

## Republic of South Sudan

# Weekly Integrated Disease Surveillance and Response (IDSR) Epidemiological Bulletin

Reporting period: Epidemiological Week 48

25 Nov to 1 Dec 2024

This weekly bulletin presents the epidemiological status of priority diseases, events, and conditions under surveillance in South Sudan. The data comes from various actors involved in preparedness and response to public health events in the country. Special thanks to all the health implementing partner and health cluster humanitarian agencies supporting integrated disease surveillance and response.

## **Key highlights**

- In week 48 of 2024, the IDSR reporting timeliness was 76%, and completeness was 89%. There is a slight decrease from 78% reporting in week 47 to 76% in week 48 in timeliness, while completeness declined from 90% in week 47 to 88% in week 48, but still maintained consistent improvement in terms of completeness since week 31. There is a consistent improvement witnessed in timeliness and completeness since week 31. Eight States and the Three administrative areas attained completeness of reporting above 80%. Greater Pibor Administrative area, Lakes, Ruweng administrative area, and Unity State achieved 100% completeness of reporting. However, only 7 of the 13 states/administrative areas attained timeliness of reporting above 80%.
- At the EWARN mobile sites, the Timeliness and Completeness of IDSR performance were at 47% and 53% respectively. There is slight decline in timeliness of reporting from 53% in week47 to 47% in week48, while completeness of reporting had remained at 53% for both weeks (47&48) respectively.
- In week 48, 80 EWARS alerts were triggered, and the proportion of verified alerts decreased from 78% in Week 47 to 54% in week 48. Most of the alerts were for ARI (26%), AWD (21%), Guinea Worm (15%), Malaria (11%) and Cholera (8%).
- Cholera outbreak is now reported in 21 of the 80 counties as of 11 December across 6 states in South Sudan. From September 28 to December 11, 2024, there have been a cumulative total of 2885 cases, including 678 RDT positive cases. The cumulative number of laboratory-confirmed cases remained 61 of the 118 culture tests so far conducted. The cumulative number of deaths now stands at 38 (13 in community and 25 at health facilities) bringing the CFR to1.3%, which is lower compared to previous outbreaks but higher than global acceptable ratios.
- South Sudan has received over 1,000, 000 doses of Oral cholera vaccine as part of the response to the ongoing outbreaks in three counties of Juba, Renk and Malakal.
- Other active outbreaks and events in South Sudan include measles in Tonj East County and hepatitis E in multiple locations, cVDPV2/Polio now declared a countrywide outbreak, as well as flooding, that has so far affected more than one million people across 52 counties, with 56 health facilities inundated.

## **Surveillance System Performance**

The epidemic alert and response system in South Sudan currently relies mainly on immediate alert notifications and weekly aggregate reporting of cases through the Integrated Disease Surveillance and Response (IDSR) system. This system is complemented by a weekly Early Warning Alert and Response System (EWARS).

Completeness (proportion of all reports received regardless of time) and timeliness (proportion of reports received by the Wednesday following the end of the reporting period) of IDSR and EWARS are shown in Table 1 below. Timeliness and completeness for week 48 were at 76% and 88%, respectively, which was an improvement from the attainments from the previous week.

Table 1: Timeliness and completeness of IDSR reporting by State for week 48 compared to 47 of 2024

State	Total	Number of facilities reported	Comp	Comparison of the reporting period Cur		Cumulative s	Cumulative since year start			
	facilities	(Completeness	Timel	iness	Compl	eteness	(2024 level)			
		Wk48)	Week 48	Week 47	Week 48	Week 47	Timeliness	Completeness		
Lakes	112	112	95%	80%	100%	100%	69%	100%		
NBGZ	101	86	74%	64%	85%	78%	60%	80%		
Unity	84	85	100%	99%	100%	100%	88%	99%		
WBGZ	113	102	81%	88%	90%	90%	43%	82%		
WES	191	157	64%	100%	82%	100%	65%	95%		
Jonglei	120	108	89%	83%	90%	90%	73%	87%		
Warrap	114	105	64%	66%	92%	94%	49%	88%		
EES	112	96	56%	54%	86%	86%	58%	94%		
RAA	16	16	38%	44%	100%	100%	49%	97%		
CES	152	124	82%	79%	82%	79%	65%	93%		
AAA	17	16	94%	82%	94%	82%	68%	82%		
Upper Nile	143	120	67%	66%	84%	85%	52%	87%		
GPAA	16	16	100%	50%	100%	100%	90%	92%		
Total	1291	1143	76%	78%	89%	91%	62%	91%		

