



# South Sudan Ministry of Health

Integrated Disease surveillance  
and response (IDSR)



World Health  
Organization  
South Sudan

## Epidemiological Bulletin Week 48, 2022 (November 28- December 4)

## Major epidemiological highlights in week 48 of 2022



- In week **48, 2022**, the IDSR reporting timeliness was at **92%** and timeliness for EWARN sites was at **84%**
- A total of 42 alerts were reported in week 48,2022; Malaria (11), AWD (8), measles (8), COVID-19(1) and ARI(3)
- The countdown for Sudan Ebolavirus in Uganda has begun as the last confirmed case was discharged on 30 November 2022. the total number of confirmed cases stand at 142 and **55 confirmed deaths** giving a **CFR of 39%**.
- A total of 30 suspected Ebola Virus Disease (EVD) cases were reported from Nimule, Yei, Yambio, Kajo-keji, Juba, and Rubkona with samples collected from 10 samples collected and all tested negative for EVD.
- Ministry of Health declared measles outbreaks in the country with 22 counties confirmed measles outbreaks since the beginning of the year 2022. A total of 2 471 cases including 243 lab confirmed and 31 deaths giving a CFR of 1.25%.
- On other emergencies, floods have affected over **1.1 million** people in **36** counties, and high cases of Acute Malnutrition in South Sudan due to **food insecurity**.

# SURVEILLANCE PERFORMANCE



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



# IDSR timeliness performance at State level for week 48 &



Completeness States Ranking	States	Total No. of Functional Health Facilities in the State	No. of HFs Reported on Time in WK 48	Timeliness Percentage of WK 48	No. of HFs Reported on Time in WK 47	Timeliness Percentage of WK 47
1st	WES	218	218	100%	213	98%
2nd	Lakes	113	113	100%	92	81%
3rd	Warrap	124	122	98%	116	94%
4th	Unity	93	91	98%	88	95%
5th	EES	105	100	95%	91	87%
6th	CES	129	119	92%	118	91%
7th	NBGZ	89	81	91%	80	90%
8th	WBGZ	78	67	86%	66	85%
9th	Jonglei	131	103	79%	97	74%
10th	Upper Nile	99	69	70%	57	58%
	<b>South Sudan</b>	<b>1179</b>	<b>1083</b>	<b>92%</b>	<b>1018</b>	<b>86%</b>

## KEY

	<60%	Poor
	61%-79%	Fair
	80%-99%	Good
	100%	Excellent

The Timeliness of IDSR Reporting (Supported by EWARS Web and Mobile) at health facility level in week 48 stands at 92% while in week 47 it was at 86% and 8 states were above the target of 80% in week 48.

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



# Surveillance: EWARS timeliness performance indicator by partner for week 48 and 47 of 2022

Partner	HFs	Reporting	Performance		
PARTER	Number of reporting sites	# of reports received on Time in Week 48	Timeliness of Week 48	# of reports received on Time in Week 47	Timeliness of Week 47
Medicair	3	3	100%	3	100%
CIDO	1	1	100%	1	100%
ADA	1	1	100%	1	100%
IRC	1	1	100%	1	100%
UNIDOR	2	2	100%	2	100%
Medair	2	2	100%	2	100%
MC	2	2	100%	2	100%
World Relief	3	3	100%	3	100%
CMA	14	14	100%	14	100%
SSHCO	1	1	100%	1	100%
HFO	8	8	100%	7	88%
Islamic Relief	5	5	100%	1	20%
TRI-SS	2	2	100%	0	0%
SMC	6	6	100%	0	0%
IOM	10	9	90%	9	90%
IMC	24	20	83%	22	92%
MSF-H	4	3	75%	3	75%
MSF-E	6	4	67%	4	67%
AFAA	2	0	0%	1	50%
UNH	2	0	0%	0	0%
HAA	4	0	0%	0	0%
<b>TOTAL</b>	<b>103</b>	<b>87</b>	<b>84%</b>	<b>77</b>	<b>75%</b>

The Timeliness of EWARS in partners' supported sites stands at 84% in week 48 and 75% in week 47 .

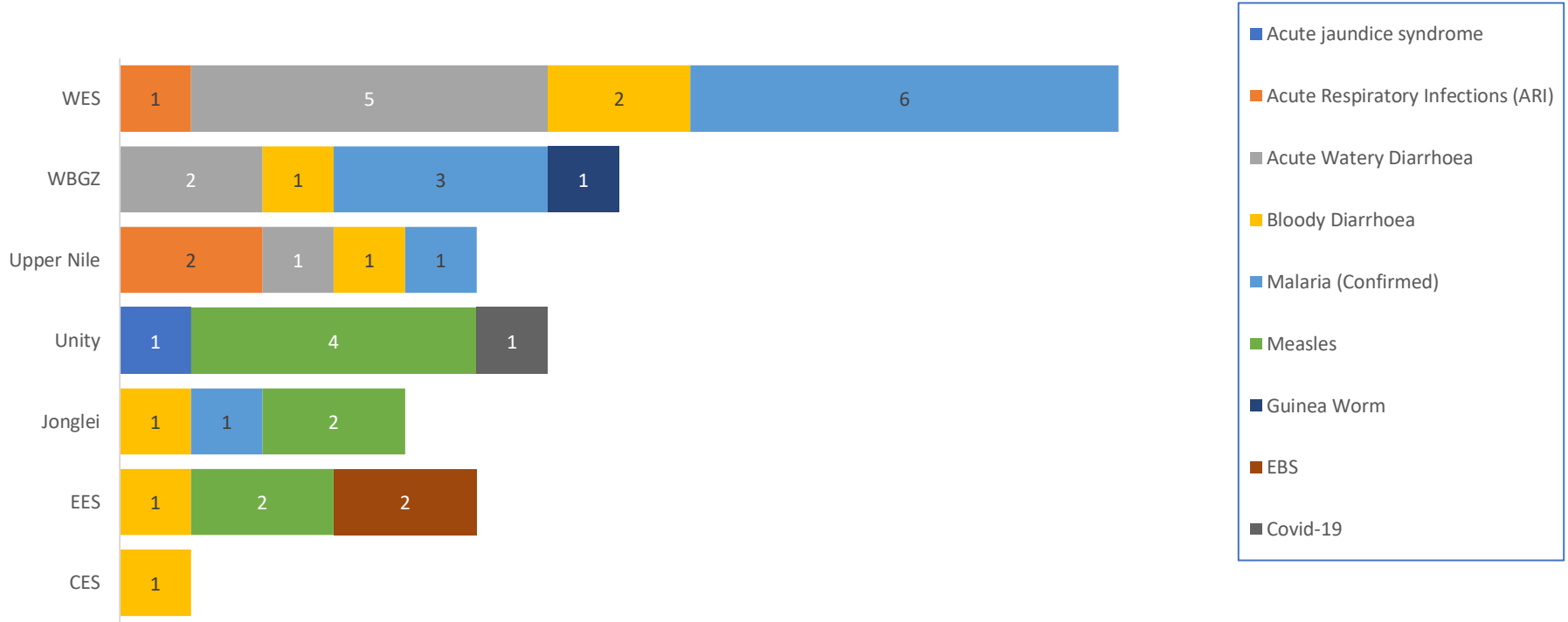
# INDICATOR-BASED SURVEILLANCE



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



# Alert by disease and States in week 48 of 2022 [ a total of events-specific alerts generated by state



## This week a total of 42 Alerts were triggered from the EWARS System:

- 1 AJS alert: these was triggered from MSF-H Bentiu IDP Hospital, in Rubkona of Unity State.
- 8 Measles alert: these were triggered from Frak Sika PHCC (2) in Budi County, Bor Civil Hospital(2) in Bor County, MSF-H Bentiu IDP Hospital(2) in Rubkona County, Bentiu State Hospital (2) in Rubkona County.
- 2 EBS alerts: these are from Okorohore PHCC of a Patient aged 22 yrs old with suspected yellow fever presenting with signs and symptoms of yellow eyes, yellow urine, fever, and general body pain , Owinykibul PHCU in Magwi County **of suspected Measles where 5 suspects were under 5 and 3 above 5 with 0 deaths.**
- 2 Guinea Worm alerts: were triggered from Bhar Mayen PHCC in Aweil Centre and Marial Ajeth PHCU in Jur River.

