

South Sudan

Integrated Disease Surveillance and Response (IDSR)

Epidemiological Bulletin Week 10, 2020 (March 02 – March 08)



Major Epidemiological Highlights in week 10 of 2020

- In week 10, 2020 IDSR reporting completeness was 92% and timeliness was 81% at health facility level. EWARN reporting both completeness and timeliness were 87%.
- Of the 145 alerts in week 10, 2020; 71% were verified 0% were risk assessed and 0% required a response. Malaria (52), AWD (34), measles (6) and bloody diarrhea (17) were the most frequent alerts in week 11, 2020.
- Three COVID-19 alerts were reported on 13th March from Juba, Wau & Malakal. All three alerts tested COVID-19 negative.
- Cholera alert in Pibor was reported on 17th March 2020, total of 8 cases in from Kong kong cattle camp. NRRT was deployed, 10 samples were collected, all tested negative for *Vibrio cholerae*; but *E. coli* was isolated (subtyping underway).
- Two (2) of the 41 samples collected from Kajo-keji by the RRT from 12th to 18th February 2020 were confirmed for yellow fever. The ICG request for yellow fever vaccines has been finalized (pending verification of target population).
- Since week 7 of 2019; 296 ILI/SARI samples have been tested with 3% being positive for Influenza B (Victoria); 7% for Influenza A (H3); and 6% for Influenza A (H1)

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 10, 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 | WES | AMREF, World Vision, CUAMM, CDTY, OPEN | 213 | 212 | 100% | 212 | 100% |
| 2nd | Warrap | GOAL, CCM, WVI, Malaria Consortium, UNKEA, Save the Children, MSF | 120 | 117 | 98% | 120 | 100% |
| 3rd | Lakes | Doctors with Africa (CUAMM), LIVEWELL | 116 | 104 | 90% | 116 | 100% |
| 4th | NBG | Malaria Consortium, Healthnet TPO, IRC, CEDS, IHO | 130 | 97 | 75% | 128 | 98% |
| 5th | Unity | Cordaid, UNIDOR, IRC, CHADO, CARE International, CRADA, CASS | 91 | 81 | 89% | 87 | 96% |
| 6th | WBG | Cordaid, Healthnet TPO, CARE International | 77 | 56 | 73% | 70 | 91% |
| 7th | CES | HLSS, SSUHA, Healthnet TPO, IHO, GOAL, TRI-SS, THESO | 121 | 92 | 76% | 106 | 88% |
| 8th | Jonglei | Nile Hope, MDM, JDF, Livewell, CMD, HFO, EDA, CRADA, Malaria Consortium, CMA | 155 | 129 | 83% | 133 | 86% |
| 9th | Upper Nile | Cordaid, WVI, RI, IMC, NIDO, UNKEA, MC, SSAID | 115 | 72 | 63% | 95 | 83% |
| 10th | EES | Cordaid, HLSS, CCM | 145 | 84 | 58% | 118 | 81% |
| | South Sudan | | 1283 | 1044 | 81% | 1185 | 92% |

Key

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

The timeliness of IDSR reporting (supported by EWARS mobile) at health facility level was 81 and completeness was 92%. All 10 states are above the target of 80% with highest reporting rate in WES, Warrap and Lakes with completeness of 100%.

IDSR Timeliness and Completeness Performance at County Level for week 10, 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 | 22 | 96% | 23 | 100% |
| Rumbek East | Doctors with Africa (CUAMM) | 24 | 23 | 96% | 24 | 100% |
| Rumbek North | Doctors with Africa (CUAMM) | 7 | 0 | 0% | 7 | 100% |
| Wulu | Doctors with Africa (CUAMM) | 14 | 14 | 100% | 14 | 100% |
| Cueibet | Doctors with Africa (CUAMM) | 15 | 14 | 93% | 15 | 100% |
| Yirol East | Doctors with Africa (CUAMM),LIVEWELL | 14 | 12 | 86% | 14 | 100% |
| Yirol West | Doctors with Africa (CUAMM) | 12 | 12 | 100% | 12 | 100% |
| Awerial | Doctors with Africa (CUAMM) | 7 | 7 | 100% | 7 | 100% |
| Yambio | World Vision International | 42 | 42 | 100% | 42 | 100% |
| Ibba | AMREF | 11 | 11 | 100% | 11 | 100% |
| Maridi | AMREF | 26 | 26 | 100% | 26 | 100% |
| Mundri West | CUAMM | 21 | 21 | 100% | 21 | 100% |
| Mundri East | CUAMM | 19 | 19 | 100% | 19 | 100% |
| Tambura | World Vision International | 26 | 26 | 100% | 26 | 100% |
| Mvolo | CUAMM | 11 | 11 | 100% | 11 | 100% |
| Nzara | World Vision International | 20 | 20 | 100% | 20 | 100% |
| Nagero | World Vision International | 10 | 10 | 100% | 10 | 100% |
| Ezo | World Vision International | 27 | 26 | 96% | 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% | 32 | 100% |
| Gogrial East | GOAL | 15 | 11 | 73% | 15 | 100% |
| Abyei | AAA, Save the Children, MSF | 10 | 10 | 100% | 10 | 100% |
| Tonj East | CCM | 12 | 12 | 100% | 12 | 100% |
| 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 | 35 | 100% | 35 | 100% |
| Duk | MDM + JDF | 15 | 15 | 100% | 15 | 100% |
| Pibor | LIVEWELL,CRADA | 5 | 3 | 60% | 3 | 60% |
| Akobo | NILE HOPE | 8 | 8 | 100% | 8 | 100% |
| Fangak | CMD,HFO | 16 | 16 | 100% | 16 | 100% |
| Uror | Nile Hope,Malaria Consortium | 8 | 7 | 88% | 7 | 88% |
| Nyirrol | CMA,Malaria Consortium | 11 | 5 | 45% | 9 | 82% |
| 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 | 13 | 100% | 13 | 100% |
| Guit | CHADO | 7 | 3 | 43% | 5 | 71% |

