

South Sudan

Integrated Disease Surveillance and Response (IDSR)

Epidemiological Bulletin Week 09, 2020 (February 24 – March 01)



Major Epidemiological Highlights in week 09 of 2020

- In week 09, 2020 IDSR reporting completeness was 90% and timeliness was 83% at health facility level. EWARN reporting both completeness and timeliness were 93%.
- Of the 175 alerts in week 09, 2020; 65% were verified 0% were risk assessed and 0% required a response. Malaria (57), AWD (56), measles (13) and bloody diarrhea (26) were the top common alerts generated through the EWARS in week 08, 2020.
- Three COVID-19 alerts were reported on 13th March from Juba, Wau & Malakal. All three alerts tested COVID-19 negative.
- EVD alert in Yambio Hospital was reported on 12th March 2020, a 47yrs old male reported with epistaxis, Known case of hypertension for 12 yrs. Alert was discarded because it did not meet EVD case definition.
- Since week 7 of 2019, a total of 292 ILI/SARI samples have been collected and tested in UVRI 228 being negative; 6 (3%) positive for Influenza B (Victoria); 13(7%) positive for Influenza A (H3); and 12(6%) positive for Influenza A (H1)pdm09 and (20) samples are pending test results .

SURVEILLANCE PERFORMANCE

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

IDSR Timeliness and Completeness Performance at Facility Level for week 09, 2020

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	116	90	78%	116	100%
2nd	WES	AMREF, World Vision, CUAMM, CDTY, OPEN	213	176	83%	212	100%
3rd	NBG	Malaria Consortium, Healthnet TPO, IRC, CEDS, IHO	134	135	101%	128	96%
4th	Warrap	GOAL, CCM, WVI, Malaria Consortium, UNKEA, Save the Children, MSF	120	111	93%	111	93%
5th	Unity	Cordaid, UNIDOR, IRC, CHADO, CARE International, CRADA, CASS	91	78	86%	83	91%
6th	WBG	Cordaid, Healthnet TPO, CARE International	77	58	75%	70	91%
7th	CES	HLSS, SSUHA, Healthnet TPO, IHO, GOAL, TRI-SS	121	105	87%	105	87%
8th	Jonglei	Nile Hope, MDM, JDF, Livewell, CMD, HFO, EDA, CRADA, Malaria Consortium, CMA	155	129	83%	130	84%
9th	EES	Cordaid, HLSS, CCM	145	105	72%	117	81%
10th	Upper Nile	Cordaid, WVI, RI, IMC, NIDO, UNKEA, MC, SSAID	115	80	70%	86	75%
	South Sudan		1287	1067	83%	1158	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 83 and completeness was 90%. Total of 9 states are above the target of 80% with highest reporting performance in Lakes and WES with completeness of 100%, while only 1 states are below the target of 80%.

IDSR Timeliness and Completeness Performance at County Level for week 09, 2020 (1)

Counties	Supporting Partners	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
Rumbek Centre	Doctors with Africa (CUAMM)	23	13	57%	23	100%
Rumbek East	Doctors with Africa (CUAMM)	24	24	100%	24	100%
Rumbek North	Doctors with Africa (CUAMM)	7	7	100%	7	100%
Wulu	Doctors with Africa (CUAMM)	14	12	86%	14	100%
Cueibet	Doctors with Africa (CUAMM)	15	15	100%	15	100%
Yirol East	Doctors with Africa (CUAMM),LIVEWELL	14	9	64%	14	100%
Yirol West	Doctors with Africa (CUAMM)	12	3	25%	12	100%
Awerial	Doctors with Africa (CUAMM)	7	7	100%	7	100%
Yambio	World Vision International	42	40	95%	41	98%
Ibba	AMREF	11	6	55%	11	100%
Maridi	AMREF	26	24	92%	26	100%
Mundri West	CUAMM	21	21	100%	21	100%
Mundri East	CUAMM	19	19	100%	19	100%
Tambura	World Vision International	26	15	58%	26	100%
Mvolo	CUAMM	11	11	100%	11	100%
Nzara	World Vision International	20	12	60%	20	100%
Nagero	World Vision International	10	10	100%	10	100%
Ezo	World Vision International	27	21	78%	26	96%
Abiemnhom	Cordaid	4	4	100%	4	100%
Koch	CRADA,IRC.	6	5	83%	5	83%

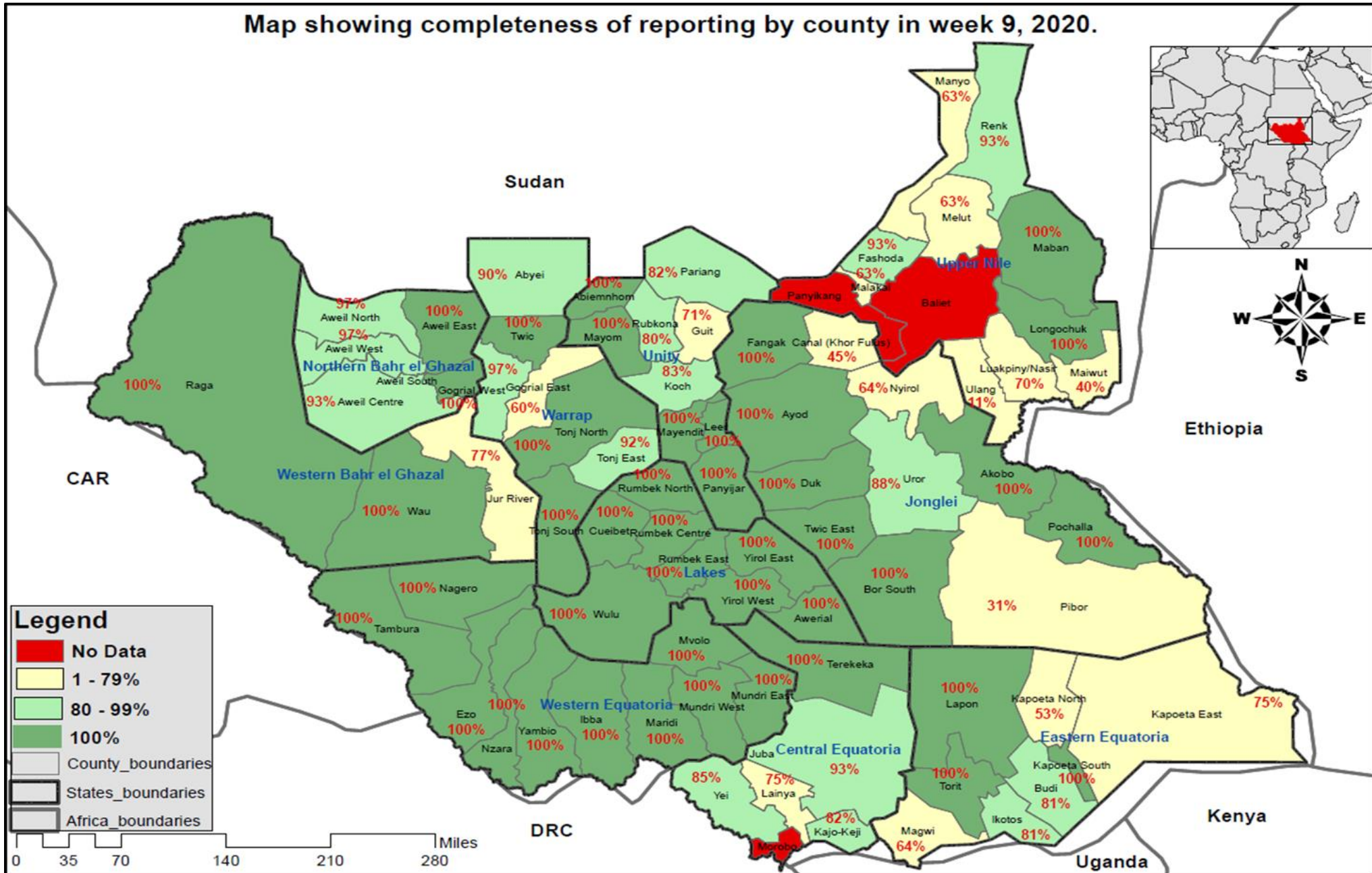
Counties	Supporting Partners	Total No. of Functional Health Facilities in the County	No. of HFs Reported on Time	Timeliness Percentage	No. of HFs Reported regardless of time	Completeness Percentage
Gogrial West	GOAL	32	30	94%	30	94%
Gogrial East	GOAL	15	9	60%	9	60%
Abyei	AAA, Save the Children, MSF	15	9	60%	9	60%
Tonj East	CCM	12	11	92%	11	92%
Tonj South	CCM	12	12	100%	12	100%
Tonj North	CCM	14	14	100%	14	100%
Twic Mayardit	GOAL	26	26	100%	26	100%
Bor	MDM + JDF	35	34	97%	34	97%
Duk	MDM + JDF	15	15	100%	15	100%
Pibor	LIVEWELL,CRADA	14	5	36%	5	36%
Akobo	NILE HOPE	8	8	100%	8	100%
Fangak	CMD,HFO	16	14	88%	14	88%
Uror	Nile Hope,Malaria Consortium	8	6	75%	7	88%
Nyirrol	CMA,Malaria Consortium	11	7	64%	7	64%
Twic East	MDM + JDF	11	11	100%	11	100%
Ayod	CMD,EDA	15	15	100%	15	100%
Pochalla	LIVEWELL	9	9	100%	9	100%
Pigi Canal	IMC	6	5	83%	5	83%
Mayendit	CASS	13	9	69%	13	100%
Guit	CHADO	7	5	71%	5	71%

IDSR Timeliness and Completeness Performance at County Level for week 09, 2020 (2)

