

South Sudan

Integrated Disease surveillance and response (IDSR)

**Epidemiological Bulletin Week 8, 2021 (February 22-
February 28)**



World Health
Organization
South Sudan



- In week 8, 2021 IDSR reporting completeness was 80% and timeliness was 66% at health facility level. EWARN reporting completeness was 93% and timeliness was 82%
- Of the 106 alerts in week 8, 2021; 75% were verified 0% were risk assessed and 0% required a response. Malaria (34), AWD (27), ARI (10), measles (1) and bloody diarrhea (26) were the most frequent alerts in week 8, 2021
- Malaria remains the top cause of morbidity and accounted for 41,429 cases (47.3% of OPD cases)
- A total of 2,134 COVID-19 alerts have been investigated with 2,027 (95.0%) being verified. Total of 8,010 COVID-19 confirmed cases and 94 deaths, CFR of 1.04%
- Other hazards include floods in over 47 counties; HEV in Bentiu PoC; and Malaria in 1 county.

SURVEILLANCE PERFORMANCE



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



IDSR timeliness & completeness performance at county level for week 8 of 2021



Completeness States Ranking	States	Supporting Partners	Total No. of Functional Health Facilities in the State	No. of HFs Reported on Time	Timeliness Percentage	No. of HFs Reported regardless of Time	Completeness Percentage
1st	WES	AMREF, World Vision, CUAMM, CDTY, OPEN	213	213	100%	213	100%
2nd	WBGZ	Cordaid, Healthnet TPO, CARE International, IOM, ALIMA	78	74	95%	78	100%
3rd	Lakes	Doctors with Africa (CUAMM)	113	75	66%	112	99%
4th	NBGZ	Malaria Consortium, Healthnet TPO, IRC, CEDS, IHO	131	97	74%	115	88%
5th	CES	HLSS, SSUHA, Healthnet TPO, IHO, GOAL, TRI-SS, THESO, IMA, SSHCO	117	76	65%	91	78%
6th	Upper Nile	Cordaid, WVI, RI, IMC, NIDO, UNKEA, MC, SSAID, Samaritans Purse, IOM, HFD, TADO	122	62	51%	90	74%
7th	Jonglei	Nile Hope, MDM, JDF, Livewell, CMD, HFO, EDA, CRADA, Malaria Consortium, CMA, ACSO, MEDAIR, CARE	101	64	63%	72	71%
8th	Unity	Cordaid, UNIDOR, IRC, CHADO, CARE International, CRADA, CASS, IOM, SP	94	55	59%	65	69%
9th	EES	Cordaid, HLSS, CCM	142	56	39%	82	58%
10th	Warrap	GOAL, CCM, WVI, Malaria Consortium, UNKEA, Save the Children, MSF	119	44	37%	61	51%
	South Sudan		1230	816	66%	979	80%

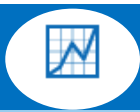
KEY

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

The timeliness of IDSR reporting (supported by EWARS mobile) at health facility level was 66% and completeness was 80%. 4 states were above the target of 80% with highest reporting rate in WES

Reporting challenges: Insecurity, internet access challenges and lack of network.

IDSR timeliness & completeness performance at county level for week 8 of 2021 (1)



STATE	COUNTY	SUPPORTING PARTNER	Total No. of Functional Health Facilities in the County	No. of HF's Reported on Time	Timeliness Percentage	No. of HF's Reported regardless of time	Completeness Percentage
Lakes	Cueibet	Doctors with Africa (CUAMM)	15	15	100%	15	100%
Lakes	Awerial	Doctors with Africa (CUAMM)	7	7	100%	7	100%
Lakes	Rumbek Centre	Doctors with Africa (CUAMM)	23	23	100%	23	100%
Lakes	Yirol East	Doctors with Africa (CUAMM),LIVEWELL	11	11	100%	11	100%
NBGZ	Aweil South	Malaria Consortium(MC),IHO	9	9	100%	9	100%
WBGZ	Raja	HealthNetTPO, ALIMA	15	15	100%	15	100%
WBGZ	Wau	Cordaid	28	28	100%	28	100%
Lakes	Wulu	Doctors with Africa (CUAMM)	14	13	93%	14	100%
WBGZ	Jur River	Cordaid	35	31	89%	35	100%
CES	Yei	SSUHA	17	14	82%	17	100%
Lakes	Rumbek East	Doctors with Africa (CUAMM)	24	0	0%	24	100%
Lakes	Yirol West	Doctors with Africa (CUAMM)	12	0	0%	12	100%
NBGZ	Aweil East	IRC,TADO	36	31	86%	34	94%
NBGZ	Aweil North	HealthNetTPO, IHO	33	30	91%	30	91%
CES	Juba	HLSS,SSHCO	46	41	89%	42	91%
Lakes	Rumbek North	Doctors with Africa (CUAMM)	7	6	86%	6	86%
CES	Terekeka	HealthNetTPO	20	17	85%	17	85%
NBGZ	Aweil West	HealthNetTPO	37	21	57%	30	81%
CES	Morobo	SSUHA,THESO,IMA	5	4	80%	4	80%
NBGZ	Aweil Centre	Malaria Consortium(MC)	15	6	40%	12	80%
CES	Kajo Keji	SSUHA,GOAL,TRISS,IMA	17	0	0%	11	65%
CES	Lainya	SSUHA	16	0	0%	0	0%

STATE	COUNTY	SUPPORTING PARTNER	Total No. of Functional Health Facilities in the County	No. of HF's Reported on Time	Timeliness Percentage	No. of HF's Reported regardless of time	Completeness Percentage
Unity	Abiemnhom	Cordaid	4	4	100%	4	100%
Unity	Panyijiar	IRC	15	15	100%	15	100%
WES	Nzara	World Vision International	20	20	100%	20	100%
WES	Nagero	World Vision International	10	10	100%	10	100%
WES	Mundri West	CUAMM	21	21	100%	21	100%
WES	Maridi	AMREF	26	26	100%	26	100%
WES	Ibba	AMREF	11	11	100%	11	100%
WES	Mundri East	CUAMM	19	19	100%	19	100%
WES	Yambio	World Vision International	42	42	100%	42	100%
WES	Ezo	World Vision International	27	27	100%	27	100%
WES	Mvolo	CUAMM	11	11	100%	11	100%
Unity	Leer	UNIDOR	11	10	91%	11	100%
WES	Tambura	World Vision International	28	26	93%	26	93%
Unity	Mayom	CASS,SP	14	12	86%	13	93%
Unity	Pariang	CARE International	11	2	18%	10	91%
Unity	Rubkona	Cordaid,IRC,IOM,MSF	15	12	80%	12	80%
Unity	Koch	CRADA,IRC.	6	0	0%	0	0%
Unity	Guit	CHADO	7	0	0%	0	0%
Unity	Mayendit	CASS	12	0	0%	0	0%