IDSR Timeliness and Completeness Performance at County Level for week 10, 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 | 2 | 25% | 2 | 25% |
| Akoka | IMC | 5 | 0 | 0% | 3 | 60% |
| Baliet | IMC | 5 | 0 | 0% | 1 | 20% |
| Renk | WVI + RI | 13 | 12 | 92% | 12 | 92% |
| Melut | WVI + RI | 8 | 0 | 0% | 6 | 75% |
| Manyo | CORDAID | 8 | 3 | 38% | 4 | 50% |
| Maiwut | RI | 5 | 4 | 80% | 5 | 100% |
| Fashoda | CORDAID | 14 | 13 | 93% | 14 | 100% |
| Ulang | UNKEA,RI | 11 | 4 | 36% | 7 | 64% |
| Maban | WVI + RI | 16 | 12 | 75% | 14 | 88% |
| Luakping Nasir | UNKEA,RI | 26 | 13 | 50% | 19 | 73% |
| Longechuk | RI | 9 | 9 | 100% | 9 | 100% |
| Panyikang | IMC | 4 | 0 | 0% | 0 | 0% |
| Aweil West | HealthNetTPO | 37 | 13 | 35% | 37 | 100% |
| Aweil East | IRC,TADO | 36 | 31 | 86% | 35 | 97% |
| Aweil Center | Malaria Consortium(MC) | 15 | 14 | 93% | 15 | 100% |
| Aweil South | Malaria Consortium(MC),IHO | 9 | 7 | 78% | 9 | 100% |
| Aweil North | HealthNetTPO,IHO | 33 | 32 | 97% | 32 | 97% |
| Pariang | CARE International | 11 | 9 | 82% | 9 | 82% |
| Panyijjar | IRC | 15 | 14 | 93% | 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 | 41 | 93% | 42 | 95% |
| Kajo-Keji | SSUHA,GOAL,TRI-SS | 16 | 14 | 88% | 14 | 88% |
| Yei | SSUHA | 20 | 16 | 80% | 17 | 85% |
| Lainya | SSUHA | 16 | 2 | 13% | 13 | 81% |
| Morobo | SSUHA,THESO | 4 | 1 | 25% | 2 | 50% |
| Terekeka | HealthNetTPO | 25 | 18 | 72% | 18 | 72% |
| Torit | Cordaid | 20 | 14 | 70% | 17 | 85% |
| Lopa Lafon | HLSS | 18 | 15 | 83% | 17 | 94% |
| Ikotos | HLSS | 27 | 23 | 85% | 27 | 100% |
| Magwi | HLSS | 22 | 15 | 68% | 19 | 86% |
| Budi | Cordaid | 21 | 10 | 48% | 18 | 86% |
| Kapoeta South | CCM | 10 | 2 | 20% | 9 | 90% |
| Kapoeta East | CCM | 12 | 5 | 42% | 5 | 42% |
| Kapoeta North | CCM | 15 | 0 | 0% | 6 | 40% |
| Wau | Cordaid | 28 | 25 | 89% | 28 | 100% |
| Raja | HealthNetTPO | 14 | 1 | 7% | 7 | 50% |
| Jur River | Cordaid | 35 | 30 | 86% | 35 | 100% |
| Rubkona | Cordaid,IRC,IOM,MSF | 15 | 13 | 87% | 15 | 100% |
| Mayom | CASS | 9 | 9 | 100% | 9 | 100% |
| Leer | UNIDOR | 11 | 11 | 100% | 11 | 100% |

Surveillance | EWARS surveillance performance indicators by partner week 10, 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% |
| IMA | 8 | 8 | 100% | 100% |
| IMC | 8 | 5 | 63% | 63% |
| 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 | 0 | 0% | 0% |
| TRI-SS | 2 | 2 | 100% | 100% |
| UNH | 2 | 0 | 0% | 0% |
| UNIDOR | 1 | 1 | 100% | 100% |
| WORLD RELIEF | 1 | 1 | 100% | 100% |
| TOTAL | 89 | 77 | 87% | 87% |

- Both completeness and timeliness were 87% for weekly reporting in week 10, 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 10, 2020 [A total of 145 event specific alerts generated by Hubs]

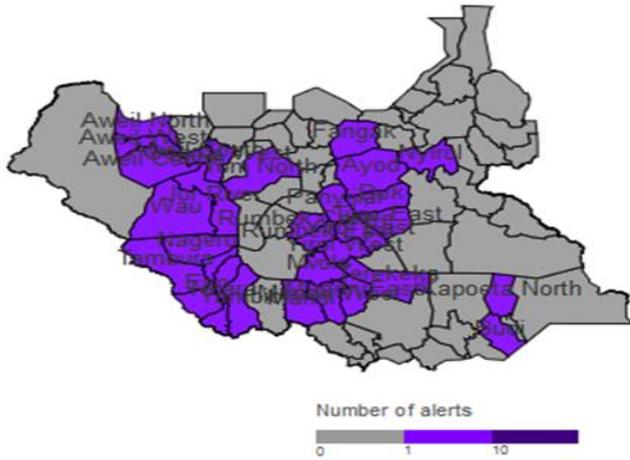
| States | AJS | ARI | Acute Watery Diarrhoea | Bloody Diarrhoea | AFP | Neonatal Tetanus | Malaria | Measles | Total Alerts |
|--------------------|----------|-----------|------------------------|------------------|----------|------------------|-----------|----------|--------------|
| Jonglei | | | | | | | | | 0 |
| Warrap | | 5 | 7 | 5 | | | 5 | | 22 |
| EES | | 6 | 5 | 5 | 1 | | 2 | 2 | 21 |
| Unity | 2 | 4 | 5 | 3 | | 1 | 3 | 3 | 21 |
| WES | | 7 | 10 | 2 | | | 39 | | 58 |
| CES | | 5 | 2 | | | | | | 7 |
| NBG | | | | | | | 1 | | 1 |
| Lakes | | | | | | | | | 0 |
| WBG | | 1 | 3 | | | | 2 | 1 | 7 |
| UNS | 1 | 3 | 2 | 2 | | | | | 8 |
| Total Grand | 3 | 31 | 34 | 17 | 1 | 1 | 52 | 6 | 145 |

During this week:

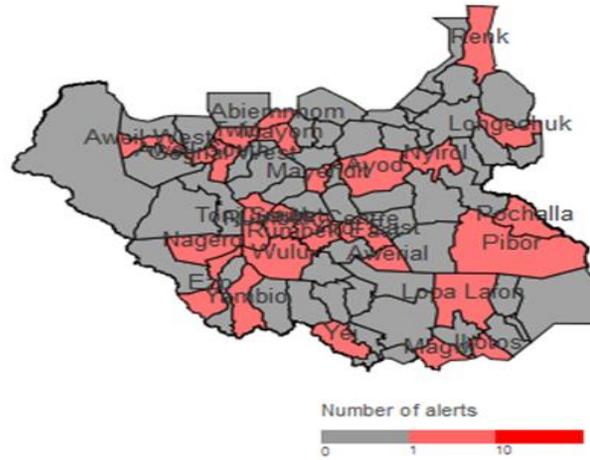
- 2 AJS alert: 2 been monitored
- 18 ARI: 12 are undergoing verification, 7 been monitored.
- 56 AWD alert: 37 undergoing verification, 16 been monitored
- 26 ABD: 13 undergoing verification, 12 been monitored and 1 under response
- 57 Malaria alerts: 25 undergoing verification, 31 under monitoring
- 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 10, 2020

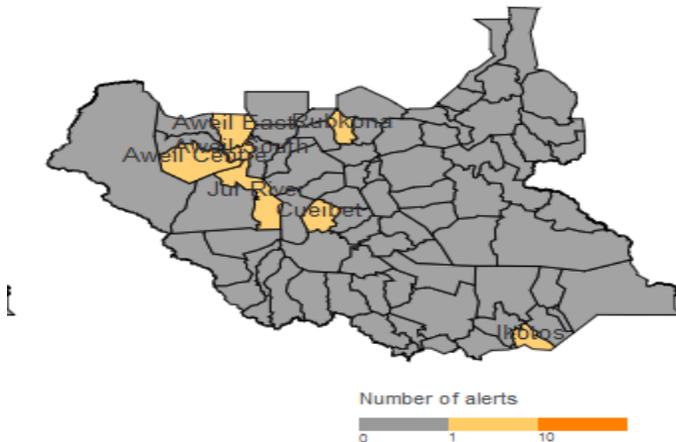
Map 2a | Malaria (W10 2020)



Map 2b | Bloody diarrhoea (W10 2020)



Map 2c | Measles (W10 2020)

