

South Sudan

Integrated Disease surveillance and response (IDSR)

Epidemiological Bulletin Week 38 of 2020 (September 14-September 20)



World Health
Organization
South Sudan



- In week 38, 2020 IDSR reporting completeness was 90% and timeliness was 69% at health facility level. EWARN reporting completeness was 85% and timeliness was 66%
- Of the 110 alerts in week 38, 2020; 60% were verified 0% were risk assessed and 0% required a response. Malaria (32), AWD (34), ARI (18), measles (0) and bloody diarrhea (16) were the most frequent alerts in week 38, 2020
- Malaria remains the top cause of morbidity and accounted for 101,548 cases (62.% of OPD cases)
- A total of 1,241 COVID-19 alerts have been investigated with 1,050 (84.6%) being verified. Total of 2,676 COVID-19 confirmed cases and 49 deaths, CFR of 1.8%
- Other hazards include malaria in 7 counties; floods in 32 counties; measles in Pibor; HEV in Bentiu PoC; yellow fever in Kajo-keji.

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 38 of 20202



Completeness States Ranking	States	Supporting Partners	Total No. of Functional Health Facilities in the State	No. of HF's Reported on Time	Timeliness Percentage	No. of HF's Reported regardless of Time	Completeness Percentage
1st	WES	AMREF, World Vision, CUAMM, CDTY, OPEN	213	124	58%	212	100%
2nd	CES	HLSS, SSUHA, Healthnet TPO, IHO, GOAL, TRI-SS, THESO	118	108	92%	112	95%
3rd	Warrap	GOAL, CCM, WVI, Malaria Consortium, UNKEA, Save the Children, MSF	119	98	82%	113	95%
4th	Lakes	Doctors with Africa (CUAMM), LIVEWELL	113	77	68%	106	94%
5th	NBGZ	Malaria Consortium, Healthnet TPO, IRC, CEDS, IHO	131	100	76%	118	90%
6th	EES	Cordaid, HLSS, CCM	142	101	71%	126	89%
7th	WBGZ	Cordaid, Healthnet TPO, CARE International, IOM	75	32	43%	66	88%
8th	Upper Nile	Cordaid, WVI, RI, IMC, NIDO, UNKEA, MC, SSAID, Samaritans Purse	119	88	74%	100	84%
9th	Jonglei	Nile Hope, MDM, JDF, Livewell, CMD, HFO, EDA, CRADA, Malaria Consortium, CMA	103	61	59%	81	79%
10th	Unity	Cordaid, UNIDOR, IRC, CHADO, CARE International, CRADA, CASS	88	51	58%	62	70%
	South Sudan		1221	840	69%	1096	90%

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 69% and completeness was 90%. 8 states were above the target of 80% with highest reporting rate in WES and CES

IDSR timeliness & completeness performance at county level for week 38 of 2020 (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%
NBGZ	Aweil South	Malaria Consortium(MC),IHO	9	9	100%	9	100%
WBGZ	Wau	Cordaid	28	28	100%	28	100%
CES	Juba	HLSS	45	45	100%	45	100%
CES	Terekeka	HealthNetTPO	20	20	100%	20	100%
Lakes	Rumbek Centre	Doctors with Africa (CUAMM)	23	22	96%	23	100%
Lakes	Wulu	Doctors with Africa (CUAMM)	14	13	93%	14	100%
Lakes	Rumbek North	Doctors with Africa (CUAMM)	7	5	71%	7	100%
Lakes	Rumbek East	Doctors with Africa (CUAMM)	24	1	4%	23	96%
CES	Yei	SSUHA	17	15	88%	16	94%
NBGZ	Aweil Centre	Malaria Consortium(MC)	15	13	87%	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%
NBGZ	Aweil West	HealthNetTPO	37	19	51%	33	89%
NBGZ	Aweil East	IRC,TADO	36	29	81%	32	89%
CES	Kajo Keji	SSUHA,GOAL,TRI-SS	16	11	69%	14	88%
Lakes	Awerial	Doctors with Africa (CUAMM)	7	6	86%	6	86%
WBGZ	Jur River	Cordaid	35	0	0%	29	83%
CES	Lainya	SSUHA	16	13	81%	13	81%
CES	Morobo	SSUHA,THESO	5	4	80%	4	80%
Lakes	Yirol West	Doctors with Africa (CUAMM)	12	8	67%	8	67%
WBGZ	Raja	HealthNetTPO	14	5	36%	9	64%

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%
Unity	Mayom	CASS	9	9	100%	9	100%
WES	Mundri West	CUAMM	21	21	100%	21	100%
WES	Mvolo	CUAMM	11	11	100%	11	100%
WES	Mundri East	CUAMM	19	18	95%	19	100%
Unity	Panyijjar	IRC	15	11	73%	15	100%
WES	Yambio	World Vision International	42	26	62%	42	100%
WES	Ezo	World Vision International	27	15	56%	27	100%
WES	Ibba	AMREF	11	5	45%	11	100%
WES	Tambura	World Vision International	26	3	12%	26	100%
WES	Nzara	World Vision International	20	0	0%	20	100%
WES	Nagero	World Vision International	10	0	0%	10	100%
WES	Maridi	AMREF	26	25	96%	25	96%
Unity	Leer	UNIDOR	11	8	73%	10	91%
Unity	Rubkona	Cordaid,IRC,IOM,MSF	15	11	73%	12	80%
Unity	Koch	CRADA,IRC.	5	3	60%	4	80%
Unity	Pariang	CARE International	11	4	36%	7	64%
Unity	Guit	CHADO	7	1	14%	1	14%
Unity	Mayendit	CASS	12	0	0%	0	0%

IDSR timeliness & completeness performance at county level for week 38 of 2020 (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 South	CCM	10	10	100%	10	100%
EES	Torit	Cordaid	20	17	85%	19	95%
Jonglei	Fangak	CMD,HFO	16	15	94%	15	94%
EES	Lopa Lafon	HLSS	18	9	50%	17	94%
EES	Ikotos	HLSS	27	21	78%	24	89%
EES	Kapoeta North	CCM	16	9	56%	14	88%
EES	Magwi	HLSS	22	17	77%	19	86%
EES	Budi	Cordaid	21	16	76%	18	86%
Jonglei	Ayod	CMD,EDA	15	7	47%	12	80%
Jonglei	Twic East	MDM + JDF	11	8	73%	8	73%
Jonglei	Duk	MDM + JDF	15	0	0%	11	73%
Jonglei	Pibor	LIVEWELL,CRADA	3	1	33%	2	67%
Jonglei	Bor	MDM + JDF	35	20	57%	21	60%
EES	Kapoeta East	CCM	12	2	17%	5	42%
Jonglei	Akobo	NILE HOPE	8	3	38%	3	38%
Jonglei	Nyiroi	CMA,Malaria Consortium	10	0	0%	2	20%
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 South	CCM	12	12	100%	12	100%
Upper Nile	Fashoda	CORDAID	13	13	100%	13	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 West	GOAL	31	30	97%	30	97%
Warrap	Twic	GOAL	26	25	96%	25	96%
Upper Nile	Maban	WVI,RI,Samaritans Purse	17	11	65%	16	94%
Warrap	Tonj North	CCM	14	13	93%	13	93%
Warrap	Gogrial East	GOAL	15	1	7%	14	93%
Upper Nile	Renk	WVI + RI	13	12	92%	12	92%
Warrap	Tonj East	CCM	12	11	92%	11	92%
Upper Nile	Luakpiny Nasir	UNKEA,RI	15	13	87%	13	87%
Upper Nile	Makal	IMC	7	1	14%	6	86%
Warrap	Abyei	AAA,Save the Children,MSF	10	6	60%	8	80%
Upper Nile	Maiwut	RI	5	3	60%	4	80%
Upper Nile	Manyo	CORDAID	10	6	60%	6	60%
Upper Nile	Baliet	IMC	4	0	0%	1	25%
Upper Nile	Ulang	UNKEA,RI	14	3	21%	3	21%