# SUDAN EBOLAVIRUS IN UGANDA AND READINESS IN SOUTH SUDAN



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

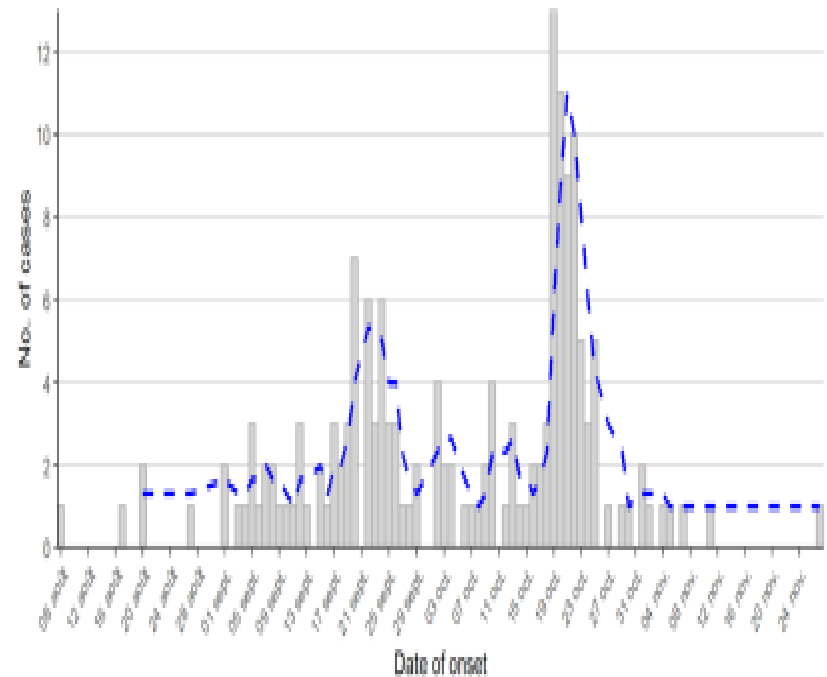


# Sudan Ebolavirus Disease in Uganda as 12 December 2022

- On 20th September 2022, the Ministry of Health declared an outbreak of Sudan ebolavirus (SVD) after a case managed at Mubende Regional Referral Hospital (MRRH) in Mubende district was confirmed through testing at the Uganda Virus Research Institute (UVRI)
- December 12, 2022 marks 87 days of response to the Sudan EVD outbreak in Uganda, first case was confirmed on 19-September 2022
- With the last confirmed case discharged on 30 November 2022 Uganda has started the 42 days countdown to the end of the outbreak.
- Cumulatively the cases stands at **142 confirmed EVD cases and 55 confirmed death giving and a Case Fatality Rate (CFR) of (39%) with total recovery of 87 out of the total confirmed cases**
- A total of 9 districts were affected with most cases reported from Mubende, Kassanda and Kampala.
- A total of 6 contacts actively being followed-up in one district (Kassanda) with a follow-up rate in the past 24 hours was 100%

## Daily case incidence

Confirmed and probable, with 3-day moving average

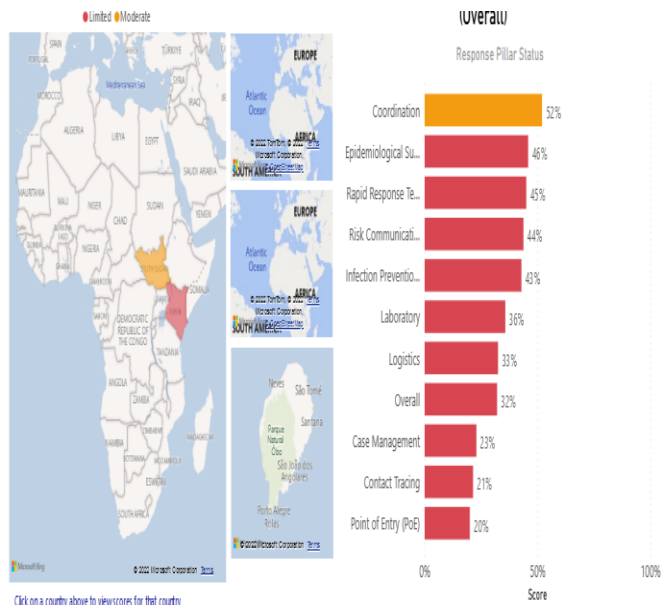


Source: Uganda daily Sudan Ebolavirus Sitrep 12 December 2022

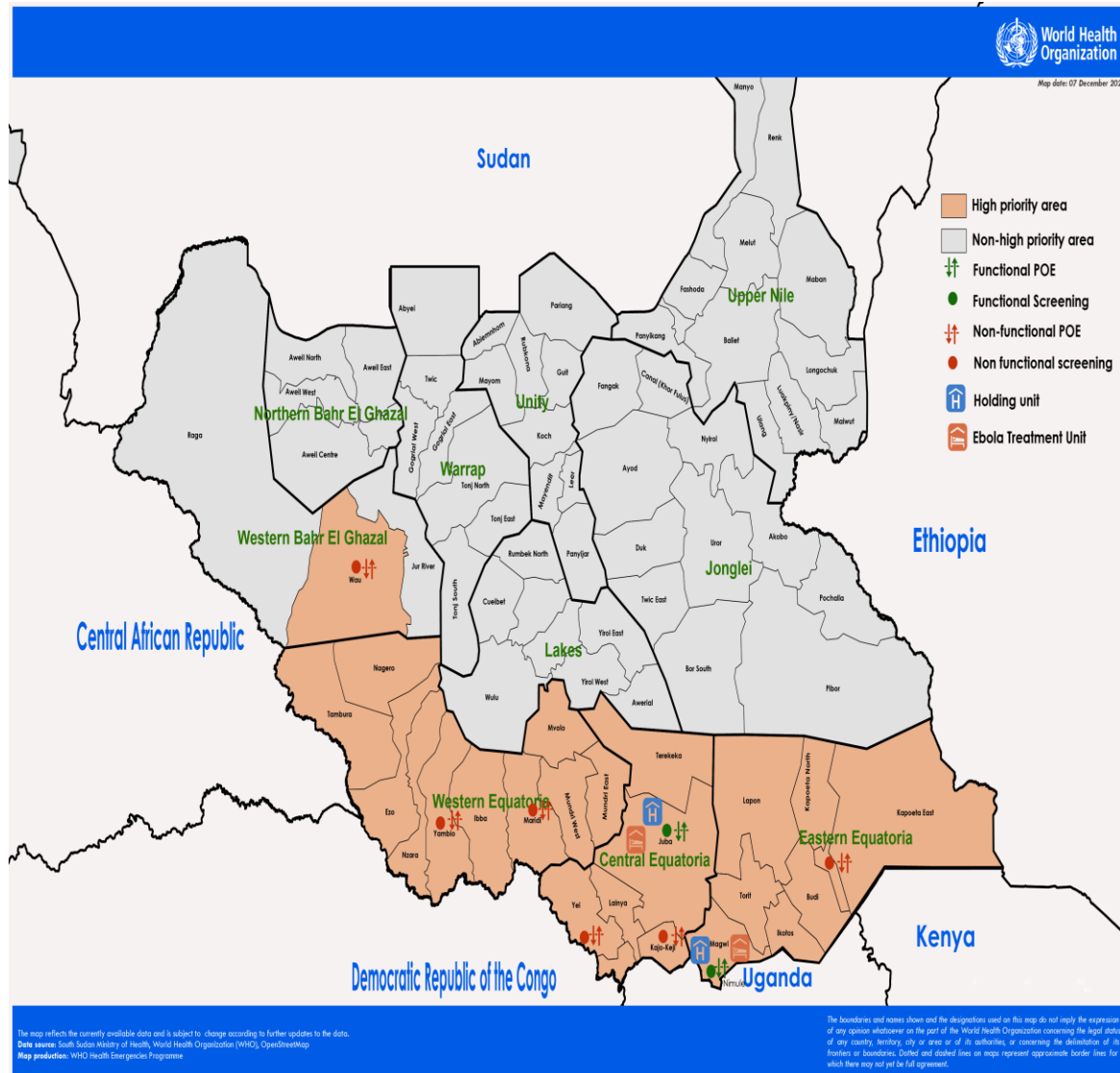


# Checklist scores and update for EVD operational readiness in South Sudan

A second national-level Sudan Ebola Virus Disease readiness assessment at the start of the outbreak indicated a few pillars needed urgent strengthening, with PoE, case management, laboratory and contact tracing targeted still require for actions improve EVD readiness



Country	Response Pillar	Comments
SOUTH SUDAN	04 - Infection Prevention and Control and safe burial	assess the available PPEs and Reagents for use in the country Isolation units are establish but not ready to receive patients
SOUTH SUDAN	01 - Coordination	n/a
SOUTH SUDAN	02 - Rapid Response Teams (RRT)	n/a
SOUTH SUDAN	03 - Risk Communication and Community Engagement	n/a
SOUTH SUDAN	05 - Case Management	n/a
SOUTH SUDAN	06 - Case Management - Safe and dignified burials	n/a
SOUTH SUDAN	07 - Epidemiological Surveillance	n/a
SOUTH SUDAN	08 - Contact Tracing	n/a
SOUTH SUDAN	09 - Laboratory	n/a
SOUTH SUDAN	11 - Logistics	n/a
SOUTH SUDAN	12 - Vaccination	n/a
SOUTH SUDAN	10 - Point of Entry (PoE)	Port health teams at all designated POEs are trained to screen only in Nimule/OM DOTM have Data on cross-border population mobility



The map reflects the currently available data and is subject to change according to further updates to the data.  
Data source: South Sudan Ministry of Health, World Health Organization (WHO), OpenStreetMap.  
Map production: WHO Health Emergencies Programme

The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dashed and dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

# South Sudan: Public Health Coordination

- An outcome of the ministerial meeting co-convened by WHO and Africa CDC in October was for A Regional Ebola Task Force to be established and chaired by South Sudan with coordination support from WHO, Africa CDC and the RECs (EAC, IGAD) to facilitate joint plan of action and monitoring. The first Task Force meeting was held 11 November 2022 during which ToRs were discussed
- A regional functional simulation exercise on public health emergency operations center (PHEOC) conducted on 06 - 07 December 2022
- The concept for comprehensive simulation exercise to test operational readiness at national and subnational levels is being developed.
- The comprehensive national EVD plan is the guiding document for EVD preparedness and response. Based on the evolution of the situation in Uganda, WHO is looking to support an technical review and in-depth budgetary review of the national EVD plan.
- Weekly EVD all pillars meeting and National Steering committee meetings being conducted on Wednesdays and Thursdays respectively to coordinate readiness efforts
- ToRs for the EVD task force and for subnational operational readiness strengthening has been updated and developed respectively, with teams already deployed in Nimule and Yei, and to be deployed to other high risk locations

