

South Sudan

Integrated Disease surveillance and response (IDSR)

Epidemiological Bulletin Week 4, 2021 (January 25- January 31)





- In week 4, 2021 IDSR reporting completeness was 92% and timeliness was 78% at health facility level. EWARN reporting completeness was 95% and timeliness was 85%
- Of the 223 alerts in week 4, 2021; 69% were verified 2% were risk assessed and 0% required a response. Malaria (51), AWD (74), ARI (37), measles (4) and bloody diarrhea (38) were the most frequent alerts in week 4, 2021
- Malaria remains the top cause of morbidity and accounted for 52,138 cases (48.6% of OPD cases)
- A total of 1,809 COVID-19 alerts have been investigated with 1,705 (94.3%) being verified. Total of 4,106 COVID-19 confirmed cases and 65 deaths, CFR of 1.7%
- Other hazards include floods in over 47 counties; measles in Ibba; HEV in Bentiu PoC; and Malaria in 3 counties.

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 4 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	Lakes	Doctors with Africa (CUAMM)	113	52	46%	113	100%
2nd	WES	AMREF, World Vision, CUAMM, CDTY, OPEN	213	212	100%	212	100%
3rd	Unity	Cordaid, UNIDOR, IRC, CHADO, CARE International, CRADA, CASS, IOM	94	72	77%	91	97%
4th	EES	Cordaid, HLSS, CCM	142	90	63%	137	96%
5th	WBGZ	Cordaid, Healthnet TPO, CARE International, IOM	78	66	85%	74	95%
6th	NBGZ	Malaria Consortium, Healthnet TPO, IRC, CEDS, IHO	131	108	82%	123	94%
7th	CES	HLSS, SSUHA, Healthnet TPO, IHO, GOAL, TRI-SS, THESO, IMA	120	107	89%	113	94%
8th	Warrap	GOAL, CCM, WVI, Malaria Consortium, UNKEA, Save the Children, MSF	119	96	81%	102	86%
9th	Jonglei	Nile Hope, MDM, JDF, Livewell, CMD, HFO, EDA, CRADA, Malaria Consortium, CMA	101	69	68%	84	83%
10th	Upper Nile	Cordaid, WVI, RI, IMC, NIDO, UNKEA, MC, SSAID, Samaritans Purse, IOM	122	61	50%	87	71%
	South Sudan		1233	933	76%	1136	92%

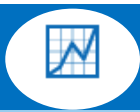
KEY

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

The timeliness of IDSR reporting (supported by EWARS mobile) at health facility level was 76% and completeness was 92%. 8 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 4 of 2021 (1)



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
Lakes	Cueibet	Doctors with Africa (CUAMM)	15	15	100%	15	100%
Lakes	Wulu	Doctors with Africa (CUAMM)	14	14	100%	14	100%
Lakes	Awerial	Doctors with Africa (CUAMM)	11	11	100%	11	100%
NBGZ	Aweil South	Malaria Consortium(MC),IHO	9	9	100%	9	100%
NBGZ	Aweil Centre	Malaria Consortium(MC)	15	15	100%	15	100%
WBGZ	Wau	Cordaid	28	28	100%	28	100%
CES	Juba	HLSS	46	42	91%	46	100%
CES	Yei	SSUHA	17	15	88%	17	100%
WBGZ	Jur River	Cordaid	35	28	80%	36	103%
Lakes	Rumbek North	Doctors with Africa (CUAMM)	7	5	71%	7	100%
Lakes	Yirol West	Doctors with Africa (CUAMM)	12	7	58%	12	100%
Lakes	Yirol East	Doctors with Africa (CUAMM),LIVEWELL	11	0	0%	11	100%
NBGZ	Aweil West	HealthNetTPO	37	25	68%	36	97%
Lakes	Rumbek Centre	Doctors with Africa (CUAMM)	23	0	0%	22	96%
CES	Terekeka	HealthNetTPO	20	19	95%	19	95%
NBGZ	Aweil North	HealthNetTPO,IHO	33	29	88%	30	91%
NBGZ	Aweil East	IRC,TADO	37	30	81%	33	89%
CES	Kajo Keji	SSUHA,GOAL,TRI-SS	17	15	88%	15	88%
CES	Lainya	SSUHA	14	12	86%	12	86%
WBGZ	Raja	HealthNetTPO	12	10	83%	10	83%
CES	Morobo	SSUHA,THESO	6	4	67%	4	67%
Lakes	Rumbek East	Doctors with Africa (CUAMM)	24	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
Unity	Panyijjar	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	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%
WES	Tambura	World Vision International	26	26	100%	26	100%
Unity	Pariang	CARE International	11	10	91%	11	100%
Unity	Leer	UNIDOR	11	10	91%	11	100%
Unity	Mayendit	CASS	12	10	83%	12	100%
WES	Maridi	AMREF	26	25	96%	25	96%
Unity	Rubkona	Cordaid,IRC,IOM,MSF	14	10	71%	13	93%
Unity	Mayom	CASS	13	12	92%	12	92%
Unity	Koch	CRADA,IRC.	7	5	71%	5	71%
Unity	Guit	CHADO	7	0	0%	5	71%
Unity	Abiemnhom	Cordaid	4	0	0%	1	25%

