



# South Sudan Ministry of Health

Integrated Disease surveillance  
and response (IDSR)



World Health  
Organization  
South Sudan

## Epidemiological Bulletin Week 03, 2022 ( January 17- January 23 )

## Major epidemiological highlights in week 3 of 2022



- In week 3, **2022** IDSR reporting timeliness was at **83%** and completeness was at **89%** while timeliness was at **90%** and completeness was **94%** for EWARN sites
- Hepatitis E virus cases continue to be reported in Bentiu IDP settlement with, **1,812** cases and 11 deaths (CFR **0.62%**) reported since week 1, 2019
- Confirmed Rubella Outbreak in Gogrial West county Warrap state
- Of the **94** alerts in week 3, 2022; malaria (42), AWD (22), ARI (10), measles (1) and ABD (10) were the most frequent alerts
- **4** new confirmed cases of COVID-19 this week, making total of **16,752** confirmed cases and **137** deaths ( CFR of **0.82%**) in South Sudan
- Alerts of suspect meningitis, yellow fever, and VHF reported and are being investigated respectively in Maridi, Ikotos, and Torit
- Other hazards include floods (unseasonal) in over 3 counties; Malaria in 4 counties

# 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 3 of 2022 & 2 of 2022

Timeliness States Ranking	States	Number of reporting sites	No. of HFs Reported on Time in WK 03	Timeliness Percentage of WK 03	No. of HFs Reported on Time in WK 02	Timeliness Percentage of WK 02
1st	Lakes	113	113	100%	106	94%
2nd	WES	213	209	98%	102	48%
3rd	Warrap	119	107	90%	94	79%
4th	WBGZ	77	68	88%	17	22%
5th	NBGZ	114	100	88%	98	86%
6th	CES	115	93	81%	84	73%
7th	EES	142	114	80%	80	56%
8th	Unity	101	68	67%	56	55%
9th	Upper Nile	102	64	63%	51	50%
10th	Jonglei	110	68	62%	55	50%
	<b>South Sudan</b>	<b>1206</b>	<b>1004</b>	<b>83%</b>	<b>743</b>	<b>62%</b>

### KEY

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

The timeliness of IDSR reporting (supported by EWARS mobile) at health facility level in week 3, 20221 was **83%** compared to **62%** in week 2, 2022. Only 6 states were above the target of 80%

**Reporting challenges:** Insecurity, internet access and new partners



## IDSR completeness performance at State level for week 3 of 2022 & 2 of 2022

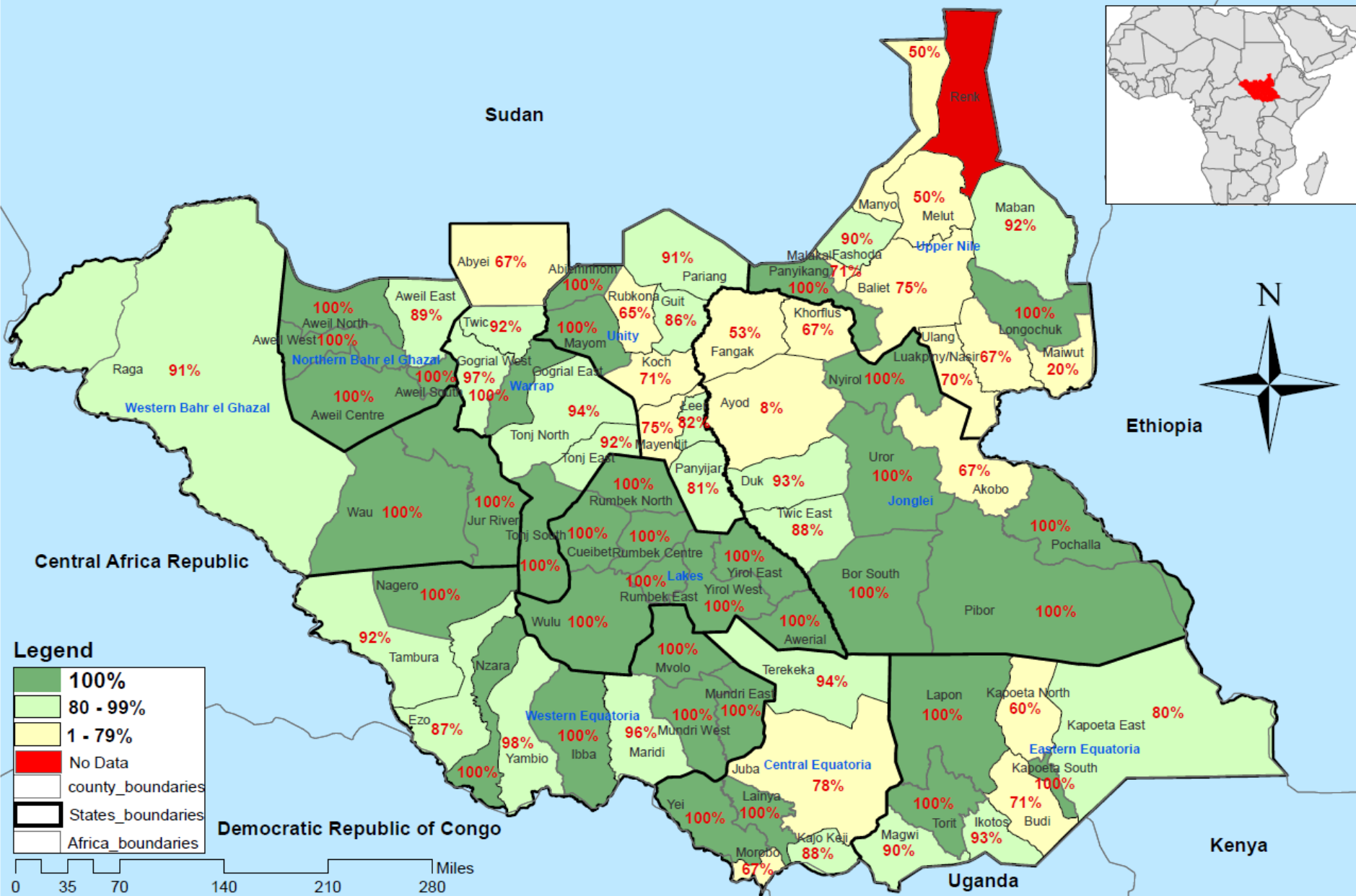
Completeness States Ranking	States	Number of reporting sites	No. of HFs Reported regardless of time in WK 03	Completeness Percentage of WK 03	No. of HFs Reported regardless of time in WK 02	Completeness Percentage of WK 02
1st	Lakes	113	113	100%	113	100%
2nd	WBGZ	77	76	99%	75	97%
3rd	WES	213	209	98%	212	100%
4th	NBGZ	114	110	96%	108	95%
5th	Warrap	119	109	92%	112	94%
6th	EES	142	123	87%	105	74%
7th	CES	115	99	86%	99	86%
8th	Unity	101	82	81%	64	63%
9th	Jonglei	110	83	75%	91	83%
10th	Upper Nile	102	69	68%	68	67%
	<b>South Sudan</b>	<b>1206</b>	<b>1073</b>	<b>89%</b>	<b>1047</b>	<b>87%</b>

