



# Republic of South Sudan

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

Reporting period: Epidemiological Week 37

*09 to 15 September 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.

### Highlights for the current reporting period

- In week 37 of 2024, The timeliness and completeness of IDSR reporting from both Public and Private facilities was 71% and 88% respectively. This is an improvement from the previous week's performance of 66% and 87% respectively.
- At the EWARN mobile sites, both Timeliness and Completeness of IDSR performance were at 40%. This is below the performance of these sites in the previous week 36, because Save the Children International became the 4th NGO to become silent in IDSR reporting.
- In week 37, 265 alerts were triggered in the EWARS, and the proportion of verified alerts increased from 46% to 71%. Most of the alerts triggered were ARI (21%), AWD (20%), Malaria (15%), ABD (14%) and Guinea Worm (13%).
- A cumulative total of 82 suspected cases of Monkeypox have been reported from 5 States and 1 administrative area. Eighty one (81) samples which completed the PCR testing were all negative for Mpox at the National Public Health Lab (NPHL). Of the 81 PCR negative samples, thirty three (33) were confirmed as negative in an external quality assurance re-testing done at Uganda Virus Research Institute (UVRI). Metagenomic sequencing supported by qPCR testing also confirmed no case of Mpox in South Sudan.
- In week 37 of 2024, Malaria continued to be the primary cause of illness, reporting 116,827 cases and 30 suspected deaths, representing 47% of the overall morbidity and other morbidities, including Hepatitis E in Abyei, Fangak and Bentiu and Anthrax (Jur River and Gogrial West counties).
- Other events, including flooding, have impacted over 735,000 people across 38 of South Sudan's 79 counties and the Abyei Administrative Area, worsening an already critical humanitarian crisis.

## Surveillance System Performance

The epidemic alert and response system in South Sudan currently relies mainly on immediate alerts notification 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 37 were at 71% 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 37 compared to 36, of 2024*

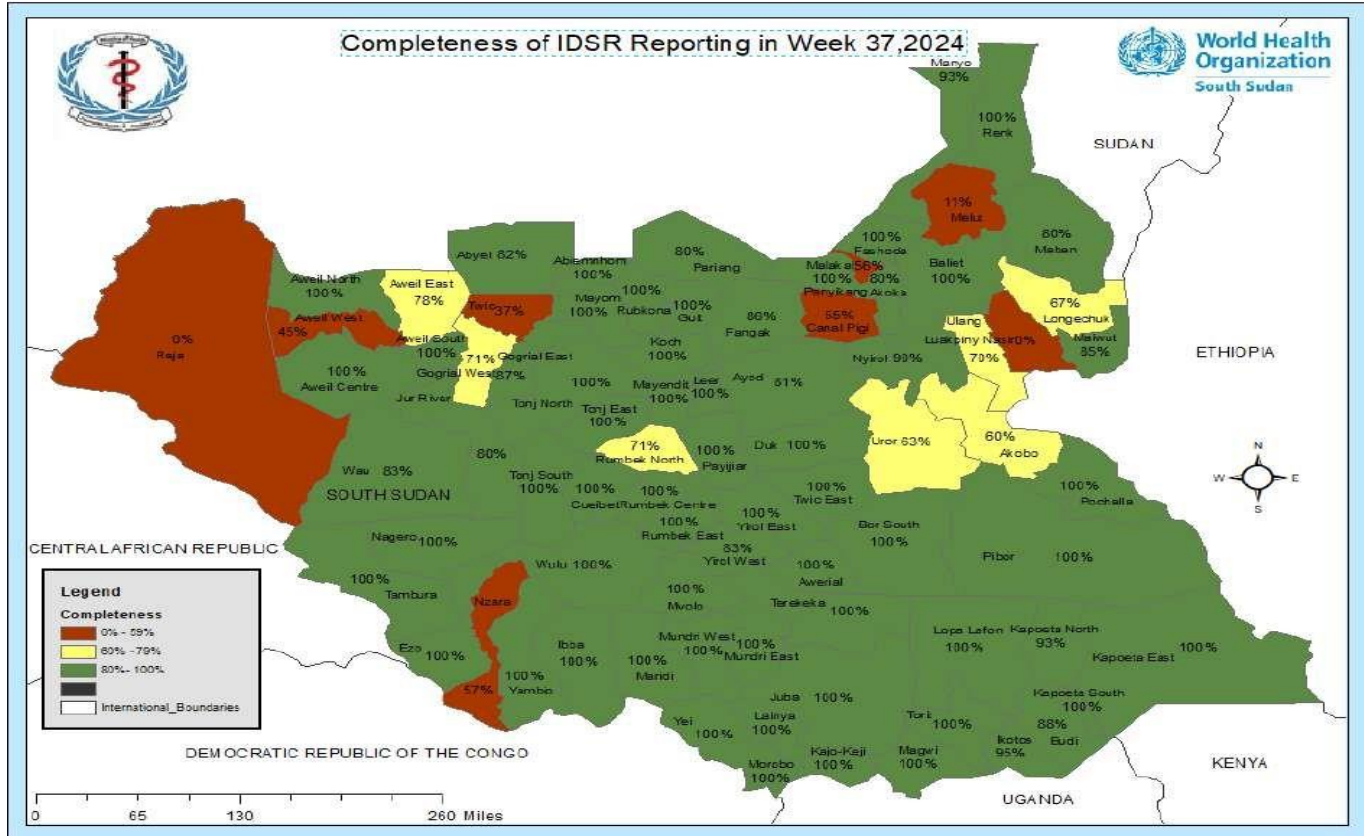
State	Total facilities	Number of facilities reported (Completeness)Wk37	Current Reporting Period				Cumulative Timeliness
			Timeliness		Completeness		
			Week.37	Week. 36	Week.37	Week. 36	
Lakes	112	108	58%	70%	96%	96%	84%
NBGZ	87	72	76%	72%	83%	91%	82%
Unity	84	84	93%	94%	100%	100%	94%
WBGZ	113	82	64%	65%	73%	73%	60%
WES	191	191	82%	74%	100%	100%	79%
Jonglei	120	99	69%	67%	83%	90%	79%
Warrap	114	84	52%	33%	74%	68%	67%
EES	112	108	61%	77%	96%	91%	74%
RAA	19	16	84%	32%	84%	84%	40%
CES	152	152	86%	78%	100%	82%	87%
AAA	17	15	71%	76%	88%	76%	72%
Upper Nile	143	104	58%	34%	73%	80%	58%
GPAA	16	16	100%	94%	100%	100%	100%
<b>Total</b>	<b>1280</b>	<b>1131</b>	<b>71%</b>	<b>66%</b>	<b>88%</b>	<b>87%</b>	<b>76%</b>

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 37 of 2024*

Partners	# Of Reporting Mobile Sites	% Of Timeliness in week 37	% Of Completeness in week 37	Payam	# Of Reporting Private Health Facilities	% Of Timeliness in week 37
IMC	4	0%	0%	Kator	3	0%
SSHCO	1	0%	0%	Marial	1	100%
				Baai	1	100%
SMC	1	0%	0%	Northern Bari	1	100%
SCI	2	0%	0%	Rajaf	3	100%
HFO	4	75%	75%	Muniki	12	92%
WVI	2	100%	100%	Wau South	20	80%
CIDO	1	100%	100%	Wau North	12	67%
<b>TOTAL</b>	<b>15</b>	<b>40%</b>	<b>40%</b>	Juba	10	30%
				Mangala	1	100%
				<b>TOTAL</b>	<b>63</b>	<b>70%</b>