Surveillance: EWARS performance indicator by partner for week 38 of 2020

Partner	HF's	Reporting		Performance	
PARTER	# OF SITES	# of reports received on Time	No. of HF's Reported regardless of time	Timeliness	Completeness
IRC	1	1	1	100%	100%
Medair	2	2	2	100%	100%
HAA	2	2	2	100%	100%
RHS	1	1	1	100%	100%
IMC	6	6	6	100%	100%
Medicaire	2	2	2	100%	100%
UNIDOR	2	2	2	100%	100%
GOAL	2	2	2	100%	100%
HFO	2	2	2	100%	100%
IOM	12	8	12	67%	100%
MSF-E	6	4	6	67%	100%
TRI-SS	2	0	2	0%	100%
CMD	1	0	1	0%	100%
IMA	9	6	6	67%	67%
MSF-H	5	1	3	20%	60%
World Relief	2	0	0	0%	0%
SMC	2	0	0	0%	0%
TOTAL	59	39	50	66%	85%

Completeness was 85% and timeliness was 66% for weekly reporting in week 38, 2020 for partner-supported clinics serving IDP sites.

EVENT-BASED SURVEILLANCE



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





State	Acute Respiratory Infections (ARI)	Acute Watery Diarrhoea	Bloody Diarrhoea	Malaria (Confirmed)	Neonatal Tetanus	Guinea Worm	PoE COVID EVD	Covid-19	Total alerts
CES		3	1	1			1		6
EES		8	2	3			1		14
Jonglei			1					1	2
Lakes	2	4	3	2					11
Unity	1	1				1		1	4
Upper Nile	9	4	7	6				1	27
Warrap		3			1				4
WBGZ		6		4			1	1	12
WES	6	5	2	16		1			30
Total alerts	18	34	16	32	1	2	3	4	110

During this week:

18 ARI alert: 11 are undergoing verification and 7 under monitoring

34 AWD alert: 14 are undergoing verification and 20 under monitoring

16 ABD alert: 7 under going verification and 9 under monitoring

32 Malaria alerts: 22 are under investigation and 10 under monitoring

3 PoE COVID EVD alert: 2 are under investigation and 1 under monitoring

4 Covid-19 alert: 1 undergoing investigation and 3 under Monitoring

1 Neonatal Tetanus alert: 1 under monitoring

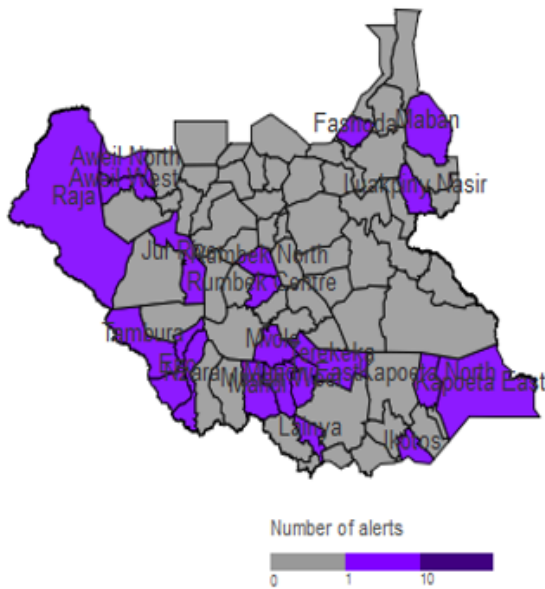
2 Guinea Worm alert: 1 undergoing investigation and 1 under monitoring



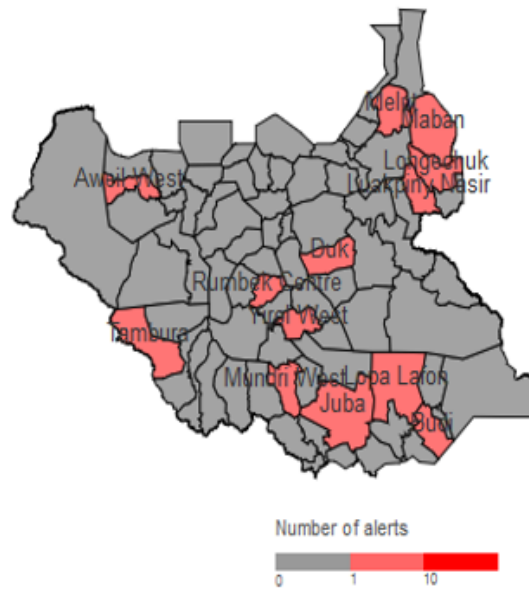
Alert: Map of key disease alerts by county of week 38 of 2020



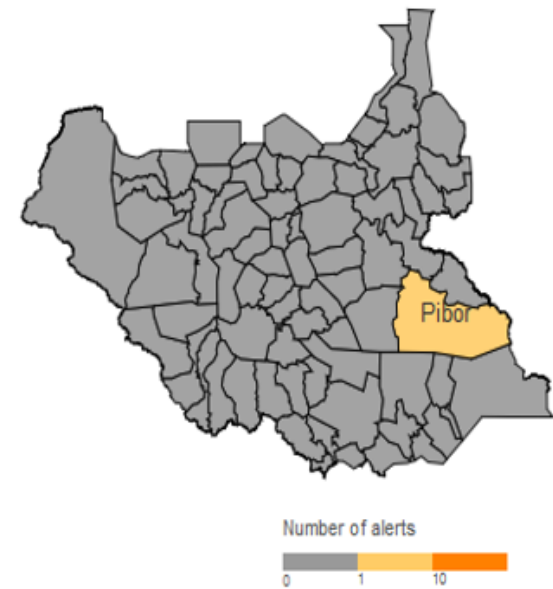
Map 2a | Malaria (W38 2020)



