South Sudan

Integrated Disease surveillance and response (IDSR)

Epidemiological Bulletin Week 35 of 2020 (August 24-August 30)

World Health Organization
South Sudan

Major epidemiological highlights in week 35 highlights of 2020

- In week 35, 2020 IDSR reporting completeness was 90% and timeliness was 77% at health facility level. EWARN reporting completeness and timeliness were 87%
- Of the 106 alerts in week 35, 2020; 67% were verified 1% were risk assessed and 1% required a response. Malaria (33), AWD (28), ARI (13), measles (3) and bloody diarrhea (18) were the most frequent alerts in week 35, 2020
- Malaria remains the top cause of morbidity and accounted for 82,101 cases (61.4% of OPD cases)
- Notification of cases of polio virus type-2 in South Sudan (two from Jur River county and one fromTonj North county)
- Suspected measles outbreak in Pibor; one sample turned positive on IgM.
- A total of 1094 COVID-19 alerts have been investigated with 915 (83.6%) being verified. Total of 2532 COVID-19 confirmed cases and 47 deaths, CFR of 1.8%

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 35 of 20202

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), LIVEWELL	113	75	66%	113	100%
2nd	WES	AMREF, World Vision, CUAMM, CDTY, OPEN	213	212	100%	212	100%
3rd	CES	HLSS, SSUHA, Healthnet TPO, IHO,GOAL,TRI-SS,THESO	118	110	93%	112	95%
4th	Warrap	GOAL, CCM, WVI, Malaria Consortium, UNKEA, Save the Children, MSF	119	97	82%	111	93%
5th	NBGZ	Malaria Consortium, Healthnet TPO, IRC, CEDS, IHO	130	83	64%	121	93%
6th	Unity	Cordaid, UNIDOR, IRC, CHADO, CARE International, CRADA, CASS	88	77	88%	82	93%
7th	WBGZ	Cordaid, Healthnet TPO, CARE International,IOM	75	57	76%	70	93%
8th	EES	Cordaid, HLSS, CCM	142	92	65%	124	87%
9th	Upper Nile	Cordaid, WVI, RI, IMC, NIDO, UNKEA, MC, SSAID	119	88	74%	99	83%
10th	Jonglei	Nile Hope, MDM, JDF, Livewell, CMD, HFO, EDA, CRADA, Malaria Consortium, CMA	102	49	48%	48	47%
	South Sudan		1219	940	77%	1092	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 77%and completeness was 90% All states except Jonglei were above the target of 80%with highest reporting rate in Lakes and WES with completeness of 100%

IDSR timeliness & completeness performance at county level for week 35 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%
Lakes	Awerial	Doctors with Africa (CUAMM)	7	7	100%	7	100%
Lakes	Rumbek Centre	Doctors with Africa (CUAMM)	23	23	100%	23	100%
NBGZ	Aweil South	Malaria Consortium(MC),IHO	9	9	100%	9	100%
WBGZ	Raja	HealthNetTPO	12	12	100%	12	100%
WBGZ	Wau	Cordaid	28	28	100%	28	100%
Lakes	Rumbek North	Doctors with Africa (CUAMM)	7	6	86%	7	100%
Lakes	Wulu	Doctors with Africa (CUAMM)	14	11	79%	14	100%
Lakes	Yirol West	Doctors with Africa (CUAMM)	12	9	75%	12	100%
Lakes	Yirol East	Doctors with Africa (CUAMM),LIVEWELL	11	4	36%	11	100%
Lakes	Rumbek East	Doctors with Africa (CUAMM)	24	0	0%	24	100%
CES	Juba	HLSS	46	43	93%	45	98%
NBGZ	Aweil North	HealthNetTPO,IHO	33	29	88%	32	97%
CES	Terekeka	HealthNetTPO	20	19	95%	19	95%
CES	Yei	SSUHA	17	16	94%	16	94%
CES	Kajo Keji	SSUHA,GOAL,TRI-SS	16	15	94%	15	94%
NBGZ	Aweil East	IRC,TADO	36	26	72%	34	94%
NBGZ	Aweil West	HealthNetTPO	37	6	16%	33	89%
NBGZ	Aweil Centre	Malaria Consortium(MC)	15	13	87%	13	87%
WBGZ	Jur River	Cordaid	35	17	49%	30	86%
CES	Lainya	SSUHA	14	12	86%	12	86%
CES	Morobo	SSUHA,THESO	6	5	83%	5	83%

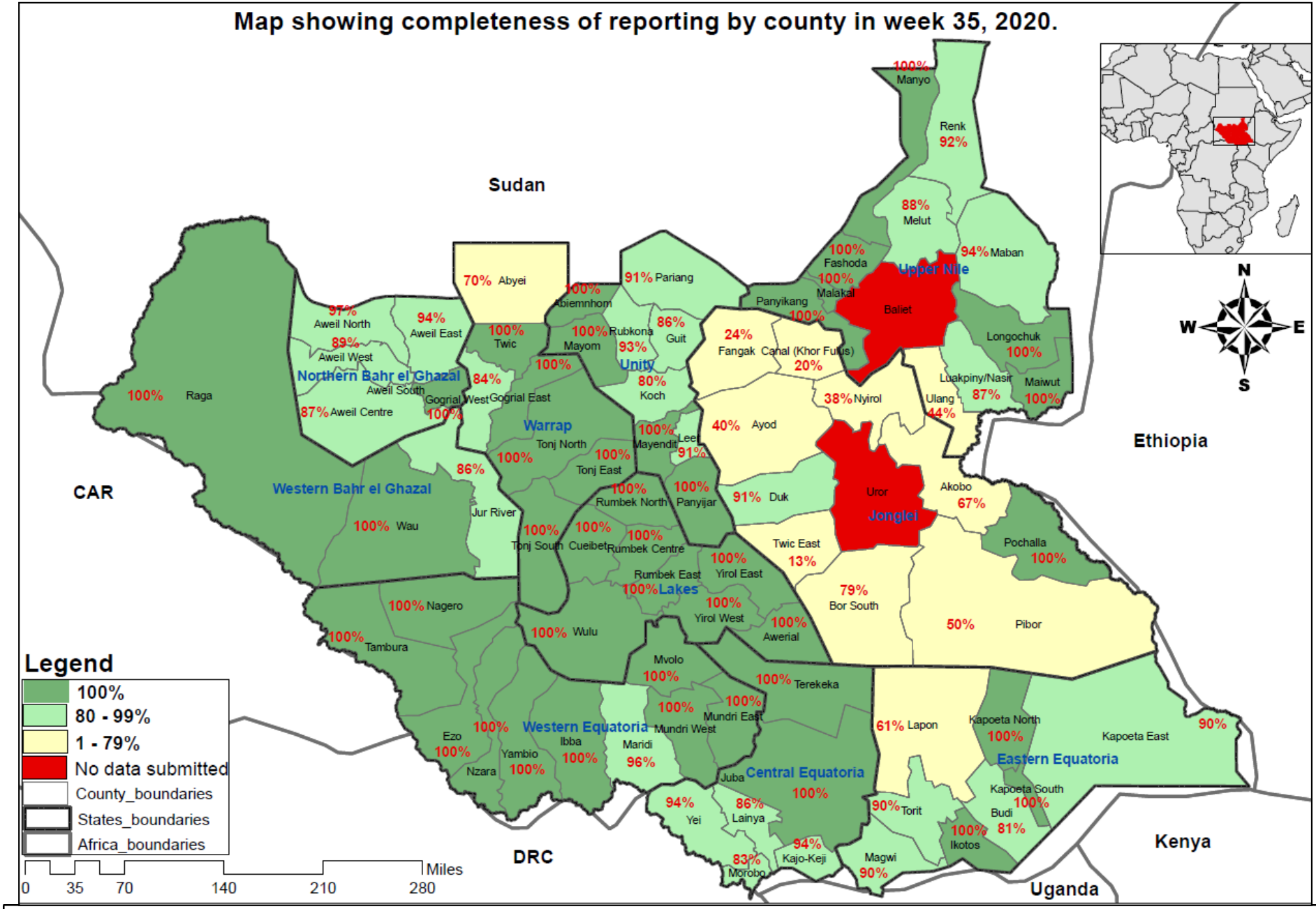
STATE	COUNTY	SUPPORTING PARTNER	Total No. of Functional Health Facilities in the County	No. of HFs Reported on Time	Timeliness Percentage	No. of HFs Reported regardless of time	Completeness Percentage
Unity	Abiemnhom	Cordaid	4	4	100%	4	100%
Unity	Koch	CRADA,IRC.	4	4	100%	4	100%
Unity	Panyijiar	IRC	15	15	100%	15	100%
Unity	Mayom	CASS	9	9	100%	9	100%
Unity	Mayendit	CASS	12	12	100%	12	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%
WES	Maridi	AMREF	26	25	96%	25	96%
Unity	Rubkona	Cordaid,IRC,IOM,MSF	14	13	93%	13	93%
Unity	Pariang	CARE International	11	7	64%	10	91%
Unity	Guit	CHADO	7	4	57%	6	86%
Unity	Leer	UNIDOR	11	9	82%	9	82%