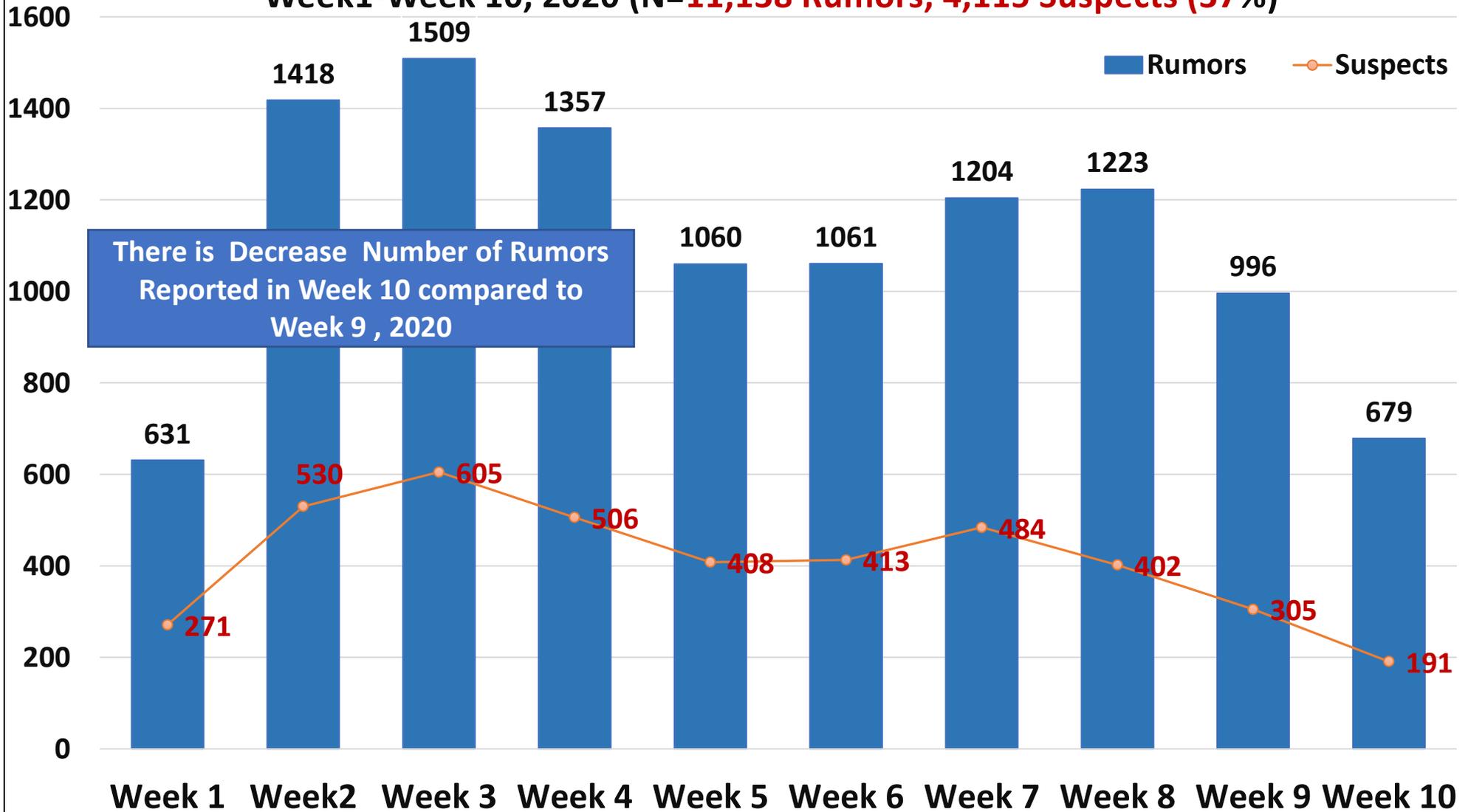


| W10 | Cumulative (2020) | |
|-----|-------------------|----------------|
| 0 | 1 | Low risk |
| 1 | 1 | Medium risk |
| 3 | 19 | High risk |
| 3 | 29 | Very high risk |

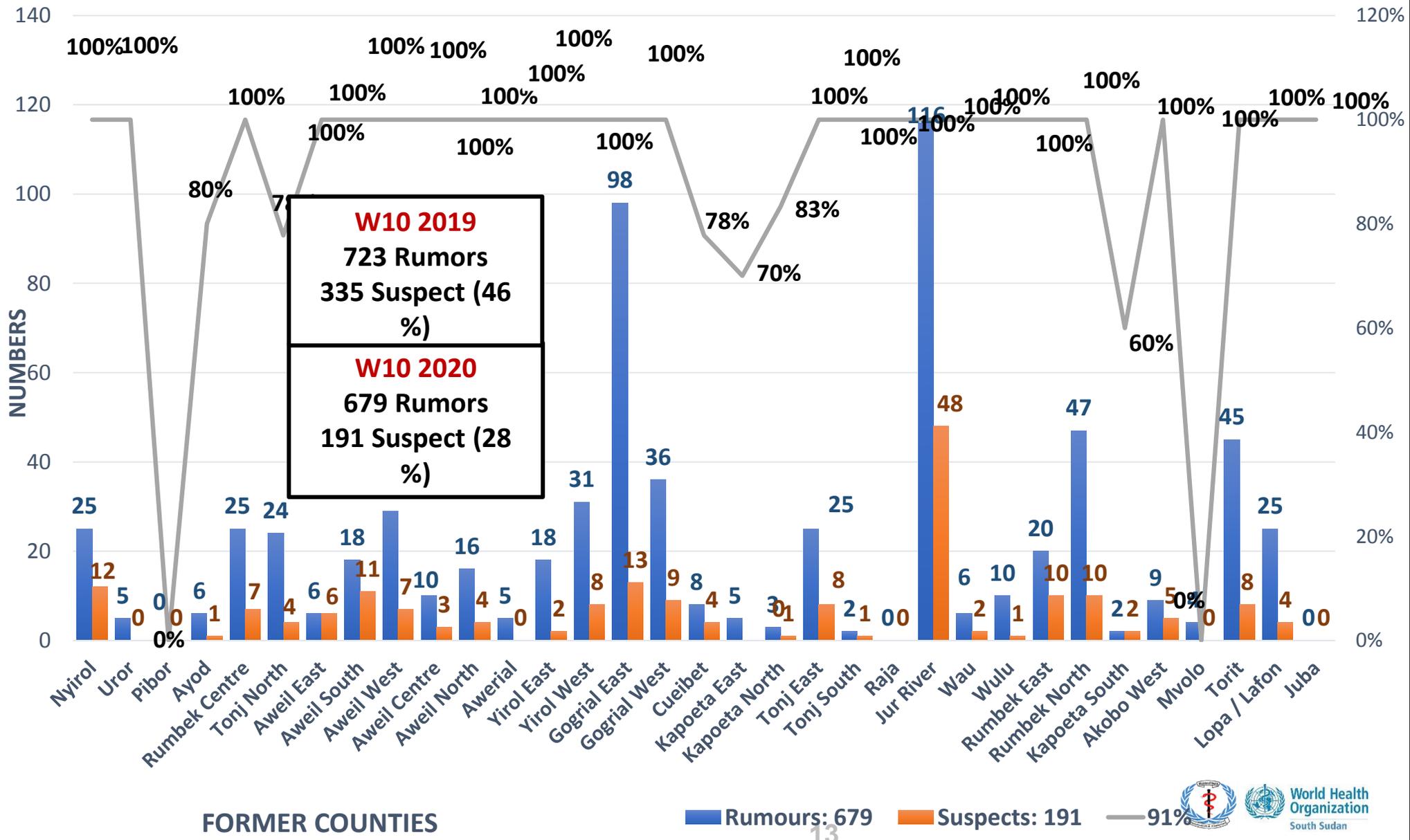
| | | |
|-----|-----|------------------------|
| 71% | 73% | % verified |
| 0% | 0% | % auto-discarded |
| 2% | 2% | % risk assessed |
| 2% | 2% | % requiring a response |

