

South Sudan Ministry of Health

Integrated Disease surveillance and response (IDSR)



Epidemiological Bulletin Week 52, 2023 (December 25 – 31 December)

Major epidemiological highlights in week 52 of 2023

- ■In week **52**, **2023**, the IDSR reporting timeliness and completeness were at **77%** and **83%**, respectively, and both at **63%** for EWARN sites
- Completeness of reporting for IDSR at private Health facilities in Juba and Wau was only at 81%
- A total of 137 alerts were triggered in week 52, 2023, and the majority were for bloody Diarrhea, Measles, and Acute Watery Diarrhea
- •On 24 December 2023, the Minister of Health declared an outbreak of Yellow Fever in Yambio County upon confirmation of one case by the National Public Health Laboratory
- •Ongoing preparedness measures and readiness are underway in Renk County, Upper Nile State, in response to a Ministry of Health statement on imported cholera cases in Renk in November 2023.
- As of Epi week 50, 2023, 7 862 suspected measles cases were reported, with 586 (7.6%) lab-confirmed, 173 deaths, and a case fatality rate of 2.2%.





SURVEILLANCE PERFORMANCE



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





Timeliness of IDSR health facility reporting for week 52 & 51 by admin area

Admin area	# of implementing partners	# of reporting health facilities	% of Timeliness in Week 52	% of Timeliness in Week 51		
GPAA	2	15	100%	100%		
Lakes	4	112	100%	86%		
RAA	1	16	100%	81%		
NBGZ	5	89	90%	56%		
CES	12	124	89%	67%		
Unity	12	88	86%	72%		
WBGZ	6	83	76%	70%		
Warrap	9	111	74%	55%		
Upper Nile	14	136	74%	66%		
EES	6	107	69%	46%		
Jonglei	16	114	67%	82%		
WES	6	183	64%	73%		
AAA	2	17	0%	6%		
National	95	1195	77%	67%		

Reporting timeliness at health facility level is Monday 10:00am of every week





Completeness of IDSR health facility reporting for week 52 & 51 by admin area

Admin area	# of implementing partners	# of reporting health facilities	% of Completeness in week 52	% of Completeness in week 51
Lakes	4	112	100%	100%
RAA	1	16	100%	100%
GPAA	2	15	100%	100%
CES	12	124	91%	90%
NBGZ	5	89	91%	96%
Unity	12	88	88%	90%
WES	6	183	83%	77%
Jonglei	16	114	82%	91%
Upper Nile	14	136	79%	71%
EES	6	107	77%	86%
WBGZ	6	83	76%	88%
Warrap	9	111	75%	81%
AAA	2	17	12%	6%
National	89	1195	83%	85%





Timeliness of IDSR mobile clinic reporting for week 52 & 51

Admin area	# of Reporting Mobile Sites	% of Timeliness in week 52	% of Timeliness in week 51		
IMC	4	100%	100%		
SSHCO	1	100%	100%		
SMC	1	100%	100%		
SCI	2	100%	100%		
TRI-SS	2	100%	100%		
HFO	3	33%	33%		
SP	4	25%	100%		
WVI	2	0%	0%		
TOTAL	19	63%	79%		

Reporting timeliness at health facility level is Monday 10:00am of every week





Completeness of IDSR mobile clinic reporting for week 52 & 51

Admin area	# of Reporting Mobile Sites	% of Completeness in week 52	% of Completeness in week 51
IMC	4	100%	100%
SSHCO	1	100%	100%
SMC	1	100%	100%
SCI	2	100%	100%
TRI-SS	2	100%	100%
HFO	3	33%	33%
SP	4	25%	100%
WVI	2	0%	0%
TOTAL	19	63%	79%