Counties	Supporting Partners	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
Malakal	IMC	8	3	38%	5	63%
Akoka	IMC	5	0	0%	0	0%
Baliet	IMC	5	0	0%	0	0%
Renk	WVI + RI	13	13	100%	13	100%
Melut	WVI + RI	8	5	63%	5	63%
Manyo	CORDAID	8	4	50%	5	63%
Maiwut	RI	4	4	100%	4	100%
Fashoda	CORDAID	14	13	93%	13	93%
Ulang	UNKEA,RI	11	0	0%	2	18%
Maban	WVI + RI	16	16	100%	16	100%
Luaping Nasir	UNKEA,RI	19	13	68%	13	68%
Longechuk	RI	9	9	100%	9	100%
Panyikang	IMC	4	0	0%	1	25%
Aweil West	HealthNetTPO	39	38	97%	38	97%
Aweil East	IRC,TADO	36	33	92%	33	92%
Aweil Center	Malaria Consortium(MC)	15	14	93%	14	93%
Aweil South	Malaria Consortium(MC),IHO	11	11	100%	11	100%
Aweil North	HealthNetTPO,IHO	33	32	97%	32	97%
Pariang	CARE International	11	9	82%	9	82%
Panyijiar	IRC	15	15	100%	15	100%

Counties	Supporting Partners	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
Juba	HLSS	44	42	95%	42	95%
Kajo-Keji	SSUHA,GOAL,TRI-SS	11	9	82%	9	82%
Yei	SSUHA	19	17	89%	17	89%
Lainya	SSUHA	16	12	75%	12	75%
Morobo	SSUHA	4	0	0%	0	0%
Terekeka	HealthNetTPO	25	25	100%	25	100%
Torit	Cordaid	20	19	95%	20	100%
Lopa Lafon	HLSS	18	18	100%	18	100%
Ikotos	HLSS	27	20	74%	22	81%
Magwi	HLSS	22	11	50%	14	64%
Budi	Cordaid	21	15	71%	17	81%
Kapoeta South	CCM	10	9	90%	10	100%
Kapoeta East	CCM	12	8	67%	8	67%
Kapoeta North	CCM	15	5	33%	8	53%
Wau	Cordaid	28	23	82%	28	100%
Raja	HealthNetTPO	14	10	71%	14	100%
Jur River	Cordaid	35	25	71%	28	80%
Rubkona	Cordaid,IRC,IOM,MSF	15	12	80%	12	80%
Mayom	CASS	9	9	100%	9	100%
Leer	UNIDOR	10	10	100%	10	100%

Map showing completeness of reporting by county in week 9, 2020.



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Surveillance | EWARS surveillance performance indicators by partner week 09, 2020

Partner	Performance		Reporting	
	# of sites	# of reports received	Completeness	Timeliness
CMD	1	1	100%	100%
GOAL	2	2	100%	100%
HAA	5	5	100%	100%
HLSS	1	1	100%	100%
HFO	3	3	100%	100%
IHO	2	2	100%	100%
IMA	8	8	100%	100%
IMC	8	7	88%	88%
MDM	10	10	100%	100%
SMC	5	5	100%	100%
IOM	13	13	100%	100%
IRC	1	1	100%	100%
LIVEWELL	4	4	100%	100%
MEDAIR	2	2	100%	100%
MEDICAIR	9	9	100%	100%
MSF-E	2	2	100%	100%
MSF-H	2	2	100%	100%
RHS	3	0	0%	0%
TADO	4	4	100%	100%
TRI-SS	2	2	100%	100%
UNH	2	0	0%	0%
UNIDOR	1	1	100%	100%
WORLD RELIEF	1	1	100%	100%
TOTAL	91	85	93%	93%

- Both completeness and timeliness were 93% for weekly reporting in week 09, 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 09, 2020 [A total of 175 event specific alerts generated by Hubs]

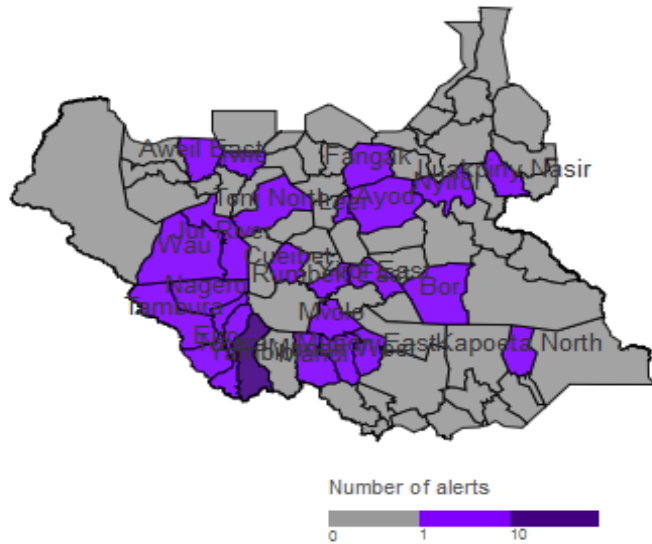
States	AJS	ARI	Acute Watery Diarrhoea	Bloody Diarrhoea	AFP	Yellow Fever	Malaria	Measles	Total Alerts
Jonglei					1		1	1	3
Warrap			3	2			4		9
EES			10	2			1	2	15
Unity	2	5	4	8				4	23
WES		9	25	2		1	43	1	81
CES		2	1	1				1	5
NBG			1					2	3
Lakes		1	2				2		5
WBG		1	2	5			5	2	15
UNS			8	6	1		1		16
Total Grand	2	18	56	26	2	1	57	13	175

During this week:

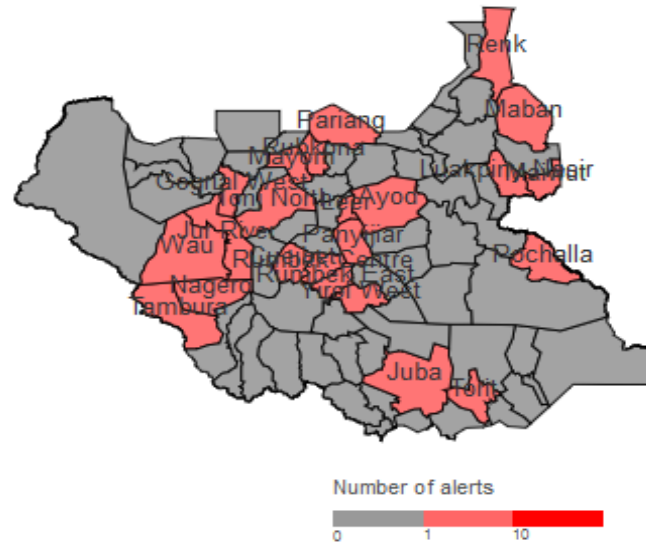
- 2 AJS alert: 2 under response
- 18 ARI: 12 are undergoing verification, 7 been monitored.
- 56 AWD alert: 37 undergoing verification, 16 been monitored
- 26 ABD: 13 undergoing verification, 12 been monitored and 1 under response
- 57 Malaria alerts: 25 undergoing verification, 31 under monitoring
- 12 Measles alert: 5 undergoing verification, 4 under monitoring and 3 in response
- 1 Yellow Fever alert: discarded.

Alert | Map of key disease alerts by county week 09, 2020

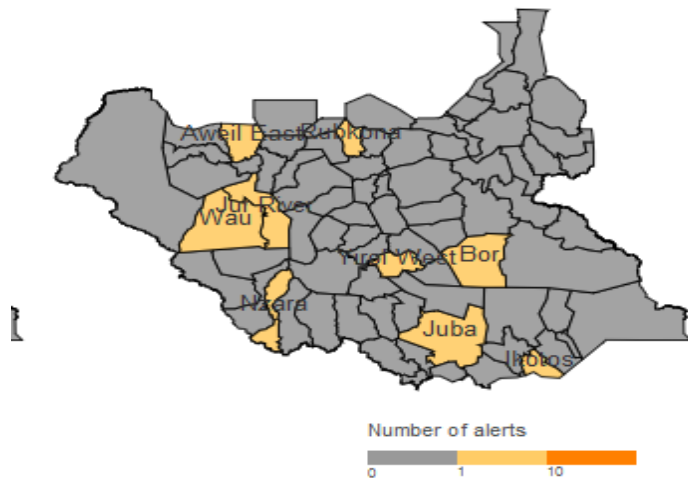
Map 2a | Malaria (W9 2020)



Map 2b | Bloody diarrhoea (W9 2020)



