



**South Sudan
Ministry of Health**

**Integrated Disease surveillance
and response (IDSR)**



**World Health
Organization**
South Sudan

**Epidemiological Bulletin Week 12, 2023
(20-26 March)**



Major epidemiological highlights in week 12 of 2023

- In week 12, 2023, the IDSR reporting timeliness and completeness were **84%** and **90%** respectively and timeliness and completeness for EWARN sites were at **87%** and **96%** respectively
- A total of 124 alerts were triggered in week 12, 2023 most of the alerts were for AWD (16), measles(24), malaria(18) and bloody diarrhea (21) alerts
- Ministry of Health Republic of South Sudan declared cholera outbreak in Malakal with a total of 608 cases reported with Two (2) death giving a CFR of 0.33% from February 22 to 30 March 2023 from both Malakal IDP camp and town
- Measles outbreaks continue with 5,810 reported; cases, 2,990(51.4%) are epi-linked, 554(9.5%) lab-confirmed, 1,663(28.6%) clinically compatible, and 603(10.3) discarded cases have been reported from epidemiological week 1, 2022, to week 12, 2023
- The persistent transmission of HEV in the Bentiu IDP camp continues with 4,043 cases since the beginning of 2019 and 18 new cases reported in week 12 of 2023.

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 12 & 11 of 2023



Timeliness States Ranking	States	Number of reporting sites	No. of HFs Reported on Time in WK 12	Timeliness Percentage of WK 12	No. of HFs Reported on Time in Wk 11	Timeliness Percentage of WK 11
1st	NBGZ	84	82	98%	77	92%
2nd	Lakes	113	108	96%	108	96%
3rd	WES	219	208	95%	222	101%
4th	CES	128	121	95%	127	99%
5th	WBGZ	78	70	90%	66	85%
6th	Warrap	127	107	84%	93	73%
7th	EES	105	84	80%	62	59%
8th	Unity	95	71	75%	82	86%
9th	Jonglei	129	78	60%	64	50%
10th	Upper Nile	101	60	59%	76	75%
	South Sudan	1179	989	84%	977	83%

KEY

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

The Timeliness of IDSR Reporting (Supported by EWARS Web and Mobile) at health facility level in week 12 stands at 84% while in week 11 it was 83% and 7 states were above the target of 80% in week 12.

Reporting Challenges in the poorly performed States are; insecurity, internet inaccessible; Turnover of Partners.



IDSR Completeness performance at State level for week 12 & 11 of 2023



Completeness States Ranking	States	Number of reporting sites	No. of HF's Reported regardless of time in WK 12	Completeness Percentage of WK 12	No. of HF's Reported regardless of time in WK 11	Completeness Percentage of Wk 11
1st	Lakes	113	113	100%	113	100%
2nd	WES	219	219	100%	219	100%
3rd	NBGZ	84	83	99%	81	96%
4th	CES	128	122	95%	126	98%
5th	EES	105	95	90%	86	82%
6th	WBGZ	78	70	90%	67	86%
7th	Warrap	127	110	87%	110	87%
8th	Unity	95	82	86%	88	93%
9th	Jonglei	129	97	75%	71	55%
10th	Upper Nile	101	75	74%	91	90%
	South Sudan	1179	1066	90%	1052	89%

KEY

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

The Completeness of IDSR Reporting (Supported by EWARS Web and Mobile) at health facility level in week 12 stands at 90% while in week 11 it was 89% and 8 states were above the target of 80% in week 12.

Reporting Challenges in the poorly performed States includes; insecurity; internet inaccessible; Turnover of Partners, Floods.



Surveillance: EWARS Timeliness performance indicator by partner for week 12 and 11 of 2023



Partner	HFs	Reporting	Performance		
PARTER	Number of reporting sites	# of reports received on Time in Week 12	Timeliness of Week 12	# of reports received on Time in Week 11	Timeliness of Week 11
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%
SSHCO	1	1	100%	1	100%
UNIDOR	2	2	100%	2	100%
IRC	1	1	100%	1	100%
Islamic Relief	5	5	100%	5	100%
ForAfrika	13	13	100%	11	85%
SCI	2	2	100%	0	0%
IOM	10	9	90%	9	90%
IMC	22	18	82%	22	100%
HFO	10	8	80%	8	80%
MSF-H	4	3	75%	2	50%
SMC	6	4	67%	6	100%
MSF-E	6	4	67%	5	83%
TOTAL	94	82	87%	84	89%

The Timeliness of EWARS in partners' supported sites stands at **87%** in week 12 while in week 11 it was at **89%**.



Surveillance: EWARS completeness performance indicator by partner for week 12 and 11 of 2023

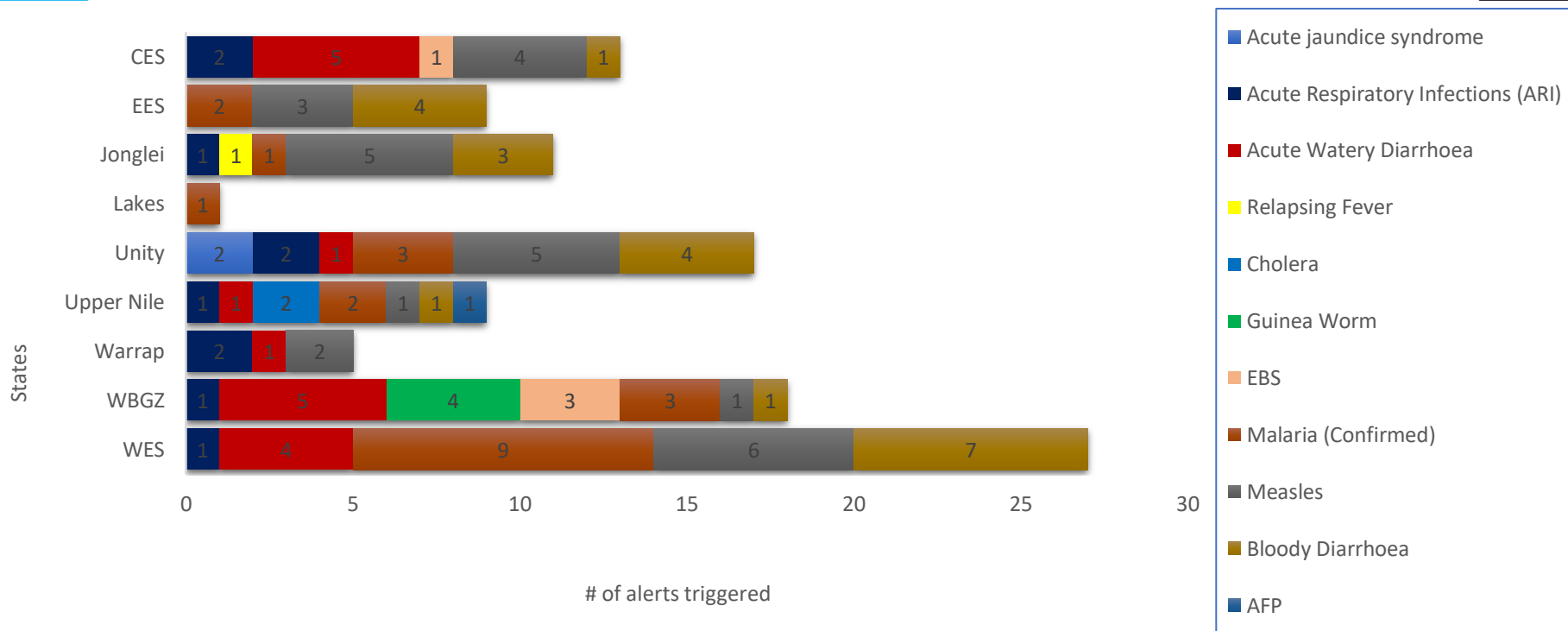


Partner	HFs	Reporting	Performance		
PARTER	Number of reporting sites	# of reports received regardless of Time in Week 12	Completeness of Week 12	# of reports received regardless of Time in Week 11	Completeness of Week 11
IRC	1	1	100%	1	100%
SMC	6	6	100%	6	100%
CIDO	1	1	100%	1	100%
Medicair	5	5	100%	5	100%
TRI-SS	2	2	100%	2	100%
World Relief	3	3	100%	3	100%
AFAA	1	1	100%	1	100%
UNIDOR	2	2	100%	2	100%
SSHCO	1	1	100%	1	100%
Islamic Relief	5	5	100%	5	100%
HFO	10	10	100%	9	90%
MSF-E	6	6	100%	5	83%
ForAfrika	13	13	100%	4	31%
SCI	2	2	100%	0	0%
IMC	22	20	91%	22	100%
IOM	10	9	90%	9	90%
MSF-H	4	3	75%	4	100%
TOTAL	94	90	96%	80	85%

The Completeness of EWARS in partners' supported sites stands at 96% in week 12 while in week 11 it was at 85%.