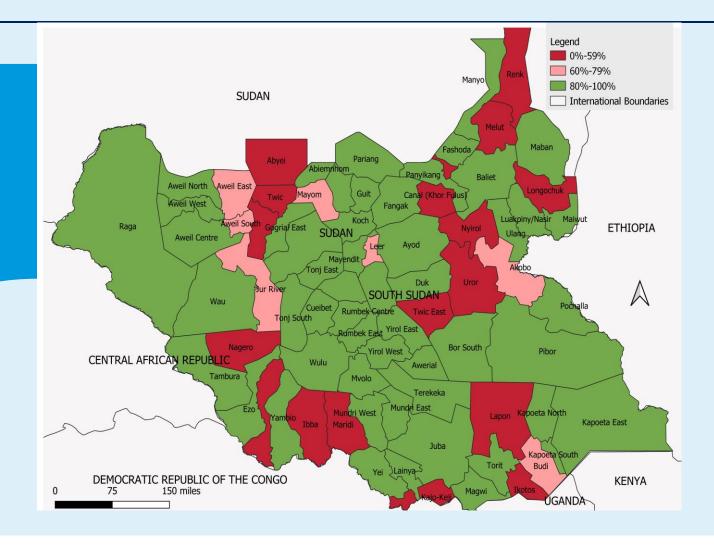
Percentage of IDSR Private Facilities reporting for week 52 & 51

Payams	# of reporting private health facilities	% of Completeness in week 52	% of Completeness in week 51
Kator	3	100%	100%
Marial Baai	1	100%	100%
Juba	10	100%	90%
Northern Bari	1	100%	0%
Wau South	20	90%	70%
Wau North	13	85%	69%
Rajaf	4	75%	0%
Muniki	12	42%	0%
TOTAL	64	81%	56%





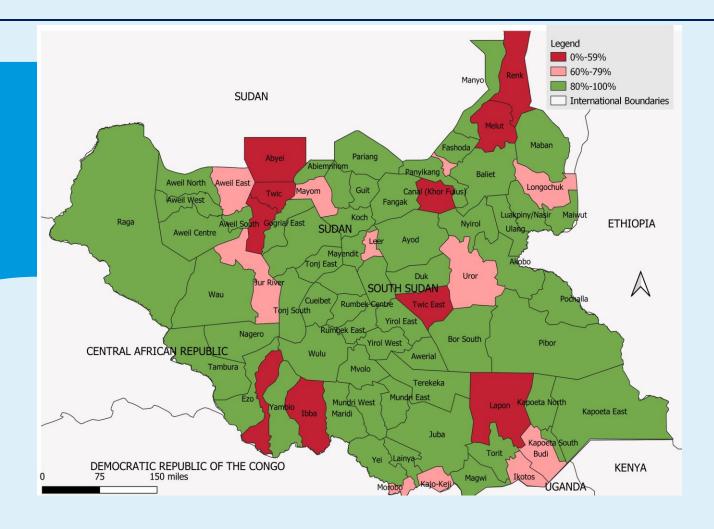
Timeliness of IDSR reporting for week 52 by county







Completeness of IDSR reporting for week 52 by county







INDICATOR-BASED SURVEILLANCE



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





Alerts reported and verified by the state for week 52

	Acute i	aundice	Acu	te Respira	atory	Acute	Watery										Malaria	1				
		lrome		ections (A			rhoea	Blood	ly Diarrhoe	a Ch	nolera		EBS	Guin	ea Worm		(Confirme		Mea	sles	Grand	Total
Admin									#	#	#	#	#		#	#	#			#		Total #
Area	# R	# V	# R	# V		# R	# V	# R	Verified	Reporte	d Verified	Reporte	d Verified	# Report	ed Verifie	d Re	ported Ve	rified	Reported	Verified	Reported	Verified
EES		0	0	0	0		2	2	3	3	0	0	0	0	0	0	0	0	3	3	8	8
GPAA	(0	0	1	1		0	0	2	1	0	0	0	0	0	0	0	0	0	() 3	2
Jonglei		1	0	1	0		2	0	3	0	1	0	0	0	5	0	0	0	5	() 18	0
Lakes	(0	0	4	4		2	2	0	0	0	0	0	0	8	8	3	3	1	1	18	18
NBGZ		0	0	3	0		1	1	2	2	0	0	0	0	0	0	2	0	2	2	2 10	5
RAA	l	0	0	0	0		0	0	1	0	0	0	1	0	0	0	1	1	1	1	4	2
Unity		2	0	2	0		2	0	5	0	2	0	0	0	0	0	2	0	2	() 17	0
Upper Nile		1	0	2	0		3	0	3	0	1	0	0	0	0	0	1	0	8	() 19	0
Warrap	ı	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	4	3	3 4	3
WBGZ		2	2	2	2		2	1	3	2	1	0	0	0	1	1	6	2	1	1	18	11
WES		0	0	3	0		6	0	2	0	0	0	0	0	0	0	4	0	3	() 18	0
Grand																						
Total		6	2	18	7	2	0	6	24	8	5	0	1	0	14	9	19	6	30	11	l 137	49



