

# South Sudan

**Integrated Disease surveillance and response (IDSR)**

**Epidemiological Bulletin Week 27, 2021 ( July 05- July 11)**





- In week 27, 2021 IDSR reporting timeliness was 76% and completeness was 91% at health facility level and 85% for EWARS partners supported sites
- Of the 97 alerts in week 27, 2021; 74% were verified 2% were risk assessed and 1% required a response. Malaria (12), AWD (22), ARI (14) and bloody diarrhea (12) were the most frequent alerts in week 27, 2021
- Malaria remains the top cause of morbidity and accounted for 55,219 cases (52.5% of OPD cases)
- Total 10 910 confirmed cases (case fatality rate of 1.07%)
- Other hazards include floods (unseasonal) in over 4 counties; Malaria in 1 counties, HEV in Bentiu PoC.

# 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 26 & 27 of 2021



Completeness States Ranking	States	Number of reporting sites	No. of HFs Reported on Time in WK 27	Timeliness Percentage of WK 27	No. of HFs Reported on Time in WK 26	Timeliness Percentage of WK 26
1st	WES	213	213	100%	213	100%
2nd	Jonglei	104	94	90%	94	90%
3rd	CES	117	100	85%	102	87%
4th	Lakes	113	88	78%	101	89%
5th	Warrap	123	95	77%	108	88%
6th	Unity	94	71	76%	76	81%
7th	NBGZ	133	97	73%	117	88%
8th	EES	142	84	59%	106	75%
9th	Upper Nile	112	62	55%	55	49%
10th	WBGZ	78	34	44%	74	95%
	<b>South Sudan</b>	<b>1229</b>	<b>938</b>	<b>76%</b>	<b>1046</b>	<b>85%</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 27 was 76% compared to 85% in week 26. 3 states were above the target of 80%

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

# IDSR completeness performance at State level for week 27 & 26 of 2021



Completeness States Ranking	States	Number of reporting sites	No. of HFs Reported regardless of time in WK 27	Completeness Percentage of WK 27	No. of HFs Reported regardless of time in WK 26	Completeness Percentage of WK 26
1st	WES	213	213	100%	213	100%
2nd	Lakes	113	113	100%	105	93%
3rd	Warrap	123	114	93%	112	91%
4th	Jonglei	104	96	92%	95	91%
5th	NBGZ	133	122	92%	123	92%
6th	WBGZ	78	71	91%	74	95%
7th	CES	117	105	90%	102	87%
8th	Unity	94	84	89%	80	85%
9th	Upper Nile	112	88	79%	76	68%
10th	EES	142	108	76%	114	80%
	<b>South Sudan</b>	<b>1229</b>	<b>1114</b>	<b>91%</b>	<b>1094</b>	<b>89%</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 91% in week 27 compared to 89% in week 26. 8 states were above the target of 80%





# Surveillance: EWARS timeliness performance indicator by partner for week 27 and 26 of 2021

Partner	HF's	Reporting	Performance		
PARTER	Number of reporting sites	# of reports received on Time in Week 27	Timeliness of Week 27	# of reports received on Time in Week 26	Timeliness of Week 26
World Relief	2	2	100%	2	100%
ALIMA	3	3	100%	3	100%
CMD	1	1	100%	1	100%
IHO	2	2	100%	2	100%
IRC	1	1	100%	1	100%
SSHCO	1	1	100%	1	100%
HFO	2	2	100%	2	100%
UNH	2	2	100%	2	100%
IOM	12	12	100%	12	100%
TRI-SS	2	2	100%	2	100%
RHS	1	1	100%	1	100%
MSF-E	6	6	100%	6	100%
HFD	6	6	100%	5	83%
UNIDOR	2	2	100%	0	0%
IMC	24	23	96%	10	42%
TADO	6	4	67%	4	67%
MSF-H	7	3	43%	4	57%
Medair	4	0	0%	2	50%
GOAL	2	0	0%	0	0%
<b>TOTAL</b>	<b>86</b>	<b>73</b>	<b>85%</b>	<b>60</b>	<b>70%</b>

Timeliness for EWARS partners supported sites were at 85% in week 271, 2021 compared to 70% at week 26, 2021



# Surveillance: EWARS completeness performance indicator by partner for week 27 and 26 of 2021

Partner	HF's	Reporting	Performance		
PARTER	Number of reporting sites	# of reports received regardless of Time in Week 27	Completeness of Week 27	# of reports received regardless of Time in Week 26	Completeness of Week 26
World Relief	2	2	100%	2	100%
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UNH	2	2	100%	2	100%
IOM	12	12	100%	12	100%
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Completeness for EWARS partners supported sites were at 98% in week 27, 2021 compared to 70% at week 26, 2021