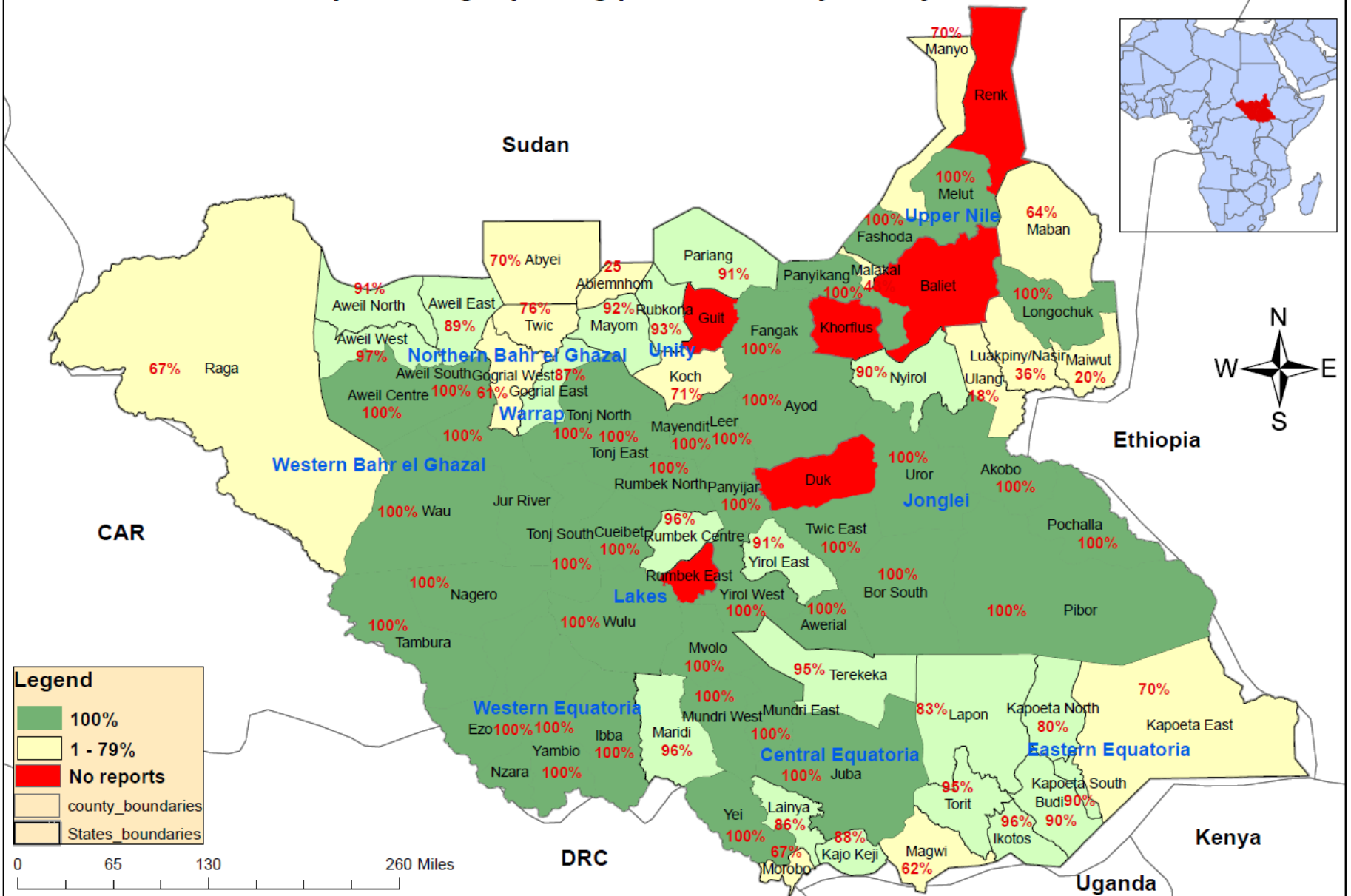
IDSR timeliness & completeness performance at county level for week 4 of 2021 (2)



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
Jonglei	Pochalla	LIVEWELL	7	7	100%	7	100%
Jonglei	Fangak	CMD,HFO	17	16	94%	17	100%
Jonglei	Bor	MDM + JDF	21	18	86%	21	100%
Jonglei	Ayod	CMD,EDA	12	10	83%	12	100%
Jonglei	Akobo	NILE HOPE	3	2	67%	3	100%
Jonglei	Twic East	MDM + JDF	8	2	25%	8	100%
Jonglei	Uror	Nile Hope,Malaria Consortium	2	0	0%	2	100%
EES	Ikotos	HLSS	27	22	81%	26	96%
EES	Torit	Cordaid	20	18	90%	19	95%
Jonglei	Nyirrol	CMA,Malaria Consortium	10	9	90%	9	90%
EES	Kapoeta South	CCM	10	6	60%	9	90%
EES	Budi	Cordaid	21	10	48%	19	90%
Jonglei	Pibor	LIVEWELL,CRADA	6	5	83%	5	83%
EES	Lopa Lafon	HLSS	18	9	50%	15	83%
EES	Magwi	HLSS	21	8	38%	13	62%
Jonglei	Canal Pigi	IMC	4	0	0%	0	0%
Jonglei	Duk	MDM + JDF	11	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
Upper Nile	Melut	WVI + RI	8	8	100%	8	100%
Warrap	Tonj East	CCM	12	12	100%	12	100%
Warrap	Tonj North	CCM	14	14	100%	14	100%
Warrap	Tonj South	CCM	12	12	100%	12	100%
Upper Nile	Panyikang	IMC	4	4	100%	4	100%
Upper Nile	Longechuk	RI	9	9	100%	9	100%
Upper Nile	Fashoda	CORDAID	18	16	89%	18	100%
Upper Nile	Akoka	IMC	5	0	0%	5	100%
Warrap	Gogrial East	GOAL	15	13	87%	13	87%
Warrap	Twic	GOAL	25	19	76%	19	76%
Warrap	Abyei	AAA,Save the Children,MSF	10	7	70%	7	70%
Upper Nile	Manyo	CORDAID	10	7	70%	7	70%
Upper Nile	Maban	WVI,RI,Samaritan's Purse	14	9	64%	9	64%
Warrap	Gogrial West	GOAL	31	19	61%	19	61%
Upper Nile	Luakpiny Nasir	UNKEA,RI	14	5	36%	5	36%
Upper Nile	Maiwut	RI	5	1	20%	1	20%
Upper Nile	Makal	IMC	7	1	14%	2	29%
Upper Nile	Ulang	UNKEA,RI	11	0	0%	2	18%
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 04, 2021