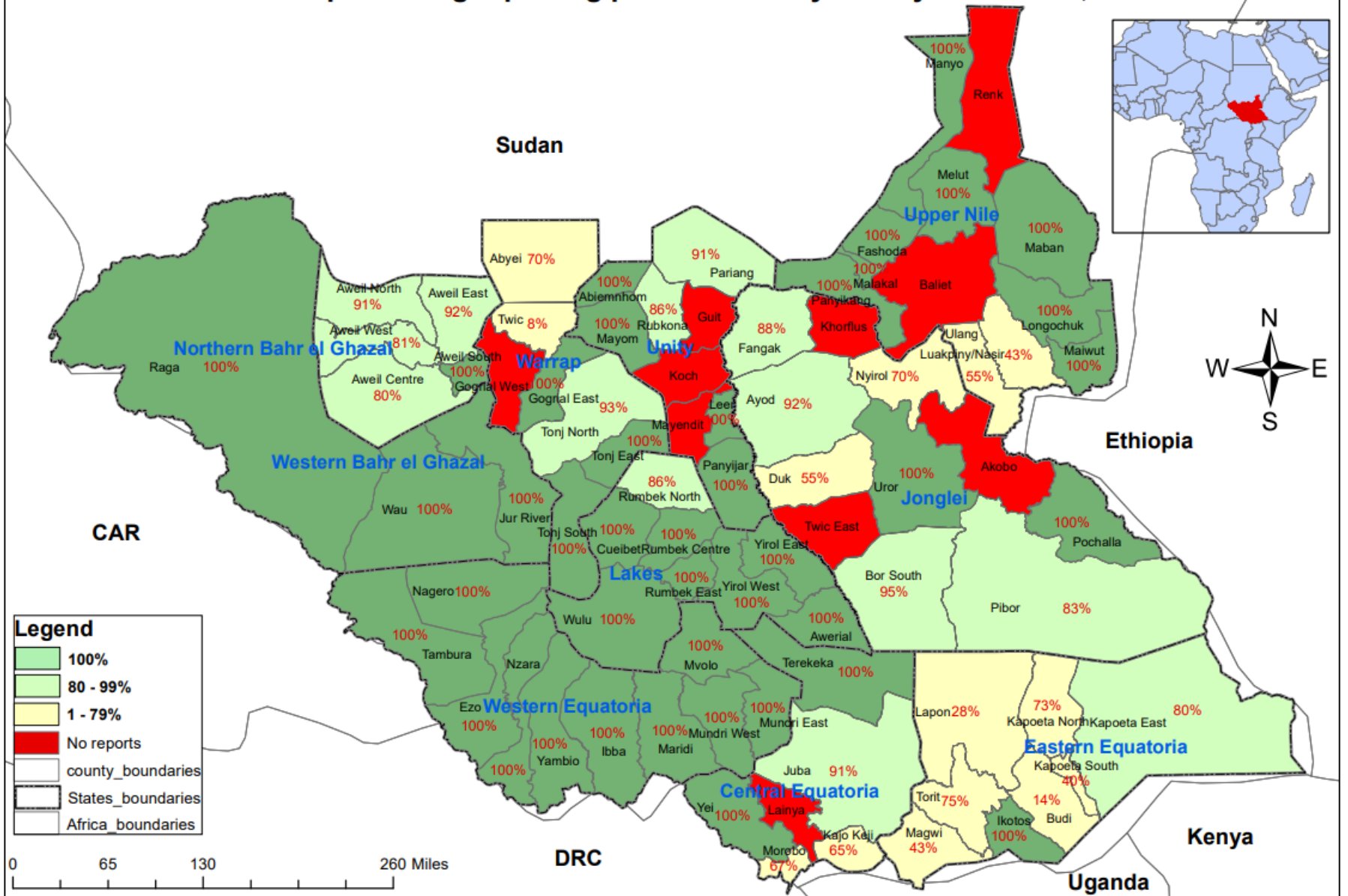
IDSR timeliness & completeness performance at county level for week 8 of 2021 (2)



STATE	COUNTY	SUPPORTING PARTNER	Total No. of Functional Health Facilities in the County	No. of HFs Reported on Time	Timeliness Percentage	No. of HFs Reported regardless of time	Completeness Percentage
Jonglei	Pochalla	LIVWELL	7	7	100%	7	100%
EES	Ikotos	HLSS	27	25	93%	27	100%
Jonglei	Fangak	CMD,HFO	16	15	94%	15	94%
Jonglei	Pibor	LIVWELL,CRADA,ME DAIR,CARE	6	5	83%	5	83%
EES	Torit	Cordaid	20	1	5%	15	75%
Jonglei	Nyirol	CMA, Malaria Consortium	10	7	70%	7	70%
EES	Kapoeta North	CCM	16	10	63%	11	69%
Jonglei	Ayod	CMD,EDA	15	10	67%	10	67%
EES	Kapoeta East	CCM	12	3	25%	8	67%
Jonglei	Bor	MDM + JDF,ACSO	35	20	57%	20	57%
EES	Magwi	HLSS	22	9	41%	9	41%
Jonglei	Duk	MDM + JDF	15	0	0%	6	40%
EES	Kapoeta South	CCM	10	0	0%	4	40%
Jonglei	Uror	Nile Hope,Malaria Consortium	8	0	0%	2	25%
EES	Lopa Lafon	HLSS	18	5	28%	5	28%
EES	Budi	Cordaid	21	3	14%	3	14%
Jonglei	Akobo	NILE HOPE	8	0	0%	0	0%
Jonglei	Twic East	MDM + JDF	11	0	0%	0	0%
Jonglei	Canal Pigi	IMC	11	0	0%	0	0%

STATE	COUNTY	SUPPORTING PARTNER	Total No. of Functional Health Facilities in the County	No. of HFs Reported on Time	Timeliness Percentage	No. of HFs Reported regardless of time	Completeness Percentage
Warrap	Tonj South	CCM	12	12	100%	12	100%
Upper Nile	Manyo	CORDAID	10	10	100%	10	100%
Upper Nile	Melut	WVI + RI	8	8	100%	8	100%
Upper Nile	Panyikang	IMC	4	4	100%	4	100%
Upper Nile	Longechuk	RI	9	9	100%	9	100%
Upper Nile	Akoka	IMC	5	5	100%	5	100%
Warrap	Gogrial East	GOAL	15	14	93%	15	100%
Upper Nile	Fashoda	CORDAID,HFD	18	10	56%	18	100%
Upper Nile	Maivut	RI	5	1	20%	5	100%
Warrap	Tonj East	CCM	12	0	0%	12	100%
Warrap	Tonj North	CCM	14	13	93%	13	93%
Upper Nile	Makal	IMC	7	4	57%	6	86%
Upper Nile	Maban	WVI,RI,Samaritans Purse	17	9	53%	14	82%
Warrap	Abyei	AAA,Save the Children,MSF	10	5	50%	7	70%
Upper Nile	Ulang	UNKEA,RI,TADO	14	2	14%	6	43%
Upper Nile	Luakpiny Nasir	UNKEA,RI	15	0	0%	5	33%
Warrap	Twic	GOAL	26	0	0%	2	8%
Warrap	Gogrial West	GOAL	31	0	0%	0	0%
Upper Nile	Baliet	IMC	4	0	0%	0	0%
Upper Nile	Renk	WVI + RI	13	0	0%	0	0%

Map showing reporting performance by county in week 08, 2021



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Surveillance: EWARS performance indicator by partner for week 8 of 2021

Partner	HFs	Reporting		Performance	
		# of reports received on Time	No. of HFs Reported regardless of time	Timeliness	Completeness
IRC	1	1	1	100%	100%
Medicaid	2	2	2	100%	100%
Medair	1	1	1	100%	100%
UNH	2	2	2	100%	100%
World Relief	2	2	2	100%	100%
CMD	1	1	1	100%	100%
IOM	12	12	12	100%	100%
RHS	1	1	1	100%	100%
UNIDOR	2	2	2	100%	100%
HFO	2	2	2	100%	100%
ALIMA	3	3	3	100%	100%
IMC	6	6	6	100%	100%
GOAL	2	2	2	100%	100%
TADO	2	2	2	100%	100%
HFD	6	5	6	83%	100%
MSF-E	6	4	6	67%	100%
MSF-H	5	2	5	40%	100%
SSHCO	1	0	1	0%	100%
HAA	2	0	0	0%	0%
TRI-SS	2	0	0	0%	0%
TOTAL	61	50	57	82%	93%

Completeness was 93% and timeliness was 82% for weekly reporting in week 8, 2021 for partner-supported clinics serving IDP sites.