IDSR timeliness & completeness performance at county level for week 35 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 North	CCM	15	15	100%	15	100%
EES	Kapoeta South	CCM	10	7	70%	10	100%
EES	Ikotos	HLSS	27	19	70%	26	96%
EES	Torit	Cordaid	20	17	85%	18	90%
EES	Magwi	HLSS	21	10	48%	19	90%
Jonglei	Duk	MDM + JDF	11	10	91%	9	82%
EES	Budi	Cordaid	21	9	43%	17	81%
EES	Kapoeta East	CCM	10	5	50%	8	80%
Jonglei	Bor	MDM + JDF	24	19	79%	15	63%
Jonglei	Akobo	NILE HOPE	3	2	67%	2	67%
EES	Lopa Lafon	HLSS	18	10	56%	11	61%
Jonglei	Pibor	LIVEWELL,CRADA	2	1	50%	1	50%
Jonglei	Nyirol	CMA,Malaria Consortium	8	3	38%	3	38%
Jonglei	Ayod	CMD,EDA	15	3	20%	5	33%
Jonglei	Canal Pigi	IMC	5	1	20%	1	20%
Jonglei	Twic East	MDM + JDF	8	1	13%	1	13%
Jonglei	Fangak	CMD,HFO	17	2	12%	4	24%
Jonglei	Uror	Nile Hope,Malaria Consortium	2	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	Gogrial East	GOAL	15	15	100%	15	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	Fashoda	CORDAID	13	13	100%	13	100%
Upper Nile	Panyikang	IMC	4	4	100%	4	100%
Upper Nile	Longechuk	RI	9	9	100%	9	100%
Upper Nile	Maiwut	RI	5	4	80%	5	100%
Warrap	Twic	GOAL	25	17	68%	25	100%
Upper Nile	Makal	IMC	7	4	57%	7	100%
Upper Nile	Renk	WVI + RI	13	12	92%	12	92%
Upper Nile	Manyo	CORDAID	10	8	80%	9	90%
Upper Nile	Maban	WVI + RI	17	13	76%	15	88%
Warrap	Gogrial West	GOAL	31	25	81%	26	84%
Upper Nile	Luakpiny Nasir	UNKEA,RI	16	13	81%	13	81%
Upper Nile	Akoka	IMC	5	4	80%	4	80%
Upper Nile	Melut	WVI + RI	8	2	25%	6	75%
Warrap	Abyei	AAA,Save the Children,MSF	10	2	20%	7	70%
Upper Nile	Ulang	UNKEA,RI	15	2	13%	2	13%
Upper Nile	Baliet	IMC	4	0	0%	0	0%

Map showing completeness of reporting by county in week 35, 2020.



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Surveillance: EWARS performance indicator by partner for week 35 of 20202

Partner	HFs	Reporting		Performance	
PARTER	# OF SITES	# of reports received on Time	No. of HFs Reported regardless of time	Timeliness	Completeness
Medair	2	2	2	100%	100%
World Relief	2	2	2	100%	100%
CMD	1	1	1	100%	100%
IRC	1	1	1	100%	100%
THESO	1	1	1	100%	100%
GOAL	2	2	2	100%	100%
TRI-SS	2	2	2	100%	100%
HFO	1	1	1	100%	100%
IMC	6	6	6	100%	100%
MSF-E	6	6	6	100%	100%
RHS	1	1	1	100%	100%
IMA	9	9	9	100%	100%
IOM	12	11	11	92%	92%
MSF-H	5	1	1	20%	20%
SMC	2	0	0	0%	0%
TOTAL	53	46	46	87%	87%

Completeness was 92% and timeliness was 90% for weekly reporting in week 34, 2020 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 35 of 2020 [a total of 106 events specific alerts generated by state

State	Acute jaundice syndrome	Acute Respiratory Infections (ARI)	Acute Watery Diarrhoea	Bloody Diarrhoea	Malaria (Confirmed)	Measles	Relapsing Fever	Cholera	EBS	PoE COVID EVD	Covid-19	Total alerts
CES			3	2				1				6
EES			3	8	2					1		14
Jonglei						1						1
Lakes		7	3	1	2							13
Unity			2	1	1				1		1	6
Upper Nile	1	4	3	3	2						2	15
Warrap			5	1				1				7
WBGZ		2	4		3	1				1		11
WES			5	2	23	1	1				1	33
Total alerts	1	13	28	18	33	3	1	2	1	2	4	106

During this week:

13 ARI alert: 7 undergoing verification and 6 under monitoring

1 AJS alert: undergoing verification

28 AWD alert: 20 are undergoing verification and 8 under monitoring

18 ABD: 16 are undergoing verification and 2 under Monitoring

33 Malaria alerts: 9 are undergoing verification and 24 under monitoring

3 Measles alert: 2 been investigated 1 under monitoring

2 PoE COVID EVD alert: all were investigated and been monitored.

2 COVID-19 alert: they are been investigated and sample collected

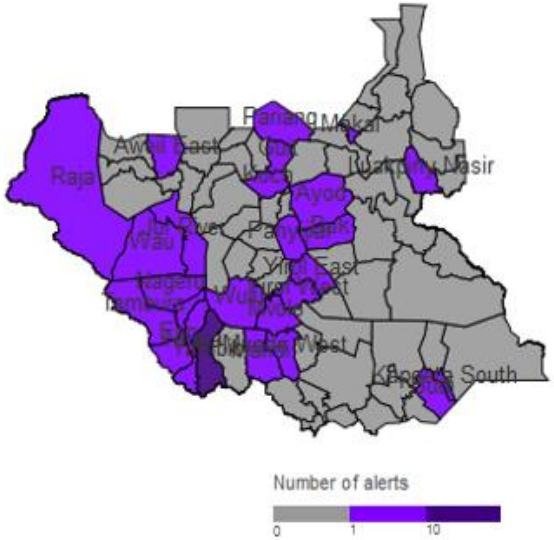
1 Relapsing fever alert: under investigation by the State RRT

2 cholera alert: The team investigated

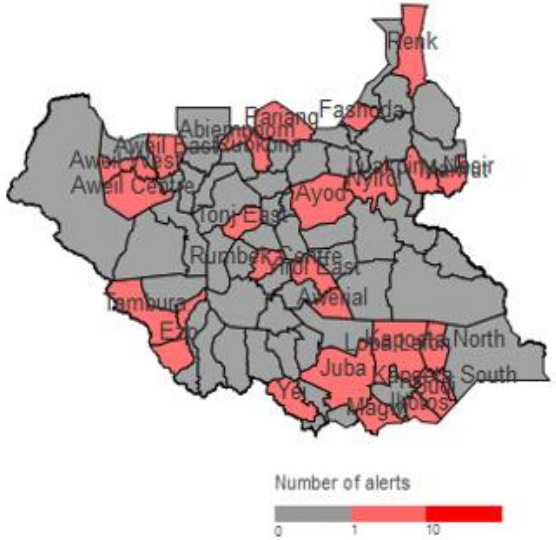
1 EBS alert: under investigation

Alert: Map of key disease alerts by county of week 35 of 2020

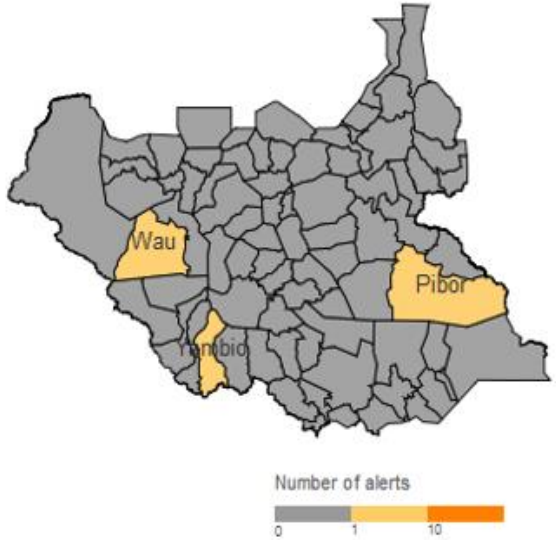
Map 2a | Malaria (W35 2020)



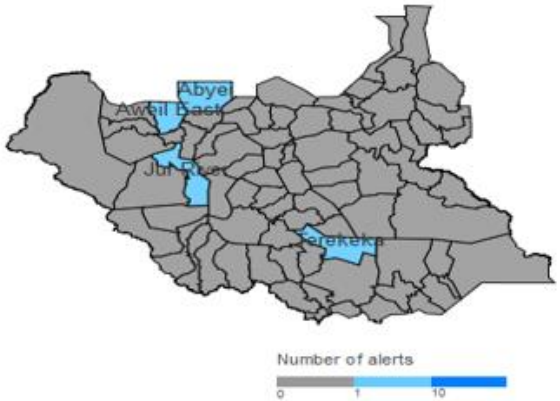
Map 2b | Bloody diarrhoea (W35 2020)



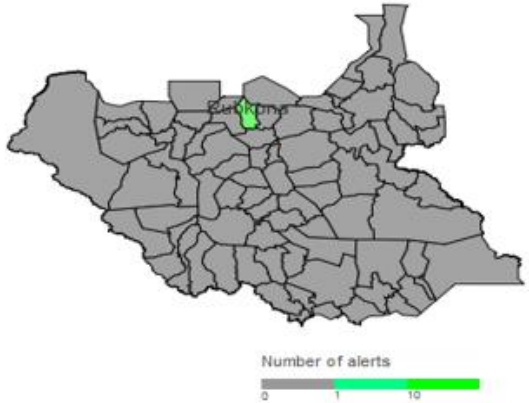
Map 2c | Measles (W35 2020)