# EVENT-BASED SURVEILLANCE



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





State	Acute jaundice syndrome	Acute Respiratory Infections (ARI)	Acute Watery Diarrhoea	Bloody Diarrhoea	Malaria	Covid-19	Total alerts
CES		2		1	1		4
EES			9	5	3		17
Lakes		1	1	1	1		4
Unity	2	4	2	1	7	3	19
Upper Nile		5		1	7		13
Warrap	3		1	1	4	2	11
WBGZ		2	9	2	5		18
WES					10	1	11
<b>Total alerts</b>	<b>5</b>	<b>14</b>	<b>22</b>	<b>12</b>	<b>38</b>	<b>6</b>	<b>97</b>

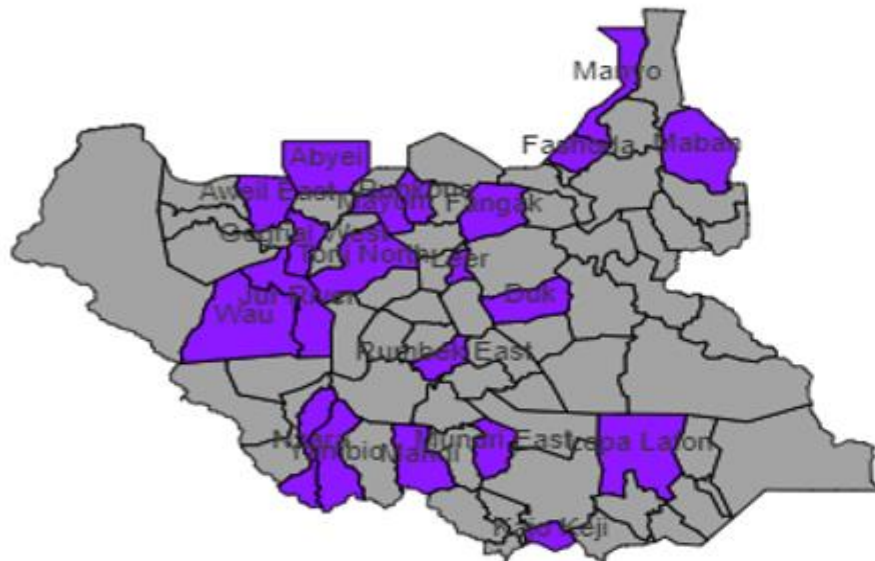
#### During this week:

- **14 ARI alerts:** 2 from CES , Northern Bari, Luri Somba PHCC, 4 from Unity State sample collected and tested for COVID-19, 1 from Lake State 5 from Upper Nile Sample collected Fashoda, HFD Yony Mobile Clinic, Akoka, IMC Riang PHCU, Longechuk, Pamach PHCU, Maban, Bunj hospital, 2 from WBGZ sample collected and tested positive for COVID-19.
- **22 AWD alerts:** 9 from EES, treated for diarrhea , 1 from Lake State, 2 from Unity treated for diarrhea, 1 from Warrap State , 9 from WBGZ State.
- **12 ABD alerts:** 1 from CES, 5 from EES patients given treatment, 1 from Lakes State, 1 from Unity investigated, 2 from WBGZ investigation under way, 1 from Upper Nile State sample will be collected, 1 from Warrap State.
- **38 Malaria alerts:**, 1 from CES, 3 from EES, 1 from Lakes State, 7 from Unity, 7 from Upper Nile State, 4 from Warrap State, 5 from WBGZ, 10 from WES , all these are due to the high increase of malaria cases in the Country.
- **5 AJS alerts:** 3 from Warrap State, Abyei County, Juljok MSF Hospital the sample was collected, 2 from Unity State, Rubkona County, Bentiu PoC Hospital.
- **6 COVID-19 alerts:** 3 from Unity, Rubkona County, Bentiu PoC Hospital, 2 from Warrap ,Abyei County,Juljok MSF Hospital , 1 from WES State all tested positive for COVID-19

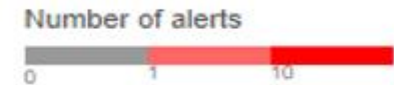
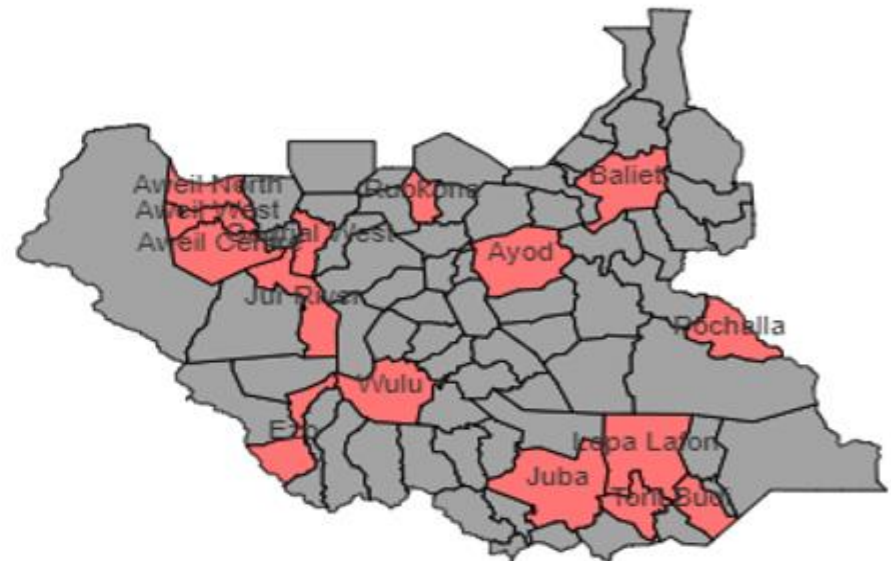
# Alert: Map of key disease alerts by county of week 27 of 2021



