

South Sudan

Integrated Disease surveillance and response (IDSR)

**Epidemiological Bulletin Week 38, 2021 (September 20-
September 26)**



World Health
Organization
South Sudan



- Hepatitis E virus case surge reported in Bentiu IDP settlement since week 38, 2021, total of 1,147 cases with 9 deaths (CFR 0.07%)
- In week 38, IDSR reporting both timeliness was 80% and completeness was 89% while timeliness was 83% and completeness 85% for EWARN sites.
- Of the 87 alerts in week 38; malaria (33), AWD (19), ARI (15), measles (1) and ABD (10) were the most frequent alerts.
- Malaria remains the top cause of morbidity and accounted for 102,798 cases (62.5% of OPD cases).
- Of the 3,207 COVID-19 alerts detected, 2,996 (96.3%) have been verified with 11,948 confirmed cases and 128 deaths (CFR of 1.07%).
- Other hazards include floods (unseasonal) in over 11 counties; malaria in 2 counties.

SURVEILLANCE PERFORMANCE



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



IDSR timeliness performance at State level for week 38 & 37 of 2021



| Completeness States Ranking | States | Number of reporting sites | No. of HFs Reported on Time in WK 38 | Timeliness Percentage of WK 38 | No. of HFs Reported on Time in WK 37 | Timeliness Percentage of WK 37 |
|-----------------------------|-------------|---------------------------|--------------------------------------|--------------------------------|--------------------------------------|--------------------------------|
| 1st | WES | 213 | 213 | 100% | 213 | 100% |
| 2nd | NBGZ | 114 | 107 | 94% | 105 | 92% |
| 3rd | Jonglei | 116 | 94 | 81% | 70 | 60% |
| 4th | Lakes | 113 | 99 | 88% | 105 | 93% |
| 5th | EES | 143 | 123 | 86% | 121 | 85% |
| 6th | CES | 117 | 97 | 83% | 103 | 88% |
| 7th | Warrap | 134 | 105 | 78% | 76 | 57% |
| 8th | Unity | 92 | 71 | 77% | 59 | 64% |
| 9th | Upper Nile | 109 | 79 | 72% | 77 | 71% |
| 10th | WBGZ | 78 | 27 | 35% | 41 | 53% |
| | South Sudan | 1229 | 1015 | 83% | 970 | 79% |

KEY

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

The timeliness of IDSR reporting (supported by EWARS mobile) at health facility level in week 38, 2021 was 83% compared to 79% in week 37, 2021. only 6 states were above the target of 80%

Reporting challenges: Insecurity, internet access and new partners

IDSR completeness performance at State level for week 38 & 37 of 2021



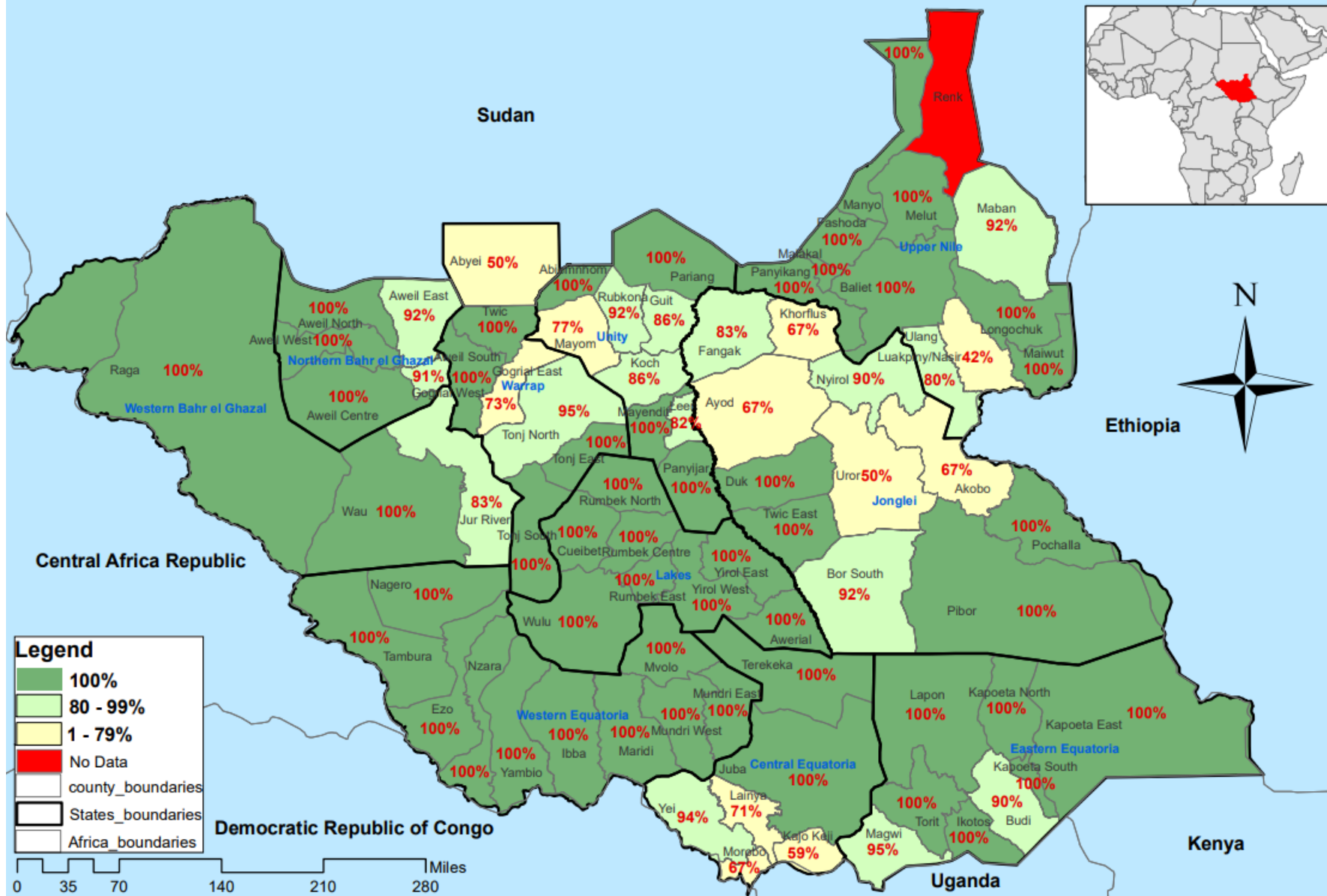
| Completeness States Ranking | States | Number of reporting sites | No. of HFs Reported regardless of time in WK 38 | Completeness Percentage of WK 38 | No. of HFs Reported regardless of time in WK 37 | Completeness Percentage of WK 37 |
|-----------------------------|--------------------|---------------------------|---|----------------------------------|---|----------------------------------|
| 1st | Lakes | 113 | 113 | 100% | 113 | 100% |
| 2nd | WES | 213 | 213 | 100% | 213 | 100% |
| 3rd | EES | 143 | 139 | 97% | 125 | 87% |
| 4th | NBGZ | 114 | 110 | 96% | 110 | 96% |
| 5th | WBGZ | 78 | 72 | 92% | 65 | 83% |
| 6th | Warrap | 134 | 122 | 91% | 116 | 87% |
| 7th | Unity | 92 | 82 | 89% | 76 | 83% |
| 8th | Jonglei | 116 | 102 | 88% | 89 | 77% |
| 9th | CES | 117 | 102 | 87% | 104 | 89% |
| 10th | Upper Nile | 109 | 86 | 79% | 80 | 73% |
| | South Sudan | 1229 | 1141 | 93% | 1091 | 89% |

KEY

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

The completeness of IDSR reporting (supported by EWARS mobile) at health facility level was **93%** in week 38 and **89%** in 37, 2021. 9 states were above the target of 80%

Map of South Sudan Showing the Completeness (reporting) by County in week 38, 2021.



Disclaimer: The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.