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	Measles	Covid-19	Total alerts
CES		1	2	1	2			6
EES		1	3	7	1			12
Lakes		3	4	1	1			9
NBGZ		2	4	3				9
Unity	2	2	1	6	3		4	18
Upper Nile			4	2	4			10
Warrap			3	1				4
WBGZ		1	6	4	7		1	19
WES				1	16	1	1	19
Total alerts	2	10	27	26	34	1	6	106

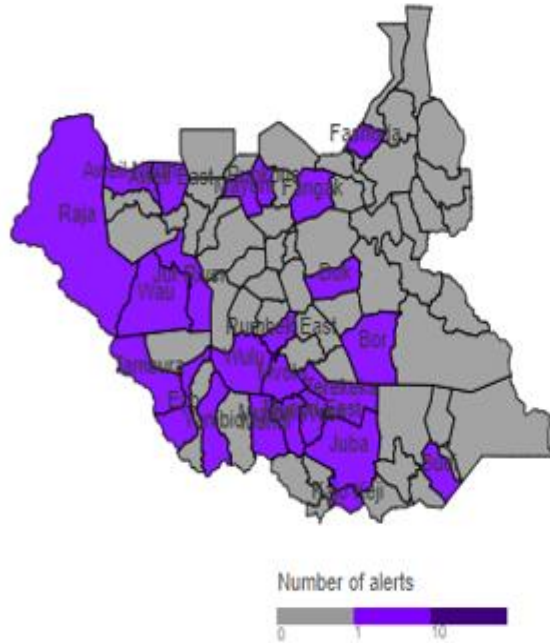
During this week:

- **10 ARI alerts:** 1 from CES sample was collected and tested negative for COVID-19 , 1 from EES sample was collected and tested negative for COVID-19 , 3 from Lakes state sample was collected and tested negative for COVID-19 , 2 from NBGZ State sample was collected and tested negative for COVID-19 , 1 from WBGZ State sample was collected and tested negative for COVID-19 , 2 from Unity state its sample was collected and tested negative for COVID-19 in the state Sentinel Site,
- **27 AWD alerts:** 2 from CES, treated as normal diarrhea, 3 from EES given treatment for diarrhea, 4 from Lakes treated for mild diarrhea, 4 from NBGZ treated as diarrhea, 1 from Unity given treatment of diarrhea, 4 from Upper Nile treated as mild diarrhea, 3 from Warrap treated as normal diarrhea, 6 from WBGZ all were treated as normal
- **26 ABD alerts:** 1 from CES, 5 from EES, 7 from Jonglei State, 5 from Unity, 1 from Upper Nile, 1 from Warrap State, 3 from WBGZ, 1 from WES all are treated as mild diarrhea
- **34 Malaria alerts:** 1 from CES, 1 from EES, 2 from Jonglei, 3 from NBGZ, 3 from Unity, 1 from UNS, 7 from WBGZ, 16 from WES all are due to malaria been the high cause of morbidity in the Country
- **1 Measles alerts:** 1 from WES, Tambura county- Tambura hospital sample was collected for testing
- **6 COVID-19 alerts:** 1 from Jonglei, 3 from Unity state and they are investigated, 1 from WBGZ , 1 from WES, samples collected and tested negative
- **2 AJS alerts:** from Unity state in the PoC where there is an ongoing AJS response

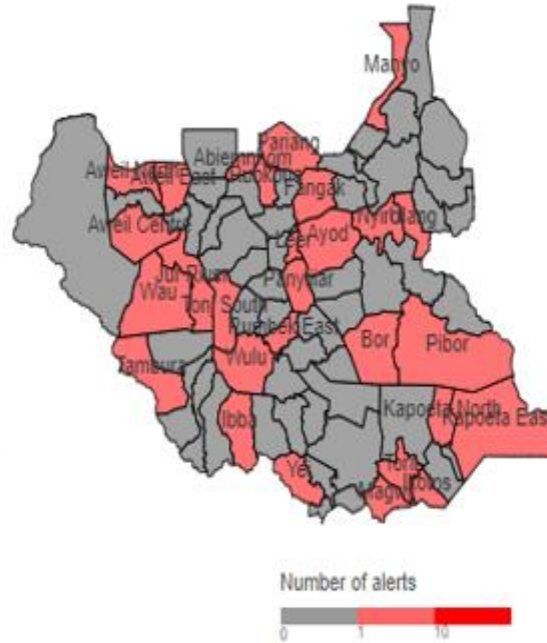
Alert: Map of key disease alerts by county of week 8 of 2021



Map 2a | Malaria (W8 2021)



Map 2b | Bloody diarrhoea (W8 2021)



Map 2c | Measles (W8 2021)



W8	Cumulative (2021)	
0	5	Low risk
5	5	Medium risk
0	31	High risk
0	14	Very high risk

75%	82%	% verified
0%	0%	% auto-discarded
0%	3%	% risk assessed
0%	3%	% requiring a response

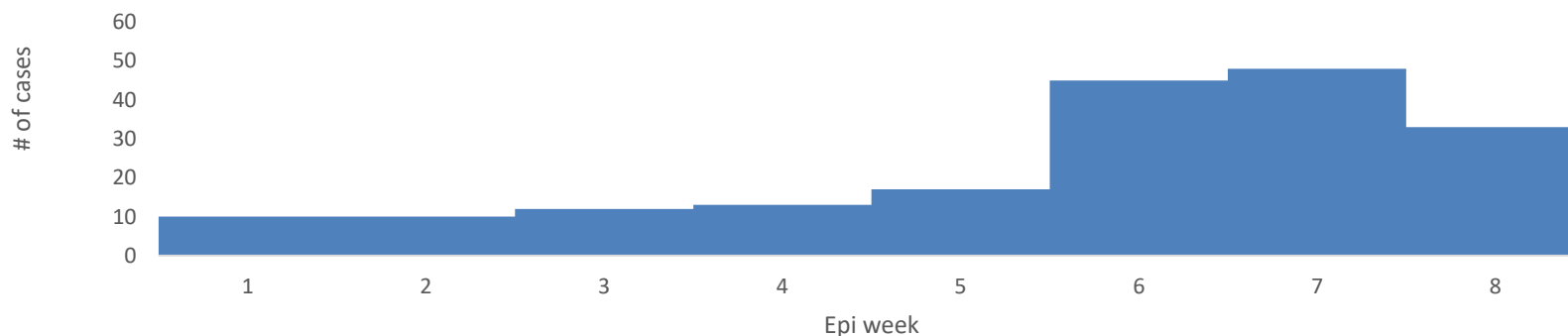
SUSPECTED OUTBREAKS



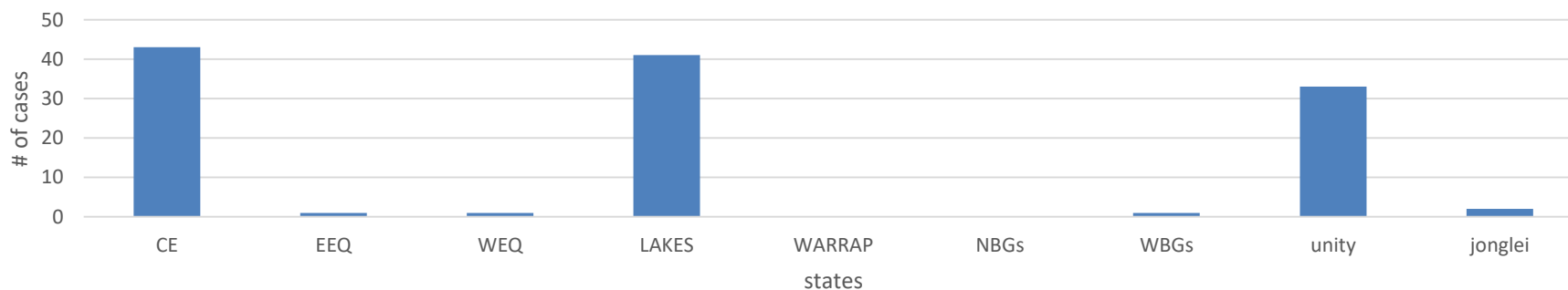
Major suspected outbreaks in South Sudan in
2020



Covid-19 total confirmed cases in South Sudan from Sentinel sites wk1 to week 8, 2021



Number of Covid-19 cases from sentinel sites in week 8, 2021



- **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 7097 samples have been collected in 2021 with 358 (5.0%) being positive for COVID-19 from sentinel sites.**