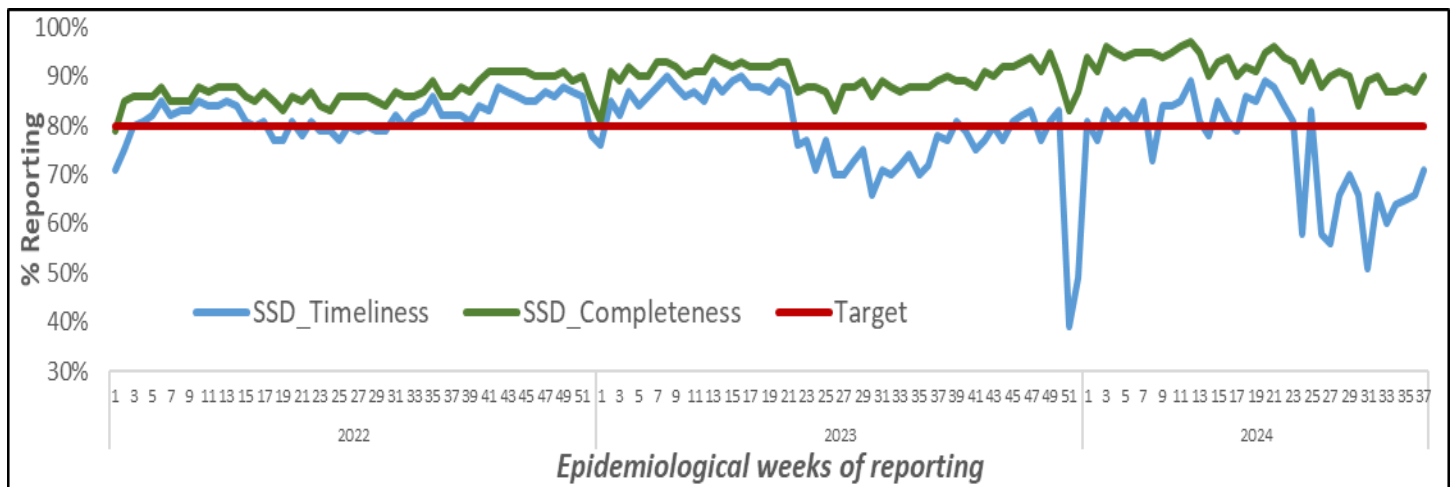
**Important point to note:** The six facilities supported by IMC (4), SSHCO (1), and SMC (1) are no longer reporting due to end of project funding which has affected the performance of partners reporting sites. Save the Children International that previously reported joined the other three NGOs that did not report in Epi Week 37.

**Figure 1: Timeliness and completeness of IDSR reporting in South Sudan; 2022-2024**



The consistent under-performance in timeliness of IDSR reporting remained and in turn, we continued to analyze the performance over the past three years to keep track of the declines in 2024 (Wk 21-37) as we prepare for the annual IDSR surveillance review scheduled in October 2024. 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.

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



## EWARS alerts reporting and Verification

In Week 37, a total of 265 alerts were triggered in the EWARS system, with 71% (188/265) verified, which is much Higher than the previous week (36) verification rates. Most of the alerts were for ARI (21%), AWD (20%), Malaria (15%), ABD (14%) and Guinea Worm (13%).

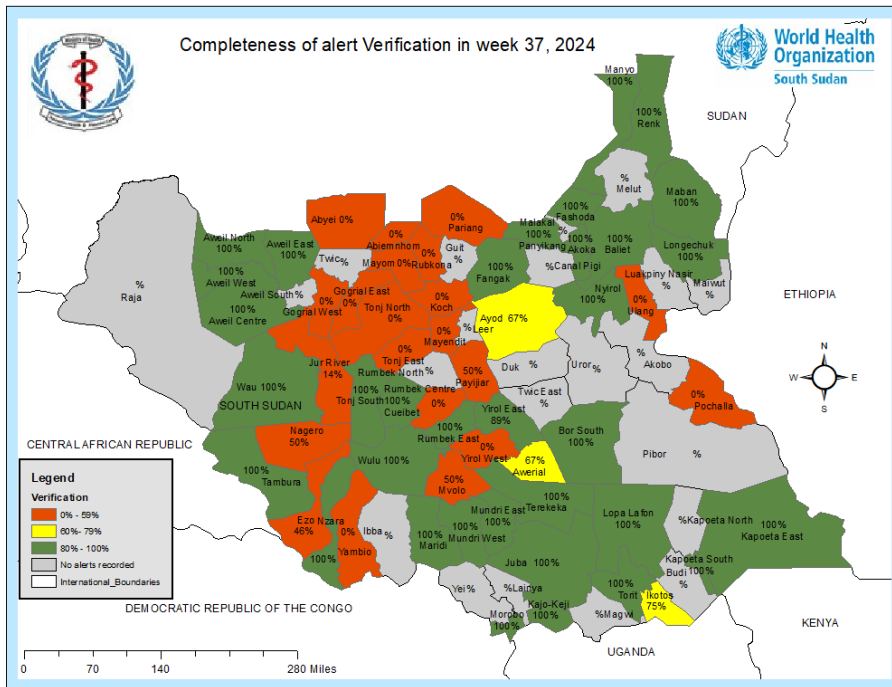
Western Equatoria which had a confirmed Yellow Fever outbreak in December 2023, did not detect or report any alert of Acute Jaundice Syndrome (AJS) for the 9th consecutive week. See Table 3 below for more details.

Table 3: Summary of EWARS alerts triggered in Epidemiological week 36, 2024

State/Ad min	AJS		ARI		AWD		AFP		ABD		Cholera		EBS		Guinea Worm		Malaria		Measles		Meningitis		NNT		Yellow Fever		Grand Total			
	# R	# V	# R	# V	# R	# V	# R	# V	# R	# V	# R	# V	# R	# V	# R	# V	# R	# V	# R	# V	# R	# V	# R	# V	# R	# V	# R	# V		
AAA	1	0	1	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	2	0
CES	0	0	5	5	6	6	1	1	0	0	0	0	0	0	1	1	2	2	0	0	0	0	0	0	0	0	0	0	15	15
EES	0	0	1	1	4	4	0	0	2	1	0	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	12	11	
GPA	1	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	1	0	
Jonglei	1	1	4	3	1	1	0	0	1	1	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	12	11	
Lakes	0	0	7	4	6	3	0	0	3	3	0	0	3	1	19	19	6	3	0	0	0	0	0	0	0	1	1	45	34	
NBGZ	0	0	9	9	10	10	0	0	4	4	0	0	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0	32	32	
RAA	0	0	2	0	2	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	
Unity	2	0	3	1	2	0	0	0	4	1	0	0	4	0	0	0	2	1	0	0	0	0	1	0	0	0	18	3		
Upper Nile	0	0	5	4	5	3	0	0	5	5	0	0	4	4	1	1	4	4	1	1	1	1	0	0	0	0	26	23		
Warrap	0	0	3	0	2	0	0	0	1	0	0	0	3	0	6	2	3	0	0	0	0	0	0	0	0	0	18	2		
WBGZ	0	0	5	5	5	4	0	0	2	1	1	1	1	1	3	0	3	2	0	0	0	0	0	0	1	1	21	15		
WES	0	0	10	7	9	7	0	0	13	10	0	0	0	0	0	0	17	14	7	4	0	0	1	0	0	0	57	42		
<b>Grand Total</b>	<b>5</b>	<b>1</b>	<b>55</b>	<b>39</b>	<b>52</b>	<b>38</b>	<b>1</b>	<b>1</b>	<b>36</b>	<b>26</b>	<b>1</b>	<b>1</b>	<b>16</b>	<b>6</b>	<b>35</b>	<b>28</b>	<b>51</b>	<b>40</b>	<b>8</b>	<b>5</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>265</b>	<b>188</b>		

#R= reported #V= verified

Figure2: Completeness of Alerts Verification rates by county of South Sudan for week 37, 2024