CUMULATIVE: Guinea Worm Rumors and Suspects

Week1-Week 10, 2020 (N=**11,138 Rumors**, **4,115 Suspects (37%)**)



Former Counties that reported Rumors, and Suspects during 1st – 7th March 2020 (10th Week) (n=32)



SUSPECTED OUTBREAKS IN 2019

Major suspected outbreaks in South Sudan in
2020

Cholera Alert in Pibor

- On 17th March /2020 MSFOCB in Pibor notified MoH and WHO of 8 (eight) suspected cholera cases in the PHCC in the UN adjacent site in Pibor and 60 admitted. All 8 cases were children coming from kong-kong cattle camp. There were reports of more cases in the cattle camp including community deaths.
- NMoH with support of WHO deployed the NRRT on 18th March from Juba to Pibor. Total of 10 samples were collected, results were released by NPHL; all 10 samples tested negative for *Vibrio cholerae*; *E. coli* was isolated – sub-typing underway)

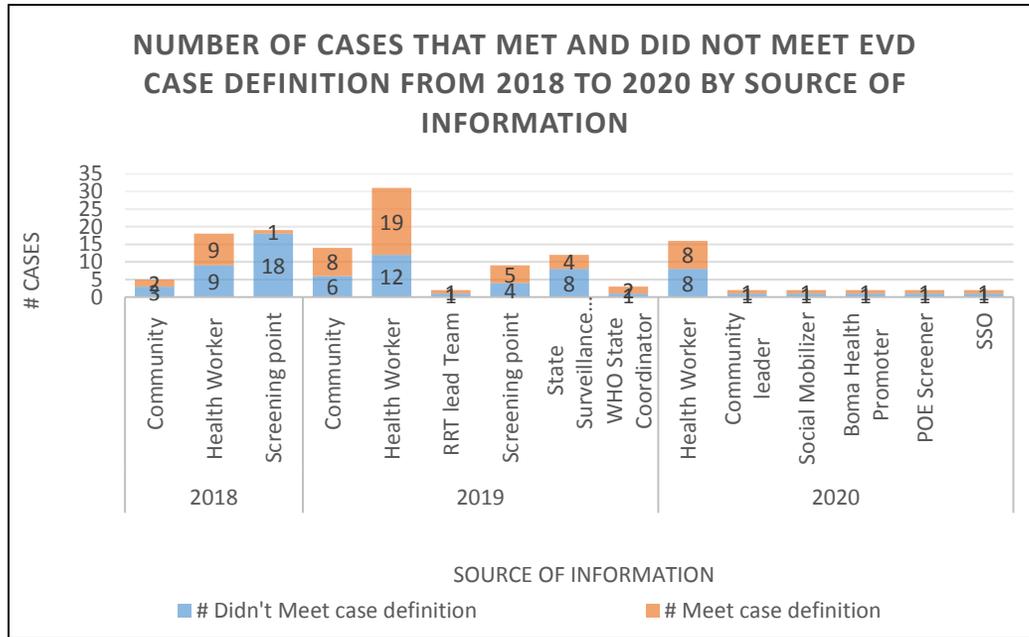


EVD Suspect cases in South Sudan 2018 and 2019 as of week 11, 2020

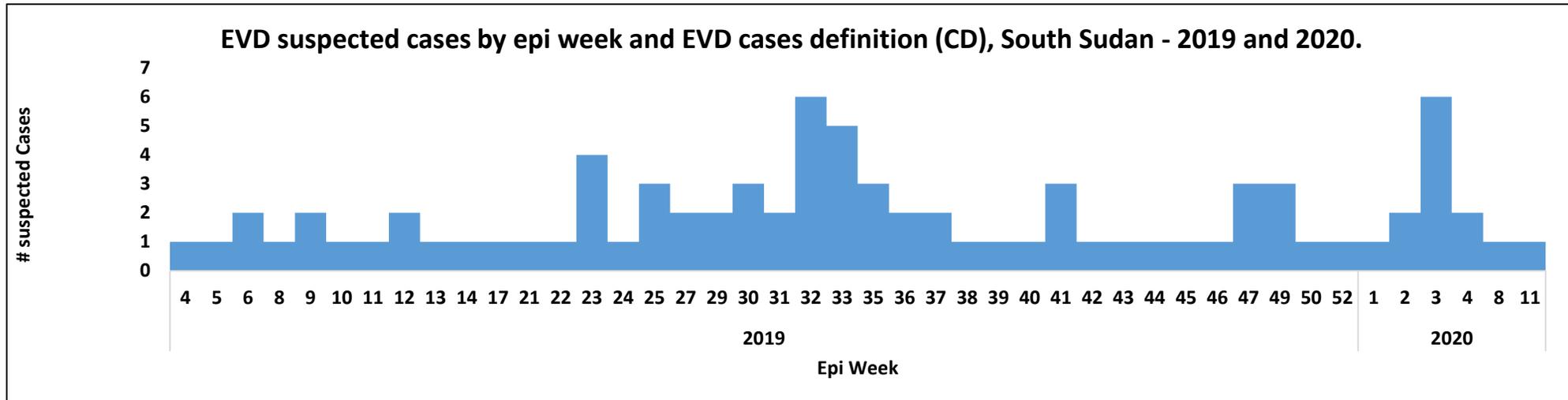
| Met EVD cases definition | | | |
|----------------------------|-----------|-----------|------------|
| 2018 | 30 | 12 | 42 |
| Community | 3 | 2 | 5 |
| Health Worker | 9 | 9 | 18 |
| Screening point | 18 | 1 | 19 |
| 2019 | 32 | 39 | 71 |
| Community | 6 | 8 | 14 |
| Health Worker | 12 | 19 | 31 |
| 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