### KEY

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

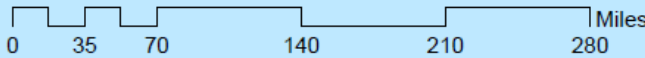
The completeness of IDSR reporting (supported by EWARS mobile) at health facility level was **89%** in week 3, 2022 and **87%** in 2, 2022. 8 states were above the target of 80%

# Map of South Sudan Showing the Completeness (reporting) by County in week 3, 2022.



**Legend**

- 100%
- 80 - 99%
- 1 - 79%
- No Data
- county\_boundaries
- States\_boundaries
- Africa\_boundaries



Disclaimer: 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.



## Surveillance: EWARS timeliness performance indicator by partner for week 3 of 2022 and 2 of 2022

Partner	HF's	Reporting	Performance		
PARTER	Number of reporting sites	# of reports received on Time in Week 03	Timeliness of Week 03	# of reports received on Time in Week 02	Timeliness of Week 02
UNH	2	2	100%	2	100%
Medicair	4	4	100%	4	100%
IRC	2	2	100%	2	100%
World Relief	2	2	100%	2	100%
MC	2	2	100%	2	100%
TRI-SS	1	1	100%	1	100%
SSHCO	1	1	100%	1	100%
UNIDOR	2	2	100%	2	100%
HAA	2	2	100%	2	100%
Islamic Relief	5	5	100%	3	60%
RHS	1	1	100%	0	0%
Medair	2	2	100%	0	0%
IMC	24	23	96%	21	88%
IOM	10	9	90%	9	90%
SMC	6	5	83%	6	100%
MSF-H	4	3	75%	2	50%
MSF-E	6	4	67%	0	0%
HFO	2	1	50%	1	50%
CMD	1	0	0%	1	100%
<b>TOTAL</b>	<b>79</b>	<b>71</b>	<b>90%</b>	<b>61</b>	<b>77%</b>

Timeliness for EWARS partners supported sites were at **90%** in week 3, 2022 compared to **77%** at week 2, 2022

## Surveillance: EWARS completeness performance indicator by partner for week 3 of 2022 and 2 of 2022



Partner	HFs	Reporting		Performance	
		Number of reporting sites	# of reports received regardless of Time in Week 03	Completeness of Week 03	# of reports received regardless of Time in Week 02
UNH	2	2	100%	2	100%
Medicaire	4	4	100%	4	100%
IRC	2	2	100%	2	100%
World Relief	2	2	100%	2	100%
MC	2	2	100%	2	100%
TRI-SS	1	1	100%	1	100%
SSHCO	1	1	100%	1	100%
UNIDOR	2	2	100%	2	100%
HAA	2	2	100%	2	100%
IOM	10	10	100%	10	100%
Islamic Relief	5	5	100%	5	100%
MSF-H	4	4	100%	2	50%
HFO	2	2	100%	2	100%
RHS	1	1	100%	1	100%
Medair	2	2	100%	1	50%
IMC	24	23	96%	24	100%
SMC	6	5	83%	6	100%
MSF-E	6	4	67%	6	100%
CMD	1	0	0%	1	100%
<b>TOTAL</b>	<b>79</b>	<b>74</b>	<b>94%</b>	<b>76</b>	<b>96%</b>

Completeness for EWARS partners supported sites was at **94%** in week 3, 2022 compared to **96%** at week 2, 2022