**Map 2a | Malaria (W27 2021)**



**Map 2b | Bloody diarrhoea (W27 2021)**



W27	Cumulative (2021)	
		Low risk
		Medium risk
		High risk
		Very high risk

<b>74%</b>	<b>88%</b>	% verified
<b>0%</b>	<b>0%</b>	% auto-discarded
<b>2%</b>	<b>4%</b>	% risk assessed
<b>1%</b>	<b>3%</b>	% requiring a response



Yei River County Hospital admitted an 18 months old child from Meri Refugees Camp/ Democratic Republic of Congo on 13<sup>th</sup> July, 2021.

On 21<sup>th</sup> July the child developed bleeding from nose and ears, bloody urine and abdominal pain.

Yei county RRT were deployed, and investigation was done

### **Response actions:**

- Samples collected and were shipped to Juba; result was negative for Ebola and Marbug
- Patient was Isolated and under monitoring
- Active case search ongoing

# SUSPECTED OUTBREAKS



Major suspected outbreaks in South Sudan in  
2020



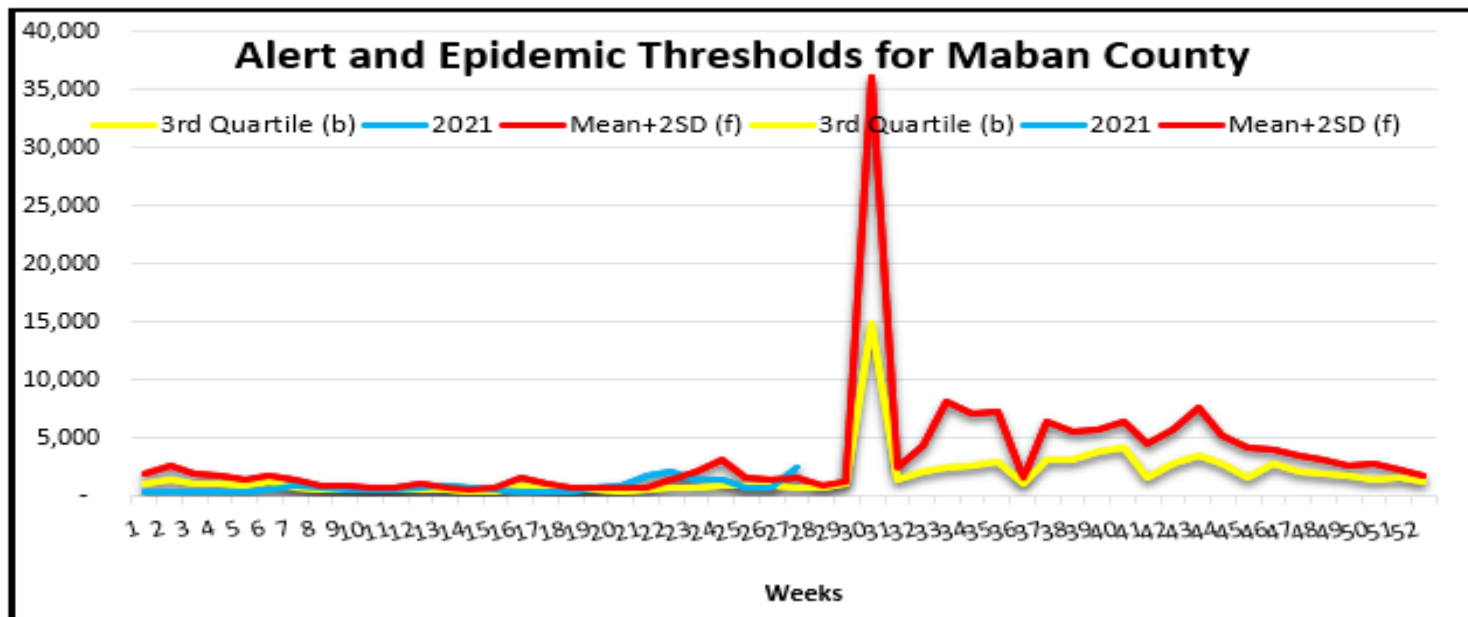


Malaria was the leading cause of morbidity and mortality, accounting for **52.2%** of all morbidities and **14.3%** of all Mortalities this week 21.