- A total of 137 alerts were generated in week 52 through the EWARS
- Only (49) 35% of all the alerts were verified in the system by surveillance officers and partners
- Measles, Acute blood diarrhea, AWD, and Guinea worm were among the highest number of alerts reported

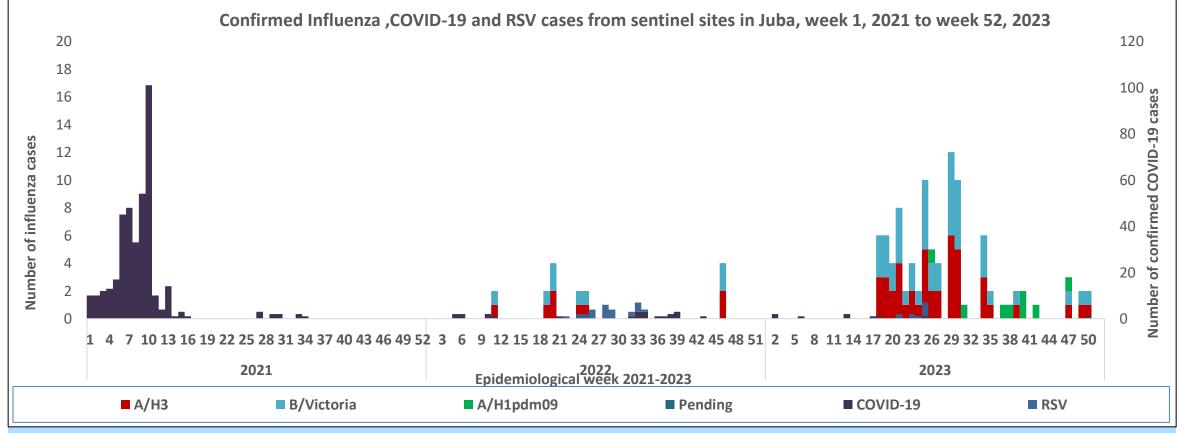


Influenza Sentinel Surveillance Updates





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 1-52 2023, a total of 955 ILI/SARI were collected all 861 tested negative, (8) positives for COVID-19, (40) Influenza types A (H3), (21) B (Victoria), (8) for A/H1pdm09 and 13 for RSV in weeks 52,2023

Alert of suspect Viral Hemorrhagic Fever From Gangura, Yambio County Western Equatoria State

Yellow Fever Outbreak in Yambio Western Equatoria state

- On December 21, 2023, the Ministry of Health received an alert about Viral Hemorrhagic Fever. The suspect was a 24-year-old male from Kangura village in Gangura Payam Yambio County.
- He had fallen ill on December 07, 2023, with symptoms that included body weakness, headache, stomach discomfort,
 fever, and vomiting. He was initially diagnosed with typhoid and treated accordingly but showed no improvement.
- Instead, he began vomiting blood on December 14, 2023, and this was reported to a health worker. Three other individuals in the community, from Sakure and Nzara, had already died from similar symptoms before this suspected case.
- An investigation was conducted by the state team, isolated the patient at the PHCC and collected a blood sample
- At the NPHL, the sample tested negative for Ebola, Marburg, and malaria; however, the sample tested positive for Yellow
 Fever virus on 23 December 2023 upon differential testing using RT-PCR
- On December 27, 2023, a multidisciplinary Rapid Response Team (RRT) was deployed to conduct further epidemiological investigations in Yambio and neighboring counties
- The sample was further tested at the UVRI for quality control yielding the same results

