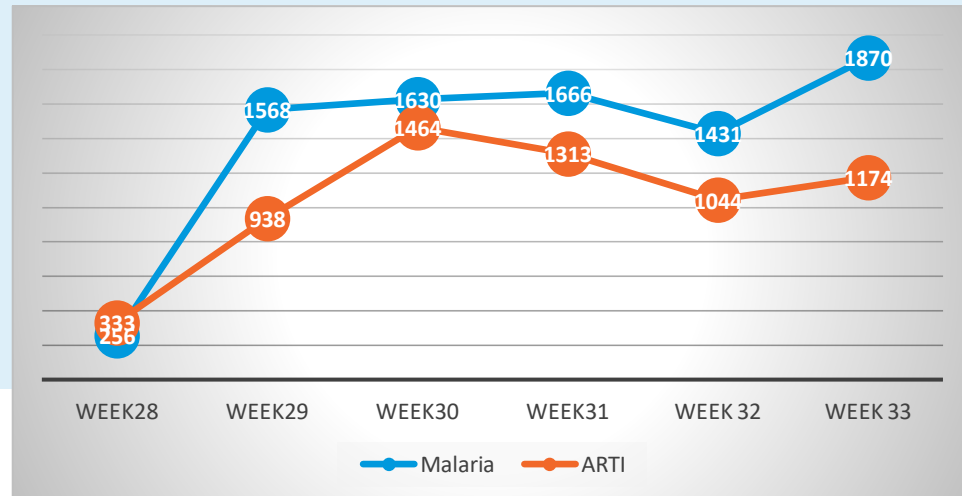
Description	IMC	IOM Ayabuk	IOM Reception	RI	MSF	WVI	Total
Total consultation	12,540	22,237	20,925	16,887		1169	73,758
Weekly new consultation(week 33)	1,302	1,479	1870	1,236		543	6,430

Health Status-Top 6 causes of morbidity

Disease	Consultation	Percentage
Malaria	1870	41%
ARTI	1174	26%
AWD	630	14%
UTI	99	2%
Measles	53	1%



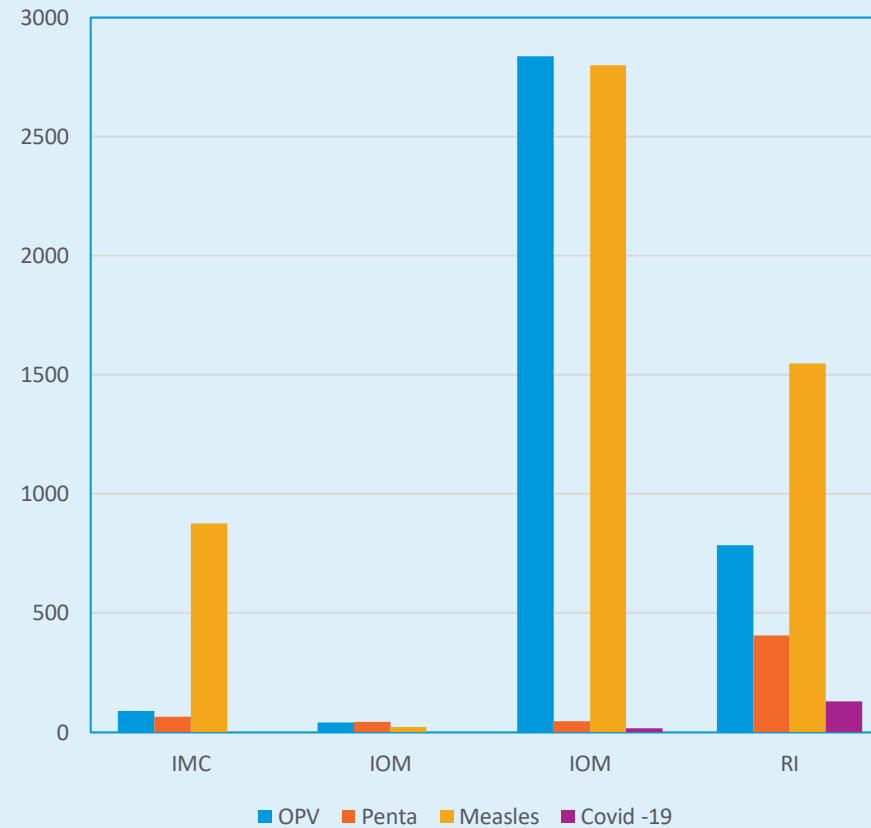
Indicators	Malaria	ARTI
Week28	256	333
Week29	1568	938
Week30	1630	1464
Week31	1666	1313
Week 32	1431	1044
Week 33	1870	1174