Map 2d | Cholera (W35 2020)



Map 2f | Event-based surveillance (W35 2020)



W35	Cumulative (2020)	
0	11	Low risk
4	4	Medium risk
0	27	High risk
0	54	Very high risk

67%	78%	% verified
0%	0%	% auto-discarded
0%	1%	% risk assessed
0%	1%	% requiring a response

SUSPECTED OUTBREAKS

Major suspected outbreaks in South Sudan in 2020

Response| Suspect Epidemics; Curent Malaria trends 35, 2020 (1)

Malaria was the leading cause of morbidity and mortality, accounting for **62.1%** of all morbidities and **36.2%** of all mortalities this week.
There were **3 Counties** with malaria trends that exceeded the threshold (third quartile of trends for the period 2013-2017) and these include the following: Bentiu hub (Rubkona); Wau hub (Wau); Malakal. Hub (Melut); Rumbek hub (Wulu)

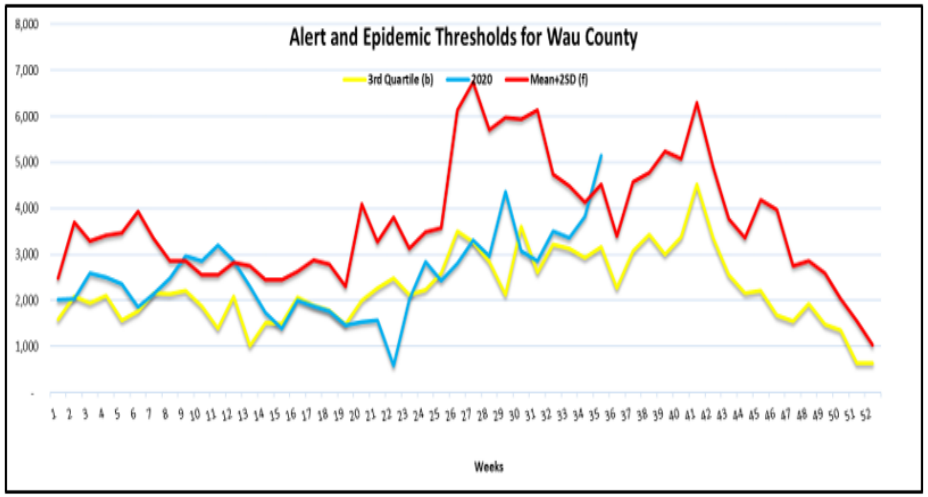
In the PoC sites; malaria is the top cause of morbidity in Bentiu (60%); Juba (40%), and Bor (47%). In Wau and Malakal PoCs, malaria accounts for (33%) and (5%) of OPD consultations, respectively.

Proposed public health actions

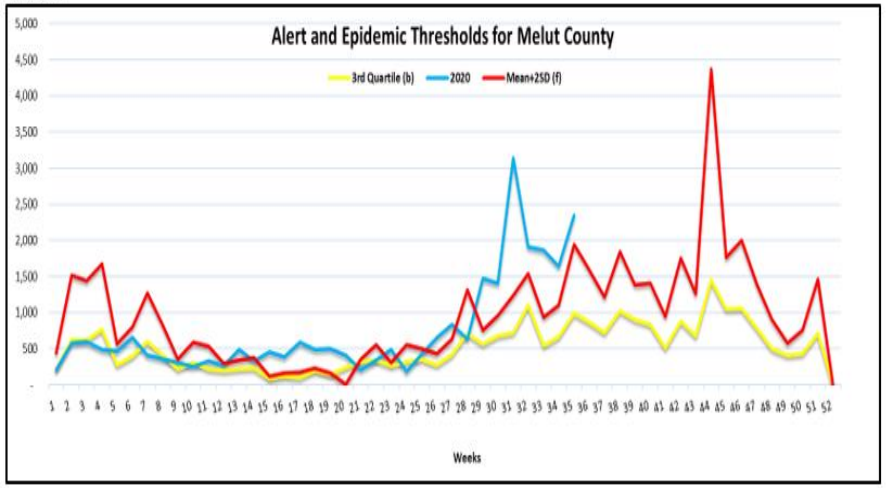
- Malaria taskforce of malaria technical working group meeting to ensure that operational readiness for malaria prevention, diagnosis, and treatment are optimized.
- Field missions to conduct technical verification of the trends in the affected counties
- Assessment of current stock levels of malaria diagnostics (RDTs), medicines (ACTs), and LLINs.
- Stocking up on malaria prevention (LLINs), diagnostics (RDTs), medicines (ACTs), and enhancing behavioral change communication for malaria prevention, prompt investigation and initiation of treatment

Response| Suspect Epidemics; Curent Malaria trends 35, 2020 (2)

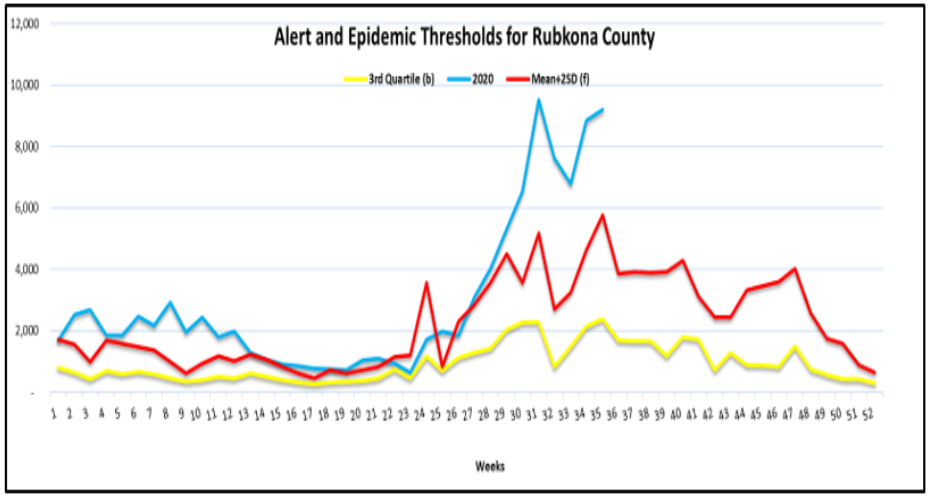
Wau.



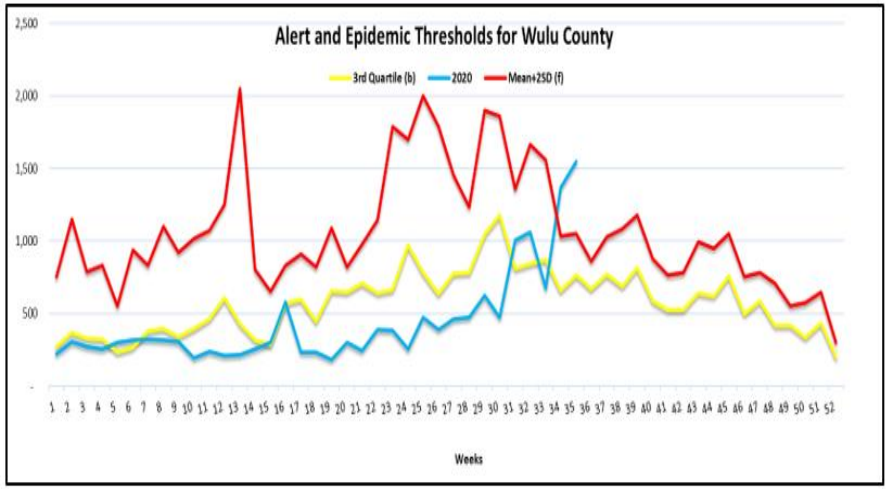
Melut.



