

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

Reporting period: Epidemiological Week 41 *07 to 13 October 2024* 

This weekly bulletin presents the epidemiological status of priority diseases, events, and conditions under surveillance in South Sudan. The data presented in this bulletin 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 that continue to support integrated disease surveillance and response.

# **Key highlights**

- In week 41 of 2024, the IDSR reporting timeliness was 75%, and completeness was 92%. There have been consistent improvements in both timeliness and completeness since week 31. Twelve (12) of the 13 states/administrative areas attained completeness of reporting above 80%. Four states and two administrative area (Abyei AA, CES, Lakes, RAA, Unity, and WES) achieved a completeness reporting rate of 100%.
- At the EWARN mobile sites, the Timeliness and Completeness of IDSR performance were at 33% and 40% respectively. There was a decrease in both timeliness and completeness as compared to the previous week (39) where it was both 53%.
- In week 41, 237 alerts were triggered, and the proportion of verified alerts decreased from 80% in Week 40 to 78% in week 41. Most of the alerts triggered were AWD (24%), Guinea Worm (22%), ARI (16%), ABD (13%) and Malaria (11%)
- A total of 112 suspected cases of Monkeypox have been reported from 10 States and 3 administrative area and Ninety-Three (93) of the tested samples returned PCR negative results for Mpox.
- Cholera disease outbreak declared in Renk County of Upper Nile State after 49 cholera cases and six laboratory-confirmed cases on 28 October 2024
- Other outbreaks and events, including anthrax and a hepatitis E upsurge in Wau and other multiple locations, as well as flooding, have affected 892,800 people across 38 counties, with 58 health facilities affected.

# **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 41 were at 75% and 91%**, respectively, which was an improvement from the attainments from the previous week.

Table 1: Timeliness and completeness of IDSR reporting by State for week 41 compared to 41 of 2024

		Number of facilities	Cor	mparison of a	reporting per	riod	Cumulative since year start		
State	Total facilities	reported	Time	liness	Comple	eteness	(2024 level)		
	100000	(Completeness)Wk41	Week 41	Week 40	Week 41	Week 40	Timeliness	Completeness	
Lakes	112	112	99%	78%	100%	100%	65%	100%	
NBGZ	101	82	70%	72%	82%	90%	57%	79%	
Unity	84	84	96%	99%	100%	100%	87%	99%	
WBGZ	113	80	47%	42%	73%	75%	40%	81%	
WES	191	191	90%	72%	100%	100%	64%	95%	
Jonglei	120	106	74%	83%	88%	86%	72%	87%	
Warrap	114	97	42%	68%	90%	88%	48%	86%	
EES	112	100	69%	47%	89%	96%	58%	91%	
RAA	16	16	38%	58%	100%	100%	42%	92%	
CES	152	152	99%	97%	100%	98%	60%	94%	
AAA	17	17	82%	18%	100%	94%	67%	81%	
Upper Nile	143	122	59%	55%	87%	83%	48%	86%	
GPAA	16	15	94%	81%	94%	94%	100%	92%	
Total	1291	1174	75%	71%	92%	92%	59%	90%	

KEY:

<u>&gt;</u> 80%	Good performance
60-79%	Fair performance
<60%	Poor performance

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 41 of 2024.

	# of	% of	% of		# of Reporting	% of	% of
Partners	Reporting	Timeliness	Completeness	Payam	Private Health	Timeliness	Completeness
	Mobile Sites	in week 41	in week 41j		Facilities	in week 41	in week 41
IMC	4	0%	0%	Kator	3	100%	100%
SSHCO	1	0%	0%	Marial Baai	1	100%	100%
SMC	1	0%	0%	Northern Bari	1	100%	100%
SCI	2	0%	0%	Rajaf	3	100%	100%
HFO	4	75%	<b>7</b> 5%	Muniki	12	100%	100%
WVI	2	50%	100%	Wau South	20	80%	85%
CIDO	1	100%	100%	Wau North	12	58%	67%
TOTAL	15	33%	40%	Juba	10	100%	100%
				Managala	1	100%	100%
				TOTAL	63	86%	89%

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 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.

World Health Completeness of IDSR Reporting in Week41,2024 Organization SUDAN ETHIOPIA CENTRAL AFRICAN REPUBLIC Legend Completeness International Boundaries DEMOCRATIC REPUBLIC OF THE CONGO KENYA UGANDA 130 260 Miles

Figure 1: Completeness of IDSR reporting by County of South Sudan; 2024.