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 performance indicator by partner for week 4 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%
TADO	2	2	2	100%	100%
Medicaair	2	2	2	100%	100%
SP	4	4	4	100%	100%
UNH	2	2	2	100%	100%
World Relief	2	2	2	100%	100%
IOM	12	12	12	100%	100%
UNIDOR	2	2	2	100%	100%
LiveWell	4	4	4	100%	100%
SSHCO	1	1	1	100%	100%
HFO	2	2	2	100%	100%
HAA	2	2	2	100%	100%
RHS	1	1	1	100%	100%
GOAL	2	2	2	100%	100%
HFD	5	5	5	100%	100%
Medair	1	1	1	100%	100%
IMC	6	3	6	50%	100%
MSF-H	5	2	5	40%	100%
CMD	1	0	1	0%	100%
MSF-E	6	4	4	67%	67%
TRI-SS	2	1	1	50%	50%
TOTAL	65	55	62	85%	95%

Completeness was 95% and timeliness was 85% for weekly reporting in week 4, 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	AFP	Bloody Diarrhoea	Malaria	Measles	Yellow Fever	Meningitis	EBS	Covid-19	Total alerts
CES	2	14	9		4	4						33
EES		2	11		3			1		1		18
Jonglei		3	2			2					1	8
NBGZ		1	1									2
Unity	4	2	8		7	4					4	29
Upper Nile		8	8		8	4					2	30
Warrap			6	2	4							12
WBGZ			8		3	17	2					30
WES		7	21		9	20	2		2			61
Total alerts	6	37	74	2	38	51	4	1	2	1	7	223

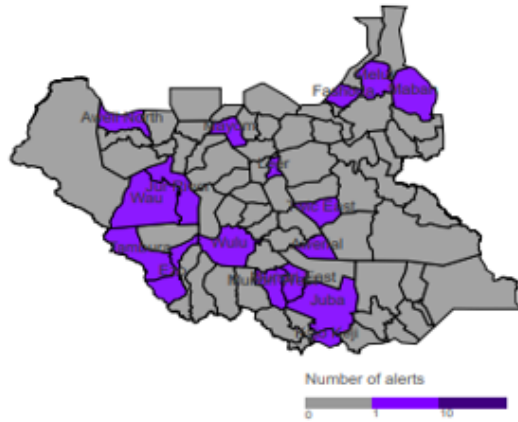
During this week:

- 37 ARI alert: 17 from CES sample was collected and tested for COVID-19 , 2 from EES sample was collected , 3 Jonglei sample collected, 1 from NBG, 2 from Unity, 8 from UNS, 7 from WES and samples were collected e tested in the state Sentinel Sites.
- 74 AWD alert: 11 from EES, Sample will be collected , 9 from CES investigation is under way, 2 from Jonglei sample was collected, 1 from NBG sample collected, 8 from Unity sample collected, 8 UNS sample will be collected, 6 from Warrap treated as normal diarrhea, 8 from WBG , 21 from WES.
- 38 ABD alert: 4 from CES sample will be collected, 3 from EES under investigation, 7 from Unity under investigation, 8 from UNS, 4 from Warrap, 3 from WBGZ and 9 from WES.
- 51 Malaria alerts: 4 from CES, 2 from Jonglei, 4 from Unity, 4 from UNS, 20 from WES, 17 from WBGZ these are due to the high increase of malaria cases in the Country and all are under monitoring.
- 4 Measles alert: The alert was from Bazia jaded PHCC in WBZ and sample was collected, 2 from WES Tambura county which is under investigation.
- 6 AJS alert: 2 from CES in Munuki Payam, Kimu PHCC and under investigation, 4 are reported by clinician in area were there is confirmed acute jaundice(Bentiu POC).
- 2 AFP alert: These are true alerts from Gogrial West, Kuajok Hospital sample was collected for laboratory confirmation..
- 7 COVID-19 alert: 1 from Jonglei, 4 from Unity, 2 from Upper Nile and investigation was done and sample tested negative.
- 1 Yellow Fever alert: Two samples were collected and shipped to Juba for testing. Currently, arrangements are underway to ship the samples to UVRI for testing”.
- 1 EBS alert: The event had been reported by Medical officer who is working with UNMISS (Torit Office) for a man 45 years old, representing with High fever, dry cough , difficult in breathing the investigation was done and sample have been collected
- 2 Meningitis alerts: all from WES and its under investigation.