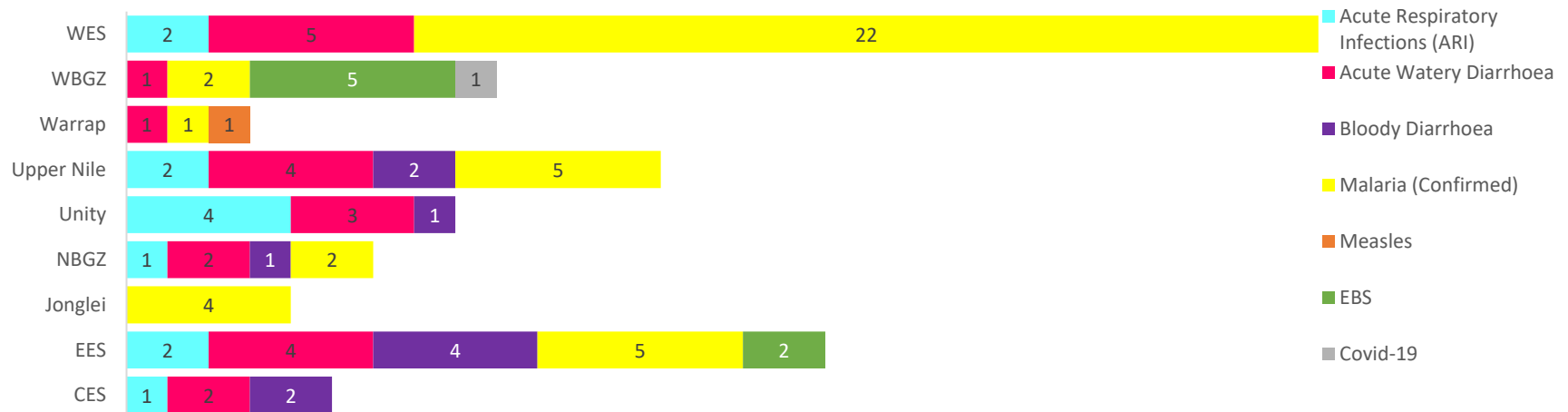


# EVENT-BASED SURVEILLANCE



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

## Alert by disease and hubs in week 3 of 2022 [ a total of 94 events specific alerts generated by state



### This week a total of 94 Alerts were triggered from the EWARS System:

- ❖ **1 Measles alert:** this alert was triggered from Warrap State, Gogrial West county in Kuajok Hospital. So far there are 27 cases line listed where 1 is positive for measles and 7 positive for Rubella.,5 were negative giving total of 13 samples tested. Surveillance is being intensified.
- ❖ **4 EBS alerts:** WBGZ state triggered 5 alerts in which 2 are for suspected measles (3 cases) of under 5yrs old in Raja Hospital and Deim Zubeir PHCC; while 2 are for AFP ( 4 under 5yrs old) in Katta PHCU & Raja Hospital. Jur River county has 1 suspected Guinea Worm (1 above 5yrs old ) reported by a community-based surveillance focal person in Nyin Juol Village of Alel chok Boma , arail bai payam . EES triggered 2 alerts one for suspected VHF in Torit hospital of above 5 years old and the second one is from Ihulung village of Torit county of a suspected measles. All of the above has samples were collected .
- ❖ **22 AWD alerts;** 4 samples were collected from Yambio State Hospital, ECS Masumbu PHCC in Ezo County , Kuwanga PHCU and Ngboko PHCU in Tambura County

# SUSPECTED OUTBREAKS



**Major suspected outbreaks in South Sudan  
in 2022**

## VHF Alert in Torit, Eastern Equatoria State (EES)



- On the 15th of Jan 2022 Sunday, the female patient age 35yrs old, came from Hai Carton Torit County with clinical presentation of high fever 39.5degrees, vomiting blood, nose bleeding, sore mouth and diarrhea., dehydration
- On the 16th of Jan 2022, the SMoH and WHO received the alert from the state hospital, SRRT was activated supported by WHO EES hub and visited the hospital
- The patient had no travel history outside or inside the country. Patient is a farmer going in the bush to collect firewood and burning charcoal currently she is receiving treatment in Torit state hospital
- The health workers have been advised to use EVD precautionary measures till the laboratory results are released
- On the 19th of Jan 2022, the sample was packed in the triple packaging and sent to Juba. GeneXpert testing for Ebolavirus Zaire was negative and further differential testing yellow fever and other pathogens is underway at NPHL

## Suspect Meningitis cases in Maridi, Western Equatoria State (WES)



- During week 2 of 2022, unexplained deaths following a febrile illness in Maridi were reported to the state Ministry of Health in Yambio
- Maridi hospital reported at least two sudden deaths initially and subsequently received two additional cases from Mambe village with fever and neck pain
- A County rapid response team (RRT) investigation mission the hospital and affected village reported no additional cases. However, on 29 Jan 2022, a line list of eight (8) suspect meningitis cases including two deaths (CFR 25%) was submitted by the CHD to the state MoH
- A follow up epidemiological investigation mission by the state RRT and WHO is slated for 31 January 2022
- The follow-up investigation mission is intended to assess the situation, collect additional epidemiological information, obtain laboratory samples from suspect cases, and initiate and optimize the recommended control measures



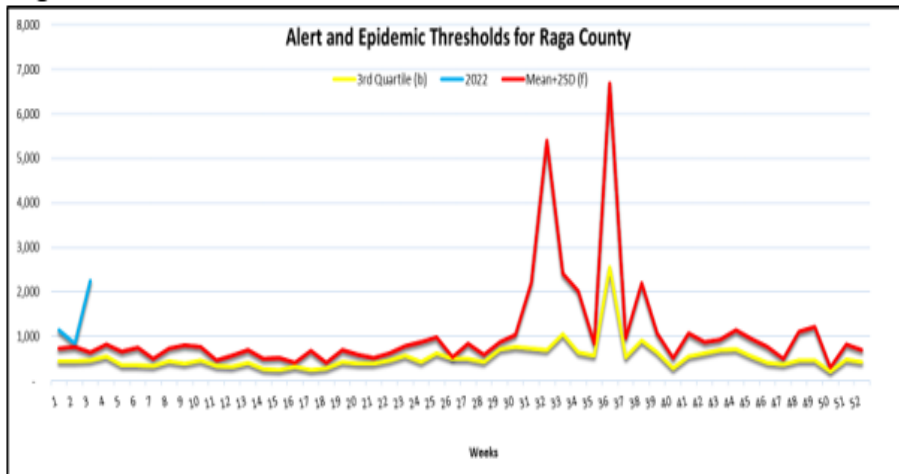
- A suspect yellow fever cases have been investigated from Imatong in Ikotos county
- The sample has been shipped to the yellow fever laboratory in Juba for testing
- Further epidemiological and laboratory information on this case will be shared in due course
- The last yellow fever outbreak in Imatong, Ikotos occurred in May 2003 with a total of 178 cases including 27 deaths (CFR 15%) being reported.