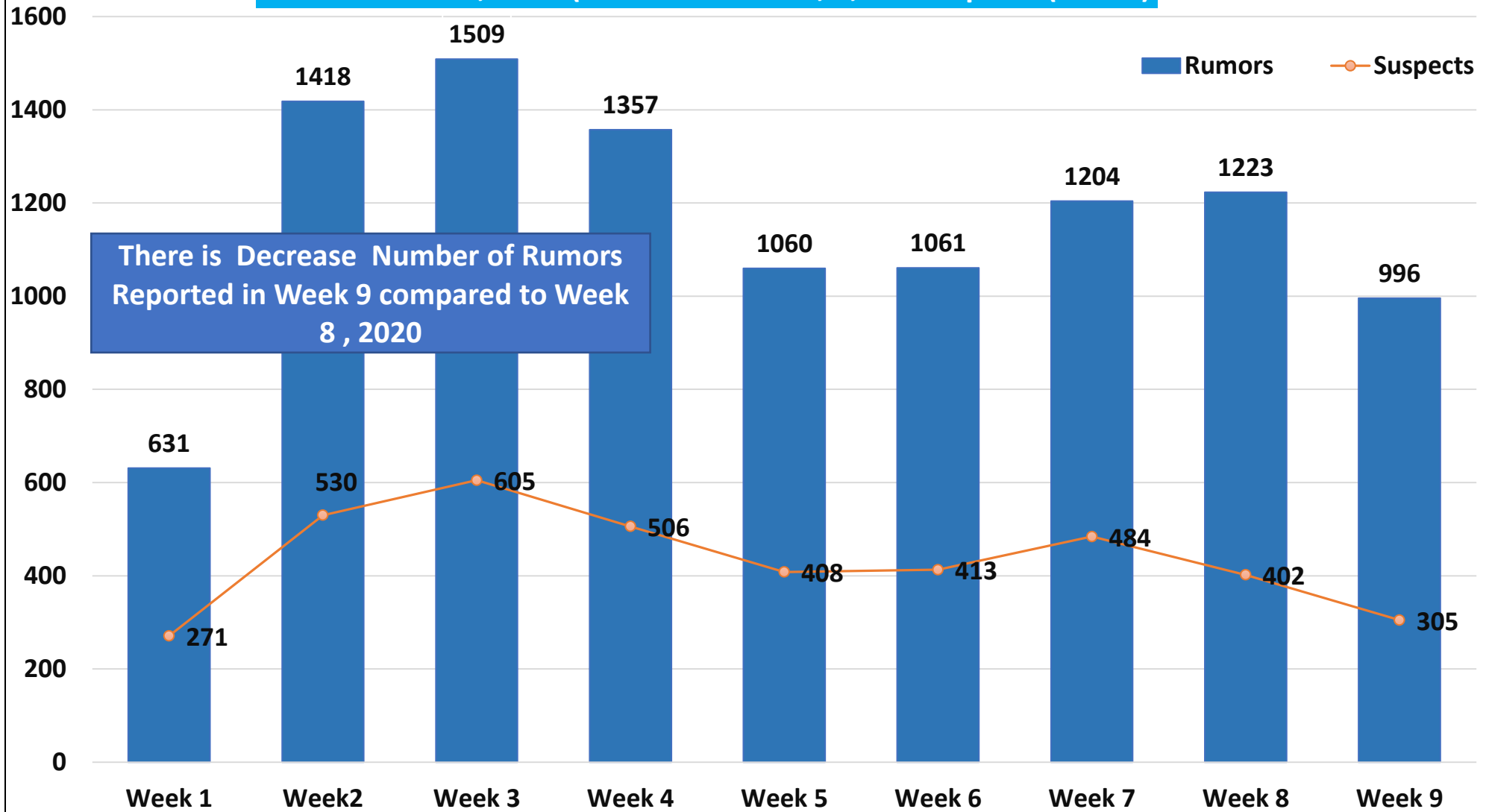
Map 2c | Measles (W9 2020)



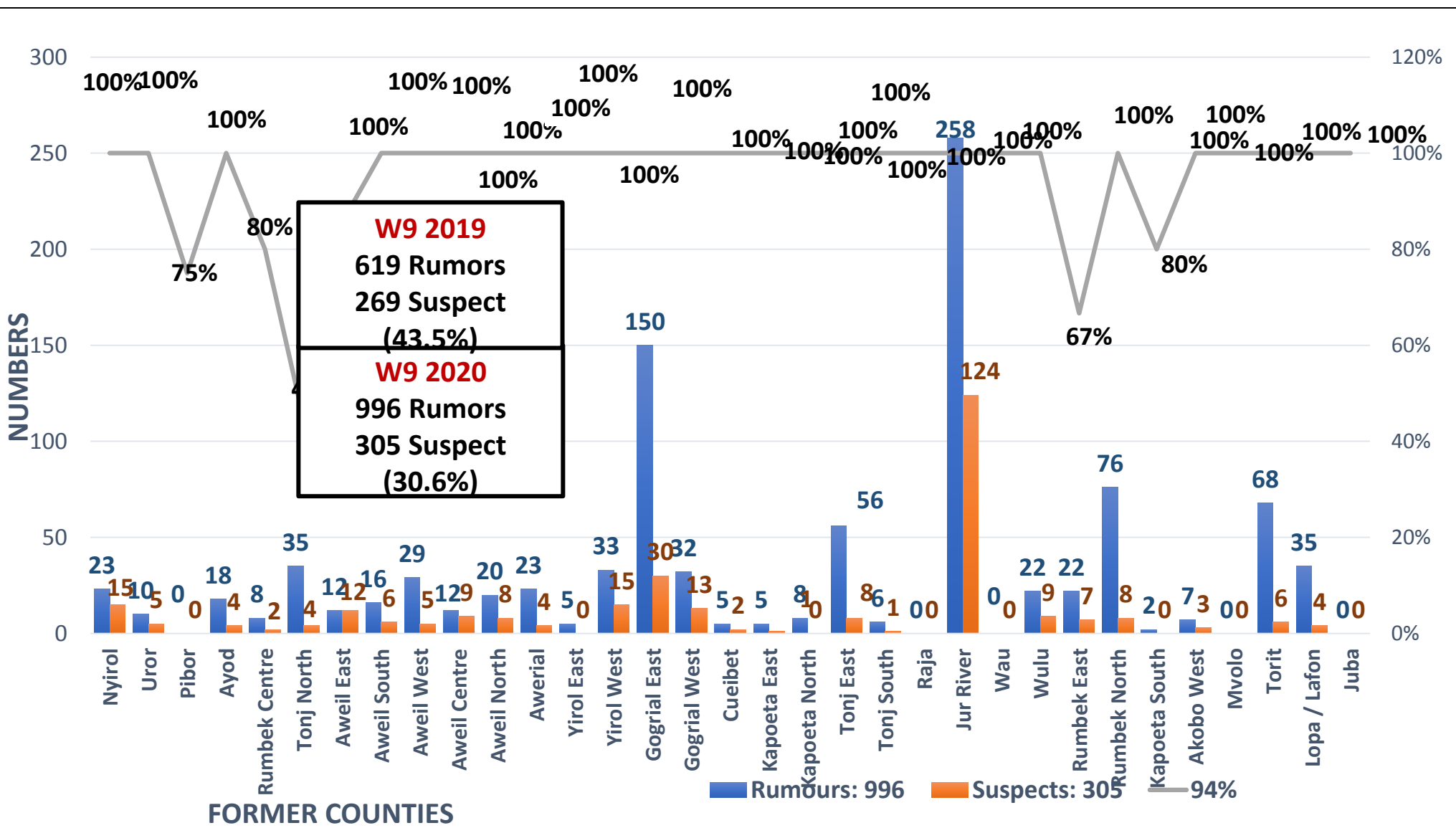
W9	Cumulative (2020)	
0	0	Low risk
1	1	Medium risk
1	10	High risk
5	22	Very high risk

65%	72%	% verified
0%	0%	% auto-discarded
2%	2%	% risk assessed
2%	2%	% requiring a response

CUMULATIVE: Guinea Worm Rumors and Suspects
Week1-Week 9, 2020 (N=10459 Rumors, 3,924 Suspects (37.5%))



Counties that reported Guinea worm Rumors, and Suspects during 23th – 29th Feb 2020 (9th Week) (n=32)



SUSPECTED OUTBREAKS IN 2019

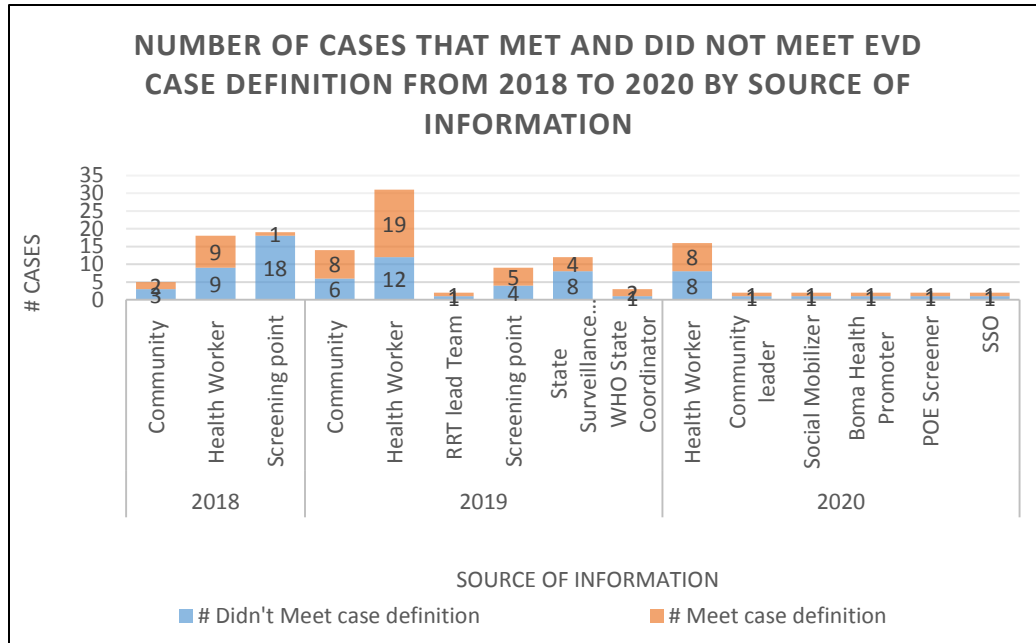
Major suspected outbreaks in South Sudan in
2020