## Updates on Monkeypox Readiness

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

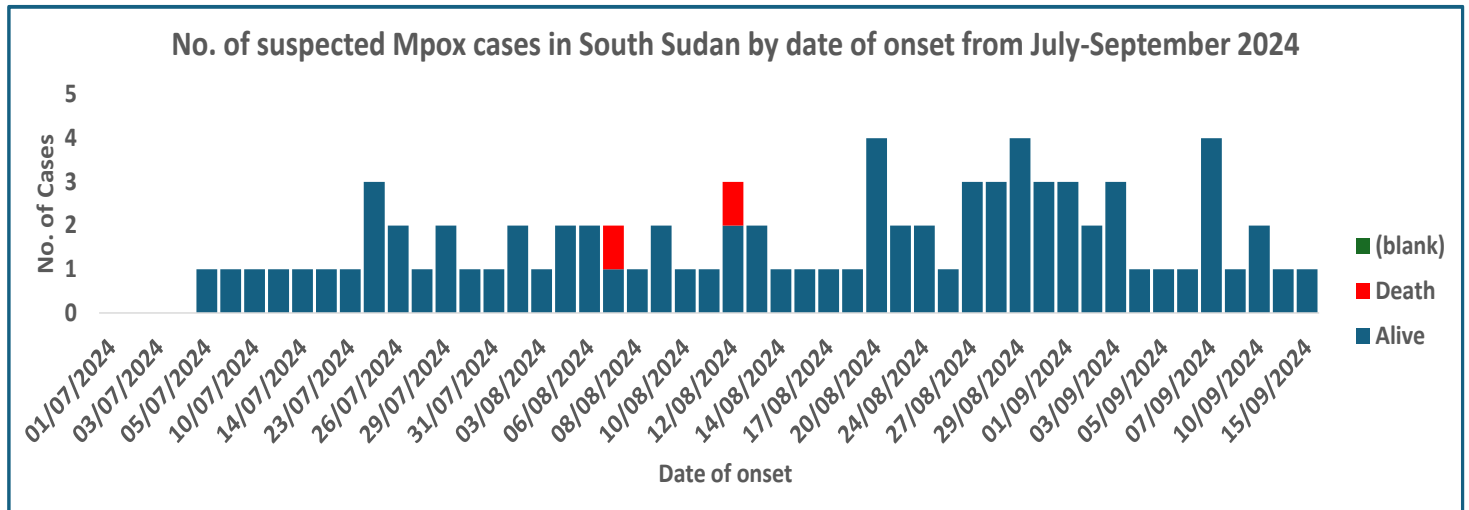
- By week 37 of 2024, a cumulative total of 81 suspected Mpox cases have been reported across 5 states and one administrative area
- Alerts have been received from Central and Western Equatoria, Warrap, Northern Bahr el Ghazal, Upper Nile, Unity, and the Abyei Administrative Area.
- Out of these, 81 samples were verified and samples collected for laboratory confirmation. 1 sample earlier tested for Mpox was found to have been a measles sample that was badly labeled and has been discarded off the list of suspected cases and samples tested.
- All 81 samples tested were negative for Mpox using the PCR testing algorithm. A cumulative total of 33 negative samples on PCR at the National Public Health Laboratory were sent to Uganda Virus Research Institute for a) re-testing for external quality assurance and b) Metagenomic sequencing.
- All 21 re-tests were reported by the reference laboratory as negative for MPOX, also using PCR. Meta-genomic sequencing analysis results indicated that 12 were positive for Human Herpes Virus, 3 Pegivirus, 1 for Enterovirus coxackievirus A, 1 for Enterovirus coxackievirus B, 1 for Pegivirus C, and 1 for Human Polomavirus. This confirms the possible differential diagnosis for the rash-like illness and qPCR confirmed yet again that there no recent infection of Mpox amongst the 33 samples shared with UVRI.

### Mpox readiness and response Intervention actions

- Mpox readiness and response IMS meetings are held every Monday, Wednesday, and Friday at 8:30 AM.
- Active case finding and contact tracing are currently underway in alert-reporting counties across six states.
- The National M-Pox Preparedness and Response Plan has been finalized and is awaiting validation in a planned Table Top Exercise taking place from 30<sup>th</sup> September to 1<sup>st</sup> October 2024.
- A risk assessment in selected high-risk sub-national regions started on 22<sup>nd</sup> September prioritised three geographies namely Nimule, Kajokeji, and Yambio counties bordering Uganda and DRC. The plan is to expand these field assessment missions to all 8 priority geographies
- Six Mpox PCR kits (reagents and Probes) have been provided by WHO, CDC, EAC, and NICD to enhance the surveillance and testing capacity of the National Public Health Laboratory.

- Infection Prevention and Control (IPC) and case management assessment were conducted at the Infectious Diseases Unit along Yei Road, and the report has been shared to guide priority interventions for accelerating readiness in these streams of work.
- Mapping of partners has been completed to identify areas of support.
- All Mpox tools have been widely distributed for use at national and sub-national levels to strengthen surveillance.

Figure 3; Epidemic curve for Suspected Mpox Cases Detected/reported in South Sudan; as at Epi Week 37 of 2024

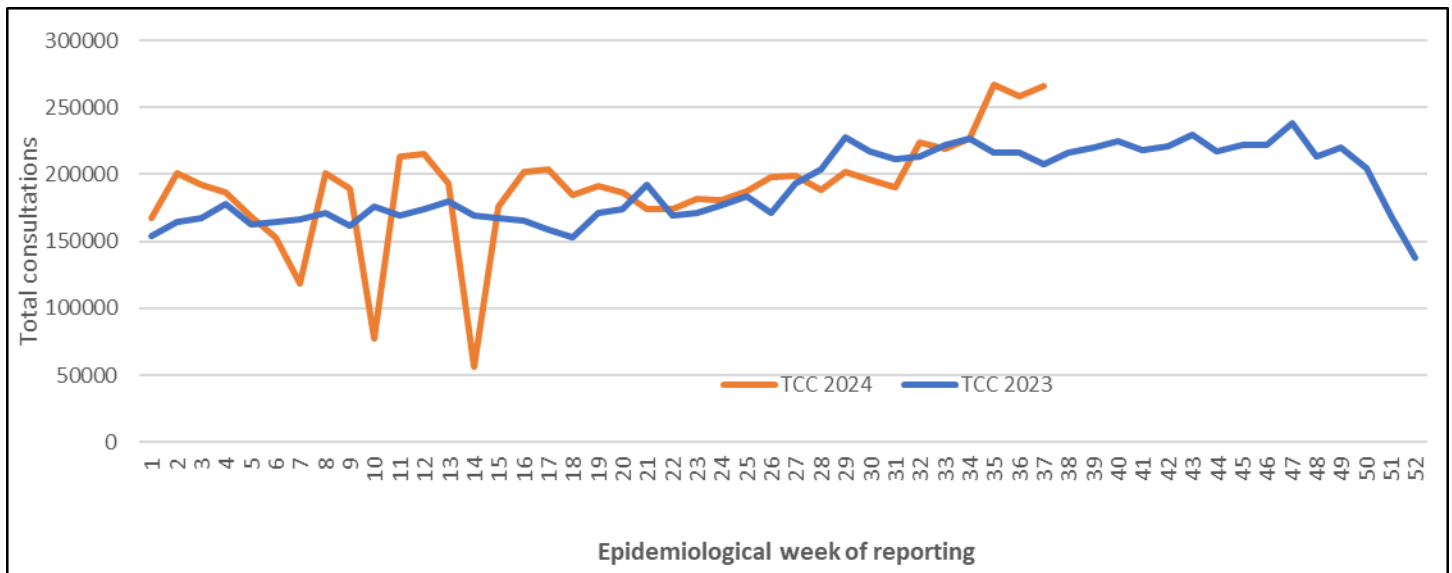


**Weekly Update on Indicator-Based Surveillance (Week 36)**

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

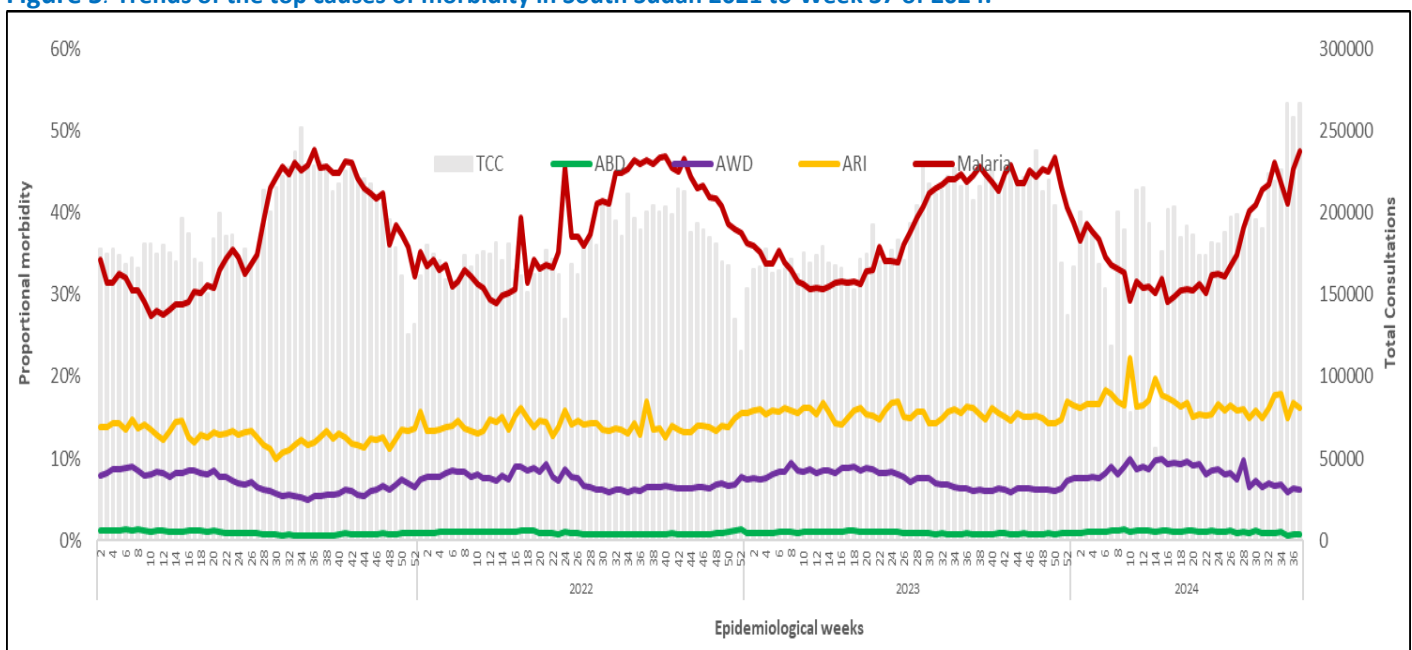
- During week 37 of 2024, individuals aged five and above had the highest number of consultations with the outpatient department (OPD).
- Since the beginning of this year, a total of 7,757,608 patients have been treated in both the outpatient and inpatient departments.
- Comparing the utilization of 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.