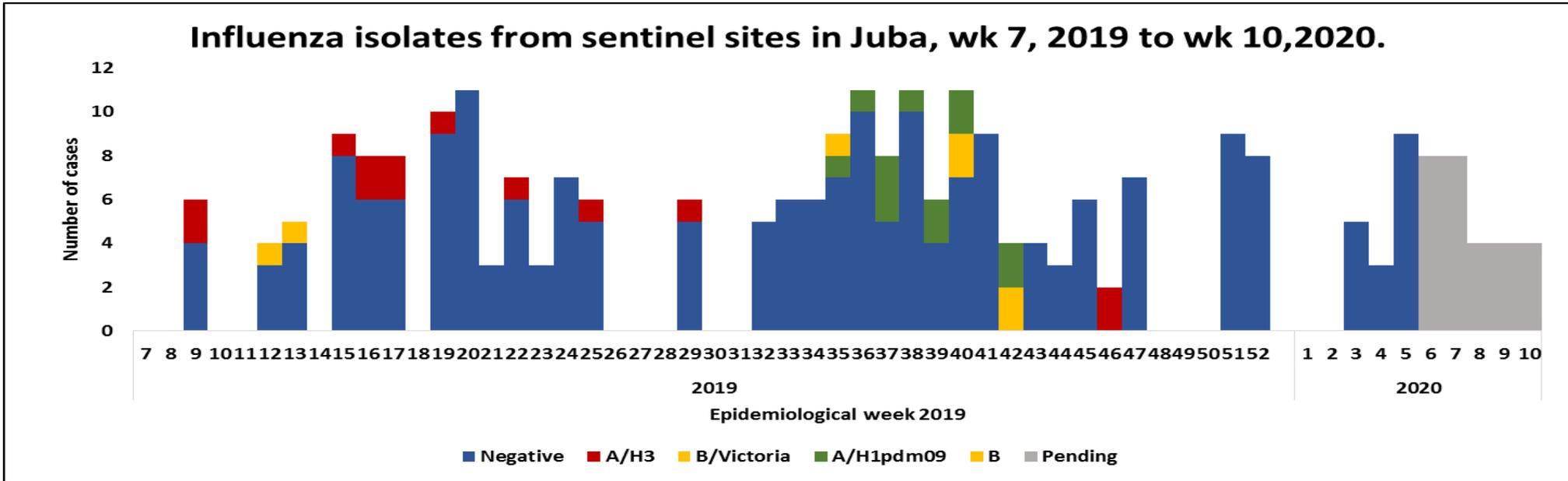
EVD Suspect cases in South Sudan 2018, 2019 and 2020 as of week 11, 2020



- 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



- 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 296 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 10, 2020

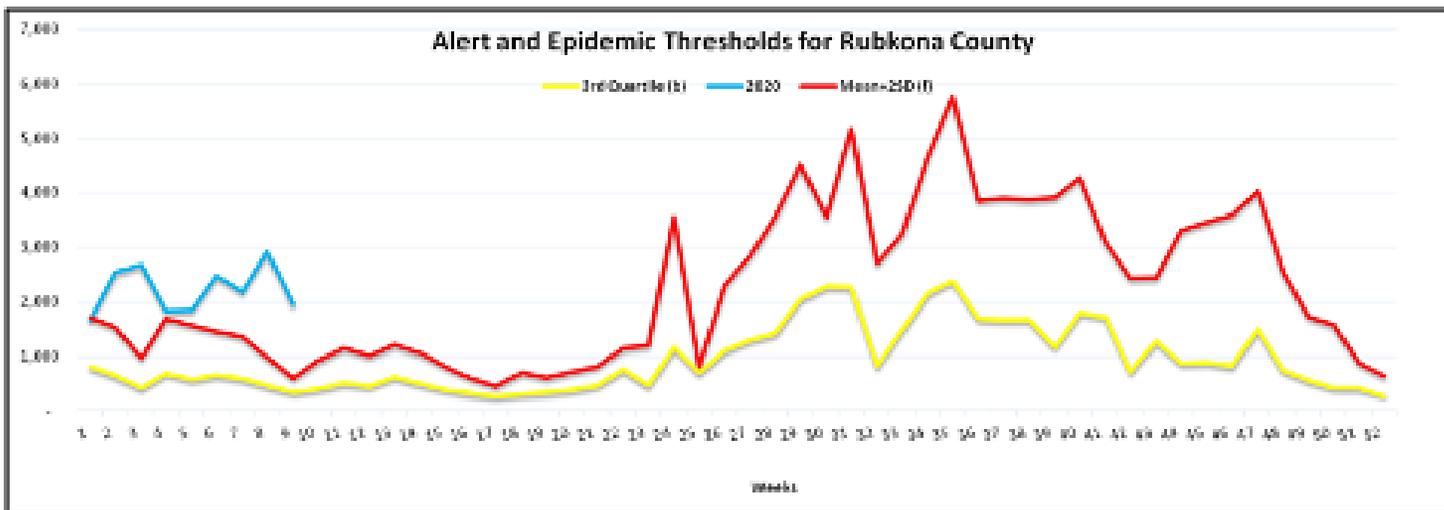
Malaria is the leading cause of morbidity and mortality, accounting for **54.6%** of all morbidities and **12.7%** of all mortalities in week 09, 2020

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



Measles/Rubella Lab results update

| S/N | County | Number of samples tested | No. Of New Measles IgM +ve | No. Of New Rubella IgM +ve | Turnaround time in days |
|--------------|-------------|--------------------------|----------------------------|----------------------------|-------------------------|
| 1 | Abyei | 1 | 0 | 0 | 12 |
| 2 | Boma | 2 | 2 | 0 | 12 |
| 3 | Twic East | 1 | 1 | 0 | 12 |
| 4 | Bor south | 2 | 2 | 0 | 12 |
| 5 | Pibor | 3 | 3 | 0 | 12 |
| 6 | Mundri West | 4 | 1 | 2 | 12 |
| 7 | Aweil East | 21 | 10 | 2 | 6 |
| Total | | 34 | 19 | 7 | |

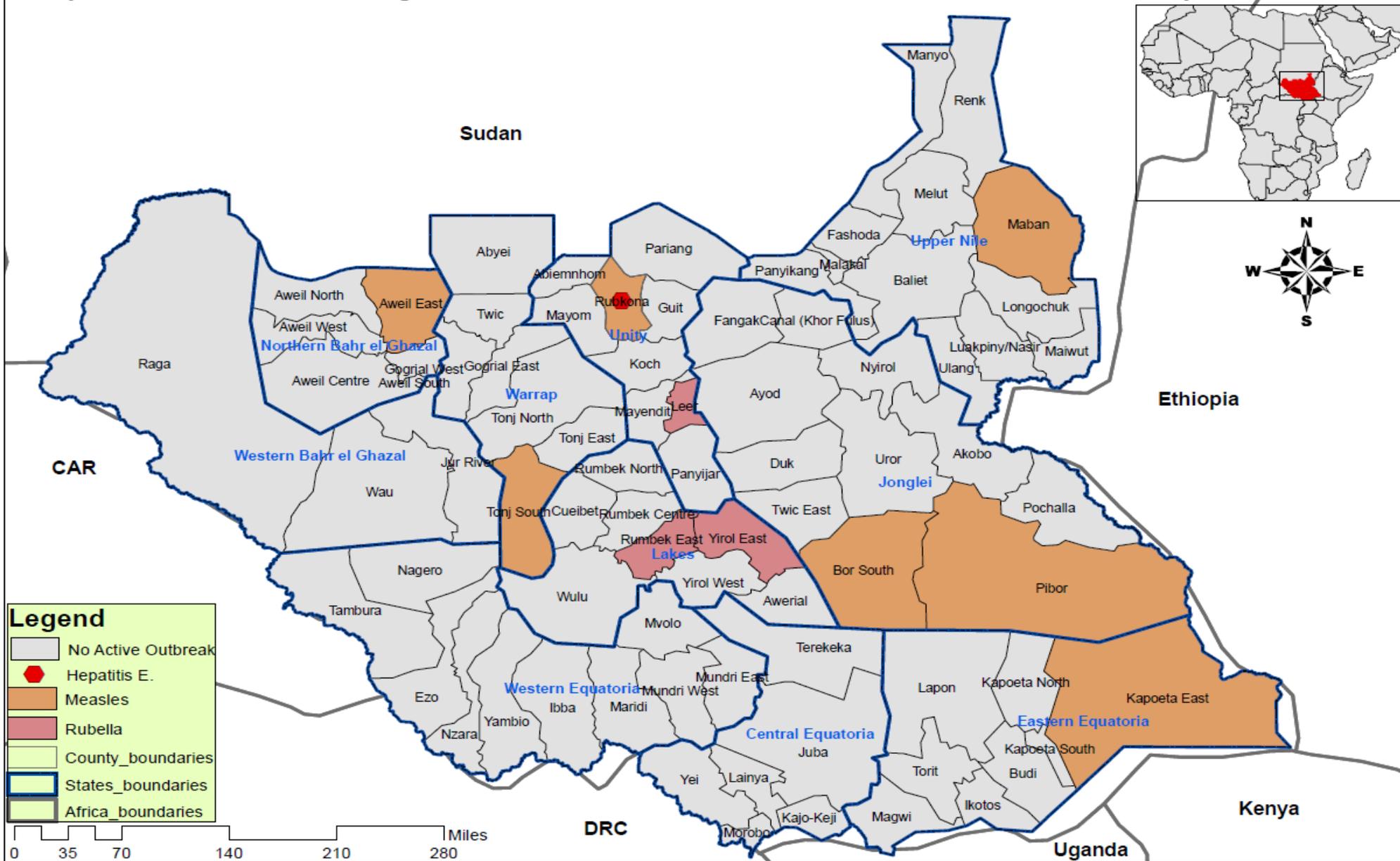
In this week:

- A total of 34 samples received from 7 counties in week 9 and 10
- Over 60% 21 (34) of the samples were from Aweil East county
- Of the 34 samples tested 19 were positive Measles IgM and 7 positive for Rubella IgM

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.



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.

Response | Summary of major ongoing outbreaks in 2019 and 2020

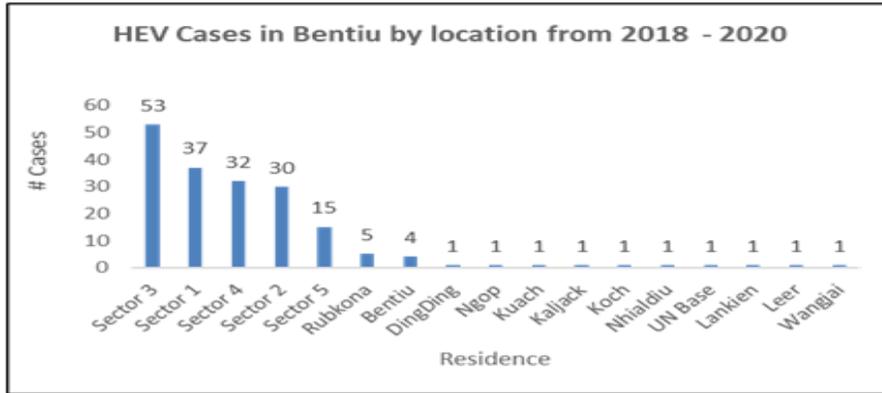
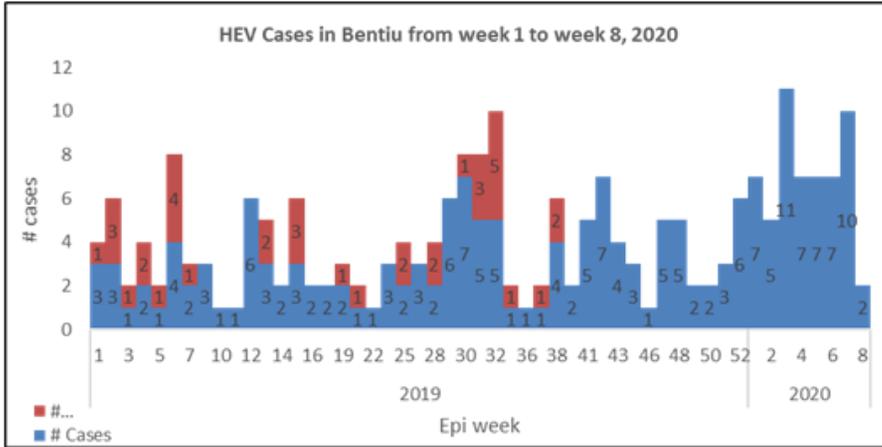
| Aetiological agent | Location (county) | Date first reported | New cases since last bulletin | Cumulative cases to date (attack rate %) | Interventions | | | |
|--------------------------|-------------------|---------------------|-------------------------------|--|-----------------|-------------|------------------|------|
| | | | | | Case management | Vaccination | Health promotion | WASH |
| Ongoing epidemics | | | | | | | | |
| Hepatitis E | Bentiu PoC | 03/01/2018 | 1 | 213 (0.046) | Yes | No | Yes | Yes |
| Measles | Bentiu PoC | 24/04/2019 | 5 | 395 (0.012) | Yes | Yes | Yes | N/A |
| Measles | Maban | 1/11/2019 | NR | 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, Tonj South, Bor, Magwi, Tonj East, Kapoeta East and Tonj South**

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 | controlled | 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 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% | |

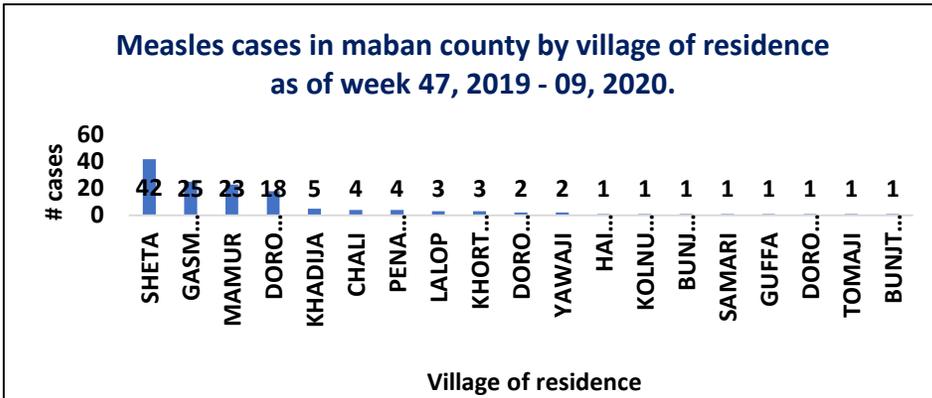
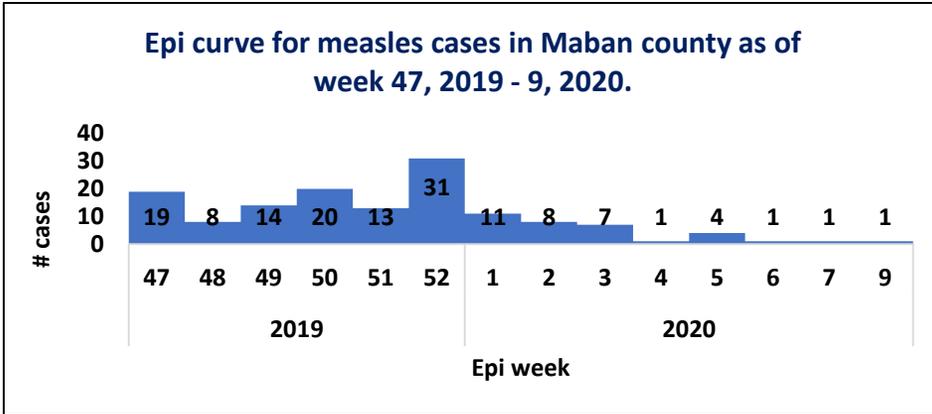
Descriptive Epidemiology:

- 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



| 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% | |

Descriptive Epidemiology:

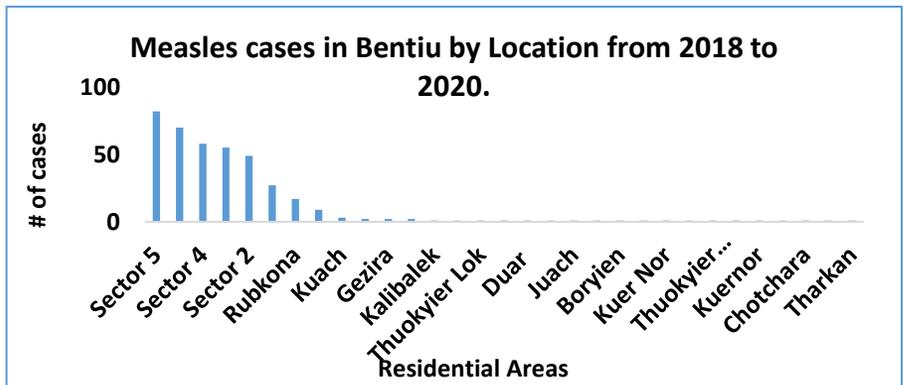
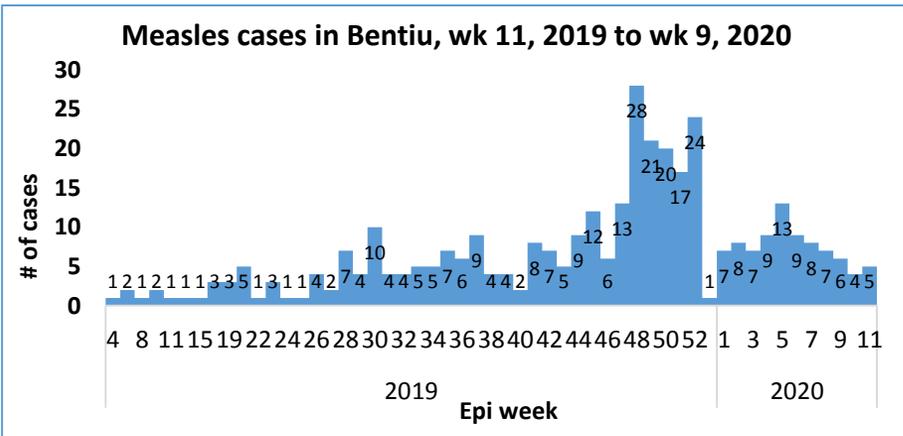
- Initial cases were reported on 1st November 2019
- A total of 139 Suspected Measles case have been line listed in Maban county
- 01 new case were reported in week 09, 2020
- 12 samples were collected of which, 11 samples tested positive for measles and (1) positive for Rubella IgM
- The most affected 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%.

Response | Confirmed epidemics

Confirmed Measles and Rubella outbreak in Bentiu PoC



| Age Group | Cases | Percentage | Cum. % |
|--------------------|------------|-------------|--------|
| 0 - 4 Years | 375 | 95% | 95% |
| 5 - 9 Years | 12 | 3% | 98% |
| 10 - 14 Years | 5 | 1% | 99% |
| 15+ Years | 3 | 1% | 100% |
| Grand Total | 395 | 100% | |

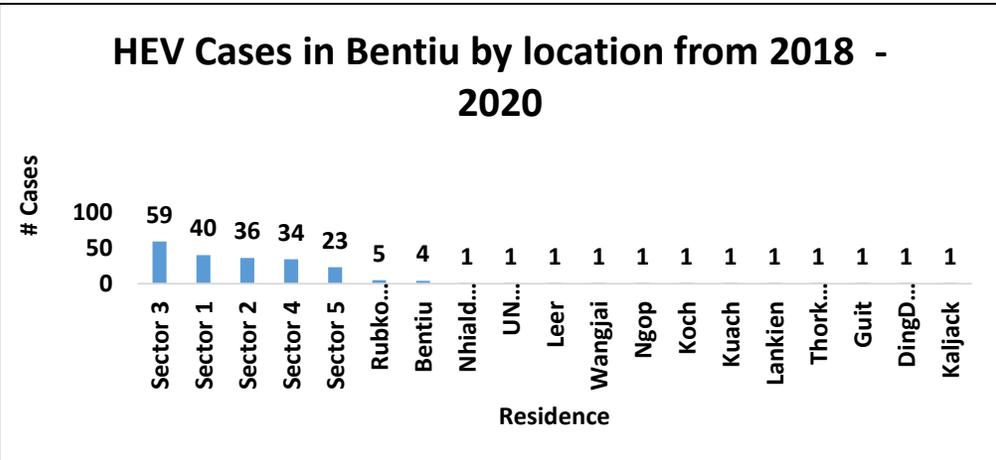
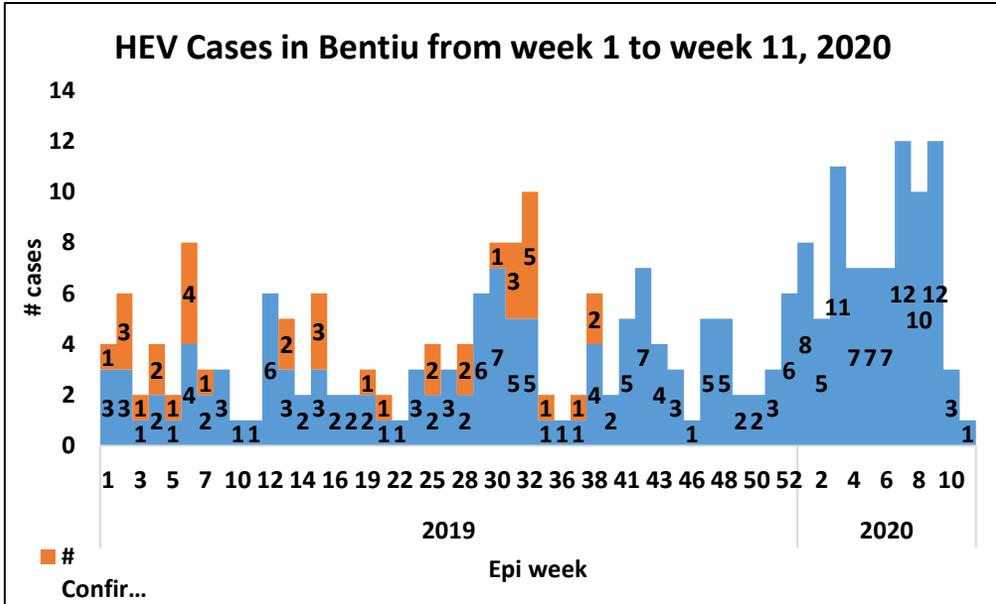
Epidemiological description

- Bentiu PoC has been reporting suspected measles/rubella cases since week 4 of 2019.
- 05 new cases reported in week 11, 2020
- At least 395 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.
- 46% of cases are female and 54% 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%.
 - Ongoing surveillance; case investigation; routine vaccination at fixed and mobile outreach sites and enhancing community awareness on routine immunization

Hepatitis E, Bentiu PoC (1)