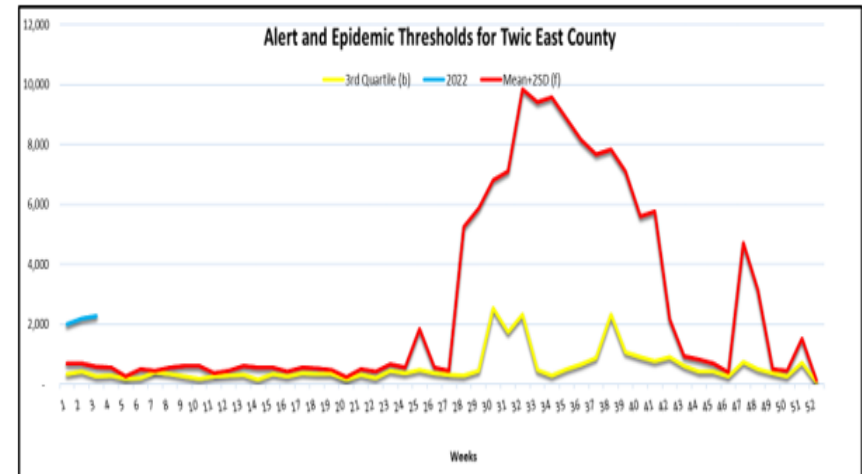
Four County with malaria trends which have exceeded the threshold (third quartile of trends for the period 2013-2017)

1. UNITY (Rubkona County)
2. JNG (Duk, Twic East Counties).
3. WBGZ (Raga County)

**Raga**



**Twic East**



# **ACTIVE OUTBREAKS AND PUBLIC HEALTH EVENTS**

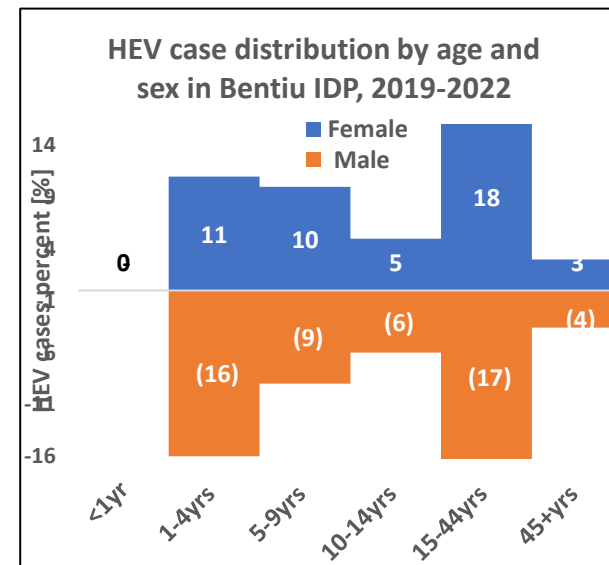
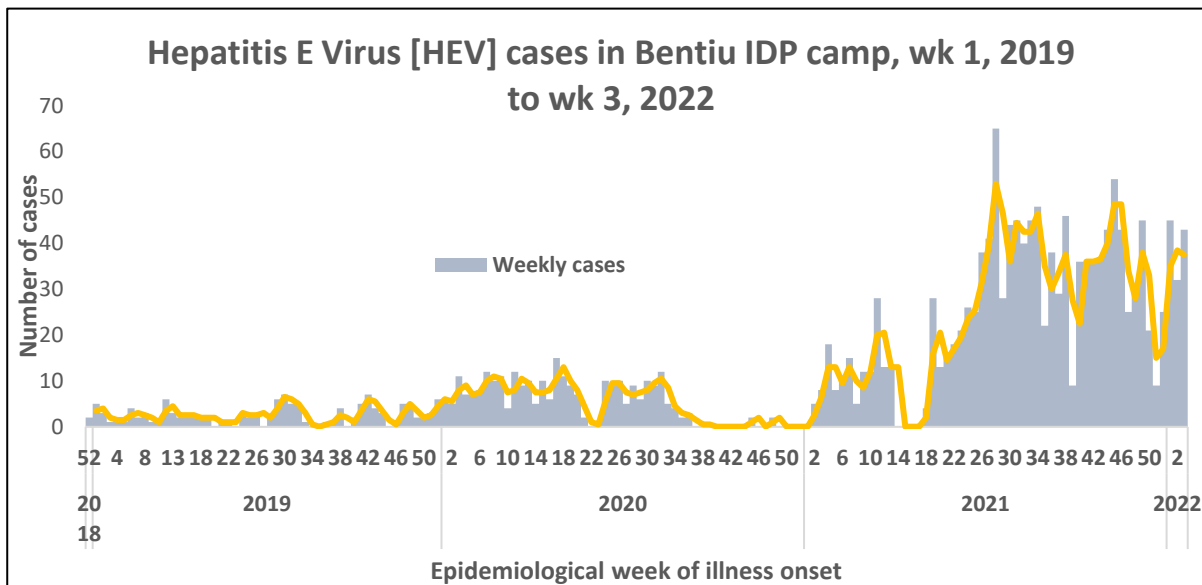
Brief epidemiological description and public health response for active outbreaks and public health events`



# Response| Summary of major ongoing outbreaks in 2020, 2021 and 2022



Aetiological agent	Location (county)	Date first reported	New cases since last bulletin	Cumulative cases to date (attack rate %)	Interventions			
					Case management	Vaccination	Health promotion	WASH
<b>Ongoing epidemics</b>								
Hepatitis E	Bentiu PoC	03/01/2018	50	1,812 (0.027)	Yes	No	Yes	Yes
COVID-19	35 counties	05/4/2020	14	16,752 (0.0008)	yes	yes	yes	yes
cVDPV2	25 counties	11/06/2020 18/09/2020	NA	59	Yes	Yes	Yes	Yes