Surveillance: EWARS timeliness performance indicator by partner for week 38 and 37 of 2021

| Partner | HF's | Reporting | Performance | | |
|--------------|---------------------------|--|-----------------------|--|-----------------------|
| PARTER | Number of reporting sites | # of reports received on Time in Week 38 | Timeliness of Week 38 | # of reports received on Time in Week 37 | Timeliness of Week 37 |
| CMD | 1 | 1 | 100% | 1 | 100% |
| IHO | 2 | 2 | 100% | 2 | 100% |
| TADO | 4 | 4 | 100% | 4 | 100% |
| World Relief | 2 | 2 | 100% | 2 | 100% |
| SSHCO | 1 | 1 | 100% | 1 | 100% |
| UNH | 10 | 10 | 100% | 10 | 100% |
| HFO | 2 | 2 | 100% | 2 | 100% |
| HFD | 6 | 6 | 100% | 6 | 100% |
| IOM | 10 | 10 | 100% | 9 | 90% |
| ALIMA | 3 | 3 | 100% | 0 | 0% |
| UNIDOR | 2 | 2 | 100% | 0 | 0% |
| IMC | 24 | 21 | 88% | 24 | 100% |
| MSF-E | 6 | 4 | 67% | 4 | 67% |
| MSF-H | 7 | 4 | 57% | 4 | 57% |
| TRI-SS | 2 | 1 | 50% | 1 | 50% |
| IRC | 1 | 0 | 0% | 1 | 100% |
| RHS | 1 | 0 | 0% | 1 | 100% |
| TOTAL | 84 | 73 | 87% | 72 | 86% |

The Timeliness of EWARS in partners' supported sites stands at 87% in week 38,2021 compared to 86% in week 37.

Timeliness for EWARS partners supported sites were at 87% in week 38, 2021 compared to 86% at week 37, 2021



Surveillance: EWARS completeness performance indicator by partner for week 38 and 37 of 2021

| Partner | HFs | Reporting | Performance | | |
|--------------|---------------------------|---|-------------------------|---|-------------------------|
| PARTER | Number of reporting sites | # of reports received regardless of Time in Week 38 | Completeness of Week 38 | # of reports received regardless of Time in Week 37 | Completeness of Week 37 |
| CMD | 1 | 1 | 100% | 1 | 100% |
| IHO | 2 | 2 | 100% | 2 | 100% |
| IRC | 1 | 1 | 100% | 1 | 100% |
| SSHCO | 1 | 1 | 100% | 1 | 100% |
| TADO | 4 | 4 | 100% | 4 | 100% |
| RHS | 1 | 1 | 100% | 1 | 100% |
| HFO | 2 | 2 | 100% | 2 | 100% |
| UNH | 10 | 10 | 100% | 10 | 100% |
| World Relief | 2 | 2 | 100% | 2 | 100% |
| IOM | 10 | 10 | 100% | 9 | 90% |
| HFD | 6 | 6 | 100% | 4 | 67% |
| MSF-E | 6 | 6 | 100% | 4 | 67% |
| ALIMA | 3 | 3 | 100% | 0 | 0% |
| UNIDOR | 2 | 2 | 100% | 0 | 0% |
| IMC | 24 | 22 | 92% | 24 | 100% |
| MSF-H | 7 | 4 | 57% | 4 | 57% |
| TRI-SS | 2 | 1 | 50% | 2 | 100% |
| TOTAL | 84 | 78 | 93% | 71 | 85% |

The completeness of EWARS in partners' supported sites stands at 93% in week 38,2021 compared to 85% in week 37.

Completeness for EWARS partners supported sites was at **93%** in week 38, 2021 compared to **85%** at week 37, 2021

EVENT-BASED SURVEILLANCE



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





| State | Acute jaundice syndrome | Acute Respiratory Infections (ARI) | Acute Watery Diarrhoea | Bloody Diarrhoea | Malaria | Measles | EBS | Covid-19 | Total alerts |
|---------------------|-------------------------|------------------------------------|------------------------|------------------|-----------|----------|----------|----------|--------------|
| CES | | 1 | 3 | | 1 | | | | 5 |
| EES | | | 3 | 1 | 2 | 1 | 2 | | 9 |
| Jonglei | | 2 | | 5 | | | | 1 | 8 |
| NBGZ | | | 1 | | | | | | 1 |
| Unity | 2 | | | | 1 | | | 2 | 5 |
| Upper Nile | | 12 | 4 | 2 | 2 | | | | 20 |
| Warrap | | | 4 | 1 | | | | 1 | 6 |
| WBGZ | | | 4 | 1 | 4 | | 1 | | 10 |
| WES | | | | | 23 | | | | 23 |
| Total alerts | 2 | 15 | 19 | 10 | 33 | 1 | 3 | 4 | 87 |

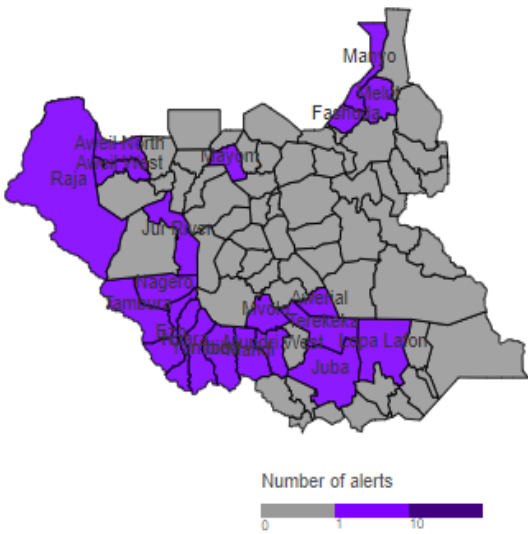
During this week:

- **15 ARI alert:** 1 from CES, 2 from Jonglei State, 12 from Upper Nile State.
- **19 AWD alert:** 3 from CES, 3 from EES, 1 from NBGZ State, 4 from Upper Nile State, 4 from Warrap, and 4 from WBGZ
- **10 ABD alert:** 1 from EES, 5 from Jonglei State, 2 from Upper Nile State, 1 from Warrap, and 1 from WBGZ.
- **33 Malaria alerts:** 1 from CES, 2 from EES State,, 1 from Unity State, 2 from Upper Nile State, 4 from WBGZ, 23 from WES, all these are due to the high increase of malaria cases in the Country.
- **4 COVID-19 alert:** 1 from Jonglei, 1 from Warrap State and 2 from Unity
- **3 EBS alert::** 2 from EES from Lofayo, Ngutume and Kekerek in Ikwoto payam, Ikwoto County about death of animals presenting with blood coming out of the mouth and also running noise, the other one is from WBGZ about death of Malaria in Wau Teaching Hospital
- **2 AJS alert:** from Unity State in Rubkona County, Bentiu PoC Hospital
- **1 Measles alert:** from EES, Kapoeta East, Good Shepherd (Nanyangachor) CDoT PHCC

