



## Epidemiological Bulletin Week 09, 2023 (February 27- 05 March)



#### Major epidemiological highlights in week 09 of 2023



- In week **09**, **2023**, **the** IDSR reporting timeliness and completeness were **81%** and 89% respectively and timeliness and completeness for EWARN sites were both at **95%**
- A total of 32 alerts were triggered in week 09, 2023 most of the alerts were for AWD (10),06 measles and 10 malaria alerts
- Ministry of Health Republic of South Sudan declared a cholera outbreak in Malakal with a total of 297 cases reported and one (1) death giving a CFR of 0.3%. From February 22 to 16 March 2023 from both the Malakal IDP camp and town
- Measles outbreaks continue with 5,433 reported; cases, 2,976(54.8%) are epi-linked, 504(9.3%) lab-confirmed, 1,376(25.3%) clinically compatible, and 577(10.6) discarded cases have been reported from epidemiological week 1, 2022, to week 09, 2023
- The persistent transmission of HEV in the Bentiu IDP camp continues with 3,990 cases since the beginning of 2019 and 15 cases reported in week 09 of 2023.
- IDSR review meeting conducted in Juba between 6-8 March 2023, MCM One health platform launched on 13-15 March 2023.

#### **SURVEILLANCE PERFORMANCE**



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



#### DSR timeliness performance at State level for week 09 & 08 of 2023



| Timelinesss States<br>Ranking | States      | Number of reporting sites | No. of HFs Reported on<br>Time in WK 09 | Timeliness Percentage of WK 09 | No. of HFs Reported on Time in Wk 08 | Timeliness Percentage of WK 08 |
|-------------------------------|-------------|---------------------------|---|--------------------------------|--------------------------------------|--------------------------------|
| 1st                           | CES         | 128                       | 127                                     | 99%                            | 127                                  | 99%                            |
| 2nd                           | Lakes       | 113                       | 110                                     | 97%                            | 113                                  | 100%                           |
| 3rd                           | EES         | 105                       | 96                                      | 91%                            | 93                                   | 89%                            |
| 4th                           | NBGZ        | 84                        | 76                                      | 90%                            | 78                                   | 93%                            |
| 5th                           | Unity       | 95                        | 78                                      | 82%                            | 72                                   | 76%                            |
| 6th                           | WES         | 219                       | 179                                     | 82%                            | 218                                  | 100%                           |
| 7th                           | Warrap      | 127                       | 98                                      | 77%                            | 105                                  | 83%                            |
| 8th                           | WBGZ        | 78                        | 57                                      | 73%                            | 76                                   | 97%                            |
| 9th                           | Jonglei     | 116                       | 67                                      | 58%                            | 69                                   | 59%                            |
| 10th                          | Upper Nile  | 101                       | 55                                      | 54%                            | 83                                   | 82%                            |
|                               | South Sudan | 1166                      | 943                                     | 81%                            | 1034                                 | 89%                            |

**KEY** 

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



#### IDSR Completeness performance at State level for week 09 & 08 of 2023



| Completeness States Ranking | States      | Number of reporting sites | No. of HFs Reported regardless of time in WK 09 | Completeness<br>Percentage of WK 09 | No. of HFs Reported regardless of time in WK 08 | Completeness Percentage<br>of Wk 08 |
|-----------------------------|-------------|---------------------------|---|-------------------------------------|---|-------------------------------------|
| 1st                         | Lakes       | 113                       | 113   | 100%                                | 113   | 100%                                |
| 5th                         | WES         | 219                       | 218   | 100%                                | 219   | 100%                                |
| 9th                         | CES         | 128                       | 127   | 99%                                 | 127   | 99%                                 |
| 4th                         | WBGZ        | 78                        | 76  | 97%                                 | 75  | 96%                                 |
| 2nd                         | NBGZ        | 84                        | 78  | 93%                                 | 83  | 99%                                 |
| 8th                         | EES         | 105                       | 93  | 89%                                 | 104   | 99%                                 |
| 7th                         | Warrap      | 127                       | 105   | 83%                                 | 103   | 81%                                 |
| 10th                        | Upper Nile  | 101                       | 83  | 82%                                 | 92  | 91%                                 |
| 3rd                         | 3rd Unity   |                           | 72  | 76%                                 | 85  | 89%                                 |
| 6th                         | Jonglei     | 116                       | 69  | 59%                                 | 75  | 65%                                 |
|                             | South Sudan | 1166                      | 1034  | 89%                                 | 1076  | 92%                                 |

KEY

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



#### Surveillance: EWARS Timeliness performance indicator by partner for week 09 and 08 of 2023



| Partner        | HFs                       | Reporting                                   |                       | Performance                                 |                       |
|----------------|---------------------------|---|-----------------------|---|-----------------------|
| PARTER         | Number of reporting sites | # of reports received on Time in<br>Week 09 | Timeliness of Week 09 | # of reports received on Time in<br>Week 08 | Timeliness of Week 08 |
| HFO            | 8                         | 8   | 100%                  | 8   | 100%                  |
| CIDO           | 1                         | 1   | 100%                  | 1   | 100%                  |
| Medicair       | 5                         | 5   | 100%                  | 5   | 100%                  |
| TRI-SS         | 2                         | 2   | 2 100% 2              |   | 100%                  |
| World Relief   | 3                         | 3   | 100%                  | 3   | 100%                  |
| AFAA           | 1                         | 1   | 100%                  | 1   | 100%                  |
| IMC            | 22                        | 22  | 100%                  | 22  | 100%                  |
| SMC            | 6                         | 6   | 100%                  | 6   | 100%                  |
| SSHCO          | 1                         | 1   | 100%                  | 1   | 100%                  |
| UNIDOR         | 2                         | 2   | 100%                  | 2   | 100%                  |
| Islamic Relief | 5                         | 5   | 100%                  | 5   | 100%                  |
| MSF-H          | 4                         | 4   | 100%                  | 3   | 75%                   |
| IRC            | 1                         | 1   | 100%                  | 0   | 0%                    |
| SCI            | 2                         | 2   | 100%                  | 0   | 0%                    |
| IOM            | 10                        | 9   | 90%                   | 8   | 80%                   |
| MSF-E          | 6                         | 4   | 67%                   | 2   | 33%                   |
| ADA            | 1                         | 0   | 0%                    | 0   | 0%                    |
| TOTAL          | 80                        | 76  | 95%                   | 69  | 86%                   |

The Timeliness of EWARS in partners' supported sites stands at 95% in week 09 while in week 08 it was at 86%.