EVD Suspect cases in South Sudan 2018 and 2019 as of week 11, 2020

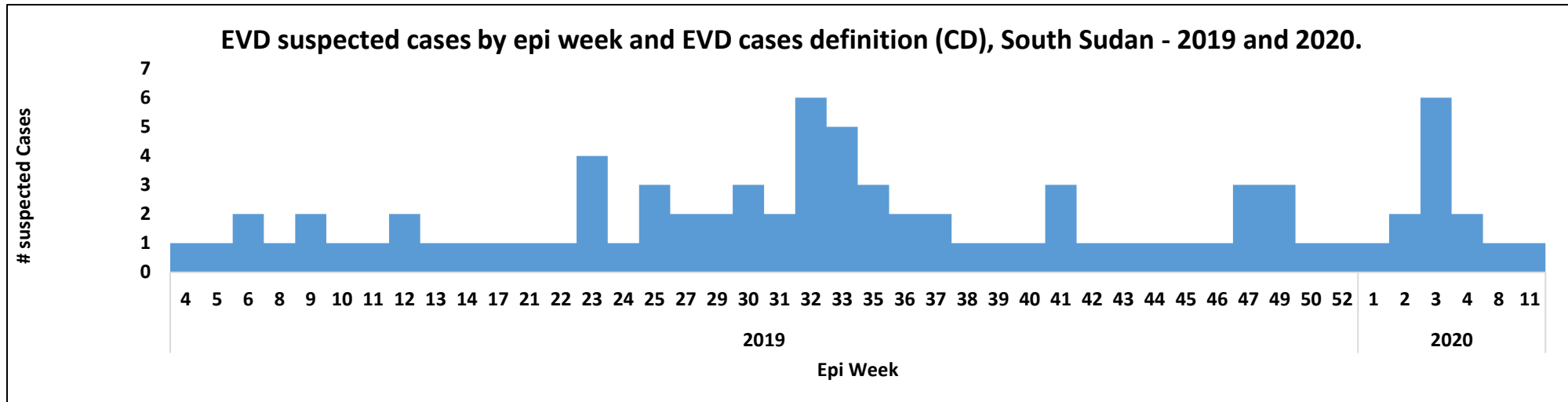
Met EVD cases definition			
2018	30	12	42
Community	3	2	5
Health Worker	9	9	18
Screening point	18	1	19
2019	32	39	71
Community	6	8	14
Health Worker	12	19	31
RRT lead Team	1	1	2
Screening point	4	5	9
State Surveillance Officer	8	4	12
WHO State Coordinator	1	2	3
2020	13	13	26
Health Worker	8	8	16
Community leader	1	1	2
Social Mobilizer	1	1	2
Boma Health Promoter	1	1	2
POE Screener	1	1	2
SSO	1	1	2
Grand Total	75	64	139

- Since August 2018, at least 139 suspect EVD cases have been reported, of which:
- 26 (18.7%) have been reported in 2020
- Most of the suspect EVD cases have been reported by health workers at health facility level
- One alert was reported in week 11, 2020

EVD Suspect cases in South Sudan 2018, 2019 and 2020 as of week 11, 2020

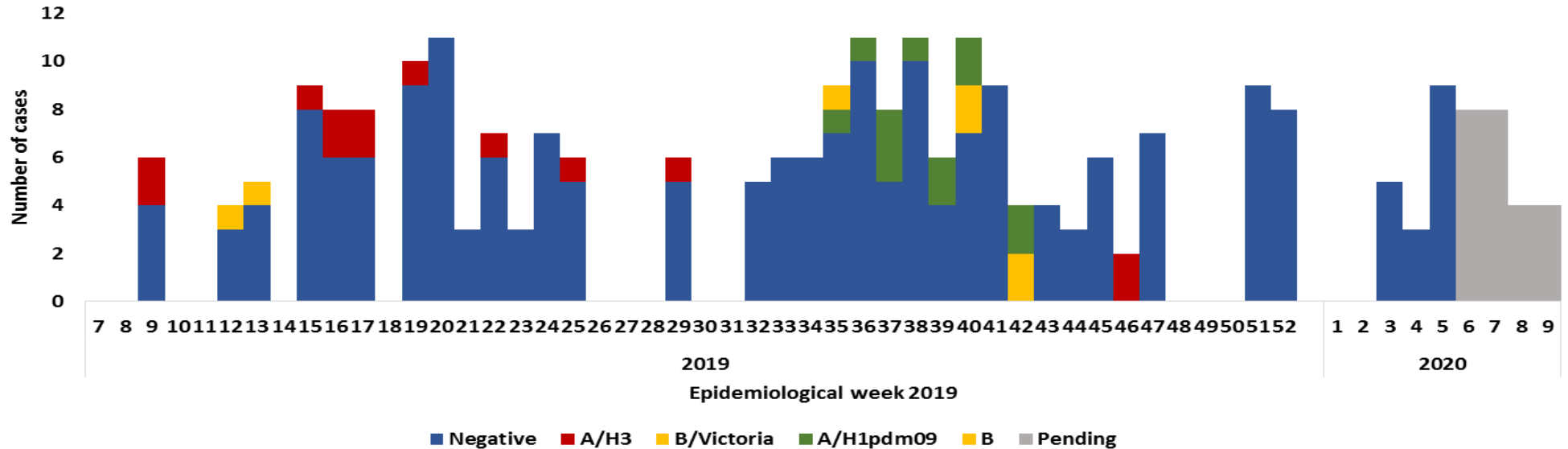


- Most of the suspect EVD cases have been reported in adults 18 years and above (72%)
- Similarly, most suspect EVD cases have been reported in males (56%)
- The distribution suspect EVD cases in both children <18years and adults ≥18yrs is skewed towards the males



Routine Sentinel Surveillance | Human Influenza

Influenza isolates from sentinel sites in Juba, wk 7, 2019 to wk 9, 2020.



- 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
- There are currently two designated Influenza sentinel surveillance sites in Juba (Juba Teaching Hospital and Al Sabah Children’s Hospital) that are collecting epidemiological data and samples from ILI/SARI cases
- Since week 7 of 2019, a total of 292 ILI/SARI samples have been collected and tested in UVRI 228 being negative; 6 (3%) positive for Influenza B (Victoria); 13(7%) positive for Influenza A (H3); and 12(6%) positive for Influenza A (H1)pdm09 and (20) samples are pending test results .
- Since the beginning of 2019; Influenza A (H3) has been the predominant isolate. However, Influenza A (H1)pdm09 emerged from week 35 as a new circulating strain.

Response | Suspect epidemics; Current Malaria trends 09, 2020

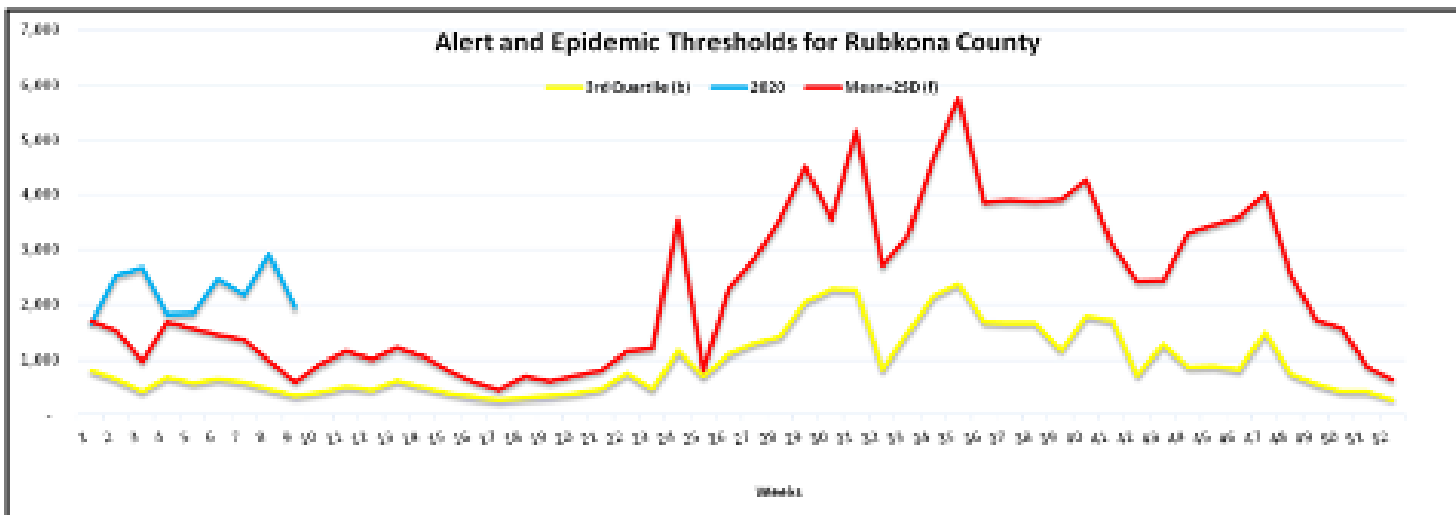
Malaria was the leading cause of morbidity and mortality, accounting for **54.6%** of all morbidities and **12.7%** of all mortalities in week 09, 2020

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

I. Unity hub (**Rubkona**)

Proposed public health actions:

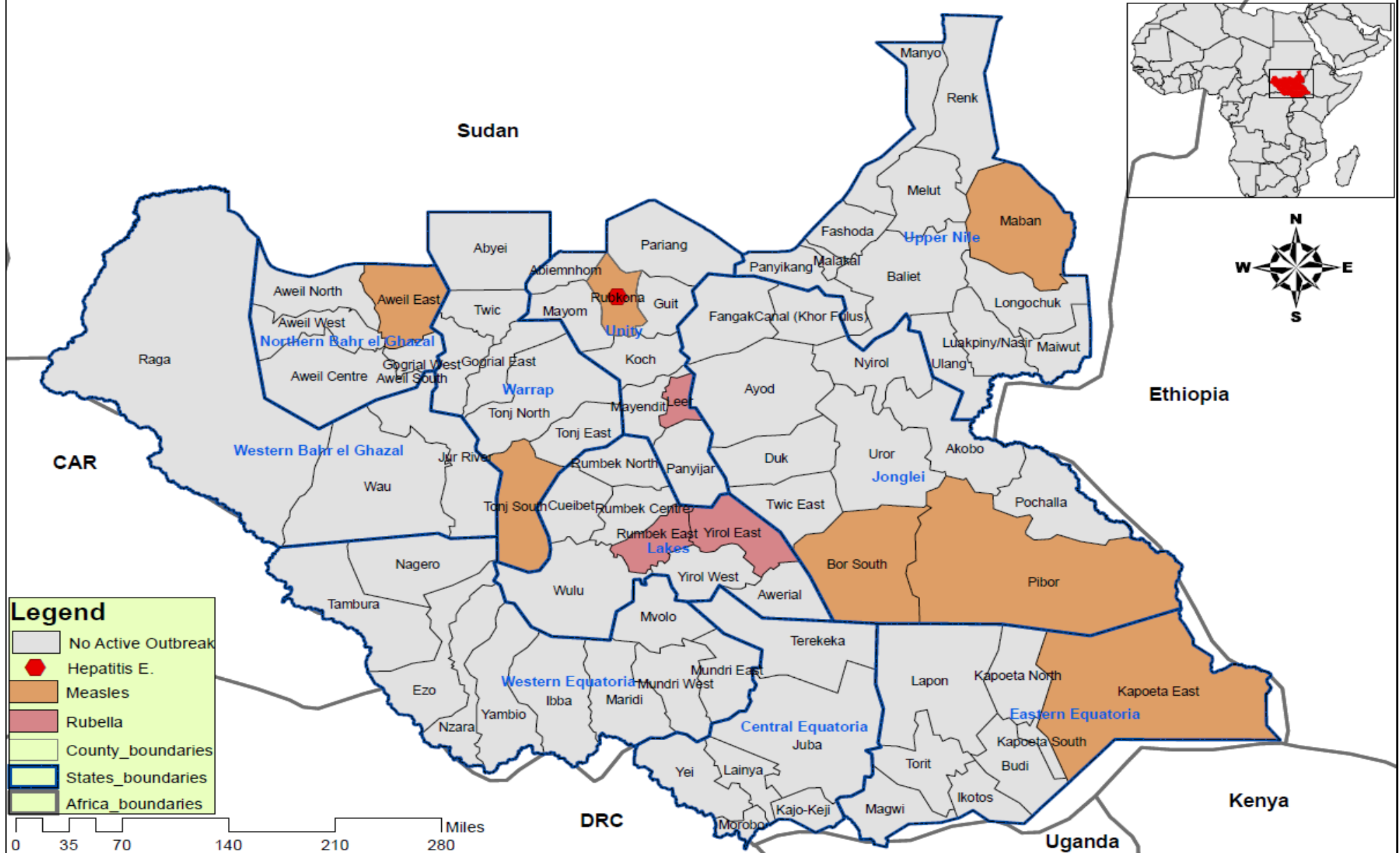
1. Malaria taskforce of malaria technical working group meeting to ensure that operational readiness for malaria prevention, diagnosis, and treatment are optimized.
2. Field missions to conduct technical verification of the trends in the affected counties
3. Assessment of current stock levels of malaria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



ACTIVE OUTBREAKS AND PUBLIC HEALTH EVENTS

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

Map of South Sudan showing counties with active outbreaks of Measles, Rubella and Hepatitis E in 2020.



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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	7	200 (0.035)	Yes	No	Yes	Yes
Measles	Bentiu PoC	24/04/2019	6	386 (0.0155)	Yes	Yes	Yes	N/A
Measles	Maban	1/11/2019	1	139(0.007)	yes	No	Yes	N/A
Rubella	Rumbek East	17/9/2019	NR	23(0.35)	yes	No	Yes	N/A
Measles	Jebel Boma	10/12/2019	NR	96(0.063)	yes	No	Yes	N/A
Measles	Aweil East	02/01/2020	NR	205(0.009)	yes	No	yes	N/A
Measles	Kapoeta East	18/01/2020	NR	16(0.625)	yes	No	Yes	N/A

● Measles outbreaks confirmed in 2020

- 5 counties – Tonj East, Magwi, Bor, Kapoeta East and Tonj South

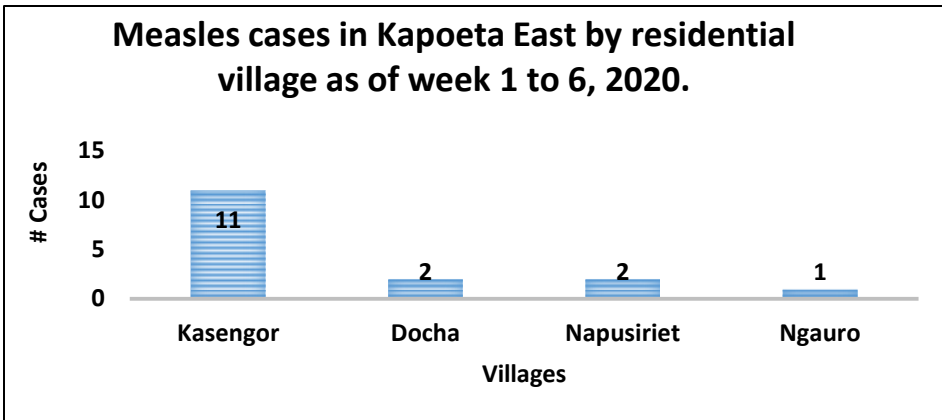
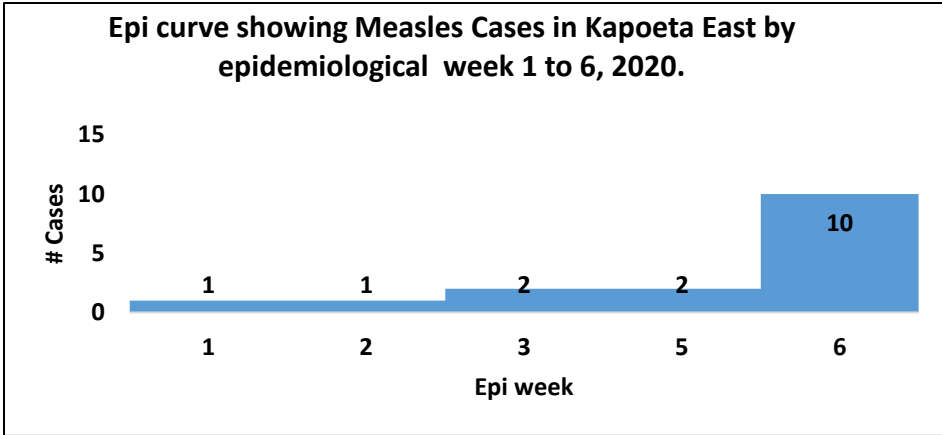
New confirmed measles outbreaks and response dates:

- Bor: **Mass campaign completed**
- Magwi: **Mass campaign completed**
- Tonj East: **Mass campaign completed**
- **Kapoeta East: Mass campaign completed (Kassengor is part of Jebel Boma reactive campaign which was finalized last week)**
- Tonj South: **Mass Campaign completed**

Measles Outbreak situation & response by county as of week 09, 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	180,809	13	48	61	33.73725865	0	0	12-Dec-19	Mass Campaign	Pending result	Mass Campaign	controlled	Mass Campaign Completed
2	Magwi	4699302	5	5	10	0.21279756	0	0	19-Sep-19	Mass Campaign	Pending result	Mass Campaign	controlled	Mass Campaign Completed
3	Bor	320,956	7	7	14	4.361968619	0	0	17-Jan-19	Mass Campaign	115.60%	Mass Campaign	controlled	Mass Campaign Completed
4	Kapoeat East	601,726	6	10	16	2.659017559	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	Awiel East		10	195	205		0	0	2-Jan-20				active	
Total		5,201,067	41	265	306	40.97104239	0	0						

Confirmed Measles Outbreak in Kapoeta East County



Age Group	Cases	Percentage	CUM. %
0 - 4 Years	13	81%	81%
5 - 9 Years	3	19%	100%
Grand Total	16	100%	

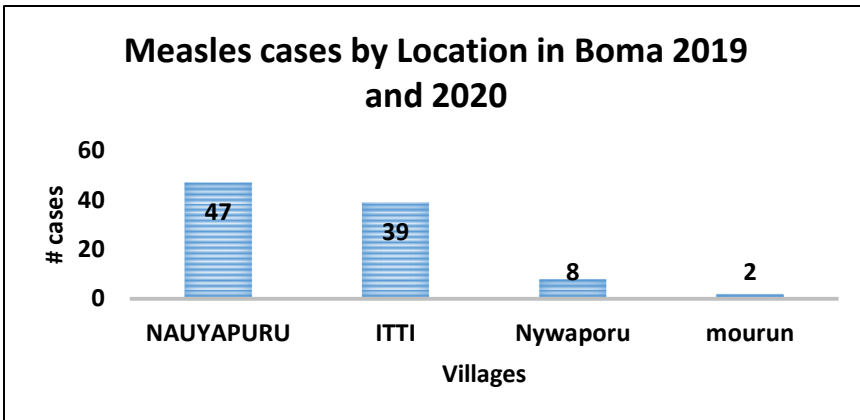
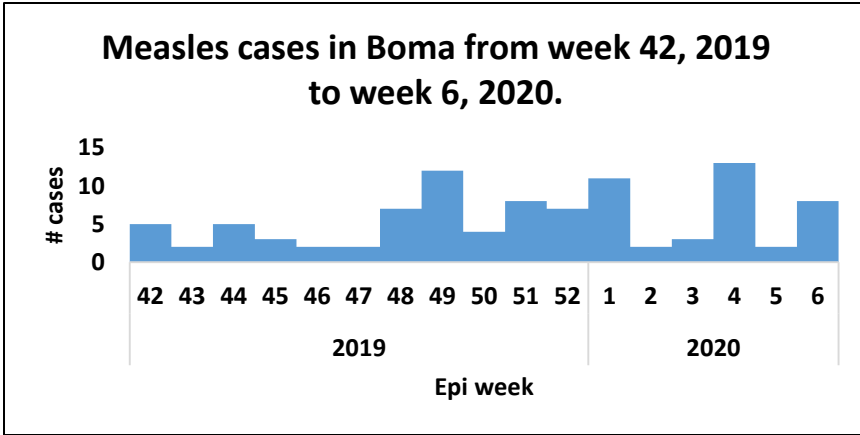
Descriptive Epidemiology:

- Initial cases were reported on 18th January 2020
- A total of 16 Suspected Measles case have been line listed in Kapoeta East county
- 10 new cases were reported in week 06, 2020
- 16 samples were collected of which 06 samples tested IgM positive for measles.
- The most affected payams are: Kasengor and Docha
- (13) 81% of the cases are less than 5 years of age
- Female were 25% and male were 75%

Response and Recommendations

- SMOH, Care International and partners completed a reactive campaign , results will be shared.
- Enhancing surveillance and active case search ongoing
- Case management is ongoing in Bor State Hospital

Confirmed Measles Outbreak in Jebel Boma County

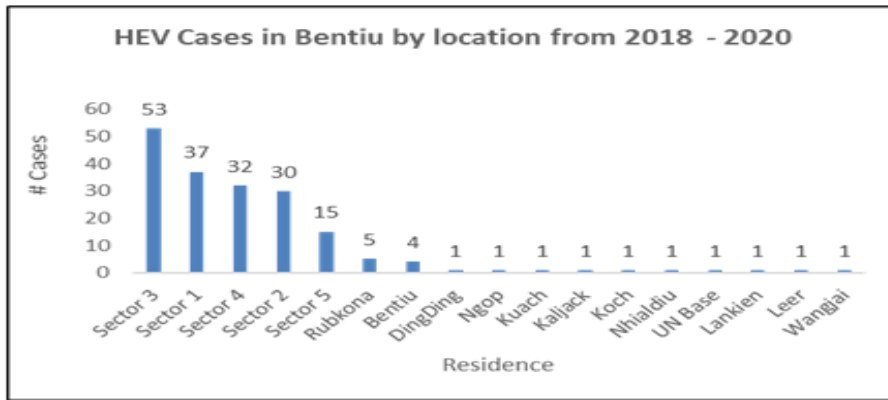
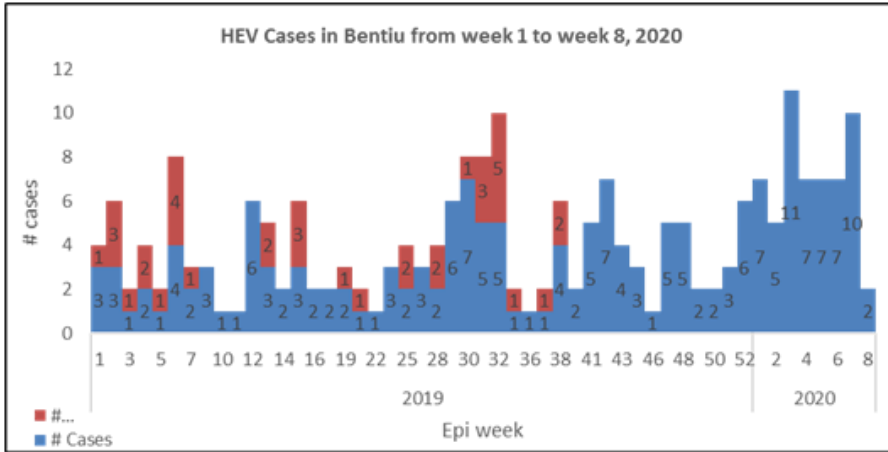


Age-group	Cases	Percentage	% Cum.
0 - 4 Years	82	85%	85%
5 - 9 Years	11	11%	97%
10 - 14 Years	2	2%	99%
15+ Years	1	1%	100%
Grand Total	96	100%	

Descriptive Epidemiology:

- Initial cases were reported on 14th October 2019
- A total of 96 Suspected Measles case have been line listed in Jebel Boma county
- 6 new cases were reported in week 04, 2020
- 11 samples were collected of which, 08 samples tested IgM positive for measles.
- The most affected payams are: Nauyapuru and Ititi (85) 82% of the cases are less than 5 years of age
- Female were 51% and male were 49%
- 11 community deaths were reported in Jebel Boma county
- **Response and Recommendations**
- SMOH, Care International and partners completed a reactive campaign, results will be shared. NMOH with support of WHO are planning for PCE.
- Surveillance and line-listing are ongoing
- Case management is ongoing in Jebel Boma Hospital

Confirmed Measles Outbreak in Aweil East County



Age Group	Cases	Percentage	Cum.%
0 - 4 Years	108	53%	53%
15 + Years	50	24%	77%
10 - 14 Years	25	12%	89%
5 - 9 Years	22	11%	100%
Grand Total	205	100%	

Descriptive Epidemiology:

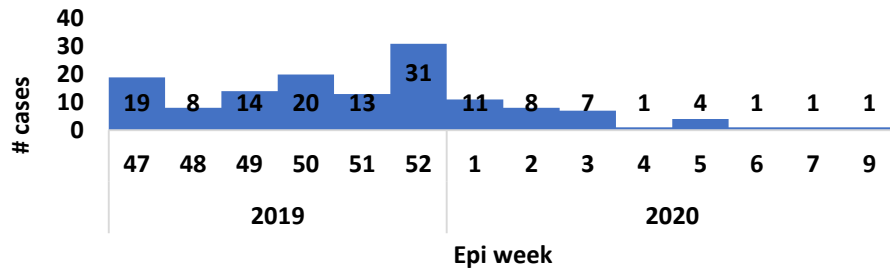
- Initial cases were reported on 2nd Jan, 2020
- A total of 205 suspected measles cases have been line listed in Aweil East county
- Majority of the cases were from Baac and Madhol payams
- 12 new cases were reported in week 09, 2020
- (108) 53% of the cases are less than 5 years of age
- Male were 59% of cases and female were 41%

Response and Recommendations

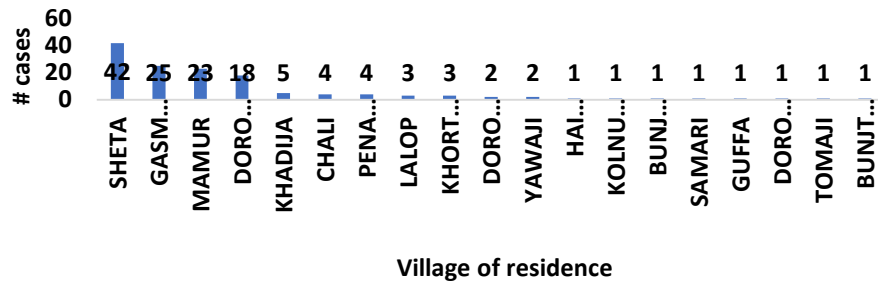
- Reactive campaign was finalized in Aweil East on 24th January, 2020 by SMOH and IOM, coverage was 119% and PCE coverage was 91.5%. Plans is ongoing for second reactive campaign.
- Majority of the cases reported this week were from Baac payam with administrative coverage of 73% which is not sufficient to interrupt transmission.
- Total of 21 samples were; 10 tested measles IgM +ve and 2 rubella IgM positive.
- Surveillance and line-listing are ongoing
- Case management is ongoing

Confirmed Measles Outbreak in Maban County

Epi curve for measles cases in Maban county as of week 47, 2019 - 9, 2020.



Measles cases in maban county by village of residence as of week 47, 2019 - 09, 2020.