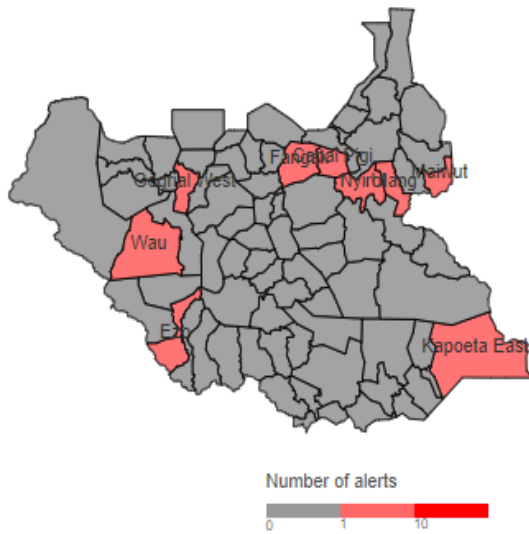


Alert: Map of key disease alerts by county of week 38 of 2021

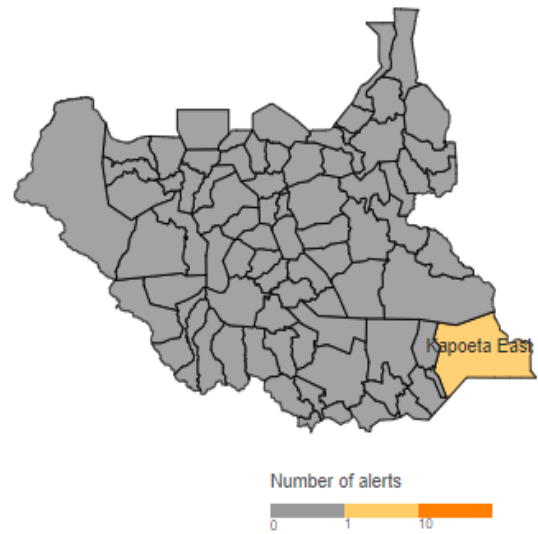
Map 2a | Malaria (W37 2021)



Map 2b | Bloody diarrhoea (W37 2021)



Map 2c | Measles (W37 2021)



| W37 | Cumulative (2021) | |
|-----|-------------------|----------------|
| 0 | 10 | Low risk |
| 9 | 9 | Medium risk |
| 0 | 53 | High risk |
| 0 | 149 | Very high risk |

| | | |
|-----|-----|------------------------|
| 78% | 89% | % verified |
| 0% | 0% | % auto-discarded |
| 0% | 4% | % risk assessed |
| 0% | 3% | % requiring a response |

SUSPECTED OUTBREAKS



Major suspected outbreaks in South Sudan in
2020



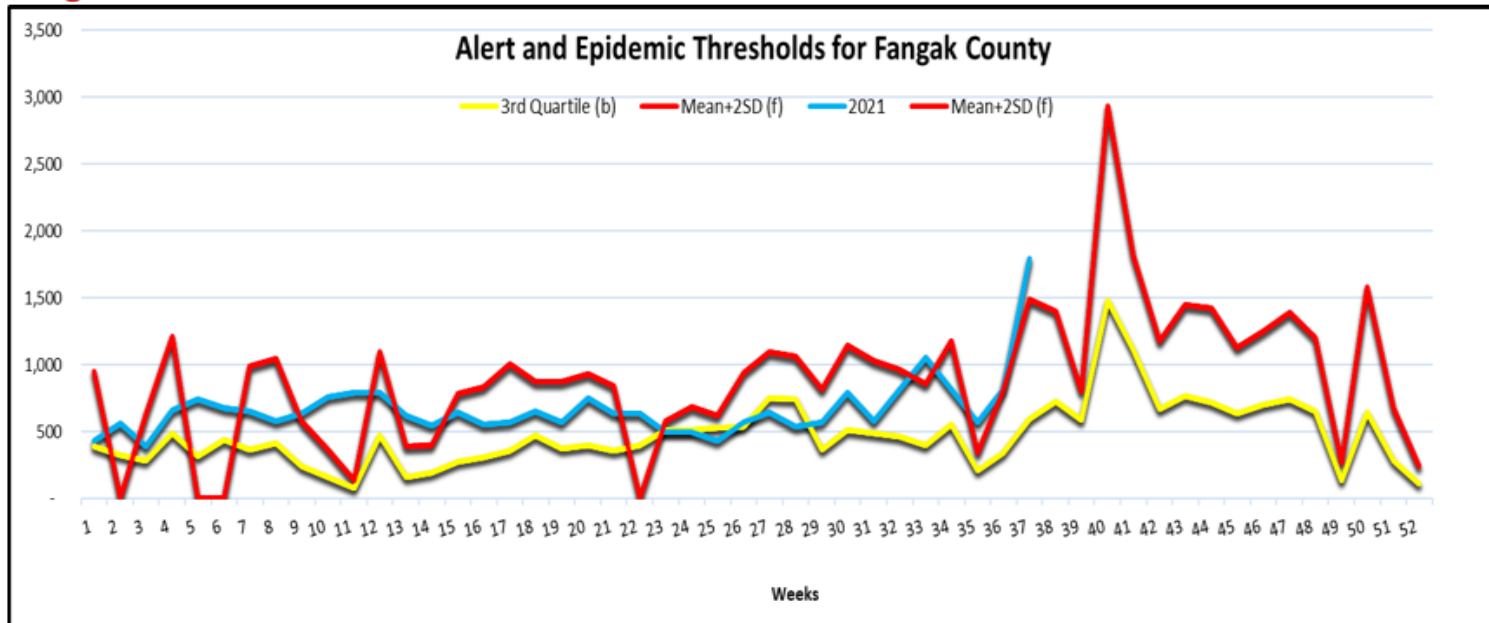


Malaria was the leading cause of morbidity and mortality, accounting for **62.5%** of all morbidities and **8.5%** of all Mortalities this week 39.

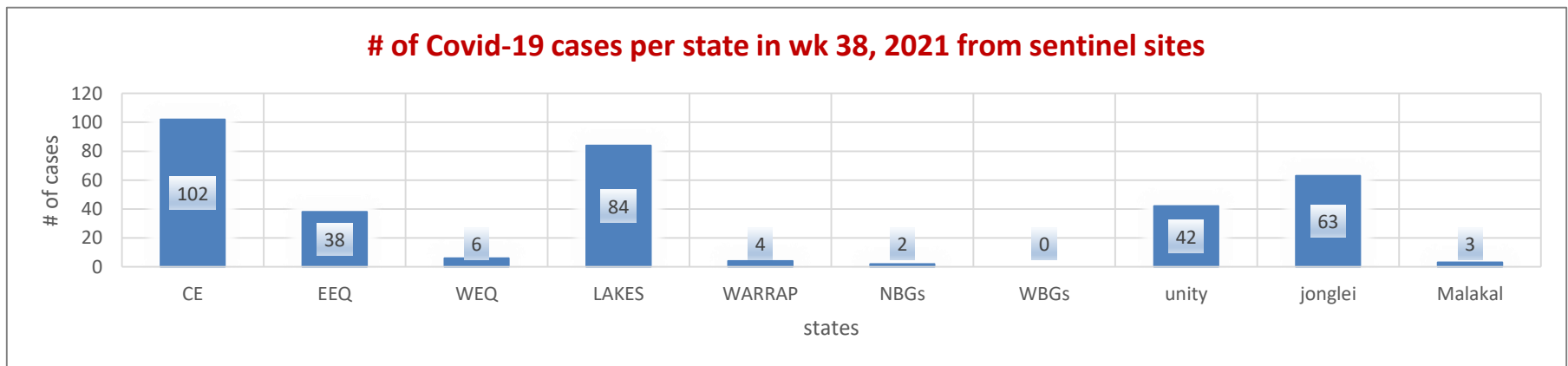
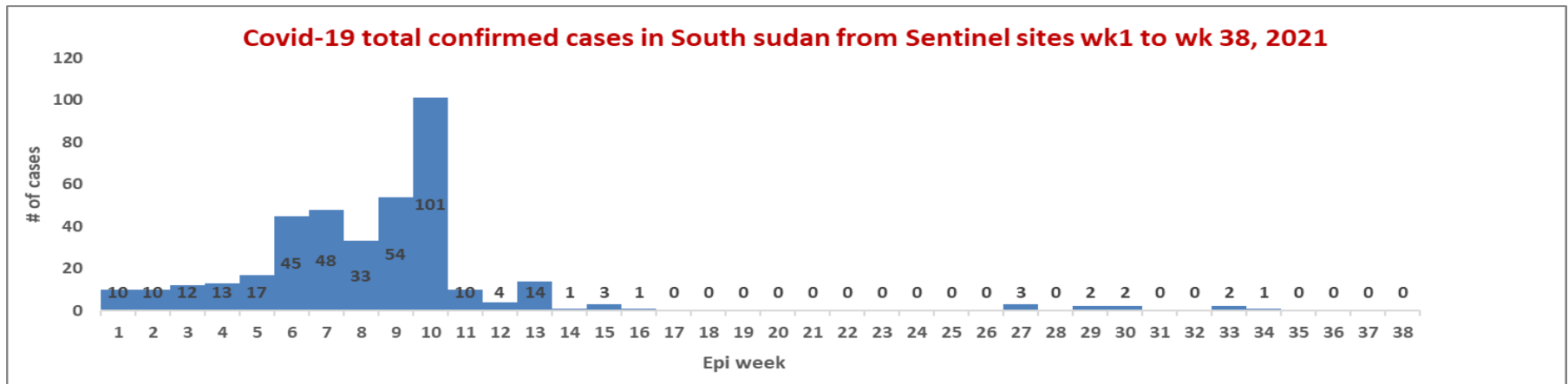
2 counties with malaria trends which have exceeded the threshold (third quartile of trends for the period 2013-2017)