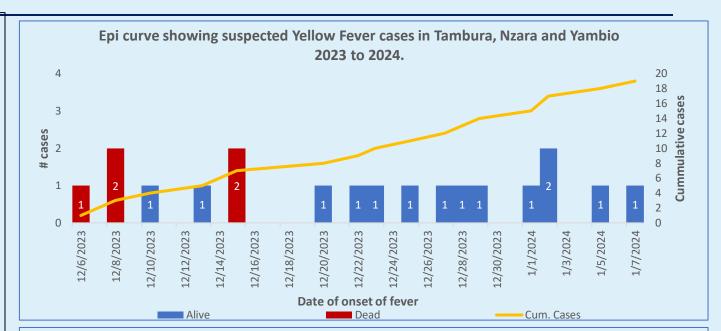


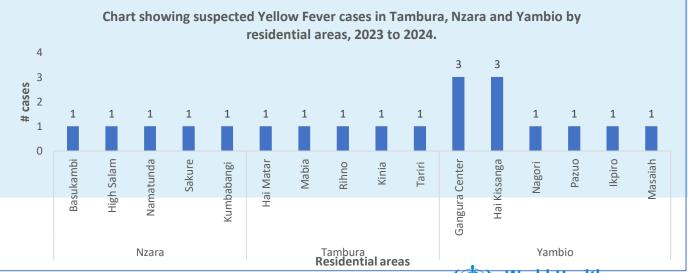


Update on Yellow Fever Outbreak in Yambio

Brief Descriptive Epi.

- As of 11 January, 20 cases, including six (05)
 deaths, were reported. The first suspect was
 reported with an onset of fever on 06 December
 2023.
- All cases were reported from three counties of Western Equatoria state: Yambio County (10), Nzara County (05) and Tambura County (05
- 70% (14) were males, and females accounted for 30% (06).
- The Median age is 26 years, with a range of 02-58 years.
- On 10 January 2024, a National Public Health Laboratory (NPHL) received 03 samples (02 from Tambura and 01 from Yambio county). Currently, 06 Samples are undergoing serological testing at NPHL.
- Additional samples have been collected and are awaiting shipment to Juba





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• Source: Yellow fever daily sitrep

Ongoing coordination and Response

- Based on this, the Ministry of Health declared an outbreak of yellow fever outbreak in Yambio as of 24 December 2023
- The National Ministry of Health (MOH) and the State Ministry of Health (SMOH), with support from WHO and partners, provide operational and strategic guidance to the ongoing Yellow Fever outbreak response.
- The PHEOC has been activated to facilitate the coordination of activities. A daily coordination meeting with stakeholders and key partners is conducted at the PHEOC with the following pillars; Coordination, Surveillance and Reporting, Laboratory, Vaccination, Case Management, Infection Prevention and Control, Risk Communication and Community Engagement (RCCE), Vector Control and Logistics.
- A National Rapid Response Team was deployed on 27 December to support the state in conducting Rapid Risk Assessment, including outbreak investigation
- UNICEF and the Core Group (CGPP-WVI) have started Risk communication community engagement through their home health promoters and community key informants to strengthen RCCE activities
- Key messages on Yellow Fever prevention and reporting have been prepared, and stakeholders' mapping has been completed and distributed
- The Ministry of Health, in collaboration with WHO and partners, has developed a comprehensive micro plan for *Yellow Fever* vaccination and preliminary vaccine requests have been submitted to ICG.
- The vaccination will target individuals aged nine (09) months to sixty(60) years in affected counties.





Cholera Readiness Updates from Renk County, Upper Nile State



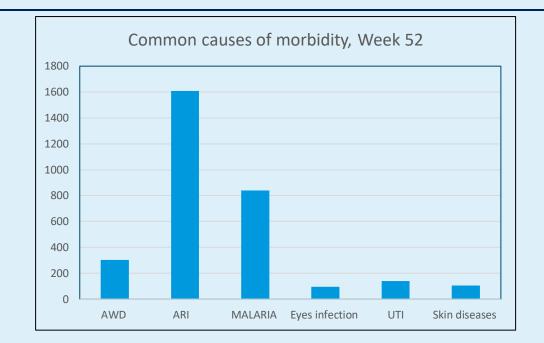


Renk Updates Basic health and RCCE updates for week 52

- The cumulative number of consultations since the crisis is 165,515.
- The number of consultations in a week (#52) is 4,897.
- The number of ANC attendances since the conflict is 4,628.
- The number of new deliveries in a week is 7, bringing the cumulative number to 322.
- The cumulative number of MUAC screenings is **5,533**.
- The number of MUAC screenings in week 52 is 654.
- Acute Respiratory Illness is the acute cause of morbidity in week 52, followed by malaria and Acute watery diarrhea