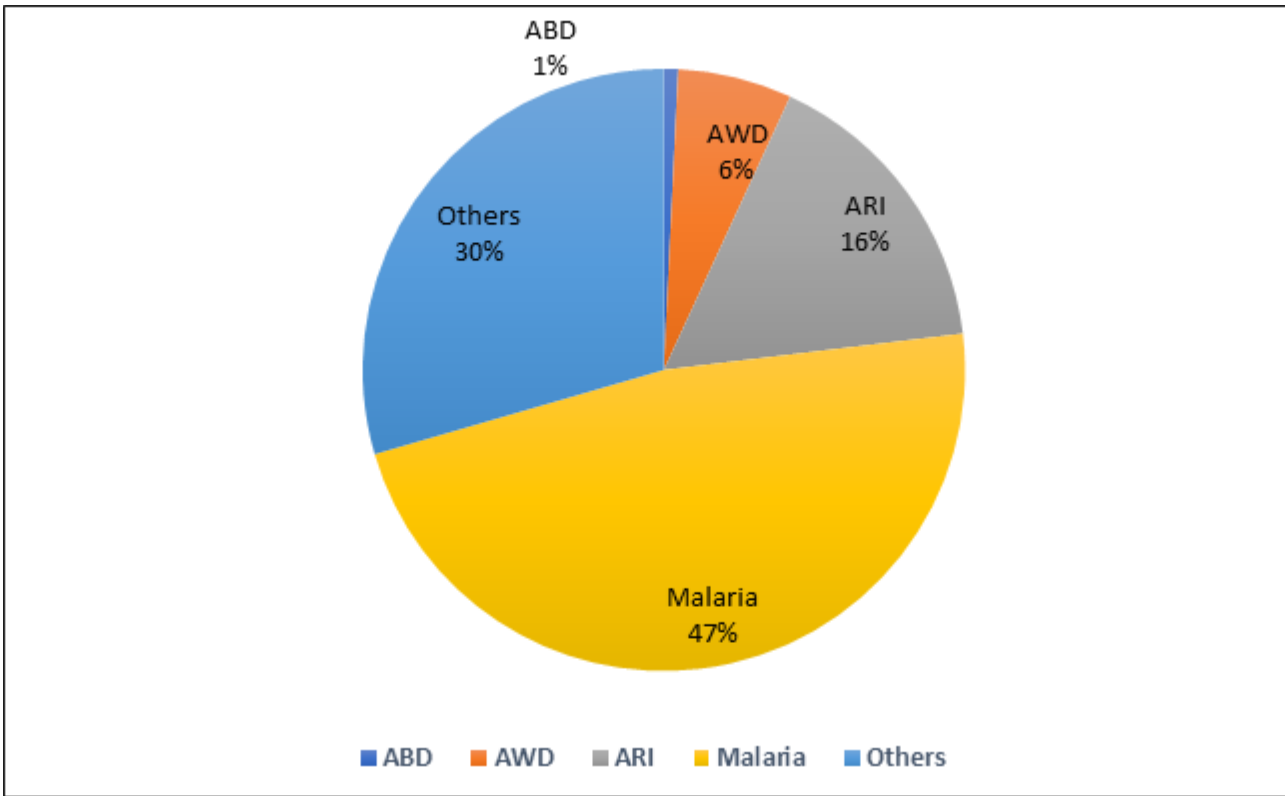
In week 37, a total of 210,899 morbidities were reported from all over South Sudan public health facilities from across 1 280 health facilities. Malaria was the top cause of morbidity, accounting for 47% of all cases, followed by Acute respiratory illnesses (16%) and acute watery diarrhea (6%) (Figure 5 below).

**Figure 5: Trends of the top causes of morbidity in South Sudan 2021 to Week 37 of 2024.**



**Figure 6: IDSR proportional morbidity for top three diseases in South Sudan 2021 to Week 37 of 2024 by epidemiological week.**





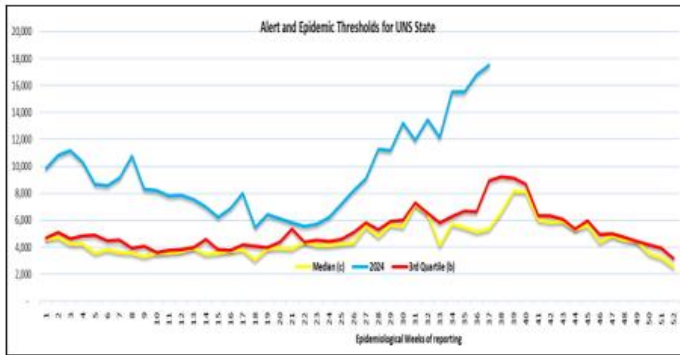
### National Malaria Update

- In week 37 of 2024, Malaria was the primary cause of illness, with 126,287 cases and 55 suspected fatalities, representing 47% of the overall morbidity. The general state of Malaria nationally in week 37 of 2024 is above the epidemic threshold, so continuous monitoring is crucial at all levels
- The incidence of malaria cases in Upper Nile, Jonglei, Central Equatoria, Western Equatoria, NBeG, and Unity states has consistently exceeded the specified alert and epidemic thresholds during most of the periods examined from week 1 to week 37 of 2024.

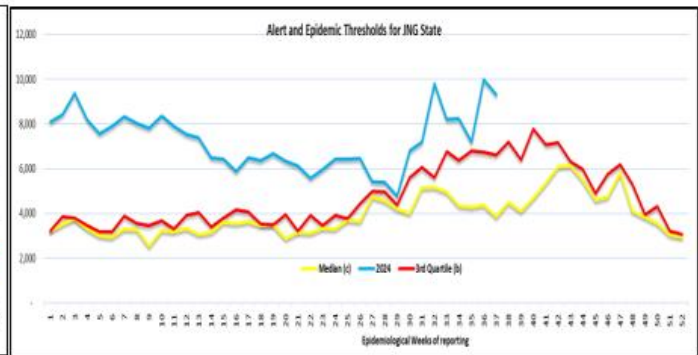
Figure 7: Malaria Incidence Trends in States of South Sudan with higher than expected cases, Week 37 of 2024



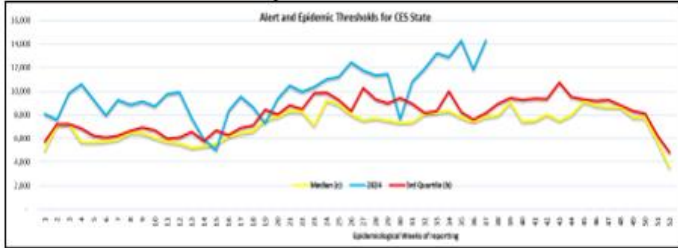
**Malaria trend in Upper Nile state 2022-2024**



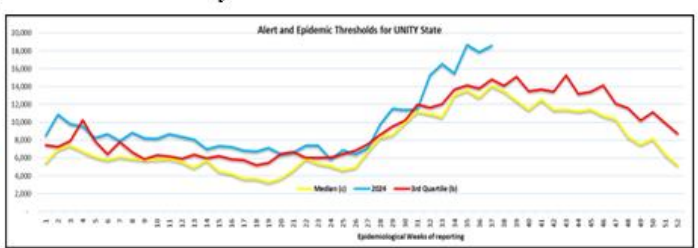
**Malaria trend in Jonglei 2022-2024**



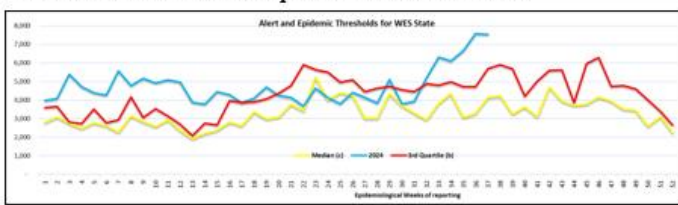
**Malaria trend in Central Equatoria State 2022 – 2024.**



