



World Health
Organization
South Sudan

South Sudan: Cholera Outbreak Situation Report

Situation report: No. 019

Date of onset of outbreak: 14 April 2022

Reporting date: 30 October 2022

Data Source: State Ministry of Health and National Public Health Laboratory



Cholera response | Cumulative figures from 19 March to 30 October 2022

424

Cases

1

Death

0.24%

CFR

Grade 1

Grade

Key Weekly Highlights

Highlights as of 30 October 2022

- Zero new case was reported during week 43 (ending 30 October 2022) from Rubkona County, Unity State.
- Zero new deaths reported during week 43, 2022.
- Cumulatively, a total of 424 cholera cases including one death have been reported since March 2022.
- Phase one oral cholera vaccination (OCV) campaign for Malakal County started on 28 October 2022 and concluded on 2 November 2022, data compilation is ongoing to determine the actual coverage.
- The Rapid Response Team (RRT) continues to investigate reported cholera cases across the country.
- A total of 1.7 million doses of oral cholera vaccines (OCV) has been received in the country of which 1.6 million OCV doses have been administered to people 1 year and above including pregnant women in Awerial, Leer, Yirol East, Rubkona, Malakal and Juba.



Situation Update as of 11 September 2022

- Since the last update in week 42, Zero new cases have been reported from Rubkona county. Zero cases in admission in cholera treatment units as of 30 October 2022.
- Cumulatively, since 19 March 2022, a total of 424 cholera cases have been reported, of which 56 were cholera RDT positive with 30 testing culture positive at the National Reference Laboratory in Juba. One of the RDT positive cases died giving 0.24% case fatality rate.
- Overall, patients between 0-4 years old are mostly affected with 140 (33%) of the 424 cases reported.
- Majority of the cases were females accounting for 264 (62.3%) and males accounted for 160 (37.7%).
- Vaccinated cases accounted for 134 (31.6 %), unvaccinated accounted for 265 (62.5%) and 25 (5.9%) have unknown vaccination status, thus making the total cases unvaccinated 68.4% of the total cases; data harmonization is ongoing to further investigate the unknowns.
- 301 (89.3%) of the cases are reported from the Bentiu ID Camp, because the IDP camp is where most of the cases reside with minimum WASH services, while 36 (10.7%) are from three locations outside of the IDP Camp.
- Drinking water sources of the reported cases include chlorinated 124 (36.8%), Borehole 34 (10.1%), Tap Water 24 (7.1%), Flood Water 12(3.6%) and 143 (42.4%) source of drinking water were not provided.

Data Analysis and Interpretation

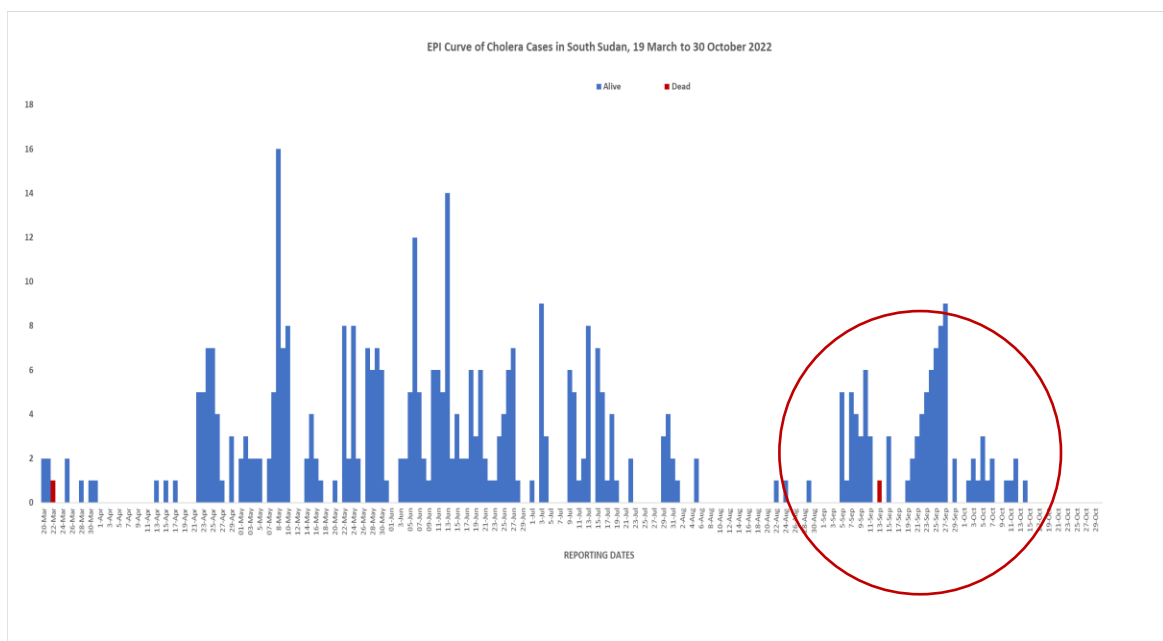


FIGURE 1: Epi Curve of Cholera Cases in South Sudan, 19 March To 30 October 2022

Note: Of the reported cases, 11(2.5%) were reported in March; 35 (8.3%) cases in April, 105 (24.8%) reported in May, 110 (25.9%) in June, 64 (15.1%) in July, while 6 (1.4%) cases were reported in August with 77 (18.2%) reported in September and 16(3.8%) cases reported in October 2022 due to under reporting.