RCCE updates

- Partially mapped RCCE Ips in and around Renk
- Identified community leaders at the transit site to help in daily reporting of cholera-suspected cases
- Visited 3 out of 11 HFs to assess RCCE needs and resources
- Distributed 60 translated IEC materials in classic Arabic to 6 HFs on 24
 Dec
- Participated in orientation of 26 HFs staff on cholera preparedness and RCCE activity on 23 and 24 Dec organized by WHO
- Participated in community leader engagement meeting on 26 Dec organized by UNICEF

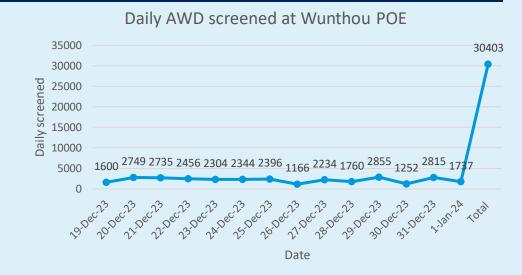


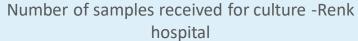




Update on cholera readiness/preparedness in Renk

- 30,403 people were screened at Wunthou POE, including 15,439 females and 14,964 males.
- 31 samples were tested for culture in Renk since December 23, 2023, and none showed growth for V. Cholera.
- Expanded the health services and oral rehydration therapy (ORT) for AWD cases including through partner run facilities
- Set up a screening center at the point of entry to identify and isolate suspected cases
- Engaged, trained, and deployed a 13-person rapid response team (RRT) and surveillance officers to conduct active case finding, sample collection, diagnosis, and contact tracing
- Establishment of the cholera treatment unit at Wunthou is ongoing while the CTU at Renk Hospital is completed that will provide adequate care and treatment for confirmed cases
- Provided essential supplies, such as cholera kits, rapid diagnostic tests, and tents
- Improving the laboratory capacity by setting up a culture testing facility in Renk for the first time, which reduced the time and cost of sending samples to Juba for confirmation
- Prepared the implementing partners to coordinate and align their activities with the risk assessment and the cholera response plan
- Improved the WASH situation in and around the point of entry, transit centers and the host communities, by providing safe water, sanitation, hygiene promotion, risk communication, and community engagement (RCCE).











IPC and WASH Updates

- WHO, in collaboration with MoH (NPHL), has continued the regular monitoring and testing of water supplies in and around Renk.
- Effective water quality testing, monitoring, and surveillance were held at the Renk transit site, healthcare facilities, community, tap stands, schools, and households
- The level of water cleanness of Renk County's various water points and
 T.C. waters was determined through testing the level of free choline residual, PH, turbidity, and bacteriological test.
- Different water treatment points with fecal or total coliforms both negative and positive were differentiated using bacteriological tests within Renk county
- Surveying of other water ponds nearer Renk Town, the TC and Jalhak encampments in which children are swimming every day. This point is relevant due to the high number of cases of haematuria likely due to schistosomiasis being reported by the health facilities.

Wate	r Quality Testing & Monitoring Test Results Form 2023	
S/ No	Variables	Total
1	Total Sample Tested	14
2	Total Sample with CFU/100mL	10
3	Total Sample with No CFU/100mL	4
4	Total Sample with No Free Residual Chlorine	13
5	Total Sample with pH out of Range	0
6	Total Sample from Borehole	0
7	Total Sample hand pump	0
8	Totat sample from Household	2
9	total sample from River/surface water	1
10	Total sample from SWAT /Treatment Plants	3