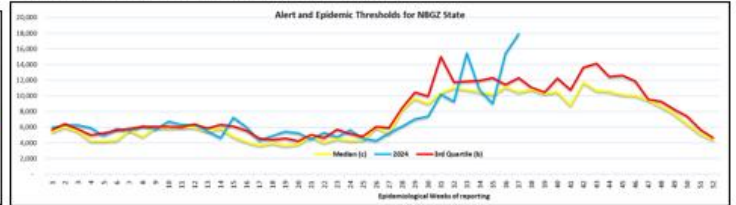
**Malaria trend in Unity State 2022 – 2024.**



**Malaria trend in Western Equatoria State 2022 – 2024.**



**Malaria trend in NBeG State 2022 – 2024.**

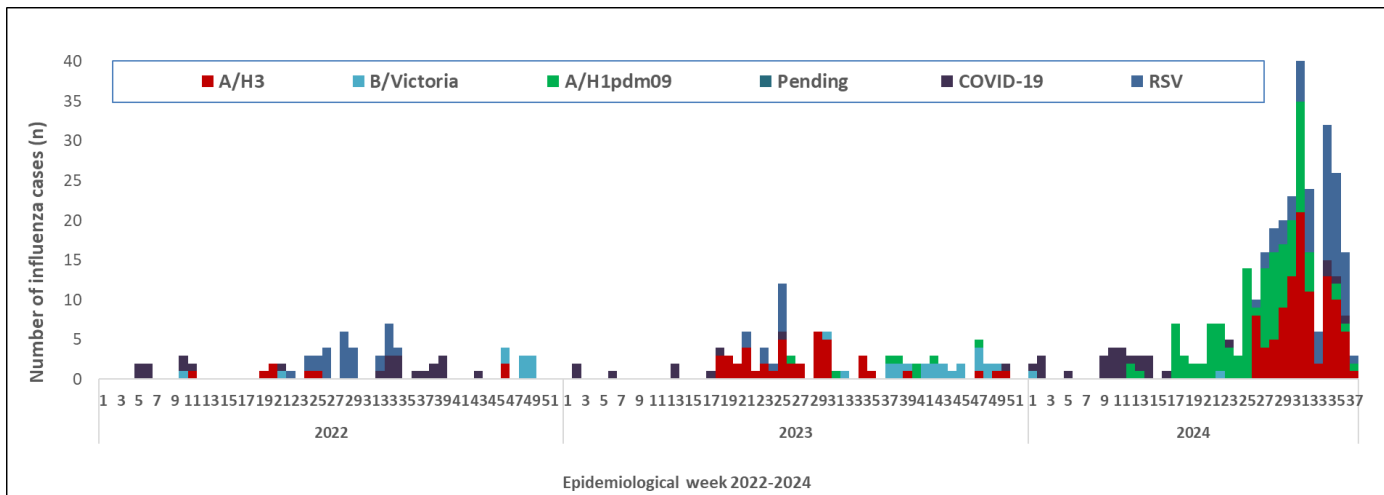


**Influenza Sentinel surveillance weekly updates.**

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.

.During Epidemiological Weeks 1 to 37 in 2024, a total of **1600 ILI/SARI** samples have been collected; **1305** tested negative for all pathogens, **(28)** were positive for **COVID-19**, **(103)** for **Influenza Type A (H3)**, **(2)** for **Influenza Type B (Victoria)**, **(91)** for **Influenza A/(H1N1)pdm09** and **(71)** for **RSV**.

Figure 8: Confirmed Influenza, COVID-19 and RSV cases from sentinel sites Epidemiological Week 1, 2022 to Week 37, 2024



### Confirmed and congoing epidemics in 2024

Table 4: Summary of ongoing and confirmed epidemics

Aetiologic agent	Location (county)	Date first reported	New cases since last bulletin	Cumulative cases to date	Response activities				
					Surveillance/Lab	Case management	Vaccination	Health promotion	IPC/WASH
<i>Ongoing outbreaks</i>									
Yellow Fever	Yambio, Nzara, Ezo, Tambura, Ibba and Maridi	21 Dec 2023	-	139	3 Laboratory confirmed	Ongoing	Done in 5 counties	Ongoing	Ongoing
Measles	Multiple counties	2022	-	14,507	1,154	ongoing	ongoing	ongoing	ongoing
Hepatitis E	Fangak	2023	3	693*	253	ongoing	ongoing	ongoing	ongoing
cVDPV2	Yambio, Juba, Ulang, Nasir, Baliel, Ayod	19/Dec 2023	-	11	20	Not applicable	Completed 2 SIAs and 3 <sup>rd</sup> round planning is ongoing	ongoing	ongoing
Hepatitis E	Rubkona (Bentiu IDP Camp)	Dec/2018	28	5,869	-	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	146	3	ongoing	Ongoing in the animal sector	ongoing	ongoing
Hepatitis E	Abyei	June 2024	-	32	3	ongoing	no	yes	yes

\*Using an updated line list shared by partners

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 current ongoing emergencies

Figure 9: Map showing confirmed disease outbreaks across South Sudan; As at Week 37 of 2024