Alert by disease and States in week 12 of 2023 [a total of events specific alerts generated by state



This week a total of 124 Alerts were triggered of which 59 are from outbreak prone diseases as Per the broken-down below

- ❖ 17 AWD alerts: these alerts were triggered from the following States, CES(5), Unity (1), Warrap(1), UNS(1), and WES(4), WBGZ(5)
- ❖ 27 Measles alert: these were triggered from following States ;CES (4), EES(3), Jonglei(5), Upper Nile (1), Unity(5), NBG(1), Warrap(2), WBGZ (1), WES(6).
- ❖ 2 AJS alert: these were from MSF-H Bentiu IDP Hospital, MSF-H Leer PHCC
- ❖ 1 AFP alert: this was an alert from Gollo PHCU in Fashoda County
- ❖ 4 EBS alerts: Lainya County, Kenyi Payam , Lime Centre in Limbe PHCC reported 90 deaths in Chicken with an un identified cause through EBS in EWARS and IOM New Site Clinic(2) in WAU payam reported 7 suspected cases of AJS 5 and above with signs and symptoms of yellowish eyes, abdominal pain, fever and headache, SRRT were deployed and conducted investigation with samples sent to the national lab for testing. And Guiea Worm in Mboro PHCU in Wau County.
- ❖ 2 Cholera alert from MSF-E Malakal Town Hospital and MSF-E Malakal POC Sector Two Hospital where there is already confirmed outbreak
- ❖ 1 Relapsing Fever alert from Walgak PHCC in Akobo County

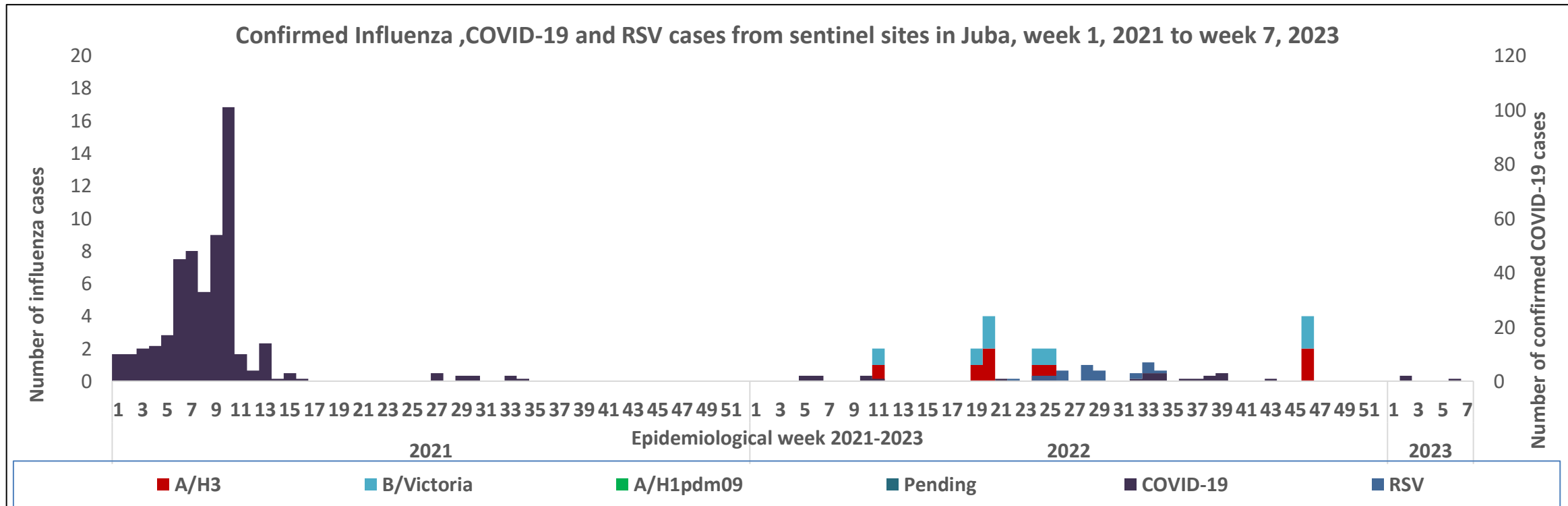
INDICATOR-BASED SURVEILLANCE



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

Influenza sentinel Surveillance updates





- 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**





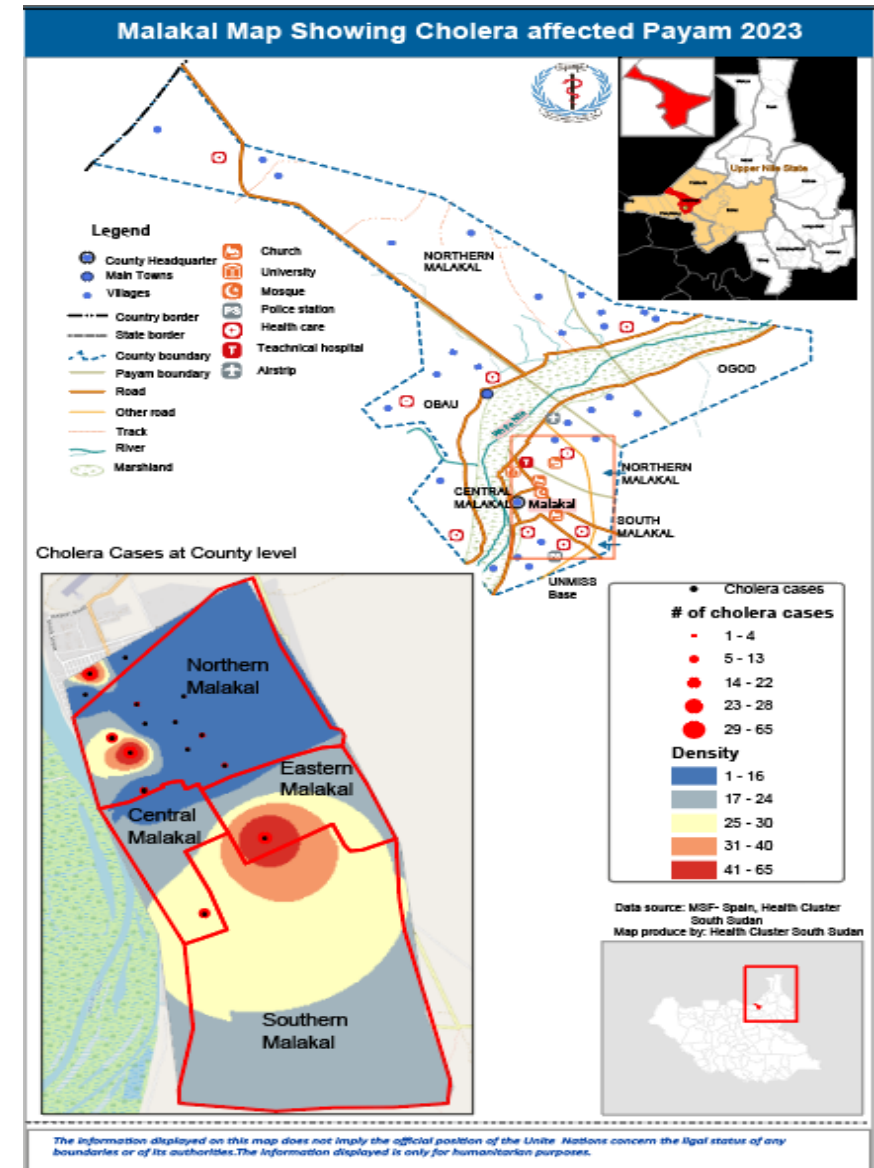
CHOLERA OUTBREAK IN MALAKAL



Key Epidemiological highlights from Malakal as of 30th March 2023



- On 1st March 2023, the National Ministry of Health received information of suspected cholera cases with two (2) RDT positive
- On 2nd 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 7th March 2023, the National Ministry of Health declared Cholera outbreak in Malakal county, Upper Nile State
- Cumulatively, since 22nd February 2023 to 30 March a total of **608** cases with one (2) death (**CFR-0.33%**)
- Eighteen (18) new cases and 0 deaths have been reported on 30 March 2023 (POC = (2) and Town =(16)
- Four (04) cases admitted as of 30 March 2023
- Overall, 331 (54%) of the cases are males and 277(46%) are females.
- Children of age 1 – 4 years old are the most affected accounting for 60 (50%) of the total cases reported followed by 15 years and above 27 (33%).
- Oral Cholera vaccination campaign commenced on 16 March 2023 targeting 66,121 individuals aged 1 year and above in the POC and Malakal town.
- Cumulatively, 54,538 people have been vaccinated (Malakal town and POC) with OCV for 5 days s of the campaign achieving 83% coverage

