South Sudan

Integrated Disease surveillance and response (IDSR)

Epidemiological Bulletin Week 7, 2021 (February 15-February 21)

World Health Organization
South Sudan

Major epidemiological highlights in week 7 highlights of 2021

- In week 7, 2021 IDSR reporting completeness was 83% and timeliness was 73% at health facility level. EWARN reporting completeness was 93% and timeliness was 83%
- Of the 116 alerts in week 7, 2021; 96% were verified 1% were risk assessed and 1% required a response. Malaria (47), AWD (29), ARI (10), measles (47) and bloody diarrhea (20) were the most frequent alerts in week 7, 2021
- Malaria remains the top cause of morbidity and accounted for 48,122 cases (48.5% of OPD cases)
- A total of 2,120 COVID-19 alerts have been investigated with 2,013 (94.6%) being verified. Total of 6,931 COVID-19 confirmed cases and 87 deaths, CFR of 1.25%
- 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 7 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	201	94%	212	100%
2nd	WBGZ	Cordaid, Healthnet TPO, CARE International, IOM	78	57	73%	75	96%
3rd	NBGZ	Malaria Consortium, Healthnet TPO, IRC, CEDS, IHO	131	110	84%	117	89%
4th	EES	Cordaid, HLSS, CCM	142	87	61%	118	83%
5th	CES	HLSS, SSUHA, Healthnet TPO, IHO,GOAL,TRI-SS,THESO,IMA	120	95	79%	95	79%
6th	Lakes	Doctors with Africa (CUAMM)	113	66	58%	89	79%
7th	Jonglei	Nile Hope, MDM, JDF, Livewell, CMD, HFO, EDA, CRADA, Malaria Consortium, CMA	101	66	65%	79	78%
8th	Unity	Cordaid, UNIDOR, IRC, CHADO, CARE International, CRADA, CASS,IOM	94	67	71%	71	76%
9th	Warrap	GOAL, CCM, WVI, Malaria Consortium, UNKEA, Save the Children, MSF	119	81	68%	87	73%
10th	Upper Nile	Cordaid, WVI, RI, IMC, NIDO, UNKEA, MC, SSAID,Samaritans Purse,IOM	122	65	53%	84	69%
	South Sudan		**1233**	**895**	**73%**	**1027**	**83%**

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 73% and completeness was 83%. 9 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 7 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	Awerial	Doctors with Africa (CUAMM)	7	11	157%	7	100%
Lakes	Cueibet	Doctors with Africa (CUAMM)	15	15	100%	15	100%
Lakes	Wulu	Doctors with Africa (CUAMM)	14	14	100%	14	100%
Lakes	Yirol West	Doctors with Africa (CUAMM)	12	12	100%	12	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	46	100%	46	100%
Lakes	Rumbek East	Doctors with Africa (CUAMM)	24	0	0%	24	100%
CES	Yei	SSUHA	17	16	94%	16	94%
WBGZ	Jur River	Cordaid	35	15	43%	33	94%
WBGZ	Raja	HealthNetTPO	15	14	93%	14	93%
NBGZ	Aweil North	HealthNetTPO,IHO	33	30	91%	30	91%
Lakes	Yirol East	Doctors with Africa (CUAMM),LIVEWELL	11	7	64%	10	91%
Lakes	Rumbek North	Doctors with Africa (CUAMM)	7	6	86%	6	86%
NBGZ	Aweil East	IRC,TADO	36	30	83%	31	86%
NBGZ	Aweil West	HealthNetTPO	37	26	70%	32	86%
CES	Terekeka	HealthNetTPO	20	17	85%	17	85%
CES	Morobo	SSUHA,THESO,IMA	5	3	60%	3	60%
CES	Kajo Keji	SSUHA,GOAL,TRI-SS,IMA	17	8	47%	8	47%
CES	Lainya	SSUHA	16	5	31%	5	31%
Lakes	Rumbek Centre	Doctors with Africa (CUAMM)	23	1	4%	1	4%