Given the turbulent declines in timeliness and completeness of IDSR reporting, this week, we continued to analyze the performance over the past three years and 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 for this surveillance performance indicator to recover. Notably, the IDSR timeliness of reporting continues to improve since week 31 when the lowest reporting rates were observed, thanks to the targeted support to the poorest reporting counties.



Figure 2: Timeliness and Completeness of IDSR reporting in South Sudan; 2022-2024.

#### **Epidemic alerts**

In the reporting week 41, a total of 237 alerts have been triggered in the EWARS system, with 78% (185/237) verified in the system, which is much higher than the previous week 40, when 71% (53/75) were verified. In Week 41, Seven States and Greater Pibor Administrative Areas completed verification of their alerts reported in the system. Most of the alerts triggered were AWD (24%), Guinea Worm (22%), ARI (16%), ABD (13%) and Malaria (11%)

Table 3: Summary of EWARS alerts triggered in Epidemiological Week 41, 2024.

	AJS		_				_		_		_		Gui			lari			_	
	A.	IS	Α	RI	A۱	ND	Α	FP	Al	BD	El	BS	Wo	rm		a	Mea	asles	To	otal
							#	#	#	#	#	#	#	#	#	#				
State/Admin	# R	# V	# R	# V	# R	# V	R	V	R	V	R	V	R	V	R	V	# R	# V	# R	# V
CES	0	0	4	4	7	7	0	0	1	1	0	0	0	0	2	2	1	1	15	15
EES	0	0	1	1	4	4	1	1	1	1	1	1	0	0	1	1	0	0	9	9
Jonglei	1	1	6	6	8	8	0	0	9	9	2	2	6	5	2	2	2	2	36	35
Lakes	0	0	6	6	4	4	0	0	1	1	6	6	33	33	3	3	0	0	53	53
NBGZ	0	0	3	3	4	4	0	0	3	3	0	0	0	0	1	1	0	0	11	11
Unity	2	1	5	5	5	5	0	0	3	2	1	1	1	1	3	3	0	0	20	18
Upper Nile	0	0	4	0	3	0	0	0	6	0	0	0	0	0	2	0	1	0	16	0
Warrap	0	0	3	0	2	0	0	0	1	1	1	0	7	2	2	0	1	0	17	3
WBGZ	1	1	2	2	7	1	0	0	1	1	2	1	5	1	6	1	0	0	24	8
WES	0	0	5	5	13	13	0	0	2	2	0	0	0	0	5	5	4	4	29	29
RAA	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	2	0
GPAA	0	0	0	0	0	0	1	1	3	3	0	0	0	0	0	0	0	0	4	4
AAA	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Total	4	3	39	32	58	46	3	2	31	24	14	11	52	42	27	18	9	7	237	185

# Confirm Cholera disease outbreak in Renk County of Upper Nile State.

- On 28 September 2024, the WHO team in Renk received a notification of suspected cholera cases in Joda.
- The initial RDT-positive sample was from a 37-year-old Sudanese woman who traveled from Khartoum and developed symptoms after dining at a restaurant in Wunthou.
- As at 28<sup>th</sup> October, there is a cumulative total of 49 suspected cholera cases, with 25 confirmed positive by RDT with six of the 26 also confirmed by bacterial Culture at the National Public Health Laboratory.
- The National Bacteriology Reference Laboratory, has cumulatively isolated 9 non-pathogenic Vibrio and another 10 showed growth for Vibrio cholera, of the serotype O1 Ogawa
- Currently there are 9 cases in CTU (7 cases in Wunthun CTU and 2 cases in Renk Hospital CTU), and discharges from the CTUs
- On October 28, 2024, the National Ministry of Health declared a cholera outbreak in Renk County, Upper Nile State.
- The National Ministry of Health has activated an Incident Management System (IMS). The IMS is multi-sectoral and has pillars for coordination, surveillance, case management, Water, Sanitation, and Hygiene (WASH), Infection Prevention and Control (IPC), Risk Communication and Community Engagement (RCCE), Points of Entry (POE), and operations and logistics.
- The Cholera Preparedness and Response Plan is being updated for resource mobilization.
- Efforts have been made to share the Oral Cholera Vaccine (OCV) request with AFRO and HQ.