#### rveillance: EWARS completeness performance indicator by partner for week 09 and 08 of 2023



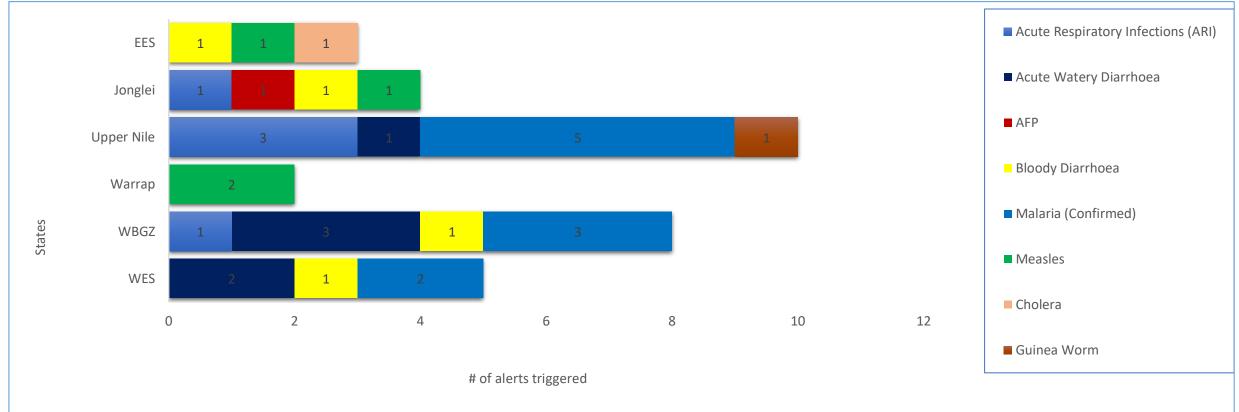
| Partner        | HFs                       | Reporting  |                         | Performance  |                         |  |
|----------------|---------------------------|--|-------------------------|--|-------------------------|--|
| PARTER         | Number of reporting sites | # of reports received regardless of<br>Time in Week 09 | Completeness of Week 09 | # of reports received regardless of<br>Time in Week 08 | Completeness of Week 08 |  |
| IRC            | 1                         | 1  | 100%                    | 1  | 100%                    |  |
| SMC            | 6                         | 6  | 100%                    | 6  | 100%                    |  |
| Islamic Relief | 5                         | 5  | 100%                    | 5  | 100%                    |  |
| HFO            | 8                         | 8  | 100%                    | 8  | 100%                    |  |
| CIDO           | 1                         | 1  | 100%                    | 1  | 100%                    |  |
| Medicair       | 5                         | 5  | 100%                    | 5  | 100%                    |  |
| TRI-SS         | 2                         | 2  | 100%                    | 2  | 100%                    |  |
| World Relief   | 3                         | 3  | 100%                    | 3  | 100%                    |  |
| AFAA           | 1                         | 1  | 100%                    | 1  | 100%                    |  |
| SCI            | 2                         | 2  | 100%                    | 2  | 100%                    |  |
| UNIDOR         | 2                         | 2  | 100%                    | 2  | 100%                    |  |
| IMC            | 22                        | 22   | 100%                    | 22   | 100%                    |  |
| MSF-H          | 4                         | 4  | 100%                    | 4  | 100%                    |  |
| SSHCO          | 1                         | 1  | 100%                    | 1  | 100%                    |  |
| IOM            | 10                        | 9  | 90%                     | 8  | 80%                     |  |
| MSF-E          | 6                         | 4  | 67%                     | 6  | 100%                    |  |
| ADA            | 1                         | 0  | 0%                      | 0  | 0%                      |  |
| TOTAL          | 80                        | 76   | 95%                     | 77   | 96%                     |  |

The Completeness of EWARS in partners' supported sites stands at 95% in week 09 while in week 08 it was at 96%.



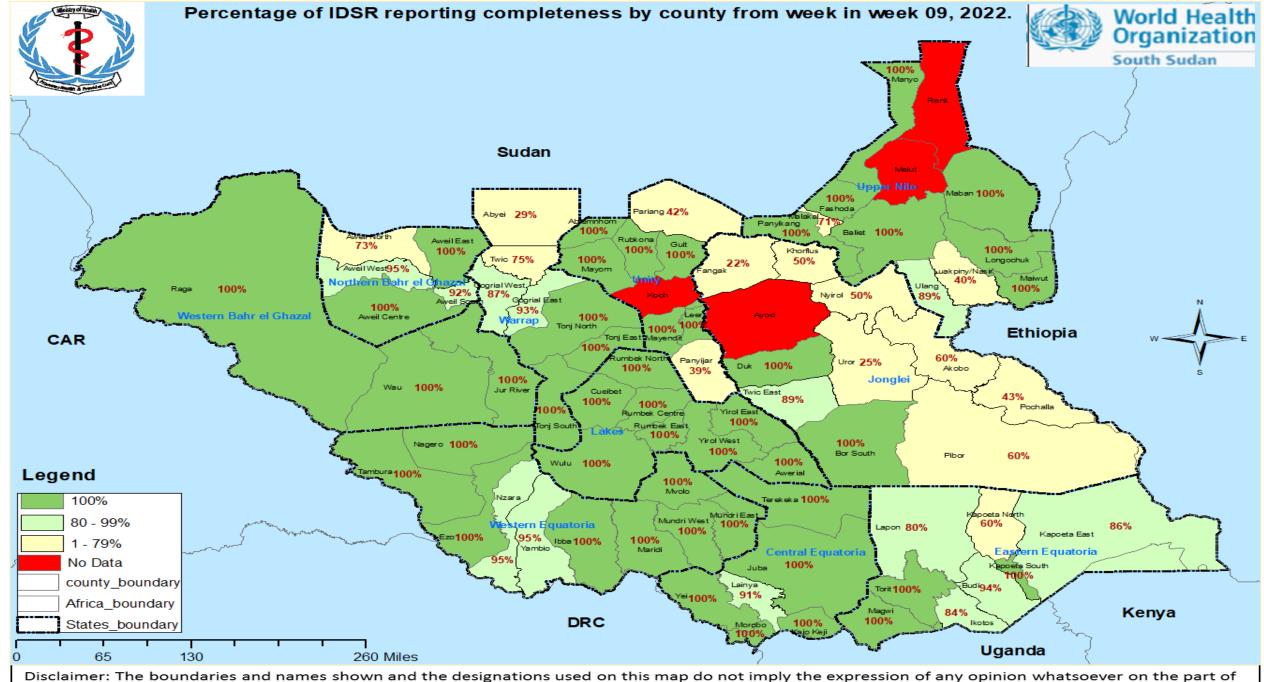
#### Alert by disease and States in week 09 of 2023 [ a total of events specific alerts generated by state





#### This week a total of 32 Alerts were triggered of which 12 are from outbreak prone diseases as Per the broken-down below

- 6 AWD alerts: these alerts were triggered from the following Counties, Tambura(2), Manyo(1), Raja (2), Jur River(1)
- 4 Measles alert: these were triggered from Awol-nhom PHCU in Abyei, Torit State Hospital in Torit, MSF-H Lankien PHCC in Nyirol, Maliai PHCU in Gogrial East
- 1 AFP alert: this was from Pariak PHCC in Bor County
- 1 Cholera alert: this was from Imatong PHCC in Ikotos County



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.

#### INDICATOR-BASED SURVEILLANCE



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

#### Influenza sentinel Surveillance updates



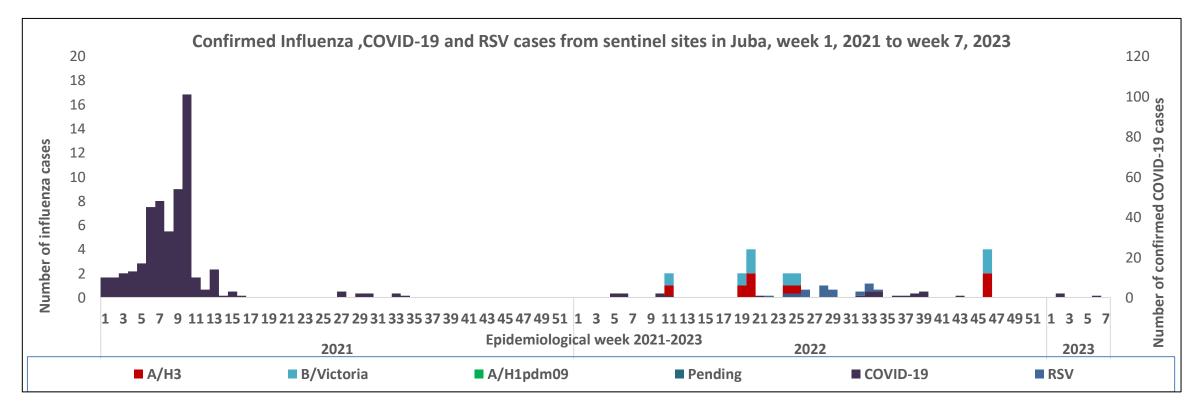






#### Routine Sentinel Surveillance | Human Influenza & other Respiratory Pathogens





- There are currently Four designated Influenza sentinel surveillance sites in Juba (Juba Teaching Hospital and Al Sabah Children's Hospital Rumbek State Hospital & Juba Military Hospital) that are collecting epidemiological data and samples from ILI/SARI cases.
- By the end of week 52,2022; a total of 594 ILI/SARI samples were collected,529 samples tested negative, and Cumulatively, 21 tested positive for covid-19,8 positive for Influenza B (Victoria), and 6 positive for influenza A(H3).26 RSV was confirmed in Week 52
- From weeks 1-7 2023, a total of 83 ILI/SARI were collected all 80 tested negative, 3 positives for Covid-19, (0) Influenza types A (H3), B (Victoria), and 0 for RSV in weeks 7,2023