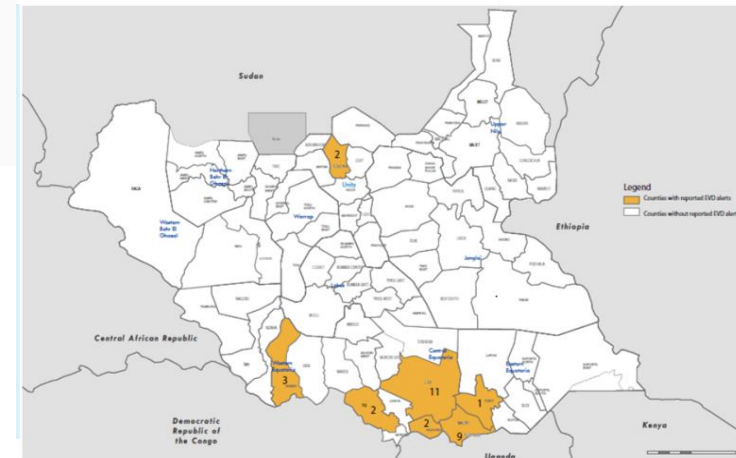


# South Sudan: Surveillance updates

- Cumulatively, a total of 30 alerts have been reported and investigated from seven locations in the country since September 2022: 18 were discarded because they didn't meet case criteria, 12 tested negative
- Nimule (9), Juba (11), Yambio (3), Yei (2), Kajo-keji (2) Rubkona (2) Torit (1),
- A total of 102 frontline healthcare workers for both private and public health facilities within Juba have been sensitized of EVD case detection, reporting and basic IPC and triaging
- RRT and HCWs and contact tracing trainings conducted in Kajo-Keji and ongoing trainings in Nimule, Yambio, Morobo and yei.
- Refresher training conducted to National RRT (20) and State RRT (7) on EVD with simulation exercises (Drills and Table top) on case scenario on EVD

Surveillance indicator table

Indicator	#
Number of alerts (cumulative)	30
Number of alerts discarded (cumulative) (not meeting case definition)	15
Number of alerts validated after investigation (cumulative)	07
Number of alerts received in the last 24 hours	00
Number of alerts to be investigated within the 24 hours	00
Number of samples collected (cumulative)	07
Number sample tested (cumulative)	07
Number of samples tested positive (cumulative)	00



map showing all EVD alerts by county



Sensitization of Health workers in Kator PHCC



Inbound travelers getting screened at Gumbo sherikat



# South Sudan Case management Updates

## Case management and Infection prevention and control (IPC) updates

- Isolation and treatment facilities have been established in Nimule and Juba (No. of beds = 16 in Nimule and 20 in Juba)
- Referral system and ambulance team established and trained including the availability of a standby ambulance with support from WHO in Juba and Nimule.
- Comprehensive case management training at the Juba Isolation facility
- Isolation tent set up in Yambio Hospital
- Yei Isolation center under renovation with support from ICRC



Pics.1&2 Juba new IDU



Pic.2 Isolation and management set up within Yambio hospital



Pic.3 Training of Staff and drill at Nimule facility

- National Level EVD **RCCE TWG** has been activated and is ongoing on weekly basis
- The **Risk Communication strategy** updated, RCCE SOP under review
- 72 hrs Plan finalized and shared – RCCE response plan captured
- **EVD Training Module** for front line worker has been developed and under review
- Ebola **IEC materials**, soft copies shared with partners for
- Produced **Radio talk shows, jingles and spots** in English, Arabic and translated to local languages
- **Toll free hotlines MoH 6666** and UNICEF sponsored hotline under SSCC; 2222 is active and continues to receive community feedback on key issues including disease outbreaks.
- EVD Bulletin prepared and circulated



# South Sudan: Operations and logistic support (OSL) updates

- PPE prepositioned at each of the 9 hub offices to support EVD readiness activities; re-stocking of PPEs at sub-national level is ongoing.
- A second mobile storage unit (rub-hall tent) donated by WFP to support EVD readiness at the new IDU site in Juba.
- The national logistics TWG is coordinating the PPEs stock and supplies distribution using the already existing supply request portal <https://ee.humanitarianresponse.info/sddy70c6>



**New isolation site Rub-Hall tent donated by WFP to support EVD readiness in Juba**

# Challenges and opportunities for improvement

- Inadequate partner participation in the incident management system.
- Inadequate funding to support EVD readiness activities. To ensure adequate preparedness in SSD, there is need for a financing in a no-regrets manner (as if it is a response)
- Inadequate screening at points of entry in high-risk areas (Yei, Kaya, Yambio, Maridi, Kapoeta, Ikotos, Torit, and Magwi), other PoEs (Kenya, Ethiopia, Sudan, CAR, and DRC), Major hospitals, and healthcare facilities including private healthcare facilities.
- Inadequate number or composition of rapid response teams (RRTs) in some EVD high-risk areas (Kaya, Morobo, Yei & Yambio)





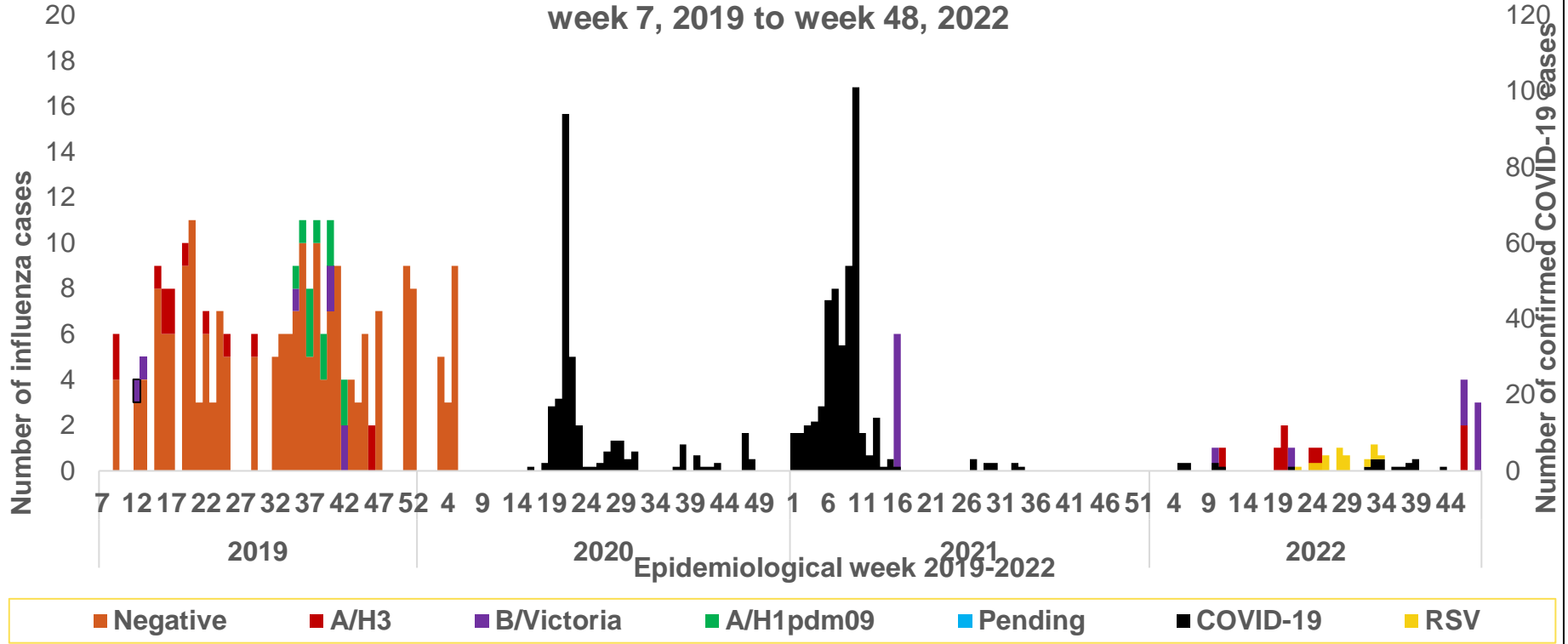
# EVENT-BASED SURVEILLANCE



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



Confirmed Influenza ,COVID-19 and RSV cases from sentinel sites in Juba, week 7, 2019 to week 48, 2022



- There are currently Four designated Influenza sentinel surveillance sites in Juba (Juba Teaching Hospital and Al Sabah Children’s Hospital Rumbek State Hospital & Juba Military Hospital) that are collecting epidemiological data and samples from ILI/SARI cases.
- By the end of wk. 52 of 2021, a total of 266 ILI/SARI samples have been collected and tested in NPHL, 257 being negative; 6(2%) positive for Influenza B (Victoria); 3 (1%) positive for Influenza A (H3) and zero(0%) positive for Influenza A (H1)pdm09.
- From week 1-to 48,2022; a total of 564 ILI/SARI samples were collected,502 samples tested negative, and Cumulatively, 21 tested positive for covid-19,5 positive for Influenza B (Victoria), and 6 positives for influenza A(H3). 26 RSV was confirmed in Week 48