#### **Key Public Health Interventions**

- The Cholera task force in Renk has been activated to support coordination and response efforts.
- Two Cholera Treatment Units (CTUs) have been established: one at Renk Civil Hospital with 10 beds and another at Wunthun/PoE with 4 beds.
- All reporting tools, including the standard case definition and other necessary materials, have been distributed but not to the facilities.
- WHO has deployed surge teams, including epidemiologists, WASH, and IPC experts. Additional, public health
- officers and laboratory experts are scheduled for deployment on Monday Trainings have been conducted on identification, line listing, reporting and onsite sample testing using RDT
- Rapid Diagnostic Tests (RDTs) and cholera kits have been distributed to partners and health facilities, including those in host communities and transit centers

# **Updates on Monkeypox Readiness**

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

As at week 41, the cumulative total of 112 suspected Mpox cases had been reported across 10 states and three(3) administrative area. Out of these, 93 cases have been verified, and samples have been collected. One sample was discarded. Alerts have been received from 24 counties. Out of 93 tested samples, all turned negative for Mpox using the PCR. Thirty-three samples were sent for sequencing, and all tested negative for Mpox. Two confirmed Mpox cases with a travel history to South Sudan were reported in Uganda (one case) and Kenya (one case). Surveillance teams are actively searching for contacts and any other suspected cases in the locations named to have been visited by the two cases with a history of travel to South Sudan.

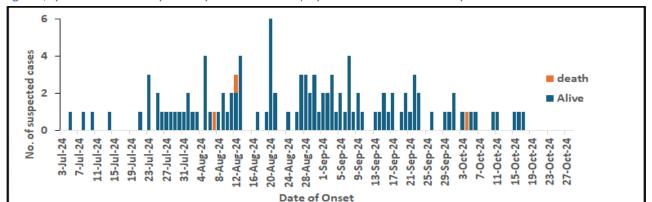


Figure 3; Epidemic curve for Suspected Mpox Cases Detected/reported in South Sudan as at Epi Week 41 of 2024.

#### Intervention actions

- In line with the Public Health Emergencies Management protocols, the Ministry of Health has elevated the Public Health Emergency Operations Centre to alert status.
- Coordination meetings are held every week from Monday to Friday at 8:30 AM at the NPHEOC
- Active case finding and contact tracing are currently underway in all counties of the country.
- The National M-Pox Preparedness and Response Plan has been finalized and is now validated.
- A risk assessment in high-risk regions has been conducted in Nimule, Kajo-keji, and Yambio.
- Six M-Pox reagent kits have been provided by WHO, CDC, EAC, and NICD to enhance the surveillance and testing capacity of the National Public Health Laboratory to nearly 600 tests.
- An Infection Prevention and Control (IPC) and case management assessment was conducted at the Infectious Disease Unit along Yei Road, and the readiness plan and resource requirements have been quantified, partners mapped against the needs with a defined functionality target start date given as 18<sup>th</sup> October 2024.

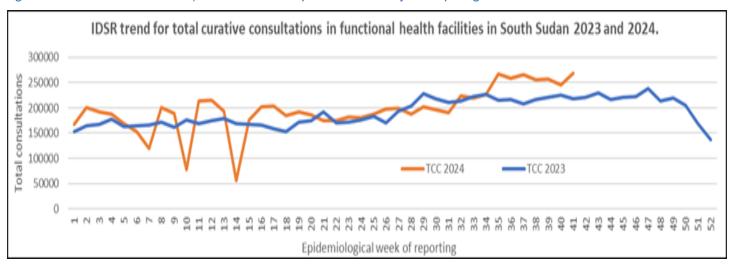
- WHO has maintained three ambulances for the Infectious Disease Unit, following the vehicle assessment report received from the Ministry of Health.
- All Mpox tools have been widely distributed for use at both national and sub-national levels to strengthen surveillance.
- Risk Communication and Community Engagement (RCCE) and Information, Education and Communication (IEC) materials have also been disseminated after receiving clearance from the Ministry of Health.

#### Weekly Update on Indicator-Based Surveillance (Week 41)

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.