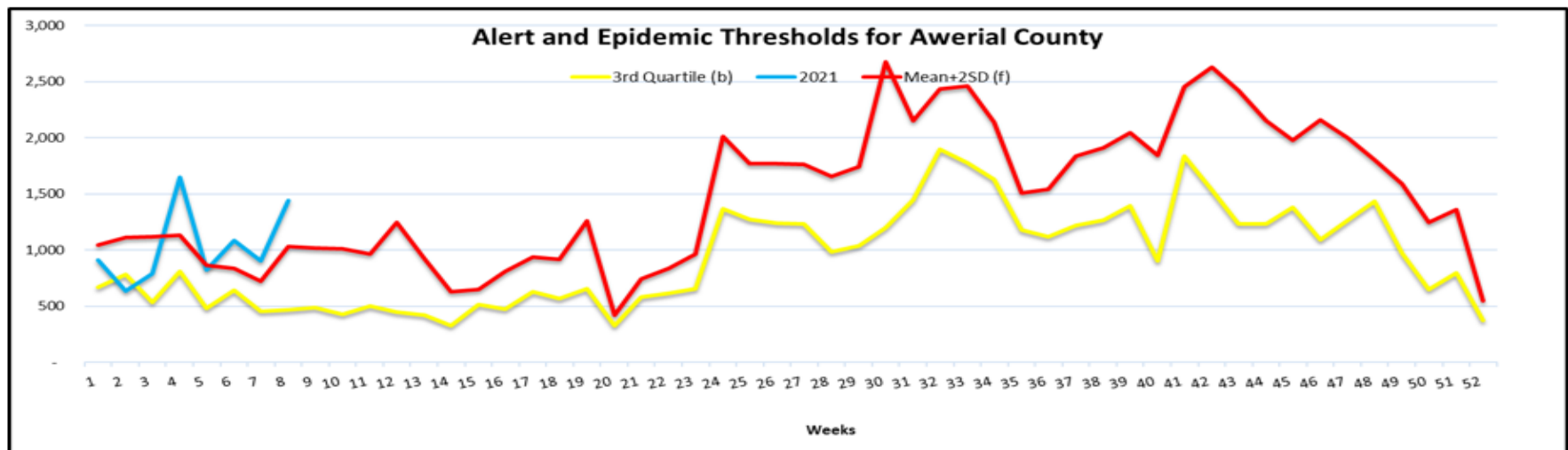
Malaria was the leading cause of morbidity and mortality, accounting for **47.3%** of all morbidities and **24.0%** of all mortalities this week.

There were 1 county with malaria trends that exceeded the threshold (third quartile of trends for the period 2013-2017) and these include the following:

1. Rumbek State (Awerial county)

In the PoC sites; malaria is one of the top cause of morbidity with respective proportional morbidity reported as **Bentiu (5%)**; **Malakal (5%)**; **Juba (38%)** and **Wau (7%)** PoCs of OPD consultations, respectively.

Awerial



Update on RVF investigations in Yiro/ Lakes State; **Lab Results**

- Following reports of 175 abortions and 15 deaths in cattle in Yiro/ in August 2020; joint investigations were conducted by the Ministry of Livestock and Fisheries, Ministry of Wildlife, and FAO (Joint One Health partners team) from 29 October 2020 to 5 November 2020 to conduct further investigations, strengthen surveillance, build community awareness on RVF and collect more animal and human samples.
 - **From the first mission, 53 samples were collected 5 tested positive for RVF IgM, 6 samples were doubtful (considered positive) and 42 tested negative.**
 - **The results of tests from the second mission (160 samples) are shown below:**

S/N	Species	RVF- IgM	RVF – IgG
1	Cattle (N= 70)	2 (3 %)	27 (39%)
2	Goat (N= 81)	1 (1%)	8 (10%)
3	Sheep (N= 9)	0 (0 %)	1 (11%)
Total	160	3	36

Summary:

- Out of 70 cattle samples, 2 (3%) tested positive for RVF IgM and 27 (39%) tested positive for RVF IgG. One goat sample tested positive for RVF- IgM and 8 tested positive IgG, none of the sheep samples tested positive IgM whilst one sample tested positive for IgG.

Next steps:

1. Heightened human RVF surveillance to detect and collect human samples from suspect cases given the risk of disease spillover.
2. Heightened risk communication to prevent exposure to potentially infectious animal products – carcass; beef; arbutus products.
3. Regular updates on suspect cases (animal and human)
4. Regular coordination meetings involving human and animal stakeholders to review the situation and update the RVF preparedness and response plans and strategies.

ACTIVE OUTBREAKS AND PUBLIC HEALTH EVENTS



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





Flooding, South Sudan week 8, 2021

JONGLEI

- **1. New Fangak, Fangak:** DFC IRNA (29 – 30 Jan); 27,000 estimated flood-affected people. Need for multi-cluster response scale-up, especially food, ES/NFI and Health, with support from Bor / Juba.
- **2. Old Fangak, Fangak:** DFC IRNA (2 – 5 Feb); 48,000 estimated flood-affected people. Need for multi-cluster response scale-up, especially food, ES/NFI and Health, with support from Bor / Juba.
- **3. Alali, Akobo East:** Bor IRNA (27 Feb): 5,000 estimated flood-affected people; multiple requests made by RRC. Only 130 HHs (700 individuals) remain in Alali Center (Baba Boma). Residents in the other 4 bomas of Wibura, Gem, Wau and Dilok had left to Gambella refugee camps in Ethiopia to access basic services. Due to the climatic shocks-floods and drought since 2015, seriously impacting livelihoods, population of 7,000 left. Alali is completely cut-off from Akobo County HQ due to physical constraints (river crossing/poor roads), and unresolved conflicts. Dire humanitarian situation of HHs that remained in Alali, lacking basic services such as food, health, education, and access to market, only 1 functional borehole. The main needs for urgent assistance include food, health (essential drugs), NFIs (cooking sets, mosquito nets, blankets, sleeping mats), WASH soaps, and livelihood support (seeds, tools, and fishing gear). ICCG Bor to agree on response.
- **4. Keth, Pading, Nyirol:** 1,600 flood-affected people from Nyirol. Need for multi-cluster response scale-up. Request for UNHAS support for transport Lankien DFC team

UPPER NILE

- **1. Tonga, Nyiluak, Panyikang and Pakwa / Paqar:** Malakal ICCG Assessment; 24,000 estimated flood-affected people. Malakal ICCG to respond to 13,500 people. Need for Juba Health support (Health fp and response).
- **2. Fashoda, Mayom:** 11,000 estimated flood-affected people; Lul (2,880), Dethwok (2,022), Aburoc (270), Kodok (3,000), Athidhwoy (1,872), Kwoch (660): Malakal ICCG to respond. Need for Juba Health support (Health fp and response).
- **3. Melut IDP sites:** IRNA (12 – 13 Jan); 2,000 flood IDPs. Malakal ICCG to respond.

UNITY

- **1. Mayom, Unity:** IRNA (10 – 12 Feb) 37,000 estimated flood-affected people: 13,000 Mankien South (13,000), Ruathnyibo (7,500) and Riak (17,200 people). immediate needs food, emergency shelter and NFIs, and medicine for people and livestock.
- **2. Mayendit and Panyinjar, Unity:** X estimated flood-affected people: Bentiu ICCG to assess
- **3. Koch, Unity:** possible flood-affected people, aside from conflict-related IDPs: TBC by Koch partners.



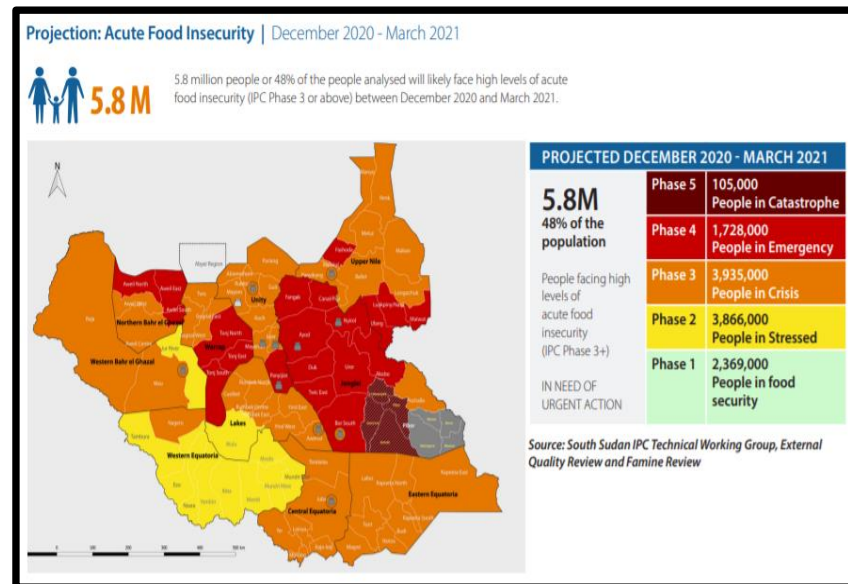
Food Insecurity

The 2021 Humanitarian Needs Overview South Sudan was released on 26 January showing some 8.3 million people (nearly 70 percent of the population) need some form of humanitarian assistance. This is an increase of 800 000 people (10 percent more) from the 7.5 million people in need in 2020.