# **ACTIVE OUTBREAKS AND PUBLIC HEALTH EVENTS**

Brief epidemiological description and public health response for active outbreaks and public health events`

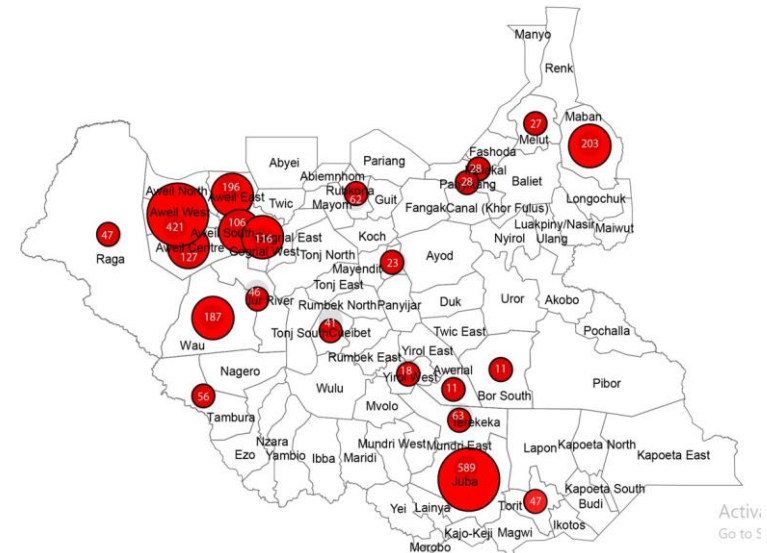
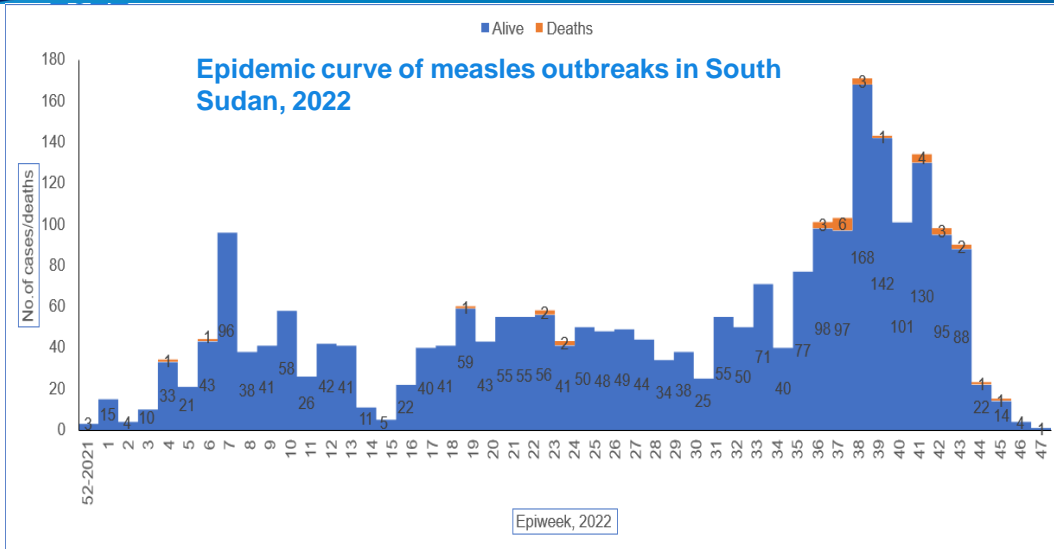
## Response| Summary of major ongoing outbreaks in 2022

Aetiological agent	Location (county/ state)	Date first reported	New cases since last bulletin	Cumulative cases to date (attack rate %)	Interventions			
					Case management	Vaccination	Health promotion	IPC/W ASH
<b>Ongoing epidemics</b>								
<b>Hepatitis E</b>	Bentiu PoC	03/01/2019	44	3,592(0.82%)	Yes	yes	Yes	Yes
<b>COVID-19</b>	35 counties	05/4/2020	15	18,313 (0.77%)	yes	yes	yes	yes
<b>Cholera</b>	Bentiu	20/3/2022	00	424(0.32)	yes	yes	yes	yes
<b>Measles</b>	Aweil West	11/5/2022	<b>4</b>	426(0.030)	Yes	yes	Yes	NA
<b>Measles</b>	Aweil East	12/3/2022	8	159(0.013)	Yes	yes	Yes	NA
<b>Measles</b>	Aweil Center	24/4/2022	<b>4</b>	96(0.32)	Yes	yes	Yes	NA
<b>Measles</b>	Juba	19/7/2022	26	406(0.66)	yes	yes	yes	NA
<b>Anthrax</b>	<b>Gogrial west</b>	NR	3	131		Yes Partial in animals	yes	
<b>measles</b>	<b>Malakal</b>				yes	yes	yes	
<b>Measles</b>	<b>Terekeka</b>				yes	yes	yes	
<b>Measles</b>	<b>Leer</b>				yes	planned	yes	
<b>Measles</b>	<b>Bentiu (Rubkona)</b>				yes	planned	yes	
<b>Measles</b>	<b>Bor South</b>				yes	Not yet	yes	

# **ACTIVE OUTBREAKS AND PUBLIC HEALTH EVENTS**

**Measles Updates**

# Measles Cases in South Sudan week 1- 48, 2022



**Counties with Confirmed measles outbreaks 2022**

- Measles cases reported from diff counties throughout the year

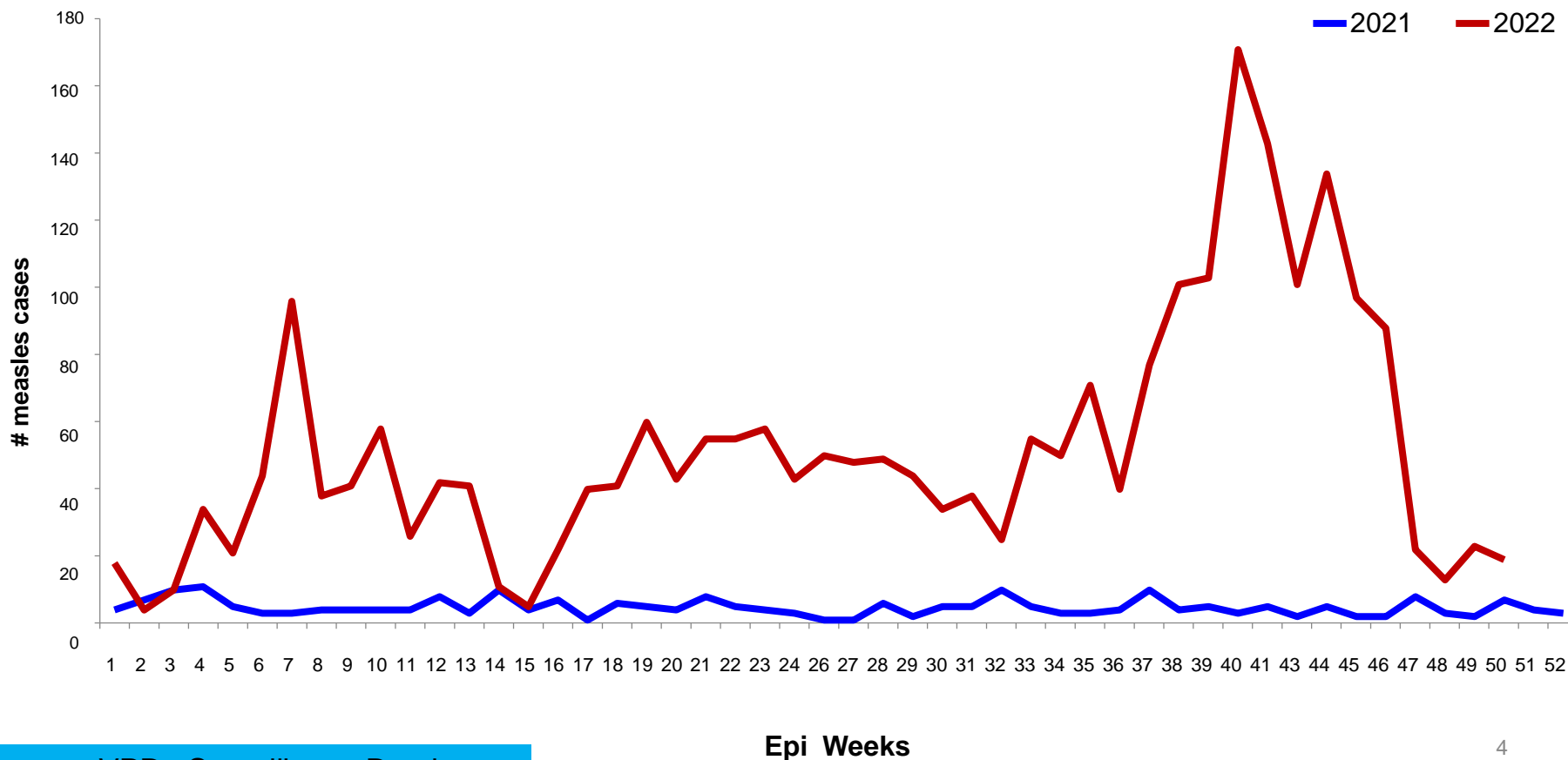
## Descriptive Epidemiology

- A total of 2471 cases, and 31 deaths (CFR, 1.2%) were reported since the beginning of 2022
- However, measles outbreaks were confirmed in 22 counties since the beginning of the year 2022
- Highest number of cases were reported from Juba and Aweil West counties
- Measles cases active cases is being reported from (18 counties) Juba, Terekeka, Malakal, Rubkona, Leer, Aweil North, Aweil East, Aweil South, Aweil North, Aweil Centre, Melut, Cuibet, Nyirol, Yirok west and Wulu
- Measles cases are still being reported in Northern Bahr el Ghazal and other locations despite the vaccination campaigns conducted in all (5) counties.
- The surge in measles transmission can be attributed to the accumulation of susceptible children due to low routine vaccination coverage in the country.