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

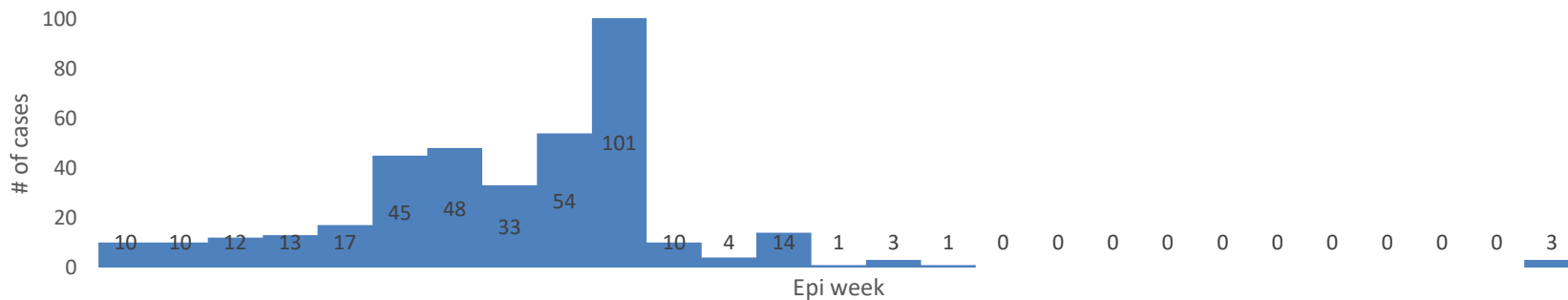
**1. Upper Nile State ( Maban)**

Maban|

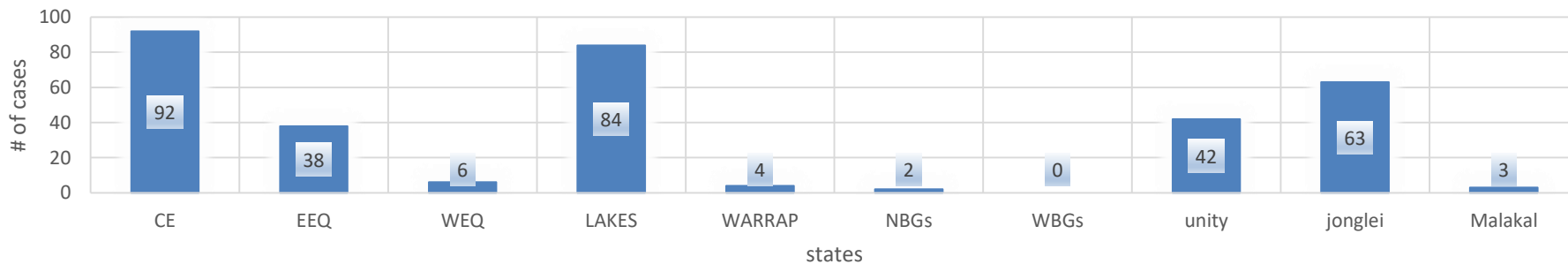


# Routine Sentinel Surveillance | Human Influenza

Covid-19 total confirmed cases in South sudan from Sentinel sites wk1 to wk 27, 2021



# of Covid-19 cases per state in wk 27, 2021 from sentinel sites



- As of 28th April 2021, a total of 138 samples were collected from three sentinel sites in Juba with 131 samples testing negative for influenza; one (1) positive for COVID-19; and six (6) positive for influenza B. All the six (6) influenza B positive samples were sub-typed as Victoria
- There are currently 13 Covid-19 designated sentinel surveillance sites in Juba and States Hospitals that are collecting epidemiological data and samples from Covid-19/ILI/SARI cases. A total of 7718 samples have been collected in 2021 with 549 (7.1%) being positive for COVID-19 from sentinel sites.

# ACTIVE OUTBREAKS AND PUBLIC HEALTH EVENTS



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







## Update on floods and response

- The flooding forecast continues to be monitored. Rainfall forecast for 13 - 20 July 2021 projects a moderate rainfall between 50 - 200 mm expected over parts of Ethiopia, **South Sudan**, southern areas of Sudan, northern Uganda, and localized areas in central Kenya. Updating of flooding contingency planning and prepositioning of essential supplies including emergency health kits are underway.
- The locations affected by recent flooding include Ayod (25 000 people), Fangak (67 000 people) and Canal/Pigi (unknown).