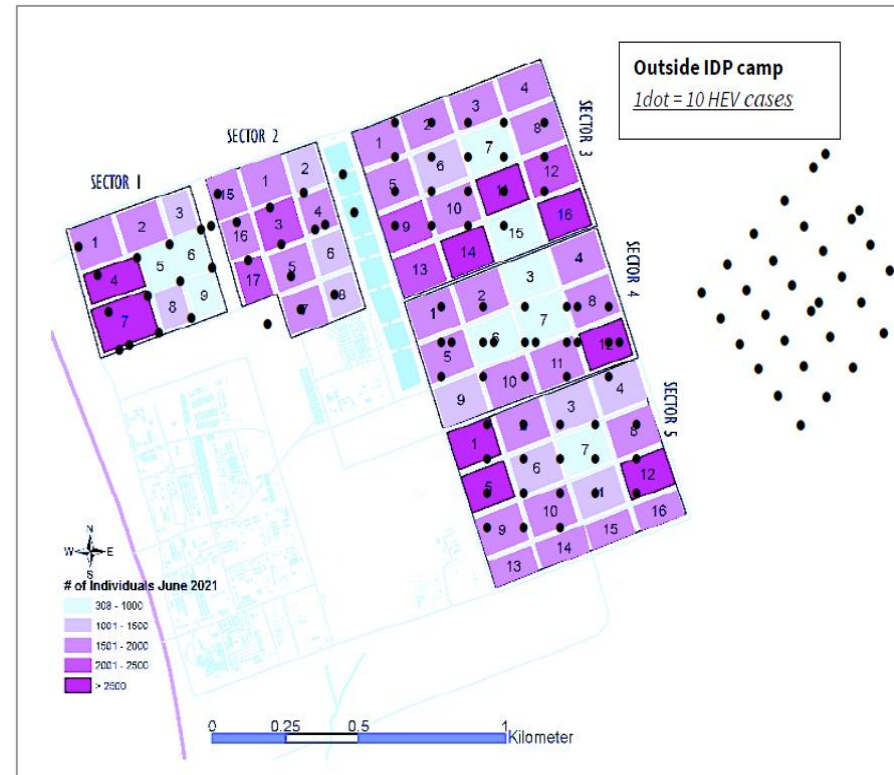
## Descriptive epidemiology

- The persistent transmission of HEV in Bentiu IDP camp continues with **1,812** cases since beginning of 2019
- There were 50 new HEV cases in week 3, 2022.
- **HEV transmission has decreased from a peak of 53 cases every fortnight by week 28, 2021 to 34 cases every fortnight by week 3, 2022.**
- All the cases have been managed as outpatient cases except for seven cases who were admitted
- 11 deaths reported in 2019, 2020 and 2021 (**CFR 0.62%**)
- 47% are female and 53% are male. Within the IDP camp, the sector specific attack rates for HEV disease for the period week 3, 2022 are highest in sectors 3 and 5.



## Ongoing Response

- Following the completion of the multi-cluster HEV response strategy, resources have been secured to optimise the response and interrupt transmission.
- The HEV vaccination microplanning has been completed with an estimated 27,000 individuals aged 16-40 years (incl. pregnant women) targeted in Bentiu IDP camp.
- However, the HEV vaccination has been put on hold until the current response to the new flood displaced populations is optimised.
- There is a surge in Bentiu IDP population due to flood displacements in recent weeks that is straining the existing WASH facilities and resources.



# Oral Cholera Vaccination (OCV) in Unity State; Rubkona and Bentiu IDPs Camp, Round One

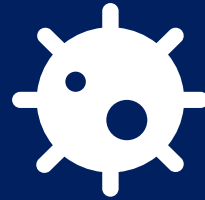
- Launch of the OCV Campaign was on 25 January 2022 with 50 Stakeholders attending due to Covid -19 restrictions
- The campaign targeted **202,627** people (1 yr. and above including pregnant women) for 7 days
- 351 staff were trained to support the OCV campaign as vaccinators, social mobilizers, team supervisors and coordinators
- Preliminary data as of day 4 of the campaign showed that 89, 010 individuals aged one year and above were vaccinated, representing 43.9% of the target population
- Two days of mop-up were added from 30- 31 January 2022

## Response | Summary of major controlled outbreaks in 2020 and 2021



Aetiological agent	Location (county)	Date first reported	New cases since last bulletin	Cumulative cases to date (attack rate %)	Interventions			
					Case management	Vaccination	Health promotion	WASH
<b>Controlled epidemics</b>								
Measles	Pibor	27/1/2020	NR	355 (0.0028)	Yes	Yes		Yes
Measles	Wau	5/1/2020	NR	39 (0.051)	Yes	Yes		Yes
Measles	Ibba	25/1/2020	0	55 (0.36)	Yes	Yes		Yes
Rubella	Tambura	11/1/2021	0	23 (0.13)	Yes	No		Yes
Rubella	Nagero	01/03/ 20201	0	5 (0.25)	Yes	No		Yes

# COVID-19 UPDATES

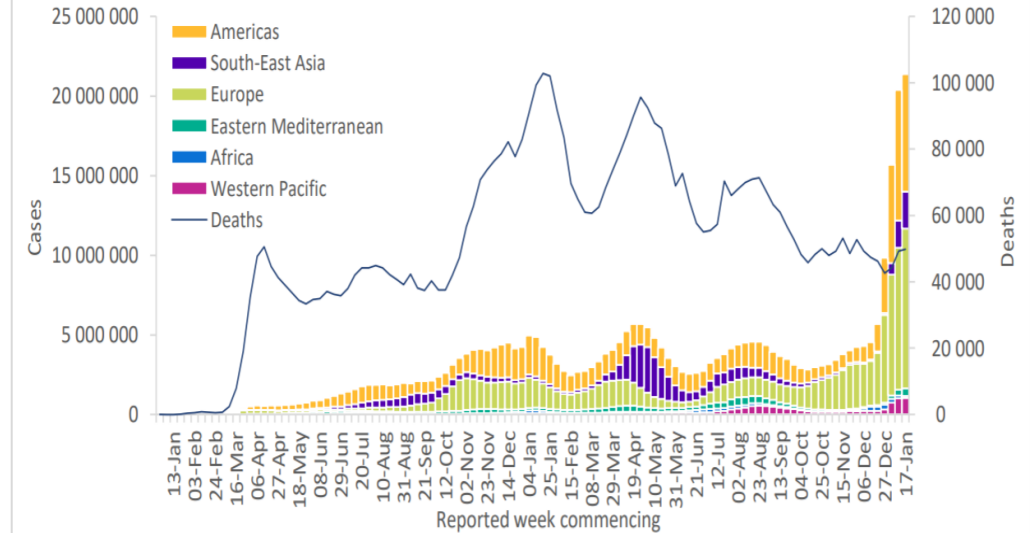




## Situation update as of 25<sup>th</sup> January 2022

- Globally, 25<sup>th</sup> January 2022**, there have been **346 741 628 confirmed cases** of COVID-19, including **5 584 374 deaths**, reported to WHO. As of **28<sup>th</sup> January 2021**, a total of **9,854,237,363 vaccine doses** have been administered.
- In Africa, as of 25<sup>th</sup> January 2022**, there have been **7 933 483 confirmed cases** of COVID-19, including **162 371 deaths** reported to WHO