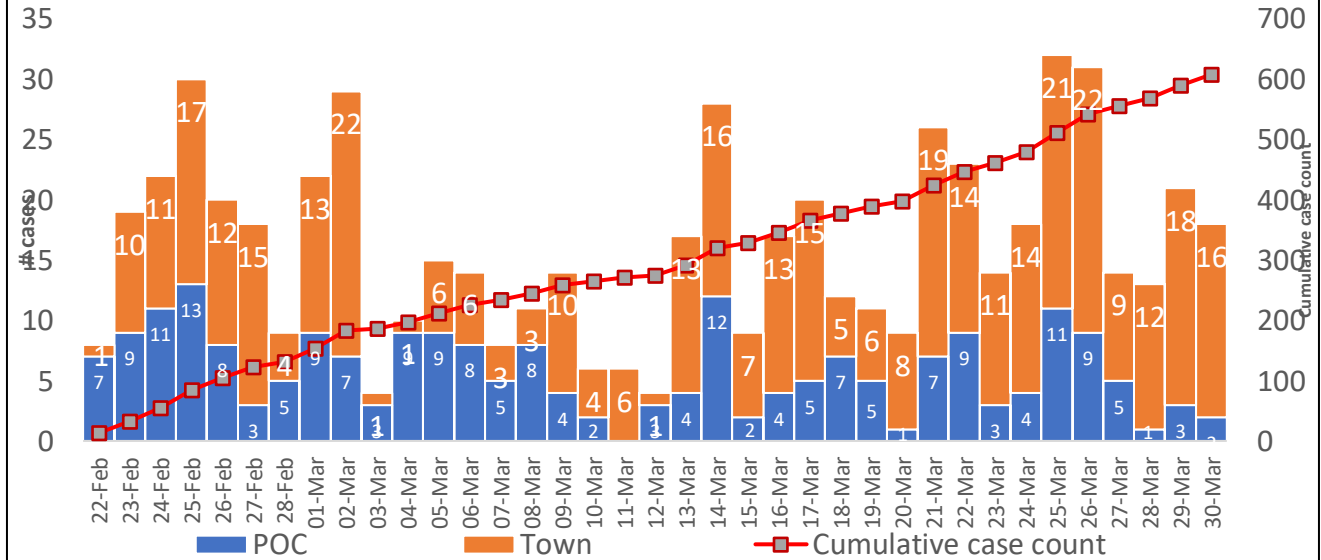




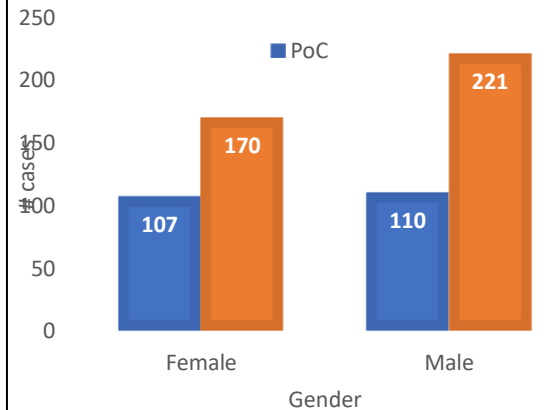
Descriptive Epi

- Eighteen (18) new Cholera cases have been recorded in the past 24 hours two (2) in the POC and eleven(16) from main town.
- No new death has been recorded in the past 24 hours.
- Cumulatively, 608 cholera cases and 2 death (CFR- 0.33%) has been recorded since the onset of the outbreak.
- Overall, 331 (54%) of the cases are males and 277(46%) are females.
- Children of age 1 – 4 years old are the most affected accounting for 60 (50%) of the total cases reported followed by 15 years and above 27(33%).
- Oral Cholera vaccination campaign commenced on 16 March 2023 targeting 66,121 individuals aged 1 year and above in the POC and Malakal town.
- Cumulatively, 54,538 people have been vaccinated (Malakal town and POC) with OCV for 5 days s of the campaign achieving 83% coverage
- The current cholera outbreak is localized in Malakal Upper Nile State on the side boarding Sudan.
- A total of (04) new cases are in isolation in Malakal CTU.
- MSF is supporting case management at the CTU in Malakal town and POC
- The national MOH and WHO Country Office have deployed a technical team to visit Malakal to support the response on 20th March 2023

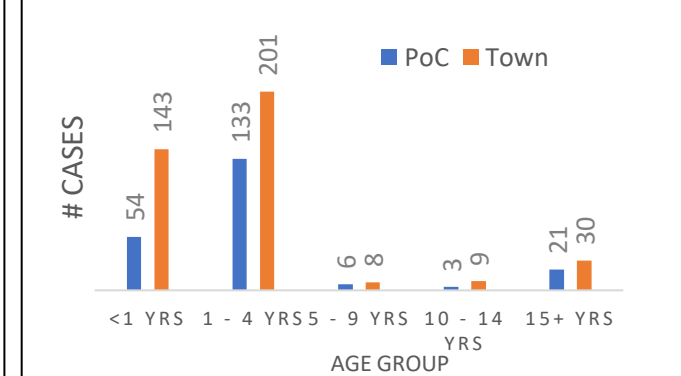
Epi curve showing cholera cases in Malakal County as of 30th March 2023



CHOLERA CASES IN MALAKAL COUNTY AS OF 30TH MARCH 2023 BY GENDER.



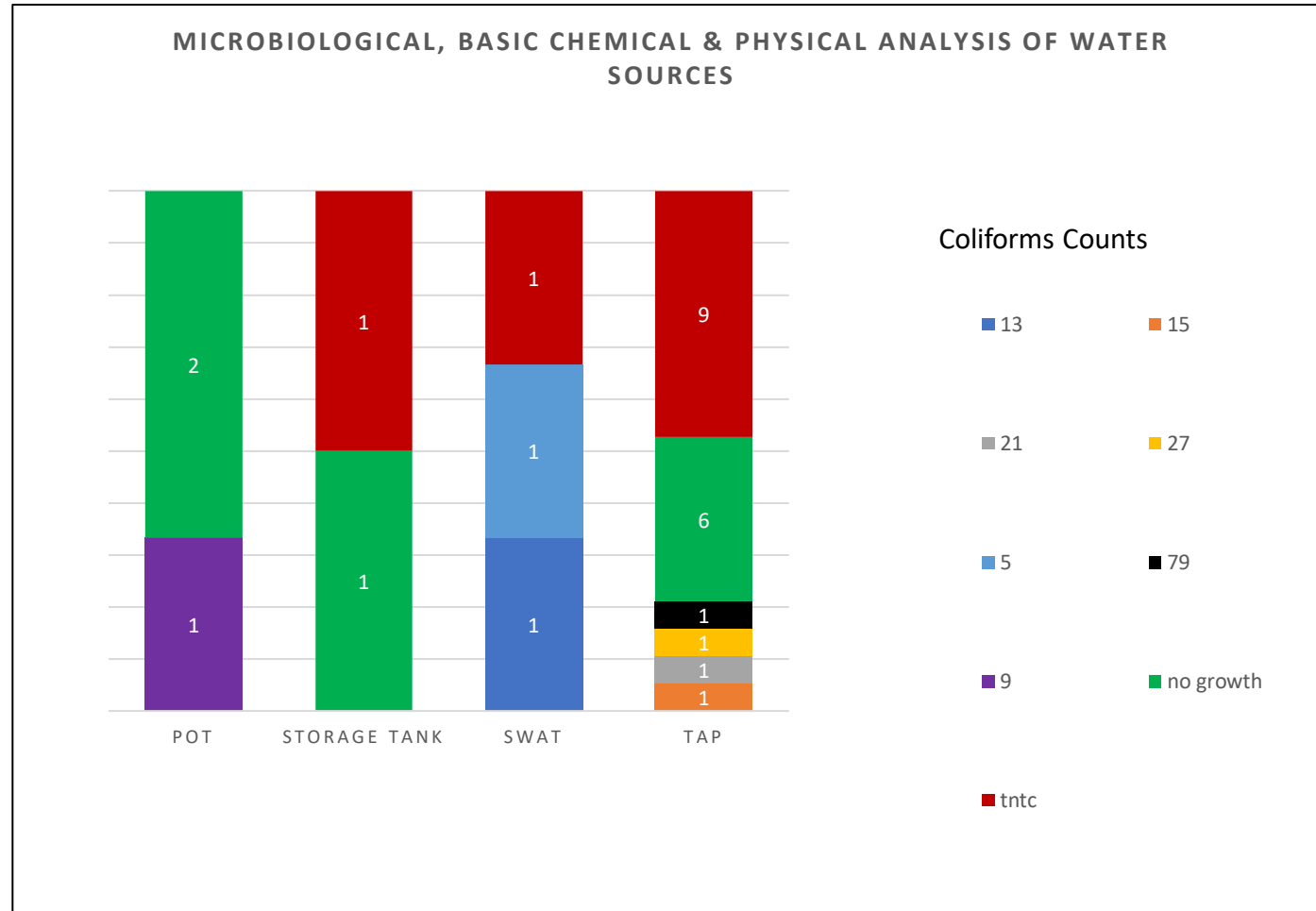
CHOLERA CASES IN MALAKAL COUNTY AS OF 30TH MARCH 2023 BY AGE GROUP.