## Public Health Response

- **The Ministry of Health on 11 declared measles outbreak in 22 counties, and measles response will be coordinated under the national steering committee within the PHEOC**
- A total of 755,768 children aged 6 months to 14 years have been vaccinated in (12) counties during the reactive campaigns
- Plans are underway to conduct a vaccination campaign in Leer county, Rubkona, Wau and Bor South counties
- Two Measles response plan has been developed and tested by table top exercise on 14<sup>th</sup> December 2022
- Nationwide catchup campaign planned to take place in April 2023

## Epi curve showing measles cases by epi week 2021 / 2022



Source: VPDs Surveillance Database





## Case and deaths by age group

- 71% (1754 cases) of all the cases are children aged < 5 years
- Overall CFR of 1.25% (31 deaths)
- Children aged 1-4 years with the highest CFR, 1.75%

## Vaccination status

- 55% (1364 cases) of all cases had zero doses
- At least 26 % (650) of the cases received one dose
- And majority of the vaccinated cases are in age group 0-9years

Age Groups	Cases	Deaths	Proportion, %	CFR, %
0-11 months	725	7	29.3	0.97
1-4 yrs	1029	18	41.6	1.75
5-9 yrs	414	3	16.8	0.72
10-14 yrs	196	2	7.9	1.02
15 & > yrs	107	1	4.3	0.93
<b>Total</b>	<b>2471</b>	<b>31</b>	<b>100.0</b>	<b>1.25</b>

Age Groups	# doses received					% zero dose
	0 dose	1 dose	2 doses	unknown	Total	
0-11 months	405	75		245	725	55.9
1-4 yrs	547	348	6	128	1029	53.2
5-9 yrs	219	158	9	28	414	52.9
10-14 yrs	129	39	3	25	196	65.8
15 & > yrs	64	30		13	107	59.8
<b>Total</b>	<b>1364</b>	<b>650</b>	<b>18</b>	<b>439</b>	<b>2471</b>	<b>55.2</b>



# Confirmed Outbreaks: measles cases, deaths, attack rates and CFR by counties, 2022

State	County	County pop	Cases	Lab confirmed	Deaths	Attack rate/1000 pop	CFR,%	Date of onset	Date of response/campaign	Campaign coverage	Outbreak status
NBeG	Aweil Centre	76117	126	39		1.7	0.0	3-Apr-22	14-22 Jun	155% (12500)	Active
	Aweil East	345540	195	8	3	0.6	1.5	10-Mar-22	13-26 Aug	91%	Active
	Aweil North	168813	39	5		0.2		16-Mar-22	14-21 Jul	97% (96730)	Active
	Aweil South	142217	105	14	3	0.7	2.9	2-May-22	13-26 Aug	97%	Active
	Aweil West	204245	420	21	2	2.1	0.5	28-Mar-22	14-22 Jun	94% (49784)	Active
Lakes	Yirol West	174804	41	10		0.1		25-Oct-22	Not done		Active
	Cueibet	183675	34	6	4	0.2	10.8	15-Oct-22	Not done		Active
Warrap	Gogrial West	326541	91	16		0.3		2-Jan-22	1-8 Jun	95% (73281)	Controlled
Jonglei	Bor South	340261	9	5		0.0		3-Sep-22	Not done		Active
	Nyirol								Not done		Active
EES	Torit	63096	32	17	2	0.5	6.3	16-Jan-22	29-31 Mar	95% (24534)	Controlled
WES	Tambura	119333	37	6		0.3		13-Feb-22	1-6 Apr	102% (12969)	Controlled
Unity	Rubkona	342 397	46	13	1	0.1	2.2	23-Sep-22	22-29 Nov	77.2 (35545) in XPoC; pending data from outside	Active
	Panyijjar	120 261	27	1		0.2		2-Sep-22	Confirmation pending		Active
	Leer	77811	19	7	1	0.2	5.3	15-Sep-22		Pending data	Active
CES	Juba	523700	588	13	15	1.1	2.6	14-Jul-22	29 Aug-29 Oct	69-98% (204756)	Active
	Terekeka	258889	48	15		0.2		4-Sep-22	2-9 Nov	106% (28876)	Active
WBeG	Raja	59638	46	16		0.8		22-Jul-22	22 May-5 Jul	70% (7370)	Active
	Wau	320752	182	11		0.6		15-Aug-22	Not done		Active
UNS	Maban	81835	202	5		2.5		2-Jan-22	7-15 Mar	97.7-98%, host&IDP	Controlled
	Malakal	195528	59	10		0.3		13-Jul-22		73% (9533)	Active
	Melut	130105	9	5		0.1		18-Oct-22	Not done		Active
Total		4255558	2355	243	31	0.5	1.3				



## Anthrax updates



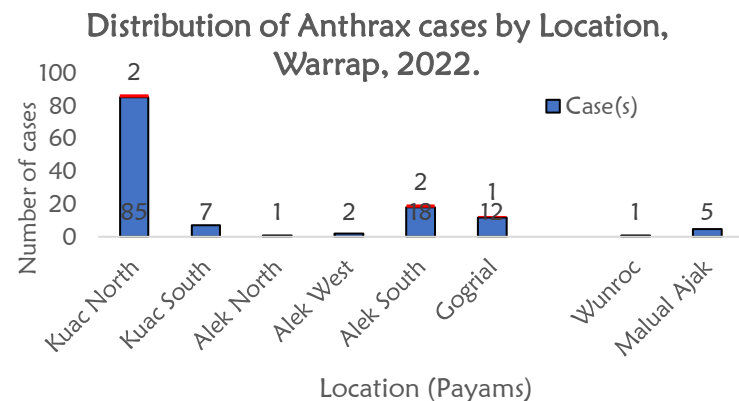
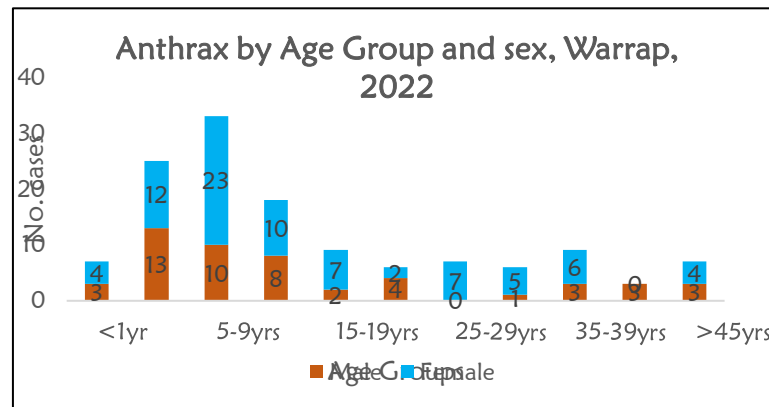
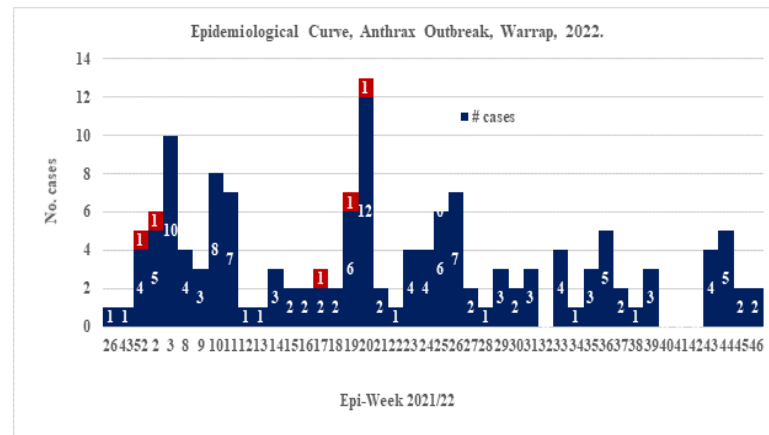
# Confirmed Anthrax Cases in Gogrial West, Warrap State as of week 47