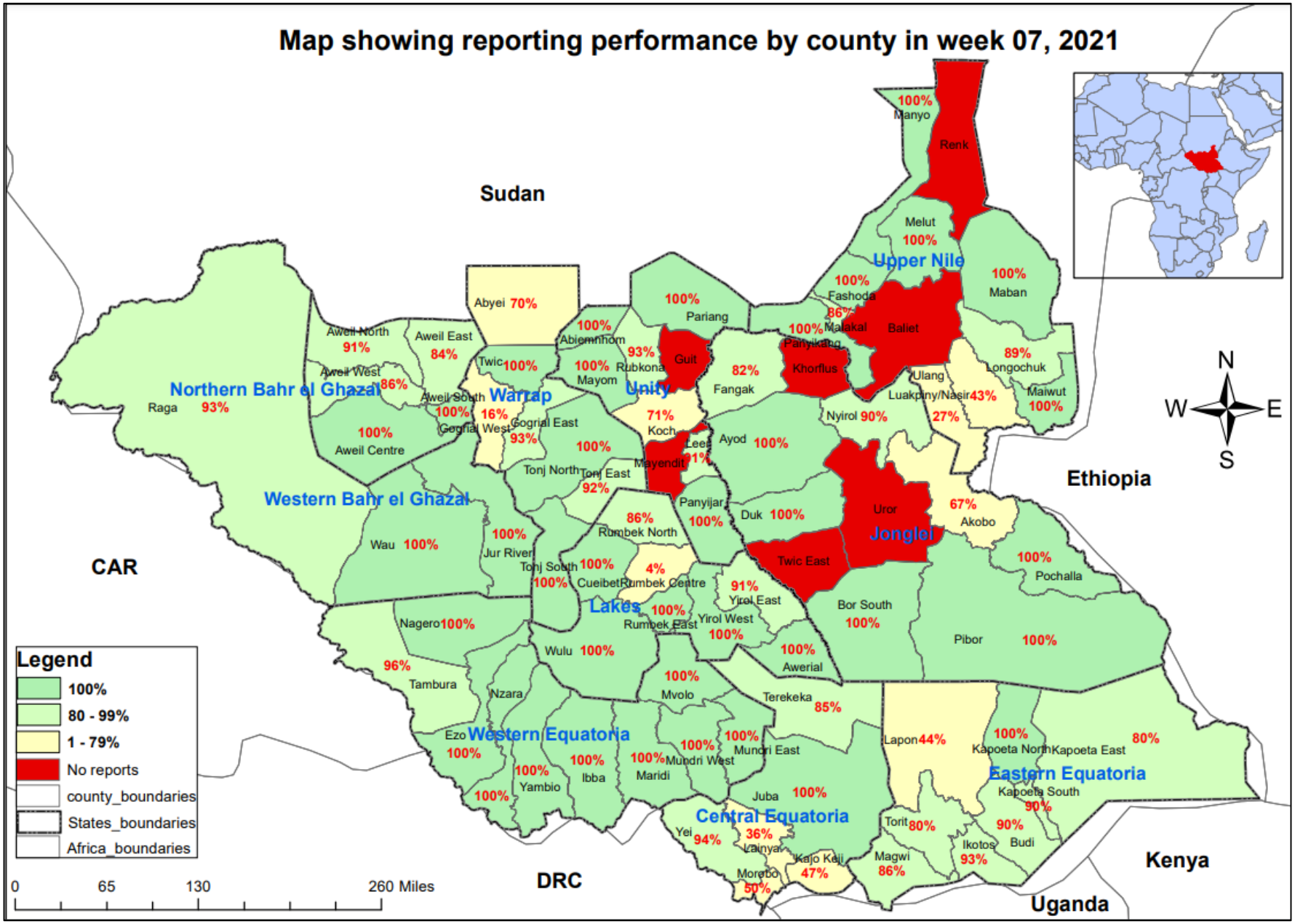
STATE	COUNTY	SUPPORTING PARTNER	Total No. of Functional Health Facilities in the County	No. of HFs Reported on Time	Timeliness Percentage	No. of HFs Reported regardless of time	Completeness Percentage
Unity	Abiemnhom	Cordaid	4	4	100%	4	100%
WES	Nagero	World Vision International	10	10	100%	10	100%
WES	Mundri West	CUAMM	21	21	100%	21	100%
WES	Maridi	AMREF	26	26	100%	26	100%
WES	Mundri East	CUAMM	19	19	100%	19	100%
WES	Yambio	World Vision International	42	42	100%	42	100%
WES	Mvolo	CUAMM	11	11	100%	11	100%
WES	Ezo	World Vision International	27	26	96%	27	100%
Unity	Panyijiar	IRC	15	14	93%	15	100%
Unity	Pariang	CARE International	11	10	91%	11	100%
WES	Ibba	AMREF	11	8	73%	11	100%
WES	Nzara	World Vision International	20	14	70%	20	100%
Unity	Mayom	CASS	14	13	93%	13	93%
Unity	Leer	UNIDOR	11	9	82%	10	91%
WES	Tambura	World Vision International	28	24	86%	25	89%
Unity	Rubkona	Cordaid,IRC,IOM,MSF	15	13	87%	13	87%
Unity	Koch	CRADA,IRC.	6	4	67%	5	83%
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 7 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	LIVEWELL	7	7	100%	7	100%
EES	Kapoeta North	CCM	16	0	0%	15	94%
EES	Ikotos	HLSS	27	25	93%	25	93%
Jonglei	Nyirol	CMA, Malaria Consortium	10	9	90%	9	90%
EES	Kapoeta South	CCM	10	6	60%	9	90%
EES	Budi	Cordaid	21	17	81%	19	90%
Jonglei	Fangak	CMD,HFO	16	12	75%	14	88%
Jonglei	Pibor	LIVEWELL,CRADA	6	5	83%	5	83%
EES	Magwi	HLSS	22	15	68%	18	82%
EES	Torit	Cordaid	20	15	75%	16	80%
Jonglei	Duk	MDM + JDF	15	0	0%	11	73%
Jonglei	Ayod	CMD,EDA	15	10	67%	10	67%
Jonglei	Bor	MDM + JDF	35	21	60%	21	60%
EES	Kapoeta East	CCM	12	5	42%	8	67%
EES	Lopa Lafon	HLSS	18	4	22%	8	44%
Jonglei	Akobo	NILE HOPE	8	2	25%	2	25%
Jonglei	Twic East	MDM + JDF	11	0	0%	0	0%
Jonglei	Canal Pigi	IMC	11	0	0%	0	0%
Jonglei	Uror	Nile Hope,Malaria Consortium	8	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 North	CCM	14	14	100%	14	100%
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	Akoka	IMC	5	5	100%	5	100%
Upper Nile	Fashoda	CORDAID	18	14	78%	18	100%
Upper Nile	Maiwut	RI	5	0	0%	5	100%
Warrap	Twic	GOAL	26	25	96%	25	96%
Warrap	Tonj East	CCM	12	11	92%	11	92%
Warrap	Gogrial East	GOAL	15	12	80%	13	87%
Upper Nile	Maban	WVI,RI,Samaritans Purse	17	8	47%	14	82%
Upper Nile	Longechuk	RI	9	7	78%	7	78%
Warrap	Abyei	AAA,Save the Children,MSF	10	7	70%	7	70%
Upper Nile	Makal	IMC	7	4	57%	5	71%
Upper Nile	Luakpiny Nasir	UNKEA,RI	15	5	33%	5	33%
Upper Nile	Ulang	UNKEA,RI	14	0	0%	3	21%
Warrap	Gogrial West	GOAL	31	0	0%	5	16%
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 07, 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 7 of 2021