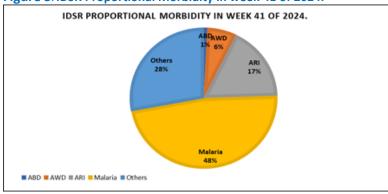
- During week 41 of 2024, individuals aged five years and above had the highest number of consultations account for (1 268 771 consultations) at the outpatient departments (OPD).
- Since the beginning of this year, a cumulative total of 80 036 859 patients have been treated in both the outpatient and inpatient departments.
- Comparing the utilization of healthcare services in 2023 and 2024 reveals fluctuating trends, suggesting variations in the weekly number of consultations (Figure 4 below).

Figure 4: Trends of cumulative curative/OPD consultations reported in the Monthly DHIS reporting: 2023-2024.



In week 41, a total of **1 268 771** morbidities were reported from all over South Sudan from across 1291 health facilities. Malaria was the top cause of morbidity accounting for 48% of all cases, followed by Acute respiratory illnesses (17%) and acute watery diarrhea (6%) (Figure 5 below).

Figure 5: IDSR Proportional Morbidity in week 41 of 2024.



IDSR proportional morbidity for top four diseases in South Sudan 2021 to 2024 by epidemiological week.

300000

TCC ABD AWD ARI Malaria
250000
20000 150000
10000 190

2023

Epidemiological weeks

2024

Figure 6: IDSR proportional morbidity for top three diseases in South Sudan 2021 to 2024 by epidemiological week.

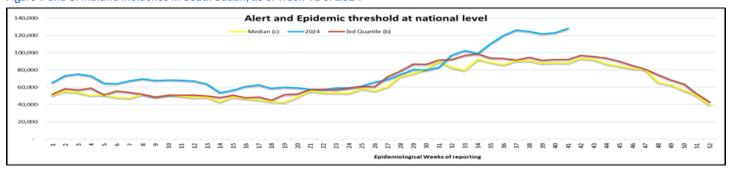
2022

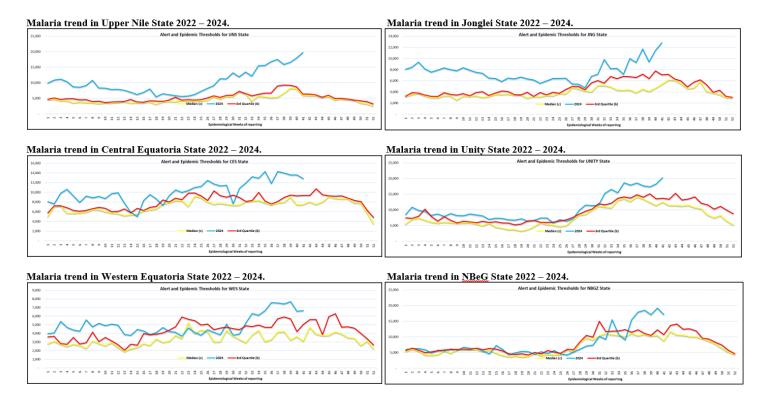
# **National Malaria Update**

Interval between X-axis = 1

- In week 41 of 2024, Malaria remained the main cause of illness, with **127811** reported cases and **39 suspected** fatalities, accounting for 48% of the total morbidity.
- The overall state of Malaria nationally in week 41 of 2024 is above the epidemic threshold. It is important to continuously monitor this situation at all levels. It's worth noting that a malaria epidemic was recorded in four states and 50 counties during this week.
- Data analysis by State indicates that the number of malaria cases in Upper Nile, Central Equatoria, Western Equatoria, Northern Bahr el Ghazal, and Unity states has been consistently exceeding the specified alert and epidemic thresholds for most of the periods observed from week 1 to week 41 of 2024.
- Many states have been experiencing shortages of antimalarial including diagnostics. However, the Malaria program
  in the Ministry of Health through UNICEF has distributed antimalarials for the last quarter. In flood affected
  locations, WHO Emergency kits were provided to the health implementing NGOs to bridge the gaps

Figure 7 and 8: Malaria Incidence in South Sudan, as of Week 41 of 2024





# 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.

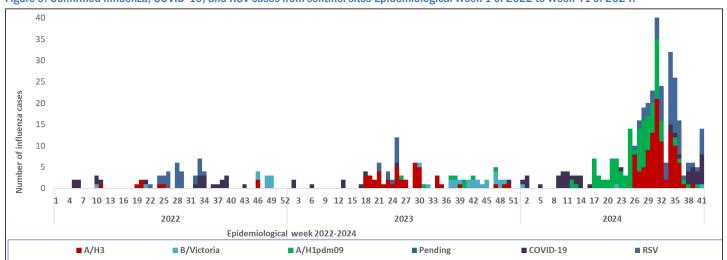


Figure 9: Confirmed Influenza, COVID-19, and RSV cases from sentinel sites Epidemiological Week 1 of 2022 to Week 41 of 2024.