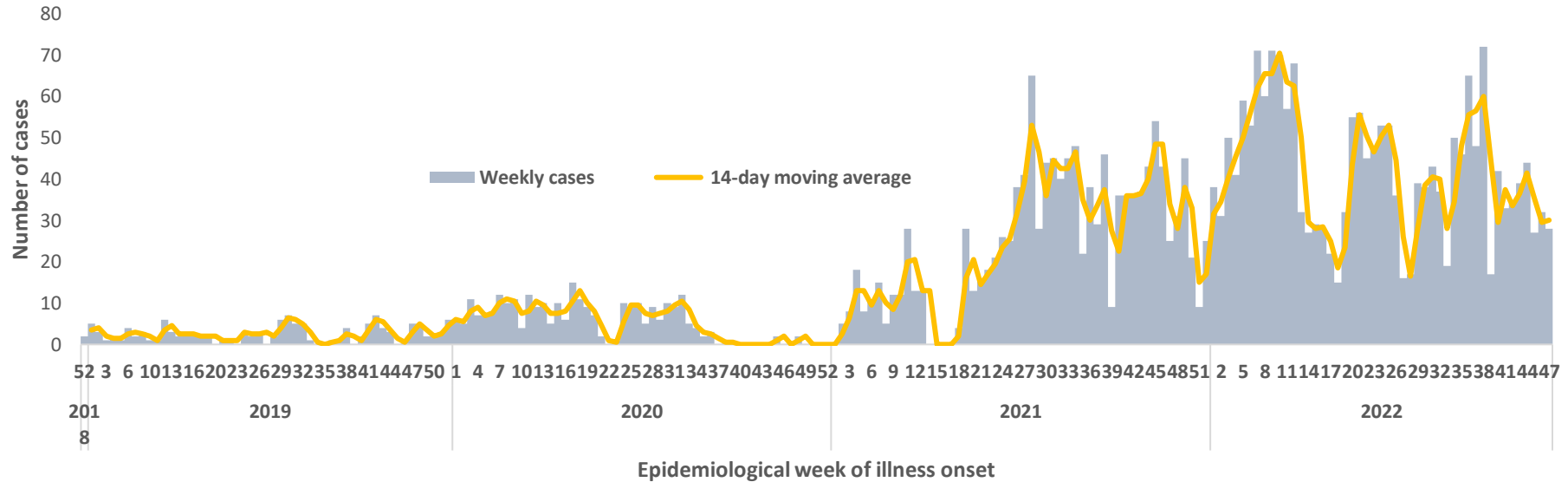
- Suspected anthrax cases were detected at the Kuajok hospital, and a retrospective review of the facility registers revealed over cases in the past two months.
- On 18th May 2022, a national team composed of MOH, MOAF, WHO, ICAP, and FAO visited the state to conduct an in-depth epidemiological investigation and response. The team visited Kuajok hospital, Gogrial PHCC, and Alak PHCC to review register books. The team also visited 24 villages where Anthrax suspected cases come from
- Three new cases were reported in week 43, 2022 bringing the total number of cases line-listed to **141 cases and 5 deaths**, case fatality rate (**CFR 3.2%**).
- The age group most affected remains the 5-9 year old's with female predominance (59%) and residents in Kuac North Payam, Gogrial West County.
- Case Management indicates a Cure Rate (80.9%), Disability Rate (0.74%), and a CFR (3.82%) during the outbreak
- All cases are from one County of Gogrial West. **62.9%** of the cases are from Kuac North Payam. **62%** of the cases are among females and **38 %** among Males.
- Out of the 18 samples collected, 8 tested positive by PCR for bacillus anthracis.
- A total of 10 animal samples were collected by the animal health experts and 3 soil samples for further analysis.

## Ongoing response

- Partial vaccination campaign in the three (3) counties of Gogrial East and West in addition to Tonj North where 180,000 ruminants were targeted (2nd – 18th August 2022) ; coverage was at a low 42% and more remains to be done given a balance of Anthrax vaccines.
- Active case search and line listing of cases in the affected county and the surrounding and Case management is underway at Kuajok hospital.
- Risk communications and community engagements activities are ongoing through local radios to reduce the risk of exposure
- Ongoing multisectoral coordination meetings at state and national levels.



## Hepatitis E Virus [HEV] cases in Bentiu IDP camp, wk 1, 2019 to wk 47, 2022



## Descriptive epidemiology

- The persistent transmission of HEV in the Bentiu IDP camp continues with **3,679** cases since the beginning of 2019
- **28 AJS new** cases with (zero deaths) were reported in week 44, bringing the cumulative cases to 3,592 (26 deaths) since the onset of the outbreak in 2018.
- **HEV transmission has reduced from a peak of 60 cases every fortnight by week 8, 2021 to 28 cases every fortnight by week 47, 2022.**
- All the cases have been managed as outpatient cases except for seven cases that were admitted
- No death was reported in 2022
- 46% are female and 54% are male. Within the IDP camp, the sector-specific attack rates for HEV disease for the period week 1, 2022 are highest in sectors 3 and 5.

### **HEV response update**

1. Multisectoral joint cholera and HEV response coordination at the state level; biweekly coordination forum comprising health, WASH, and other clusters
2. Surveillance enhanced through the provision of refresher training, distribution of case definition, and other reporting tools
3. Weekly analytics of the outbreak data to monitor trends and inform decision making
4. Case management for symptomatic cases provided by the PHCCs; severe cases are referred to MSP PoC Hospital
5. The HEV vaccination campaign was conducted in Bentiu IDP Camp; the first round with a coverage of 91% and the second round with a coverage of 82% among those aged 16-40 years (incl. pregnant women); the third round is expected to be conducted in October 2022
6. Risk communication and awareness are enhanced through household health promoters/hygiene promoters; radio talk shows and messaging. Cholera and HEV messages were disseminated.
7. Enhanced access to safe drinking water, sanitation facilities such as latrines, mass clean-up campaigns, regular water quality testing, and monitoring

### **HEV response challenges**

1. Lack of long-term investment to improve the WASH situation in the camp
2. Lack of meaningful behavioral changes among the population
3. Frequent population movements between the IDP and host communities; the host community was not vaccinated
4. Floods have worsened the WASH situation in the camp





# **EVENT-BASED SURVEILLANCE**



**Other Emergencies (Floods and Malnutrition)**

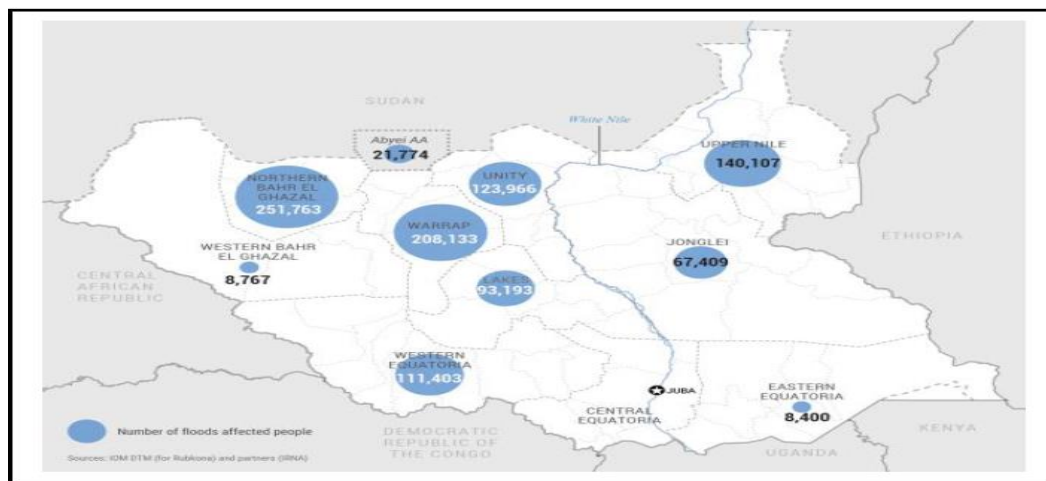
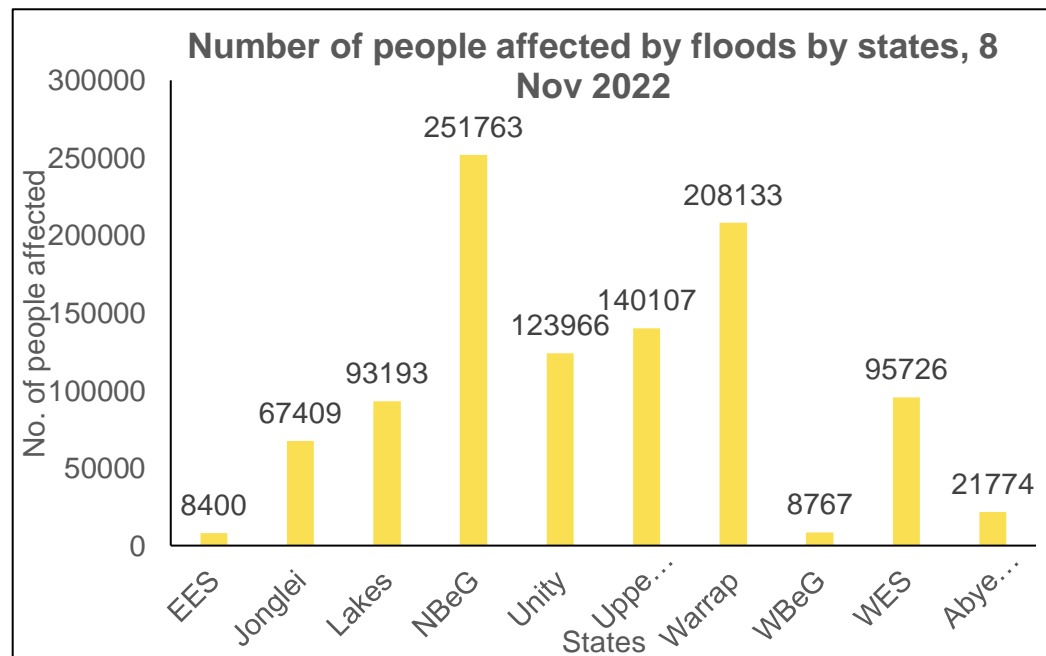
# Updates on Floods situation in South Sudan as of December, 2022