## ACTIVE OUTBREAKS AND PUBLIC HEALTH EVENTS

## CHOLERA OUTBREAK IN MALAKAL

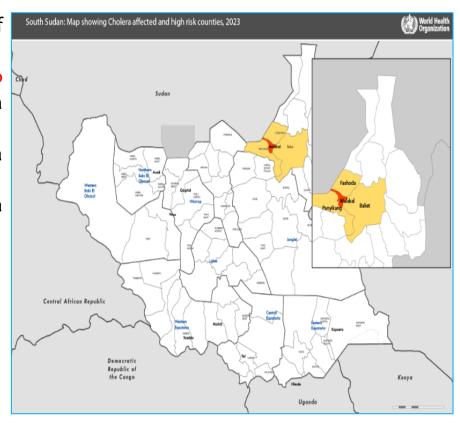


#### Key Epidemiological highlights from Malakal as of 16 March 2023



- On 1<sup>st</sup> March 2023, the National Ministry of Health received information of suspected cholera cases with two (2) RDT positive
- On 2<sup>nd</sup> March 2023, nine (9) samples were received at the NPHL, and two

   (2) samples tested positive for vibrio cholerae by Polymerase chain reaction
   (PCR) on 6th March 2023.
- on 7<sup>th</sup> March 2023, the National Ministry of Health declared Cholera outbreak in Malakal county, Upper Nile State
- Cumulatively, since 22<sup>nd</sup> February 2023 to 16 March a total of 297 cases with one (1) death (CFR-0.3%)
- Fourteen (14) new cases and zero deaths have been reported on 14<sup>th</sup> March 2023 (POC = 12 and Town = 2)
- The current cholera outbreak is localized in Malakal Upper Nile State on the side boarding Sudan.
- Oral Cholera vaccination campaign has commenced on 16 March 2023 targeting 53 000 individuals aged 1 year and above in the POC and Malakal town.



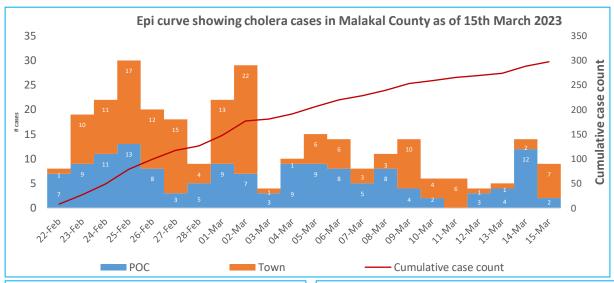


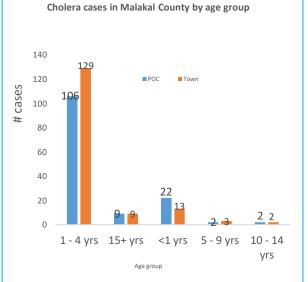
#### Key Epidemiological highlights from Malakal as of 16 March 2023

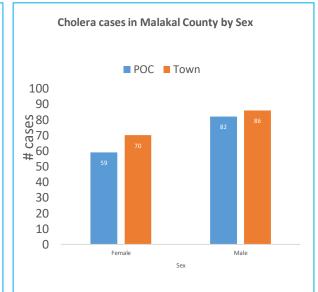


#### Descriptive Epi

- Nine (9) new Cholera cases have been recorded in the past 24 hours two (2) in the POC and seven(7) from main town.
- No new death has been recorded in the past 24 hours.
- Cumulatively, 297 cholera cases and 1 death (CFR-0.3%) has been recorded since the onset of the outbreak.
- Overall, 168(57%) of the cases are males and 129(43%) are females.
- Children of age 1-4 years old are the most affected accounting for 79% (235) of the total cases reported followed by <1 year old 12% (35) cases.
- Majority of 1– 4 years cases were reported from Malakal town (129) and in Malakal protection site POC (106) cases.
- A joint active case search is being conducted by both the National and State RRT teams at health facility and community levels in Malakal County.
- Surveillance heightened in at-risk locations bordering Malakal in Upper Nile State





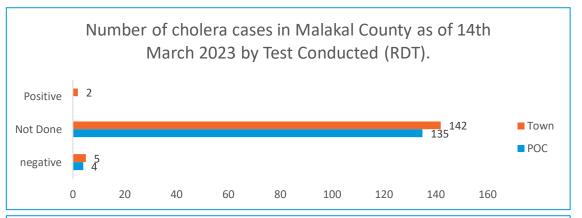


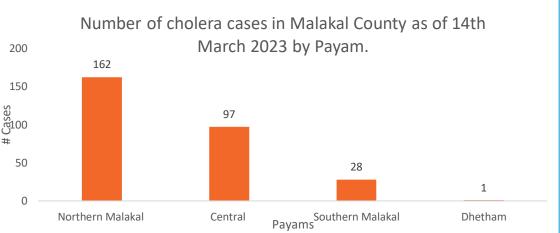


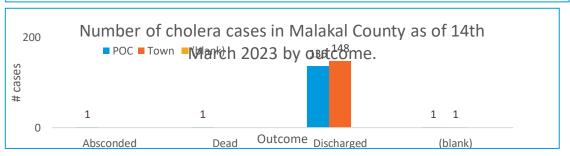
#### Key Epidemiological highlights from Malakal as of 16 March 2023



- Three cases tested positive on RDT in the past.
- The cases have been reported from three (3)main locations; Malakal Central; Northern Malakal and Southern Malakal.
- Northern Malakal Payam accounts for 56% (162) of the total cases reported.
- One case came from Dhetham Payam of Panyikang county.
- There are no inpatients in the treatment center as of 14<sup>th</sup> March 2023 and a majority of the cases have been discharged from the cholera treatment centers both in town and POC.







#### Key interventions and Challenges in Malakal as of 16 March 2023

#### **Key Interventions**

- Launching of the Oral cholera vaccination targeting 53,00 individuals age 1 year and above on 16 March 2023
- The National Ministry of Health declared a Cholera outbreak in Malakal county, Upper Nile State on 7<sup>th</sup> March 2023,
- The National EOC was immediately activated and MOH IMS instituted
- Ongoing coordination at both National and State levels to discuss the progress on Cholera response.
- Multi-sectoral NRRT continue to support Coordination, epidemiological investigation, and response activities.
- Ongoing orientation of MSF-Spain M&E on the eEWARS cholera line list
- Ongoing WASH preventive measures where 28 water samples collected and tested out of those 15 showed coliforms and 13 showed no growth(showing 54% contamination with 46% of safe water with no coliforms
- There are ongoing RCCE activities on health education and community awareness, radio talk shows, and Jingles

#### Challenges

- Inadequate access to safe and clean water due to limited WASH supplies.
- Sub-optimal risk communication and community engagement in affected high-risk locations on cholera prevention and control measures.
- Inadequate RDT testing of suspected cholera cases at the subnational level, most especially, in health facilities and treatment centers
- Inadequate funding for partners to respond.
- Lack of designated ambulance for the referral of cholera cases and designated vehicle for the safe dignified burial (SDB) team.
- Identification and training of the SDB team.
- Overcrowding in the POC due to the continued influx of IDPs poses a major challenge to the limited WASH facilities in the POC.
- Need for additional cholera kits and investigation kits.