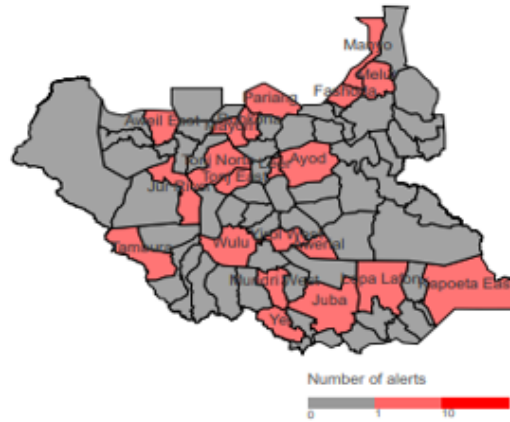
Alert: Map of key disease alerts by county of week 4 of 2021



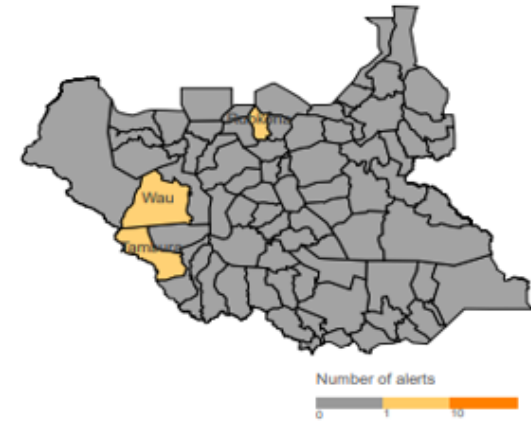
Map 2a | Malaria (W4 2021)



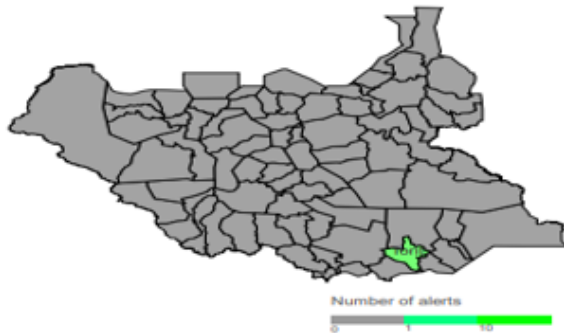
Map 2b | Bloody diarrhoea (W4 2021)



Map 2c | Measles (W4 2021)



Map 2f | Event-based surveillance (W4 2021)



W4	Cumulative (2021)	
0	3	Low risk
5	5	Medium risk
2	28	High risk
0	12	Very high risk

69%	77%	% verified
0%	0%	% auto-discarded
2%	5%	% risk assessed
0%	4%	% requiring a response

SUSPECTED OUTBREAKS



Major suspected outbreaks in South Sudan in
2020



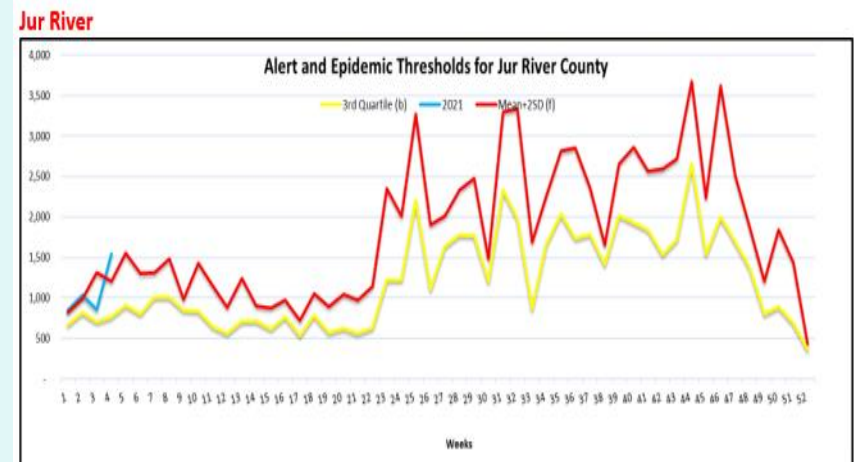
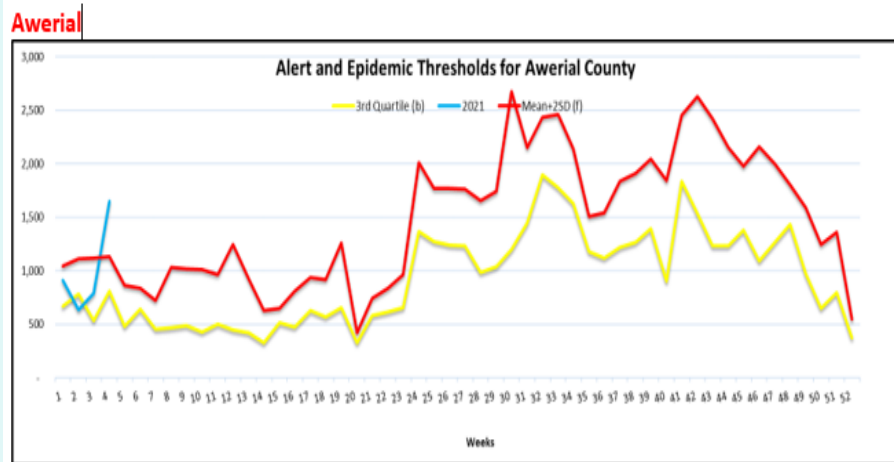


Malaria was the leading cause of morbidity and mortality, accounting for **48.6%** of all morbidities and **32.3%** of all mortalities this week.