1. NBGZ State (Aweil East)
2. Warrap State (Gogrial West)

Fangak



Routine Sentinel Surveillance | Human Influenza



- As of 28th April 2021, a total of 166 samples were collected from three sentinel sites in Juba with 156 samples testing negative for influenza; one (1) positive for COVID-19; and six (8) positive for influenza B (with four (4) sub-typed as Victoria while the other two (2) are pending sub-typing)
- There are currently 13 Covid-19 designated sentinel surveillance sites in Juba and States Hospitals that are collecting epidemiological data and samples from Covid-19/ILI/SARI cases. A total of 7757 samples have been collected in 2021 with 550 (7.0%) being positive for COVID-19 from sentinel sites.

ACTIVE OUTBREAKS AND PUBLIC HEALTH EVENTS



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





- More than 466,000 people have been reported to be affected by flooding in areas along the Nile and Lol rivers and Sudd marshlands since May. This reflects a 23 percent increase in the numbers of people reported to be affected since the end of August. Jonglei, Unity, Northern Bahr elGhazal and Upper Nile are the worst affected states.
- Health partners have reported that more than 50 health facilities have been damaged by the floods with 19 more at risk of being destroyed. Furthermore, partners have reported shortages of medical supplies to sustain essential primary health care services in flood-affected locations.
- A coordinated intersectoral humanitarian response and rapid assessments is underway in the six most affected states. Health and other clusters have reported that additional funding will be needed to respond to the increasing needs of flood-affected people.

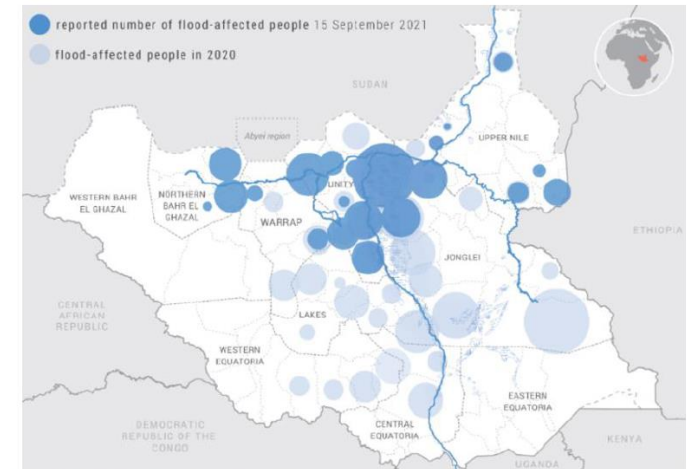


Figure 1: Flood-affected locations and populations across the states as of 15 September 2021



- The communities residing in the highly food insecure counties continue to experience a challenging humanitarian situation as their needs are compounded by flooding, sub-national violence and increasing morbidities of water- and vector-borne diseases.
- As per the Integrated Food Security Phase Classification report released in December 2020, 60% (7.2 M) of South Sudanese were projected to face high levels of acute (IPC Phase 3+) food insecurity during April-July 2021.
- The six highly food insecure counties (Pibor, Akobo, Aweil South, Tonj North, Tonj South and Tonj East) with 108 000 people in IPC Phase 5 catastrophe have been targeted for a humanitarian response that has been underway since early 2021.

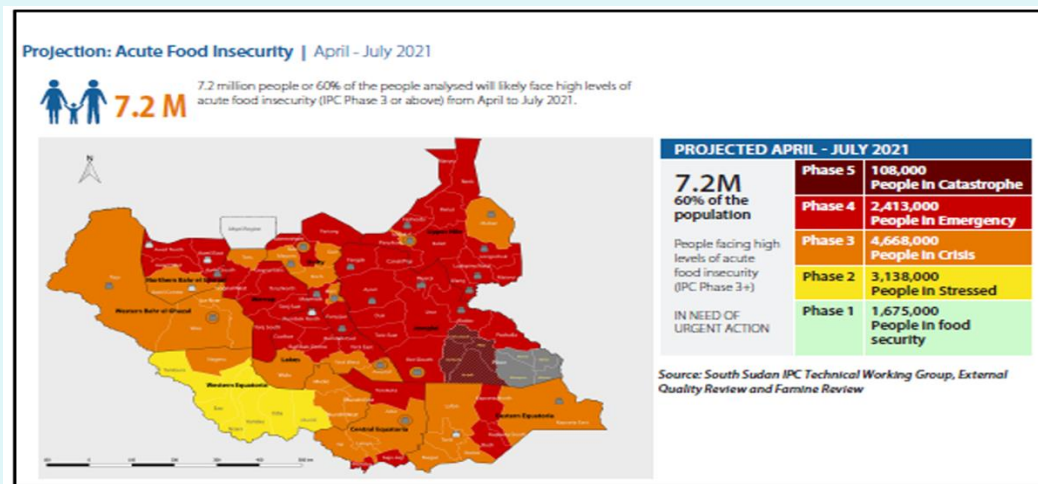


Figure 1: population estimates by IPC Phase and State based on the compilation of the South Sudan IPC Technical Working Group



Public Health Actions by Health Cluster/WHO in Highly Food Insecurity and flood-affected counties

- WHO and health cluster partners supported rapid needs assessment in flood-affected counties to establish critical health needs and gaps.
- Health cluster allocated additional funds from South Sudan Humanitarian Fund (First Standard Allocation) to implementing partners for flood- and highly food-insecure counties. WHO will continue to deploy mobile medical teams to Pibor, Akobo and Duk under this funding.
- WHO prepositioned emergency health kits including malaria drugs and cholera investigations kits in the 10 state offices to support partners responding in the counties.
- More than 30 emergency health kits and other medical supplies were distributed in Bentiu, Ayod and Fangak in Unity and Jonglei to support service provision for flood-affected population.
- WHO supported the ministry to train 80 community informers on community-based surveillance in Tonj South and Tonj North. Overall, 120 participants trained in Tonj North, Tonj South and Aweil South while 78 participants received refresher training in Pibor and Akobo East Counties.
- WHO trained 16 health workers in Pibor on the management of severe acute malnutrition with medical complications to optimize care for severe acute malnutrition cases and reduce mortality. Overall, 63 health workers have been capacity built-in Pibor, Tonj North, Tonj East, Tonj South and Aweil South counties.



AFP Cases in 2021: The total number AFP cases is 379.