Source: Situation report: No. 008



| Provision            | Provision of clean and safe water.  |
|----------------------|---|
| Enhance              | Enhance testing of suspected cholera cases at health facilities and treatment centers |
|                      |   |
| Accelerate           | Accelerate the RCCE interventions at POC and Malakal town.                            |
| <u> </u>             |   |
| Finalize             | Finalize the cholera response plan and budget for resource mobilization.              |
|                      |   |
| Designate            | Designate an ambulance to support the referral of cholera cases                       |
|                      |   |
| Conduct              | Conduct training for the SDB team.  |
|                      |   |
| Quantify and ship    | Quantify and ship additional cholera kits and investigation kits to Malakal County.   |
| <u> </u>             | -   |
| Print and distribute | Print and distribute IEC materials  |
|                      |   |

### ACTIVE OUTBREAKS AND PUBLIC HEALTH EVENTS

**MEASLES 'UPDATES** 



#### Measles Updates as of week 09 2023

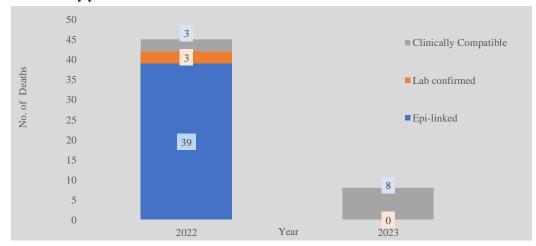


- A total of the 5,433 suspected measles cases, 2,976(54.8%) are epi-linked, 504(9.3%) lab-confirmed, 1,376(25.3%) clinically compatible, and 577(10.6) discarded cases have been reported from epidemiological week 1, 2022, to week 9, 2023
  - Thirty two (32) suspected cases have been reported during the reporting week 09
- A total of 53 measles-related deaths were reported since January 2022, with only 3 deaths among the lab-confirmed measles cases. The case fatality rate (CFR) is 1.0% (as shown in figure 1 below)
  - No new measles-related death reported this week
- Twenty three (23) counties have confirmed Measles outbreaks in 2022 and thirteen (13) counties in 2023
  - No newly confirmed outbreak this week
- Thirty nine (39) counties have reported suspected measles cases in 2023, of which twenty (20) counties have at least one confirmed case
  - Thirteen (13) counties (Mvolo, Mundri East, Pariang, Awerial, Rumbek Centre, Kapoeta South Tonj South, Tonj North, Bor South, Aweil Centre, Rumbek East, Gogrial East and Juba) have confirmed outbreaks in 2023.
- Reactive vaccination campaigns were conducted in 20 counties (16 counties in 2022, 4 counties in 2023), with 858,274 children vaccinated
- The latest reactive measles campaign was conducted in Nyirol county targeting 30,675 children
- The Ministry of Health, WHO, and partners plan to conduct reactive measles vaccination campaigns in Tonj North and Bor South

#### Table: Yearly distribution of cases by final classification

| FINAL<br>CLASSIFICATION | 2               | 022   | 2023            |       | TOTAL |
|-------------------------|-----------------|-------|-----------------|-------|-------|
|                         | NO. OF<br>CASES | %     | NO. OF<br>CASES | %     |       |
| Lab confirmed           | 392             | 9.5   | 112             | 8.6   | 504   |
| Epi-linked              | 2825            | 68.3  | 151             | 11.7  | 2976  |
| Clinically Compatible   | 391             | 9.5   | 985             | 76.2  | 1376  |
| Total                   | 3608            | 87.2  | 1248            | 96.3  | 4856  |
| Discarded (-ve)         | 529             | 12.8  | 48              | 3.7   | 577   |
| Grand Total             | 4137            | 100.0 | 1296            | 100.0 | 5433  |