There were 3 county with malaria trends that exceeded the threshold (third quartile of trends for the period 2013-2017) and these include the following:

1. **CES (Juba)**
2. **Lakes State (Awerial)**
3. **WBGZ (Jur River)** □

In the PoC sites; malaria is the top cause of morbidity in Bentiu (**6%**);and Wau (**3%**) PoCs of OPD consultations, respectively.



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 4, 2021

- Two consecutive years of severe seasonal flooding in the country, among other drivers, has contributed to heightened food insecurity in the country in 2021 as projected recent IPC report.
- While water levels continue to recede, most of the road networks connecting Jonglei State & GPAA with neighbouring states remain inaccessible due to flood waters. Air and river transport remain the only means to deliver humanitarian assistance to affected people. Parts of Nyirol, Fangak and Ayod continue to face access challenge because of the flooding and its aftermath.
- Response gap in provision of emergency shelter and non-food items (ES/NFI) has been reported in Mundri East and Mundri West where 20,000 IDPs are awaiting emergency shelter materials.

Health Cluster Response:

- An estimated 1 066 000 people in 47 counties were affected by floods in South Sudan from 1 July 2020 to 31 January 2021.
- Some 495 000 people were affected in Jonglei State and the Greater Pibor Administrative Area, the worst affected areas.
- Flood-affected people's urgent needs included food and livelihood support, emergency shelter and non-food items (ES/NFI), water, sanitation and hygiene (WASH), health and protection services.
- Flood-response activities were considerably constrained by persistent heavy rains, infrastructure damage and reduced physical accessibility, funding constraints, and insecurity.
- The COVID-19 emergency response depleted ES/NFI and WASH core pipeline stocks. Delays in replenishing core pipelines due to border and travel restrictions resulted in delayed flood response.



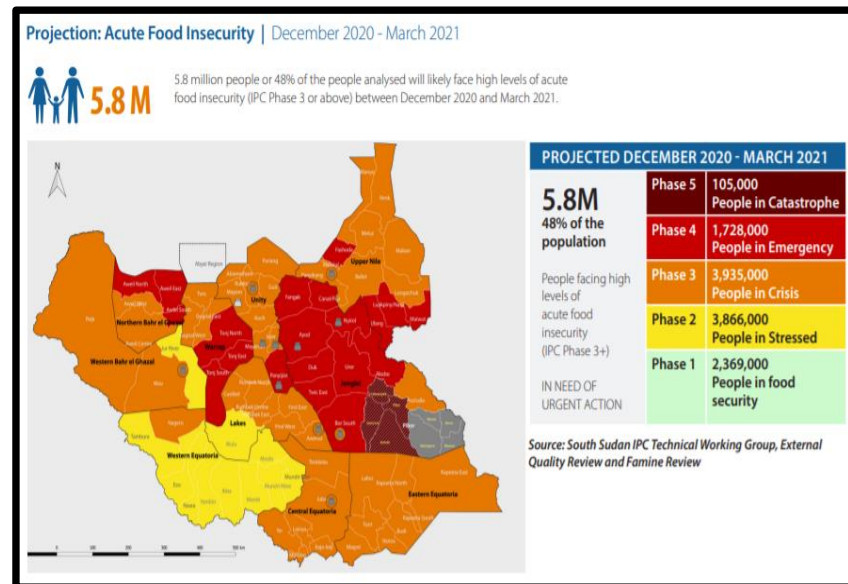
Food Insecurity, week 4, 2021

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, week 4, 2021

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.

- As of 14 Feb 2021 the country has reported 38 cVDPV2 from AFP cases, 16 from contacts and 2 from Environmental surveillance.
- All states have reported a case with surveillance activities being intensified and deployment of Mcking's consultants (5), ISTOPs (13) for added supervision along with over 400 personnel engaged at different levels in the Programme.
- The date of onset for the first cases was on 11/06/2020, while the most recent case was on 13/09/2020, of note is that no new cases reported have dates of onset after campaigns in that area.
- Fifteen new PV2 cases (5 AFP, 10 Contacts) were notified in the week 3 2021 involving 3 states

States Hubs	cVDPV2	cVDPV2	Total
	cases	Contacts	
Central Equatoria	4	0	4
Eastern Equatoria	1	0	1
Jonglei	1	0	1
Lakes	3	4	7
Northern Bahr El Ghazal	3	3	6
Unity	1	2	3
Upper Nile	1	0	1
Warrap	16	2	18
Western Bahr Ghazal	7	3	10
Western Equatoria	1	2	3
Total	38	16	54

- Focus was on conducting a rapid, quantity campaign with mOPV2, enhancing surveillance through better coordination mechanism under the leadership of MOH.
- A total of 44 and 35 counties are in the phase1a and b mOP2 reactive campaign, with implementation of phase 2 commencing on 8 Dec 2020