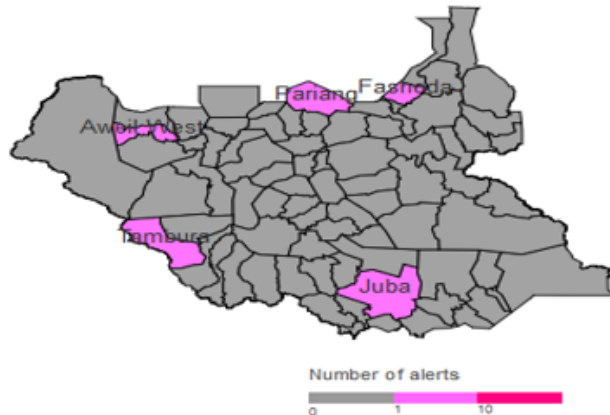
Map 2b | Bloody diarrhoea (W38 2020)



Map 2c | Measles (W38 2020)



Map 2e | Guinea Worm (W38 2020)



W38	Cumulative (2020)	
0	11	Low risk
4	4	Medium risk
0	27	High risk
0	55	Very high risk
60%	79%	% verified
0%	0%	% auto-discarded
0%	1%	% risk assessed
0%	1%	% requiring a response

SUSPECTED OUTBREAKS



Major suspected outbreaks in South Sudan in
2020





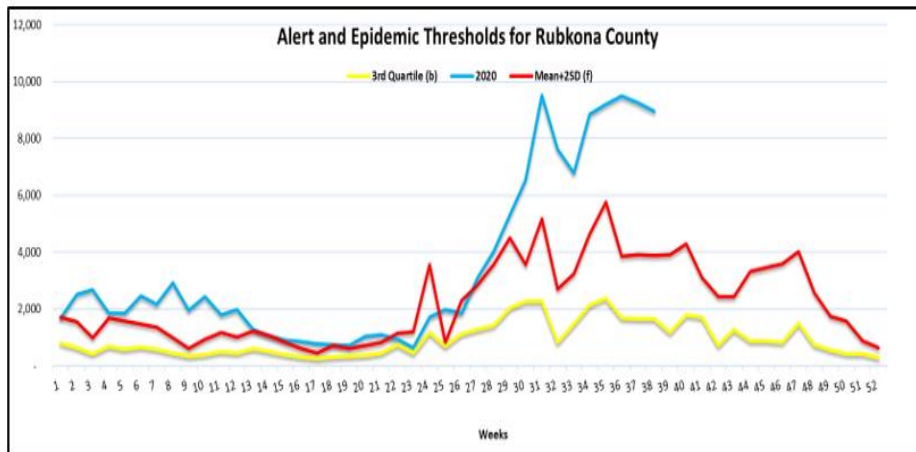
Malaria was the leading cause of morbidity and mortality, accounting for **62.0%** of all morbidities and **17.8%** of all mortalities this week.

There were **7 Counties** with malaria trends that exceeded the threshold (third quartile of trends for the period 2013-2017) and these include the following:

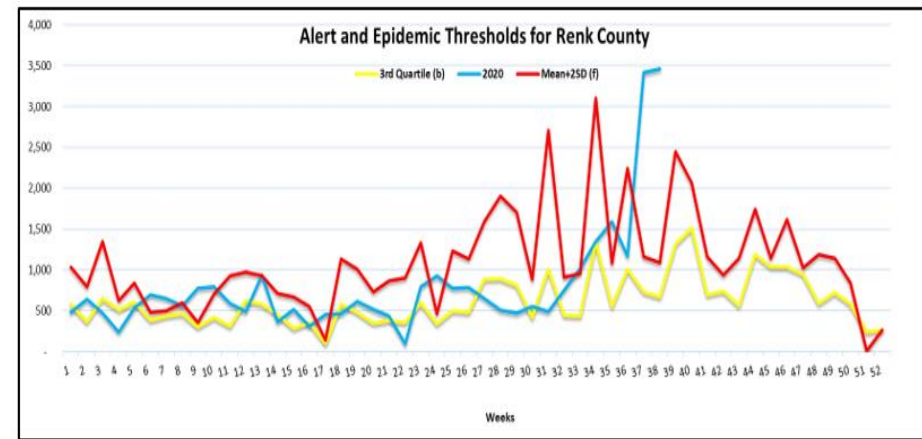
- Unity state (Pariang, Rubkona)
- NBGZ State (Wau)
- Warrap State (Abyei, Twic Maayardit)
- Upper Nile State (Renk, Melut)

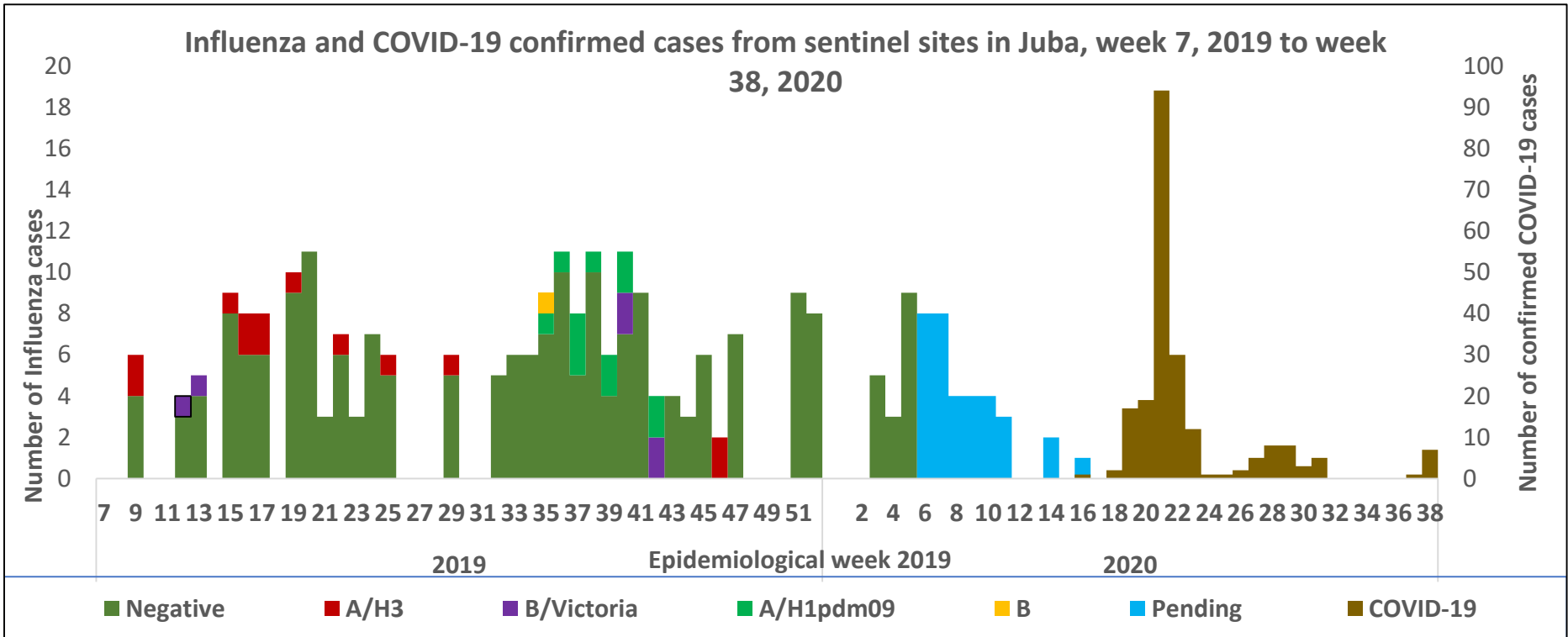
In the PoC sites; malaria is the top cause of morbidity in Bentiu (57%); Juba (50%), Bor (0%) and Wau (38%) PoCs, in Malakal PoC malaria accounts for (4%) of OPD consultations, respectively.