In the Epidemiological Weeks 1 to 41 of 2024, a total of 1929 ILI/SARI samples have been collected; 1605 tested negative for all pathogens, (45) were positive for COVID-19, (104) for Influenza Type A (H3), (3) for Influenza Type B (Victoria), (93) for Influenza A/(H1N1)pdm09 and (81) for RSV.

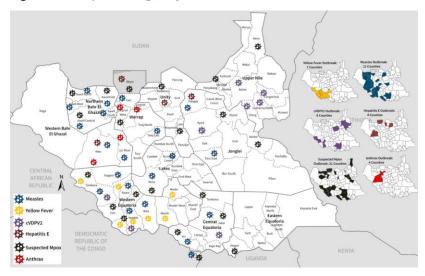
#### Confirmed and congoing epidemics in 2024

 Table 4: Summary of ongoing and confirmed epidemics

			New cases		Response activities								
Aetiologic agent	Location (county)	Date first reported	since last bulletin	Cumulative cases to date	Surveillance/Lab	Case management	Vaccination	Health promotion	IPC/WASH				
Ongoing outbr	eaks			:	1	8							
Yellow Fever	Yambio, Nzara, Ezo, Tambura, Ibba and Maridi	21 Dec 2023	-	139	3 Laboratory confirmed	Ongoing	Done in 7 counties	Ongoing	Ongoing				
Measles	Multiple counties	2022	-	14,507	1,154	ongoing	Completed	ongoing	ongoing				
Hepatitis E	Fangak	2023	0	693*	253	ongoing	ongoing	ongoing	ongoing				
cVDPV2	Yambio, Juba,Ulang, Nasir, Baliet, Ayod	19/Dec 2023	_	11	20	Not applicable	Completed 2 SIAsand 3 <sup>rd</sup> round Planning is ongoing	ongoing	ongoing				
Hepatitis E	Rubkona (Bentiu IDP Camp)	Dec/2018	29	5,979	-	ongoing	Done in 2021/22	ongoing	ongoing				
Hepatitis E	Twic	Feb 2024	-	32	1	ongoing	Not done	ongoing	ongoing				
Anthrax	Gogrial west(WRP) and Jur River (NBG)	2022	0	159	3	ongoing	Ongoing in the animalsector	ongoing	ongoing				
Hepatitis E	Abyei	June 2024	-	32	3	ongoing	no	yes	yes				
Cholera	Renk County (UNS)	28 Sept. 2024	5	49	10	ongoing	no	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 include measles, anthrax, meningitis, cholera, hepatitis E virus, and others. Measures have been put in place to help mitigate the spread of these outbreaks. Below is a map of the confirmed emergencies since

Figure 10: Map showing confirmed disease outbreaks across the country in 2024.



# Response activities for ongoing/suspected outbreaks

#### **Poliomyelitis**

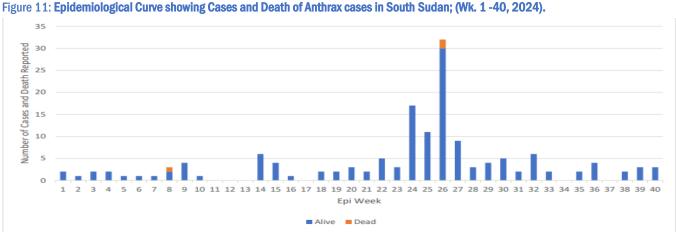
#### 1. Circulating Vaccine Derived Polio Virus type-2 (cVDPV2).

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 11. 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 two months three cVDPV2 viruses were isolated from environmental samples collected from three environmental sites in Juba. The latest cVDPV2 virus isolates were from an ES sample collected on 23/7/2024 and confirms breakthrough transmission of circulating Vaccine Derived Polio Virus Type 2. The third response round is planned for the 4th week of October but will likely be delayed for a week or two to allow for recession of flooding that is currently affecting more than 40 of the 80 counties.