Phase 1a: mOPV2 Result November 2020

States	Total Population	Target (OPV)	Children Immunized	OPV Doses used	% Coverage	Vaccine Wastage	PCE
Lakes	1,255,414	263,637	262,896	282,220	100%	6.8	90
Northern Bahr Ghazal	1,251,100	262,731	290,452	304,990	111%	4.8	92
Unity	1,546,148	324,691	256,580	276,200	79%	7.1	87
Upper Nile	612,520	128,629	125,964	137,140	98%	8.1	98
Warrap	1,539,553	323,306	319,419	339,100	99%	5.8	94
Western Bahr Ghazal	579,623	121,721	104,203	117,880	86%	11.6	76
Western Equatoria	650,463	136,597	130,312	138,069	95%	5.6	83
Grand Total	7,434,821	1,561,312	1,489,826	1,595,600	95%	6.6	90

Phase 1a: mOPV2 Result December 2020

States	Total Population	Target (OPV)	Total Children Immunized	mOPV2 Doses used	% Coverage	Vaccine Wastage rate	PCE by FM (%)
Central Equatoria	1,430,847	300,478	255,984	289,920	85%	11.7	94
Eastern Equatoria	1,492,725	313,472	277,588	307,400	89%	9.7	94
Western Equatoria	1,046,345	219,732	215,263	223,302	98%	3.6	91
Jonglei	1,758,786	369,345	308,755	330,700	84%	6.6	NA
Grand Total	5,728,703	1,203,028	1,057,590	1,151,322	88%	8.1	92

The second round will be conducted from 16 Feb 2021 targeting 2.8 million children under 5 years of age with an assessment of outbreak response in March 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
Ongoing epidemics								
Hepatitis E	Bentiu PoC	03/01/2018	3	422 (0.007)	Yes	No	Yes	Yes



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>	



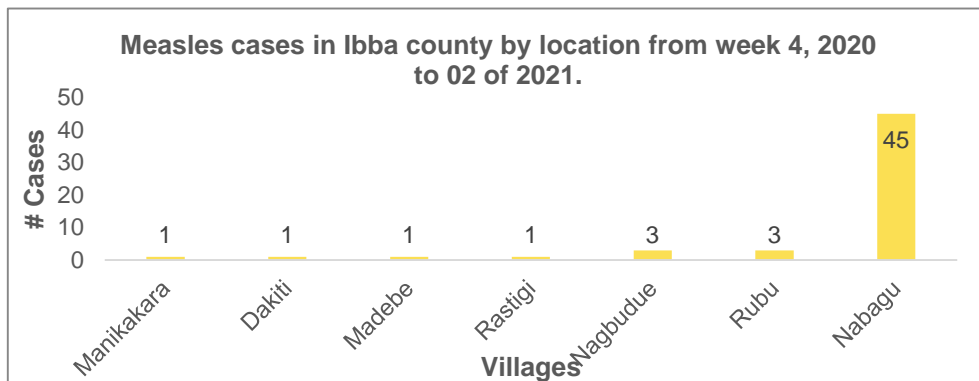
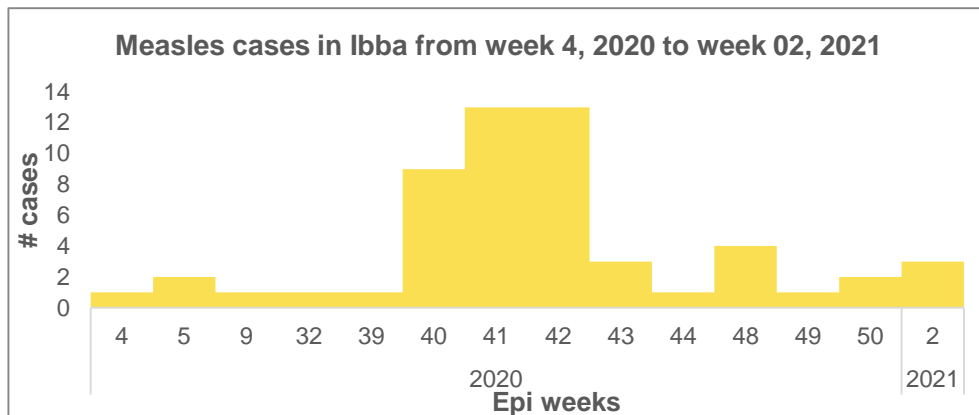
- Measles outbreaks confirmed in 2020

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

- No new outbreak confirmed in 2021



Confirmed Measles Outbreak in Ibba



Age group	Cases	Percentage	CUM. %
0 - 4 Years	19	35%	35%
10 - 14 Years	11	20%	55%
15 + Years	9	16%	71%
5 - 9 Years	16	29%	100%
Grand Total	55	100%	