#### Deaths by year and final classification

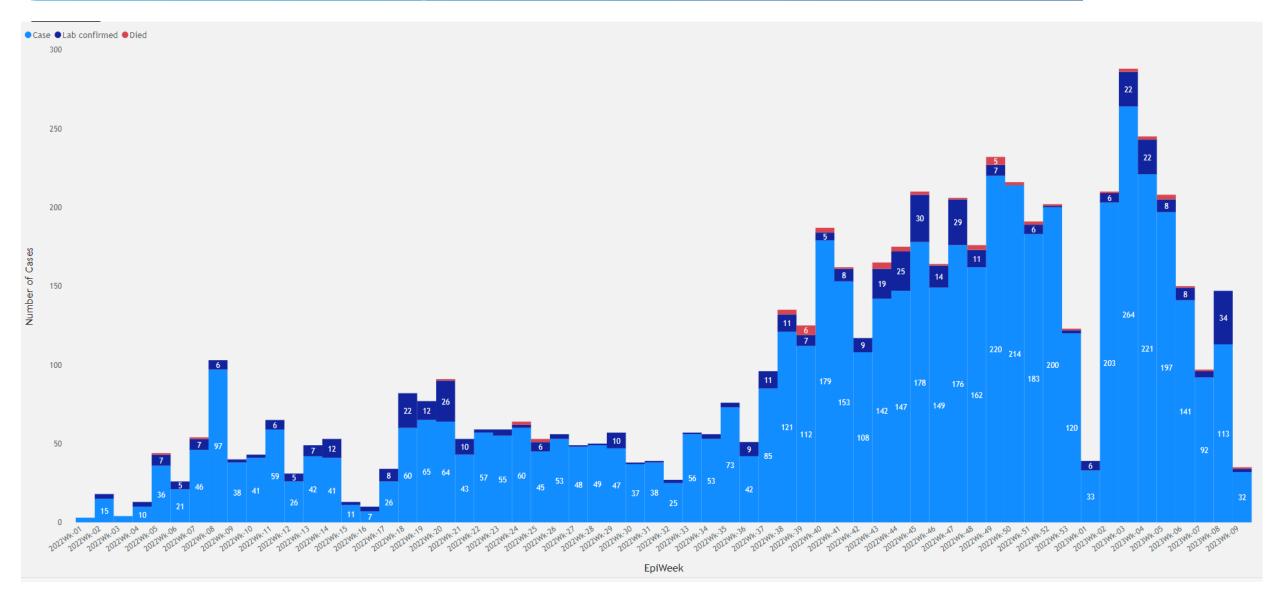




Source: measles weekly sitrep

#### Measles Updates. EPI Curve as of week 09, 2023





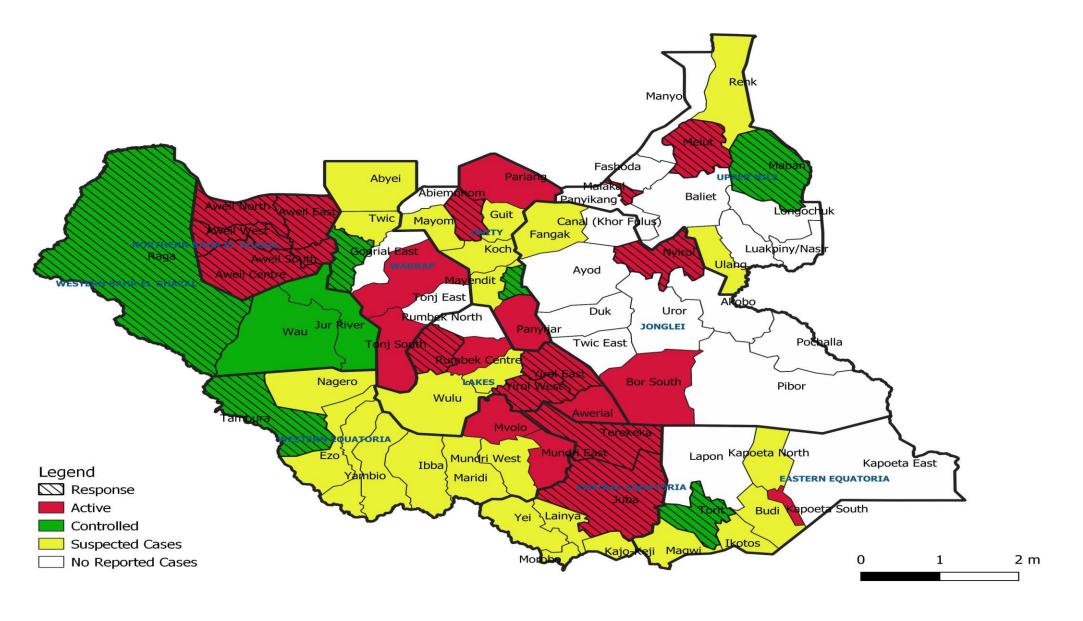


| State   | County with           | Cases | Lab-               | Deaths | CFR %  | Attack       | Date of onset | d response by cou | Date of           | Campaign     | Outbreak Status                |
|---------|-----------------------|-------|--------------------|--------|--------|--------------|---------------|-------------------|-------------------|--------------|--------------------------------|
| State   | confirmed<br>outbreak | Cases | confirmed<br>cases | Deaths | CFR 70 | rate/1000pop | _1st Case     | Case              | response/Campaign | coverage (%) | Outbreak status                |
| CES     | Juba                  | 1029  | 14                 | 18     | 1.7    | 1.6          | 16/01/2022    | 24/02/2023        | 29 Aug-29 Oct     | 69-98%       | Active with response           |
| EES     | Kapoeta South         | 7     | 6                  | 0      | 0.0    | 0.0          | 01/012023     | 04/02/2023        |                   |              | Active without response        |
| JONGLEI | Nyirol                | 106   | 11                 | 0      | 0.0    | 0.6          | 02/11/2022    | 24/02/2023        | Ongoing           |              | Response recently<br>Conducted |
|         | Bor South             | 28    | 18                 | 0      | 0.0    | 0.1          | 23/03/2022    | 14/02/2023        |                   |              | Active without response        |
| LAKES   | Cueibet               | 185   | 19                 | 9      | 4.9    | 0.8          | 24/01/2022    | 09/02/2023        | 18-24 Jan         | 88%          | Response recently Conducted    |
|         | Yirol East            | 108   | 4                  | 2      | 1.9    | 0.9          | 12/04/2022    | 05/02/2023        | 18-24 Jan         | 141%         | Response recently Conducted    |
|         | Yirol West            | 445   | 24                 | 5      | 1.1    | 2.3          | 20/05/2022    | 08/02/2023        | 18-24 Jan         | 129%         | Response recently Conducted    |
|         | Rumbek Centre         | 18    | 6                  | 0      | 0.0    | 0.1          | 01/01/2023    | 07/02/2023        |                   |              | Active without response        |
|         | Rumbek East           | 8     | 4                  | 0      | 0.0    | 0.0          | 26/02/2022    | 22/02/2023        |                   |              | Active without response        |
|         | Awerial               | 15    | 6                  | 0      | 0.0    | 0.2          | 14/10/2022    | 09/01/2023        |                   |              | Active without response        |
| NBeG    | Aweil Center          | 252   | 65                 | 0      | 0.0    | 3.5          | 21/03/2022    | 27/01/2023        | 14-22 Jun         | 155%         | Active with response           |
|         | Aweil East            | 355   | 29                 | 4      | 1.1    | 0.7          | 10/03/2022    | 02/02/2023        | 13-26 Aug         | 91%          | Active with response           |
|         | Aweil North           | 53    | 11                 | 0      | 0.0    | 0.2          | 03/03/2022    | 02/02/2023        | 14-21 Jul         | 97%          | Active with response           |
|         | Aweil South           | 152   | 15                 | 3      | 2.0    | 1.2          | 20/04/2022    | 17/01/2023        | 13-26 Aug         | 97%          | Active with response           |
|         | Aweil West            | 587   | 26                 | 3      | 0.5    | 2.1          | 06/01/2022    | 05/02/2023        | 14-22 Jun         | 94%          | Active with response           |
| UNITY   | Panyijar              | 179   | 1                  | 1      | 0.6    | 1.8          | 09/02/2022    | 17/02/2023        |                   |              | Active without response        |
|         | Pariang               | 89    | 25                 | 0      | 0.0    | 0.6          | 17/12/2022    | 15/02/2023        |                   |              | Active without response        |
| WARRAP  | Tonj North            | 52    | 0                  | 0      | 0.0    | 0.2          | 10/03/2022    | 21/01/2023        |                   |              | Active without response        |
|         | Tonj South            | 8     | 3                  | 0      | 0.0    | 0.0          | 20/04/2023    | 10/01/2023        |                   |              | Active without response        |
|         | Gogrial East          | 14    | 12                 | 0      | 0.0    | 0.1          | 10/02/2023    | 21/02/2023        |                   |              | Active without response        |
| WES     | Mvolo                 | 26    | 0                  | 1      | 3.8    | 0.2          | 26/05/2022    | 22/01/2023        |                   |              | Active without response        |
|         | Mundri East           | 20    | 2                  | 0      | 0.0    | 0.1          | 18/04/2022    | 31/01/2022        |                   |              | Active with Organiza           |

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#### Vaccination updates

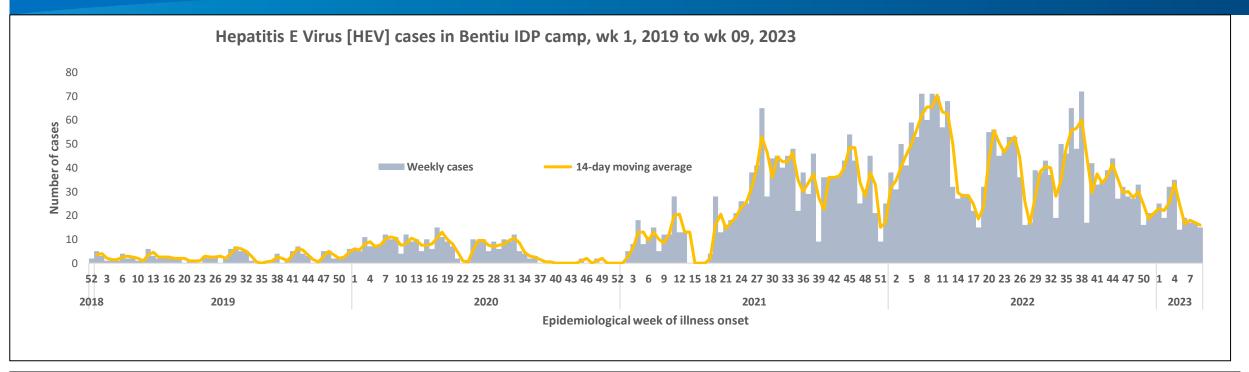
- The MOH, WHO, and partners are planning to start a reactive measles campaign in Tonj North (CCM, AMREF, Islamic Relief) and Bor South (LIVEWELL)
- Reactive vaccination campaign still underway in Nyirol County(MEDAIR) targeting to vaccinate 30,675 children
- World Vision International has been endorsed to apply to RRF for funds to support campaigns in Mvolo and Mundri East
- Planning is underway for a nationwide non-selective measles vaccination campaign to start on 25 April 2023.
- Measles micro plan training conducted 7 to 9 March 2023



### ACTIVE OUTBREAKS AND PUBLIC HEALTH EVENTS

MEASLES 'UPDATES

#### Response | Confirmed epidemics; Hepatitis E, Bentiu IDP camp (1)



#### Descriptive epidemiology

- The persistent transmission of HEV in the Bentiu IDP camp continues with 3,990 cases since the beginning of 2019
- 15 new cases were reported in week 09 and zero deaths. The cumulative cases since the onset of the outbreak are 3, 990 cases including 27 deaths.
- All the cases have been managed as outpatient cases except for seven cases that were admitted in 2020
- No death was reported in 2022
- 47% are female and 53% are male. Within the IDP camp, the sector-specific attack rates for HEV disease for the period week 05, 2022 are highest in sectors 3 and 5.