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 23 January 2022\*\*



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



- ❑ **16,752** confirmed cases with **137** deaths, **12,934** recoveries, and **3,681** active cases, **0.82%** case fatality rate (CFR)
- ❑ Average positivity yield is 5.0% this week compared to 9.1% in week 1 (second consecutive week of observed decrease in positivity rate)
- ❑ The variants of concern identified in South Sudan include: (Alpha [B.1.1.7], Beta [B.1.351], Delta [B.1.617.2]) and Omicron [B.1.1.529]. Omicron variant has been isolated in South Sudan since week 50 of 2021. South Sudan has emerged from the resurgence that started in week 49 of 2021.





## Epi Curve

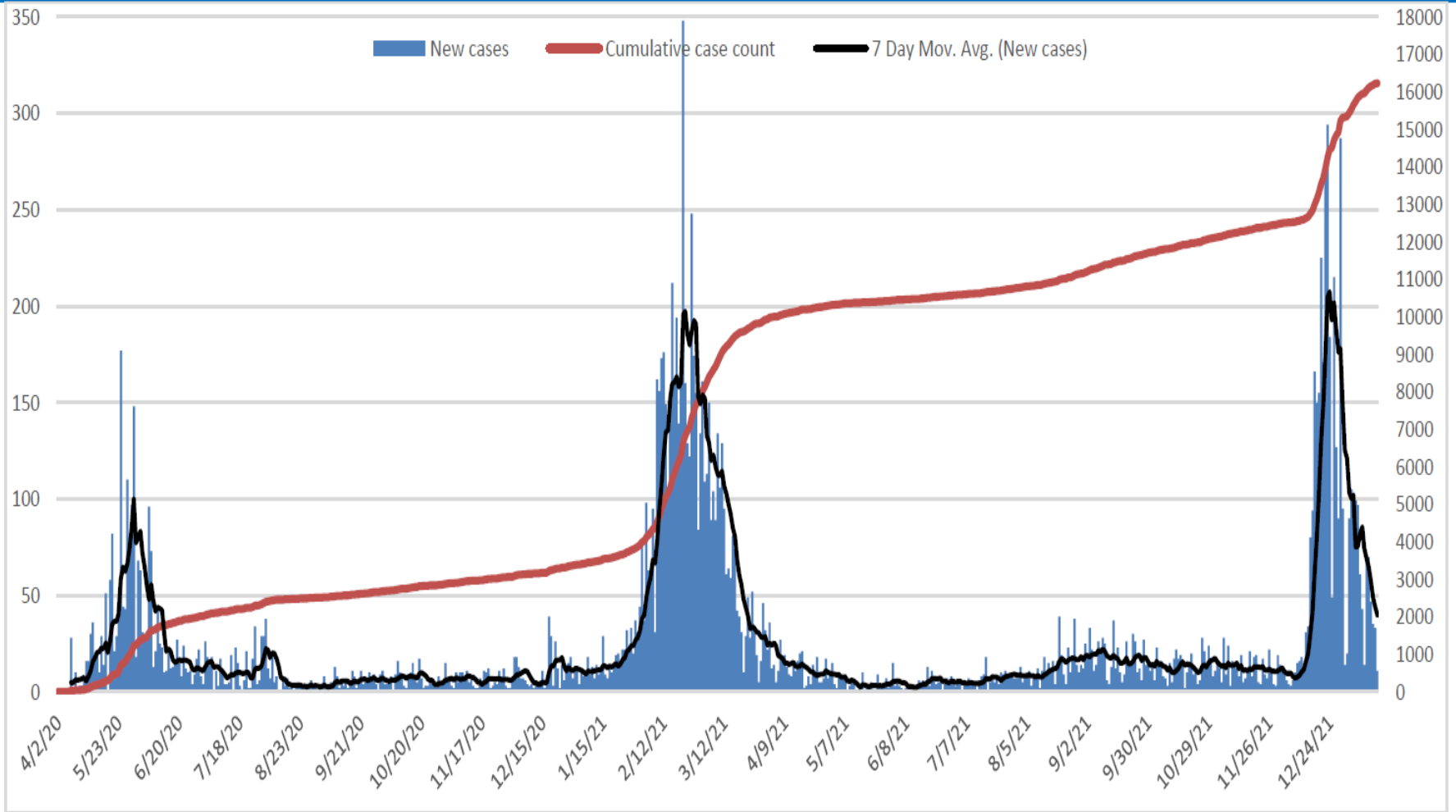


Figure 2. Epidemiological curve of reported cases through Week 2



**OVERALL  
CONCLUSIONS AND  
RECOMMENDATIONS**

# Conclusions

- The overall performance of IDSR and EWARN reporting sites in week 3, 2022 is below the target of 80%
- **16, 752** confirmed COVID-19 cases (case fatality rate of **0.82%**) **137** deaths.
- HEV transmission has decreased from a peak of 53 cases every fortnight by week 28, 2021 to 34 cases every fortnight by week 3, 2022.
- Confirmed Rubella outbreak in Gogrial west county as 7 out of the 12 samples sent in December tested positive for Rubella IgM.
- Alerts of suspect meningitis, yellow fever, and VHF reported and are being investigated respectively in Maridi, Ikotos, and Torit