Vaccination Uptake in Renk

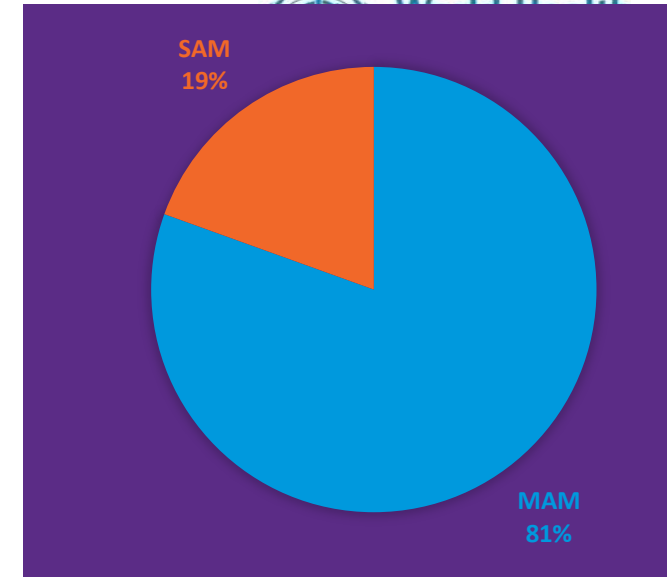
	IMC	IOM Ayabuk	IOM Reception	RI
OPV	90	40	2,838	785
Penta	64	42	47	406
Measles	876	22	2,800	1,548
Covid -19	0		17	128

- At PoEs, IOM had reported positive vaccination figures of over 3,000 a week when they extended vaccinations to occur 24/7. At night, they have been averaging over 200 vaccinations every night. However, these efforts are now being affected by an inadequate number of doses. The same has also been reported by Relief International and World Vision at the Transit Centres requests for additional doses have been placed.



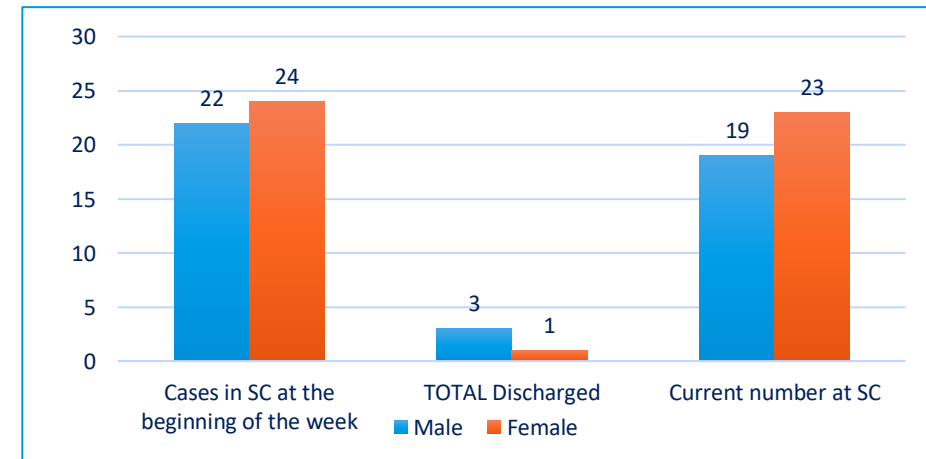
Nutrition Update (Renk)

	TOTAL	RI	GOAL	WVI
Total MUAC screening	7803	883	1185	981
Weekly MUAC screening	541	0	0	120
MAM(cumulative)	2147	181	254	12
SAM(cumulative)	520	0	108	13
Malnutrition with medical complication(Cumulative)	68	0	38	3



• Children admitted at the Stabilization Center from 18-23 August 2023

Indicators	Male	Female
Cases in SC at the beginning of the week	22	24
Discharge	3	1
Current number at SC	18	23
Death	2	0



site	AWD	malaria	measle	chronic liver	advanced CA prostate	pneumonia	TB/HIV	kidney failure	TB	SAM	anemia	trouma	stroke	un-known
military hospital			1											
renk hospital	8	6	21	1		4	1		4	3	2	1	1	1
river side (port)			2											
transit center		2	18	1	1	6		1						
wanthou phcu		1	3											
proportion of mortality	9%	10%	51%	2%	1%	11%	1%	1%	4%	3%	2%	1%	1%	1%