A horizontal banner with a dark blue background and light blue diagonal stripes on the left and right sides. The text "WATER QUALITY TEST RESULTS" is centered in yellow, bold, uppercase letters.

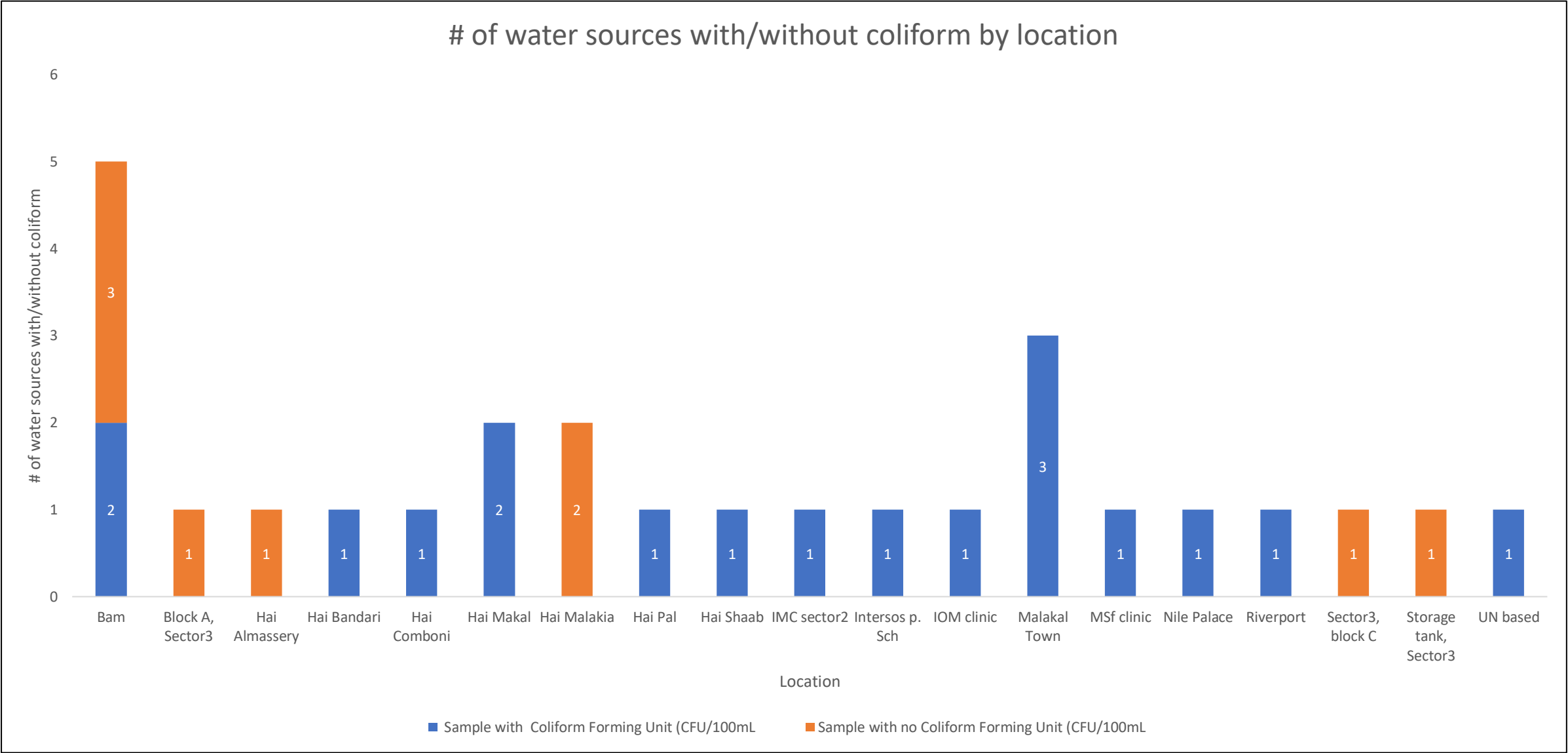
**WATER QUALITY TEST
RESULTS**

MICROBIOLOGICAL, BASIC CHEMICAL & PHYSICAL Analysis of Water Sources



- Out of 3 Water Pots sampled 1 contaminated with 9 CFU/100ml and 2 water pots without coliform growth.
- Out of 2 storage tanks sampled 1 contaminated with TNTC and 1 tanks without coliform growth.
- Out of 3 SWAT sampled all contaminated with different levels TNTC, 13 CFU/100ml and 5 CFU/100ml respectively.
- Out of 19 water tap sampled with different levels of contamination, 9 with TNTC, 1 with 79 CFU/100ML, 1 with 27 CFU/100ML, 1 with 21 CFU/100ML, 1 with 15 CFU/100ml and 6 without coliform growth.

Number of water sources with/without coliform by location, 23 -24 March 2023



Key interventions and Challenges in Malakal as of 30th March 2023

Key Interventions

- The National Ministry of Health declared a Cholera outbreak in Malakal county, Upper Nile State on 7th March 2023,
- The National EOC was immediately activated and MOH IMS instituted
- Ongoing coordination at both National and State levels to discuss the ational and State Cholera Taskforce continue to meet regularly to provide operational and strategic guidance to the ongoing cholera outbreak response.
- A multisectoral National and State RRT continue to provide epidemiological investigation and technical support to the response interventions in Malakal County.
- Launching of the Oral cholera vaccination targeting 66,121 individuals aged 1 year and above on 16 March 2023
- Over 54,538 people have been vaccinated both in the POC and Malakal town with a coverage of 83% in 5 days.
- WHO hired 2 additional vehicles to support response activities in Malakal.
- WHO has dispatched 1 x 48sqm and 1 x 24sqm medical tents to Malakal to support the ongoing Cholera response.
- WHO conducting a 5 days Case management training starting on 28 March and 1 April 2023 to support health partners (IMC, IOM, MSF and DRC)
- MSF completed the rehabilitation the Cholera treatment Center (CTC) in PoC and functional from Monday it will be official open
- 7 ORP supported IMC and 2 ORP supported by IOM with a total of 121 patient see, presented with AWD, no dehydration status, treated with ORS and discharged in 4 hours.
- Cumulation of 590 cholera case managed at the MSF facilities sites both for PoC with 215 (36%) and Town with 375 cases (64%).
- WHO/MOH continue to conduct active case searches in three (3) Health facilities (IOM PHCC,IMC PHCC & MSF Isolation in POC
- Cholera-specific training started entered its second day focusing on Case Management, Lab, RCCE, IPC, WASH & Surveillance

Challenges

- Inadequate access to safe and clean water due to limited WASH supplies.
- Sub-optimal risk communication and community engagement in cholera affected high-risk locations.
- 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 to the cholera outbreak in Malakal.
- Lack of designated ambulance to facilitate referral of cholera cases and designated vehicle for the safe dignified burial (SDB) team.
- Identification of personnel to be trained safe and dignified burial (SDB).
- Overcrowding in the POC due to the continued influx of IDPs poses is a major challenge to the limited WASH facilities in the POC.
- Inadequate cholera kits and investigation kits for the cholera outbreak response.
- Case management charts are in English making it difficult for healthcare workers who only understand Arabi
- Rehabilitation of the CTC in Malakal Teaching Hospital (MTH)
- Activation of the State RRT to responses with an active case search and investigation

Risk of Cholera spread to other states

Oral cholera vaccination was conducted only in 6 out of the 20 cholera hotspot counties

Significant population movements within Malakal IDP camps (Estimated Population is 34056) and back and forth movement between the IDPs in Juba and the displacement from the recent Tonga- Panyikang crisis.