Main surveillance indicators for 2021

- The national Non-Polio AFP rate is 7.63 in 2021, All state hubs have achieved NP-AFP rate of 3.0 and above*
- 9 state Hubs have achieved stool adequacy rate of 80% and above except Jonglei State hub*

▪ Classification of AFP cases

- Discarded as NP/AFP =312*
- Compatible case =7*
- cVDPV2 cases in 2021 =9*
- Pending for Lab culture =37*
- Pending Lab ITD =1*
- Pending for NPEC =13*

•AFP Surveillance indicators:

- Early detection within 7 days of onset of cases =78%*
- Early investigation within 48 Hours from Notification =84%*
- # of silent Counties that didn't report any case for 2021 =02(3%),*
- Stool Adequacy =89%*
- Immunity profile 4+ Doses (6-59) for 2021 AFP cases = 54%*
- Intensified case search continues at facility ,Community and AVADAR*



2020-2021* SUMMARY by States (Using NID figures for population estimates)

| State Hubs | | Population <15 years | Cumulative AFP Cases | Non-Polio Cases | Cases of the Week | Polio cases | | Pending | | | NP/AFP Rate | Stool Adequacy | | | Lab indicators (Pending lab cases excluded) | | | |
|--------------------|-----------------------------|----------------------|----------------------|-----------------|-------------------|------------------|-----------|-----------------|-----------------|-------------|-------------|----------------|--------------------|----------------|--|------------|------------|-----------|
| | | | | | | Polio Compatible | VDPV | Pending Lab/CLT | Pending Lab/ITD | Pending ERC | | Specimens (#) | Adequate Specimens | Stool adequacy | NPEV | | Sabin like | |
| | | | | | | | | | | | | | | | Number | Percent | Number | Percent |
| 2020 | CENTRAL EQUATORIA HUB | 863660 | 33 | 33 | - | 0 | 5 | 0 | 0 | 0 | 3.82 | 33 | 32 | 97% | 6 | 18% | 2 | 6% |
| | EASTERN EQUATORIA HUB | 690305 | 47 | 47 | - | 0 | 1 | 0 | 0 | 0 | 6.81 | 47 | 39 | 83% | 9 | 19% | 0 | 0% |
| | JONGLEI HUB | 1036855 | 50 | 43 | - | 7 | 4 | 0 | 0 | 0 | 4.15 | 50 | 27 | 54% | 11 | 22% | 3 | 6% |
| | LAKES HUB | 534695 | 40 | 40 | - | 0 | 4 | 0 | 0 | 0 | 7.48 | 40 | 38 | 95% | 8 | 20% | 2 | 5% |
| | NORTHERN BAHR EL GHAZAL HUB | 587977 | 27 | 26 | - | 1 | 4 | 0 | 0 | 0 | 4.42 | 27 | 22 | 81% | 6 | 22% | 1 | 4% |
| | UNITY HUB | 495932 | 49 | 45 | - | 4 | 5 | 0 | 0 | 0 | 9.07 | 49 | 39 | 80% | 7 | 14% | 5 | 10% |
| | UPPER NILE HUB | 780912 | 51 | 49 | - | 2 | 1 | 0 | 0 | 0 | 6.27 | 51 | 40 | 78% | 12 | 24% | 1 | 2% |
| | WARRAP HUB | 755662 | 66 | 64 | - | 2 | 17 | 0 | 0 | 0 | 8.47 | 66 | 60 | 91% | 10 | 15% | 13 | 20% |
| | WESTERN BAHR EL GHAZAL HUB | 265382 | 33 | 33 | - | 0 | 7 | 0 | 0 | 0 | 12.43 | 33 | 31 | 94% | 5 | 15% | 6 | 18% |
| | WESTERN EQUATORIA HUB | 467732 | 34 | 33 | - | 1 | 1 | 0 | 0 | 0 | 7.06 | 34 | 31 | 91% | 6 | 18% | 0 | 0% |
| SOUTH SUDAN | | 6479113 | 430 | 413 | - | 17 | 49 | 0 | 0 | 0 | 6.37 | 430 | 359 | 83% | 80 | 19% | 33 | 8% |
| 2021* | CENTRAL EQUATORIA HUB | 889570 | 30 | 26 | - | 0 | 1 | 2 | 0 | 1 | 4.6 | 30 | 28 | 93% | 5 | 17% | 1 | 3% |
| | EASTERN EQUATORIA HUB | 711015 | 33 | 28 | - | 0 | 1 | 2 | 0 | 2 | 6.4 | 33 | 30 | 91% | 2 | 6% | 1 | 3% |
| | JONGLEI HUB | 1067961 | 74 | 56 | - | 4 | 2 | 10 | 0 | 2 | 9.0 | 74 | 58 | 78% | 10 | 14% | 2 | 3% |
| | LAKES HUB | 550736 | 20 | 17 | - | 0 | 0 | 3 | 0 | 0 | 5.0 | 20 | 20 | 100% | 0 | 0% | 0 | 0% |
| | NORTHERN BAHR EL GHAZAL HUB | 605616 | 22 | 17 | - | 0 | 0 | 5 | 0 | 0 | 5.0 | 22 | 22 | 100% | 4 | 18% | 0 | 0% |
| | UNITY HUB | 510810 | 51 | 41 | - | 1 | 2 | 5 | 0 | 2 | 13.4 | 51 | 47 | 92% | 13 | 25% | 0 | 0% |
| | UPPER NILE HUB | 804340 | 45 | 37 | - | 0 | 2 | 4 | 0 | 1 | 7.7 | 45 | 43 | 96% | 8 | 18% | 0 | 0% |
| | WARRAP HUB | 778332 | 39 | 31 | - | 0 | 1 | 5 | 0 | 2 | 6.9 | 39 | 35 | 90% | 8 | 21% | 0 | 0% |
| | WESTERN BAHR EL GHAZAL HUB | 273343 | 32 | 28 | - | 2 | 0 | 1 | 0 | 1 | 15.0 | 32 | 26 | 81% | 6 | 19% | 0 | 0% |
| | WESTERN EQUATORIA HUB | 481764 | 33 | 31 | - | 0 | 0 | 0 | 0 | 2 | 9.4 | 33 | 30 | 91% | 5 | 15% | 0 | 0% |
| SOUTH SUDAN | | 6673486 | 379 | 312 | - | 7 | 9 | 37 | 0 | 13 | 7.63 | 379 | 339 | 89% | 61 | 16% | 4 | 1% |

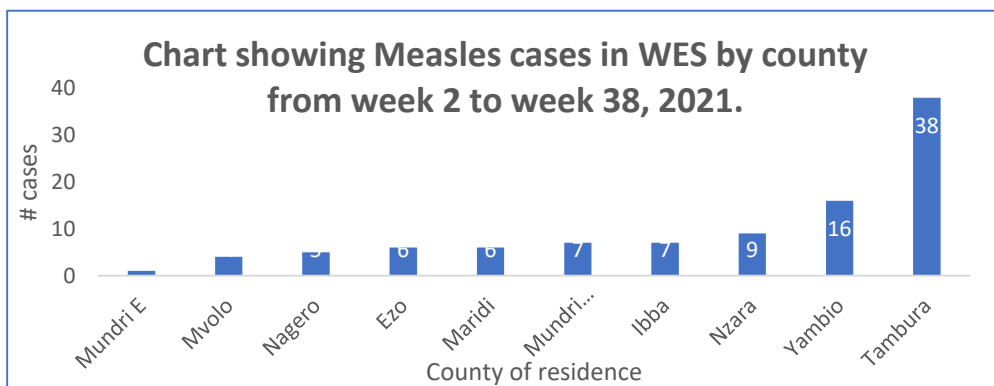
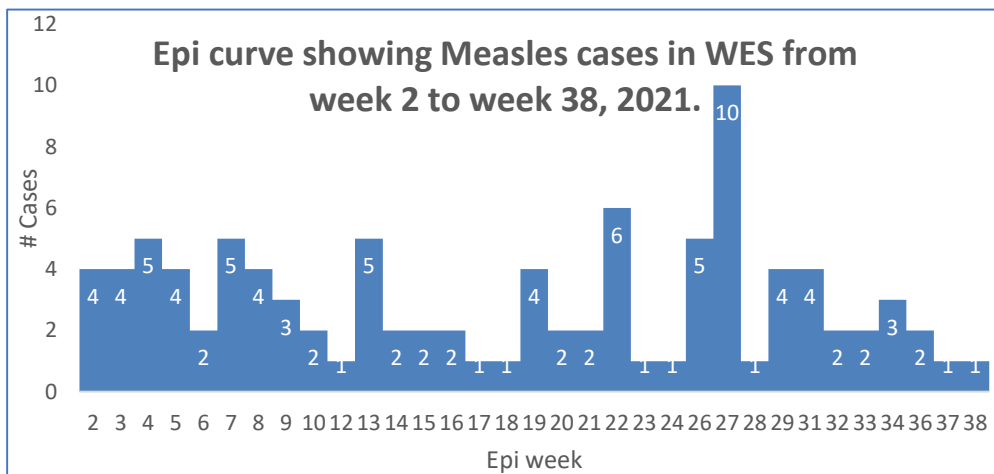