Rubkona



Renk





- In week 7, 2019, South Sudan started case-based surveillance for Influenza Like Illness (ILI) and Severe Acute Respiratory Infection (SARI) cases through systematic collection of epidemiological and virological information.
- In 2019, a total of 309 ILI/SARI samples have been collected and tested in UVRI 228 being negative; 6 positive for Influenza B (Victoria); 13 positive for Influenza A (H3); and 12 positive for Influenza A (H1)pdm09 and (50) samples are pending test results .
- There are currently 20 Covid-19 designated sentinel surveillance sites in Juba that are collecting epidemiological data and samples from ILI/SARI cases. A total of 3600 samples have been collected in 2020 with 214 (5.9%) being positive for COVID-19 in Juba. These sentinel samples have not been tested for influenza in 2020

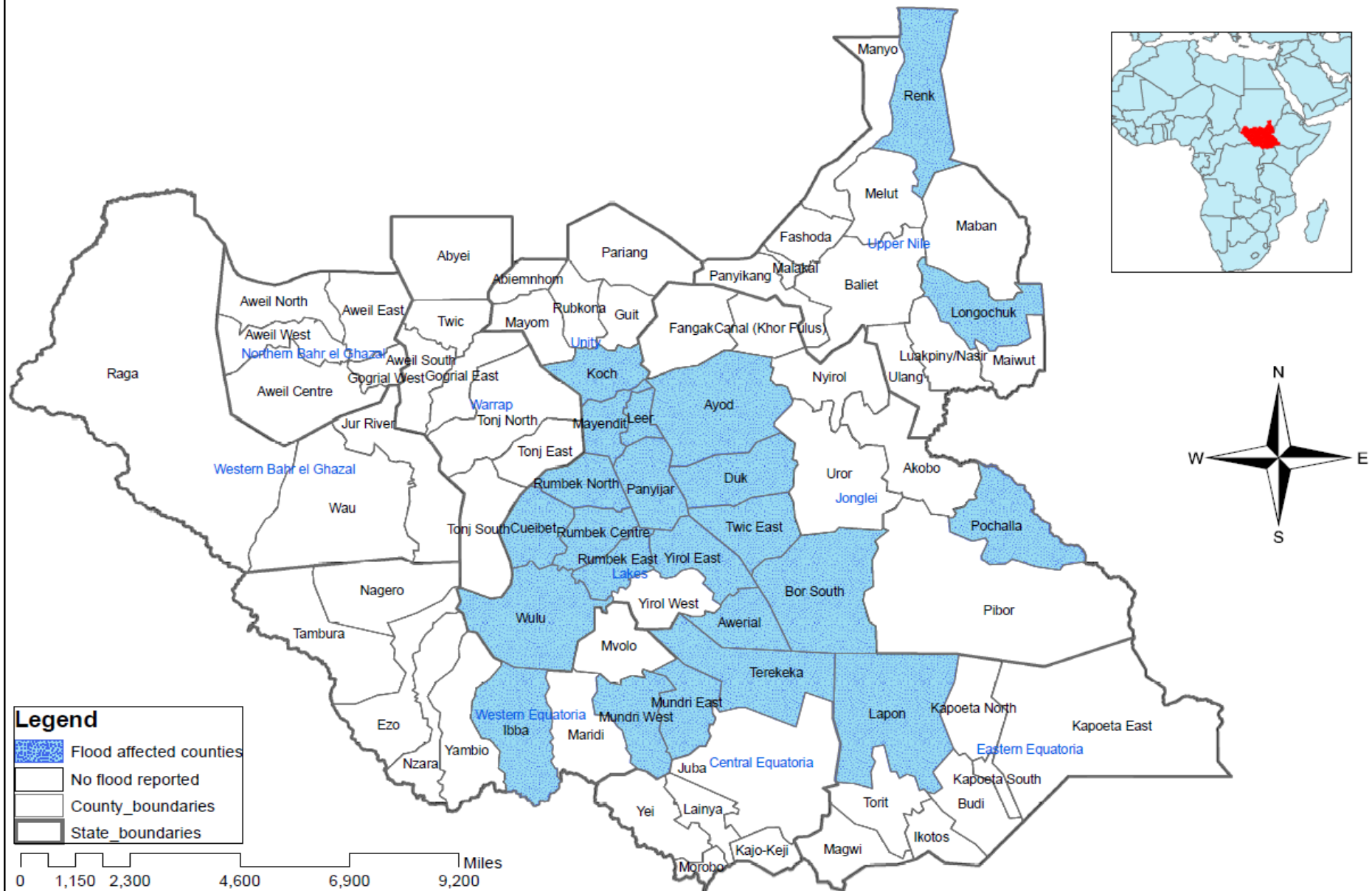
ACTIVE OUTBREAKS AND PUBLIC HEALTH EVENTS



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



Map showing the flood affected counties in south sudan July - August, 2020.



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.



Flooding, South Sudan, week 38, 2020

Description

Monitoring of flood forecast continues across the country, in the next two weeks it is forecast that the southern part of the country (the Eqatorias and Jonglei) will experience above-average rainfall. The number of affected population still over 600,000 individuals. No new flooding event reported.

Public health response

- Floods multi-cluster response and assessments are ongoing in the other affected Counties.
- Five affected counties (Pibor, Duk, Tonj East, Tonj South, Ayod) prioritized for response scale-up.
- Humanitarian core pipeline managers are currently quantifying needs for multisectoral flood response this year.
- Plans are underway to mobilize resources to support the flood humanitarian response.