ACTIVE OUTBREAKS AND PUBLIC HEALTH EVENTS



Measles Updates



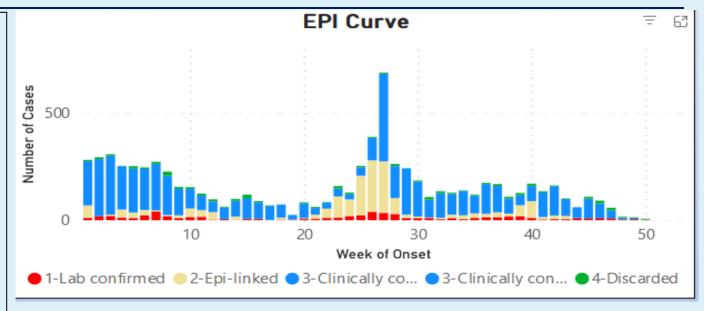


Measles outbreak situation update

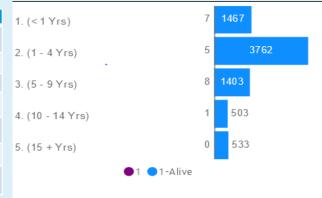
- As of Epi week 50, 2023, 7 862 suspected measles cases were reported, with 586 (7.6%) lab-confirmed, 173 deaths, and a case fatality rate of 2.2%.
- 66% of cases are in children less than five years of age,
 with 77% of all related deaths

In the last four weeks,

- 20 cases reported with the date of onset from week 50
- New counties with a confirmed outbreak are Magwi, Tonj East, Maridi, and Mundri East
- Reactive Vaccination campaign is underway in these counties with support from WHO and partners



FINAL CLASSIFICATION	2	2023
	NO. OF CASES	%
Lab confirmed	586	7.5
Epi-linked	1,611	20.5
Clinically Compatible	5,316	67.6
Total	7,513	95.6
Discarded (-ve)	349	4.4
Grand Total	7,862	100.0



Source: measles sitrep





Vaccination Response Following Sudan Crisis

1. Phase I (Reactive campaign in July 2023)

County		Me	asles				Polio			
	Target (6mth – 15 Yrs)	Host	Returnee	Total	Coverage	Target (0 – 15 Yrs)	Host	Returnee	Total	Coverage
		_					_			
Aweil East	2,504	0	2,378	2,378	95%	2,615	0	478	478	18%
Aweil North	700	0	599	599	86%	731	0	786	786	108%
Aweil West	3,497	0	3,179	3,179	91%	3,652	0	2743	2743	75%
Rubkona	9000	6,494	2,684	9,178	102%	9,400	3814	1461	5275	56%
Renk	53,000	40,518	9,753	50,271	95%	55,356	44,163	10625	54788	99%
Total	68,701	47,012	18,593	65,605	96%	71,754	47,977	16,093	64,070	89%

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Phase II Measles Reactive/Mop-Up Vaccination Activities

Counties included for Mop up/Reactive campaign based on

- ■Low performance of last MFUP campaign both admin and PCE coverage taken as a reference
- Active Measles transmission from Epi week 25 forward (4 weeks after the MFUP campaign)
- ■Border with Sudan and have registered point of entry (reference IOM population tracking dashboard)
- Counties with temporary transit camps





Measles Reactive/Mop Up Vaccination (Sept to date)

#	County	Target age group	Type of vaccination	Supporting Partner	Status of Implementation
		1418ct 48c 8104b	Type of vaccination	supporting runner	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	Мор Uр	Save the Children/ Unicef	Completed (Final data submitted but not 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 submitted)
11	Ayod	6- 59 months	Мор Uр	MEDAIR/IMA/Unicef	Partial Complete (three Payams yet to implement)
12	Fangak	6 to 59 months	Mop up/Reactive	HFO	Complete (Final data submitted but not uploaded on ODK)
13	Logechuk	6 months to 15 years	Reactive	WHO/Unicef	 Partially Complete Dajo Payam is yet to implement
14	Akobo	6 to 59 months	Reactive	WHO/Unicef	Completed (Final data submitted)
15	Maban	6 months to 15 years	Reactive	WHO/Unicef	Completed (Final data submitted)
16	Maiwut	6 months to 15 years	Reactive	WHO/Unicef	The campaign is ongoing from 10 th of Dec
feath 17	Kapoeta East	6 to 59 months	Reactive	WHO/Unicef	The campaign is ongoing from 8 th of Dec