| Aetiological agent | Location (county) | Date first reported | New cases since last bulletin | Cumulative cases to date (attack rate %) | Interventions | | | |
|--------------------------|-------------------|--------------------------|-------------------------------|--|-----------------|-------------|------------------|------|
| | | | | | Case management | Vaccination | Health promotion | WASH |
| Ongoing epidemics | | | | | | | | |
| Hepatitis E | Bentiu PoC | 03/01/2018 | 23 | 1,147 (0.020) | Yes | No | Yes | Yes |
| COVID-19 | 35 counties | 05/4/2020 | 128 | 11,948 (0.010) | yes | yes | yes | yes |
| cVDPV2 | 25 counties | 11/06/2020 18/09/2020 | 27 | 59 | Yes | Yes | Yes | Yes |





Suspected Measles Trends in Western Equatoria State



| Age group | Cases | percentage | CUM. % |
|--------------------|-----------|-------------|--------|
| 0 - 4 Years | 47 | 34% | 34% |
| 5 - 9 Years | 26 | 34% | 69% |
| 10 - 14 Years | 18 | 21% | 90% |
| 15 + Years | 8 | 10% | 100% |
| Grand Total | 99 | 100% | |

Descriptive epidemiology

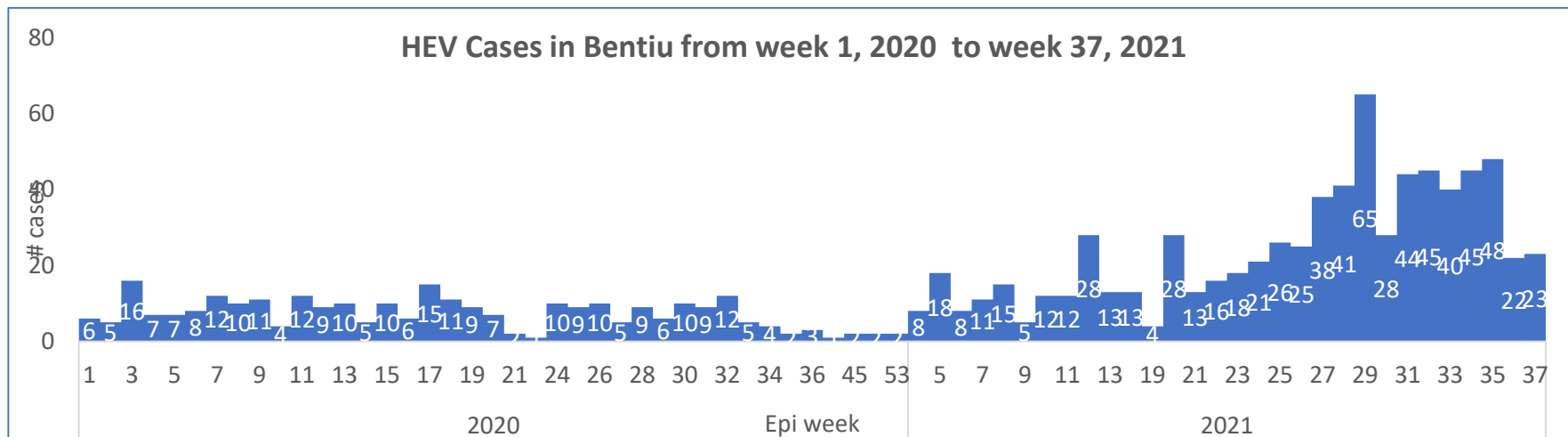
- WES started to report cases of suspected Measles in week 2, 2021. Up to week 38, 2021 a total of **99** cases have been listed.
- One new case reported in week 38, 2021
- No deaths reported
- **64%** are female and **36%** are male.
- Less than 5 yrs of age is 34% .
- Most affected counties are Tambura and Yambio.

Response Actions & Recommendations:

- Given the current crisis in Tambura and the reports of 38 suspect measles cases; displacement; and reduced access to essential health care **it is important that emergency measles vaccination of <15-year-old is considered in Tambura (even in the absence of laboratory confirmed cases).**



Hepatitis E, Bentiu IDP camp (1)



Descriptive epidemiology

- The persistent transmission of HEV in Bentiu IDP camp continues with **1,147** cases since beginning of 2019
- There were (**23**) new cases reported in week 37, 2021
- All the cases were managed as outpatient cases except for seven cases who were admitted
- 9 deaths reported in 2019, 2020 and 2021
- 48% are female and 52% are male.
- Age group less than 15 years had the most cases with (62%) cases.
- There is risk of adverse outcomes women are infected in their last trimester
- Use of unsafe drinking water is likely to be source of infection
- Up to week 37, 2021; a cumulative of 1,086 cases of HEV in Bentiu IDP camp including 9 deaths (CFR 0.07%)
- There is an upsurge of HEV cases since the beginning of 2021. The upsurge is attributed to declining WASH in the IDP camp as the daily workers and hygiene promoters have not been working for months now amidst reduced funding for WASH activities in IDP camp.



Ongoing Response

- The HEV taskforce has been activated to implement comprehensive HEV control interventions to interrupt transmission
- HEV strategy has been developed to guide implementation and mobilization of resources to support the response
- Deployment of WASH partners to initiate emergency WASH interventions including;
- Hygiene promotion; water quality surveillance; solid waste management etc.
- **Microplanning underway to import and deploy HEV vaccines targeting 57,000 individuals aged 16-40 years with two doses of HEV vaccine this year. Third dose to follow in the second quarter of 2022.**



| Aetiological agent | Location (county) | Date first reported | New cases since last bulletin | Cumulative cases to date (attack rate %) | Interventions | | | |
|-----------------------------|-------------------|---------------------|-------------------------------|--|-----------------|-------------|------------------|------|
| | | | | | Case management | Vaccination | Health promotion | WASH |
| Controlled epidemics | | | | | | | | |
| Measles | Juba | 21/11/2019 | NR | 6(0.1667) | Yes | No | Yes | N/A |
| Measles | Tonj East | 12/12/2019 | NR | 61(0.98) | yes | Yes | Yes | N/A |
| Measles | Bor | 17/01/2020 | NR | 14(0.214) | yes | No | yes | N/A |
| Measles | Jebel Boma | 10/12/2019 | NR | 96(0.063) | yes | No | Yes | N/A |
| Measles | Kapoeta East | 18/01/2020 | NR | 16(0.625) | yes | No | Yes | N/A |
| Measles | Aweil East | 29/12/2019 | NR | 664 (0.127) | Yes | | No | Yes |
| Measles | Pibor | 27/1/2020 | NR | 355 (0.0028) | Yes | | Yes | Yes |
| Measles | Wau | 5/1/2020 | NR | 39 (0.051) | Yes | | Yes | Yes |
| Measles | Ibba | 25/1/2020 | 0 | 55 (0.36) | Yes | | Yes | Yes |
| Rubella | Tambura | 11/1/2021 | 0 | 23 (0.13) | Yes | | No | Yes |
| Rubella | Nagero | 01/03/ 20201 | 0 | 5 (0.25) | Yes | | No | Yes |