There is also a challenge of access to safe and clean water and also the practice of open defecation

Continued flooding due to heavy rain experienced in the past 4 years & the next rainy season is likely to start in April



**World Health
Organization**
South Sudan



- Translation of case management charts into Arabic language to facilitate easy understanding by healthcare workers.
- Provision of adequate clean and safe water, especially in the cholera outbreak and high-risk locations.
- Enhance cholera RDT testing of suspected cholera cases at health facilities and treatment centers
- Accelerate RCCE interventions at POC and Malakal town.
- Finalize the cholera response plan and budget for resource mobilization.
- Provide a designated ambulance to support the referral of cholera cases.
- Identify and train safe and dignified burial (SDB) teams.
- Raising the 02 emergency 10M³ Bladder collapsible tank platform- each with mud soil filled in sandbags for 1.5 height to give a good flow of water during fetching
- Dismantle the existing water supply pipeline at Bam from St. Andrew primary school- Daniel Comboni Community tap-stand and reconnect with the same pipeline diameter for good flow pressure at the collection point.
- Training of mobile sanitation community committee on basic sanitation topics and messages prior to general clean-up campaign to maintain clean environment.
- Decommission of non-functional latrines in the PoC
- Coordination with WASH partners to distribution aqua tabs to house holds and conduct onsite water treatments for contaminated water sources.
- Active the State RRT to conduct active case search in the community and facilities around affected locations

ACTIVE OUTBREAKS AND PUBLIC HEALTH EVENTS

MEASLES ` UPDATES



Measles Updates as of week 12 2023

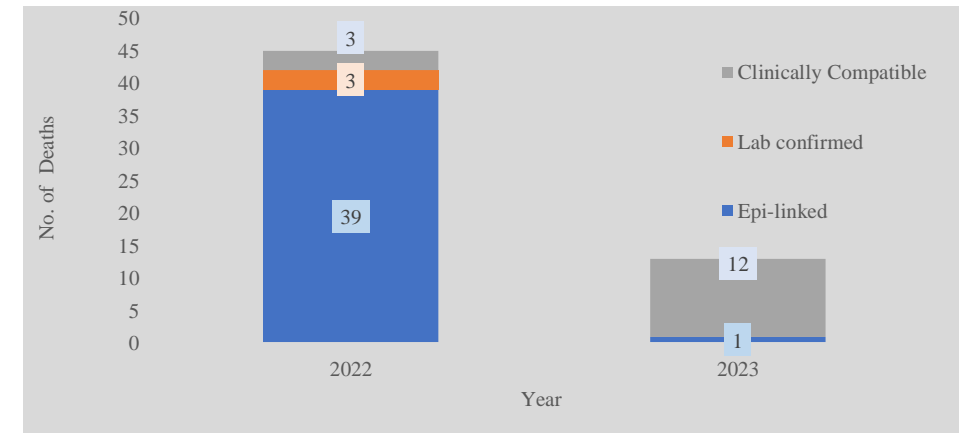


- A total of the 5,810 suspected measles cases, 2,990(51.4%) are epi-linked, 554(9.5%) lab-confirmed, 1,663(28.6%) clinically compatible, and 603(10.3) discarded cases have been reported from epidemiological week 1, 2022, to week 12, 2023
- One (01) suspected cases have been reported during the reporting week 12
- A total of 58 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%
- No new measles-related death reported this week
- Twenty-three (23) counties have confirmed Measles outbreaks in 2022, and fifteen (15) counties in 2023
 - No newly confirmed outbreak this week
- Forty-five (45) counties have reported suspected measles cases in 2023, of which twenty-eight (28) counties have at least one confirmed case
- Fifteen (15) counties (Mvolo, Mundri East, Pariang, Awerial, Rumbek Centre, Kapoeta South Tonj South, Tonj North, Bor South, Aweil Centre, Rumbek East, Gogrial East, Juba, Tonj East and Wulu) have confirmed outbreaks in 2023.
- Reactive vaccination campaigns were conducted in 21 counties (16 counties in 2022, 5 counties in 2023), with 937,123 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

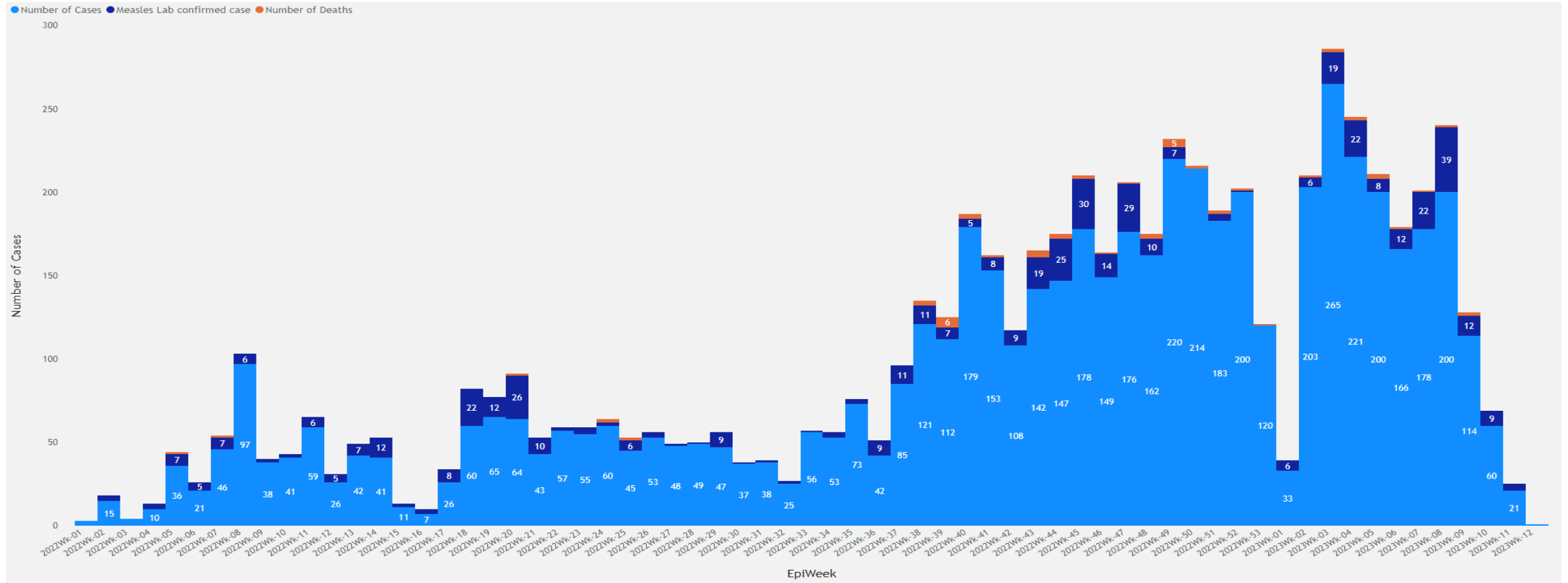
Table: Yearly distribution of cases by final classification

FINAL CLASSIFICATION	2022		2023		TOTAL
	NO. OF CASES	%	NO. OF CASES	%	
Lab confirmed	392	9.5	162	9.7	554
Epi-linked	2825	68.3	165	9.9	2990
Clinically Compatible	391	9.5	1272	76.0	1663
Total	3608	87.2	1599	95.6	5207
Discarded (-ve)	529	12.8	74	4.4	603
Grand Total	4137	100.0	1673	100.0	5810