Partner	HFs	Reporting		Performance	
PARTER	# OF SITES	# of reports received on Time	No. of HFs Reported regardless of time	Timeliness	Completeness
IRC	1	1	1	100%	100%
Medicair	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%
HAA	2	2	2	100%	100%
UNIDOR	2	2	2	100%	100%
HFO	2	2	2	100%	100%
SSHCO	1	1	1	100%	100%
MSF-E	6	6	6	100%	100%
IMC	6	6	6	100%	100%
GOAL	2	2	2	100%	100%
HFD	6	5	6	83%	100%
TADO	2	0	2	0%	100%
HAA	2	0	2	0%	100%
MSF-H	5	2	3	40%	60%
TRI-SS	2	0	0	0%	0%
TOTAL	**60**	**50**	**56**	**83%**	**93%**

Completeness was 93% and timeliness was 83% for weekly reporting in week 7, 2021 for partner-supported clinics serving IDP sites.

EVENT-BASED SURVEILLANCE

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

Alert by disease and hubs in week 7 of 2021 [a total of 116 events specific alerts generated by state

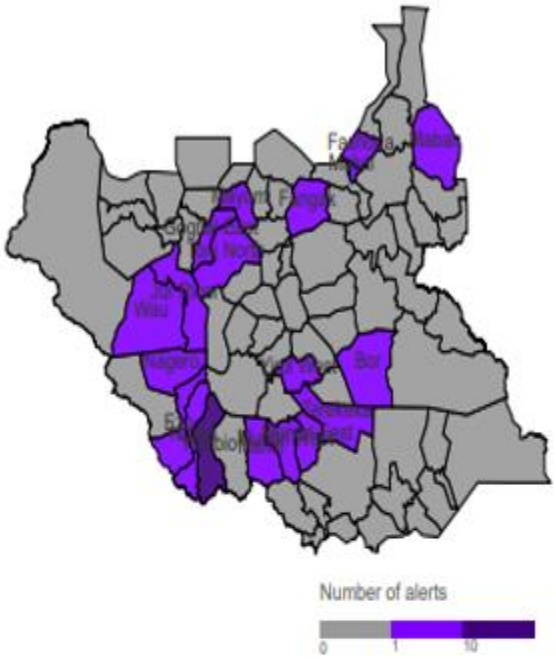
State	Acute jaundice syndrome	Acute Respiratory Infections (ARI)	Acute Watery Diarrhoea	Bloody Diarrhoea	Malaria	Measles	EBS	Covid-19	Total alerts
CES		1	6	4					11
EES			2	2			1	1	6
NBGZ			1	1					2
Unity	1		1	2	1			4	9
Upper Nile		6	4	2	3				15
Warrap				3	2				5
WBGZ		2	5	2	5				14
WES		1	10	4	36	2		1	54
Total alerts	**1**	**10**	**29**	**20**	**47**	**2**	**1**	**6**	**116**

During this week:

- 10 ARI alerts: 1 from CES sample was collected in tested negative for COVID-19 ,,6 from Upper Nile State sample collected and tested, 2 from WBGZ state sample collected and tested, 1 from WES sample collected and tested negative.
- 29 AWD alerts: 6 from CES, Sample not collected but treated as normal diarrhea , 2 from EES investigation is under way,,,1 from NBGZ it was treated as normal diarrhea,1 from Unity treated as normal diarrhea,4 from Upper Nile, 5 from WBGZ treated as diarrhea, 10 from WES investigation under way.
- 20 ABD alerts: 4 from CES sample will be collected, 2 from EES Sample tested negative, 1 from NBGZ State treated as diarrhea,2 from Unity treated for mild diarrhea, 2 from UNS sample will be collected, 3 from Warrap treated for mild diarrhea,2 from WBGZ Sample was not collected but given treatment for diarrhea,4 from WES sample not collected as patients were treated for mild diarrhea.
- 47 Malaria alerts: 1 from Unity, 3 from UNS, 2 from Warrap,5 from WBGZ and 36 from WES these are due to the high increase of malaria cases in the Country.
- 2 Measles alerts: 2 from WES in Yambio Teaching Hospital and Yubu PHCC in Tambura county and samples were collected.
- 1 AJS alerts: This alert is from Unity which is a true alert of Jaundice syndrome, reported in area of confirmed cases of jaundice.
- 1 EBS alerts:1 from EES in Nimule Hospital for Guinea Worm and the team investigated it.
- 6 COVID-19 alerts: 1 from EES investigated, 1 from Lakes ,1 from Unity This is true an alert reported by clinician in the area where there is Confirmed COVID-19,

Alert: Map of key disease alerts by county of week 7 of 2021

Map 2a | Malaria (W7 2021)



Map 2b | Bloody diarrhoea (W7 2021)

Map 2c | Measles (W7 2021)