### Updates on Public Health Response

1. Health partners continue to expand access to health services through the re-establishment of critical static primary health care and mobile service delivery across the six 'Priority 1' counties of Pibor, Akobo, Tonj East, Tonj South, Tonj North, and Aweil South
2. WHO secured 1.3 M USD from UN CERF for rapid response scale-up in Pibor and Akobo by supplementing the available funding for three responding partners. The support will go towards the provision of emergency obstetric and neonatal care, and integrated mobile outreaches in areas with critical response gaps.
3. Weekly trends of the top causes of morbidity and mortality are being monitored for potential upsurges and timely investigation. New reporting sites have been created for emergency partners who have begun response scale-up in Akobo, Tonj East, Tonj South and Aweil South.
4. Integrated disease surveillance and response (IDSR) trainings concluded in Pibor and ongoing in Akobo Counties. Plans are underway to cascade the trainings to other four counties



- The multi-sectoral response guided by multi-cluster assessments continues to intensify efforts to reach the food insecure populations with life-saving food, health, nutrition and WASH assistance in the prioritized six counties.
- Health response strategies are geared towards increasing access to basic health and nutrition services, enhancing capacities of disease surveillance, prevention, detection and response to infectious disease outbreaks, and building resilience of the health system to reduce preventable mortality and morbidity.

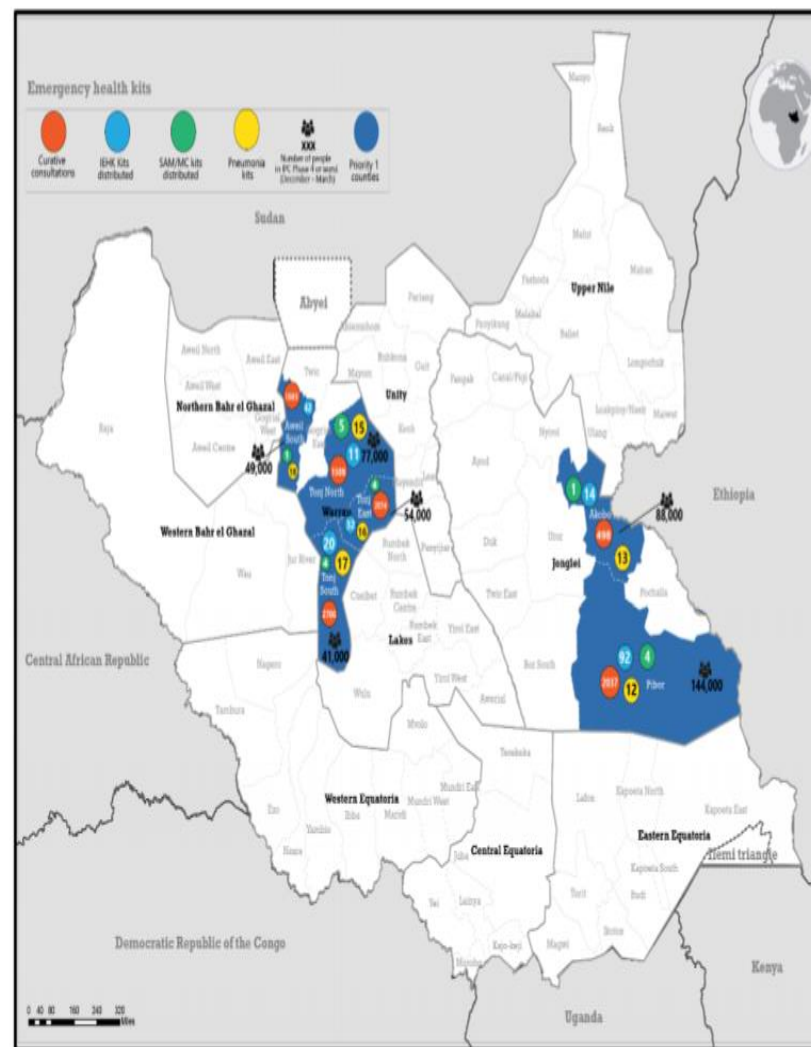


Figure 2: Emergency health kits delivered, and weekly consultations conducted in the six priority IPC 5 counties as of week 19 2021