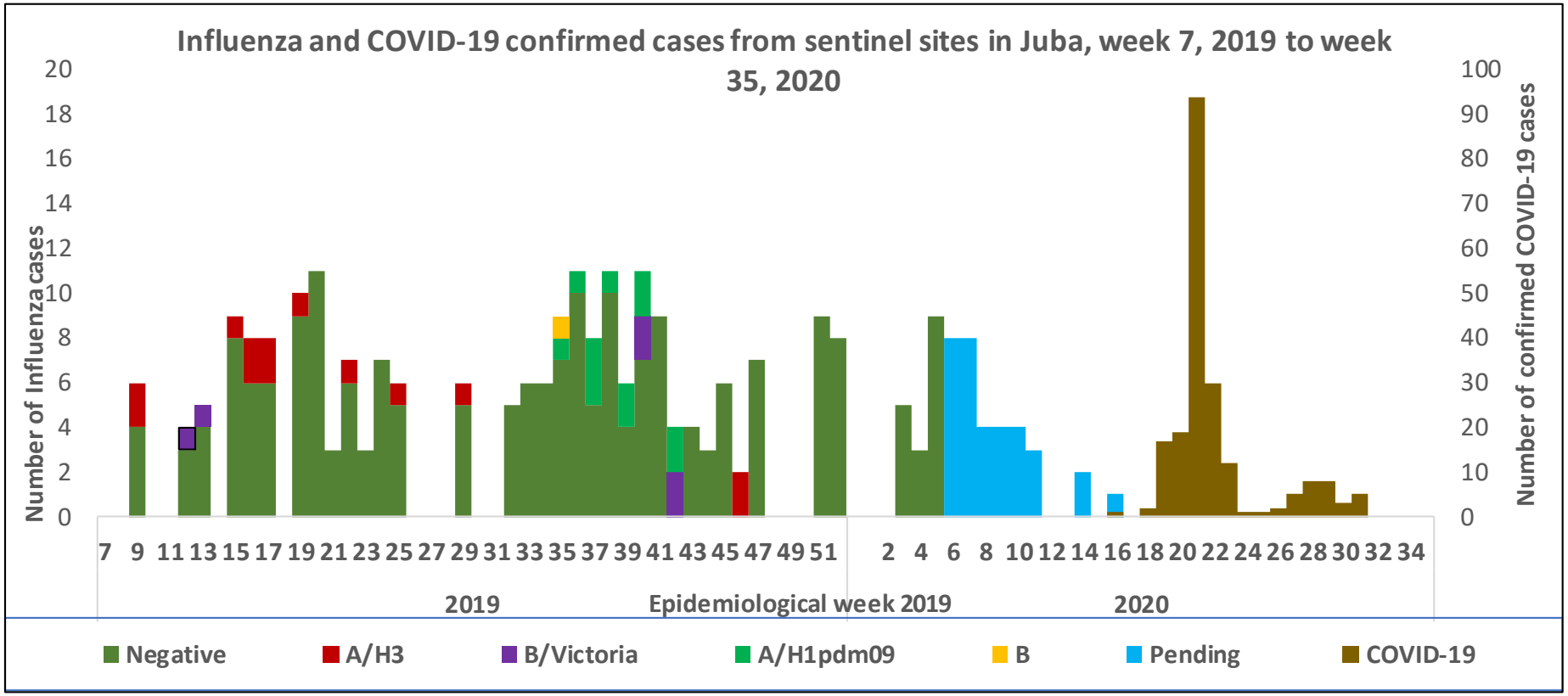
Rubkona.



Wulu.



Routine Sentinel Surveillance | Human Influenza

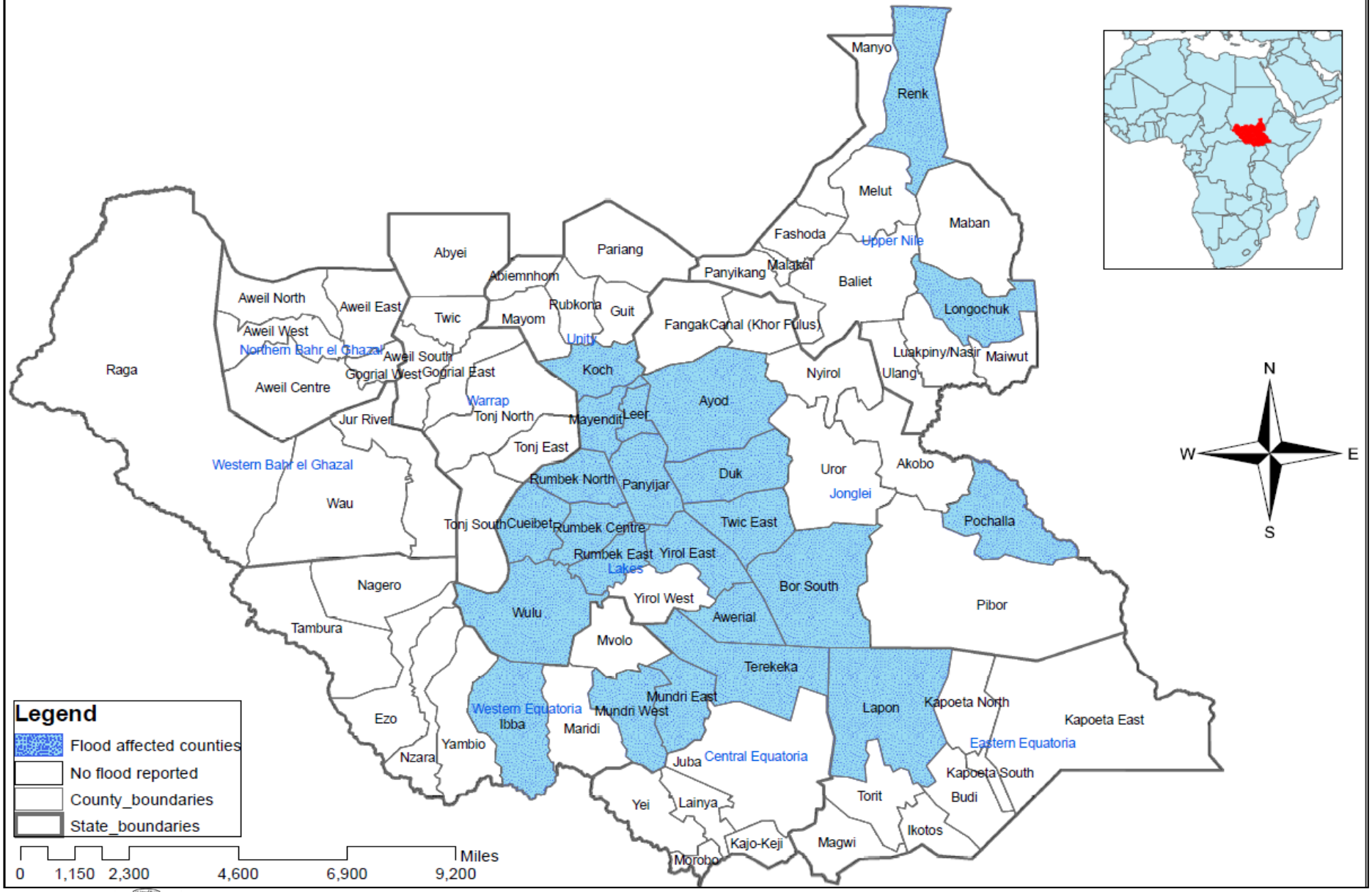


- In week 7, 2019, South Sudan started case-based surveillance for Influenza Like Illness (ILI) and Severe Acute Respiratory Infection (SARI) cases through systematic collection of epidemiological and virological information.
- In 2019, a total of 309 ILI/SARI samples have been collected and tested in 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 3308 samples have been collected in 2020 with 206 (6.2%) 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.



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Flooding, South Sudan, week 35, 2020

Description

Over 600, 000 people across 28 counties have been affected by floods in South Sudan at the end of August 2020 (see the map). Need-based responses are ongoing in 23 counties and are expected to kick off 12 counties. Many affected counties lie along the River Nile and are being affected by the rising waters of the river. Counties in Western Bahr el Ghazal, Jonglei, and Northern Eastern Equatoria are expected to
experience above-average rainfall in the first week of September 2020.

Public health response

The flood response is targeting counties with food insecurity and nutrition challenges based on assessed needs and counties in Integrated Food Security Phase Classification (IPC) phases 3 and 4. The locations prioritized include settlements located along the Nile river down through the centre of the country where the majority of flood-affected communities were displaced to higher ground. Locations where over 5,000 people were affected, where property is now inhabitable and over half of water infrastructure and health facilities were destroyed are top priorities for response.

Response| Summary of major ongoing outbreaks in 2019 and 2020

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	6	375 (0.016)	Yes	No	Yes	Yes
Measles	**Bentiu PoC**	24/04/2019	NR	482 (0.006)	Yes	Yes	Yes	N/A

Update on Measles lab results release in September 2020

S/N	County	Number of Samples tested	Measles IgM positive	Rubella IgM Positive
1	Pibor	1	1	0
2	Tambura	1	0	1
3	Ibba	1	0	0
4	Juba	1	0	0
5	Nzara	6	0	0
6	total	10	1	1

- Ten samples received for Measles between July and August 2020
- Only one sample tested positive for Measles IgM from Pibor County
- All samples from Nzara County tested Negative for both Measles and Rubella IgM

Measles Highlights in 2020

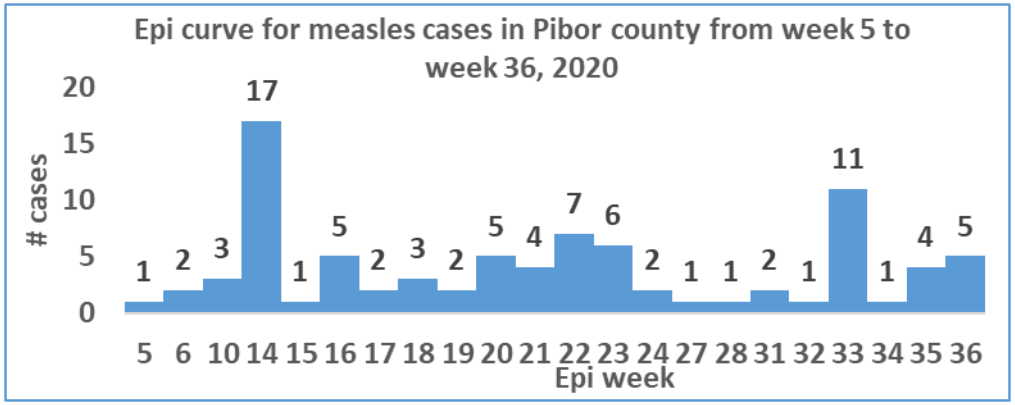
- Measles outbreaks confirmed in 2020
  - 6 counties – Tonj East, Magwi, Bor, Kapoeta East, Tonj South and Wau
  - Locations with ongoing measles transmission
    - Bentiu PoC
  - **No new confirmed measles cases**