#### Ongoing Response | | Hepatitis E, Bentiu IDP camp (2)

#### **HEV** response update

- 1. Biweekly coordination forum comprising health, WASH, and other clusters
- 2. Surveillance enhanced through the provision of refresher training, distribution of case definition, and other reporting tools
- 3. Weekly analytics of the outbreak data to monitor trends and inform decision making
- 4. Case management for symptomatic cases provided by the PHCCs; severe cases are referred to MSP PoC Hospital
- 5. The HEV vaccination campaign was conducted in Bentiu IDP Camp; the first round with a coverage of 91% and the second round with a coverage of 82% among those aged 16-40 years (incl. pregnant women.
- 6. Risk communication and awareness are enhanced through household health promoters/hygiene promoters; radio talk shows and messaging. Cholera and HEV messages were disseminated.
- 7. Enhanced access to safe drinking water, sanitation facilities such as latrines, mass clean-up campaigns, regular water quality testing, and monitoring **HEV response challenges**
- 1. Lack of long-term investment to improve the WASH situation in the camp
- 2. Lack of meaningful behavioral changes among the population
- 3. Frequent population movements between the IDP and host communities; the host community was not vaccinated
- 4. Floods have worsened the WASH situation in the camp



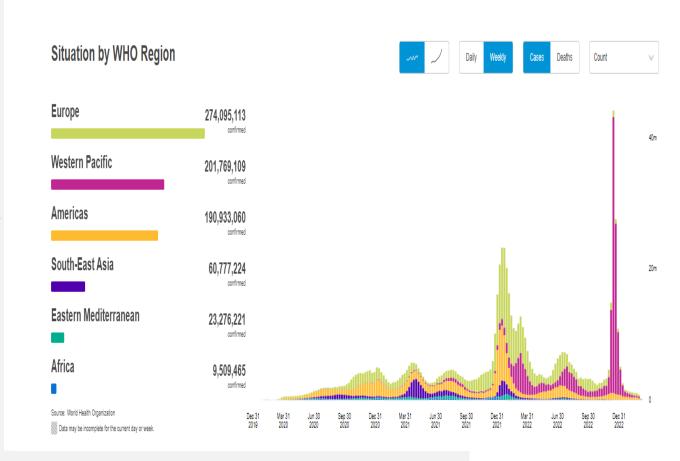
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#### **COVID-19 Virus Situation Summary**



#### Situation update as of 16, March 2023

- Globally, 16 March 2023, there have been 760,360,956 confirmed cases of COVID-19, including 6,873,477 deaths, reported to WHO. As of 11 March 2023, a total of 13,232,780,775 vaccine doses have been administered.
- In Africa, as of 16 March 2023 there have been 9,509,465 confirmed cases of COVID-19, including 175,313 deaths reported to the WHO
- In South Sudan, from 3 January 2020 to 16 March 2023, there have been 18 368 confirmed cases of COVID-19 with 138 deaths, reported to WHO. As of 4 March 2023, a total of 3,193,261 vaccine doses have been administered.
- Second round of the COVAX campaign has been launched and the campaign is ongoing in most counties to cover the remaining 72 counties



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



#### **OTHER UPDATES**

#### SSD Cholera After Action Review meeting 22-23 February 2023



#### Objective:

To provide an opportunity of sharing experiences and collectively analyze the document BEST PRACTICES, CHALLENGES AND RECCOMMEDATION FOR THE FUTURE RESPONSES.

#### Methodology:

- 1. What went well? What went less well? Why?
- 2. What can we do to improve for next time?
- 3. Way Forward:

#### Scope:

The Review covered 8 technical areas (Coordination, logistics, and finances, surveillance and information sharing, case management, IPC and Safe and dignified burial, WaSH, RCCE, OCV)

Participants supported the AAR: Hon. Minister MoH, SMOH, PHEOC, NPHL, OCHA, MWRI, WHO, UNICEF, UNHCR, UNFPA, ICAP, MSF, IOM-CCCM/DTM, IRC, WR, Cordaid, NRC, CONCERN INT, Mercy Corp)

- Cumulatively 424 cholera cases have been reported 56 cholera RDT positive, 30 testing culture positive at the NPHL. One of the RDTpositive cases died giving 0.24% CFR.
- Cholera Outbreak declined over by MoH and SMoH
- Validate overview of the National action plan on cholera and align field findings.





#### Update IDSR review meeting conducted from 6-8 March 2023.



#### Main objectives

- To review the general performance of IDSR in the last one year
- To review the performance of IDSR at the sub-national levels
- To review the linkages between IDSR and other programs to identify strengths and gaps
- To share best practices, gaps, and lessons learned during IDSR implementation in 2022

#### Main lessons learned

- Support of health cluster partners in enhancing weekly IDSR performance
- Availability of state RRT to support the investigation
- Leveraging on MoH staff who were laid off due to lack of funding by Health pooled funds to support the unsupported health facility
- Availabity of national PHEOC to coordinate both preparedness and response activities at both national and sub-national levels
- Through routine surveillance activities in the community and supportive supervision, teams were able to detect suspected measles cases in the community
- Improvement in subnational surveillance activities due to the Field Epidemiology training Program Course supported by CDC through AFENET

#### Main Challenges

- Delayed lab results especially for measles
- High staff turnover
- Limited investment in community-based surveillance
- Limited financial support to conduct detailed surveillance activities in the counties

#### Main recommendations

- Establish a surveillance system among the special population like the cattle herders
- Improve lab turnaround time by motivating staff and engaging lab leadership
- Invest in a community surveillance system



#### **Launching of Multisectoral Coordination Platform 13-15 March**



- Multisectoral coordination mechanism (One Health) has been launched officially by the minister of Cabinet Affairs in the presence of line ministries, partners and Donors to help coordinate one health activities in South Sudan
- The sector will coordinate one health activities through three levels
  - 1. The steering committee will be the overall leadership body coordinated through the ministerial level under the office of the minister of cabinet affairs, head of agencies, donors
  - 2. Technical committee comprised of the DGs from the line ministries and
  - 3. The technical working groups comprised directors from line ministries and technical officers from agencies and partners
  - 4. The secretariat will be full-time multisectoral staff who will be responsible to manage and coordinate the day-to-day technical and administrative activities of the platform.



## OVERALL HUMANITARIAN CRISIS OVERVIEW

#### Ongoing Humanitarian Crisis as of January 2023



- South Sudan continues to face multiple emergencies that are eroding communities' coping capacities and increasing humanitarian needs in the country in 2023.
- According to the Humanitarian Response Plan 2023, it is estimated that 9.4 million people including 2.2 million women,
   4.9 million children, and 337,000 refugees, are projected to need humanitarian assistance and protection services in
   2023.
- Communities faced critical needs in January 2023 owing to the impact of multiple emergencies such as recurring subnational violence, food insecurity, flooding, inaccessibility, and public health emergencies.
- Floodwater levels although receding remained high in Bentiu and Rubkona towns in Unity, and multiple locations in Jonglei and Upper Nile impeding livelihood activities, exposing people to waterborne diseases, and disrupting the provision of basic services.
- Although projected to improve marginally during December 2022-March 2023, the food insecurity situation is projected to worsen during the lean season, April-July 2023, as some 7.8 million people (63% of the population) will likely face Crisis (IPC Phase 3) or worse acute food insecurity, with 43 000 people likely to be in Catastrophe (IPC Phase 5) acute food insecurity in Akobo, Canal/Pigi and Fangak counties of Jonglei State; and Leer and Mayendit counties of Unity State.
- Further, hostilities erupted in several parts of the country in December 2022 and January 2023. The violence between communities in Greater Pibor Administrative Area displaced 17000 people to Pibor while the clashes between cattle keepers and host communities displaced 5000 in Mangala in Juba and 2500 people in Kajo Keji County. Nineteen people were killed during the violence clashes in Kajo Keji County.