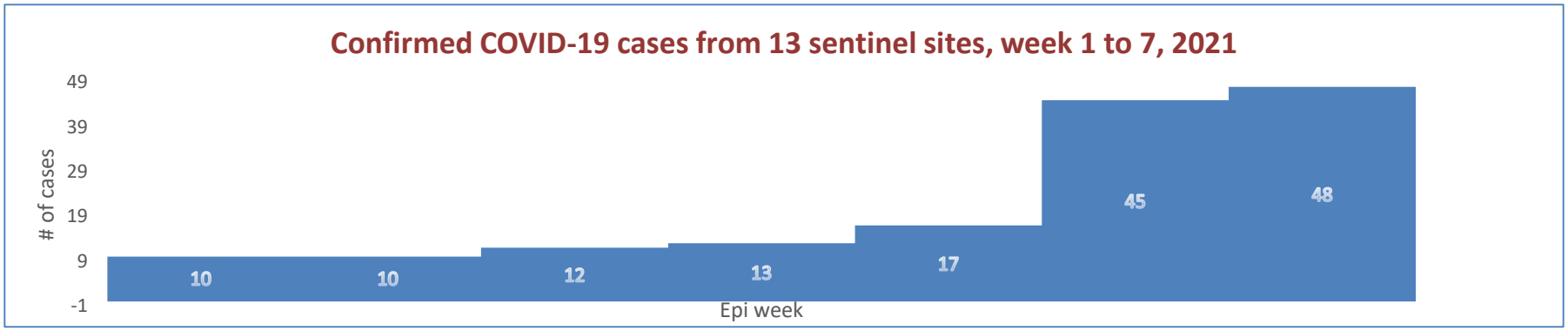
W7	Cumulative (2021)	
0	5	Low risk
5	5	Medium risk
1	31	High risk
1	14	Very high risk

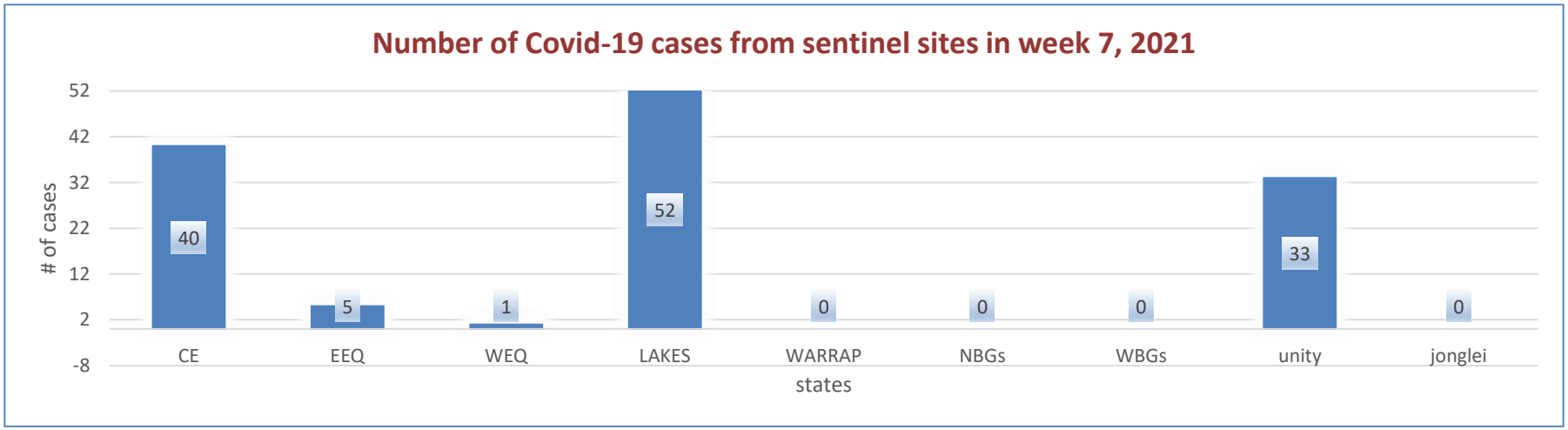
96%	82%	% verified
0%	0%	% auto-discarded
1%	4%	% risk assessed
1%	3%	% requiring a response

SUSPECTED OUTBREAKS

Major suspected outbreaks in South Sudan in 2020

Routine Sentinel Surveillance | Human Influenza and Covid-19





- **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 7064 samples have been collected in 2021 with 325 (4.6%) being positive for COVID-19 from sentinel sites.**

Response| Suspect Epidemics; Curent Malaria trends 7, 2021

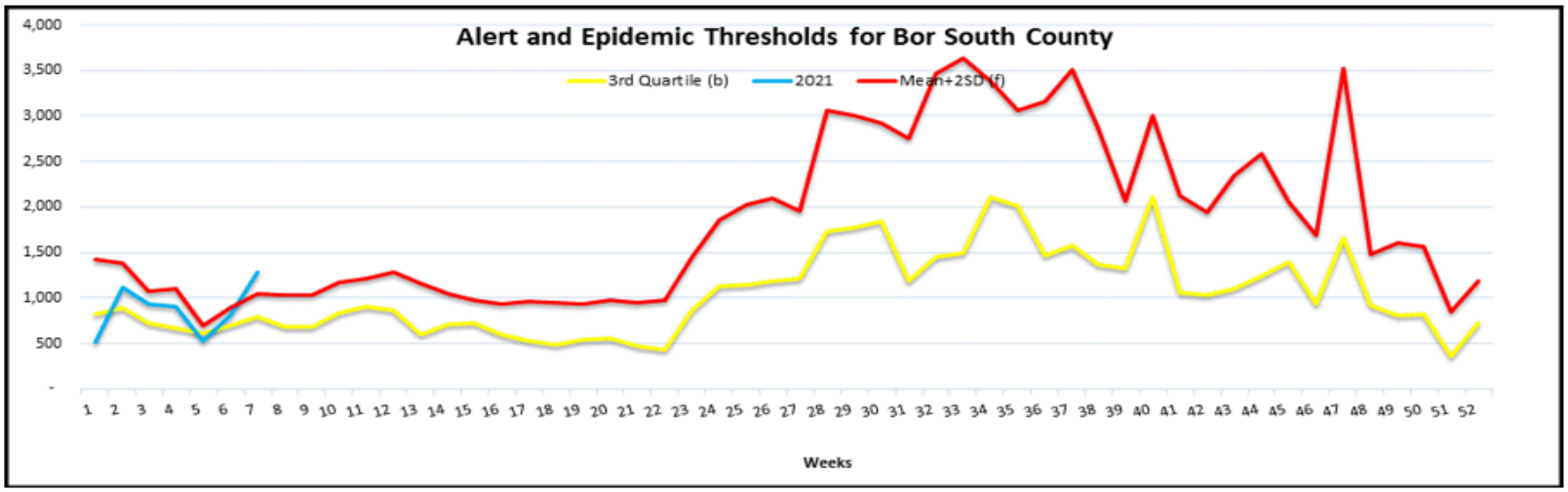
Malaria was the leading cause of morbidity and mortality, accounting for **48.5%** of all morbidities and **1.7%** of all mortalities this week.