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	409 (0.007)	Yes	No	Yes	Yes
Measles	Bentiu PoC	24/04/2019	NR	482 (0.006)	Yes	Yes	Yes	N/A
Measles	Pibor	27/1/2020	NR	86(0.058)	Yes	Yes	Yes	N/A





- Measles outbreaks confirmed in 2020

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

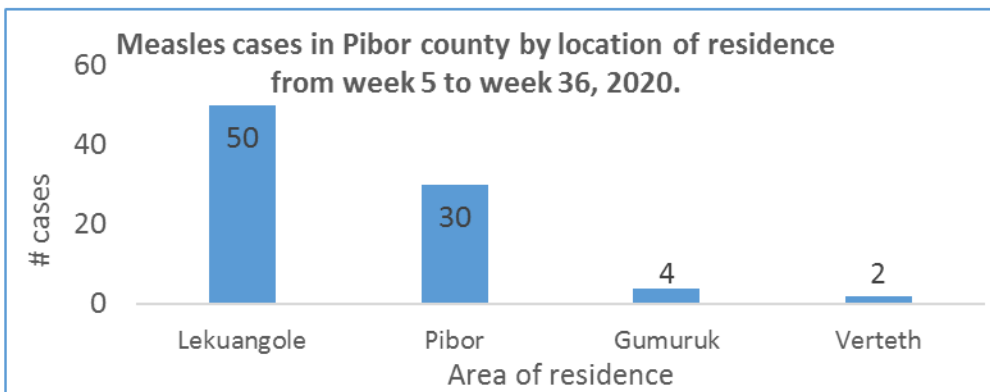
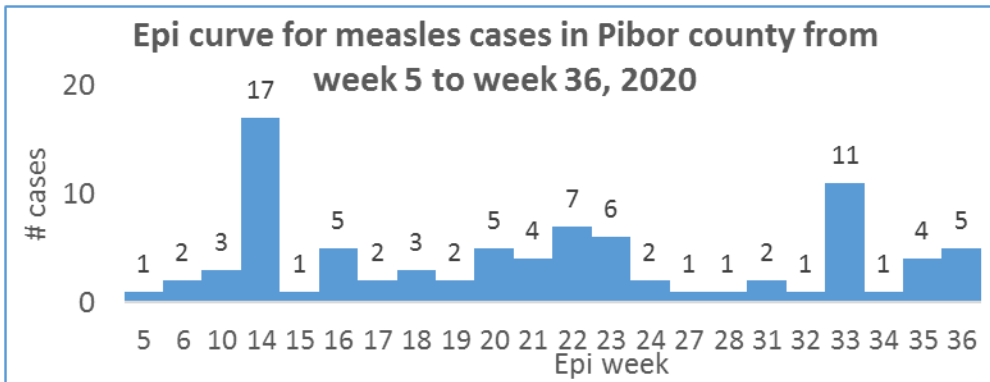
- Locations with ongoing measles transmission

- Bentiu PoC

- Pibor County



Confirmed Measles Outbreak in Pibor



Age Group	Cases	Percentage	% Cum.
1 - 4 Years	66	77%	77%
5 - 9 Years	16	19%	95%
15+ Years	3	3%	99%
10 - 14 Years	1	1%	100%
Grand Total	86	100%	

Background and descriptive epidemiology

- Measles transmission has persisted in Pibor county despite of the vaccination campaign conducted in February and March and October, 2019
- Suspected measles cases were reported from Pibor; five sample were send to Juba and tested measles IgM +e.
- 5 cases reported in week 36, makes a total of 86 since beginning of 2020
- 77% of the cases are less than 5 years of age
- 52% are female and 48% male
- Most affected areas are Lekuangle followed by Pibor town

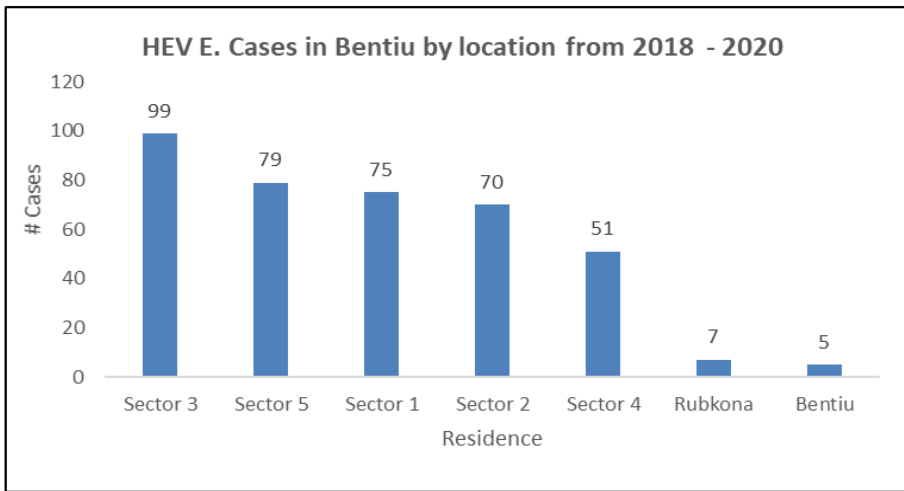
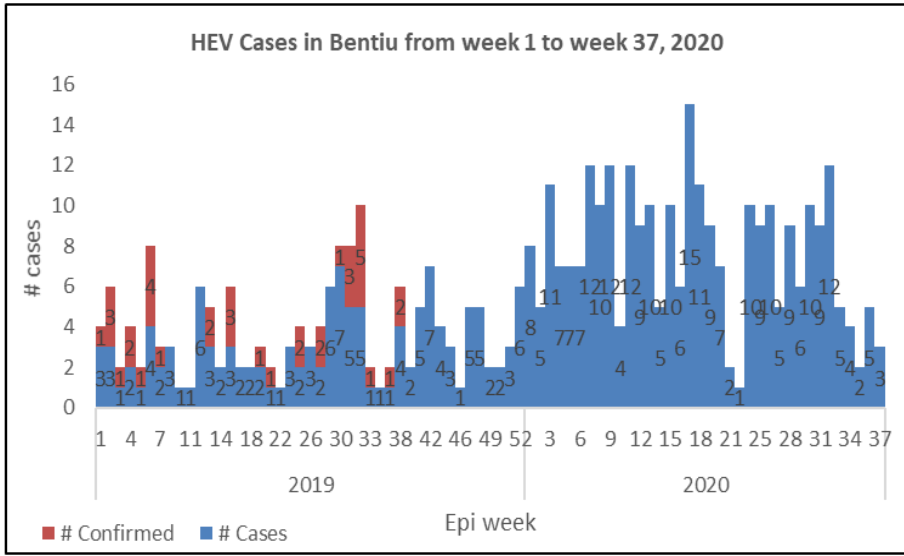
Response Actions:

- Partners to strengthen routine immunization and to continue to collect samples from suspect cases.
- Measles case management to continue
- Plans underway for reactive measles campaign