#### Anthrax 2.

Anthrax Situation Report number 12 was published on 15<sup>th</sup> October and shows the following highlights:

- In week 41, these were no Anthrax cases reported from WBGz and Warrap State, no death cases reported from the two States during the week.
- Cumulatively, a total of 159 human cases including three deaths (CFR-1.9%) have been reported across South Sudan.
- Jur River in Western Bar-El Gazal State has the highest recorded 84 cases representing attack rate of 34.2 per 100,000 population, followed by Gogrial West County in Warrap State with an attack rate of 11.7 per 100,000 population. Wau in Western Bar-El Gazal has an attack rate of 2.9 per 100,000 population, and Gogrial East in Warrap State has an attack rate of 0.5 per 100,000 population.
- Males accounted for 106 cases (66%), while females accounted for 54 cases (34%). Overall, the reported cases range in age from 1 to 57 year
- Since 2024, a total of 36 861 animals have contracted the disease of which 36 694 have died representing case fatality rate of 99.5 % in Animals
- A total of 1,741 animals have been vaccinated across three Boma (Majok-Yienhliet, Malual-lukluk and Waar-Alel/Kuajok).
- The World Health Organization (WHO) has identified 17 health facilities. It has approved the shipment of 11 Interagency Emergency Health Kits (IEHK), containing supplementary medicines and various laboratory materials to the affected state. At the state level, One Health stakeholders are working on community-based waste management initiatives to mitigate the risk of Anthrax transmission.



#### 3. Hepatitis E outbreak in Wau Western Bahr el Ghazal State

During week41 of 2024, there were no new cases of Hepatitis E virus diseases reported and zero death. A cumulative total of 556 cases including 26 deaths case fatality rate (CFR of 5%) have been reported since the declaration of Hepatitis E virus disease in April 2023 by the national ministry of health. There had been continued decline in the number of hepatitis E virus cases since week4 of 2024 however, there was an upsurge registered in Epi week39 where 30 cases were recorded including 4 deaths. All the cases are being managed at Wau Teaching Hospital with support from MSF and partners. The state has reactivated the task force with all pillars coordination for outbreak response, active case search ongoing, and community awareness by the Boma Health Initiative (BHI) teams. The state will continue to act on the recommendations from the Intra Action Review conducted on 17 to 18 October 2023.

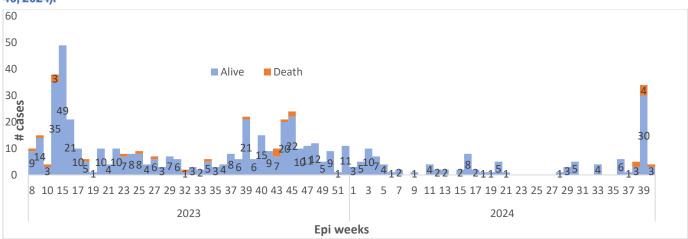


Figure 12: Epidemi Curve showing Cases and Death of Hepatitis E in Wau Western Bahr el Ghazal state, South Sudan; (Wk. 8, 2023 to Week 40, 2024).

#### 4. Hepatitis E in Abyei

In week 41 of 2024, there were no new reported cases of Hepatitis E Virus and no death reported. A cumulative total of 57 Cases of Hepatitis E virus including 6 deaths with case fatality rate (CFR) of 10.5%) have been reported in Abyei administrative area since the outbreak commenced in week 21 of 2024. Majority of the cases happened in individuals aged 15 years and older, with males accounting for 47% (27 cases) while females for 53% (30 cases) of the total cases. Most of the cases and deaths were concentrated in Amiet Aguok Payam. Hepatitis E cases by age shows that 87% (29/32) of the cases were 15 years and above. Females accounted for 53% of the detected and confirmed Hepatitis E cased in Abyei Administrative Area. currently MSF is supporting Hepatitis E case management. The Ministry of health in Abyei in consultation and guidance from the Ministry of Health have declared an outbreak of hepatitis E in the state.