## OVERALL CONCLUSIONS AND RECOMMENDATIONS

#### **Conclusions**



- In week **09, 2023, the IDSR** reporting timeliness and completeness were **81%** and 89**%** respectively and timeliness and completeness for EWARN sites were both at **95%**
- A total of 32 alerts were triggered in week 09, 2023 most of the alerts were for AWD (10),06 measles and 10 malaria alerts
- Ministry of Health Republic of South Sudan declared cholera outbreak in Malakal with a total of 297 cases reported with one (1) death giving a CFR of 0.3% from February 22 to 16 March 2023 from both Malakal IDP camp and town
- Measles outbreaks continue with 5,433 reported; cases, 2,976(54.8%) are epi-linked, 504(9.3%) lab-confirmed, 1,376(25.3%) clinically compatible, and 577(10.6) discarded cases have been reported from epidemiological week 1, 2022, to week 09, 2023
- The persistent transmission of HEV in the Bentiu IDP camp continues with 3,975 cases since the beginning of 2019 and 17 cases reported in week 08 of 2023.
- IDSR review meeting conducted in Juba between 6-8 March 2023, MCM One health platform launched on 13-15 March 2023.

#### Recommendations



- Partners to continue supporting County Health Departments (CHD) & State Ministries of Health on timely IDSR/EWARN reporting and involve the boma health workers to support community-based surveillance
- Health facilities to conduct an initial investigation on suspected cases of epidemic-prone diseases and collect samples
- Conduct reactive measles vaccination campaign in counties with confirmed outbreaks and advocate for enhanced routine immunization through PIRI
- Continue with preparedness activities to strengthen surveillance at all levels including conducting afteraction reviews and simulation exercises.
- Continue to support the multicluster HEV response strategy in the Bentiu IDP camp and advocate for depopulation of





#### IDSR timeliness & completeness performance at county level for week 09 and 08 of 2023 (1)



| STATE | COUNTY           | Number of reporting sites | No. of HFs<br>Reported on<br>Time in WK<br>09 |      | No. of HFs<br>Reported<br>regardless<br>of time in<br>WK 09 | Completen<br>ess<br>Percentage<br>of WK 09 | No. of HFs<br>Reported<br>regardless<br>of time in<br>WK 08 |      |
|-------|------------------|---------------------------|---|------|---|--|---|------|
| Lakes | Cueibet          | 15                        | 15  | 100% | 15  | 100%                                       | 15  | 100% |
| Lakes | Rumbek<br>North  | 7                         | 7   | 100% | 7   | 100%                                       | 7   | 100% |
| Lakes | Wulu             | 14                        | 14  | 100% | 14  | 100%                                       | 14  | 100% |
| Lakes | Rumbek<br>East   | 24                        | 24  | 100% | 24  | 100%                                       | 24  | 100% |
| Lakes | Awerial          | 7                         | 7   | 100% | 7   | 100%                                       | 7   | 100% |
| Lakes | Rumbek<br>Centre | 23                        | 23  | 100% | 23  | 100%                                       | 23  | 100% |
| Lakes | Yirol West       | 12                        | 12  | 100% | 12  | 100%                                       | 12  | 100% |
| Lakes | Yirol East       | 11                        | 11  | 100% | 11  | 100%                                       | 11  | 100% |
| NBGZ  | Aweil East       | 23                        | 23  | 100% | 23  | 100%                                       | 23  | 100% |
| NBGZ  | Aweil<br>Centre  | 13                        | 13  | 100% | 13  | 100%                                       | 13  | 100% |
| WBGZ  | Raja             | 11                        | 11  | 100% | 11  | 100%                                       | 10  | 91%  |
| WBGZ  | Jur River        | 40                        | 40  | 100% | 40  | 100%                                       | 40  | 100% |
| CES   | Kajo Keji        | 28                        | 28  | 100% | 28  | 100%                                       | 28  | 100% |
| CES   | Morobo           | 10                        | 10  | 100% | 10  | 100%                                       | 10  | 100% |
| CES   | Juba             | 48                        | 48  | 100% | 48  | 100%                                       | 48  | 100% |
| CES   | Yei              | 18                        | 18  | 100% | 18  | 100%                                       | 18  | 100% |
| CES   | Terekeka         | 13                        | 13  | 100% | 13  | 100%                                       | 13  | 100% |
| NBGZ  | Aweil West       | 20                        | 19  | 95%  | 19  | 95%  | 20  | 100% |
| WBGZ  | Wau              | 27                        | 25  | 93%  | 25  | 93%  | 25  | 93%  |
| NBGZ  | Aweil South      |                           | 12  | 92%  | 12  | 92%  | 12  | 92%  |
| CES   | Lainya           | 11                        | 10  | 91%  | 10  | 91%  | 10  | 91%  |
| NBGZ  | Aweil North      | 15                        | 11  | 73%  | 11  | 73%  | 15  | 100% |

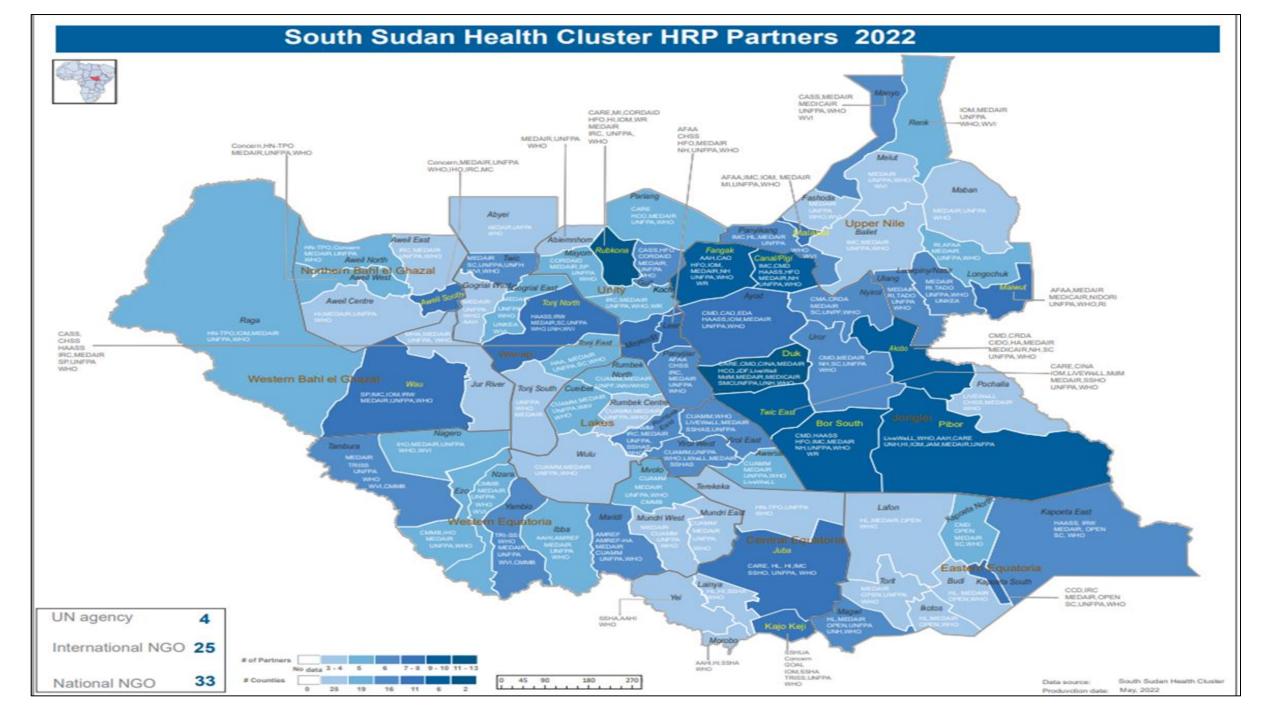
|       |                |                 | No. of<br>HFs    | Timelines      |                    |                     | No. of HFs             |                        |
|-------|----------------|-----------------|------------------|----------------|--------------------|---------------------|------------------------|------------------------|
|       |                | Number of       | Reporte<br>d on  |                | regardles          |                     | Reported regardless of |                        |
| STATE | COUNTY         | reporting sites | Time in<br>WK 09 | ge of WK<br>09 | s of time<br>in 09 | Percentage of WK 09 | time in WK<br>08       | Percentage<br>of WK 08 |
| Unity | Abiemnho<br>m  | 4               | 4                | 100%           | 4                  | 100%                | 4                      | 100%                   |
| Unity | Rubkona        | 11              | 11               | 100%           | 11                 | 100%                | 11                     | 100%                   |
| Unity | Mayom          | 13              | 13               | 100%           | 13                 | 100%                | 13                     | 100%                   |
| Unity | Guit           | 6               | 6                | 100%           | 6                  | 100%                | 6                      | 100%                   |
| Unity | Mayendit       | 11              | 11               | 100%           | 11                 | 100%                | 11                     | 100%                   |
| Unity | Leer           | 15              | 15               | 100%           | 15                 | 100%                | 15                     | 100%                   |
| WES   | Nagero         | 10              | 10               | 100%           | 10                 | 100%                | 10                     | 100%                   |
| WES   | Mundri<br>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<br>East | 19              | 19               | 100%           | 19                 | 100%                | 19                     | 100%                   |
| WES   | Ezo            | 32              | 32               | 100%           | 32                 | 100%                | 32                     | 100%                   |
| WES   | Mvolo          | 10              | 10               | 100%           | 10                 | 100%                | 10                     | 100%                   |
| WES   | Tambura        | 26              | 26               | 100%           | 26                 | 100%                | 26                     | 100%                   |
| WES   | Nzara          | 21              | 20               | 95%            | 20                 | 95%                 | 21                     | 100%                   |
| WES   | Yambio         | 42              | 40               | 95%            | 40                 | 95%                 | 42                     | 100%                   |
| Unity | Panyijiar      | 16              | 7                | 44%            | 7                  | 44%                 | 13                     | 81%                    |
| Unity | Pariang        | 12              | 5                | 42%            | 5                  | 42%                 | 10                     | 83%                    |
| Unity | Koch           | 7               | 0                | 0%             | 0                  | 0%                  | 2                      | 29%                    |