Hepatitis E, Bentiu PoC (1)



Descriptive epidemiology

- The persistent transmission of HEV in Bentiu PoC continues with 409 cases since beginning of 2019
- There were (3) new cases reported in week 37, 2020
- All the cases were managed as outpatient cases except for seven cases who were admitted
- 5 deaths reported in 2019 and 2020
- 50% are female and 50% are male.
- Age group less than 15 years had the most cases with (75%) 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 37, 2020; there were 409 cases of HEV in Bentiu PoC including 4 deaths (CFR 0.01%)

Age-Group	Alive	Dead	Grand Total	Percentage	CFR	Cum. %2
1 - 4 Years	128	0	128	31%	0%	31%
10 - 14 Years	64	0	64	16%	0%	47%
15+ Years	99	3	102	25%	3%	72%
5 - 9 Years	113	2	115	28%	2%	100%
Grand Total	404	5	409	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 Jerrycans 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





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



EBOLA VIRUS DISEASE[EVD] PREPAREDNESS IN SOUTH SUDAN



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



EVD DRC Update 18th September in Equateur Province

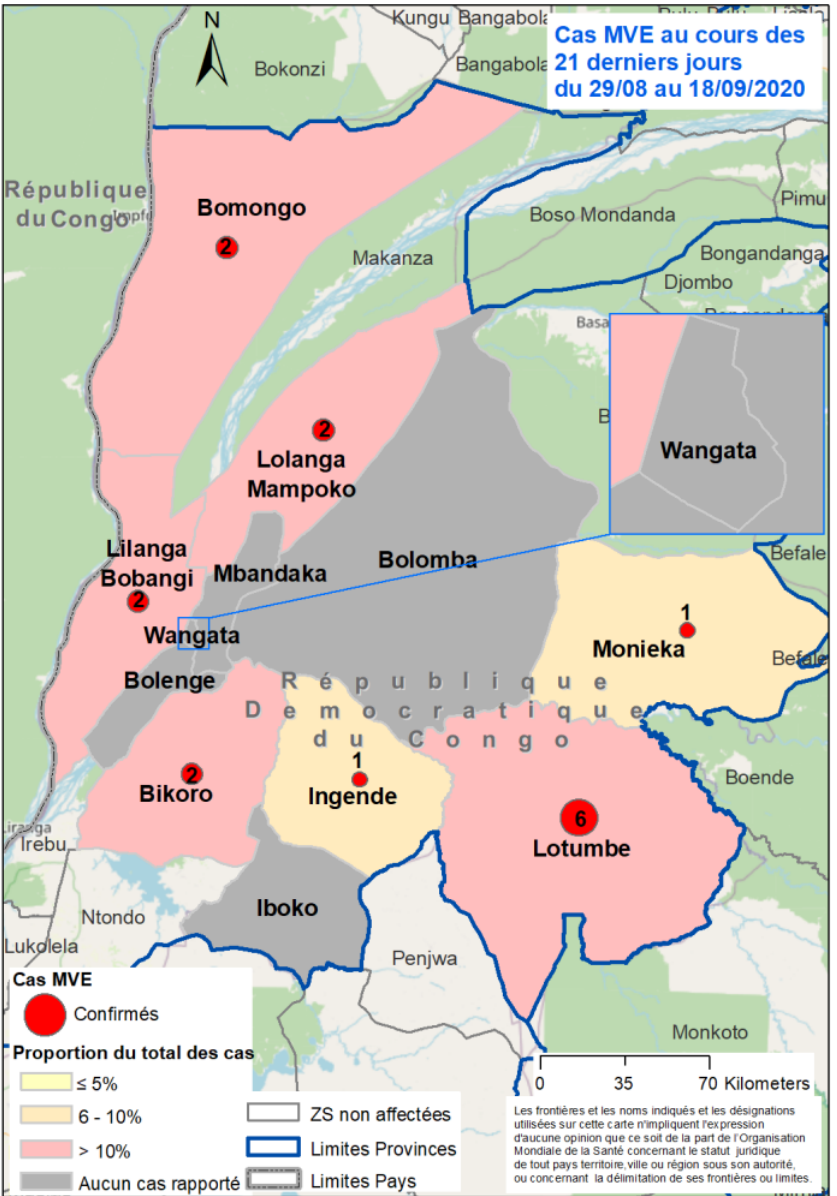
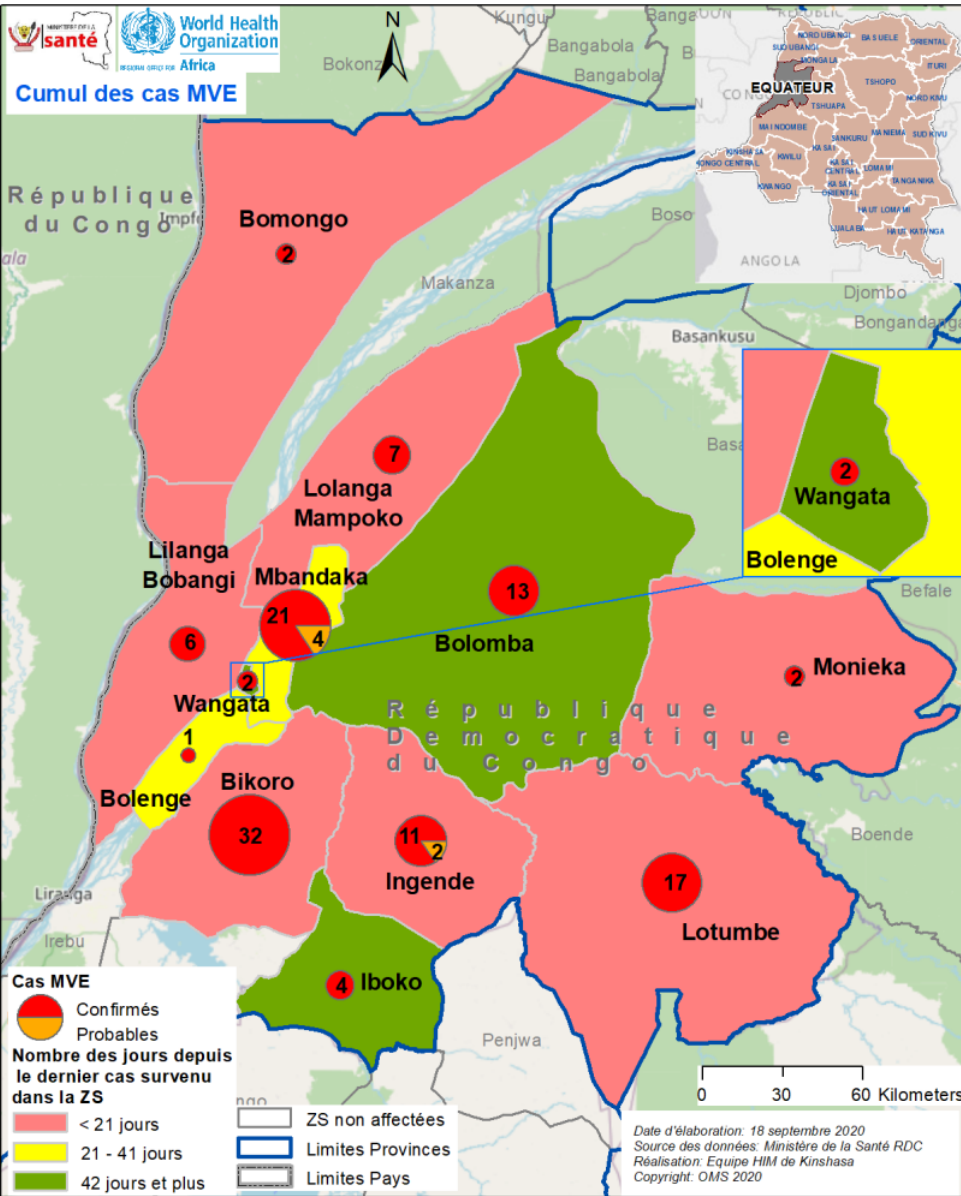
Cumulative figures for the outbreak