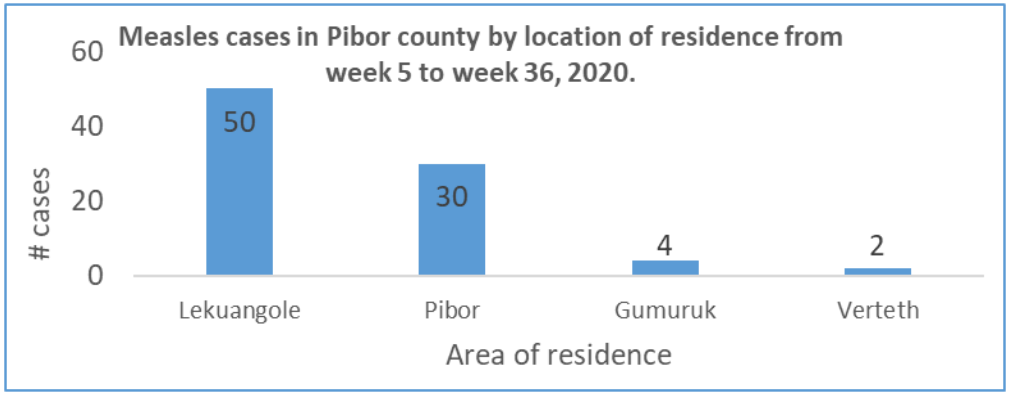
Measles Outbreak situation & response by county as of week 35, 2020

S/N	County	Population	Confirmed cases	Probable cases	Total cases	Cases per 100,000	Total deaths	CFR %	Date first reported	Emergency Campaign	Admin Coverage	Implementing Partner	Status	Comments
1	Tonj East	183,233	13	48	61	33.3	0	0	12-Dec-19	Mass Campaign	Pending result	Mass Campaign	control led	Mass Campaign Completed
2	Magwi	272,880	5	5	10	3.7	0	0	19-Sep-19	Mass Campaign	Pending result	Mass Campaign	control led	Mass Campaign Completed
3	Bor	320,956	7	7	14	4.36	0	0	17-Jan-19	Mass Campaign	115.60%	Mass Campaign	control led	Mass Campaign Completed
4	Kapoeta East	262,720	6	10	16	6.1	0	0	18-Jan-20	Reactive Campaign (Jebel Boma)	Reactive Campaign to start on 26 Feb 2020	IRC	active	Reactive Campaign completed in March 2020
5	Aweil East	519,537	16	469	694	127.8	0	0	02-Jan-20				active	Reactive campaign started on 22 June 2020
6	Bentiu Poc	115,479			455	83	2	2	01-Jan-19	Reactive campaign	126%	IOM	Active	Reactive campaign 20 Jan 2020
7	Wau	271,975	3	0	22	8.1	0	0	14-Jan-20	Enhanced routine immunization	N/A		Active	Enhanced surveillance
Total		1,427,243	50	539	1272	266.36	2	0.23						

Response| Suspected epidemics

Suspected 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

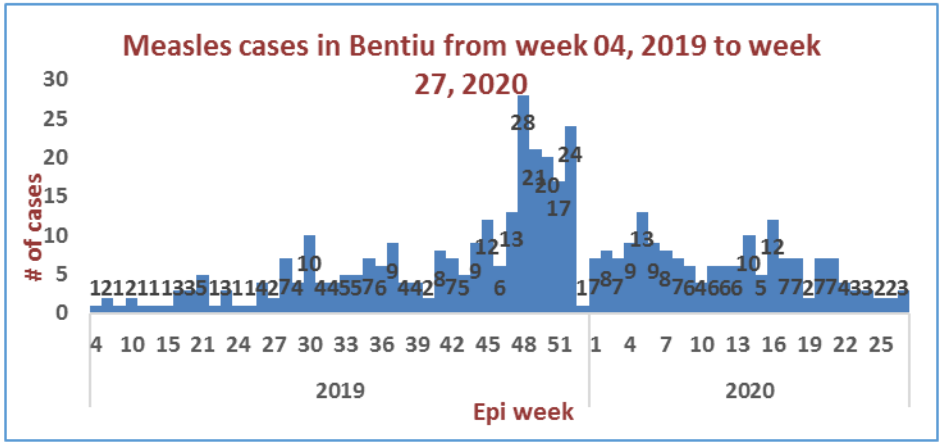
- Measles transmission has persisted in Pibor county despite of the vaccination campaign conducted in February and March and October, 2019
- Suspected measles cases were reported from Pibor; one sample was send to Juba and tested measles IgM +e.
- 5 cases reported in week 36, makes a total of 86 since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

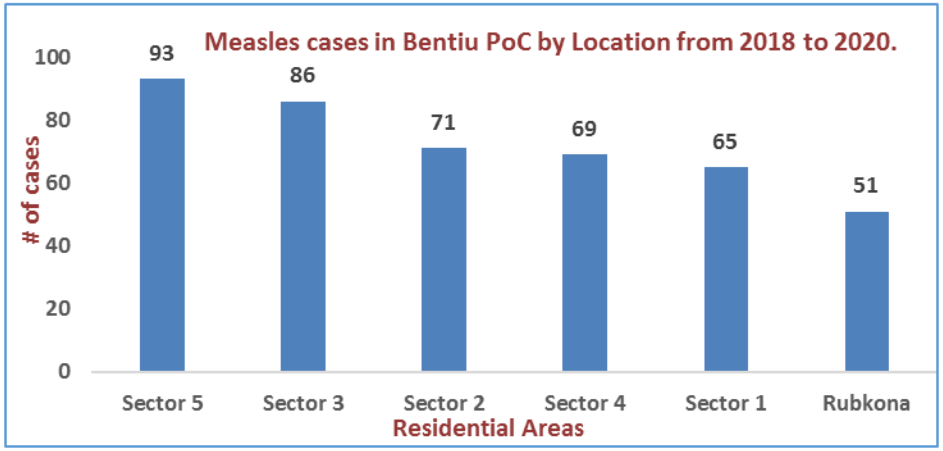
Response Actions:

- Partners to strengthen routine immunization and to continue to collect samples from suspect cases.
- Measles case management to continue

Response| Confirmed epidemics

Confirmed Measles Outbreak in Bentiu PoC





Age Group	Cases	Percentage	Cum. %
0 - 4 Years	456	95%	95%
5 - 9 Years	14	3%	98%
10 - 14 Years	8	2%	99%
15+ Years	4	1%	100%
Grand Total	482	100%	

Epidemiological description

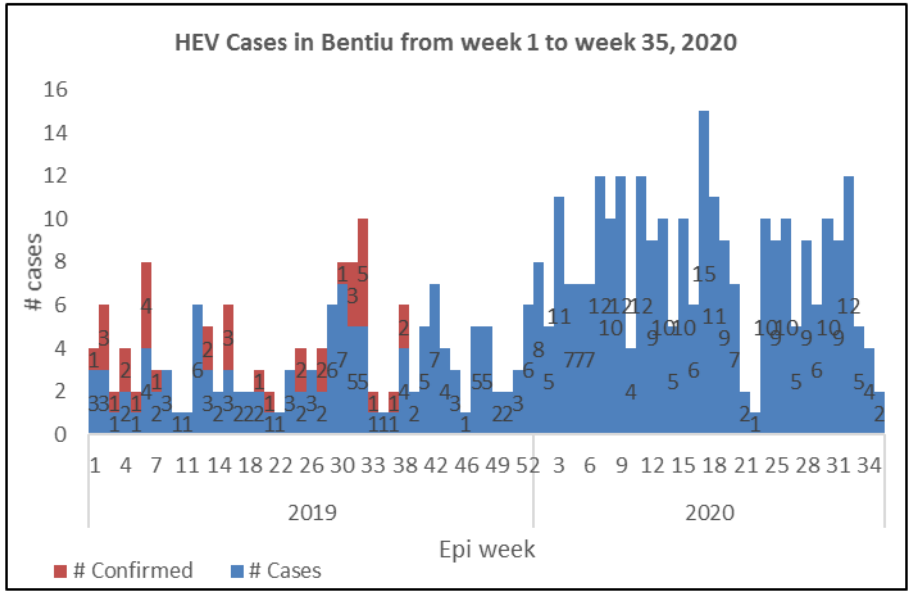
- Bentiu PoC has been reporting suspected measles/rubella cases since week 4 of 2019.
- 3 new cases reported in week 26, 2020
- At least 482 measles cases including 1 death (CFR 0.002%) reported since then.
- Cumulatively, 36 tested cases have tested measles IgM positive while 15 tested rubella IgM positive.
- 47% of cases are female and 53% are male
- 95% are under 5 yrs old, 5% are 5 yrs old and above
- Cases have been reported from inside and outside the PoC with most of the cases originating from the PoC (most cases from sector 5 but generally all the sectors are affected).