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. Jonglie State (Bor)

In the PoC sites; malaria is one of the top cause of morbidity with respective proportional morbidity reported as **Bentiu** (**4%**); **Malakal** (**12%**); **Juba** (**38%**) and **Wau** (**9%**) PoCs of OPD consultations, respectively.

Bor



Update on RVF investigations in Yirol/ Lakes State; Lab Results

- Following reports of 175 abortions and 15 deaths in cattle in Yirol 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

- 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.

Response to Public Health Emergencies| (1)

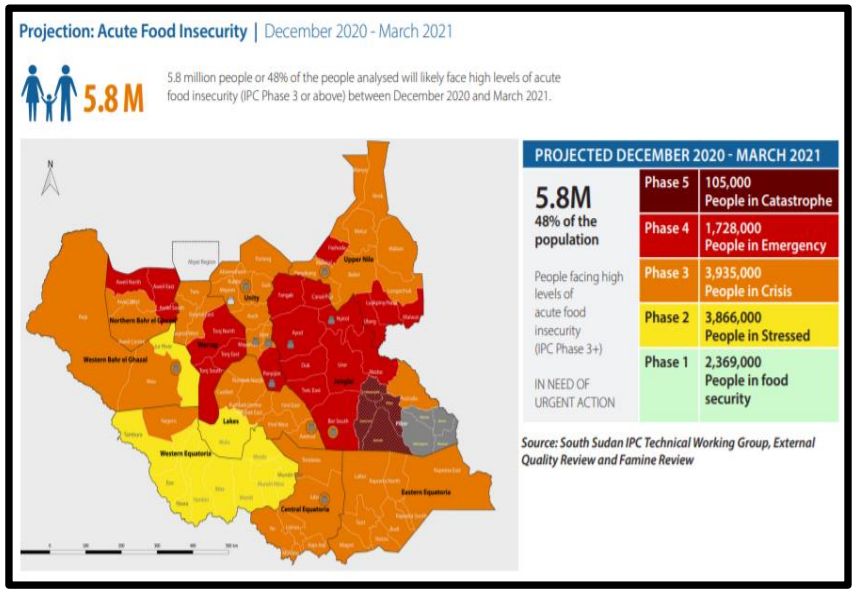
Food Insecurity

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.



Response to Public Health Emergencies| (2)

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.

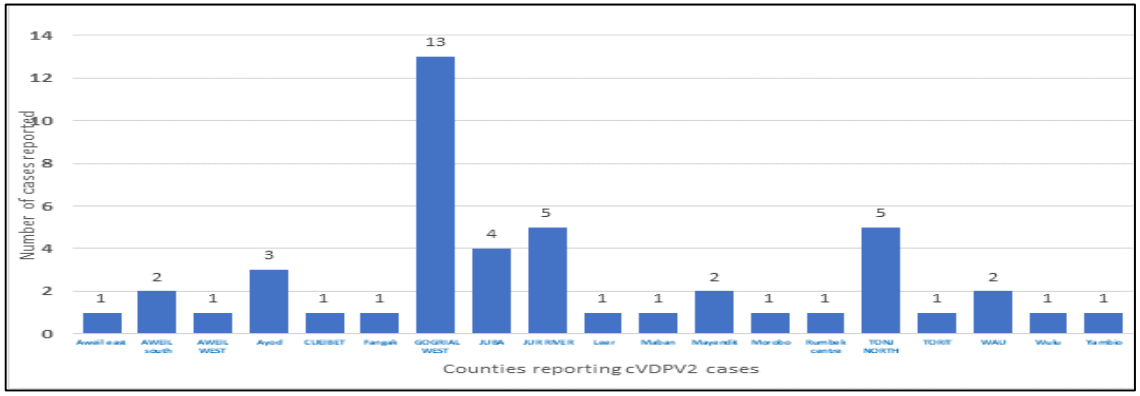
Epidemiologic details

- 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.

Distribution of cVDPV2 cases by county, South Sudan



- 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 been collated with plans ongoing to reach the remaining 7 counties (Ulang, Nasir, Longechuk, Maiwut, Tonj East, Tonj North and Rumbek North).