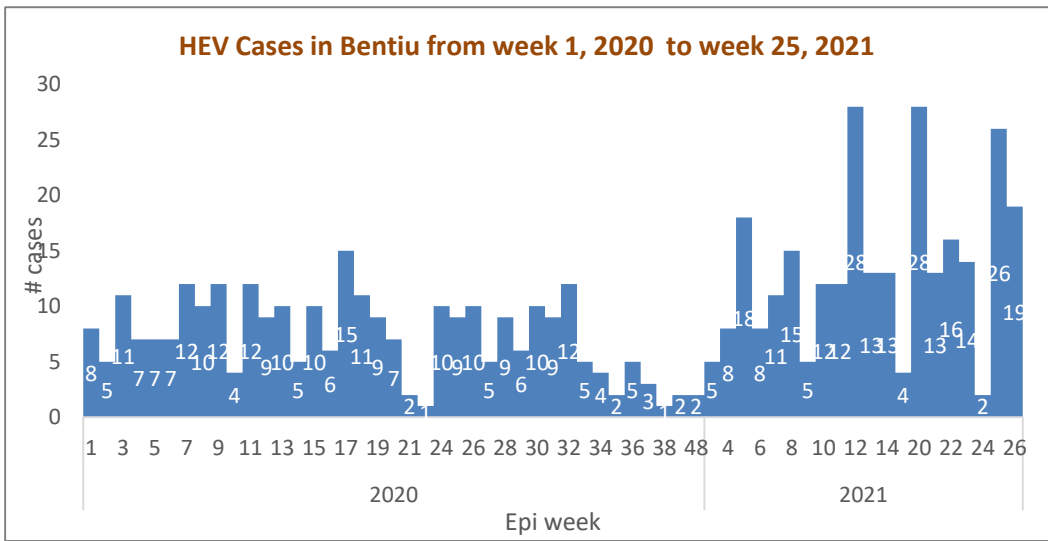


Aetiological agent	Location (county)	Date first reported	New cases since last bulletin	Cumulative cases to date (attack rate %)	Interventions			
					Case management	Vaccination	Health promotion	WASH
<b>Ongoing epidemics</b>								
Hepatitis E	Bentiu PoC	03/01/2018	14	631 (0.022)	Yes	No	Yes	Yes
COVID-19	35 counties	05/4/2020		10,855	yes	yes	yes	yes
cVDPV2	25 counties	11/06/2020 18/09/2020	0	54	Yes	Yes	Yes	Yes
Rubella	Tambura	11/1/2021	0	23 (0.13)	Yes	No	Yes	Yes
Rubella	Nagero	01/03/ 20201	0	5 (0.25)	Yes	No	Yes	N/A





# Hepatitis E, Bentiu IDP camp (1)



Age-Group	Alive	Dead	Grand Total	Percentage	CFR	Cum. %2
1 - 4 Years	185	0	185	27%	0%	27%
10 - 14 Years	102	0	102	15%	0%	42%
15+ Years	234	3	237	35%	1%	77%
5 - 9 Years	158	2	160	23%	1%	100%
<b>Grand Total</b>	<b>679</b>	<b>5</b>	<b>684</b>	<b>100%</b>	<b>0.01</b>	

## Descriptive epidemiology

- The persistent transmission of HEV in Bentiu IDP camp continues with **684** cases since beginning of 2019
- There were **(19)** new cases reported in week 25, 2021
- All the cases were managed as outpatient cases except for seven cases who were admitted
- 5 deaths reported in 2019 and 2020
- 48% are female and 52% are male.
- Age group less than 15 years had the most cases with (67%) cases.
- There is risk of adverse outcomes women are infected in their last trimester
- Use of unsafe drinking water is likely to be source of infection
- Up to week 23, 2021; a cumulative of 631 cases of HEV in Bentiu IDP camp including 5 deaths (CFR 0.79%)
- There is an upsurge of HEV cases since the beginning of 2021. The upsurge is attributed to declining WASH in the IDP camp as the daily workers and hygiene promoters have not been working for months now amidst reduced funding for WASH activities in IDP camp.

### Public health response

- Given the current HEV upsurge in Bentiu IDP camp, the WASH cluster in Juba working with the local WASH implementing partners – Concern Worldwide; Mercy Corps; and IOM have agreed to undertake the following interventions:
  - Intensify Hygiene promotion messaging prioritizing the most affected sectors. Many of the daily workers stopped working for quite some time including Hygiene Promoters hence orientation of HPs will be intensified
  - Provide WASH NFIs (soap, buckets for water storage and handling)
  - Intensify water quality monitoring at source and point of use and adjust chlorine dosage accordingly to maintain FRC levels at 0.5-1mg/L as the point of collection
- Partners, - WHO and MSF in support of the MoH are exploring the feasibility of deploying HEV vaccines as an additional outbreak response tool to interrupt transmission



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	Juba	21/11/2019	NR	6( 0.1667)	Yes	No	Yes	N/A
Measles	Tonj East	12/12/2019	NR	61(0.98)	yes	Yes	Yes	N/A
Measles	Bor	17/01/2020	NR	14(0.214)	yes	No	yes	N/A
Measles	Jebel Boma	10/12/2019	NR	96(0.063)	yes	No	Yes	N/A
Measles	Kapoeta East	18/01/2020	NR	16(0.625)	yes	No	Yes	N/A
Measles	Aweil East	29/12/2019	NR	664 (0.127)	Yes		No	Yes
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