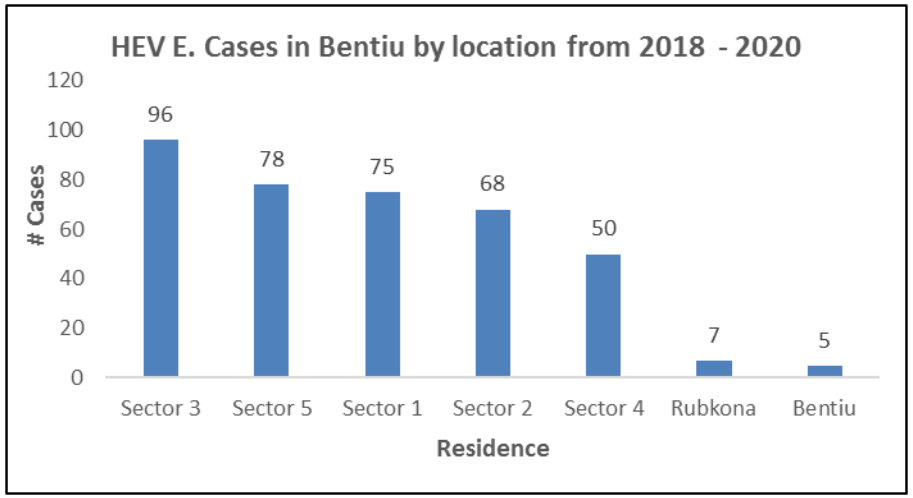
Response actions

- Several rounds of reactive campaigns were conducted in Bentiu IOM:
  - IOM completed a reactive campaign in Bentiu POC on 31 May 2019, with 21,285 children 6-59 months and coverage of 126% receiving measles vaccination. PCE was done by MoH & WHO, coverage was 74.6%.
  - Another campaign was conducted by SMOH, IOM and partners which was completed during the week of 20th January 2020 with coverage of 126%.
  - Partners to strengthen routine immunization to continue to collect samples from suspect cases.
  - Measles case management to continue

Response | Confirmed epidemics

Hepatitis E, Bentiu PoC (1)





Descriptive epidemiology

- The persistent transmission of HEV in Bentiu PoC continues with 401 cases since beginning of 2019
- There were (2) new cases reported in week 35, 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 35, 2020; there were 401 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	126		126	31%	0%	31%
10 - 14 Years	62		62	15%	0%	47%
15+ Years	97	3	100	25%	3%	72%
5 - 9 Years	111	2	113	28%	2%	100%
Grand Total	396	5	401	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 stope 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

Response | Summary of major controlled outbreaks in 2019 and 2020

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

Preliminary notification of polio virus type 2 in South Sudan

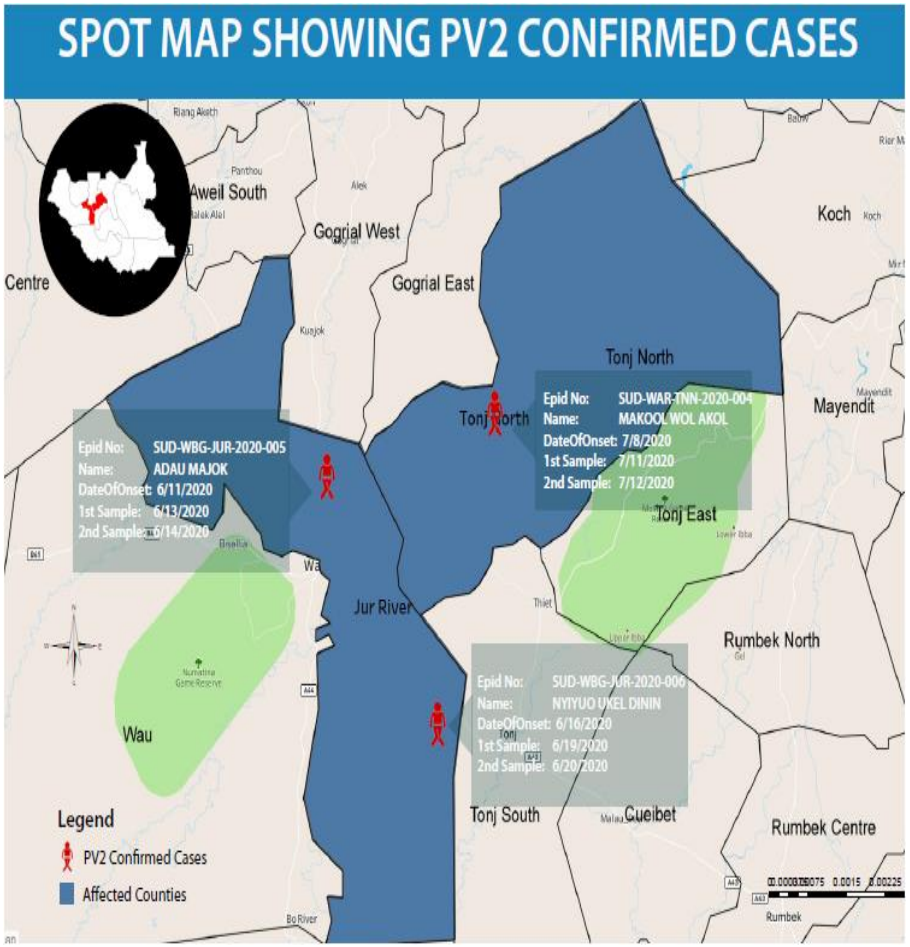
September 5, 2020

Background PEI

- The last indigenous wild polio virus was detected in 2001 in Unity state.
- Two major epidemics of WPV due to importations in 2004-2005 and 2008-2009.
- In 2014 two circulating Vaccine Derived Polio Virus (cVDPV2) were detected in Bentu POC1 and POC5 in Unity state.
- In 2015 one aVDV2 case was detected in Unity state in Rubekona county
- The last wild polio virus was detected in Northern Bhar Ghazal state in June 2009

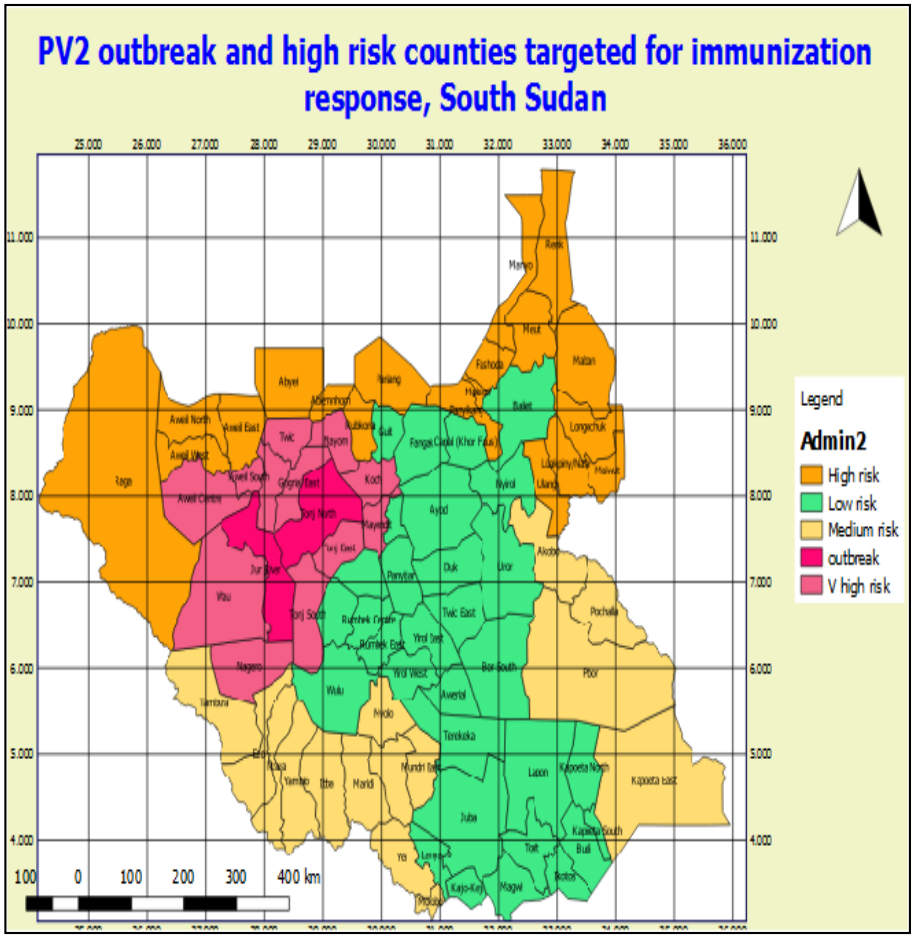
Preliminary notification PV2

- 4th September 2019, we received a notification from Ugandan Virus Research Institute on the isolation of Polio Virus Type 2(PV2) an AFP cases.
- Further analysis(sequencing) is on going to establish the origin and type of the virus.
- The two cases are from Western Bahr EL Ghazal state in Jur River county, while one case was reported from Warrap state in Tonji North county.
- The date onset for the first cases is on June-11-2020, while the last case was on July 11, 2020
- 2 male and 1 Female children below the age of 2 years