- One confirmed case reported on 18th Sept. in Lotumbe HZ
- 124 cases (118 confirmed, 6 probable;)
- 50 deaths (40.7% CFR), 57 recoveries;
- 40 affected health areas, 12 health zones;
- 30,970 vaccinated, 7,681 high risk;
- 5 known confirmed cases are in the community (4 in Lotumbe and 1 in Mbandaka).
- 1 case reported in the community in Ingende HZ since 10th Sept has been admitted to Ingende ETC.

Highlights from the past 21 days:

- 17 confirmed cases were reported in 8/40 affected health areas across 7/12 affected health zones;
- 5 HZs have not reported a case in over 21 days,
- 12/17 (71%) of cases reported were not registered contacts;
- 12/17 (71%) do not have a documented epi-link to date (investigations ongoing).

Distribution of EVD cases, Equateur Province, as of Sept 18th, 2020 (n = 124)



COVID-19 Updates



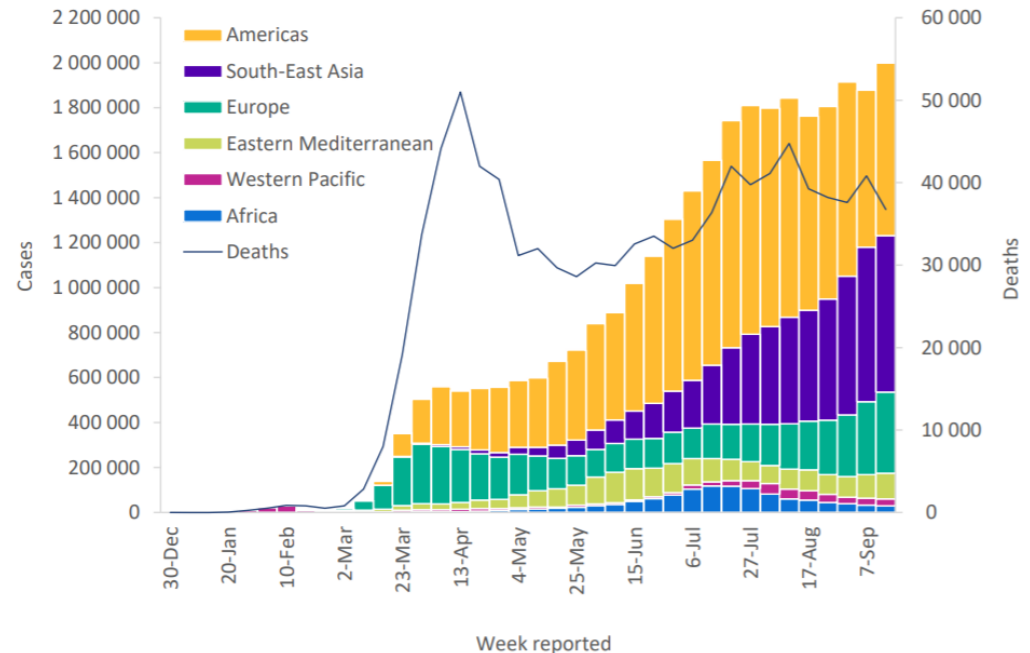
COVID-19 Virus Situation Summary



Situation update as of 20th September 2020

- The COVID-19 pandemic initial cases were detected in Wuhan China
- Globally >30 million cases (> 950, 000 deaths)
- Africa > 1 million cases (>24 757 deaths)

Figure 1: Number of COVID-19 cases reported weekly by WHO Region, and global deaths, 30 December 2019 through 20 September 2020**