Deaths by year and final classification



Measles Updates. EPI Curve as of week 12, 2023



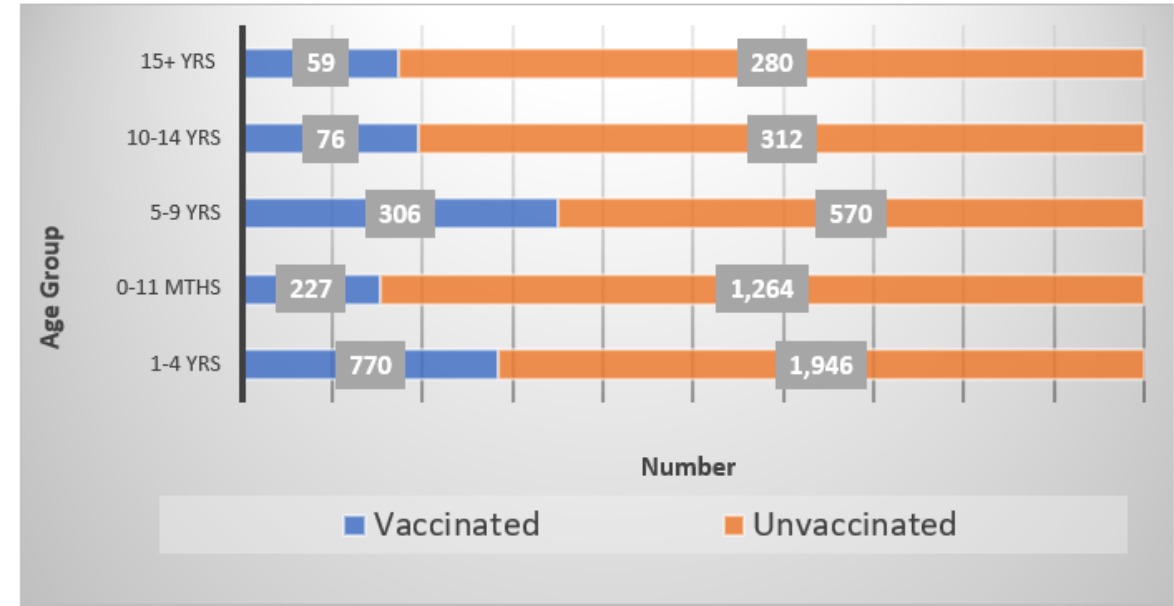
Note: Measles cases have been reported from different counties throughout 2022 and week seven of 2023. The observed peaks are driven by different counties that experienced surge in measles cases at different times.

Table 3: Distribution of reported measles cases and deaths by age groups in South Sudan, 2022-2023

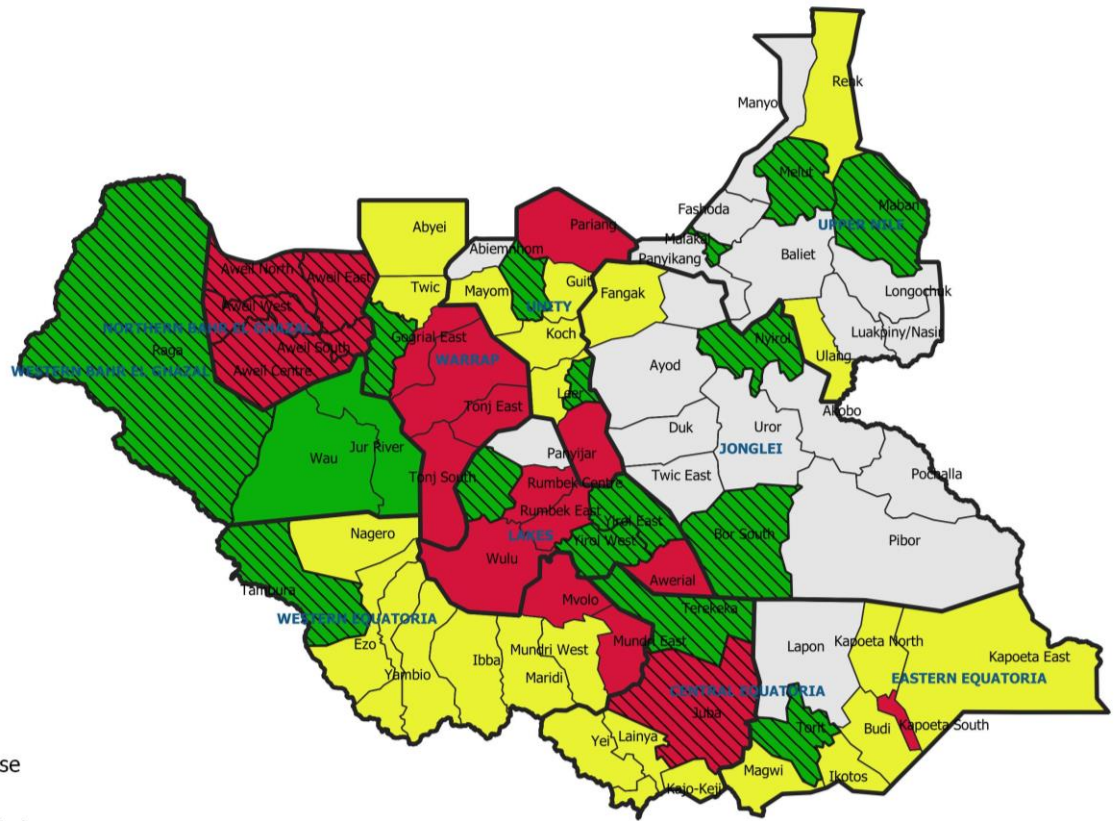
Age Groups	Cases	Deaths	Proportion, %	CFR, %
0-11 months	1,491	11	25.7	0.7
1-4 years	2,716	35	46.7	1.3
5-9 years	876	7	15.1	0.8
10-14 years	388	3	6.7	0.8
15+ years	339	2	5.8	0.6
Total	5,810	58	100.0	1.0

Note: Majority (72.4%) of all the measles cases (with age variable collected) are children below 5 years of age. The case fatality rate is highest (1.3%) among children age 1-4 years. 46 out of the 58 deaths were among children below age 5 years

Figure 3: Distribution of measles cases and their vaccination status, 2022-2023



Note: Generally, 4,372(75.2%) were unvaccinated (zero, unknown) including 3,210(73.4%) children <5 years. Among children less than one year old (1,491 cases), 84.7% (1,264 cases) have not been vaccinated against measles compared with 227(15.2%) vaccinated. This trend is observed across all the age groups.



Legend

-  Response
-  Active
-  Controlled
-  Suspected Cases
-  No Reported Cases



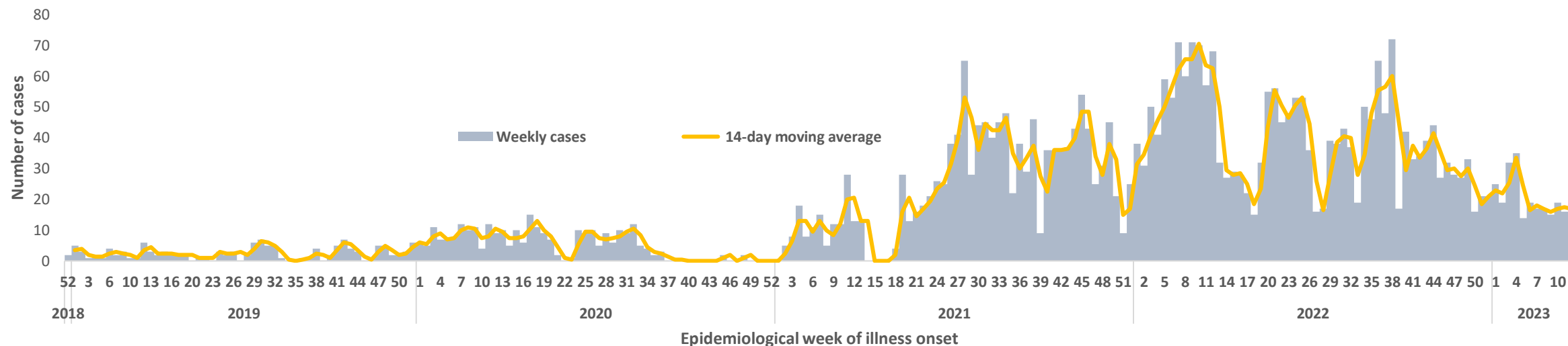
Vaccination updates

- 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 concluded in Nyirol County(MEDAIR) targeting to vaccinate 30,675 children compilation of report in ongoing
- 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.