Humanitarian needs are most concerning in the Greater Pibor Administrative Area with Pibor classified as the only county in catastrophic need. A total of 72 counties face extreme need while the remaining five are in severe need.

A second round of food distribution to 42,850 food insecure people in eight locations in Aweil South County commenced on 6 February 2021.

Nutrition partners established two static outpatients therapeutic Programme (OTPs) and two mobile nutrition units in Akobo where 5 000 children and pregnant mothers were screened and offered treatment and preventive packages for severe acute malnutrition and moderate acute malnutrition.





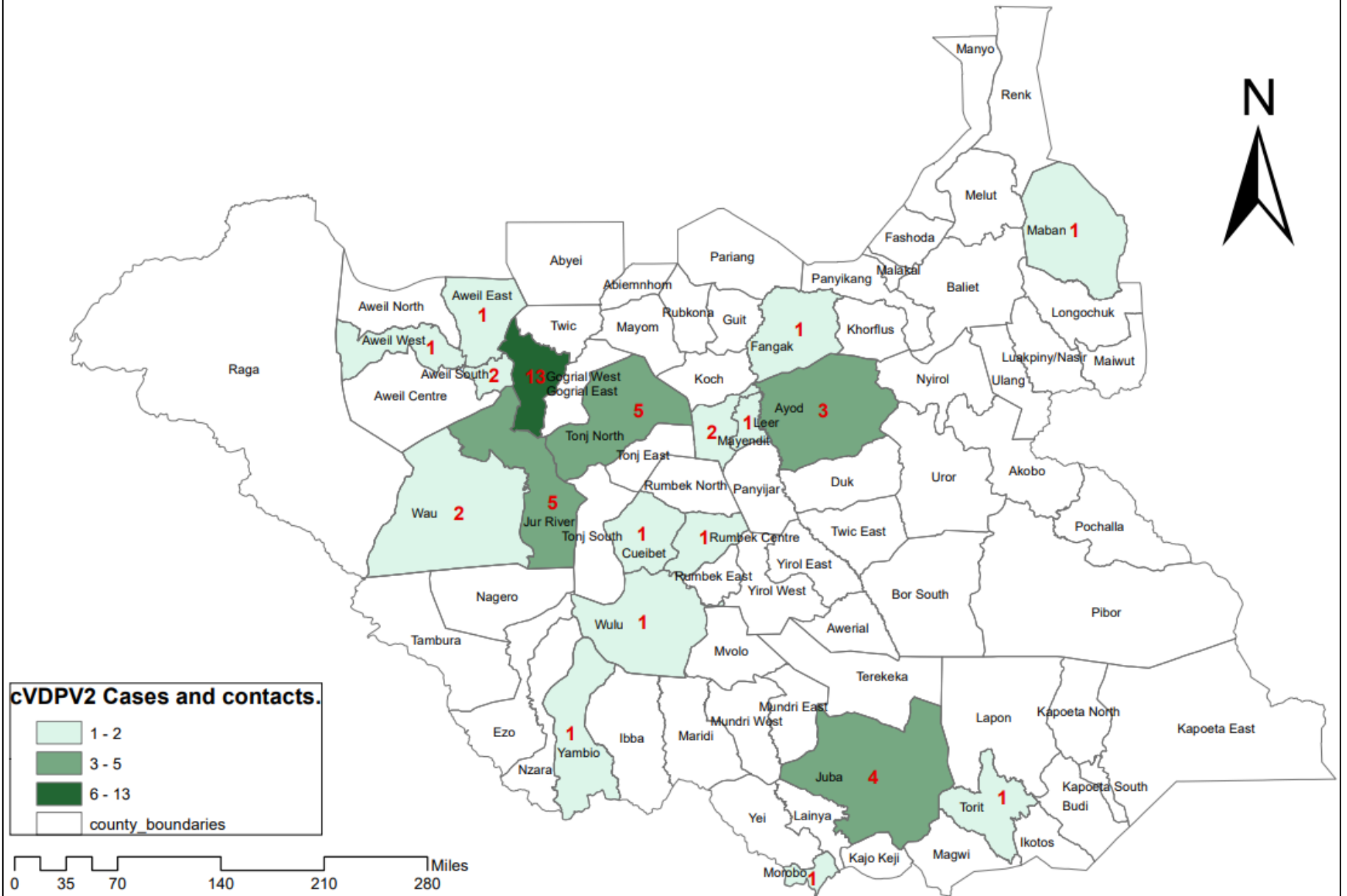
Food Insecurity

Health Cluster Response in IPC 5 Counties:

- The health cluster partners continue to scale up health response by ensuring access to the primary health services across the six 'Priority 1' counties through mobile and static facilities. During the past two weeks, over 20 000 consultations were conducted for various morbidities across the six counties.
- The outbreak prevention measures by various partners and programs are ongoing as well. The ongoing oral cholera vaccine (OCV) campaign targeting 93 250 people in Pibor, Gumuruk, Verteth, and Lekuangule ended on 21 February 2021. During the campaign, 59,001 individuals received their second OCV dose and another 37,316 individuals received their second OCV dose.
- The Maternal Neonatal Tetanus Eradication (MNTE) efforts targeting 35,970 women age group 14-45 years in Pibor reached 29,270 (79% coverage).
- Second round of polio campaign in response to the circulating Vaccine-Derived Poliovirus type 2 (cVDPV2) outbreak was planned to take place in Pibor, Tonj East, Tonj North and Tonj South. The second round of the polio campaign was implemented in Tonj South from 16th to 20th February 2021 (data awaited) but could not take place in Tonj East and Tonj North due to insecurity. In Pibor, the polio campaign will commence immediately after the cholera vaccination campaign.
- Cholera preparedness and readiness measures are ongoing in Pibor, Akobo and other counties bordering Ethiopia where there is an active cholera outbreak.
- WHO emergency health kits delivered to partners and county health departments in Pibor, Akobo, Tonj South, Tonj North and Aweil South
- A new consignment severe acute malnutrition with medical complication (SAM/MC) kits have reached Juba.
- No outbreaks have been reported in the counties.

- The polio outbreak was declared on the 18th of Sept 2020 and currently, 47 AFP cases have been confirmed positive for cVDPV2.
- Eight new circulating Vaccine-Derived Polio Virus, type 2 (cVDPV2) cases were confirmed by the lab in week 7, and they are from six counties spread across five states Jonglei (3), Unity (1), Warrap (2), Central Equatoria (1) and Northern Bahr el Ghazal (1) states. The most recent cVDPV2 case from the AFP sample was reported from Juba, Central Equatoria State, with date onset of paralysis on 30th November 2020
- In 2021, as of this week, a total of 53 AFP cases have been detected and samples collected and shipped to the laboratory with none yet confirmed for the cVDPV2.
- under 5 children in Feb 2021 was implemented. All ten states have conducted the Feb round of mOPV2 campaign however 7 counties are yet to start as of 1st March 2021. Preliminary data shows a total of 1,424,215 children reached, and 90% of the caregivers were aware of the Polio campaign. Data collation and lessons learnt are being collated with plans ongoing to reach the remaining 7 counties (Ulang, Nasir, Longechuk, Maiwut, Tonj East, Tonj North and Rumbek North).

Distribution of cVDPV2 cases and contacts by county.