# COVID-19 Updates





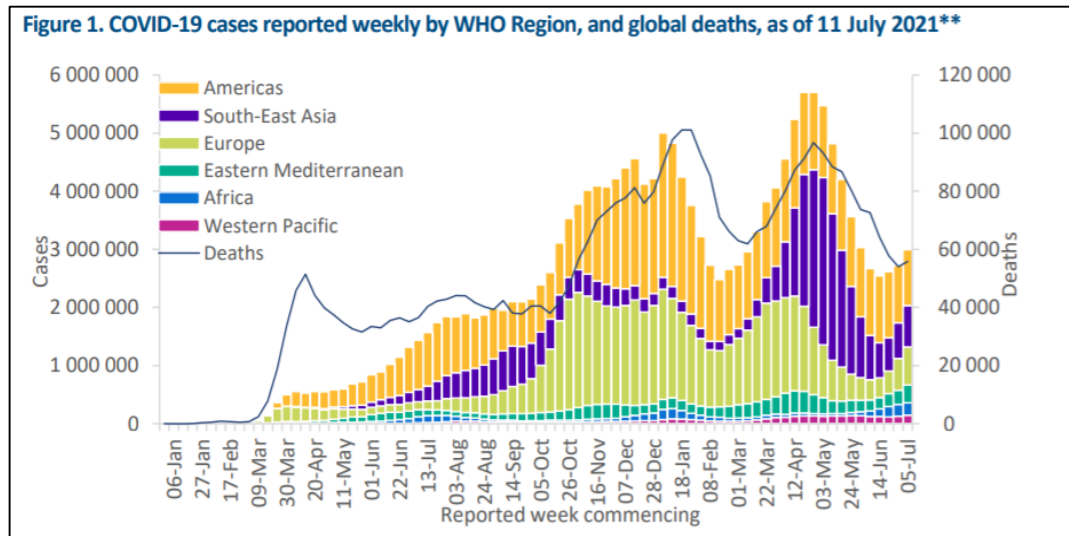
# COVID-19 Virus Situation Summary



Situation update as of 1 July 2021

- Globally, 13 July 2021, there have been **186 240 393 confirmed cases** of COVID-19, including **4 027 861 deaths**, reported to WHO. As of 13 July 2021, a total of **3,568,861,733 vaccine doses** have been administered.

- In Africa, as of 13 July 2021, there have been **4 386 419 confirmed cases** of COVID-19, including **102 681 deaths** reported to WHO



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



- Thirty-one new cases were identified in Week 27, bringing the cumulative number of confirmed cases to 10910, including 370 imported cases mainly from South Sudanese returnees (199), Uganda (52), and Kenya (19)
- At the end of Week 27, 35 (43.8%) of the 80 counties in the country have a confirmed case. There was no county with a first confirmed case this week
- Average positivity yields have been declining in recent epi weeks (after peaking at 22.4% in Week 07), reaching a low of 0.4% in Week 19 before increasing to 1.0% in Week 27
- Six alerts tested positive for COVID-19 this week. Cumulatively, 28671 alerts have been reported, of which 2740 (95.6%) have been verified, and 2660 (97.1%) of the verified alerts were sampled.
- Cumulatively, 16779 contacts have been listed and followed up since the first confirmed case was reported in April 2020, of which 14889 (88.7%) have completed follow-up
- Two SARS-CoV-2 lineages were detected in South Sudan. The first variant of interest (VOI) detected in the South Sudan samples is the A.23.1 lineage and the second one is the B.1.525 lineage
- As of the end of Week 27, South Sudan has vaccinated 55714 people, of whom 4234 are fully vaccinated and 51480 have had one dose. So far, 9116 healthcare workers have been vaccinated [Figure 14]. Vaccination is currently ongoing in 96 health facilities across all 10 states. Challenges to the vaccination campaign include:
  - Low uptake by healthcare workers
  - Low uptake among women (only 25.5% nationally)