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

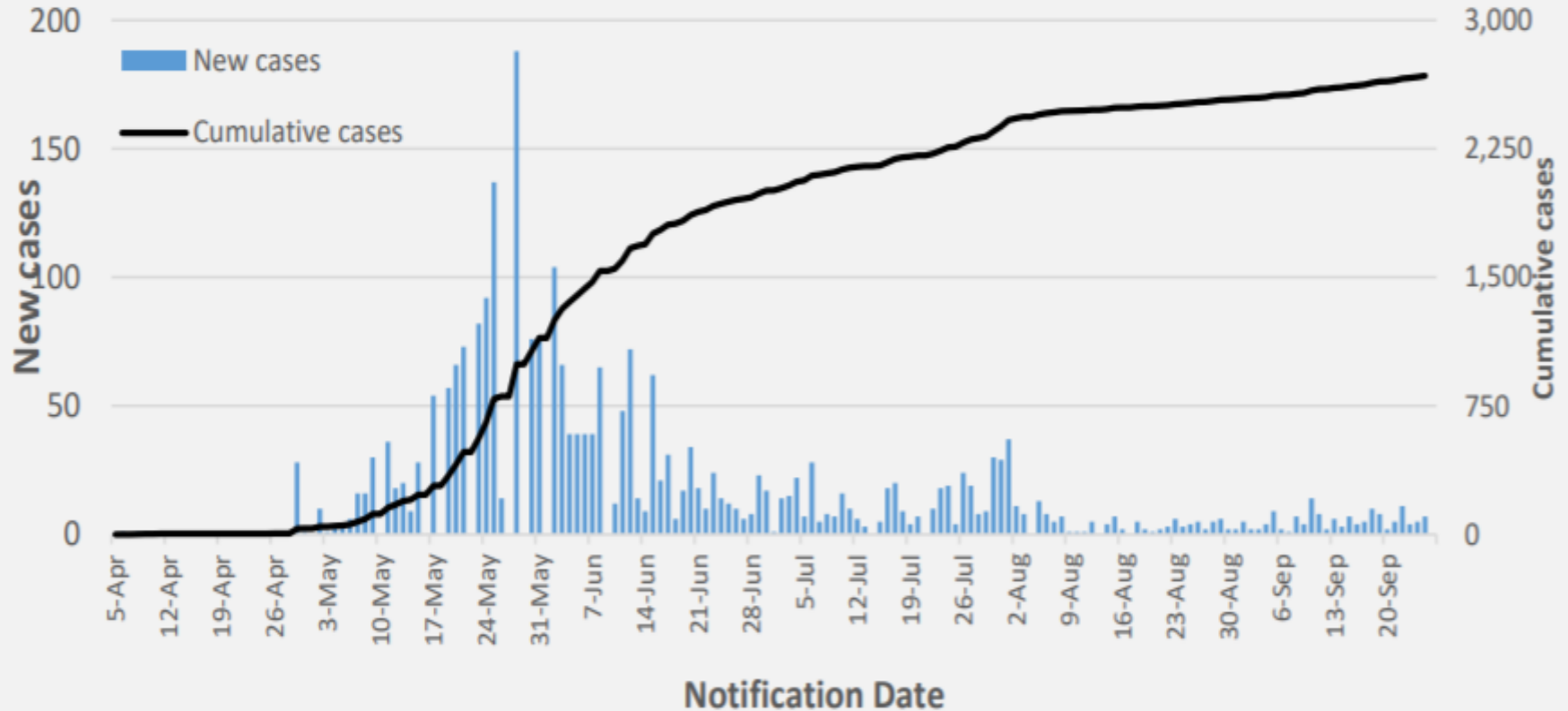


- 2,676 confirmed COVID-19 cases in South Sudan; 85% in Juba with 49 deaths and a case fatality rate (CFR) of 1.8%. Total 8,743 contacts identified, quarantined, & undergoing follow up
- Implementation of priorities; risk communication and community engagement; active case search and testing; quarantine 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 and the COVID-19 National Steering Committee



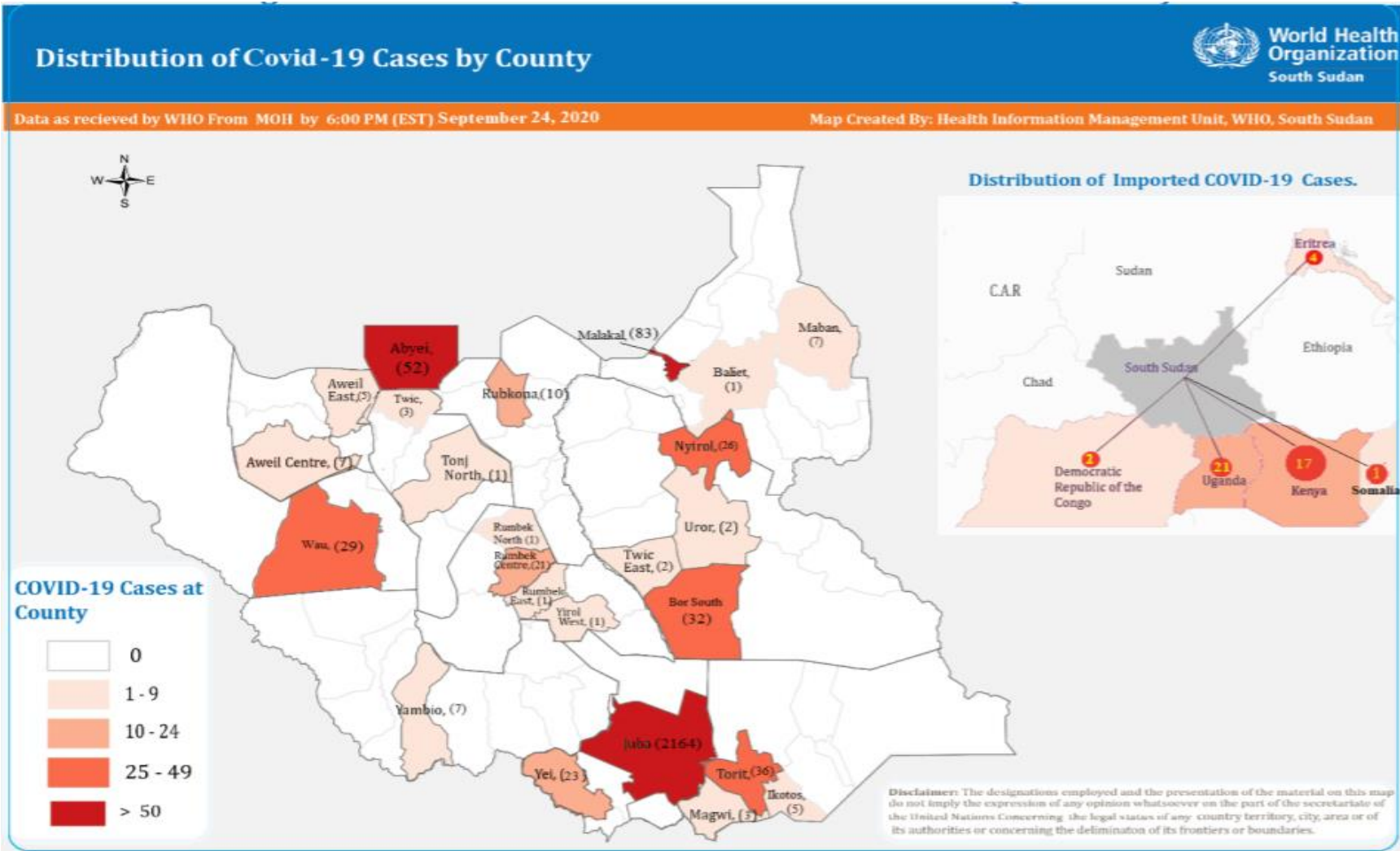


Figure 1. New and cumulative confirmed COVID-19 cases by notification date



COVID-19 cases increasing exponentially in the past few weeks

Distribution of COVID-19 cases in South Sudan



**Geographical information is available for 2 567 cases.*

The majority of the cases have been reported in Juba; while the rest have been imported (involving truckdrivers from the neighboring countries)

Overall Conclusions and Recommendations



Conclusion

- The overall IDSR and EWARN reporting performance in week 38, is above the target of 80%. (8) states were above 80%
- 2,676 confirmed COVID-19 cases in South Sudan; 85% in Juba with 49 deaths (CFR of 1.8%). Total 8,743 contacts identified, quarantined, & undergoing follow up
- Cumulative total of COVID-19 alerts is 1241, of these, 1,050 (84.6%) have been verified and samples were collected
- With seven outbreaks confirmed in 2020; measles remains the most frequent vaccine preventable disease
- There are ongoing measles outbreak in Bentiu PoC and Pibor 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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More information can be found at <http://ewars-project.org>