COVID-19 Updates



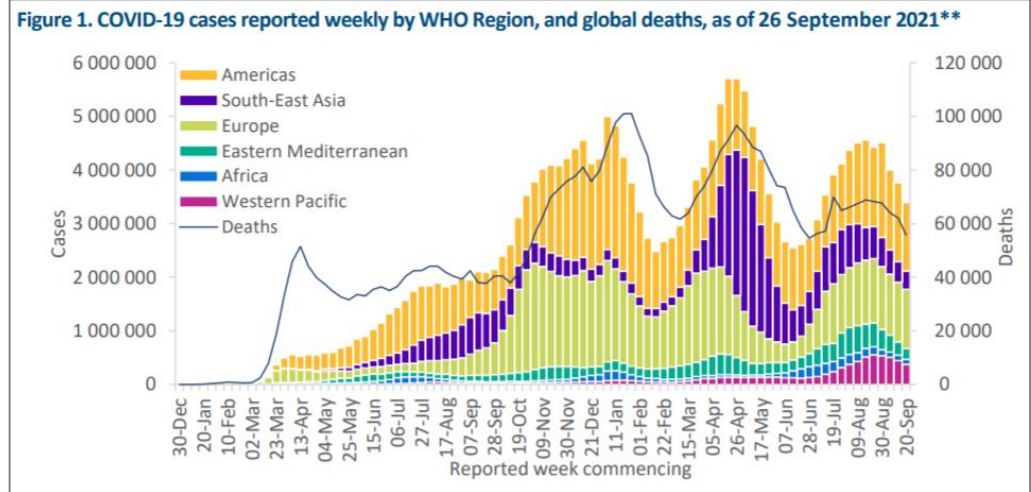
COVID-19 Virus Situation Summary



Situation update as of 28th September 2021

- Globally, 28th September 2021, there have been **231 416 660 confirmed cases** of COVID-19, including **4 741 330 deaths**, reported to WHO. As of **3rd October 2021**, a total of **6,364,021,792 vaccine doses** have been administered.

- In Africa, as of **28th September**, there have been **5 998 863 confirmed cases** of COVID-19, including **144 957 deaths** reported to WHO



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



- 11,948 confirmed cases with 128 deaths, 11,422 recoveries, and 398 active cases. 1.07% case fatality rate (CFR)
- At the end of Week 32, 35 (43.8%) of the 80 counties in the country have a confirmed case. There was no county with a first confirmed case this week
- 134 new confirmed cases during the week with pre-travel screening (68%) and alerts (22%) accounting for majority of the cases 419 imported cases (1 new) mostly from South Sudanese returnees (247), Uganda (53), and Kenya (19), 4 admitted to the Infectious Disease Unit (IDU) in Juba during the week, two discharged
- Average positivity yields increased for five consecutive epi weeks, reaching 3.3% in Week 35 before falling to 2.8% in Weeks 37 and 38
- 30 alerts tested positive for COVID-19 this week. Cumulatively, 3,207 alerts have been reported, 3079 (96.0%) were verified, and 2,996 (96.3%) sampled.
- Cumulatively, 18,311 contacts have been listed and followed up since the first confirmed case was reported in April 2020, of which 16,360 (89.3%) have completed follow-up.
- So far three variants of concern (Alpha [B.1.1.7], Beta [B.1.351], and Delta [B.1.617.2]) have been identified in the country, with the Delta variant predominating (93%) 59520 doses of AstraZeneca from France received on 31 August 2021; 152950 doses of J&J from USA received on 14 September, 2021
 - **106899** people vaccinated as of 29 Sept 2021 (76424 vaccinated first dose; 30475 fully vaccinated - 11719 healthcare workers vaccinated)

Overall Conclusions and Recommendations



Conclusion

- The overall performance of IDSR and EWARN reporting sites in week 38, 2021 is above the target of 80% in both Timeliness and Completeness
- **11, 948** confirmed COVID-19 cases (case fatality rate of 1.07%) 128 deaths. Total **18,311** contacts identified, quarantined, & undergoing follow up as of week 38, 2021
- Given the COVID-19 pandemic, and the third pandemic wave that is currently underway in Africa, resurgence monitoring and response readiness is being enhanced for all the pillars including surveillance, laboratory, case management, infection prevention and control, border health, and community engagement to emphasize adherence to public health social measures including vaccination of health workers, high risk groups, and the general population

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 resurgence monitoring and response readiness through identifying and testing suspect cases (including genomic sequencing), isolating and effective management of confirmed cases, contact tracing, community engagement, COVID-19 vaccination, and strengthening adherence to PHSMs.

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>





IDSR timeliness & completeness performance at county level for week 38 of 2021 (1)

| STATE | COUNTY | Number of reporting sites | No. of HFs Reported on Time in WK 38 | Timeliness Percentage of WK 38 | No. of HFs Reported regardless of time in WK 38 | Completeness Percentage of WK 38 | No. of HFs Reported regardless of time in WK 37 | Completeness Percentage of WK 37 |
|-------|---------------|---------------------------|--------------------------------------|--------------------------------|---|----------------------------------|---|----------------------------------|
| Lakes | Cueibet | 15 | 15 | 100% | 15 | 100% | 15 | 100% |
| Lakes | Rumbek North | 7 | 7 | 100% | 7 | 100% | 7 | 100% |
| Lakes | Wulu | 14 | 14 | 100% | 14 | 100% | 14 | 100% |
| Lakes | Rumbek East | 24 | 24 | 100% | 24 | 100% | 24 | 100% |
| Lakes | Awerial | 7 | 7 | 100% | 7 | 100% | 7 | 100% |
| NBGZ | Aweil North | 25 | 25 | 100% | 25 | 100% | 25 | 100% |
| NBGZ | Aweil West | 27 | 27 | 100% | 27 | 100% | 27 | 100% |
| NBGZ | Aweil Centre | 15 | 15 | 100% | 15 | 100% | 15 | 100% |
| WBGZ | Raja | 15 | 15 | 100% | 15 | 100% | 7 | 47% |
| WBGZ | Wau | 28 | 28 | 100% | 28 | 100% | 28 | 100% |
| CES | Juba | 46 | 45 | 98% | 45 | 98% | 46 | 100% |
| Lakes | Rumbek Centre | 23 | 22 | 96% | 23 | 100% | 23 | 100% |
| CES | Yei | 17 | 16 | 94% | 16 | 94% | 16 | 94% |
| Lakes | Yirol West | 12 | 11 | 92% | 12 | 100% | 12 | 100% |
| NBGZ | Aweil South | 11 | 10 | 91% | 10 | 91% | 11 | 100% |
| NBGZ | Aweil East | 37 | 32 | 86% | 33 | 89% | 32 | 86% |
| CES | Terekeka | 20 | 17 | 85% | 17 | 85% | 17 | 85% |
| WBGZ | Jur River | 35 | 29 | 83% | 29 | 83% | 30 | 86% |
| Lakes | Yirol East | 11 | 8 | 73% | 11 | 100% | 11 | 100% |
| CES | Morobo | 5 | 3 | 60% | 4 | 80% | 4 | 80% |
| CES | Kajo Keji | 17 | 10 | 59% | 10 | 59% | 10 | 59% |
| CES | Lainya | 16 | 8 | 50% | 10 | 63% | 11 | 69% |