# Recommendations

- Partners to continue supporting County Health Departments (CHD) & State Ministries of Health on timely IDSR/EWARN reporting
- Health facilities to conduct initial investigation on suspected epidemic prone diseases and collect samples.
- Implement the multicluster HEV response strategy in Bentiu IDP camp and initiate the HEV vaccination campaign as soon as the current flood threat eases.
- Enhance COVID-19 surveillance by investigating all ARI/ILI/SARI cases at HF level & using Ag-RDTs.
- Implement the accelerated COVID-19 vaccine absorption plan to attain 40% coverage
- Strengthen Measles routine immunization, isolate and treat Measles/Rubella cases



# IDSR timeliness & completeness performance at county level for week 03 and 02 of 2022 (1)

STATE	COUNTY	Number of reporting sites	No. of HFs Reported on Time in WK 03	Timeliness Percentage of WK 03	No. of HFs Reported regardless of time in WK 03	Completeness Percentage of WK 03	No. of HFs Reported regardless of time in WK 02	Completeness Percentage of WK 02
WBGZ	Wau	30	30	100%	30	100%	30	100%
Lakes	Cueibet	15	15	100%	15	100%	15	100%
Lakes	Rumbek North	7	7	100%	7	100%	7	100%
Lakes	Wulu	14	14	100%	14	100%	14	100%
Lakes	Rumbek East	24	24	100%	24	100%	24	100%
Lakes	Awerial	7	7	100%	7	100%	7	100%
Lakes	Yirol West	12	12	100%	12	100%	12	100%
Lakes	Yirol East	11	11	100%	11	100%	11	100%
NBGZ	Aweil South	11	11	100%	11	100%	11	100%
NBGZ	Aweil Centre	15	15	100%	15	100%	15	100%
NBGZ	Aweil North	25	24	96%	25	100%	25	100%
Lakes	Rumbek Centre	23	22	96%	23	100%	23	100%
CES	Yei	17	16	94%	16	94%	16	94%
CES	Lainya	16	14	88%	14	88%	13	81%
CES	Kajo Keji	17	14	82%	14	82%	13	76%
WBGZ	Jur River	35	28	80%	35	100%	35	100%
CES	Morobo	5	4	80%	4	80%	4	80%
NBGZ	Aweil East	37	29	78%	32	86%	31	84%
CES	Terekeka	20	15	75%	15	75%	15	75%
NBGZ	Aweil West	27	19	70%	27	100%	26	96%
WBGZ	Raja	15	10	67%	10	67%	10	67%
CES	Juba	46	30	65%	36	78%	38	83%

STATE	COUNTY	Number of reporting sites	No. of HFs Reported on Time in WK 03	Timeliness Percentage of WK 03	No. of HFs Reported regardless of time in 03	Completeness Percentage of WK 03	No. of HFs Reported regardless of time in WK 02	Completeness Percentage of WK 02
Unity	Abiemnhom	4	4	100%	4	100%	4	100%
WES	Nzara	20	20	100%	20	100%	20	100%
WES	Nagero	10	10	100%	10	100%	10	100%
WES	Mundri West	21	21	100%	21	100%	21	100%
WES	Ibba	11	11	100%	11	100%	11	100%
WES	Mundri East	19	19	100%	19	100%	19	100%
WES	Ezo	27	27	100%	27	100%	27	100%
WES	Mvolo	11	11	100%	11	100%	11	100%
WES	Yambio	42	41	98%	41	98%	42	100%
WES	Maridi	26	25	96%	25	96%	26	100%
Unity	Pariang	11	10	91%	10	91%	4	36%
Unity	Guit	7	6	86%	6	86%	6	86%
WES	Tambura	28	24	86%	24	86%	25	89%
Unity	Leer	11	9	82%	9	82%	8	73%
Unity	Mayom	13	9	69%	13	100%	13	100%
Unity	Mayendit	12	8	67%	9	75%	3	25%
Unity	Rubkona	20	13	65%	13	65%	12	60%
Unity	Koch	7	4	57%	5	71%	0	0%
Unity	Panyijiar	16	5	31%	13	81%	14	88%