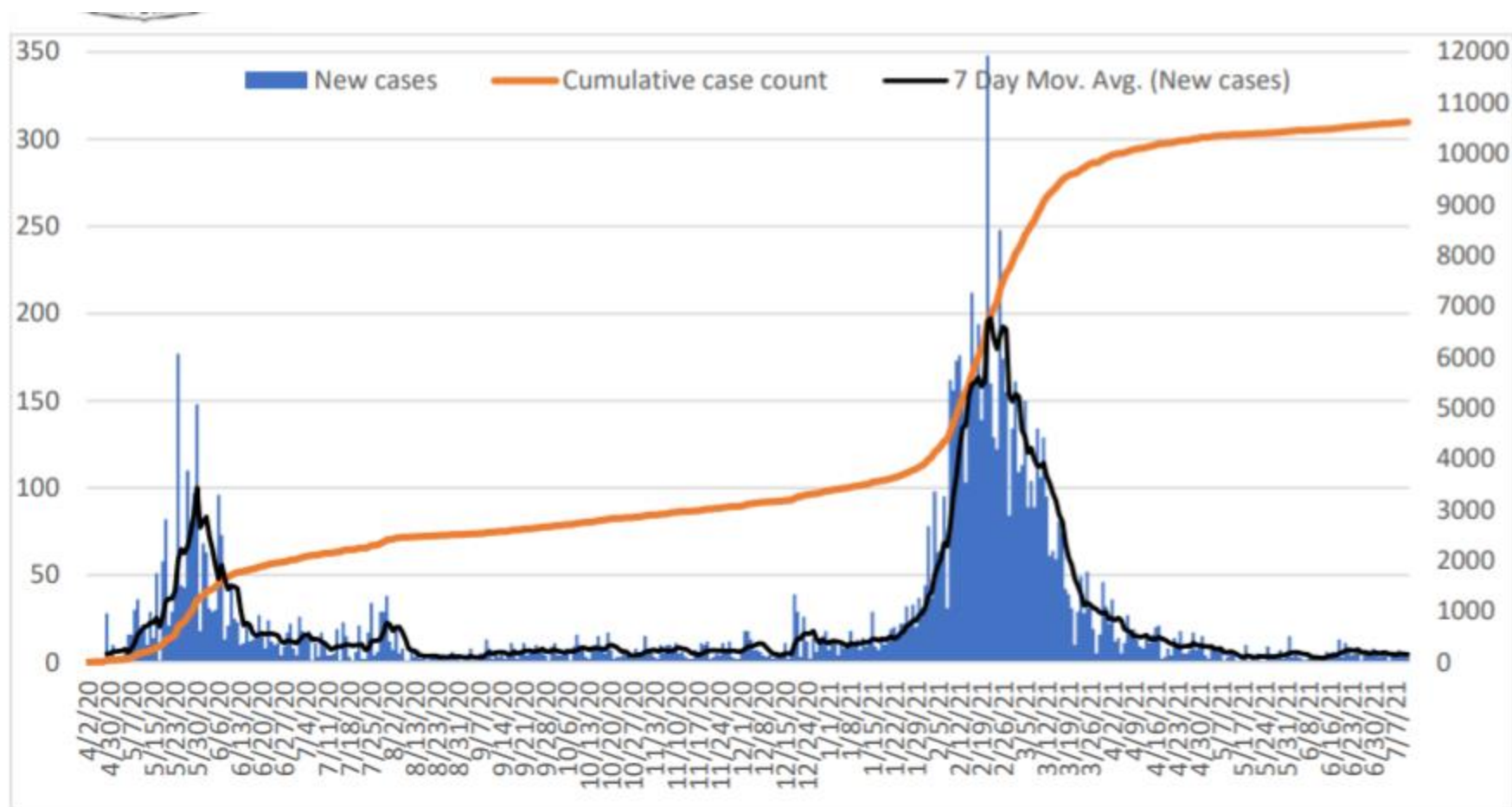


Figure 2. Epidemiological curve of reported cases through Week 27, showing new cases (blue bars), rolling 7-day average of reported cases (black line), and total cumulative reported cases (yellow line)



# Overall Conclusions and Recommendations



## Conclusion

- The overall performance of IDSR and EWARN reporting sites in week 27, 2021 is below the target of 80% in both Timeliness and Completeness
- **10 910** confirmed COVID-19 cases (case fatality rate of 1.07%) deaths Total **16,779** contacts identified, quarantined, & undergoing follow up as of week 27, 2021
- Rubella Outbreak in Nagero County, Western Equatoria State
- Given the COVID-19 pandemic, and the third pandemic wave that is currently underway in Africa, resurgence monitoring and response readiness is being enhanced for all the pillars including surveillance, laboratory, case management, infection prevention and control, border health, and community engagement to emphasize adherence to public health social measures including vaccination of health workers, high risk groups, and the general population

## Recommendations

- All partners should support CHDs & State Ministries of Health to undertake IDSR/EWARN reporting
- All health facilities should report, and conduct case-based investigation of suspect measles cases and routine measles immunization should be strengthened in all counties
- Strengthen capacities for COVID-19 resurgence monitoring and response readiness through identifying and testing suspect cases (including genomic sequencing), isolating and effective management of confirmed cases, contact tracing, community engagement, COVID-19 vaccination, and strengthening adherence to PHSMs.



**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 2020 use the link below:**

**<https://www.afro.who.int/publications/south-sudan-weekly-disease-surveillance-bulletin-2020>**





States	Number of reporting sites	Supporting Partners
WES	213	AMREF, World Vision, CUAMM, CDTY, OPEN
CES	117	HLSS, SSUHA, Healthnet TPO, IHO, GOAL, TRISS, THESO, IMA, SSHCO
NBGZ	133	Malaria Consortium, Healthnet TPO, IRC, CEDS, IHO
WBGZ	78	Cordaid, Healthnet TPO, CARE International, IOM, ALIMA
Jonglei	108	Nile Hope, MDM, JDF, Livewell, CMD, HFO, EDA, CRADA, Malaria Consortium, CMA, ACSO, MEDAIR, CARE, World Relief, UNH
EES	142	Cordaid, HLSS, CCM
Unity	94	Cordaid, UNIDOR, IRC, CHADO, CARE International, CRADA, CASS, IOM, Samaritan's Purse
Warrap	123	GOAL, CCM, WVI, Malaria Consortium, UNKEA, Save the Children, MSF
Upper Nile	117	Cordaid, WVI, RI, IMC, NIDO, UNKEA, MC, SSAID, CORDAID, IOM, HFD, TADO
Lakes	113	Doctors with Africa (CUAMM)



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

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## Notes

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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>