- Measles account for 51% of the total deaths (n=89)
- Followed by pneumonia (11%), malaria (10%), AWD (9%)



**OVERALL
CONCLUSIONS AND
RECOMMENDATIONS**



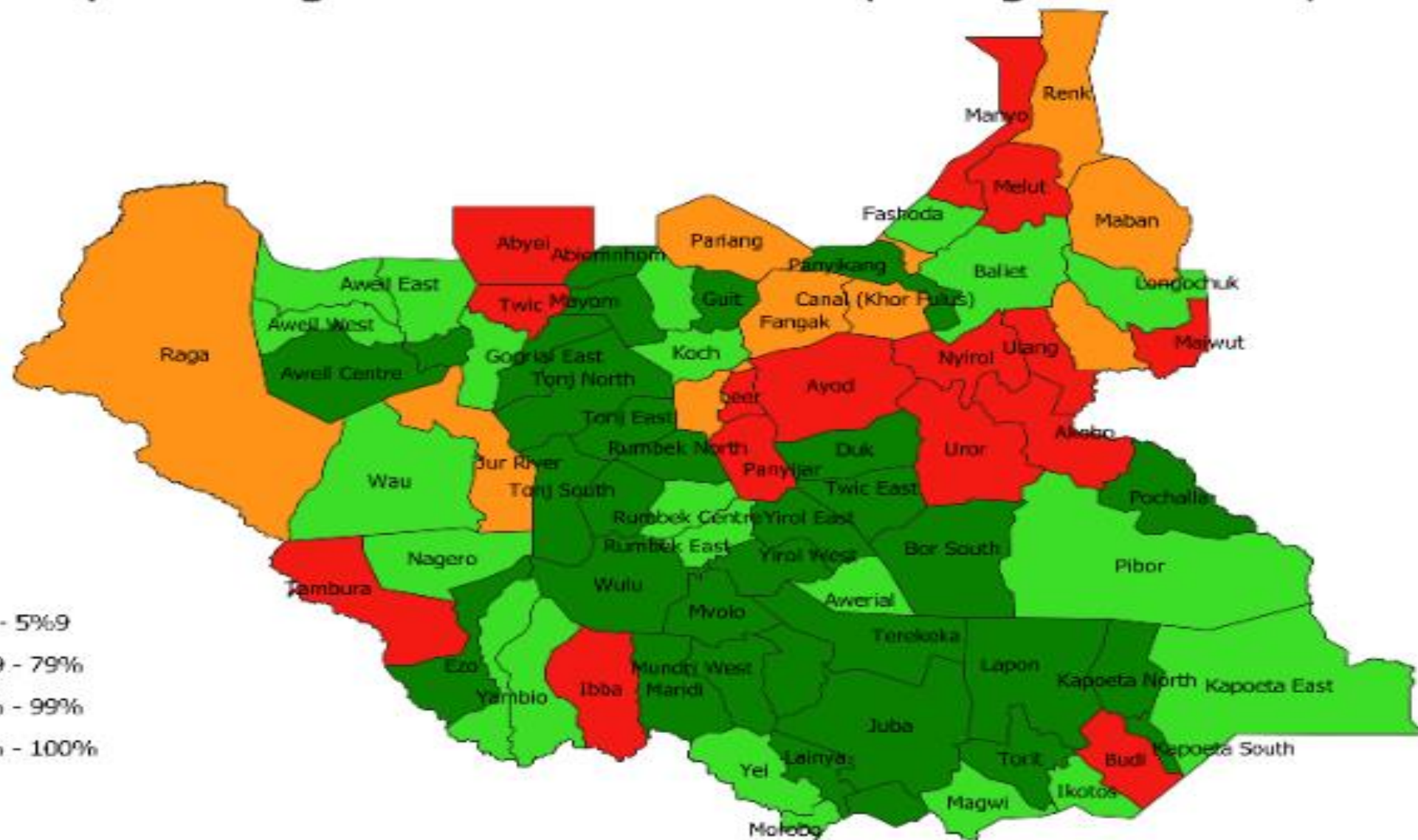
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- Ongoing measles outbreak response (reactive/mop-up campaigns) in prioritized counties
- As of 22 August 2023, South Sudan received 243,940 individuals (56,669 households) who have entered South Sudan since 16 April 2023 with 39,061 total returnees in Renk.
- Malaria and acute respiratory illnesses are the top cause of morbidity in Renk County as of week 33, 2023