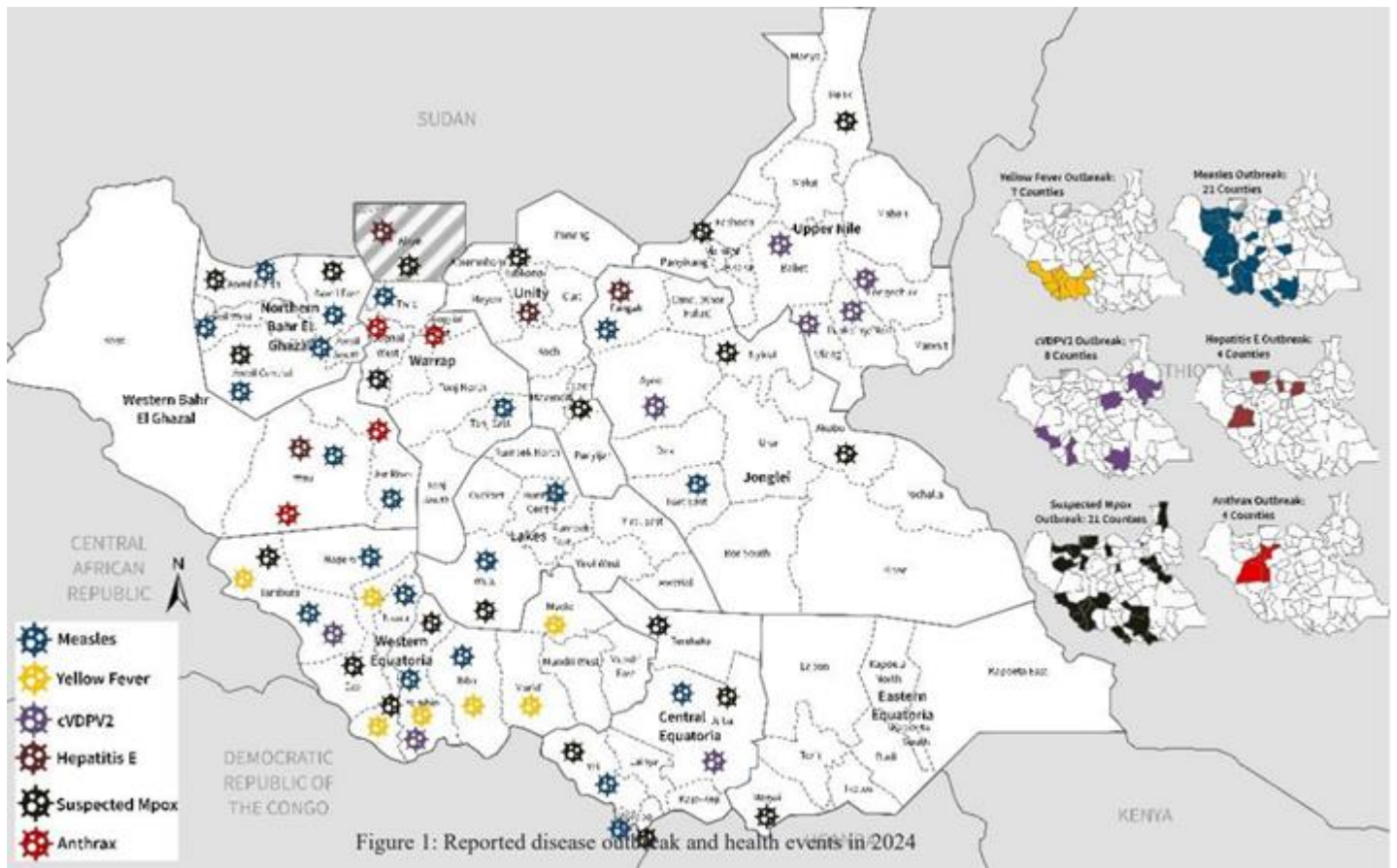


Figure 1: Reported disease outbreak and health events in 2024

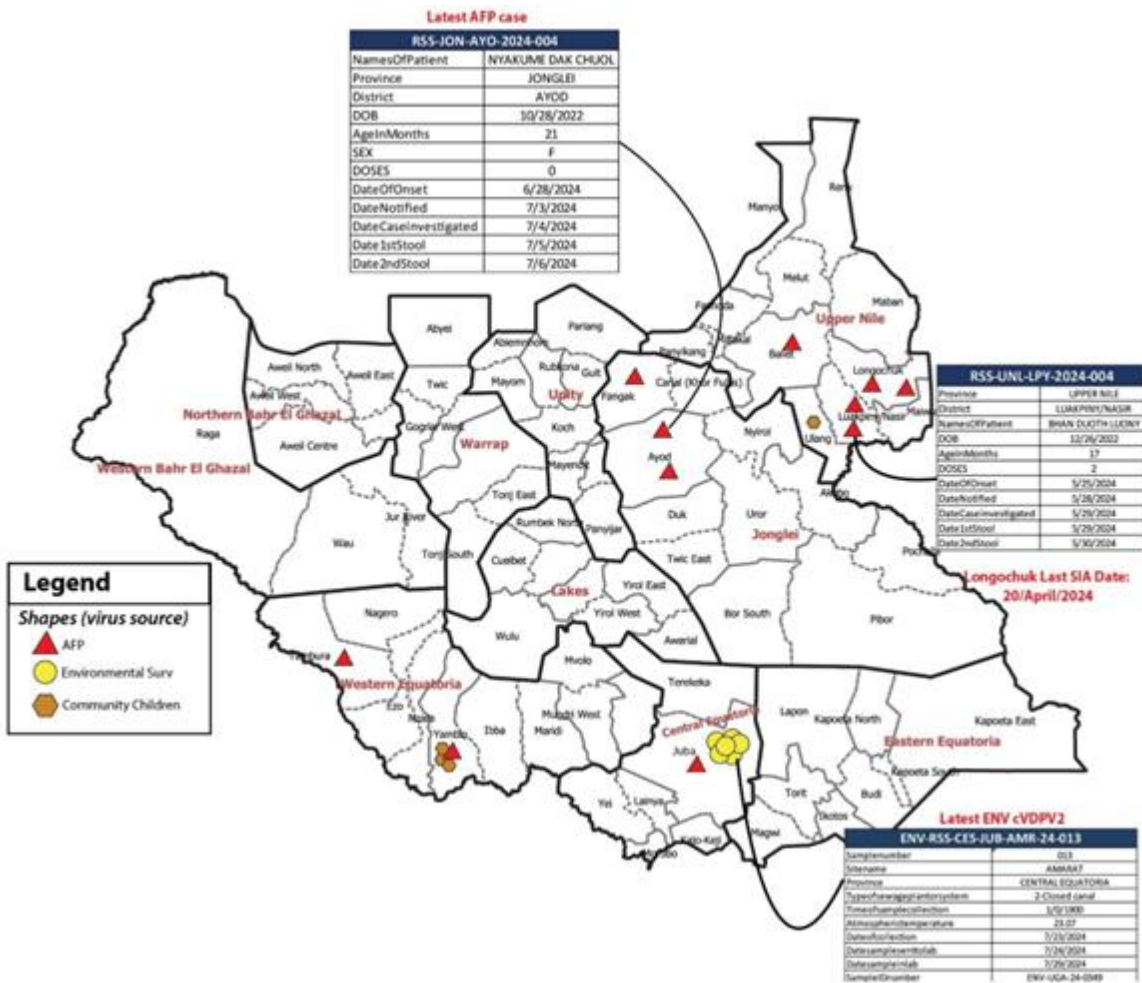
## Response activities for ongoing/suspected outbreaks

### 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 was from an ES sample collected on 23/7/2024 and confirms breakthrough transmission of circulating Vaccine Derived Polio Virus Type 2.

Figure 10: Distribution of cVDPV2 cases isolates (All sources)



The third outbreak response vaccination using nOPV2 has been approved and is being changed to November 12<sup>th</sup> to 16<sup>th</sup>, 2024. This two-week adjustment is a) to align with the synchronized nOPV2 response SIAs in Ghambela of Ethiopia and b) to allow time for resolution of the floods expected to last the whole of October. Funds for the November nOPV2 SIAs have been received in country and implementation dates will only change by the country decision making process that is usually informed by the preparedness dashboards. The country team is already aware of the delayed response to the break-through transmission and is considering to deliver the Short Interval Dosing approach in the high-risk counties, in addition to trial of digital micro-planning tools to ensure that the number of missed children in each response vaccination round is brought to a bare minimum of less than 5%.

## 2. Anthrax

Since the last update in week 35, a total of four (4) new cases with no deaths have been reported from Western Bar El Ghazal State, and no case has been reported from Warrap state during week 37 (ending 15<sup>th</sup> September 2024). No samples were collected during week 36 and 37, however, pending samples from previous weeks have not been tested.

Since January 2024, a cumulative total of 146 human anthrax cases have been reported from two states: Western Bar El Ghazal (85 cases) and Warrap (61 cases). Of these, one sample tested positive for anthrax at UVRI in Uganda. Among the 146 human cases, three have died, resulting in a case fatality rate (CFR) of 2.1%.

Four new admissions were reported during the reporting week; however, patients are placed on home treatment. The reported cases range in age from 1 to 57 years. Most cases were in the 15-57 age group, accounting for 62 cases (47.9%), followed by the 10 -14 age group with 32 cases (22.5%), the 5-9 age group with 25 cases (17.6%), and the 0-4

age group with 17 cases (12.8%).

Most of the cases were males, accounting for 95 cases (66.9%), while females accounted for 45 cases (31.7%). Overall, the reported cases range in age from 1 to 57 years.

None of the human cases have a history of previous vaccination, indicating a lack of herd immunity.

All 146 cases have a history of consuming dead meat. Regarding occupation, the distribution is as follows: farmers accounted for 44 cases (30.1%), Children account for 34 (23.9%) students account for 15 cases (10.6%), housewives for 10 (7.0%) cases, soldiers for 4 (3.0%) cases, a policeman for 1 (0.8%) case, and a herdsman for 1 (0.8%) case. The occupation for 31 cases was not indicated in the line list.

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 and supported 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.