Measles Reactive/Mop Up vaccination Data from 15 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
Abyei	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	28,642	-	28,642	67%		-	-	•		Complete
Malakal	29,291	25,654	3,328	28,982	99%	30,592	25,298	3,422	28,720	94%	Complete
Melut	30,470	28,852	652	29,504	97%	31,824	26,469	1,595	28,064	88%	Complete
Longechuk	50,289	33,942	7,189	41,131	82%	52,524	30,331	7,496	37,827	72%	Partially complete
Awerial	33,410	28,536	-	28,536	85%	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
Fangak	29585	25,973	573	26,546	90%	32,700	25,014	923	25,937	79%	Complete
Akobo	35,531	28,259	8,501	36,760	103%	39,271	30,022	8,843	38,865	99%	Complete
Maban	138,608	62,231	61,194	123,425	89%	-		-	-	-	Complete
Total	865,753	650,600	131,584	782,184	90%	713,578	540,833	60,926	601,759	84%	





Summary of Measles Reactive/Mop Up vaccination (Phase I and Phase II)

- As of week 49, a total of 15 counties have implemented the campaign (Ayod, Leer, Juba, Rubkona, Malakal, Melut, Abyei, Longechuk, Gogrial West, Twic, Awerial, Yirol East, Akobo, Fangak and Maban).
- The total number of children vaccinated in phase II reactive campaign is 782,184 (90%) of which 131,584 (17%) of them are returnees from Sudan and Ethiopia and refugees in Maban.
- Akobo and Kapoeta East counties are additional counties included in the vaccine response plan. Accordingly, Akobo complete the campaign and vaccinated 36,760 (103%) including 8,501(23%) returnees from Ethiopia. Similarly, the campaign is ongoing in Kapoeta East and waiting for the data submission.
- Maiwut and Ayod County also completed the preparation and campaign is ongoing in both counties from 10th of Dec and expected to finalize on 17th of Dec 2023.
- POE/Temporary transit post vaccination is ongoing in the 10 prioritized counties. The antigens being used at POE/Transit post are Measles OPV and COVID -19.
- As of Week 49, a total of 10 sites in 5 counties (Juba, Akobo, Aweil East, Malakal and Melut) have started vaccination. The partial data submitted from these sites for the last one week showed a total of 2,394 children of under 15 years vaccinated with Measles and 2,486 with Polio vaccine.





Recommendations

- The following are the key actions that will be taken to support the planned measles mop-up campaign and other activities:-
- The Ministry of Health (MOH) and its partners will provide support- State and County MOH will continue to report measles cases on a weekly basis, including zero reporting where applicable-
- UNICEF will ensure there is enough measles vaccine stock-
- Prompt detection and management of measles cases will be prioritized- Vitamin A will be added to future responses-
- Blood samples will be collected from suspected cases in counties that continue to report measles cases for longer than 4 weeks to monitor the epidemiology- Nasopharyngeal swabs will be collected from new cases-
- Routine immunization at points of entry and within the community will be strengthened-
- Case management will be prioritized to reduce morbidity and mortality-
- Risk communication and community engagement in health and help-seeking behavior will be enhanced.