## Updates

- Flooding declared a national emergency by the Govt-10 Sept 2022
- More **1.01 million** people affected in 36 counties and Abyei Administrative Area across 9 states
- Majority of people affected are in Northern Bahr el Ghazal, Warrap, Upper Nile and Unity
- Impact of floods
  - A total of 62 deaths related to the current flooding
  - Increased cases of snake bite cases (468 cases)
  - 45 HF's and 25 nutrition facilities affected (submerged, cut-off or structural damage sustained)
  - Increased caseload of malaria, Acute Watery Diarrhea, Acute Respiratory Infections
  - Depletion of essential drugs/supplies in health facilities & BHWs

## Public Health Response (October)

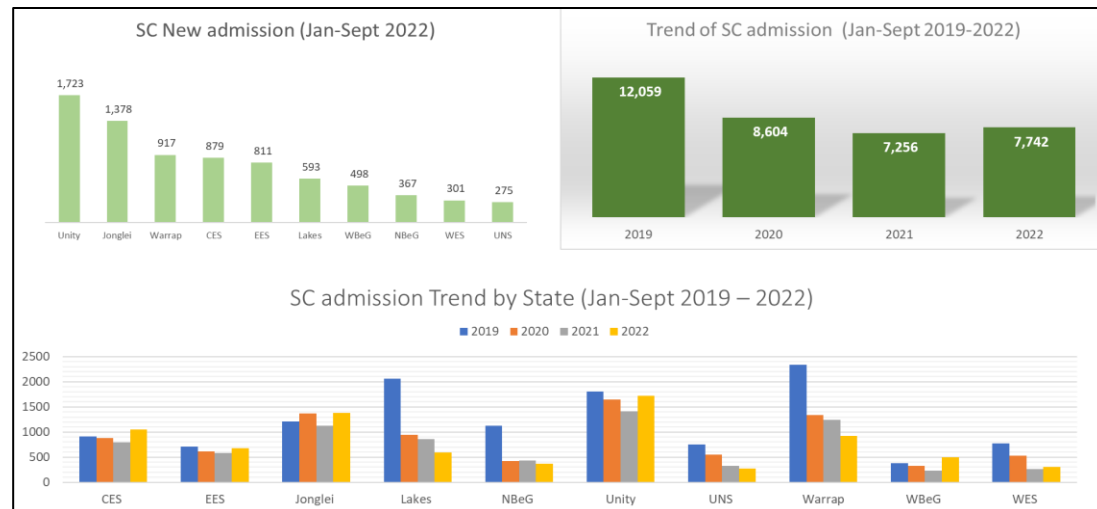
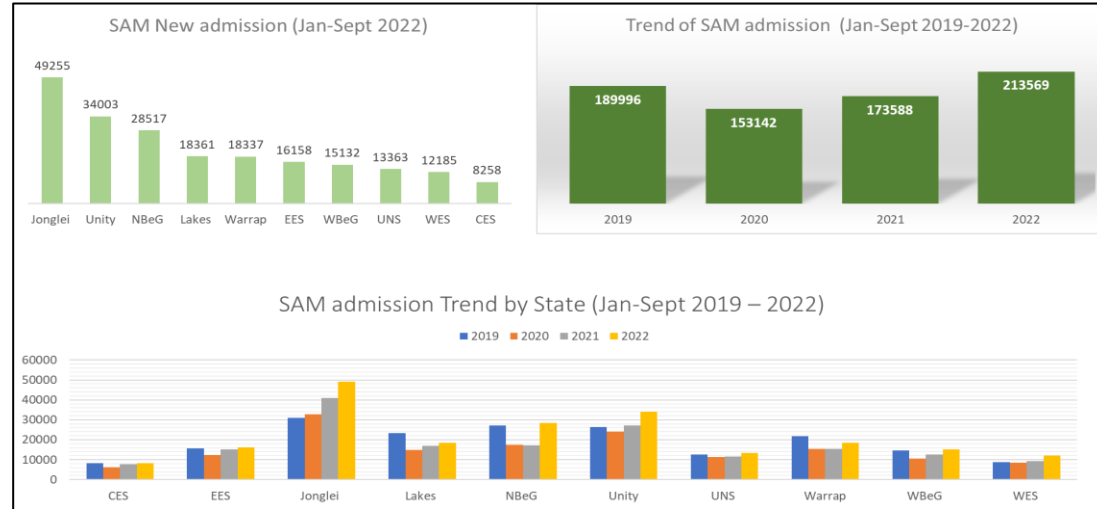
- Health service delivery: WHO supported the provision of primary health services in Leer, Mayendith, Pibor and Fangak (counties with IPC 5 populations) by supporting 11 static and mobile health facilities in collaboration with implementing partners.
- Outbreak prevention and response: WHO supported 41 600 (first round) during a pre-emptive oral cholera vaccination campaign in Malakal County (including Malakal PoC) in October 2022.





# Food insecurity and Acute Malnutrition in South Sudan Jan to Sept. 2022

- **A total of 6.6 million** (53.6% of the population) people are currently facing IPC Phase 3 (Crisis),
- Out of which **2.22 Million** are in IPC Phase 4 (emergency) Acute food insecurity
- **A total of 61,000** people in IPC Phase 5 in Fangak, Canal/Pigi and Akobo and Pibor counties of Jonglei State and Greater Pibor Administrative A
- **1.4 M** U5 children are acutely malnourished of these 345,893 children severely malnourished





# Public Health Response, Achievements and Challenges

## Public Health Response

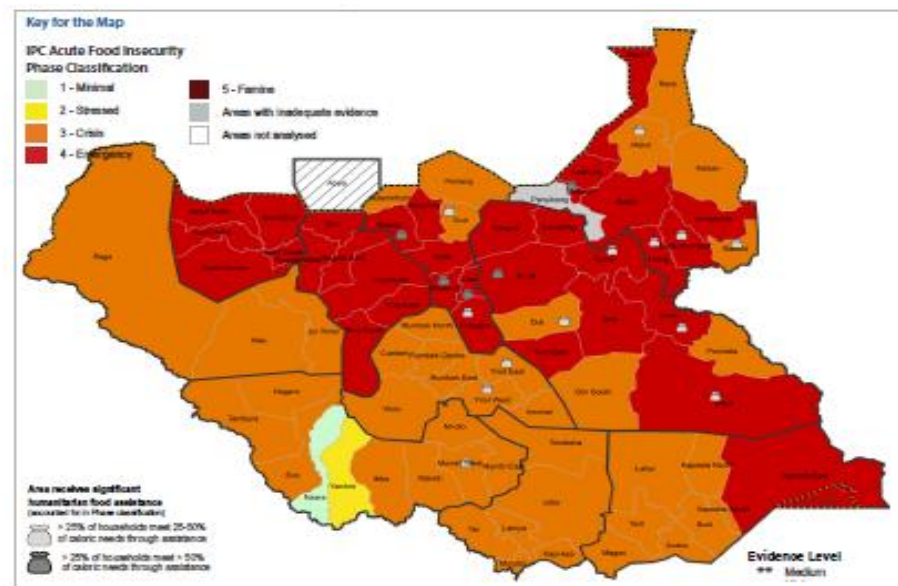
- Core pipeline support for service provision
  - **85** Severe acute malnutrition with Medical Complication kits distributed to stabilization centers in IPC4&5 locations
  - **341** Interagency Emergency Health Kits and **70** pneumonia kits distributed to health facilities and implementing partners in priority locations
  - **170** Cholera investigation and treatment kits prepositioned and distributed to priority locations
- Assessment conducted to evaluate inpatient management of SAM in the health facilities in IPC4&5
- Capacity building of health workers
  - **26** health workers trained on inpatient management of Severe acute malnutrition with Medical Complication
  - **50** health workers trained on nutrition surveillance (**Aweil South** and **Panyijiar**)
- **11** health facilities (static and mobile) supported to provide primary health care in four priority IPC 5 locations (through sub-granted implementing partners)

## Challenges

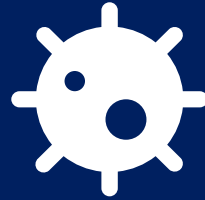
- Multiple emergencies-overstretching capacities in-country
- Inadequate emergency health kits and other supplies
- Long lead time for international procurements for emergency health kits
- Limited accessibility to basic health care services owing to flooding and insecurity

## Achievements Vs Target and People in Need

Program	People in need	Cluster Target	New Admission (Jan-Sept 2022)	Achieved Vs People in Need	Achieved Vs Target
SC	45,324	36,249	7,787	17%	21%
SAM	302,163	241,662	213,569	71%	88%
MAM	1,039,472	6,754,189	464,879	45%	7%
PLW	675,710	540,438	409,521	61%	76%