Recommendations

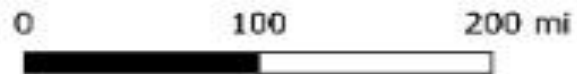
- Partners to continue supporting County Health Departments (CHD) & State Ministries of Health on timely IDSR/EWARN reporting and involve the boma health workers to support community-based surveillance
- Health facilities to conduct an initial investigation on suspected cases of epidemic-prone diseases and collect samples
- Continue with preparedness activities to strengthen surveillance at all levels including conducting after-action 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 Timeliness of IDSR reporting in Week 33,2023

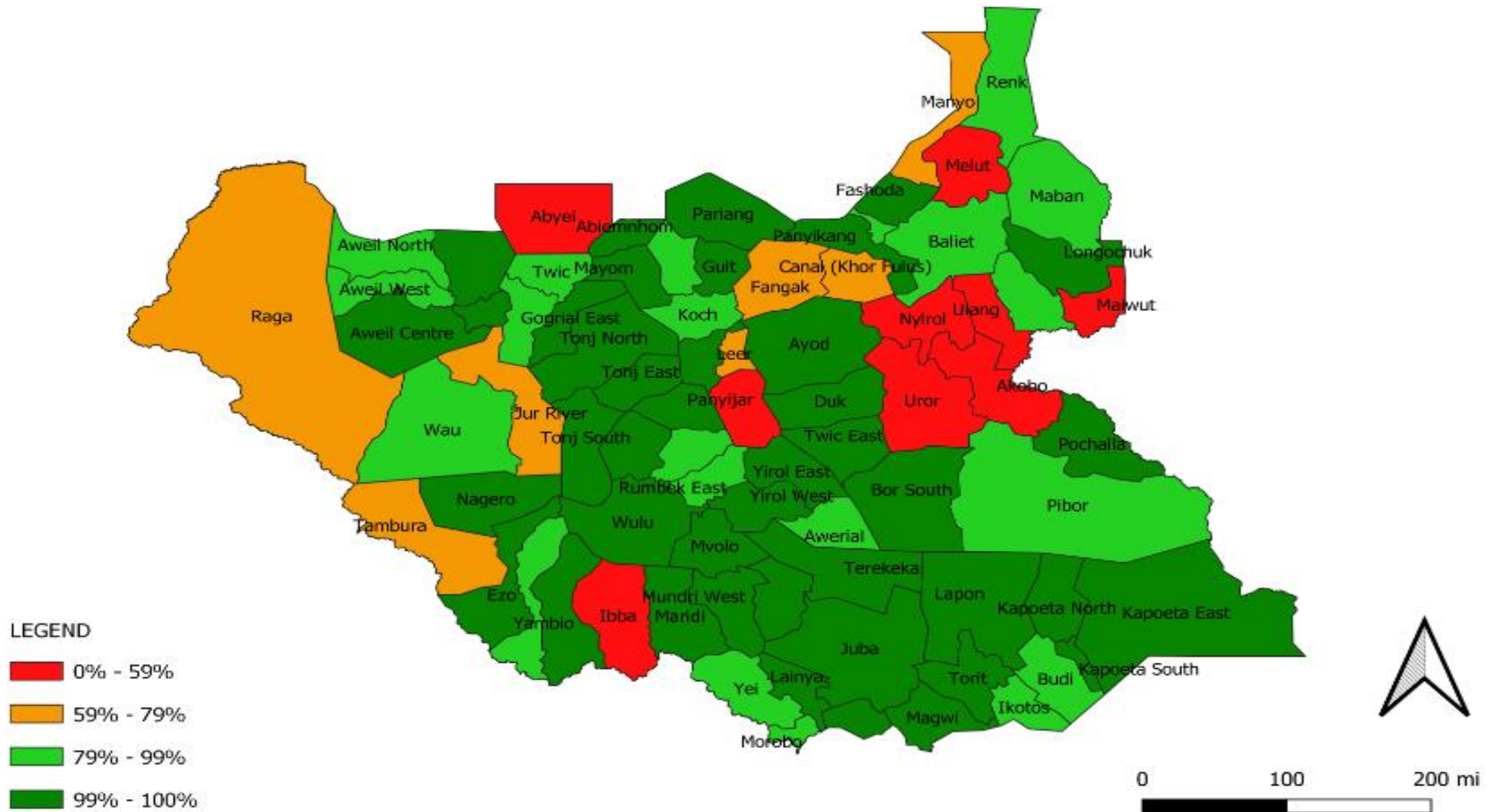


LEGEND

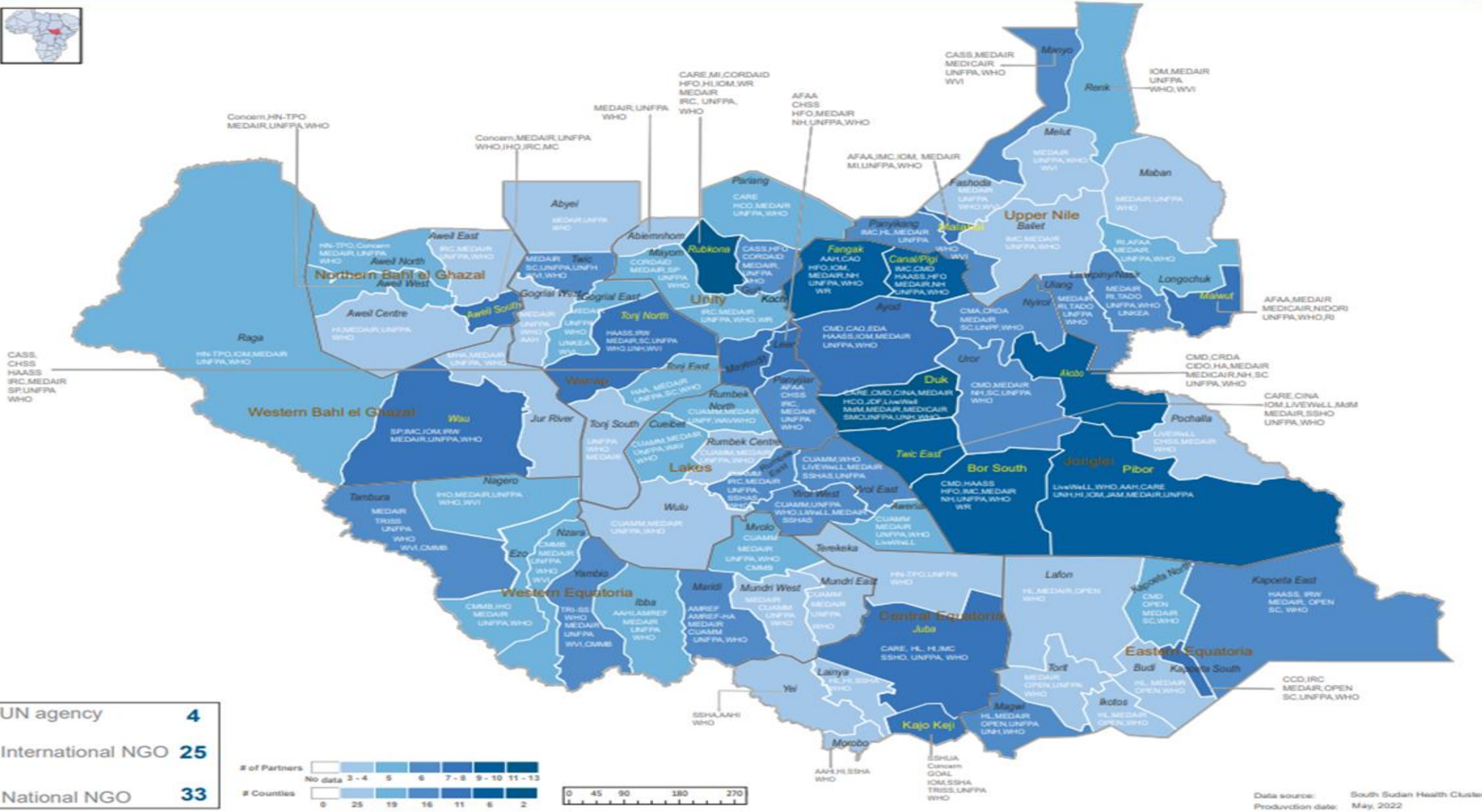
- 0% - 5%
- 5% - 79%
- 79% - 99%
- 99% - 100%



A Map Showing Complteness of IDSR reporting for week 33,2023



South Sudan Health Cluster HRP Partners 2022



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>

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Notes

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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>