| STATE | COUNTY | Number of reporting sites | No. of HFs Reported on Time in WK 38 | Timeliness Percentage of WK 38 | No. of HFs Reported regardless of time in 38 | Completeness Percentage of WK 38 | No. of HFs Reported regardless of time in WK 37 | Completeness Percentage of WK 37 |
|-------|-------------|---------------------------|--------------------------------------|--------------------------------|--|----------------------------------|---|----------------------------------|
| Unity | Abiemnhom | 4 | 4 | 100% | 4 | 100% | 4 | 100% |
| Unity | Panyijiar | 15 | 15 | 100% | 15 | 100% | 12 | 80% |
| Unity | Pariang | 11 | 11 | 100% | 11 | 100% | 11 | 100% |
| Unity | Mayendit | 12 | 12 | 100% | 12 | 100% | 12 | 100% |
| WES | Nzara | 20 | 20 | 100% | 20 | 100% | 20 | 100% |
| WES | Nagero | 10 | 10 | 100% | 10 | 100% | 10 | 100% |
| WES | Mundri West | 21 | 21 | 100% | 21 | 100% | 21 | 100% |
| WES | Maridi | 26 | 26 | 100% | 26 | 100% | 26 | 100% |
| WES | Ibba | 11 | 11 | 100% | 11 | 100% | 11 | 100% |
| WES | Mundri East | 19 | 19 | 100% | 19 | 100% | 19 | 100% |
| WES | Yambio | 42 | 42 | 100% | 42 | 100% | 42 | 100% |
| WES | Ezo | 27 | 27 | 100% | 27 | 100% | 27 | 100% |
| WES | Mvolo | 11 | 11 | 100% | 11 | 100% | 11 | 100% |
| WES | Tambura | 28 | 26 | 93% | 26 | 93% | 28 | 100% |
| Unity | Guit | 7 | 6 | 86% | 6 | 86% | 6 | 86% |
| Unity | Leer | 11 | 9 | 82% | 9 | 82% | 1 | 9% |
| Unity | Rubkona | 13 | 10 | 77% | 11 | 85% | 11 | 85% |
| Unity | Mayom | 14 | 10 | 71% | 10 | 71% | 13 | 93% |
| Unity | Koch | 7 | 1 | 14% | 4 | 57% | 6 | 86% |



IDSR timeliness & completeness performance at county level for week 38 of 2021 (2)

| STATE | COUNTY | Number of reporting sites | No. of HF's Reported on Time in WK 38 | Timeliness Percentage of WK 38 | No. of HF's Reported regardless of time in WK 38 | Completeness Percentage of WK 38 | No. of HF's Reported regardless of time in WK 37 | Completeness Percentage of WK 37 |
|---------|---------------|---------------------------|---------------------------------------|--------------------------------|--|----------------------------------|--|----------------------------------|
| Jonglei | Pibor | 9 | 9 | 100% | 9 | 100% | 8 | 89% |
| Jonglei | Pochalla | 7 | 7 | 100% | 7 | 100% | 7 | 100% |
| Jonglei | Duk | 15 | 15 | 100% | 15 | 100% | 10 | 67% |
| EES | Lopa Lafon | 18 | 18 | 100% | 18 | 100% | 18 | 100% |
| EES | Torit | 20 | 20 | 100% | 20 | 100% | 17 | 85% |
| EES | Kapoeta South | 10 | 10 | 100% | 10 | 100% | 10 | 100% |
| EES | Kapoeta North | 16 | 15 | 94% | 15 | 94% | 15 | 94% |
| Jonglei | Nyirrol | 10 | 9 | 90% | 9 | 90% | 10 | 100% |
| Jonglei | Fangak | 17 | 15 | 88% | 15 | 88% | 13 | 76% |
| EES | Magwi | 22 | 19 | 86% | 20 | 91% | 15 | 68% |
| EES | Ikotos | 27 | 22 | 81% | 27 | 100% | 24 | 89% |
| Jonglei | Twic East | 11 | 8 | 73% | 8 | 73% | 8 | 73% |
| EES | Budi | 21 | 15 | 71% | 19 | 90% | 17 | 81% |
| Jonglei | Bor | 35 | 24 | 69% | 24 | 69% | 21 | 60% |
| EES | Kapoeta East | 12 | 8 | 67% | 10 | 83% | 9 | 75% |
| Jonglei | Ayod | 15 | 8 | 53% | 8 | 53% | 5 | 33% |
| Jonglei | Canal Pigi | 12 | 4 | 33% | 4 | 33% | 6 | 50% |
| Jonglei | Akobo | 8 | 2 | 25% | 2 | 25% | 0 | 0% |
| Jonglei | Uror | 8 | 1 | 13% | 1 | 13% | 1 | 13% |

| STATE | COUNTY | Number of reporting sites | No. of HF's Reported on Time in WK 38 | Timeliness Percentage of WK 38 | No. of HF's Reported regardless of time in WK 38 | Completeness Percentage of WK 38 | No. of HF's Reported regardless of time in WK 37 | Completeness Percentage of WK 37 |
|------------|----------------|---------------------------|---------------------------------------|--------------------------------|--|----------------------------------|--|----------------------------------|
| Warrap | Tonj North | 20 | 20 | 100% | 20 | 100% | 20 | 100% |
| Warrap | Gogrial West | 31 | 31 | 100% | 31 | 100% | 30 | 97% |
| Warrap | Tonj South | 14 | 14 | 100% | 14 | 100% | 14 | 100% |
| Upper Nile | Baliet | 4 | 4 | 100% | 4 | 100% | 4 | 100% |
| Upper Nile | Maiwut | 5 | 5 | 100% | 5 | 100% | 4 | 80% |
| Upper Nile | Makal | 7 | 7 | 100% | 7 | 100% | 5 | 71% |
| Upper Nile | Panyikang | 3 | 3 | 100% | 3 | 100% | 3 | 100% |
| Upper Nile | Longechuk | 9 | 9 | 100% | 9 | 100% | 9 | 100% |
| Upper Nile | Akoka | 5 | 5 | 100% | 5 | 100% | 5 | 100% |
| Warrap | Twic | 26 | 25 | 96% | 25 | 96% | 23 | 88% |
| Upper Nile | Fashoda | 16 | 14 | 88% | 14 | 88% | 9 | 56% |
| Upper Nile | Melut | 8 | 6 | 75% | 6 | 75% | 6 | 75% |
| Upper Nile | Maban | 17 | 12 | 71% | 12 | 71% | 10 | 59% |
| Upper Nile | Manyo | 10 | 7 | 70% | 8 | 80% | 8 | 80% |
| Warrap | Abyei | 10 | 7 | 70% | 7 | 70% | 8 | 80% |
| Warrap | Gogrial East | 15 | 9 | 60% | 11 | 73% | 7 | 47% |
| Upper Nile | Ulang | 14 | 8 | 57% | 8 | 57% | 8 | 57% |
| Upper Nile | Luakpiny Nasir | 12 | 5 | 42% | 5 | 42% | 9 | 75% |
| Warrap | Tonj East | 14 | 4 | 29% | 14 | 100% | 14 | 100% |
| Upper Nile | Renk | 11 | 0 | 0% | 0 | 0% | 0 | 0% |



| States | Number of reporting sites | Supporting Partners |
|------------|---------------------------|--|
| WES | 213 | AMREF, World Vision, CUAMM, CDTY, OPEN |
| CES | 117 | HLSS, SSUHA, Healthnet TPO, IHO,GOAL,TRI-SS,THESO,IMA,SSHCO |
| NBGZ | 133 | Malaria Consortium, Health net TPO, IRC, CEDS, IHO |
| WBGZ | 78 | Cordaid, Healthnet TPO, CARE International,IOM,ALIMA |
| Jonglei | 107 | Nile Hope, MDM, JDF, Livewell, CMD, HFO, EDA, CRADA, Malaria Consortium, CMA,ACSO,MEDAIR,CARE,World Relief,UNH |
| EES | 142 | Cordaid, HLSS, CCM |
| Unity | 94 | Cordaid, UNIDOR, IRC, CHADO, CARE International, CRADA, CASS,IOM,Samaritan's Purse |
| Warrap | 123 | GOAL, CCM, WVI, Malaria Consortium, UNKEA, Save the Children, MSF |
| Upper Nile | 112 | Cordaid, WVI, RI, IMC, NIDO, UNKEA, MC, SSAID,CORDAID ,IOM,HFD,TADO |
| Lakes | 113 | Doctors with Africa (CUAMM) |

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More information can be found at <http://ewars-project.org>