ACTIVE OUTBREAKS AND PUBLIC HEALTH EVENTS



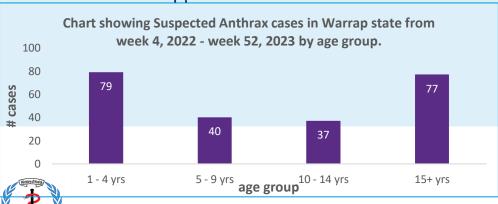
Anthrax Updates

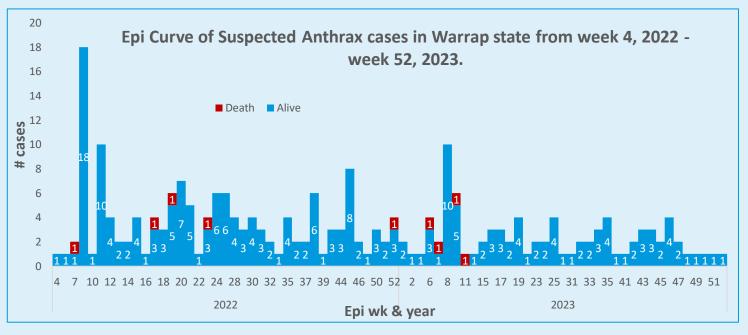


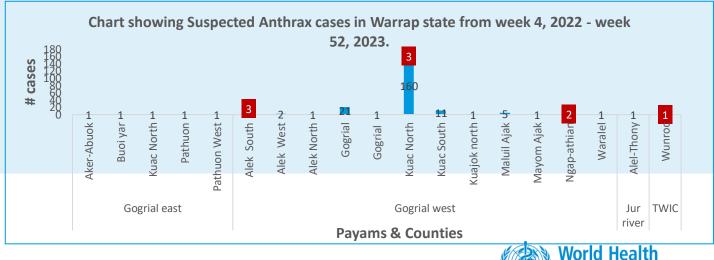


Update on Anthrax cases In Warrap State week 1 2022 to week 52, 2023

- Warrap State has been reporting seasonal cases of anthrax
- A total of 233 suspected cases have been reported in three payams from week 4, 2022, to week 52, 2023.
- Nine (9) cumulative deaths were registered since the suspected outbreak began 3.82%
- Majority of the cases (66%) 156 are in children less than
 15 yrs and 44 in age above 15 yrs of age
- Over 90% (211) are reported from Gogrial West County, and Kuac North is the most affected Payam since the outbreak in 2022.
- Regarding categorization by Sex, 54% of the cases were reported among the female, and men accounted for 46%.
- Anthrax was confirmed in 2022, and the Ministry of Livestock and Fisheries conducted vaccination of livestock with support from FAO







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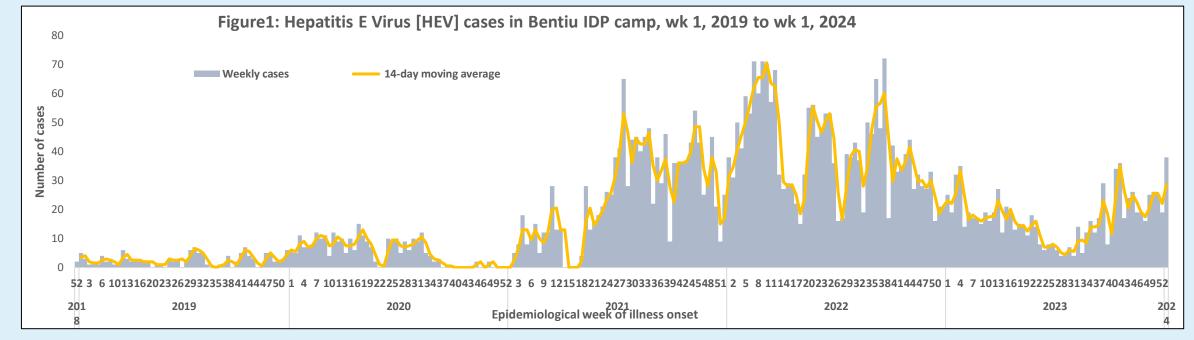
ACTIVE OUTBREAKS AND PUBLIC HEALTH EVENTS

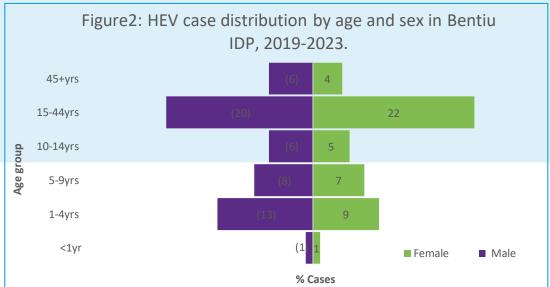


Hepatitis E fr Bentiu Updates









- A total of 4,716 cases, including 27 deaths, have been reported since the outbreak was declared in 2019 (see Figure 1 above).
- CFR = 0.57%
- By sex, men account for 53% of the cases, and by age, 15-44 years old registered the majority of the cases (see Figure 2 above).





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