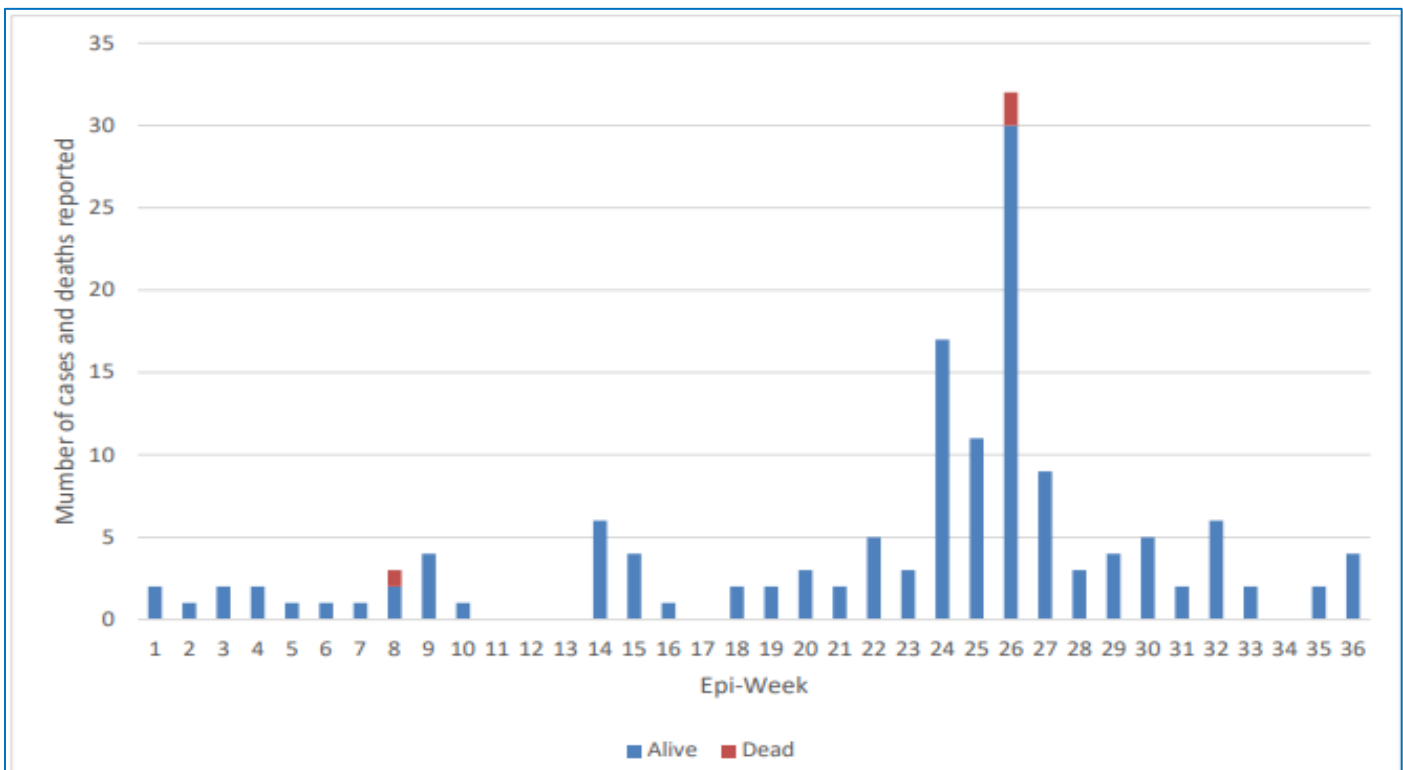


Figure 11: Epidemiological Curve showing Suspected Cases and Death of Anthrax in South Sudan; (Wk. 1-36, 2024).

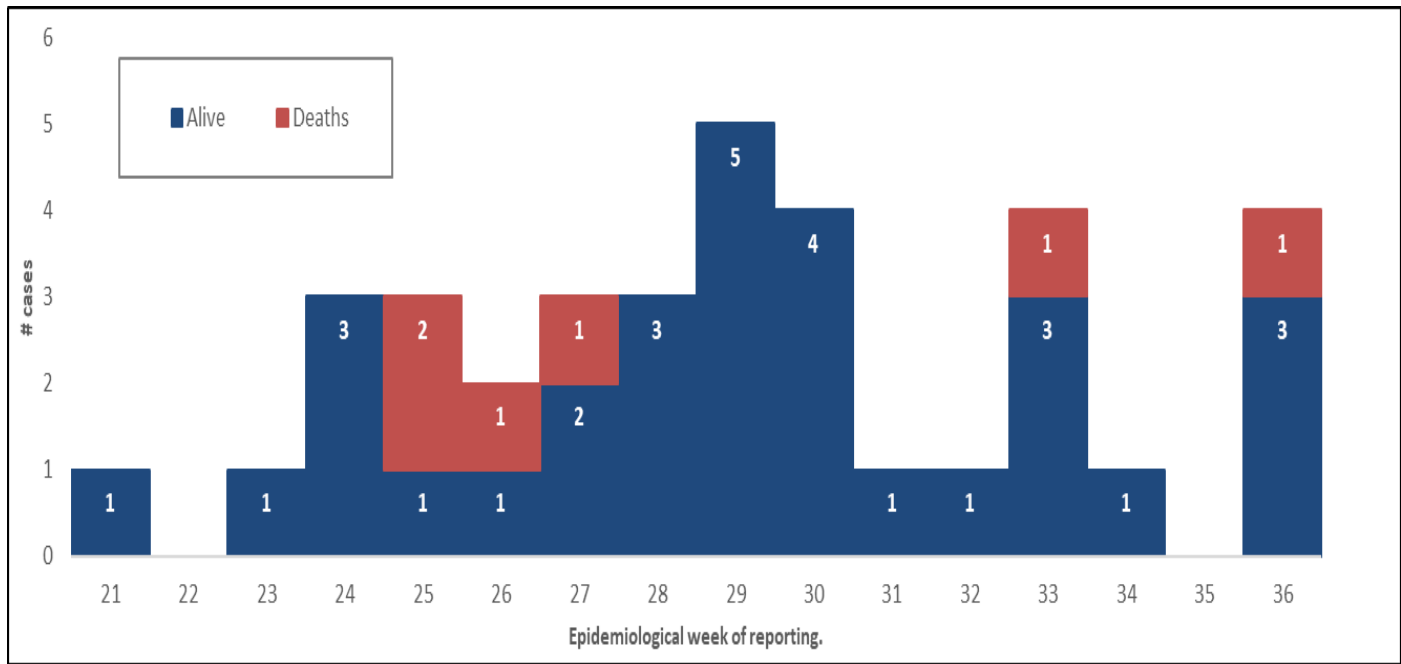
### 3. Hepatitis E in Abyei

In week 37 no new cases of hepatitis E were reported. Cumulatively 32 cases were reported from week 1 to 35. line listed including (4) four deaths giving case fatality rate of 13.3%. Three tested positive by PCR out of the 5 samples sent to the National Public Health Laboratory in Juba and almost all samples tested positive by using RDT. Most of the cases came from Ameth about Payam with Aybei.

Analysis of confirmed 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.



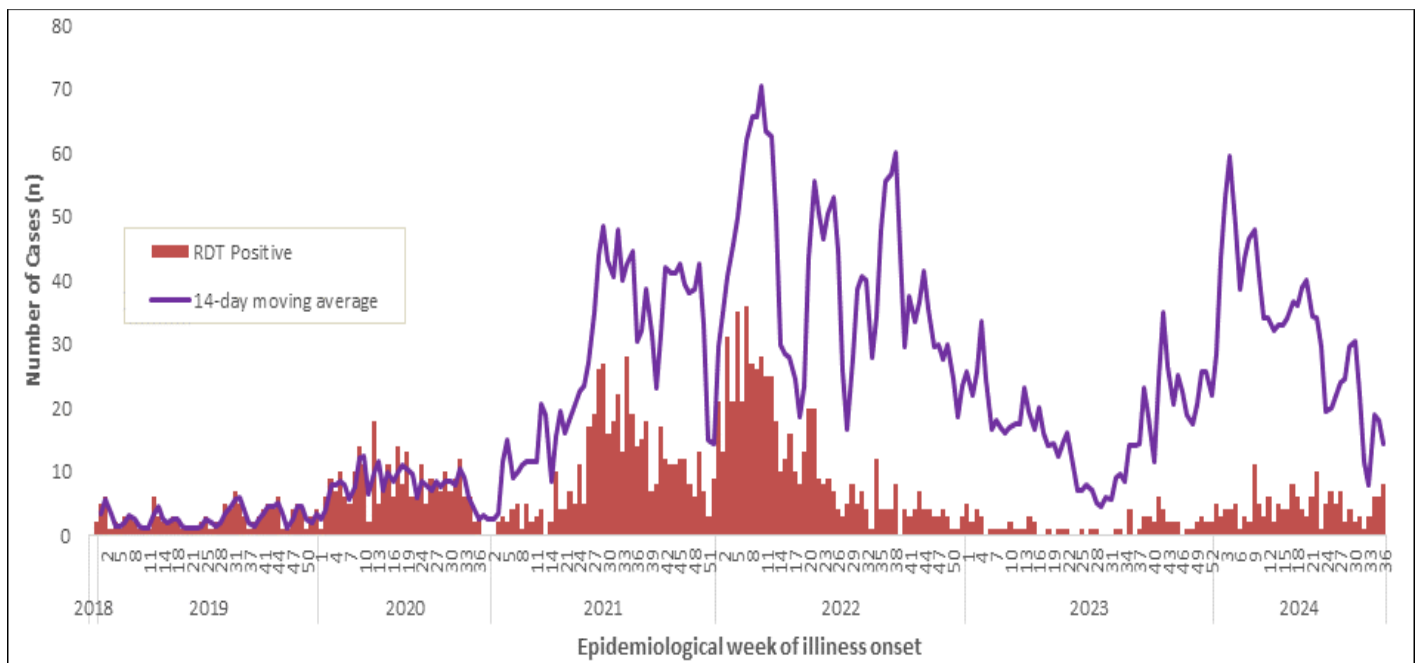
Figure 11: Epidemiological curve showing HEV cases in Abyei Administrative area as of week 36, 2024.