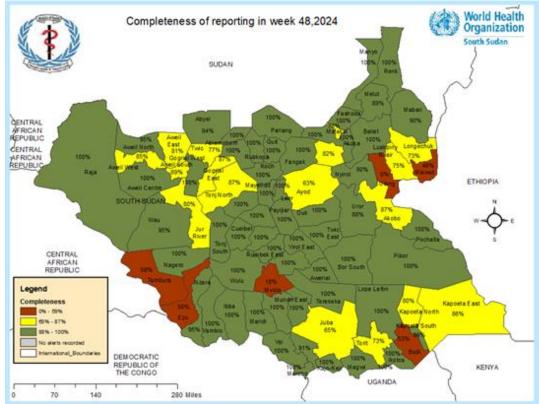
NOTE: Since week 41, the total number of facilities nationwide has decreased following the removal of three duplicate entries

**Table 2**: Timeliness and completeness of reporting by Payam and Partner of IDSR reporting from NGO-run mobile health facilities and private health facilities in Juba and Wau, Week 48 of 2024.

Partners	# of Reporting Mobile Sites	% of Timeliness in week 47	% of Completeness in Week 47	Payam	# of Reporting Private Health Facilities	% of Timeliness in week 48	% of Completeness in week 48
IMC	4	0%	0%	Kator	3	0%	0%
SSHCO	1	0%	0%	Marial Baai	1	100%	100%
SMC	1	0%	0%	Northern Bari	1	0%	100%
SCI	2	100%	100%	Rajaf	3	100%	100%
HFO	4	75%	75%	Muniki	12	100%	100%
WVI	2	50%	50%	Wau South	20	100%	100%
CIDO	1	100%	200%	Wau North	12	92%	92%
TOTAL	15	47%	53%	Juba	10	0%	0%
				Mangala	1	100%	100%
				TOTAL	63	76%	78%

An important point to note: The six facilities supported by IMC (4), SSHCO (1), and SMC (1) are no longer reporting due to the end of HPF project funding which has affected the performance of partners reporting sites. The IDSR team is exploring the new implementing partner covering these facilities to re-establish weekly epidemiological reporting.

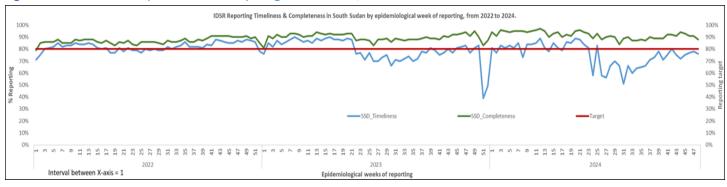




Given the turbulent declines in timeliness and completeness of IDSR reporting, this week, we continued to analyze the performance over the past three years. We documented that the declines in 2024 (Wk. 21-31) are more pronounced than they were in previous years of 2023 and 2022. In this HSTP transition period, we shall continue to provide targeted support to the newly contracted health implementing partners to recover this surveillance performance indicator. Notably, the IDSR timeliness of reporting continued to improve since week 31 when the lowest reporting rates were observed, thanks to the targeted support to the poorest reporting counties.

The primary reason cited for the inadequate performance in timeliness and completeness indicators was the challenge of staff turnover and inaccessibility to some health facilities.

Figure 1: Timeliness and Completeness of IDSR reporting in South Sudan; 2022-2024.



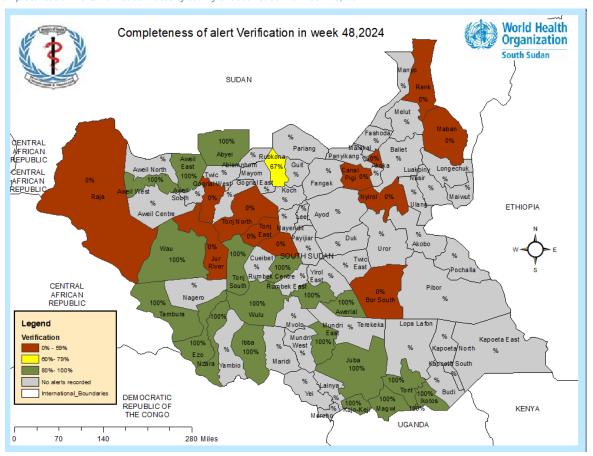
## **Epidemic alerts**

In week 48, 80 alerts were triggered in the EWARS system, with 54% (43 of 80) verified, much lower than the previous week 47, where 78% (70/90) were verified. In Week 47, ten states and one administrative area recorded at least one notifiable disease alert. Most of the alerts were for ARI (26%), AWD (21%), Guinea Worm (15%), Malaria (11%) and Cholera (8%). Table 3 below

Table 3: Summary of EWARS alerts triggered in Epidemiological Week 48, 2024.