Descriptive epidemiology

- The persistent transmission of HEV in Bentiu PoC continues with 213 cases since beginning of 2019
- There were (02) new cases reported in week 11, 2020
- All the cases were managed as outpatient cases except for seven cases who were admitted
- Two deaths one on 12th, April 2019 and the second on 11th July 2019
- 50% are female and 50% are male.
- Age group less than 15 years had the most cases with (76%) 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 8, 2020; there were 46 cases of HEV in Bentiu PoC including 2 deaths (CFR 0.27%)

| Age-Group | Alive | Dead | Grand Total | Percentage | CFR | Cum. %2 |
|--------------------|------------|----------|-------------|-------------|-------------|---------|
| 1 - 4 Years | 69 | 0 | 69 | 32% | 0% | 32% |
| 10 - 14 Years | 37 | 0 | 37 | 17% | 0% | 50% |
| 15+ Years | 50 | 2 | 52 | 24% | 4% | 74% |
| 5 - 9 Years | 54 | 1 | 55 | 26% | 2% | 100% |
| Grand Total | 210 | 3 | 213 | 100% | 0.01 | |

Hepatitis E, Bentiu PoC (2)

HEV response updates:

- Every AJS patient received a package of hygiene kit and MSF is doing follow up to the patients every week for period of three weeks.
- •The community engagement and community awareness on HEV key messages are ongoing and are mainly concentrating of Personal hygiene like: washing hand always and use of latrines.
- •The work on backfilling the two ponds is ongoing and the small pond is likely to finish, but the work in other big pond still ongoing and the clear update will be provided by CCM Cluster in next meeting (IOM CCM Cluster was absent during the meeting).
- •The distribution of some WASH/NFIs kits to the affected families is ongoing.
- •There is still a big gap in water storage in the HH level and the WASH Partners has only 3000 water storage buckets which not be enough for estimated 31,000 HH, Therefore the WASH are looking of other solution to distribute collapsing Jerrycans with the obstacles the community will not accept the last option.
- •The working on installation of hand washing facilities is ongoing (Wash partners will provide the statistics in next meeting, the number of hand washing facilities installed).

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 threats of COVID -19 Pandemic Outbreak, WASH partners should increase the coverage of hand washing facilities within the PoCs community ASAP.
- Other Wash interventions 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 taskforce 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 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 |
| 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 |

Novel Coronavirus

Novel Corona Virus Situation Summary

- Situation update as of 2nd April, 2020

SITUATION IN NUMBERS

total (new) cases in last 24 hours

Globally

896 450 confirmed (72 839)
45 526 deaths (4924)

Western Pacific Region

107 626 confirmed (1204)
3723 deaths (22)

European Region

503 006 confirmed (38 809)
33 604 deaths (3515)

South-East Asia Region

5324 confirmed (149)
216 deaths (21)

Eastern Mediterranean Region

58 168 confirmed (3887)
3280 deaths (165)

Region of the Americas

216 912 confirmed (28161)
4565 deaths (1165)

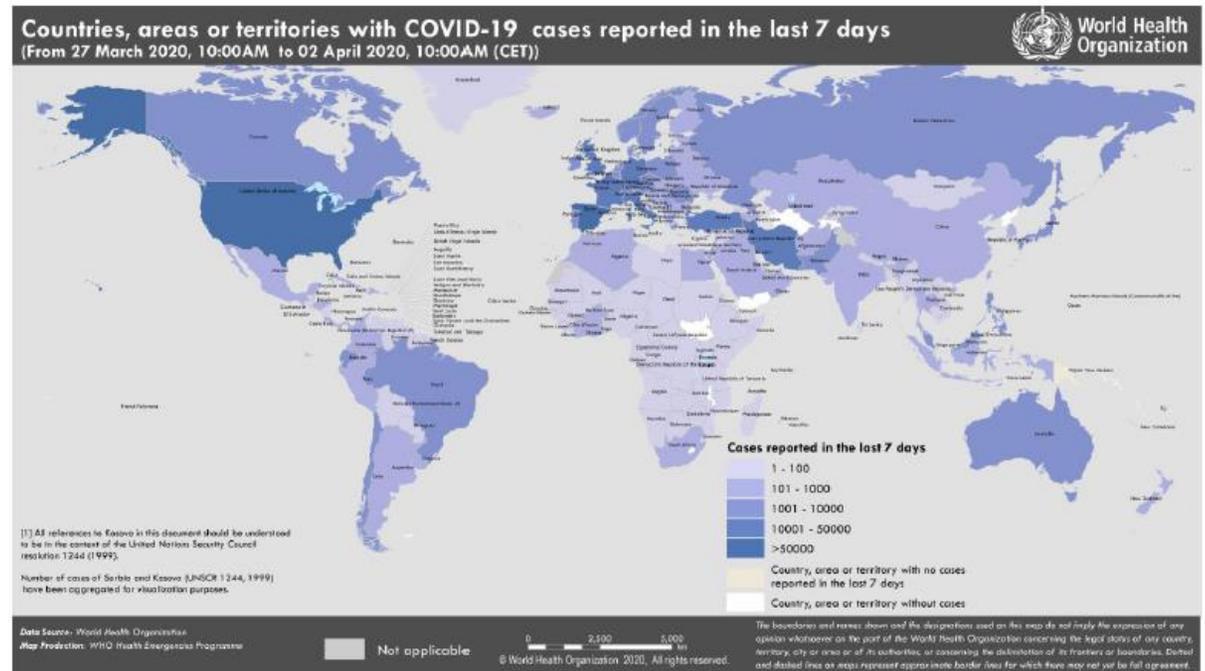
African Region

4702 confirmed (629)
127 deaths (36)

WHO RISK ASSESSMENT

Global Level Very High

Figure 1. Countries, territories or areas with reported confirmed cases of COVID-19, 2 April 2020



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

COVID-19 Preparedness in South Sudan

- No confirmed COVID-19 cases in South Sudan
- Total of 26 alerts were investigated and all tested negative for COVID-19
- The national and high-level COVID-19 taskforce committees are coordinating current response
- The national COVID-19 preparedness plan costed at \$10.8 million is approved & passed for implementation
- Implementation of priorities; risk communication; active case search and testing; quarantine for contacts; infection prevention and control; and management of cases are currently underway

EBOLA VIRUS DISEASE[EVD] PREPAREDNESS IN SOUTH SUDAN

Brief on the Ebola situation in DR Congo

Ebola update DRC 24 March 2020

Current situation

- Currently as of 22 March 2020
- 3453 Cases [3310 confirmed & 143 probable]
- 2273 Deaths [2179 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.

Overall Conclusions and Recommendations for week 10, 2020

Conclusion

- The overall IDSR and EWARN reporting performance in week 10, surpasses the target of 80%. All 10 states were above 80%
- With five outbreaks confirmed in 2020; measles remains the most frequent vaccine preventable disease
- Cholera has been ruled out in Pibor, but it is critical that underlying WASH causes are addressed
- Yellow fever is confirmed in Kajo-keji and plans for reactive vaccination are underway
- Given the COVID-19 pandemic, it is critical that measures are stepped up to detect, test, and isolate cases, quarantine contacts and communicate COVID-19 risk and prevention

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
 - Initiate response to contain measles transmission in Aweil East; Maban; & Bentiu PoC
- Finalize and submit the yellow fever reactive campaign vaccine request to ICG
- 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>