Proposed course of action

- **Enhanced surveillance: Increase the frequency of active surveillance, and raise NP-AFP rate to 3/100000 <15 years**
- Outbreak investigation is underway
- Alert letter sent to the field staff to activate the surveillance system
- Strengthen immunization to improve coverage particularly IPV
- **Immunization Response**
  - Conduct Rapid response campaign within 14 days from date of notification
  - Target outbreak affected counties including adjacent counties.
  - mOPV2 campaign targeted use in outbreak affected and bordering counties
- **2nd and 3rd SIAs**
  - **1st and 2nd rounds to target wider area and target population**



Extra information on the cases

Demographic characteristics (pending final investigation)

Case # 1

- **RSS-WBG-JUR-20-005 (WBG states, Jur river county)**
  - Residence JUR RIVER, city WAU BAI , Village THARKUENY
  - Age 23 month
  - Sex: Female
  - Date onset of paralysis: June-11-2020
  - Site of paralysis: left arm and Left leg
  - Date1stStool collected: 13-Jun-2020
  - Date2nd Stool collected: 14-Jun-2020
  - Stool condition on arrival at lab: Good
  - Admission to hospital: Not admitted
  - Vaccination status: Four doses:
  - Case geocoded: Yes

Case # 2

- **RSS-WBG-JUR-20-006(WBG states, Jur river county)**
  - Residence JUR RIVER , city KUAJENA, village MAPEL
  - Age 16 month
  - Sex: Male
  - Date onset of paralysis: 16-Jun-2020
  - Site of paralysis Right Arm & Right leg
  - Date1stStool collected: 19-Jun-2020
  - Date2nd Stool collected: 20-Jun-2020
  - Stool condition on arrival at lab: Good
  - Admission to hospital: Not admitted
  - Vaccination status: Four doses
  - Case geocoded: Yes

Demographic characteristics (pending final investigation)

Case # 3

- RSS-WAR-TNN-20-004 (**Warrap state, Tonji North)**
- Residence
  - Age ; 12 months
  - Sex: Male
  - Date onset of paralysis: 08-Jul-20
  - Site of paralysis: left arm and Left leg
  - Date1stStool collected: 11-Jul-2020
  - Date2nd Stool collected: 12-Jul-2020
  - Stool condition on arrival at lab: Good
  - Admission to hospital: Not admitted
  - Vaccination status: currently no information available
  - Case geocoded: No

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 2nd September in Equateur Province

Cumulative figures
Preliminary highlights from 2nd Sept 2020

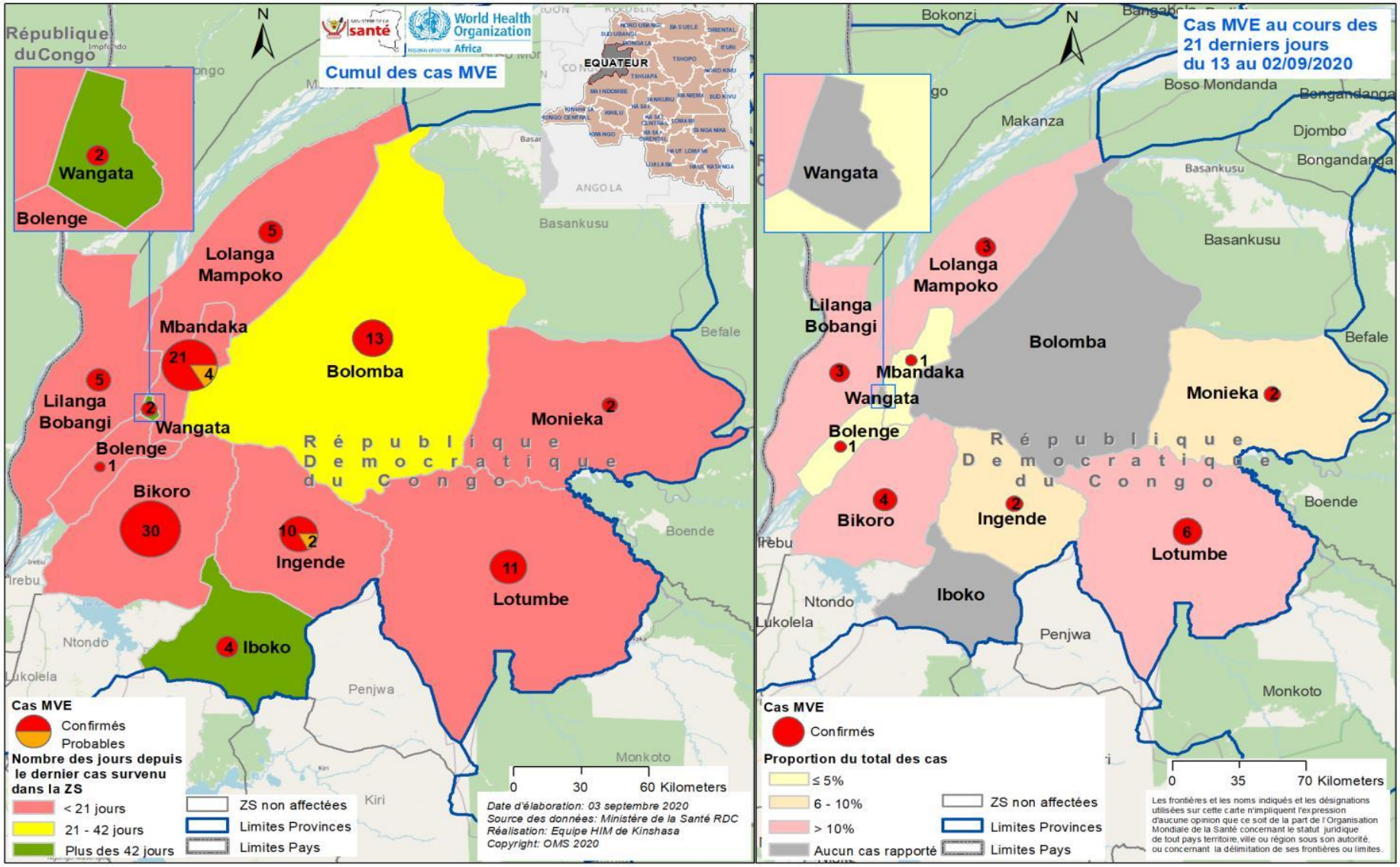
•0 new confirmed cases reported;
•0 new deaths reported among confirmed cases; no new recovery reported;

•**In the past 21 days**
- 26 cases reported (24 confirmed, 2 probable)
- 7/24 (29%) of cases died in the community
  - 4/5 (80%) confirmed community deaths with no SDB
- 67% of reported cases were not registered contacts
- 54% of reported cases do not have a documented epi-link
- 7 sick confirmed individuals in the community
- In 15 HA of 8 HZ

Highlights for 23rd August 2020
Cumulative figures

•110 cases reported (104 confirmed, 6 probable);
•47 deaths (CFR 42.7%); 48 recoveries;
•36 health areas affected across 11 HZ;
•3 health workers infected;
•26,829 vaccinated inc. 6,963 high risk contacts;
•20% of cases are in children <18

Geographic distribution of EVD cases in Equateur province (cumulative and 21 days) 2nd September 2020



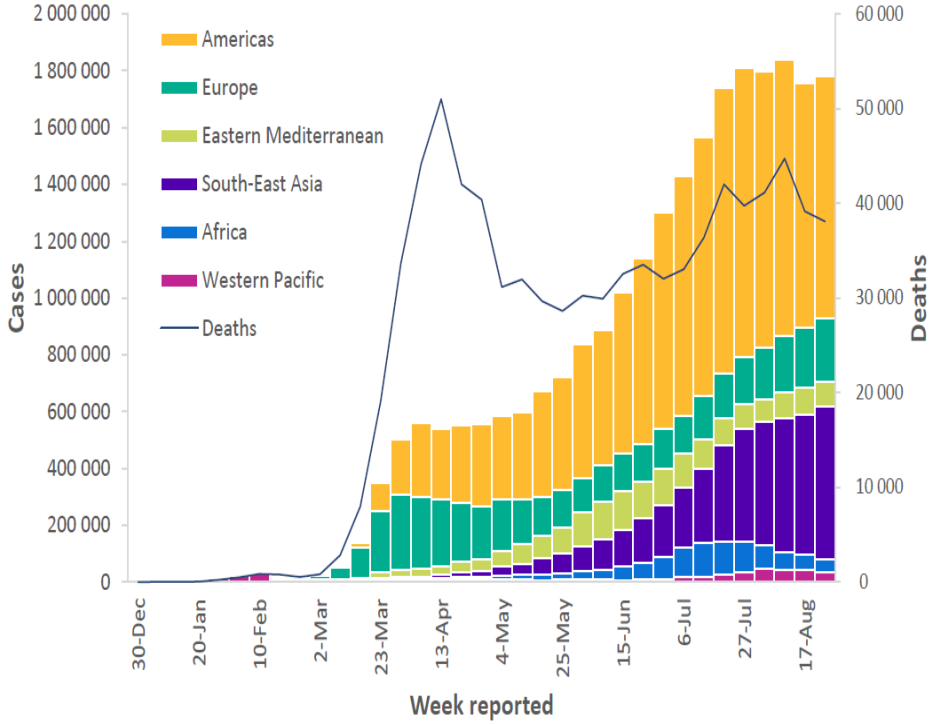
COVID-19 Updates

COVID-19 Virus Situation Summary

Situation update as of 30th August 2020

- The COVID-19 pandemic initial cases were detected in Wuhan China
- Globally >25 million cases (> 800 000 deaths)
- Africa > 1 million cases (>21,722 deaths)