	A	JS	А	RI	ΑW	/D	Al	FP	ΑI	BD	Chc	lera		vid- .9	E	BS		inea orm	N	/lalaria	N	1easles	N	1eningitis		ub- otal
	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#		#		#		#	#
State/Admin	R	٧	R	٧	R	٧	R	٧	R	٧	R	V	R	٧	R	V	R	٧	R	# V	R	# V	R	# V	R	V
AAA	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
CES	1	1	1	1	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	1	1	5	5
EES	0	0	0	0	1	1	0	0	0	0	1	1	0	0	0	0	0	0	2	2	0	0	0	0	4	4
Jonglei	0	0	3	0	2	0	0	0	2	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	10	0
Lakes	0	0	3	3	2	2	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	7	7
NBGZ	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
Unity	2	2	0	0	0	0	0	0	0	0	2	2	0	0	1	1	0	0	0	0	0	0	0	0	5	5
Upper Nile	0	0	4	0	4	0	0	0	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	11	0
Warrap	0	0	2	0	4	0	0	0	0	0	1	1	0	0	0	0	5	1	3	0	2	1	0	0	17	3
WBGZ	0	0	3	2	1	1	0	0	0	0	0	0	0	0	0	0	2	1	1	1	0	0	0	0	7	5
WES	0	0	4	4	1	1	1	1	2	2	0	0	0	0	0	0	0	0	3	3	0	0	0	0	11	11
GPAA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RAA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	3	3	21	11	17	7	1	1	5	2	6	5	1	1	2	2	12	3	9	6	2	1	1	1	80	43

Figure 2: Completeness of Alerts Verification rates by county of South Sudan for week 48, 2024

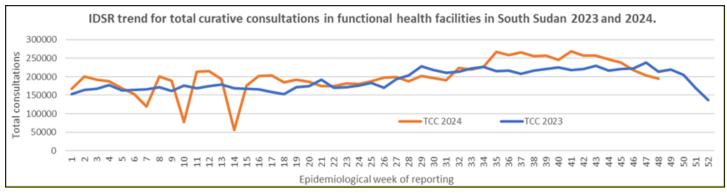


#### Weekly Update on Indicator-Based Surveillance (Week 47)

Indicator-based surveillance is implemented in South Sudan through the EWARS platform according to the IDSR 3rd guidelines, where approximately 59 priority diseases and public health events are regularly monitored and reported from health facilities across the country.

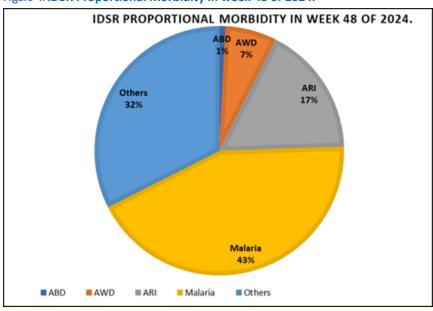
- During week 48 of the year 2024, individuals aged five years and older reported the highest volume of consultations at the outpatient department (OPD).
- Since the commencement of the current year, the cumulative number of patients treated in both the outpatient and inpatient departments has reached a total of 9651799
- Comparing the utilization of healthcare services in 2023 and 2024 reveals fluctuating trends, suggesting variations in the weekly number of consultations

Figure 3: Trends of cumulative curative/OPD consultations reported in the Monthly DHIS reporting: 2023-2024.



- In week 48 of 2024, malaria continue to be the leading cause of morbidity and mortality, with over 100,000 reported cases nationwide.
- Comparison between week 48 of 2023 and 2024 reveals an increase incidence of ABD, ARI, and Malaria
  in 2024 for all the four major causes of morbidity in the country compared to the same period in 2023.
- Malaria represented 43% of total consultations in week 48 of 2024 and emerged the top cause of morbidity and mortality during the week.
- Other causes of illness accounted for 32% of the over-all consultations in the country (Figure 6 below).

Figure 4: IDSR Proportional Morbidity in week 48 of 2024.