Descriptive Epidemiology:

- Initial cases were reported on 1th November 2019
- A total of 139 Suspected Measles case have been line listed in Maban county
- 01 new case were reported in week 09, 2020
- 12 samples were collected of which, 11 samples tested positive for measles and (1) positive for Rubella IgM
- The most affected payams are: Sheeta and Gasmalla
- 77% of the cases are less than 5 years of age
- 46% of cases are females while 54% are male
- No deaths reported

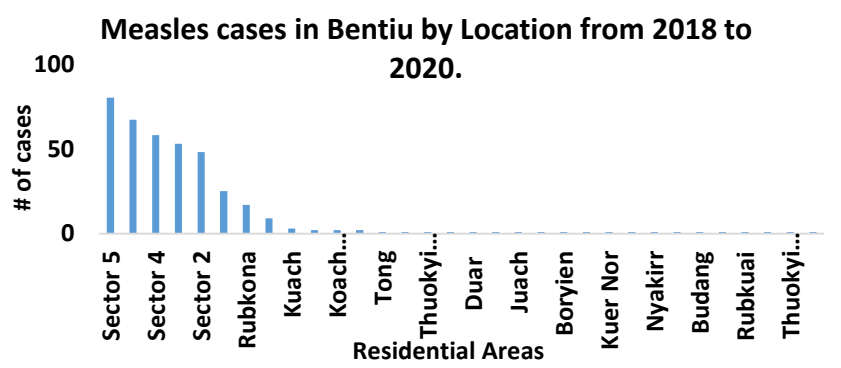
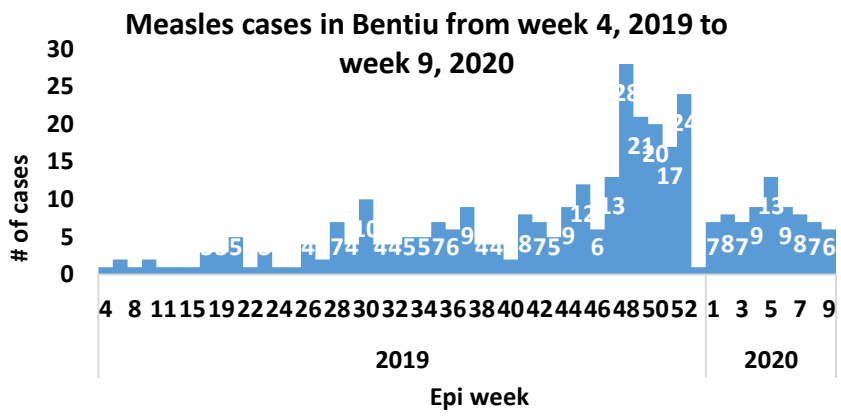
Response and Recommendations:

- Rapid response team deployed to support the response
- Reactive campaign micro plan has been developed for the whole county pending phase 2 mass campaign on 10th March 2020
- Surveillance and line-listing are ongoing
- Case management is ongoing
- SMoH, MSF-B conducted a reactive campaign on 4th Dec, 2019 targeted 7394 children age 6 months to 15 years in the affected areas in Maban with an average of 73.94%.

Age group	Cases	Percentage	Cum. %
0 - 4 Years	107	77%	77%
5 - 9 Years	15	11%	88%
10 - 14 Years	9	6%	94%
15+ Year	8	6%	100%
Grand Total	139	100%	

Response | Confirmed epidemics

Confirmed Measles and Rubella outbreak in Bentiu PoC



Age Group	Cases	Percentage	Cum. %
0 - 4 Years	366	95%	95%
5 - 9 Years	12	3%	98%
10 - 14 Years	5	1%	99%
15+ Years	3	1%	100%
Grand Total	386	100%	

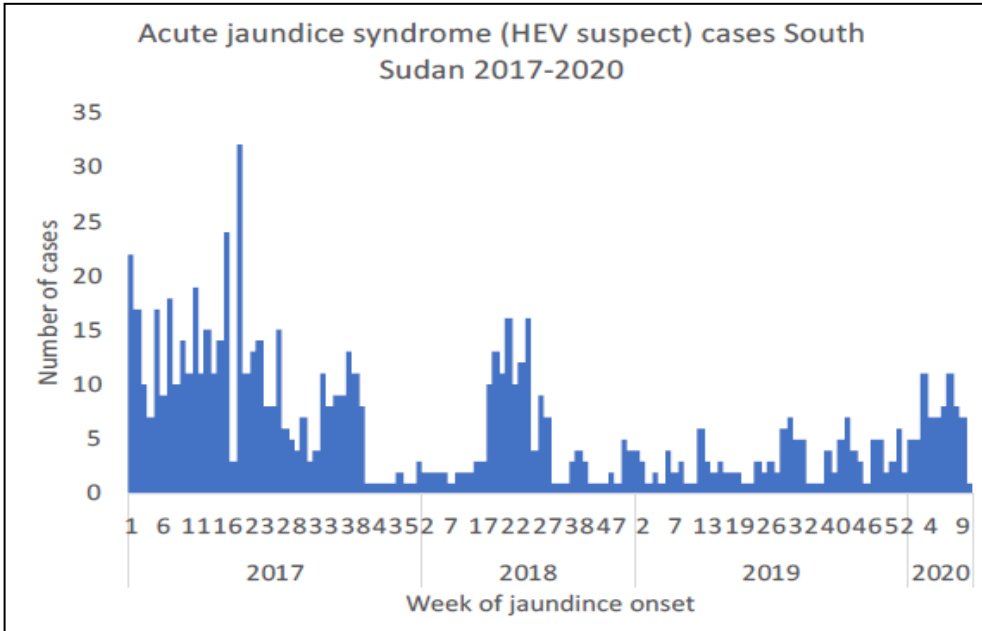
Epidemiological description

- Bentiu PoC has been reporting suspected measles/rubella cases since week 4 of 2019.
- 06 new cases reported in week 09, 2020
- At least 386 measles cases including 1 death (CFR 0.3%) 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 advised to collect samples from suspect cases.
 - Review case details of new suspect cases to determine why they getting measles

Hepatitis E, Bentiu PoC (1)



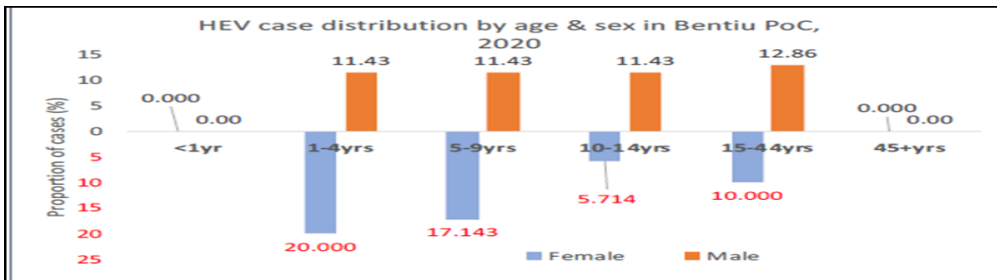
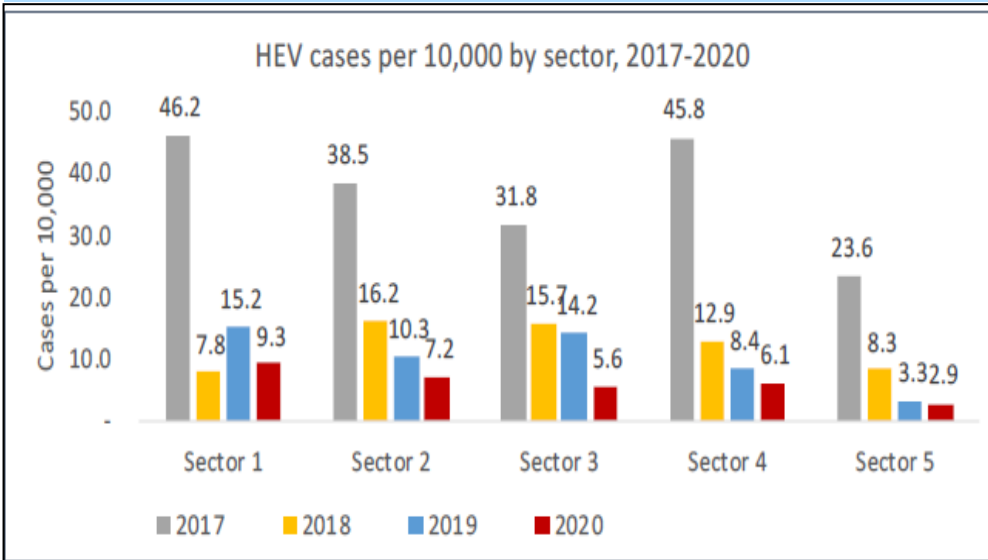
- HEV cases reported in Bentiu PoC for over 4yrs
- 799 cases; 4 deaths (CFR 0.5% since 2017)
- Cases have been reducing since 2017
- 70 HEV cases including one death reported in 2020 (end of wk9)

Descriptive epidemiology

- The persistent transmission of HEV in Bentiu PoC continues with 799 cases since beginning of 2017
- There were 70 new cases reported in 2020 as of week 09.
- At risk of adverse outcomes when infected in the 3rd trimester of pregnancy
- Use of unsafe drinking water likely to be source of infection
- Sustained transmission with transmission peaks may be associated with seasonal changes and other factors
Shows continuous exposure to a common source of infection
- Up to week 8, 2020; there were 46 cases of HEV in Bentiu PoC including 2 deaths (CFR 0.27%)

Outcome	2017	2018	2019	2020	Total
Died		1	2	1	4
Recovered	1	23	127	69	220
Missing outcome	442	133			575
Total	443	157	129	70	799

Hepatitis E, Bentiu PoC (2)



- Incidence by sector has been reducing since 2017
- During 2020; the highest incidence reported in sectors 1&2
- In children below 10yrs, most cases are female
- In persons 10yrs and above; most cases males.

Factors for the current trends

- Increase in in the PoC population from last year due to returnees thus straining the WASH resources.
- The breakdown of the borehole in sector 4 thus constraining access to safe water and pushing residents to use unsafe water sources.
- Delays to distribute soap in the PoC due to delays of consignment on the Juba-Bentiu road.
- Delays in desludging full latrines thus rendering the latrines unusable and forcing people to resort to open defecation.
- Inconsistent chlorination of the safe water sources thus leading to sub-optimal FRC levels at water collection points.
- Ponds of stagnant water that are used for bathing, washing – adults & children; swimming & playing by children
- Open defecation around the open water ponds
- Lack of hand washing facilities at the latrines leading to inconsistent hand washing
- Inadequate/shortage of water storage containers
- Limited attention and education on HEV prevention and control

Hepatitis E, Bentiu PoC (3)

Current response

- HEV coordination meeting instituted in Bentiu PoC and in Juba – PHEOC to
- coordinate assessments and response (recent minutes attached).
- FRC levels are being monitored and reported to ensure optimal FRC levels at the
- points of collection (recent est. FRC 0.3-0.4 mg/l).
- WASH has also increased hygiene promotion in the camps and schools.
- General soap distribution has resumed to all the sectors
- WASH kits are being provided to HH with HEV cases.
- Broken borehole in sector 4 has been assessed & is beyond repair hence in the
- interim; alternative water source being extended from the neighboring sector 5
- Desludging of full latrines has commenced.
- Camp management engaged to solicit a solution for the pools of stagnant water.
- Surveillance and case management are ongoing for HEV cases.