Response| Summary of major ongoing 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
Ongoing epidemics								
Hepatitis E	**Bentiu PoC**	03/01/2018	3	422 (0.007)	Yes	No	Yes	Yes
cVDPV2	**13 counties**	11/06/2020 18/09/2020	7	47	Yes	Yes	Yes	Yes

Bacteriology lab updates 2021

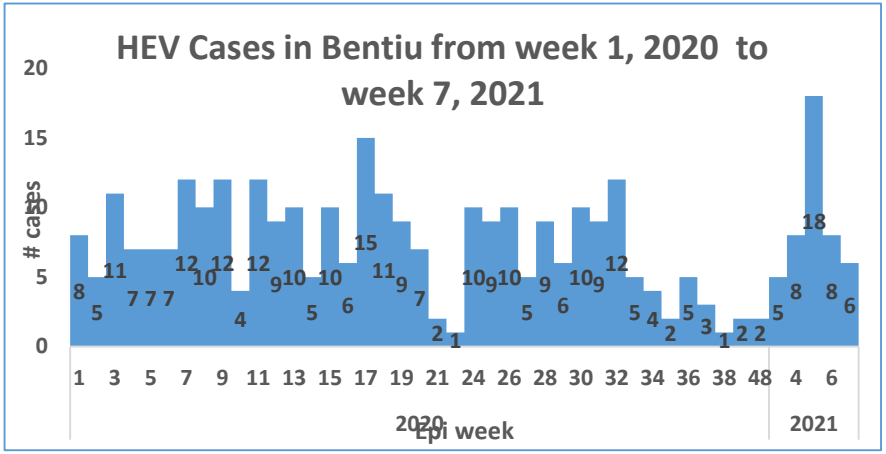
Epi-week	County (no. of samples)	Specimen tested (n)	Sample type	Suspected diseases	Lab Results	Comment
52	Bor South	2	stool	Cholera	No Growth for all enteric pathogens	
1	Juba	1	stool	Cholera	Growth for *E Coli*	
1	Juba	1	stool	Cholera	No Growth for *V. Cholerae*	
1	Ibba	1	stool	Cholera	No Growth	
1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

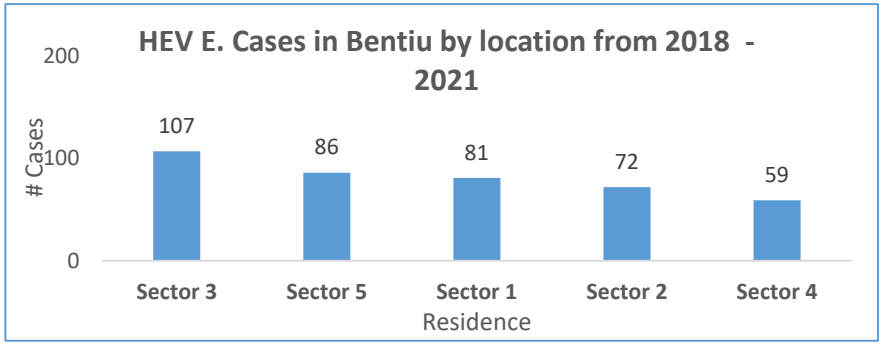
Measles Highlights in 2021

- Measles outbreaks confirmed in 2020
  - 8 counties – Tonj East, Magwi, Bor, Kapoeta East, Tonj South, Wau and Pibor
  - No new outbreak confirmed in 2021

Response| Confirmed epidemics

Hepatitis E, Bentiu PoC (1)

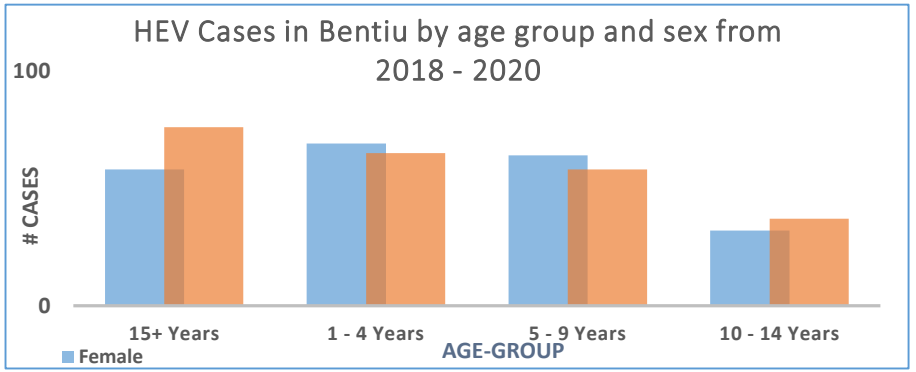




Descriptive epidemiology

- 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**.

Age-Group	Alive	Dead	Grand Total	Percentage	CFR	Cum. %2
1 - 4 Years	134		134	29%	0%	29%
10 - 14 Years	69		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	



Hepatitis E, Bentiu PoC (2)

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.

Response| Summary of major controlled outbreaks in 2019, 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
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** (**82,25% coverage**) individuals were vaccinated against cholera in Pibor, Lekuangule, Verteth and Gumuruk.
- **2nd round start dates**)
- 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)

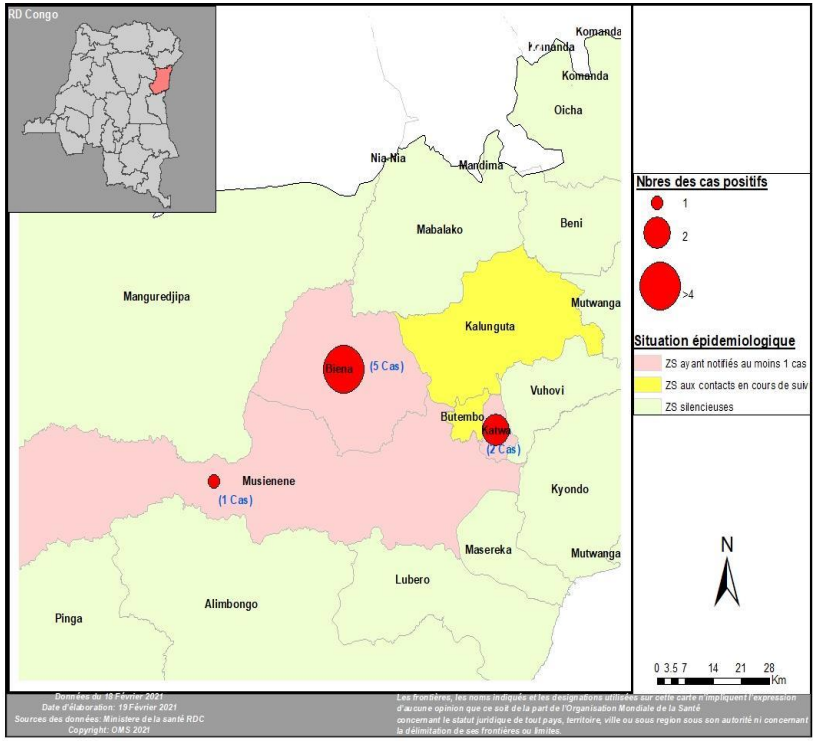
DRC, North Kivu EVD Outbreak (27th Feb, 2021)