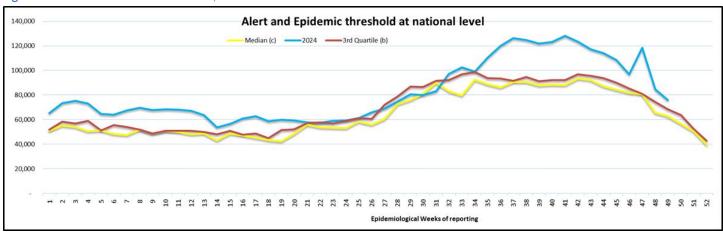
## **National Malaria Update**

- The national malaria situation during this week indicates that the incidence is above the epidemic threshold, making ongoing monitoring critical at all levels (Figure 7).
- It is important to note that a malaria epidemic was recorded in two states and 35 counties during this period (Figure 8).
- Ongoing challenges in the implementation of other measures including vector control, case management (Therapeutic efficacy) and monitoring using the IDSR/DHIS2 generated information

#### **Ongoing Interventions**

- > The Malaria Indicator Survey concluded, and findings will inform strategic interventions
- Locations with upsurges have been supported with anti-materials through the WHO emergency stockpile

Figure 5: Malaria Incidence in South Sudan, as of Week 48 of 2024



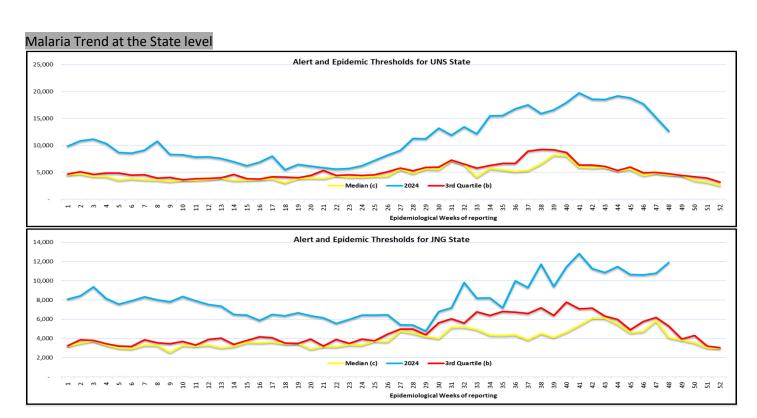


Figure 6: Weekly tracking of South Sudan Counties above the Alert and epidemic thresholds for Malaria

## Influenza Sentinel surveillance weekly updates.

Currently, there are six designated Influenza sentinel surveillance sites in the country: Juba Teaching Hospital, Al Sabbah Children's Hospital, Juba Military Hospital, Rumbek State Hospital, Bor State Hospital, and Nimule Hospital. They are actively collecting epidemiological data and samples from ILI/SARI cases.

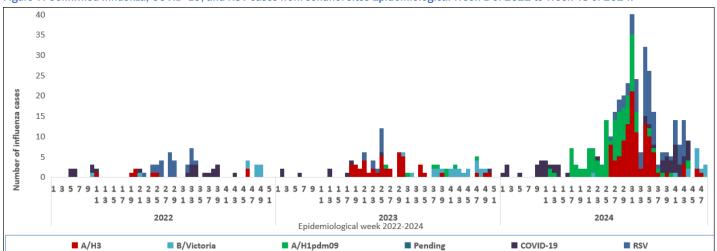


Figure 7: Confirmed Influenza, COVID-19, and RSV cases from sentinel sites Epidemiological Week 1 of 2022 to Week 48 of 2024.

During Epidemiological Weeks 1 to 46 in 2024, a total of 2408 ILI/SARI samples have been collected; 2043 tested negative for all pathogens, (55) were positive for COVID-19, (110) for Influenza Type A (H3), (13) for Influenza Type B (Victoria), (95) for Influenza A/(H1N1)pdm09 and (94) for RSV.

#### Confirmed and congoing epidemics in 2024

Table 4: Summary of ongoing and confirmed epidemics

			New cases	Cumulative	ve Response activities								
Aetiologic	Location	Date first	since last	suspected	Surveillance/Lab	Case	Vaccination	Health	IPC/WASH				
agent	(county)	reported	bulletin	cases	confirmed	management		promotion					
Yellow Fever	Yambio, Nzara, Ezo, Tambura, Ibba and Maridi	21 Dec 2023	0	139	3	Ongoing	Done in 7 counties	Ongoing	Ongoing				
Measles	Multiple counties	2024	12	3429	206	ongoing	Completed	ongoing	ongoing				

cVDPV2	Yambio, Juba, Ulang, Nasir, Baliet, Ayod, Old Fangak	19/Dec 2023	2	21	21	Not applicable	Completed 2 nOPV2 SIAsand 3 <sup>rd</sup> round is ongoing	ongoing	ongoing
Anthrax	Gogrial west (WRP) and Jur River (NBG)	2022	3	168	3	ongoing	Ongoing in the animalsector	ongoing	ongoing
Hepatitis E	Fangak	2023	0	701*	253	ongoing	ongoing	ongoing	ongoing
Hepatitis E	Rubkona (Bentiu IDP Camp)	Dec/2018	25	6, 120	-	ongoing	Done in 2021/22	ongoing	ongoing
Hepatitis E	Twic	Feb 2024	0	32	1	ongoing	Not done	ongoing	ongoing
Hepatitis E	Abyei	June 2024	0	64	3	ongoing	no	yes	yes
Cholera	In 19 counties across six states	September 2024	433	1427	45	ongoing	Underway in some counties	yes	yes