Recommendations

- Sustainable solution required for the water in the oxidation pond that is accessed by the PoC population for leisure & domestic use
- Coordinated health wash response meetings – Bentiu & Juba
- Monitoring; reporting; and optimization of FRC levels at source &
- household level
- Adequate water storage containers
- Complete soap distribution and avail hand washing facilities
- Targeted WASH for affected households & pregnant women
- Desludging of latrines should continue
- Community education HEV prevention
- Surveillance and case management

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								
Measles	Juba	21/11/2019	NR	6(0.1667)	Yes	No	Yes	N/A
Measles	Tonj East	12/12/2019	6	61(0.98)	yes	Yes	Yes	N/A
Measles	Bor	17/01/2020	3	14(0.214)	yes	No	yes	N/A

EBOLA VIRUS DISEASE[EVD] PREPAREDNESS IN SOUTH SUDAN

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

Ebola update DRC 10 March 2020

Current situation

- Currently as of 8 March 2020
- 3444 Cases [3310 confirmed & 123 probable]
- 2264 Deaths [2170 confirmed & 94 probable]

Response update

- 1 August 2019 marked one year since the Government of the Democratic Republic of the Congo declared the Ebola outbreak

Affected health zones

- No new cases of Ebola virus disease have been reported since 17 February 2020, and on 3 March 2020, the only person confirmed to have EVD in the last 21 days was discharged from an Ebola Treatment Centre after recovering and testing negative twice for the virus.

Novel Coronavirus

Novel Corona Virus Situation Summary

- Situation update as of 21th March, 2020

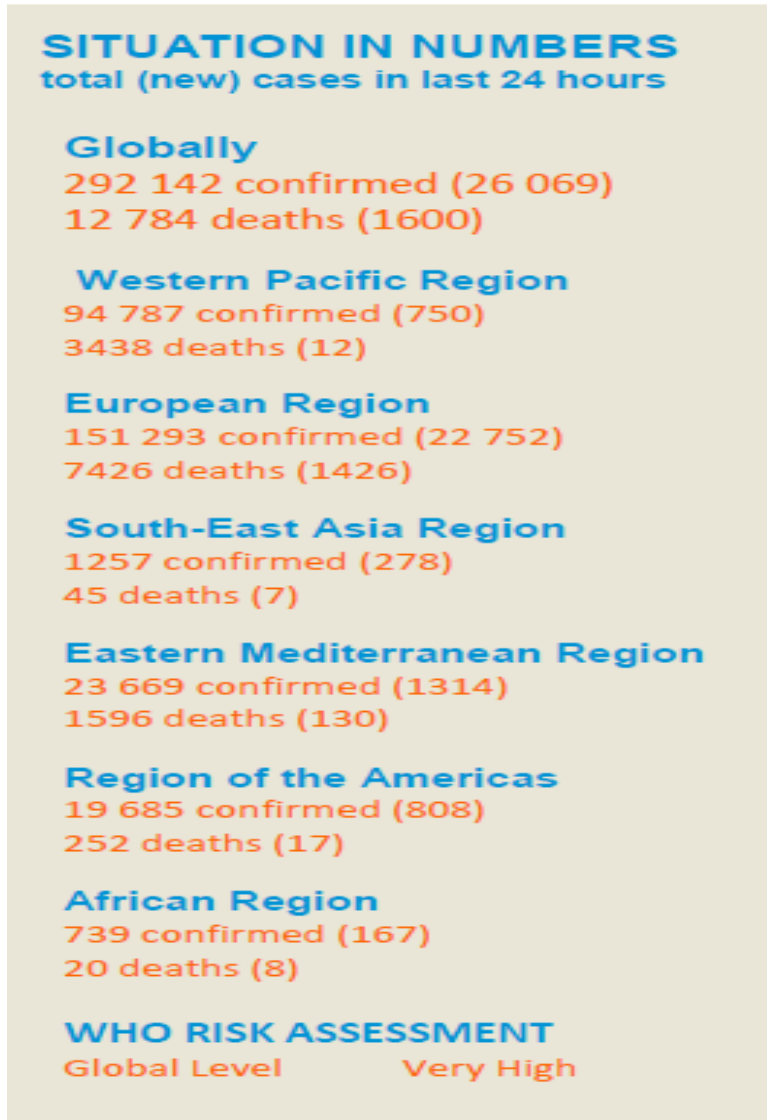
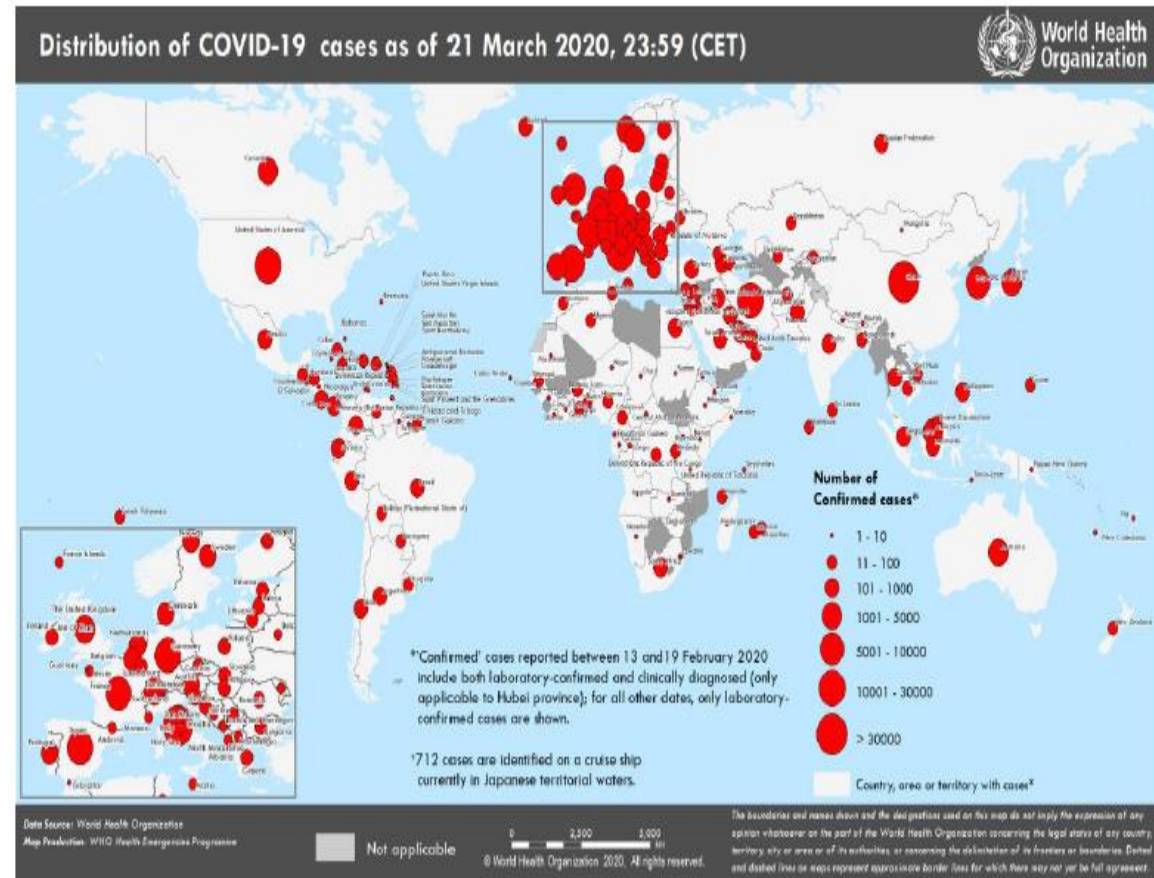


Figure 1. Countries, territories or areas with reported confirmed cases of COVID-19, 21 March 2020



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

COVID-19 Preparedness in South Sudan

- No confirmed COVID-19 cases in South Sudan
- Three COVID-19 alerts reported from Juba, Malakal & Wau on 13th March 2020.
- The three alerts from Juba and Malakal and Wau tested negative.
- Guidelines for identifying suspect cases at the HF & PoE under review
- Concept for integrated COVID-19 trainings has been prepared and endorsed by the taskforce
- All the pillars are now involved in updating their COVID-19 plan
- WHO-AFRO case definition is adopted
- Laboratory testing for COVID-19 established in NPHL
- Weekly meetings of the national COVID-19 taskforce are ongoing

Overall Conclusions and Recommendations for week 9, 2020

Conclusion

- The overall IDSR and EWARIN reporting performance in week 9, surpasses the target of 80%. Nevertheless, there is room for improvement in Upper Nile
- With five outbreaks confirmed in 2020; measles remains the most frequent vaccine preventable disease. Universal implementation of the measles control strategy is paramount.
- There is increasing COVID-19 spread outside China and Africa with new confirmed outbreaks in Sudan, Kenya, Rwanda and Ethiopia with a very high risk of importing cases into countries like South.

Recommendations

- All partners should support CHDs & HF in Upper Nile and other states to improve IDSR/EWARN reporting.
- All partners should support Government to optimize the implementation of the measles control strategy.
- Strengthen national capacities for COVID-19 preparedness and response readiness.

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>