ACTIVE OUTBREAKS AND PUBLIC HEALTH EVENTS

HEPATITIS E VIRUS ` UPDATES

Hepatitis E Virus [HEV] cases in Bentiu IDP camp, wk 1, 2019 to wk 12, 2023



Descriptive epidemiology

- The persistent transmission of HEV in the Bentiu IDP camp continues with 4,043 cases since the beginning of 2019
- **18 new** cases were reported in week 12 and zero deaths. The cumulative cases since the onset of the outbreak are 4, 043 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.

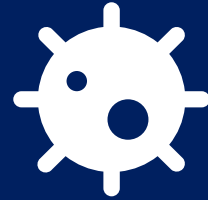
HEV response update

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

COVID-19 UPDATES

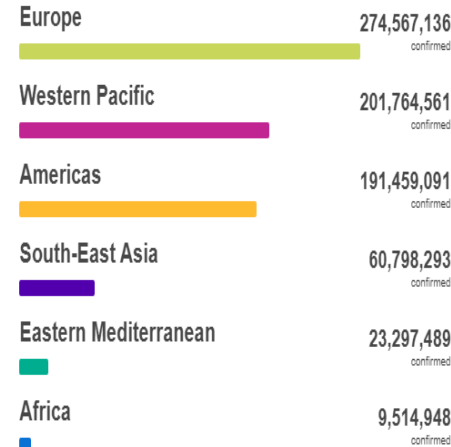




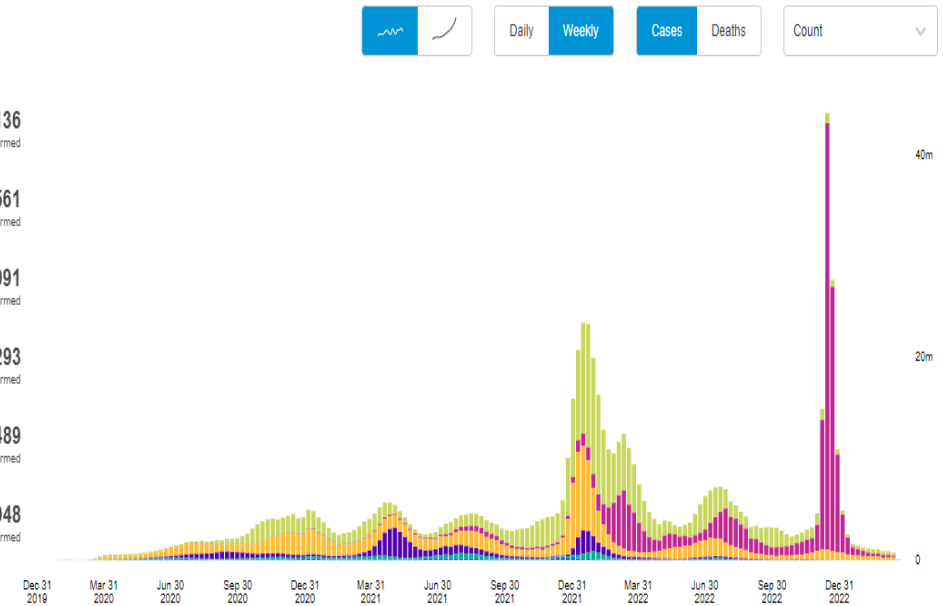
Situation update as of 29, March 2023

- Globally, 29 March 2023, there have been **761,402,282** confirmed cases of COVID-19, including **6,887,000** deaths, reported to WHO. As of 28 March 2023, a total of **13,331,975,343** vaccine doses have been administered.
- In Africa, as of 16 March 2023 there have been **9,514,948** confirmed cases of COVID-19, including **175,328** deaths reported to the WHO
- In South Sudan, from 3 January 2020 to 21 March 2023, there have been **18 368** confirmed cases of COVID-19 with **138** deaths, reported to WHO. As of 23 March 2023, a total of **3,218,712** 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

Situation by WHO Region



Source: World Health Organization
 Data may be incomplete for the current day or week.



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



**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 12, 2023, the IDSR reporting timeliness and completeness were 84% and 90% respectively and timeliness and completeness for EWARN sites were 87% and 96% respectively
- A total of 124 alerts were triggered in week 12, 2023 most of the alerts were for AWD (16), measles(24), malaria(18) bloody diarrhea(21) alerts
- Ministry of Health Republic of South Sudan declared cholera outbreak in Malakal with a total of 608 cases reported with one (2) death giving a CFR of 0.33% from February 22 to 30 March 2023 from both Malakal IDP camp and town
- Measles outbreaks continue with 5,810 reported; cases, 2,990(51.4%) are epi-linked, 554(9.5%) lab-confirmed, 1,663(28.6%) clinically compatible, and 603(10.3) discarded cases have been reported from epidemiological week 1, 2022, to week 12, 2023
- The persistent transmission of HEV in the Bentiu IDP camp continues with 4,043 cases since the beginning of 2019 and 18 new cases reported in week 12 of 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 after-action 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 12 and 11 of 2023 (1)



STATE	COUNTY	Number of reporting sites	No. of HFs Reported on Time in WK 12	Timeliness Percentage of WK 12	No. of HFs Reported regardless of time in WK 12	Completeness Percentage of WK 12	No. of HFs Reported regardless of time in WK 11	Completeness Percentage of WK 11
CES	Kajo Keji	28	28	100%	28	100%	28	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%
Lakes	Yirol West	12	12	100%	12	100%	12	100%
Lakes	Yirol East	11	11	100%	11	100%	11	100%
NBGZ	Aweil West	20	20	100%	20	100%	20	100%
NBGZ	Aweil Centre	13	13	100%	13	100%	13	100%
CES	Lainya	11	11	100%	11	100%	11	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 East	23	22	96%	23	100%	23	100%
Lakes	Cueibet	15	14	93%	15	100%	15	100%
NBGZ	Aweil North	15	14	93%	15	100%	14	93%
WBGZ	Raja	11	10	91%	11	100%	11	100%
WBGZ	Wau	27	24	89%	23	85%	24	89%
Lakes	Rumbek Centre	23	20	87%	23	100%	23	100%
Lakes	Rumbek North	7	6	86%	7	100%	7	100%
WBGZ	Jur River	40	32	80%	36	90%	32	80%
CES	Morobo	10	8	80%	4	40%	8	80%
NBGZ	Aweil South	13	8	62%	12	92%	11	85%

STATE	COUNTY	Number of reporting sites	No. of HFs Reported on Time in WK 12	Timeliness Percentage of WK 12	No. of HFs Reported regardless of time in 12	Completeness Percentage of WK 12	No. of HFs Reported regardless of time in WK 11	Completeness Percentage of WK 11
WES	Mvolo	10	10	100%	10	100%	10	100%
WES	Mundri West	21	21	100%	21	100%	21	100%
WES	Tambura	26	26	100%	26	100%	26	100%
Unity	Abiemnhom	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	Nzara	21	21	100%	21	100%	21	100%
WES	Nagero	10	10	100%	10	100%	10	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	32	31	97%	32	100%	32	100%
Unity	Pariang	12	10	83%	12	100%	12	100%
Unity	Panyijiar	16	12	75%	7	44%	12	75%
Unity	Koch	7	0	0%	3	43%	0	0%