Background and descriptive epidemiology

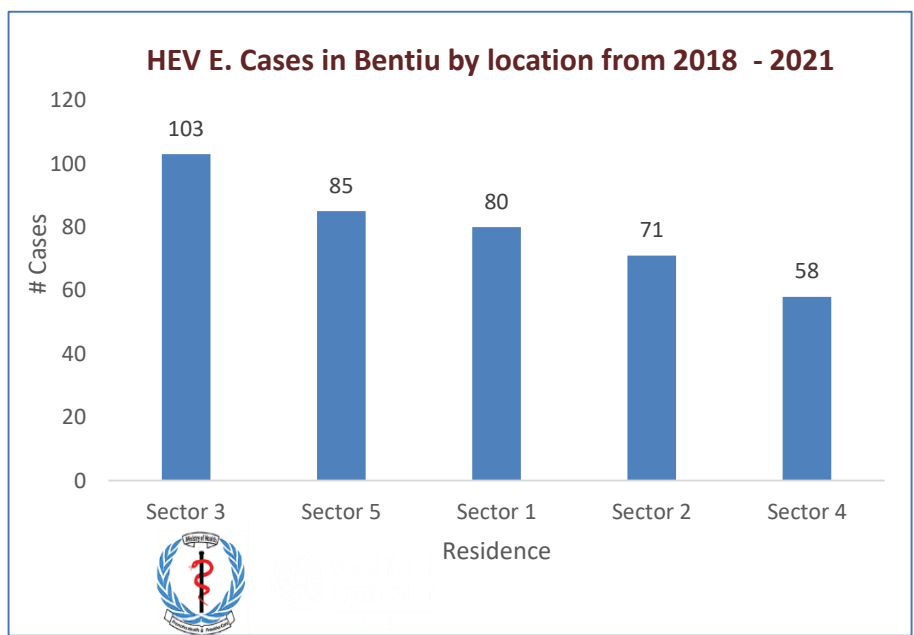
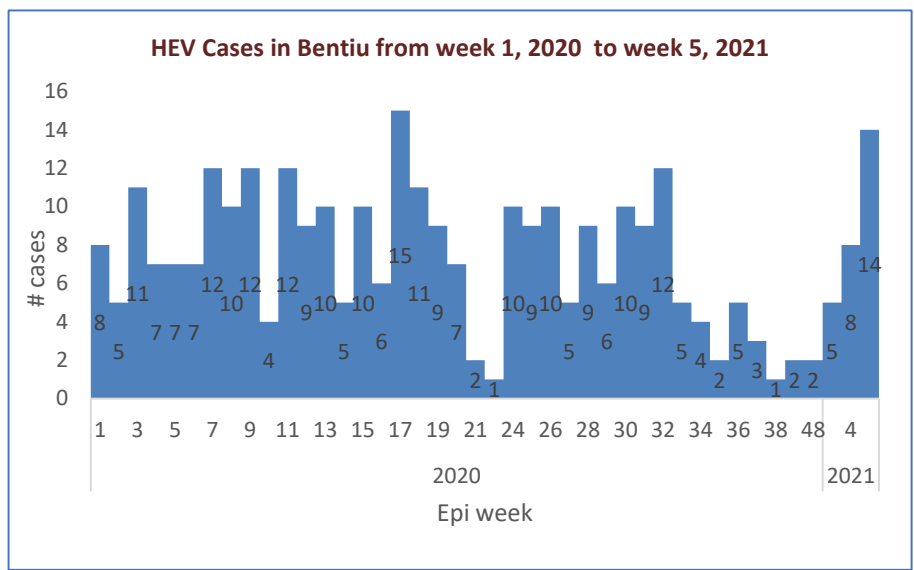
- Measles transmission has persisted in Ibba county despite of the mass vaccination, and the follow up campaign was completed for the two counties – the coverage was 99%
- Suspected measles cases were reported, and two samples tested measles IgM +e.
- 2 cases were reported in week 2, 2021 makes a total of 55 cases since beginning of 2020
- 35% of the cases are less than 5 years of age
- 42% are female and 58% male
- Most affected areas are Maniakakara and Dakiji
- Measles follow up campaign, achieved 99% early 2020

Response Actions:

- An assessment mission recommended the need to strengthen routine immunization (thru static and outreach vaccination; social mobilization for routine immunization; and enhanced measles case-based surveillance).
- The implementing NGOs, (Action Africa help (AAH) responded through enhanced routine vaccination outreaches to the affected and at-risk villages but these were not optimized due to resource constraints.
- Reactive measles campaign was concluded in Ibba with total of 11,896 children age 6-59 month been vaccinated and coverage of 96%.



Hepatitis E, Bentiu PoC (1)



Descriptive epidemiology

- The persistent transmission of HEV in Bentiu PoC continues with 422 cases since beginning of 2019
- There were (3) new cases reported in week 4, 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 (74%) 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 4, 2021; there were 417 cases of HEV in Bentiu PoC including 5 deaths (CFR 0.012%)
- There is an upsurge of HEV cases since the beginning of 2021. Therefore calls for review to establish and address the WASH gaps.