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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
Ongoing epidemics								
Hepatitis E	Bentiu PoC	03/01/2018	0	422 (0.007)	Yes	No	Yes	Yes
cVDPV2	13 counties	11/06/2020	0	47	Yes	Yes	Yes	Yes
		18/09/2020						



Bacteriology lab updates 2021

Epi-week	County (no. of samples)	Specimen tested (n)	Sample type	Suspected diseases	Lab Results	Comment
52	Bor South	2	stool	Cholera	No Growth for all enteric pathogens	
1	Juba	1	stool	Cholera	Growth for <i>E Coli</i>	
1	Juba	1	stool	Cholera	No Growth for <i>V. Cholerae</i>	
1	Ibba	1	stool	Cholera	No Growth	
1	Rumbek East	1	CSF	Meningitis	No Growth	
1	Aweil Centre	1	stool	Shigellosis	Growth of <i>Shigella Spp</i>	
2	Abyei (Agok)	1	stool	Cholera	Growth for non <i>V. Cholerae</i>	
5	Ibba	2	stool	Cholera	Growth for <i>E.Coli</i>	E.coli normally cause diarrhea in children < 5
5	Gogrial west	7	stool	Cholera	No Growth for <i>V. Cholerae</i>	



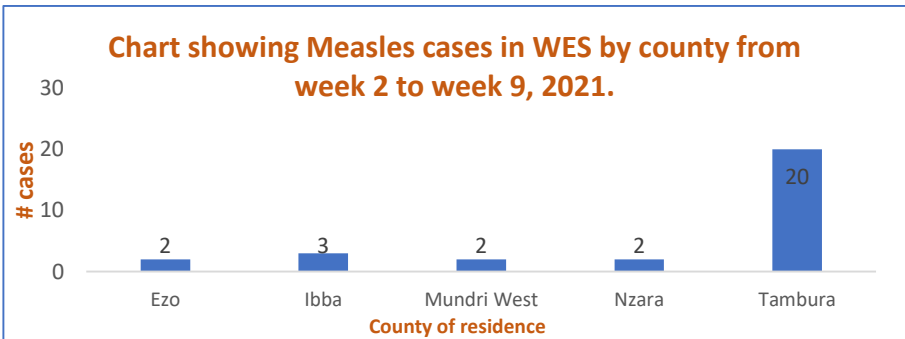
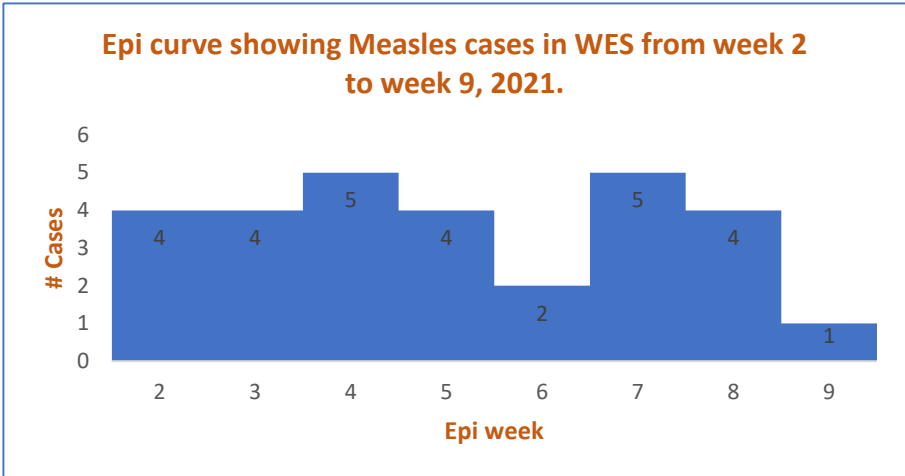
- Measles outbreaks confirmed in 2020

- 8 counties – Tonj East, Magwi, Bor, Kapoeta East, Tonj South, Wau and Pibor

- Suspected measles outbreak in WES- Tambura County



Suspected Measles in WES- Tambura County



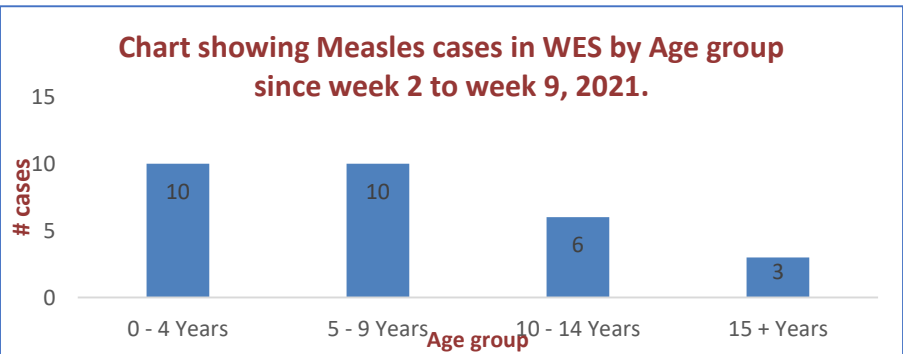
Age group	Cases	percentage	CUM. %
0 - 4 Years	10	34%	34%
5 - 9 Years	10	34%	69%
10 - 14 Years	6	21%	90%
15 + Years	3	10%	100%
Grand Total	29	100%	

Descriptive epidemiology

- WES started to report cases of suspected Measles in week 2, 2021. Up to week 9, 2021 a total of 20 cases have been listed.
- 12 samples were collected for testing and were shipped to UVRI, awaiting results.
- There was (1) new case reported in week 9, 2021
- No deaths were reported
- 55% are female and 45% are male.
- Age group 0- 9 years had the most cases with (68%) .
- Most affected area is Tambura county with 20 cases.

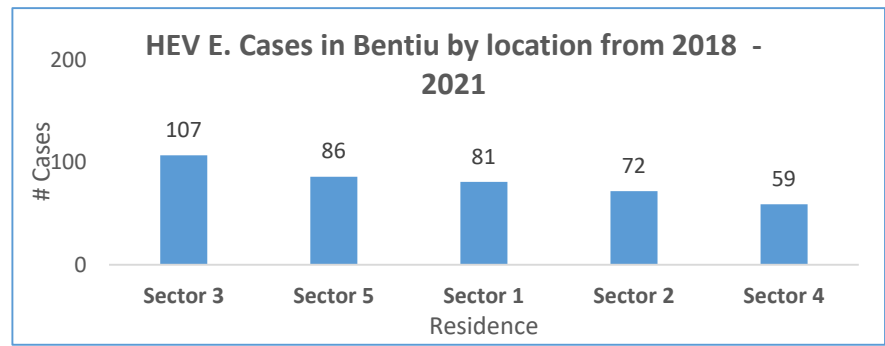
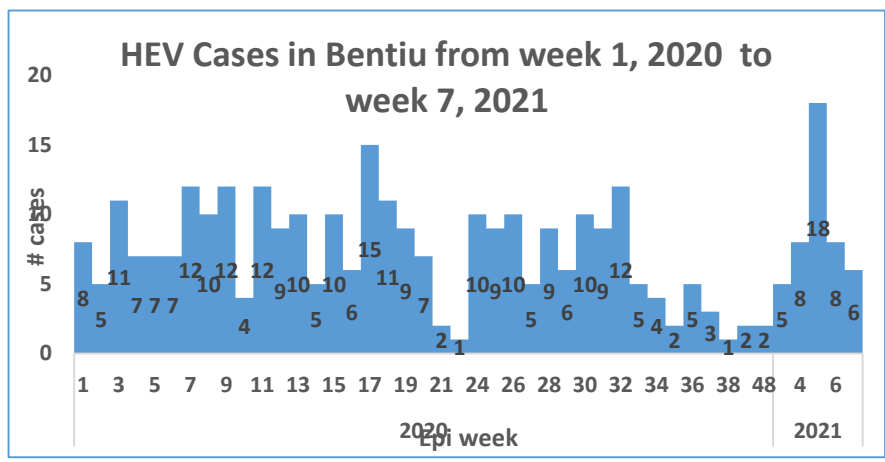
Response Actions:

- Surveillance and line-listing are ongoing
- Case management is ongoing





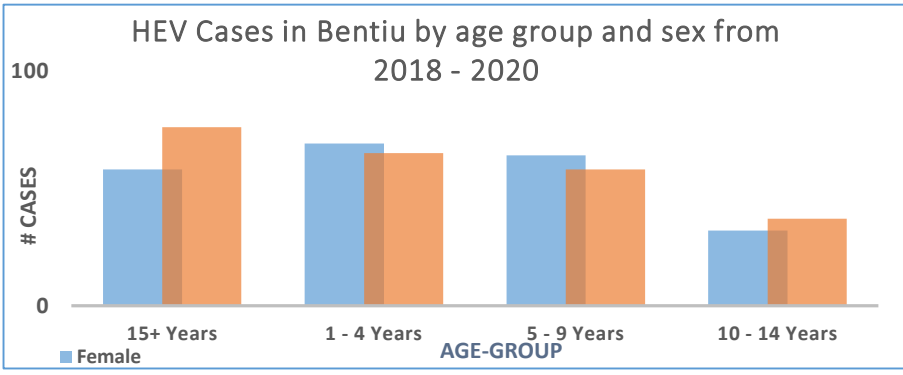
Hepatitis E, Bentiu PoC (1)