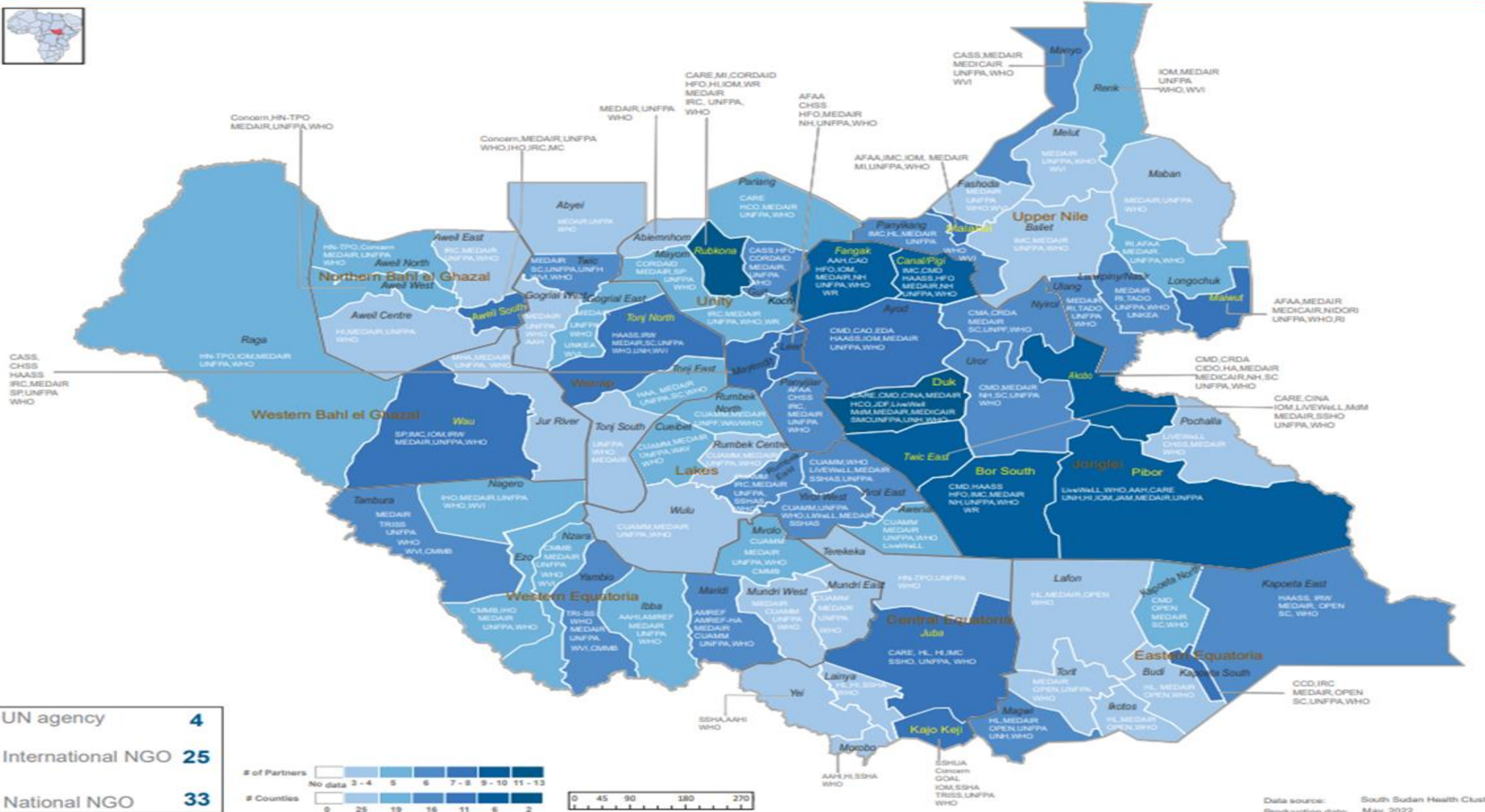


IDSR timeliness & completeness performance at county level for week 12 and 11 of 2023 (2)



STATE	COUNTY	Number of reporting sites	No. of HFs Reported on Time in WK 12	Timeliness Percentage of WK 12	No. of HFs Reported regardless of time in WK 12	Completeness Percentage of WK 12	No. of HFs Reported regardless of time in WK 11	Completeness Percentage of WK 11	STATE	COUNTY	Number of reporting sites	No. of HFs Reported on Time in WK 12	Timeliness Percentage of WK 12	No. of HFs Reported regardless of time in WK 12	Completeness Percentage of WK 12	No. of HFs Reported regardless of time in WK 11	Completeness Percentage of WK 11
Jonglei	Pibor	8	8	100%	8	100%	8	100%	Warrap	Abyei	14	14	100%	14	100%	11	79%
Jonglei	Bor	19	19	100%	19	100%	19	100%	Warrap	Tonj North	15	15	100%	15	100%	15	100%
Jonglei	Pochalla	7	7	100%	7	100%	7	100%	Warrap	Tonj South	12	12	100%	12	100%	12	100%
Jonglei	Twic East	9	9	100%	9	100%	0	0%	Upper Nile	Baliet	5	5	100%	5	100%	5	100%
EES	Magwi	17	17	100%	17	100%	17	100%	Upper Nile	Longechuk	9	9	100%	9	100%	9	100%
EES	Torit	11	11	100%	11	100%	11	100%	Warrap	Twic	28	27	96%	27	96%	17	61%
EES	Kapoeta East	7	6	86%	6	86%	5	71%	Upper Nile	Maban	13	12	92%	13	100%	13	100%
Jonglei	Duk	13	11	85%	13	100%	13	100%	Upper Nile	Ulang	8	7	88%	7	88%	8	100%
EES	Ikotos	19	16	84%	18	95%	19	100%	Warrap	Gogrial East	15	13	87%	15	100%	13	87%
EES	Kapoeta North	10	8	80%	8	80%	1	10%	Warrap	Gogrial West	31	26	84%	27	87%	31	100%
EES	Kapoeta South	9	7	78%	7	78%	9	100%	Upper Nile	Akoka	5	4	80%	5	100%	4	80%
EES	Budi	17	13	76%	13	76%	12	71%	Upper Nile	Makal	9	6	67%	8	89%	5	56%
Jonglei	Fangak	21	14	67%	14	67%	6	29%	Upper Nile	Fashoda	9	6	67%	7	78%	9	100%
Jonglei	Nyirrol	2	1	50%	1	50%	1	50%	Upper Nile	Manyo	15	10	67%	10	67%	12	80%
Jonglei	Akobo	15	7	47%	7	47%	6	40%	Upper Nile	Panyikang	2	1	50%	2	100%	1	50%
EES	Lopa Lafon	15	6	40%	15	100%	12	80%	Upper Nile	Melut	6	0	0%	4	67%	0	0%
Jonglei	Canal Pigi	14	2	14%	7	50%	10	71%	Upper Nile	Maiwut	9	0	0%	5	56%	9	100%
Jonglei	Ayod	13	0	0%	12	92%	0	0%	Warrap	Tonj East	12	0	0%	0	0%	11	92%
Jonglei	Uror	1	0	0%	0	0%	1	100%	Upper Nile	Luakpiny Nasir	10	0	0%	0	0%	8	80%
									Upper Nile	Renk	6	0	0%	0	0%	0	0%

South Sudan Health Cluster HRP Partners 2022



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>

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

For more help and support, please contact:

Dr Joseph Lasu Hickson
Director, Emergency Preparedness and Response
Ministry of Health
Republic of South Sudan
Telephone: +211921395440
Email: josh2013.lasu@gmail.com

Dr. John Rumunu
Director General Preventive Health Services
Ministry of Health
Republic of South Sudan
Telephone: +211924767490
Email: ori.moiga@gmail.com

IDSR Bulletin Editorial Team

- 1.Mr. Ajak Ater, MoH - Email: ajakater014@gmail.com
- 2.Mrs. Sheila Baya, WHO- Email: bayas@who.int
- 3.Mr. Robert Lasu Martin, WHO -Email: lasur@who.int
- 4.Mrs. Rose Dagama , WHO - Email: dagamaa@who.int
- 5.Dr. Abraham Adut, WHO- Email: abenegoa@who.int
- 6.Dr. Tony Wurda, WHO-Email wurdatt@who.int
- 7.Mr.Korsuk Scopas.WHO-Email lonyikk@who.int
- 8.Dr Antonio Oke, WHO -Email okea@who.int
- 9.Dr Aggrey Bategereza, WHO -Email bategerezaa@who.int

Notes

WHO and the Ministry of Health gratefully acknowledge the surveillance officers [at state, county, and health facility levels], health cluster and health pooled fund (HPF) partners who have reported the data used in this bulletin. We would also like to thank ECHO, USAID and World Bank for providing financial support.

The data has been collected with support from the EWARS project. This is an initiative to strengthen early warning, alert and response in emergencies. It includes an online, desktop and mobile application that can be rapidly configured and deployed in the field. It is designed with frontline users in mind, and built to work in difficult and remote operating environments. This bulletin has been automatically published from the EWARS application.

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