Age-Group	Alive	Dead	Grand Total	Percentage	CFR	Cum. %2
1 - 4 Years	132	0	132	30%	0%	30%
10 - 14 Years	68	0	68	15%	0%	45%
15+ Years	117	3	120	27%	3%	73%
5 - 9 Years	119	2	121	27%	2%	100%
Grand Total	436	5	441	100%	0.01	

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:

- OCV campaign in Pibor (1st round) started on 16th January 2021 targeting 93, 250 people one year and above. Total of **57, 960 (62% coverage)** individuals were vaccinated against cholera in Pibor, Lekuangule, Verteth and Gumuruk.
- **2nd round start dates** (targeting **93,250** individuals one year and above) will commence on 14 February 2021

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

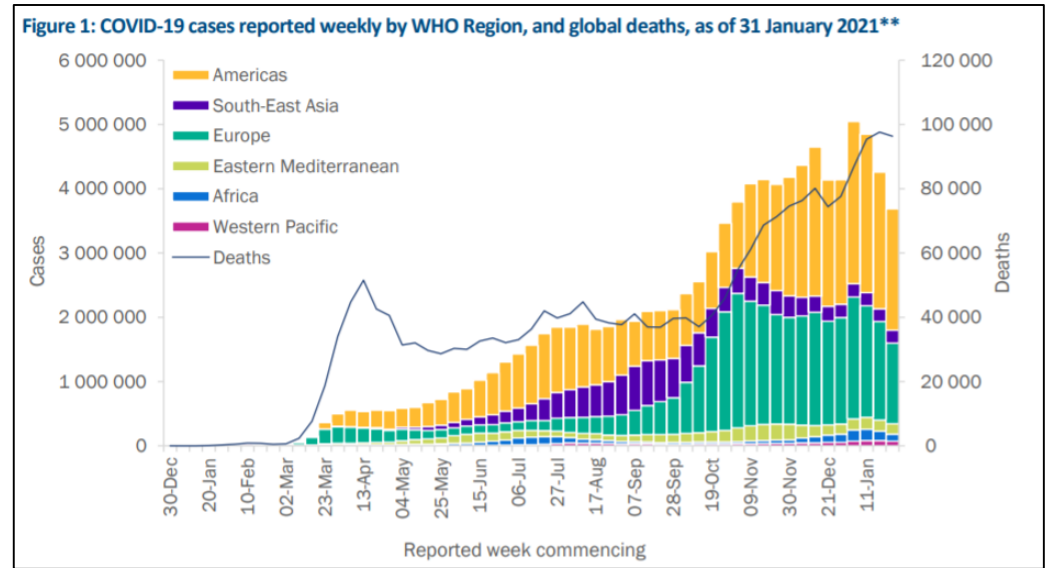


COVID-19 Virus Situation Summary



Situation update as of 2nd Feb, 2020

- The COVID-19 pandemic initial cases were detected in Wuhan China
- Globally **>102 139 771** million cases (**>2 211 762** deaths)
- Africa **>2 570 474** million cases (**>62 504**deaths)

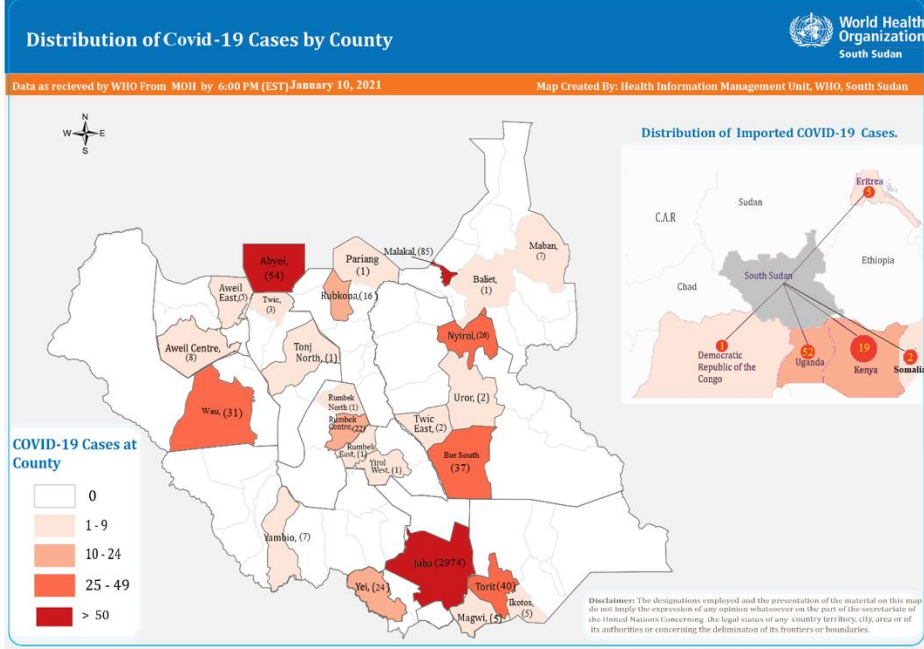


WHO: <https://www.who.int/health-topics/coronavirus>



COVID-19 Response in South Sudan Week 2, 2021

- **4,106** confirmed COVID-19 cases in South Sudan; > **85%** in Juba with **65** deaths and a case fatality rate (CFR) of 1.7%. Total **10,534** 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



Overall Conclusions and Recommendations



Conclusion

- The overall IDSR and EWARNS reporting performance in week 4, 2021 is above the target of 80%. (9) states were above 80%
- 4,106 confirmed COVID-19 cases in South Sudan; >85% in Juba with 65 deaths (CFR of 1.7%). Total 10,534 contacts identified, quarantined, & undergoing follow up
- A total of 1,809 COVID-19 alerts have been investigated with 1,705 (94.3%) being verified
- With eight outbreaks confirmed in 2020; measles remains the most frequent vaccine preventable disease
- **No** measles outbreak conformed in 2021.
- There is ongoing measles outbreak in Ibba county
- 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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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>