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

- In week 36 of 2024, there were 19 newly reported cases, with 8 RDT positive and zero death.
- Since the start of outbreak in 2018, a total of 5, 841 cases have been documented, with 33 resulting in deaths.
- Among individuals aged 15 to 44 years, 43% of the reported cases were recorded (figure 19 below).
- Males represented 52% (3, 057 cases) of the total cases, while females accounted for 48% (2,784 cases).
- Age group 15 to 44 years old account for 43 cases out of the total number of cases recorded

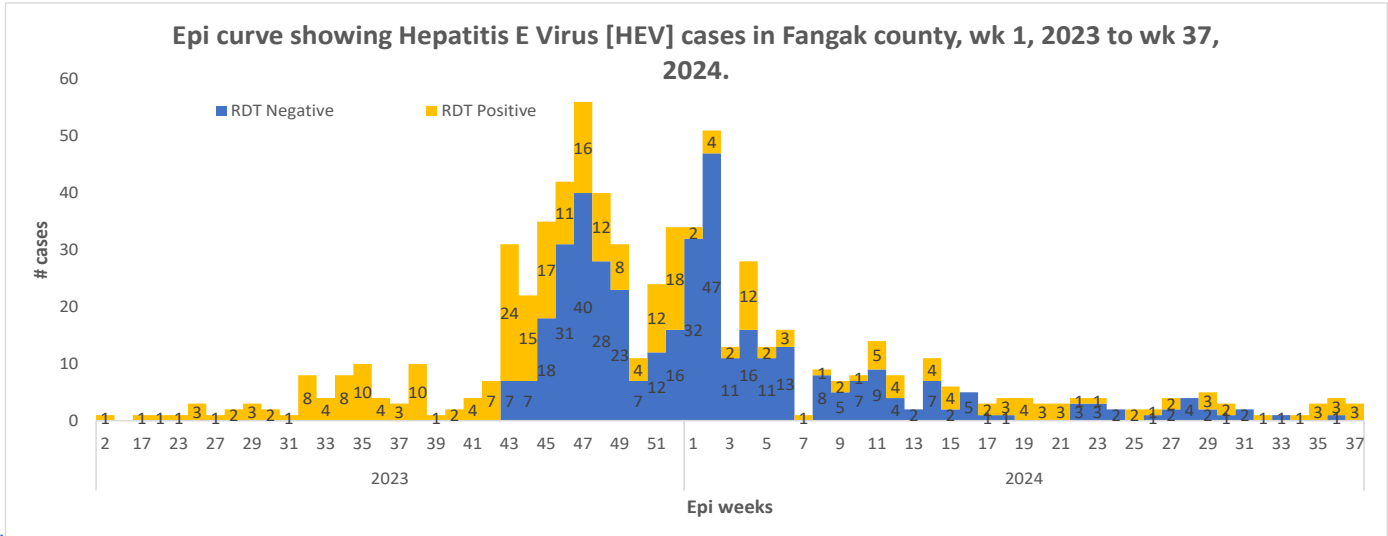
Figure 12: Epicure of HEV in Bentiu IDP camp, Unity State; Epi Week 52 of 2018 to Week 3 of 2024



### 5. Hepatitis E outbreak in Fangak County of Jonglei State

From week 1 of 2023 to week 37 of 2024, a total of 693 AJS cases were reported, with 27 deaths. Most cases occurred in individuals aged 15 years and above. Females accounted for 64% (445/693) of the cases, while males accounted for 36% (248/693). 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.

Figure 13: Epidemiological curve showing HEV cases in Fangak County of Jonglei State; Epi Week 37 of 2024



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

In week 37 of 2024, there were 28 new cases reported, with 8 testing positive for RDT and no fatalities. Since the start of the outbreak in 2018, a total of 5,869 cases have been documented, resulting in 33 deaths. Among individuals aged 15 to 44 years, 43% of the reported cases occurred. Males accounted for 52% (3,072 cases) of the total cases, while females represented 48% (2,797 cases). The provided chart illustrates the distribution of HEV cases based on the patient's place of residence, both within and outside Bentiu PoC. Most cases were identified in individuals residing outside the Bentiu IDP camp who sought medical assistance at healthcare centers within the camp.

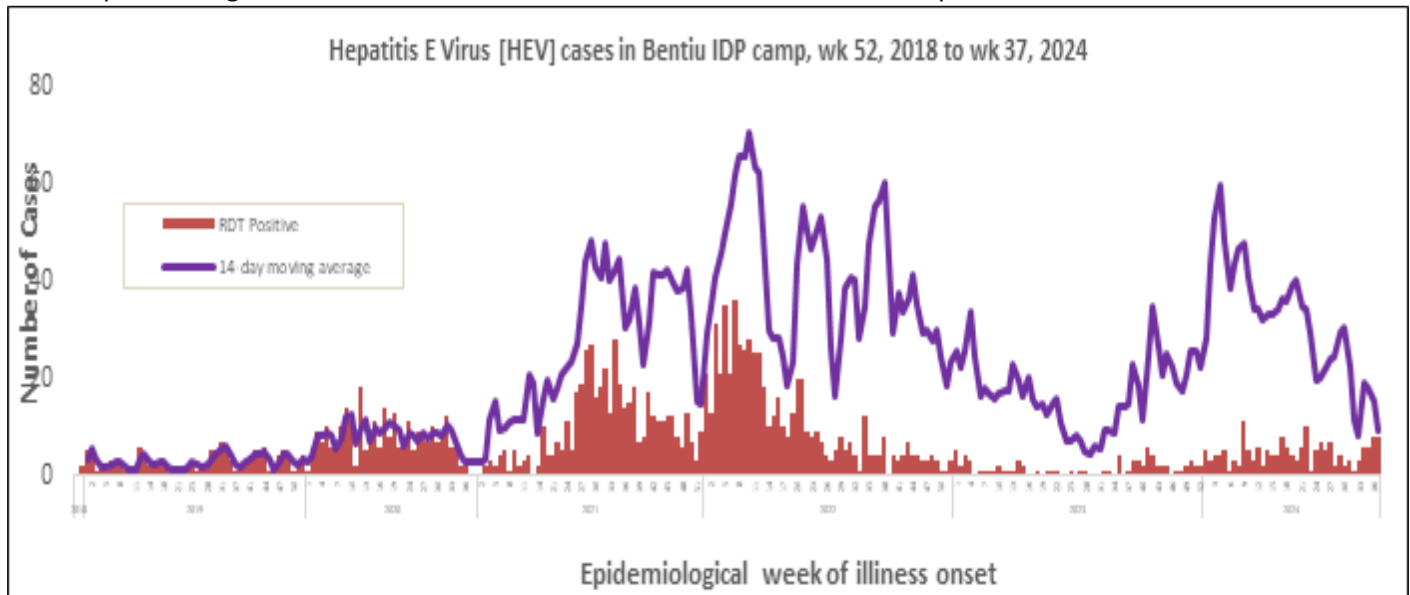


Figure 14: Epicure of HEV in Bentiu IDP camp, Unity State; Epi Week 52 of 2018 to Week 37 of 2024.



## Other Events

**Sudan crisis:** As of Week 37, at least **814 539** individuals have crossed from 18 different nationalities. Of this number, **75.84% (617, 360)** 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. Communities 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 Niño event in 2024 is projected to lead to approximately 50% higher levels of rainfall in the northern and eastern 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.

Flooding has impacted over 735,000 people across 38 South Sudan's 78 counties and the Abyei Administrative Area, worsening an already critical humanitarian crisis. Approximately 65,000 people have been displaced by the floods in Jonglei, Northern Bahr el Ghazal, Unity, Warrap and Western Bahr el Ghazal states, with Warrap bearing the brunt of the displacement, accounting for 41,000 individuals, followed by 10,370 in Jonglei.

Ongoing coordination with the Ministry of Health supporting response coordination at national and sub-national 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:

<https://www.afro.who.int/countries/south-sudan/publication/south-sudan-weekly-integrated-disease-surveillance-and-response-bulletin-2024>

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For more help and support, please contact:

Dr Joseph Lasu Hickson

Emergency Preparedness and Response

Ministry of Health Republic of South Sudan

Email: [josh2013.lasu@gmail.com](mailto:josh2013.lasu@gmail.com)

Phone number +211921395440

Dr. Kediende Chong

Director General Preventive Health Services

Ministry of Health

Republic of South Sudan

Email: [mkediende@gmail.com](mailto:mkediende@gmail.com)

Phone number: +21192888461

Dr BATEGEREZA, Aggrey Kaijuka

WHO-EPR Team Lead

Email: [bategerezaa@who.int](mailto:bategerezaa@who.int)

Phone number : +211 924222030

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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>

Data source: DHIS-2 and EWARS