# COVID-19 UPDATES



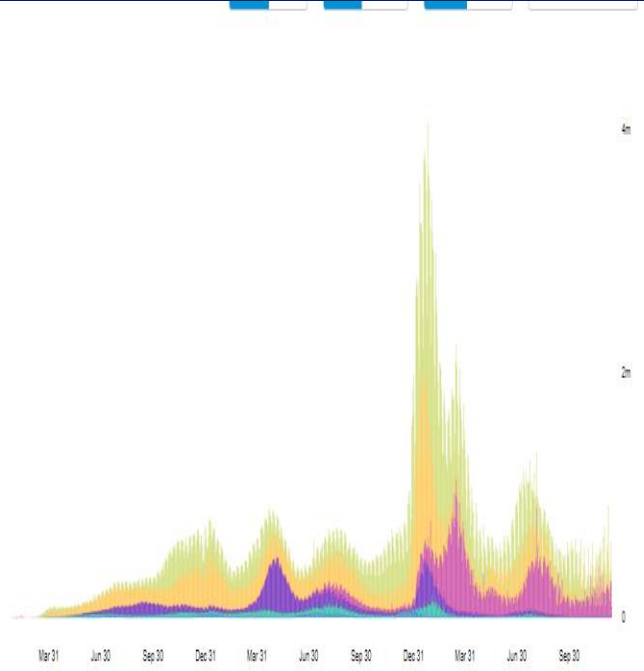


## Situation update as of 15 December 2022

- Globally**, as of **15 December 2022**, a total of **646,740,524 confirmed cases** of COVID-19, including **6,637,512 deaths**, reported to WHO.
- As of **12 December 2022**, a total of **13,008,560,983 vaccine doses** have been administered.
- In Africa**, as of **12 December 2022** there have been **9,427,566 confirmed cases** of COVID-19, including **175,070 deaths** reported to the WHO
- In South Sudan**, from as of 16 December 2022, there have been **18,368 confirmed cases** of COVID-19 with **138 deaths**, reported to WHO. As of 3 December 2022, a total of **2,213,231 vaccine doses** have been administered.



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



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



**OVERALL  
CONCLUSIONS AND  
RECOMMENDATIONS**

# Conclusions

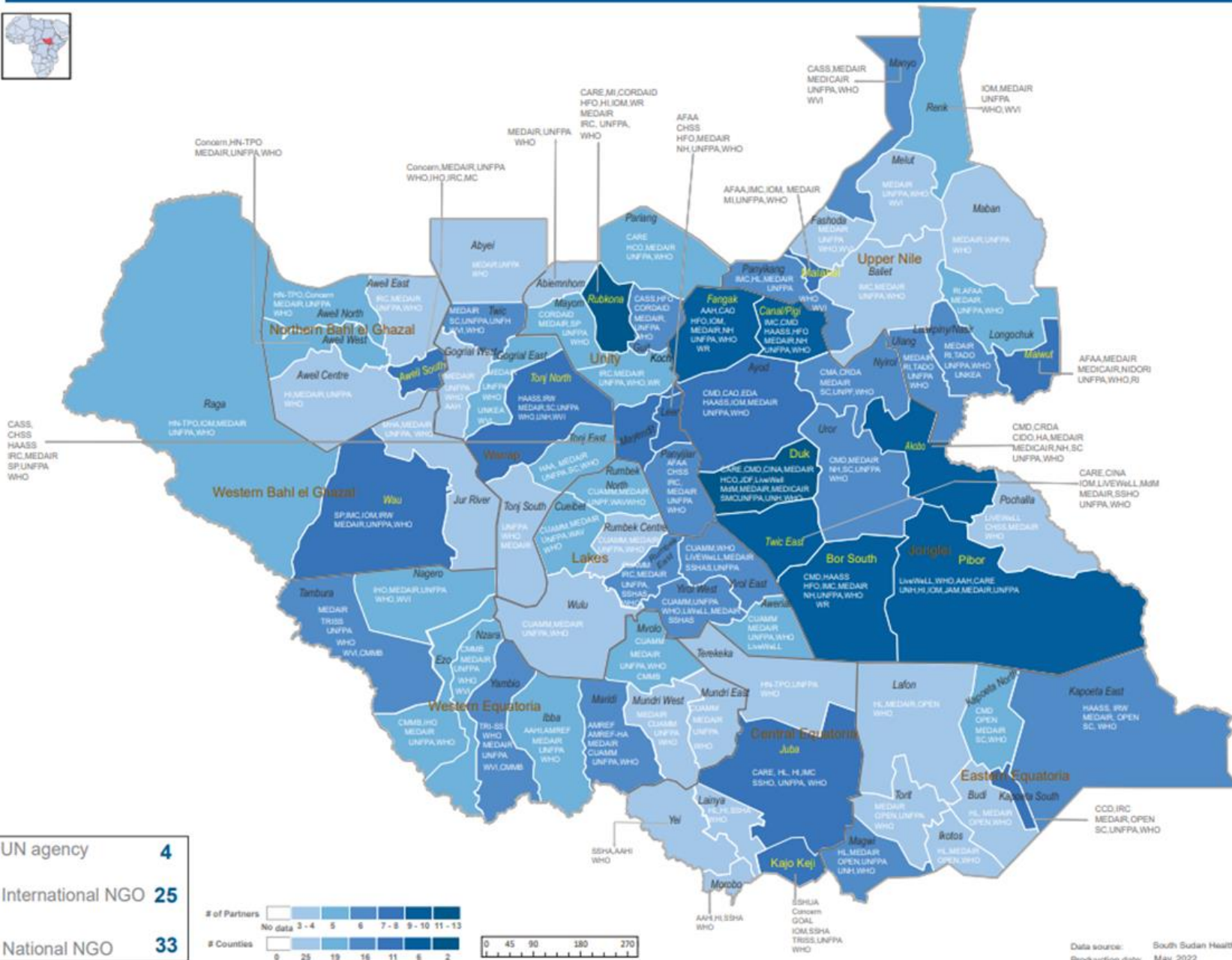
- In week **48, 2022, the** IDSR reporting timeliness was at **92%** and timeliness for EWARN sites was at **84%**
- A total of 42 alerts were reported in week 48,2022; Malaria (11), AWD (8), measles (8), COVID-19(1) and ARI(3)
- The countdown for Sudan Ebolavirus in Uganda has begun as the last confirmed case was discharged on 30 November 2022. the total number of confirmed cases stand at 142 and **55 confirmed deaths** giving a **CFR of 39%**.
- A total of 30 suspected Ebola Virus Disease (EVD) cases were reported from Nimule, Yei, Yambio, Kajo-keji, Juba, and Rubkona with samples collected from 10 samples collected and all tested negative for EVD.
- Ministry of Health declared measles outbreaks in the country with 22 counties confirmed measles outbreaks since the beginning of the year 2022
- On other emergencies, floods have affected over **1.1 million** people in **36** counties, and high cases of Acute Malnutrition in South Sudan due to **food insecurity**.

# Recommendations

- Partners to continue supporting County Health Departments (CHD) & State Ministries of Health on timely IDSR/EWARN reporting
- Health facilities to conduct an initial investigation on suspected cases of epidemic-prone diseases and collect samples
- Strengthen EVD surveillance, Infection Prevention and Control (IPC) and Risk communication and community engagement (RCCE) in high-risk areas of Juba, Yei, Yambio, Kaya, Nimule and Kako-keji
- Conduct reactive measles vaccination campaign in counties with confirmed outbreaks and advocate for enhanced routine immunization through PIRI
- Support the multicluster HEV response strategy in the Bentiu IDP camp and the ongoing cholera outbreak



# South Sudan Health Cluster HRP Partners 2022





**Thanks to the State Surveillance Officers, County Surveillance Officers and Health Facility in-charges for sharing the weekly IDSR data**

**Thanks to all partners for supporting IDSR weekly reporting and sharing the line lists**

**To access the IDSR bulletins for 2022 use the link below:**

**<https://www.afro.who.int/publications/south-sudan-weekly-disease-surveillance-bulletin-2022>**

## This bulletin is produced by the Ministry of Health with Technical support from WHO

For more help and support, please contact:

**Dr Joseph Lasu Hickson**  
Director, Emergency Preparedness and Response  
Ministry of Health  
Republic of South Sudan  
Telephone: +211921395440  
Email: [josh2013.lasu@gmail.com](mailto:josh2013.lasu@gmail.com)

**Dr. John Rumunu**  
Director General Preventive Health Services  
Ministry of Health  
Republic of South Sudan  
Telephone: +211924767490  
Email: [pri.moiga@gmail.com](mailto:pri.moiga@gmail.com)

## IDSR Bulletin Editorial Team

- 1.Mr. Ajak Ater, MoH - Email: [ajakater014@gmail.com](mailto:ajakater014@gmail.com)
- 2.Mrs. Sheila Baya, WHO- Email: [bayas@who.int](mailto:bayas@who.int)
- 3.Mr. Robert Lasu Martin, WHO -Email: [lasur@who.int](mailto:lasur@who.int)
- 4.Mrs. Rose Dagama , WHO - Email: [dagamaa@who.int](mailto:dagamaa@who.int)
- 5.Dr. Abraham Adut, WHO- Email: [abenegoa@who.int](mailto:abenegoa@who.int)
- 6.Dr. Tony Wurda, WHO-Email [wurdatt@who.int](mailto:wurdatt@who.int)
- 7.Dr Antonio Oke, WHO -Email [okea@who.int](mailto:okea@who.int)
- 8.Dr Aggrey Bategereza, WHO -Email [bategerezaa@who.int](mailto:bategerezaa@who.int)

## Notes

WHO and the Ministry of Health gratefully acknowledge the surveillance officers [at state, county, and health facility levels], health cluster and health pooled fund (HPF) partners who have reported the data used in this bulletin. We would also like to thank ECHO, USAID and World Bank for providing financial support.

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>