Cumulative Figures:

- 8 EVD cases reported since 7 Feb
- 4 deaths (CFR 50%)
- 5 health areas affected across 3 HZ (Biena, Katwa & Musienene)
- 2 health workers infected
- 737 contacts, contacts of contacts and probable contacts vaccinated to date using experimental vaccine rVSV-ZEBOV-GP under WHO MEURI protocol

Key Highlights – 26 Feb

- 0 newly confirmed cases reported
- 0 deaths among confirmed cases
- 137 alerts reported (100% investigated, 47 validated)
- 699/797 (87.7%) contacts followed
- 58 samples tested, 0 positive
- 4 confirmed cases under treatment in 2 ETCs
- 11 suspected cases under treatment



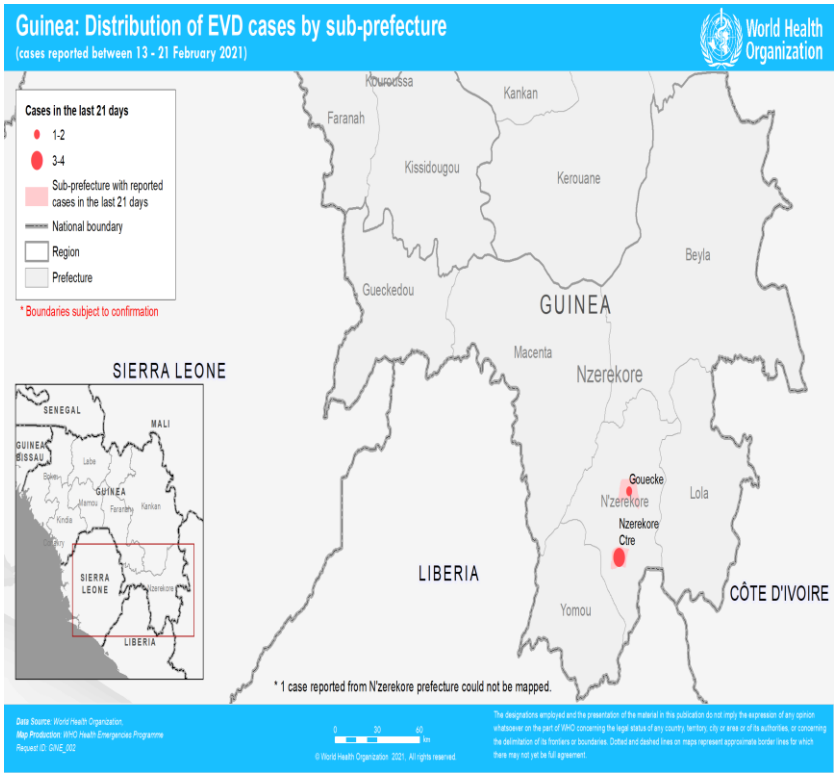
EVD Outbreak in Guinea as of 26 Feb, 2021 (n = 15)
Situation Overview since declaration on 14th Feb

Cumulative figures

- **15** EVD cases reported to date (**11** confirmed, **4** probable)
- Including 5 deaths (CFR 33.33%), 3 SDB
- 1 health district active, 4 on high alert
- **7** patients under case management in Nzerekore ETC
- **771** vaccinated, 123 high-risk contacts, **520** contacts of contacts and **128** probable contacts vaccinated to date including **236** HWs using experimental vaccine rVSV-ZEBOV-GP under WHO MEURI protocol

Key Highlights – 26 Feb

- **6** newly confirmed cases reported in Nzerekore on 26th Feb
- **301/304 (99%)** contacts followed
- **47** new contacts registered
- Ultra-cold (6 units) received
- **20,000** vaccine doses donated
- Ethical approval for EVD therapies under MEURI protocol approved.
- Patient treatment to commence on 27 Feb
- **4** confirmed cases under treatment in Nzerekore treatment center