Since 2022, South Sudan has experienced several emergencies throughout the country. Based on data from the states and the EWARS system, most counties have reported ongoing disease outbreaks. These outbreaks included measles, anthrax, meningitis, cholera, hepatitis Evirus, and others. Measures have been put in place to help mitigate the spread of these outbreaks. Below is a map of the confirmed emergencies as at 6<sup>th</sup> December 2024

SUDAN 0 Northern Bahr El Ghazal Awell So Western Bahr El Ghazal Jonglei ₩ Ø Nage: **AFRICAN** REPUBLIC \*\*\* 典典 Cholera Western Equatoria Yellow Fever Eastern Équatoria Measles 费 cVDPV2 REPUBLIC OF Hepatitis E KENYA THE CONGO Anthrax Data Source: WHO South Sudan Map Production: HIM Unit, WHO South Sudan Map Date: 28/11/2024 300 Kilometers

Figure 11: Map showing confirmed disease outbreaks across the country in 2024.

## Response activities for ongoing/suspected outbreaks

## 1. South Sudan Cholera Outbreak Epidemic description as at 1st December, 2024

- On 28 September 2024, the WHO team in Renk received a notification of suspected cholera cases in Joda.
- ☐ Samples sent to NPHL showed growth in 6 samples collected from suspected cases by culture for the vibrio cholerae serogroup 01 sub-type Ogawa suspected cases
- ☐ The Ministry of Health declared an outbreak in Renk on the 28th day of October activating IMS for the coordination of the outbreak.
- ☐ From 28th September to 6th December 2024, a cumulative 1,948 suspected and confirmed Cholera cases including 28 deaths (case fatality rate: 1.4%) had been reported from 18 Counties (Juba, Magwi, Ayod, Canal Pigi, Fangak, Aweil Centre, Aweil East, Aweil North, Aweil South, Aweil West, Rubkona, Fashoda, Maban, Malakal, Panyikang, Renk, Fangak and Ulang) across 6 States of South Sudan.
- ☐ The outbreak has been confirmed in 18 of 80 counties and 6 states. The most affected counties were Malakal county (780 cases and 5 deaths), followed by Rubkona, (363 cases and 6 deaths) and Renk comes in 3<sup>rd</sup> with 323 cases and 2 death. In Juba, cholera affected 196 cases and caused 10 deaths (53 RDT positive and 6 culture positive). In Northern Bahr el Ghazal state, all the five counties have reported cholera cases, with a cumulative total of 175 cases.
- ☐ The most affected age group (with highest case count) is 0-4 years (representing 37% of cases), followed by the 5–14-year age group (19%).
- ☐ The epidemic evolution in the different counties has varied between counties and over time. The outbreak in Malakal has been explosive with a point-source epidemic curve while Juba and Renk had nearly flat epidemic curves that spiraled upwards in the latest weeks.

Figure 8 Epidemic curve and distribution of Cholera Cases in Malakal by Week, week39-48\*,2024

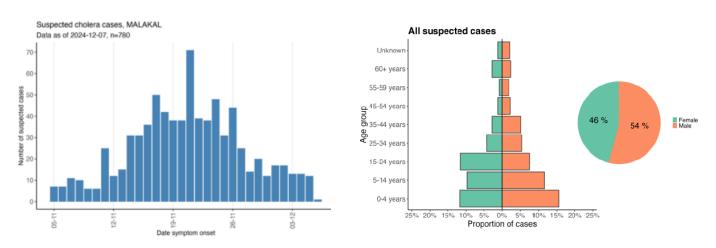
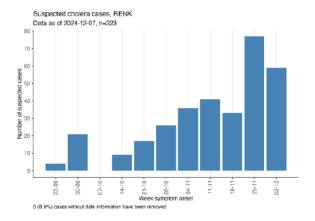


Figure 11: Epidemic curve and distribution of Cholera Cases in Renk by Week, week39-48\*,2024