#### IDSR timeliness & completeness performance at county level for week 09 and 08 of 2023 (2)



| STATE   | COUNTY           | Number of reporting sites | No. of HFs<br>Reported on<br>Time in WK<br>09 |      | regardless | Completen<br>ess<br>Percentage<br>of WK 09 | regardless | Completeness<br>Percentage of<br>WK 08 |                       | COLINITY             | Number of reporting sites | on Time  | Percentage   | of time in  | Completeness<br>Percentage of | time in WK | Completeness<br>Percentage of |
|---------|------------------|---------------------------|---|------|------------|--|------------|--|-----------------------|----------------------|---------------------------|----------|--------------|-------------|-------------------------------|------------|-------------------------------|
| Jonglei | Bor              | 19                        | 19  | 100% | 19         | 100%                                       | 19         | 100%                                   | STATE<br>Warrap       | COUNTY  Tonj East    | 12                        | 12       | of WK 09     | WK 09<br>12 | WK 09                         | 08<br>12   | WK 08                         |
| Jonglei | Duk              | 13                        | 13  | 100% | 13         | 100%                                       | 13         | 100%                                   | Warrap                | Tonj North           | 15                        | 15       | 100%         | 15          | 100%                          | 15         | 100%                          |
| Jonglei | Uror             | 1                         | 1   | 100% | 1          | 100%                                       | 1          | 100%                                   | <u>'</u>              | TOTIJ NOTTI          | 13                        | -        |              | 15          |                               |            |                               |
| EES     | Magwi            | 17                        | 17  | 100% | 17         | 100%                                       | 17         | 100%                                   | Warrap                | Tonj South           | 12                        | 12       | 100%         | 12          | 100%                          | 12         | 100%                          |
| EES     | Torit            | 11                        | 11  | 100% | 11         | 100%                                       | 11         | 100%                                   | Upper Nile            | Baliet               | 4                         | 4        | 100%         | 4           | 100%                          | 4          | 100%                          |
| EES     | Kapoeta<br>South | 9                         | 9   | 100% | 9          | 100%                                       | 9          | 100%                                   | Upper Nile Upper Nile | Maban<br>Manyo       | 13<br>11                  | 13<br>11 | 100%<br>100% | 13<br>11    | 100%                          | 13<br>11   | 100%                          |
| EES     | Budi             | 17                        | 16  | 94%  | 16         | 94%  | 17         | 100%                                   |                       |                      |                           |          |              |             |                               |            |                               |
| Jonglei | Twic East        | 9                         | 8   | 89%  | 8          | 89%  | 9          | 100%                                   | Upper Nile Upper Nile | Fashoda<br>Longechuk | 5<br>9                    | 5<br>9   | 100%         | 5<br>9      | 100%                          | 5<br>9     | 100%                          |
| EES     | Kapoeta<br>East  | 7                         | 6   | 86%  | 6          | 86%  | 7          | 100%                                   | Warrap                | Gogrial East         | 15                        | 14       | 93%          | 14          | 93%                           | 13         | 87%                           |
| EES     | Ikotos           | 19                        | 16  | 84%  | 16         | 84%  | 18         | 95%                                    | 1.1                   | Luakpiny             | 10                        |          | 90%          | 0           | 90%                           | 10         | 100%                          |
| EES     | Lopa<br>Lafon    | 15                        | 12  | 80%  | 12         | 80%  | 15         | 100%                                   | Upper Nile            | Nasir<br>Gogrial     | 10                        | 9        |              | 9           |                               | 29         |                               |
| Jonglei | Pibor            | 5                         | 3   | 60%  | 3          | 60%  | 3          | 60%                                    | Warrap<br>Upper Nile  | West<br>Ulang        | 10                        | 27       | 87%<br>80%   | 27<br>8     | 87%                           | 8          | 94%                           |
| EES     | Kapoeta<br>North | 10                        | 6   | 60%  | 6          | 60%  | 10         | 100%                                   | Upper Nile            | Akoka                | 5                         | 4        | 80%          | 4           | 80%                           | 5          | 100%                          |
| Jonglei | Canal Pigi       | 14                        | 8   | 57%  | 8          | 57%  | 10         | 71%                                    | Warrap                | Twic                 | 28                        | 21       | 75%          | 21          | 75%                           | 16         | 57%                           |
| -       |                  |                           |   |      |            |  |            |  | Upper Nile            | Maiwut               | 12                        | 9        | 75%          | 9           | 75%                           | 9          | 75%                           |
| Jonglei | Akobo            | 15                        | 8   | 53%  | 8          | 53%  | 10         | 67%                                    | Upper Nile            | Makal                | 7                         | 5        | 71%          | 5           | 71%                           | 7          | 100%                          |
| Jonglei | Nyirol           | 2                         | 1   | 50%  | 1          | 50%  | 1          | 50%                                    | Upper Nile            | Panyikang            | 3                         | 2        | 67%          | 2           | 67%                           | 2          | 67%                           |
| Jonglei | Pochalla         | 7                         | 3   | 43%  | 3          | 43%  | 7          | 100%                                   | Warrap                | Abyei                | 14                        | 4        | 29%          | 4           | 29%                           | 6          | 43%                           |
| Jonglei | Fangak           | 18                        | 4   | 22%  | 4          | 22%  | 2          | 11%                                    | Upper Nile            | Renk                 | 6                         | 0        | 0%           | 0           | 0%                            | 0          | 0%                            |
| Jonglei | Ayod             | 13                        | 0   | 0%   | 0          | 0%   | 0          | 0%                                     | Upper Nile            | Melut                | 6                         | 0        | 0%           | 0           | 0%                            | 5          | 83%                           |



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 2022 use the link below:

https://www.afro.who.int/publications/south-sudan-weekly-disease-surveillance-bulletin-2023

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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.

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