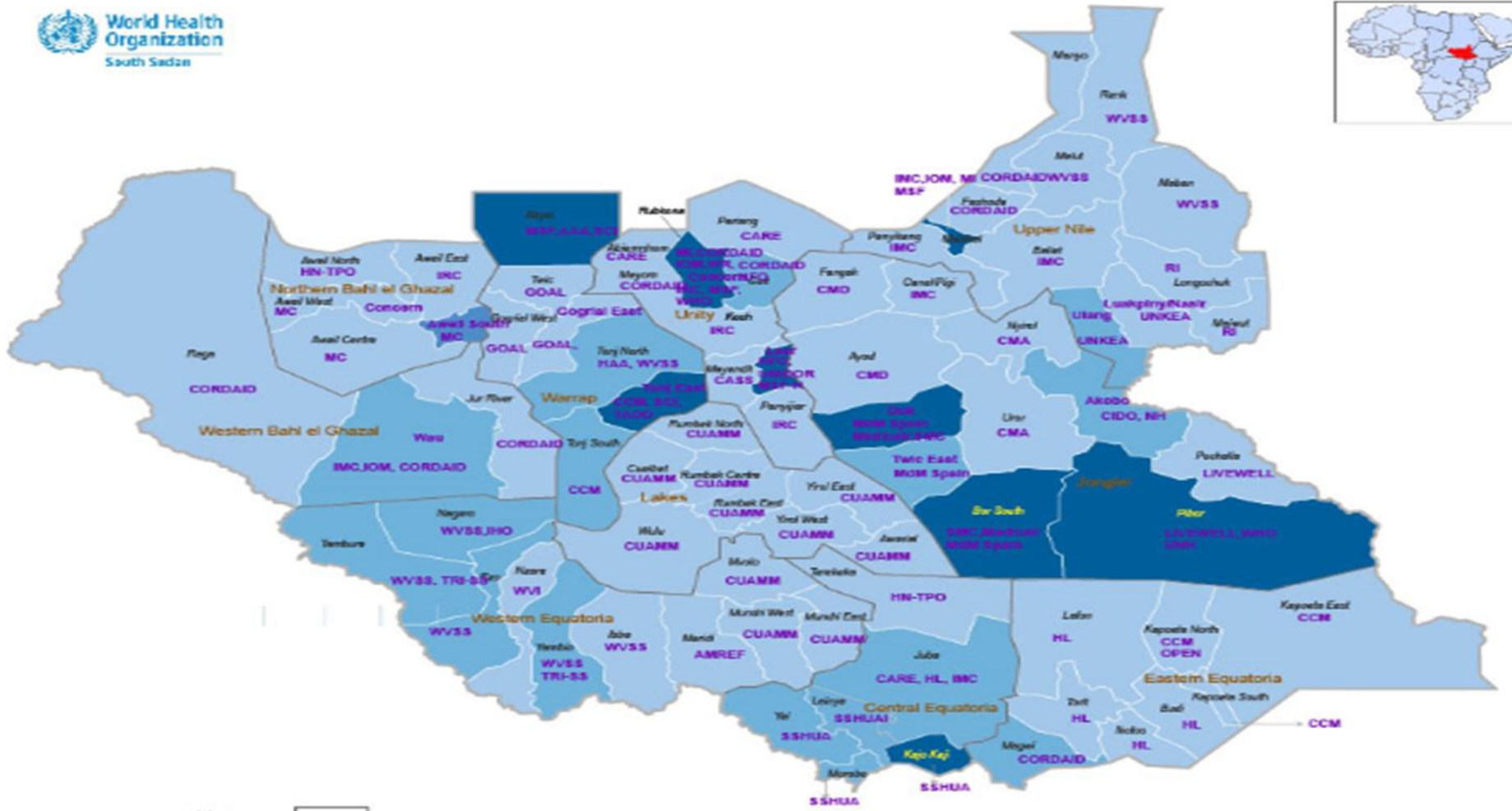
# IDSR timeliness & completeness performance at county level for week 03 and 02 of 20212 (2)

STATE	COUNTY	Number of reporting sites	No. of HFs Reported on Time in WK 03	Timeliness Percentage of WK 03	No. of HFs Reported regardless of time in WK 03	Completeness Percentage of WK 03	No. of HFs Reported regardless of time in WK 02	Completeness Percentage of WK 02
Jonglei	Nyirol	10	10	100%	10	100%	1	10%
Jonglei	Pochalla	7	7	100%	7	100%	7	100%
EES	Torit	20	19	95%	20	100%	17	85%
EES	Lopa Lafon	18	17	94%	18	100%	16	89%
EES	Magwi	22	19	86%	19	86%	13	59%
EES	Kapoeta South	10	8	80%	10	100%	8	80%
EES	Ikotos	27	21	78%	25	93%	26	96%
EES	Kapoeta East	12	8	67%	8	67%	8	67%
Jonglei	Twic East	11	7	64%	7	64%	8	73%
EES	Budi	21	13	62%	14	67%	8	38%
Jonglei	Bor	35	21	60%	21	60%	21	60%
EES	Kapoeta North	16	9	56%	9	56%	9	56%
Jonglei	Pibor	9	4	44%	6	67%	3	33%
Jonglei	Fangak	17	7	41%	10	59%	10	59%
Jonglei	Canal Pigi	12	4	33%	4	33%	6	50%
Jonglei	Akobo	8	2	25%	2	25%	3	38%
Jonglei	Duk	15	3	20%	14	93%	15	100%
Jonglei	Ayod	15	1	7%	1	7%	8	53%
Jonglei	Uror	8	0	0%	1	13%	1	13%

STATE	COUNTY	Number of reporting sites	No. of HFs Reported on Time in WK 03	Timeliness Percentage of WK 03	No. of HFs Reported regardless of time in WK 03	Completeness Percentage of WK 03	No. of HFs Reported regardless of time in WK 02	Completeness Percentage of WK 02
Warrap	Tonj North	15	15	100%	15	100%	15	100%
Warrap	Gogrial East	15	15	100%	15	100%	15	100%
Warrap	Tonj South	12	12	100%	12	100%	12	100%
Upper Nile	Panyikang	3	3	100%	3	100%	2	67%
Upper Nile	Longechuk	9	9	100%	9	100%	8	89%
Upper Nile	Akoka	5	5	100%	5	100%	5	100%
Warrap	Gogrial West	31	30	97%	30	97%	28	90%
Warrap	Tonj East	12	11	92%	11	92%	11	92%
Upper Nile	Baliet	4	3	75%	3	75%	3	75%
Upper Nile	Makal	7	5	71%	5	71%	7	100%
Warrap	Abyei	9	6	67%	6	67%	5	56%
Upper Nile	Luakpiny Nasir	12	8	67%	8	67%	8	67%
Warrap	Twic	26	17	65%	19	73%	25	96%
Upper Nile	Fashoda	16	9	56%	9	56%	9	56%
Upper Nile	Ulang	14	6	43%	7	50%	6	43%
Upper Nile	Melut	8	3	38%	3	38%	0	0%
Upper Nile	Maban	17	6	35%	12	71%	12	71%
Upper Nile	Maiwut	5	1	20%	1	20%	4	80%
Upper Nile	Manyo	10	0	0%	4	40%	4	40%
Upper Nile	Renk	11	0	0%	0	0%	0	0%



## Partners Across South Sudan



Data Source: South Sudan Health Cluster

Production Date: November, 2021

**DISCLAIMER:**

The information displayed on this map does not imply the official position of the United Nations concerning the legal status of any boundaries or of its authorities. The information displayed is only for humanitarian purposes.

**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 2021 use the link below:**

**<https://www.afro.who.int/publications/south-sudan-weekly-disease-surveillance-bulletin-2021>**



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