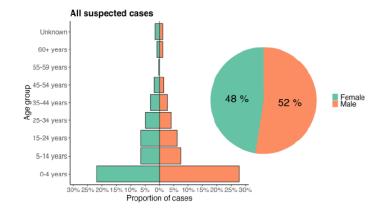
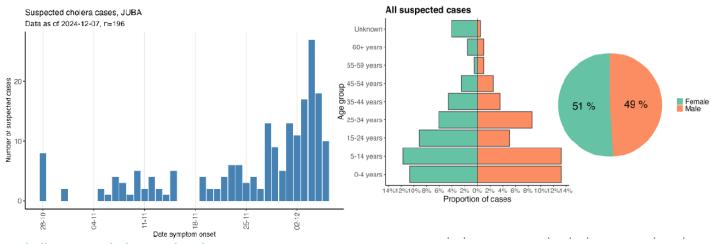


Figure 12: Epidemic curve and distribution of Cholera Cases in Renk by Week, week39-48\*,2024



#### **Key Challenges to Cholera Outbreak Response**

- Uncontrolled outbreak in Sudan, with free and porous border
- Suboptimal coordination and resource mobilization for effective response at national and subnational levels.
- Water, Sanitation, and Hygiene (WASH) Issues including contaminated water sources and lack of proper sanitation facilities exacerbating the outbreak situation through increased risk of transmission.
- Inadequate Community Engagement and Education on the modes of cholera transmission and preventive measures.
- Limited Healthcare Infrastructure (CTCs/CTUs) and limited essential supplies and trained personnel.
- Displacement and Population Movement the cholera outbreak in Sudan that has witnessed protracted conflict resulting in significant population displacement into South Sudan will continue to pose risk of cholera importation.
- Funding Constraints current response efforts heavily rely on external funding

#### **Key Recommendations for improving Cholera outbreak response**

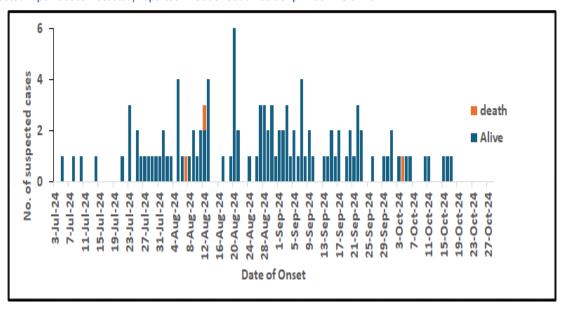
- Improve national and subnational coordination for streamlined (IMS) and effective cholera response.
- Mobilize adequate resources using the cholera response plan to address critical infrastructural gaps such
  as establishment of CTCs/CTUs, improve the WASH conditions and strengthen RCCE activities.
- Establish mechanisms to improve cross-border collaboration through high level government and humanitarian partners engagement.
- Scale up WASH interventions to limit community spread of Cholera
- Mobilise and train all community owned resource persons to intensify community engagement and education on prevention and control of Cholera

### 2. Updates on Suspected Monkeypox Outbreak

The latest update on the suspected Mpox cases is as follows:

Figure 13; Epidemic curve for Suspected Mpox Cases Detected/reported in South Sudan as at Epi Week 48 of 2024.

In week 48 of 2024, there were no reported suspected cases and suspected deaths reported due to Mpox.The number cumulative suspected Mpox cases remained at 112. The suspected cases had been reported across 10 states and three(3) administrative area. Out of these, 111 cases have been verified, and samples collected. One sample was discarded. Alerts have been received from 24 counties. Out of 111 tested samples, all



turned negative for Mpox using the PCR. Thirty-three samples were sent for meta-genomic sequencing, and all tested negative for Mpox.)

Majority of the suspected cases are less than 15 years of age and Males accounted for (56%) compared to females (44%). Ongoing sensitization of health care workers in Juba and Nimule are under way.

## 3. Circulating Vaccine Derived Polio Virus type-2 (cVDPV2).

The Ministry of Health declared the cVDPV2 as a public health emergency on December 22, 2023, following confirmation of PV2 Yambio. The total number of laboratory-confirmed cVDPV2 isolates from AFP cases are 12. Cases are reported from Yambio in Western Equatoria, Juba in Central Equatoria, Ayod in Jonglei, Baliet, Luakpiny/Nasir, and Longechuk in Upper Nile, and Tambura in Western Equatoria state. Four additional viruses were isolated from samples collected from healthy children sampled during outbreak investigation. Another three samples collected from contacts of AFP children also tested positive for the cVDPV2. In the last six months nine cVDPV2 viruses were isolated from environmental samples collected from three environmental sites in Juba. The latest cVDPV2 virus isolate from an environmental surveillance sample collected on 5th November 2024, while the latest isolate from AFP isolate was in a case with onset of Paralysis on 02/09/2024. The third response round was conducted in the 4th week of October reaching 3,405,150 children. All States attained 90% and higher administrative coverage. In the 3rd round of nOPV2 outbreak response SIAs, 292 610 children received their first dose, justifying an additional 4th response vaccination round for these children to get a second opportunity to receive OPV2 and in turn reduce the risk of virus seeding for future outbreaks.