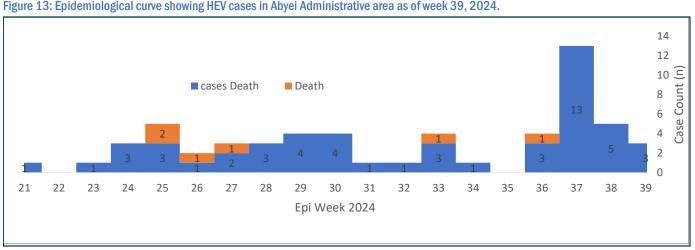


Figure 13: Epidemiological curve showing HEV cases in Abyei Administrative area as of week 39, 2024.

#### 5. Hepatitis E Virus in Fangak county Jonglei State

In week 41 of 2024, there were no reported cases of hepatitis E virus and no death reported during the week. A cumulatively number of 701 AJS cases have been reported with 28 deaths Case Fatality Rate (CFR) of 3.9% since the outbreak commenced in week1 of 2024. Age group 15 years and above are the most affected. Female represented 64% (446 cases) of the total cases, while males accounted for 36% (255 cases). The outbreak reached its peak in week 42 of 2023, with a positivity rate of over 60% in RDT tests. Since week 17, there has been a decline in the number of reported cases, accompanied by high positivity rates. MSF continue to support with case management in old Fangak hospital

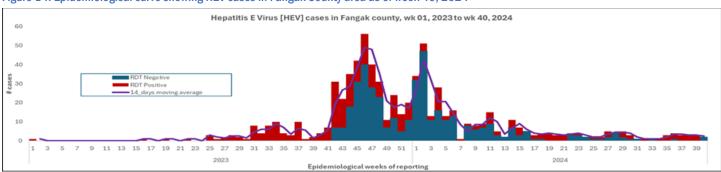


Figure 14: Epidemiological curve showing HEV cases in Fangak County area as of week 40, 2024

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

In week 41 of 2024, there were 29 newly reported cases of HEV, with 4 being RDT positive and zero death. Since the outbreak in 2018, a total of 5,979 cases have been documented, resulting in 33 deaths with case fatality rate (CFR) of 0.6%. Individuals aged 15 to 44 years account for 43 cases out of the total cases of reported. Males represented 52% (3, 133 cases) of the total cases, while females accounted for 48% (2, 846 cases). Many cases were identified in individuals living outside Bentiu PoC who visited healthcare centers within the PoC for medical assistance.

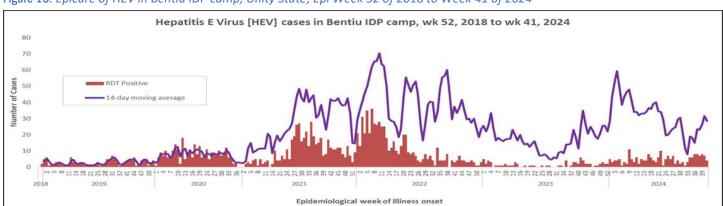
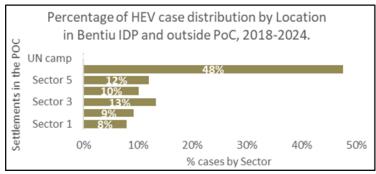
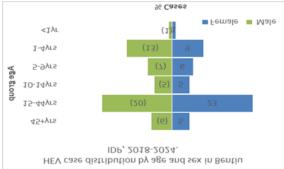


Figure 15: Epicure of HEV in Bentiu IDP camp, Unity State; Epi Week 52 of 2018 to Week 41 of 2024





#### **Other Events**

**Sudan crisis**: As of Week, 41, at least *837 635* individuals have crossed from 18 different nationalities. Of this number, *75.77% (634657)* are South Sudanese returnees and 23.5% are Sudanese refugees. Currently, 21 PoEs are being monitored, with Joda-Renk accounting for 68% of the reported influx figures. Hostcommunities and healthcare systems are struggling to cope with the increased demand for health and other Services, morbidity, and mortality among returnees and refugees. During week 32, there was a significant increase in the number of people seeking refuge in Renk Town from the conflict in Sinja, the capital of Sinnar State in Sudan, located east of Renk County.

**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 There is an expectation of extensive flooding to occur in South Sudan in 2024 due to two separate climatic events. 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 892 800 people (including 241 100 displaced) affected across 38 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 one week) and an upsurge of malaria morbidity. 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 with hardly any new money coming in to support the response plans.

#### 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