Figure 1: Number of COVID-19 cases and deaths reported weekly by WHO region, 30 December to 30 August 2020**



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

COVID-19 Response in South Sudan

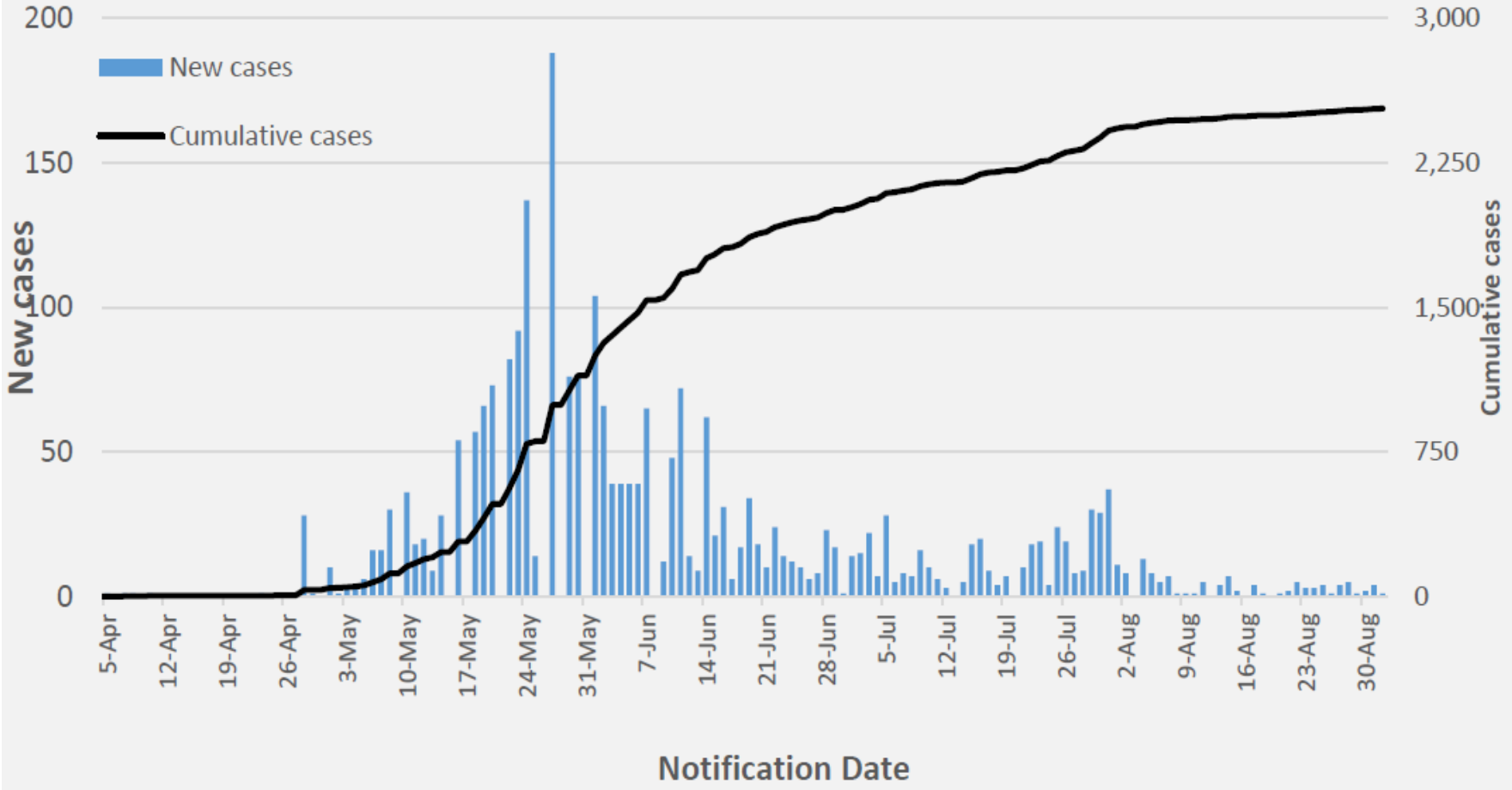
- 2,532 confirmed COVID-19 cases in South Sudan; 85% in Juba with 47 deaths and a case fatality rate (CFR) of 1.8%. Total 8,273 contacts identified, quarantined, & undergoing follow up

- 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

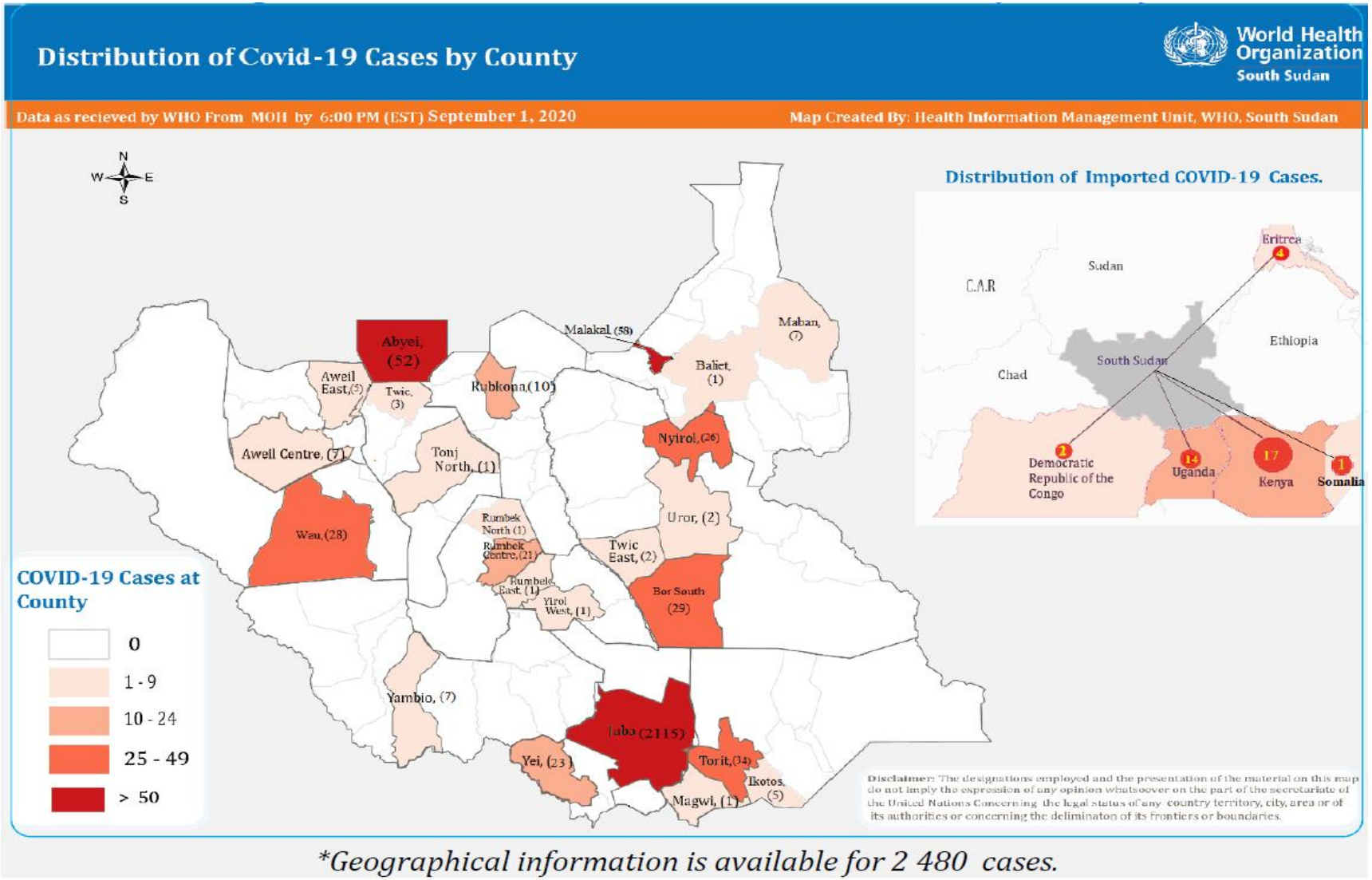
Trends of COVID-19 cases in South Sudan

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 2 480 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 35, is above the target of 80%. (9) states were above 80%
- 2,532 confirmed COVID-19 cases in South Sudan; 85% in Juba with 47 deaths (CFR of 1.8%). Total 8,273 contacts identified, quarantined, & undergoing follow up
- Cumulative total of COVID-19 alerts is 1094, of these, 915 (83.6%) have been verified and samples were collected
- With six outbreaks confirmed in 2020; measles remains the most frequent vaccine preventable disease
- There is ongoing measles outbreak in Bentiu PoC
- 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

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

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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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