Age-Group	Alive	Dead	Grand Total	Percentage	CFR	Cum. %2
1 - 4 Years	134	0	134	29%	0%	29%
10 - 14 Years	69	0	69	15%	0%	44%
15+ Years	131	3	134	29%	2%	73%
5 - 9 Years	120	2	122	27%	2%	100%
Grand Total	454	5	459	100%	0.01	

Descriptive epidemiology

- The persistent transmission of HEV in Bentiu PoC continues with **459** cases since beginning of 2019
- There were **(6)** new cases reported in week 7, 2021
- All the cases were managed as outpatient cases except for seven cases who were admitted
- 5 deaths reported in 2019 and 2020
- 49% are female and 51% are male.
- Age group less than 15 years had the most cases with (71%) cases.
- At risk of adverse outcomes when infected in the 3rd trimester of pregnancy
- Use of unsafe drinking water likely to be source of infection
- Up to week 7, 2021; there were 459 cases of HEV in Bentiu PoC including 5 deaths (CFR 0.011%)
- There is an upsurge of HEV cases since the beginning of 2021. **There-fore calls for review to establish and address the WASH gaps.**



Recommendations

- Supportive case management guided by the HEV protocol is ongoing
- KEV messages on HEV prevention should continue within the community through HPs, CHWs and Kondial Radio
- With current COVID -19 Pandemic Outbreak, WASH partners to increase the coverage of hand washing facilities within the PoCs community.
- Other Wash intervention like increasing the access for clean water and improving the water storage in the affected individuals should be made urgently by distributing the water storage containers that will be the only way to mitigate this problem and stop the HEV outbreak.
- The WASH Cluster/HEV task force should engage in group discussion with Community leaders and woman group at water distribution points to understand their opinions on issue of Collapsing Jerry cans distribution.
- Monitoring the FRC levels at the taps stands in the different sectors, and the concentration of chlorination should maintain at 0.5-1mg/L as the point of collection
- There is an upsurge of HEV cases since the beginning of 2021. This therefore calls for review to establish and address the WASH gaps.



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
Controlled epidemics								
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



OCV Updates in Bor and Pibor

Bor:

- Oral cholera campaign was conducted in Bor where over **63,000 (88% coverage)** people (one year and above) were vaccinated during the first round of the campaign that ended on 20 December 2020.
- The second round of the campaign ended on 14th January 2021 with over **71,852 (89%)** people (one year and above) were covered.

Pibor:

1st Round:

- OCV campaign in Pibor (1st round) started on 16th January 2021 targeting 93, 250 people one year and above. Total of **86, 313 (92,5% coverage)** individuals were vaccinated against cholera in Pibor, Lekuangule, Verteth and Gumuruk.

2nd Round:

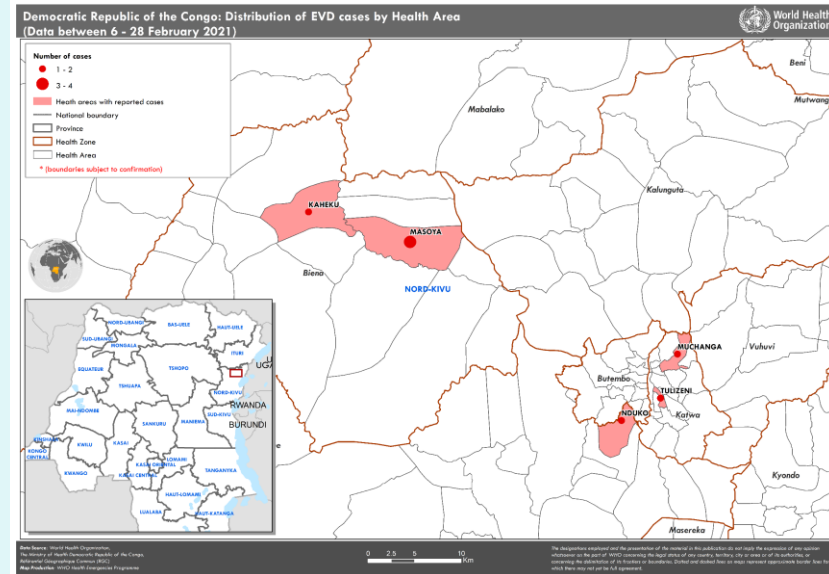
- Campaign was concluded on 20th in greater Pibor with support from NMoH, IOM, Medair and WHO
 - In **Pibor, Gumuruk and Verteth** total number of people vaccinated (age one year and above) both first and second dose OCV is **70,123 (103%)**
 - In **Lekuangule** total number of people vaccinated (age one year and above) is **27,515 (108,9%); 6,594** received first dose and **20,921** received second dose of OCV.
 - Plans for mop-up in areas with low second dose coverage is being finalized.

EBOLA VIRUS DISEASE (EVD)

DRC, North Kivu EVD Outbreak (5th March, 2021)

Cumulative figures as of 6 March

- 11 EVD cases reported since 7 Feb
- 4 deaths (CFR 36%)
- 6 health areas affected across 4 HZ (Biena (5), Katwa (2), Musienene (1) & Butembo (3))
- 2 health workers infected
- 1,083 vaccinated to date using experimental vaccine rVSV-ZEBOV-GP
- 1,014 samples analyzed to date
- **Key Highlights: 5 March**
- Zero newly confirmed cases reported since 1 March
- 0 deaths among confirmed cases
- 196 new alerts including 15 deaths (76 validated, 72 samples taken) 557/643 (87%) contacts followed.
- 5 confirmed cases under treatment in 2 ETCs (Katwa (4), Masoya (1))
- 125 persons vaccinated
- 53 tests analyzed to date



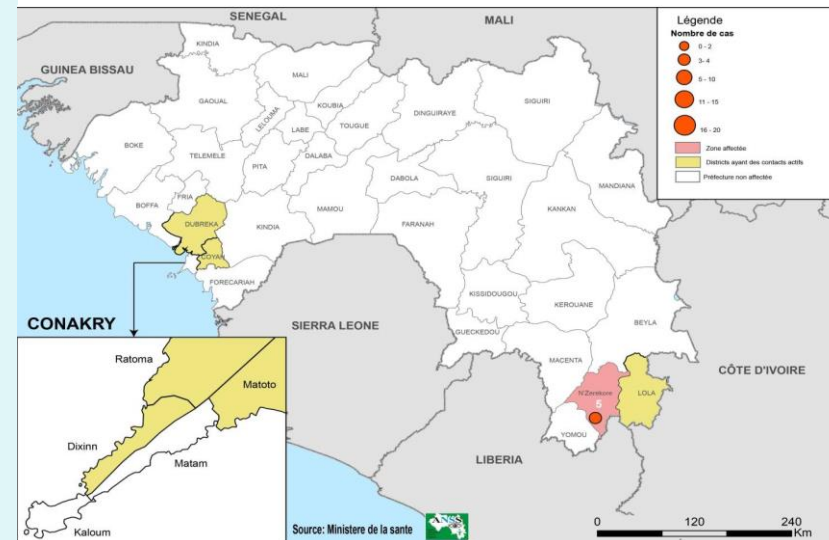
EVD Outbreak in Guinea as of 6th March, 2021 (n = 18)

Cumulative figures – 3 - 6th March

- One newly confirmed case reported on 4th March, a known contact (a pregnant woman) who was vaccinated
- 18 total EVD cases reported (14 confirmed including 9 deaths (5 confirmed & 4 probable), (CFR: 50%)
- 1 health district active, 6/38 districts on high alert
- 10 patients, 6 confirmed and 4 suspects currently hospitalized in Nzerekore ETC
- 1,944 vaccinated including 298 high-risk contacts, 1,296 contacts of contacts and 390 probable contacts including 664 HWs