During the 3rd nOPV2 response vaccination, 1 610 support supervisions were documented on ODK in 77 of the 80 counties. This was an improvement from 1456 supervisions in 70 counties documented in the second nOPV2 outbreak response SIAs conducted in April 2024.

The nOPV2 SIAs campaign was monitored for quality, using LQA surveys. The 3rd round had 46% (18 of 39 counties surveyed passing the LQAs test. This was a decline from 58% (23 of 40 counties surveyed) that was achieved in the second response round. Similarly, the proportion of counties surveyed in which the LQAs test failed increased from 23% (9 of 40 counties) to 26% (10 of the 39 counties). Data from the LQAs survey shows that the majority of missed children were due to poor vaccination team performance (houses not visited, vaccinated but not finger marked, and child was asleep). All the under-performance was predictable 1 week prior to the campaign, only 80% of the counties were ready.

### 4. Measles Update

- Over the past week (48), there was no case of suspected measles reported. The cumulative number of suspected measles cases remained 3 488 as at week 48.
- □ During the epidemiological week 48, there were no newly confirmed measles cases by IgM, and therefore the cumulative total number of confirmed measles cases remained 228 (of the 384 cases from whom serum samples were collected).
- □ 64% of measles cases occur in children under the age of 5, highlighting a critical failure in routine immunization programs.
- ☐ Furthermore, 80% of these cases are found among children aged between 6 months and 9 years, making this age group the optimal focus for measles outbreaks response Supplementary Immunization Activities (SIAS).

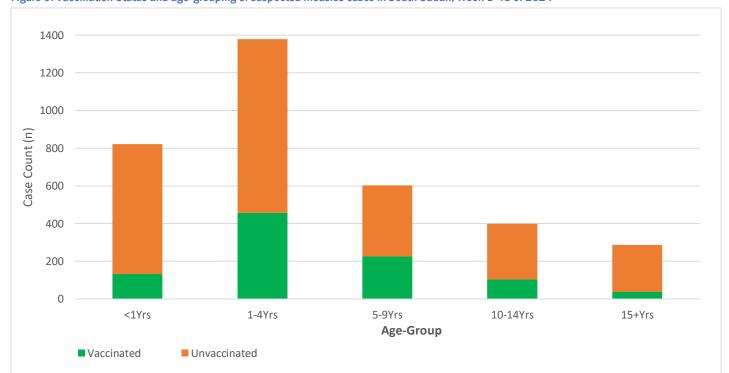


Figure 9: Vaccination Status and age-grouping of suspected measles cases in South Sudan; Week 1-48 of 2024

## 5. Hepatitis E outbreak in Bentiu IDP Camp in Unity State.

- During week 48 of 2024, there were 25 newly reported cases, with 6 testing positives using rapid diagnostic tests (RDT), and there were no fatalities reported.
- Cumulatively, a total of 6,180 Hepatitis E virus cases including 34 deaths case fatality ration of 0.55% have been reported since the outbreak started in 2018
- Among the cases reported a total of 43 cases were recorded in individuals aged 15 to 44 years old.
- Majority of the cases are Males accounted for 52% (3, 214 cases) while females were 48% (2, 966 cases).
- The charts in figure 15, illustrate the distribution of hepatitis E virus (HEV) cases over time (epidemic curve) and Figure 16, illustrates the cases distribution by patients' place of residence, age and sex, both within and outside the Bentiu Protection of Civilians (PoC) site.
- Predominantly, the reported Hepatitis E virus cases were identified in individuals living outside the Bentiu
  Internally Displaced Persons (IDP) Camp, who then sought medical assistance at the healthcare centers located
  within the camp.