EBOLA VIRUS DISEASE[EVD] PREPAREDNESS IN SOUTH SUDAN

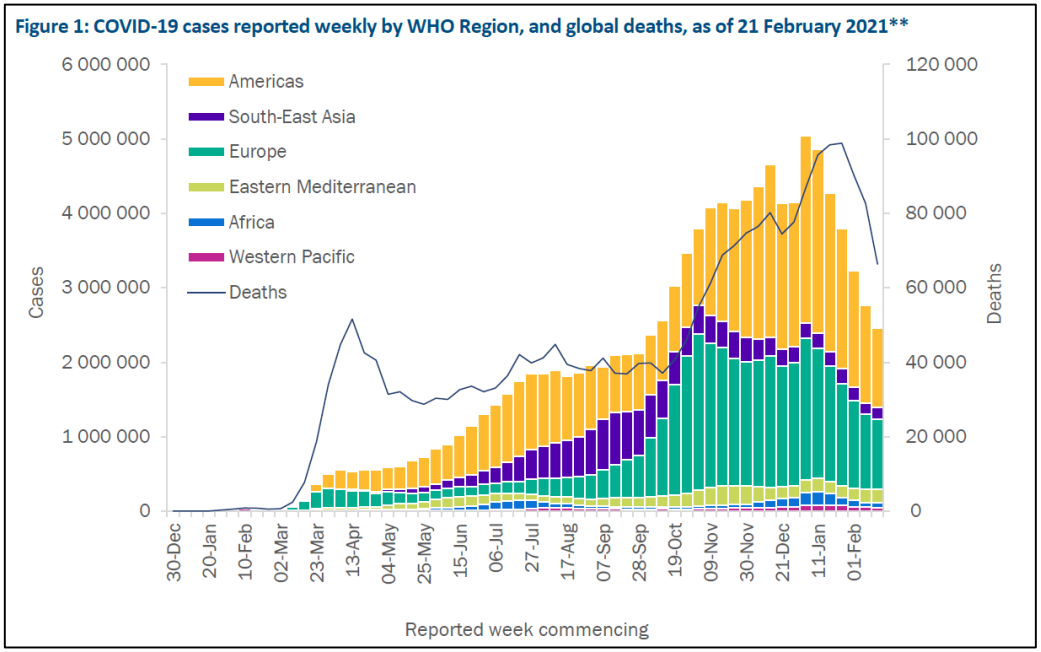
Brief on the Ebola situation in DR Congo and updates on EVD preparedness in South Sudan

COVID-19 Updates

COVID-19 Virus Situation Summary

Situation update as of 21st Feb, 2020

- The COVID-19 pandemic initial cases were detected in Wuhan China
- Globally >**110 763 898** million cases (>**2 455 331** deaths)
- Africa >**2 789 884** million cases (>**70 332** deaths)

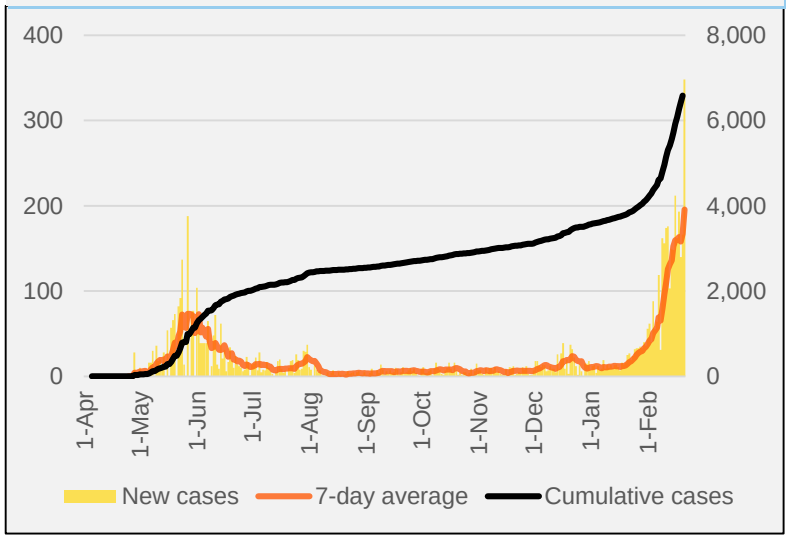


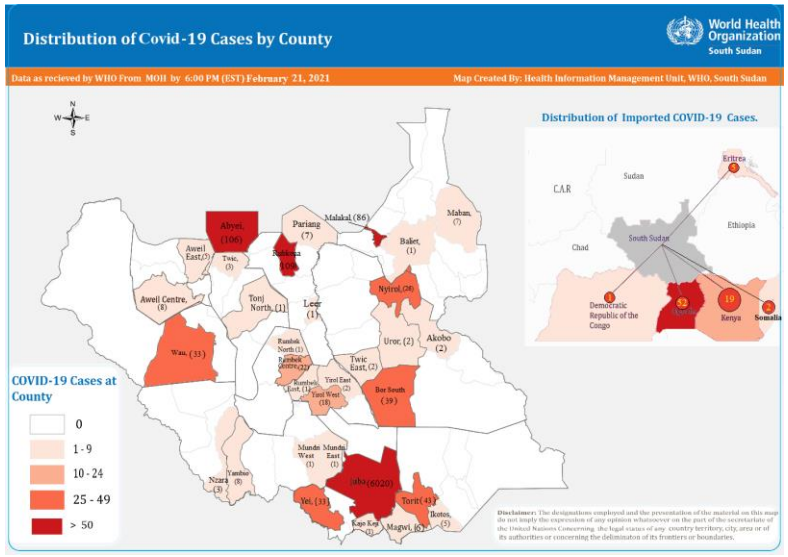
WHO: **https://www.who.int/health-topics/coronavirus**

COVID-19 Response in South Sudan as of 21st Feb, 2021

- **6,931** confirmed COVID-19 cases in South Sudan; > **85%** in Juba with **87** deaths and a case fatality rate (CFR) of **1.25%**. Total **12,537** 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 17.9% in week 6 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.

Case notification curve Apr 2020-Feb 2021





Overall Conclusions and Recommendations

Conclusion

- The overall IDSR and EWARN reporting performance in week 7, 2021 is above the target of 80%. (9) states were above 80%
- 6,931 confirmed COVID-19 cases in South Sudan; >85% in Juba with 78 deaths (CFR of 1.25%). Total 12,537 contacts identified, quarantined, & undergoing follow up
- A total of 2,120 COVID-19 alerts have been investigated with 2,013 (94.6%) 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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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

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