Zero newly confirmed cases reported on 6 March

- **26** (2 community deaths) alerts received - 5/26 investigated; 16 invalidated. 5 under investigation. 3 hospital death alerts had swabs taken for testing, bodies secured in morgue awaiting family discussions. SDBs not yet conducted.
- **324/415** (78%) contacts followed up
- **41** contacts completed the 21-day follow-up; Conakry (**19**), Nzérékoré (**22**).
- **140** vaccinated inc. **9** high-risk, **117** contacts of contacts, **14** probable & **102** health workers
- Ongoing risk assessment of health workers exposed to a confirmed or probable case in Nzerekore Regional Hospital



EBOLA VIRUS DISEASE[EVD] PREPAREDNESS IN SOUTH SUDAN



Brief on the Ebola situation in DR Congo and updates on EVD preparedness in South Sudan



COVID-19 Updates

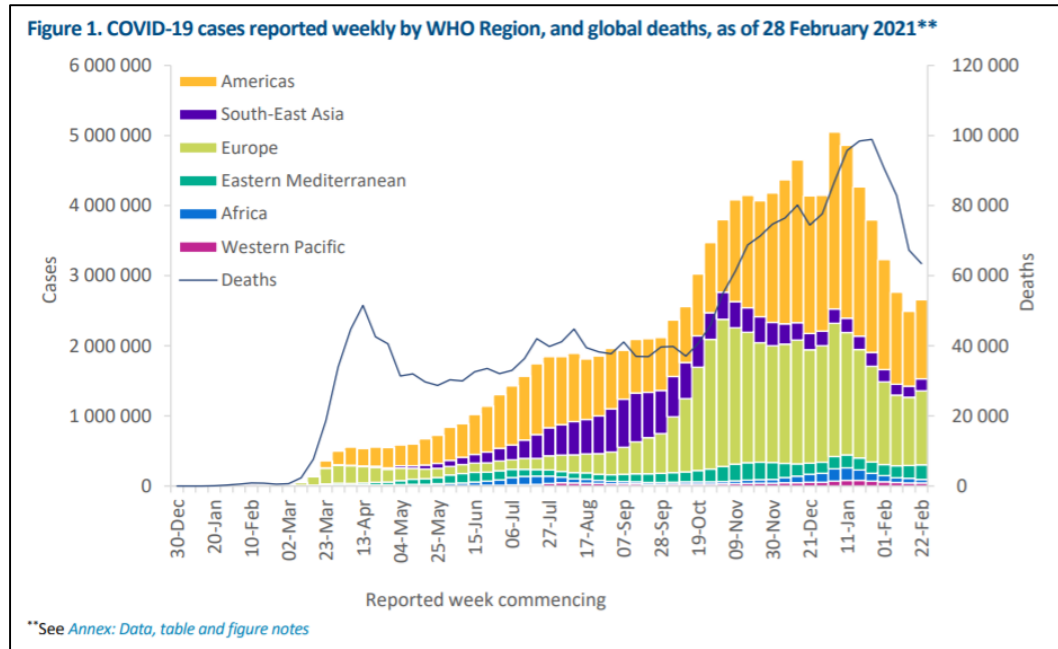


COVID-19 Virus Situation Summary



Situation update as of 2nd March, 2020

- The COVID-19 pandemic initial cases were detected in Wuhan China
- Globally **>113 472 187** million cases (**>2 520 653** deaths)
- Africa **>2 840 208** million cases (**>71 991** deaths)



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

COVID-19 Response in South Sudan as of 28th Feb, 2021



- **8,010** confirmed COVID-19 cases in South Sudan; > **85%** in Juba with **94** deaths and a case fatality rate (CFR) of **1.04%**. Total **12,210** contacts identified, quarantined, & undergoing follow up
- Implementation of priorities; risk communication and community engagement; active case search and testing; quarantine for contacts; isolation of confirmed cases, infection prevention and control; and management of cases are currently underway
- The overall response currently led by the COVID-19 National level taskforce, Medical Advisory Panel and the COVID-19 National Steering Committee
- COVID-19 cases have increased since the beginning of 2021. South Sudan is currently experiencing the second wave of COVID-19 transmission with PCR test positivity rates rising from 2.7% in week 1 of 2021 to 15.12% in week 8 of 2021.
- A monthlong partial lockdown imposed on 3 Feb 2021 that entails a ban on social gatherings, closure of schools and other institutions; entertainment places and limiting the number of passengers in public vehicles.

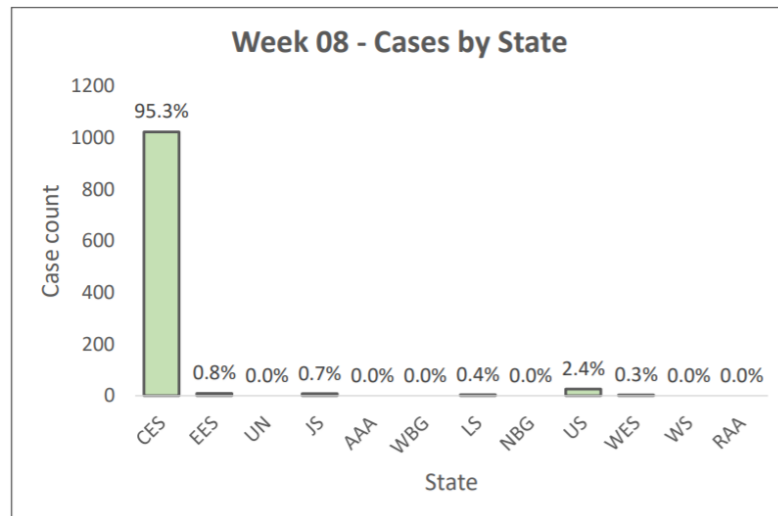


Figure 6. Case distribution by state (Week 08)

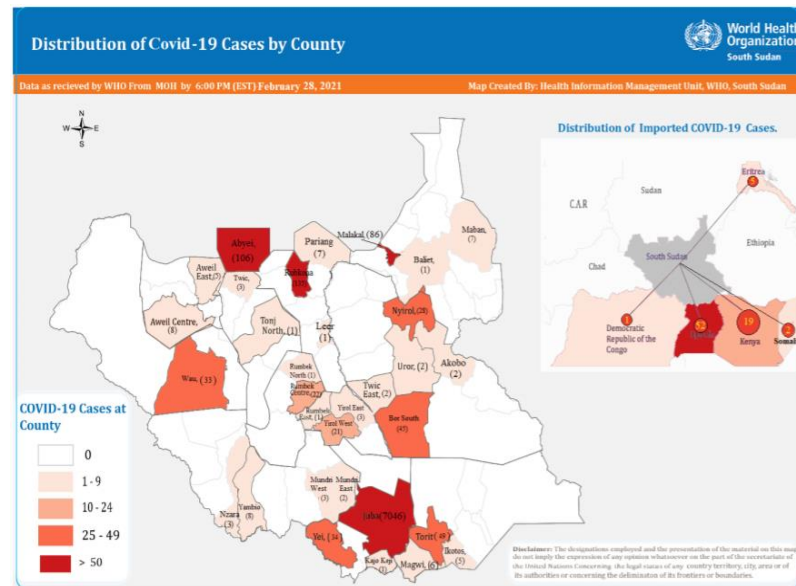


Figure 1. Map of cumulative reported COVID-19 cases, by county

Overall Conclusions and Recommendations



Conclusion

- The overall IDSR and EWARN reporting performance in week 8, 2021 is above the target of 80%. (4) states were above 80%
- **8,010** confirmed COVID-19 cases in South Sudan; >85% in Juba with **94** deaths (CFR of 1.04%). Total 12,210 contacts identified, quarantined, & undergoing follow up
- A total of **2,134** COVID-19 alerts have been investigated with **2,027 (95.0%)** being verified
- With eight outbreaks confirmed in 2020; measles remains the most frequent vaccine preventable disease
- **No** measles outbreak conformed in 2021.
- Given the COVID-19 pandemic, it is critical that measures are stepped up to contain its spread.

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 containment through identifying and testing suspect cases, isolating confirmed cases, and quarantining contacts



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>



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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>