Figure 105: Epicure of HEV in Bentiu IDP camp, Unity State; Epi Week 52 of 2018 to Week 44 of 2024

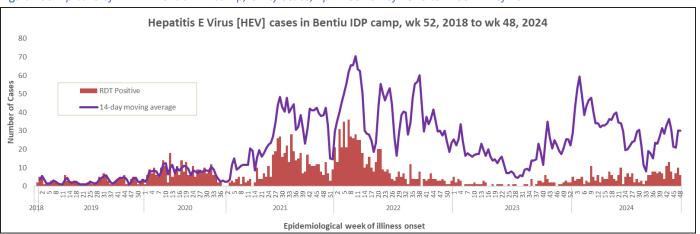
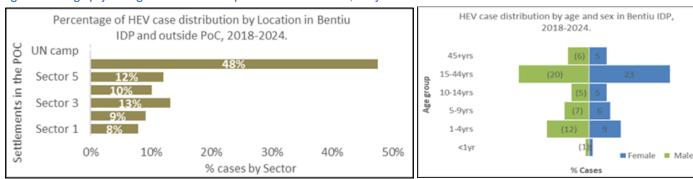


Figure 11: Geography and age distribution of Hepatitis E cases in Bentiu, Unity state of South Sudan



#### **Other Events**

**Sudan crisis**: As of Week48, at least **889 335** (433 348 Males and 455 987 females) individuals have crossed from 18 different nationalities. Of this number, **75.85% (674 561)** are South Sudanese returnees and 23.55% (209 438) are Sudanese refugees. Only 0.33% are from other nationalities, largely Eritrean population. Currently, 21 PoEs are being monitored, with Joda-Renk accounting for 69% of the reported influx figures. There are currently 58 898 individuals (13 784 in transit Centre and 45 114 in host communities) in Renk. Hostcommunities and healthcare systems are struggling to cope with the increased demand for health and other Services, morbidity, and mortality among returnees and refugees. Currently most of the counties receiving returnees including Juba have confirmed cholera outbreaks and interventions have been put in place to mitigate adverse effect including use of Oral cholera Vaccines (OCV) aimed at mitigating the risks of sustained transmission.

Food insecurity in 2023, severe acute food insecurity impacted an estimated 7.7 million people across 78 counties in South Sudan. This includes 43,000 people facing catastrophe-level food insecurity at Integrated Food Security Phase Classification (IPC) Phase 5, 2.9 million at IPC Phase 4 (emergency-level), and 4.8 million at IPC Phase 3 (crisis-level). Among those affected are 1.4 million malnourished children. For 2024, it is estimated that millions of people will still be unable to meet minimum food needs as food stocks could be depleted by April 2024. Additionally, ongoing sporadic conflicts and the influx of returnees and refugees from Sudan is likely to strain food supplies and incomes further, driving severe malnutrition.

Flooding The expectation of extensive flooding to occur in South Sudan in 2024 due to two separate climatic events remains reality with floods affecting 58 health facilities. The tail end of the 2023-24 El Niño event is leading to significantly above-average rainfall in Uganda, which increases the water level of the White Nile, leading to increased flood risks downstream in South Sudan. Additionally, the onset of the El Nino event in 2024 is projected to lead to approximately 50% higher levels of rainfall in the northern and easter parts of South Sudan, which not only further exacerbates the flood risk along the White Nile and its tributaries but will also contribute to flooding in more distant regions, like those occurring during the triple-dip La Niña event of 2020-2023. Historical data indicates a peak in flooding around September.

The ongoing flooding in the affected areas is a major threat to the well-being of the communities, with more than one million people (including 375,000 displaced) affected across 41 counties. Notably, flooding has submerged 58 health facilities and has been associated with an increased number of snake bites (68 in 6 weeks), drowning (3 in week 42) and an upsurge of malaria morbidity (refer to Figure 7). This is compounded by existing humanitarian needs in the country and ongoing multiple disease outbreaks.

Ongoing coordination with the Ministry of Health supporting response coordination at national and subnational levels through weekly cluster and inter-cluster coordination meetings. As part of the preparedness plan, the MoH, WHO, and Health Cluster have developed the 2024 South Sudan Health Sector Flood contingency and response plan. The Health Cluster partners will support the Ministry of Health in implementing this plan, although a key limitation will be the availability of funds. The estimated budget needed for the response is USD 63 million.

#### Acknowledgments

Thanks to the State Surveillance Officers, Health Cluster partners for sharing the weekly IDSR data. To access the IDSR bulletins for 2024 use the link below: <a href="https://www.afro.who.int/countries/south-sudan/publication/south-sudan-weekly-integrated-disease-surveillance-and-response-bulletin-2024">https://www.afro.who.int/countries/south-sudan/publication/south-sudan-weekly-integrated-disease-surveillance-and-response-bulletin-2024</a>

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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: <a href="http://ewars-project.org">http://ewars-project.org</a>

Data source: DHIS-2 and EWARS