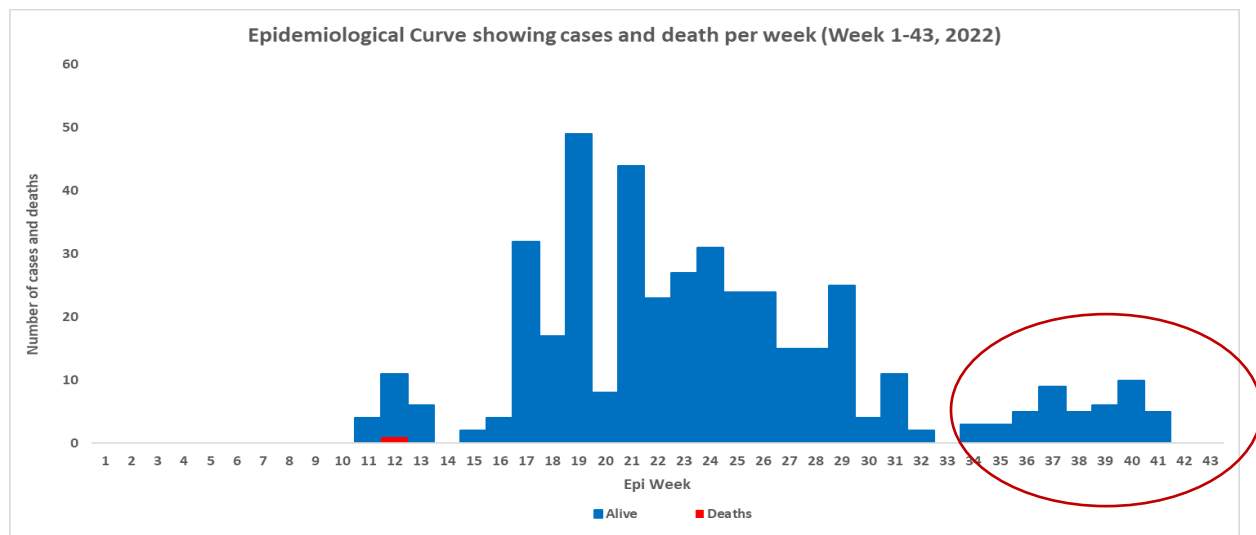


FIGURE 2: Weekly Epi Curve of Cholera Cases in South Sudan, Rubkona County, Week 1-36, 2022.

Note: The initial cases reported between weeks 11 to 13, while the first peak was observed in week 17 with 27 (6.7%) cases and the second peak observed in week 19 when 38 (9%) cases, a gradual increase observed from week 21 through week 29 and gradual reduction is being observed from week 30 up to week 41, however, this must be interpreted with caution because most reporting sites did not report during these weeks.

TABLE 1: Distribution of Reported Cases by Sex and Age, Rubkona County, as of 30 October 2022

Age Group	Female		Male		Total	
	cases	%	Cases	%	Cases	%
0-4 yrs	65	15.3	75	17.7	140	33.0
5-9 yrs	22	5.2	11	2.6	33	7.8
10-14 yrs	21	5.0	19	4.5	40	9.4
15-19 yrs	31	7.3	5	1.2	36	8.5
20-49 yrs	94	22.2	33	7.8	127	30.0
≥50 yrs	31	7.3	17	4.0	48	11.3
Total	264	62.3	160	37.7	424	100.0

Note: Majority of the cases were females accounting for 264 (62.3%) and males accounted for 160 (37.70%). Overall, patients between 0-4yrs old are mostly affected with 140 (33%) of the 424 cases reported.

TABLE 2: Vaccination Status of Reported Cholera Cases by Age Category, Rubkona County, 19 March – 30 October 2022

Age Group	Vaccinated		Not Vaccinated		Unknown		Total	
	cases	%	Cases	%	Cases	%	Cases	%
0-4 yrs	26	6.1	103	24.3	11	2.6	140	33.0
5-9 yrs	10	2.4	21	5.0	3	0.7	34	8.0
10-14 yrs	17	4.0	23	5.4	0	0.0	40	9.4
15-19 yrs	8	1.9	28	6.6	0	0.0	36	8.5
20-49 yrs	55	13.0	66	15.6	5	1.2	126	29.7
≥50 yrs	18	4.2	24	5.7	6	1.4	48	11.3
Total	134	31.6	265	62.5	25	5.9	424	100.0

Note: Vaccinated cases accounted for 134 (31.6 %), unvaccinated accounted for 265 (62.5%) and 25 (5.9%) have unknown vaccination status, thus making the total cases unvaccinated 68.4% of the total cases; data harmonization is ongoing to further investigate the unknowns.

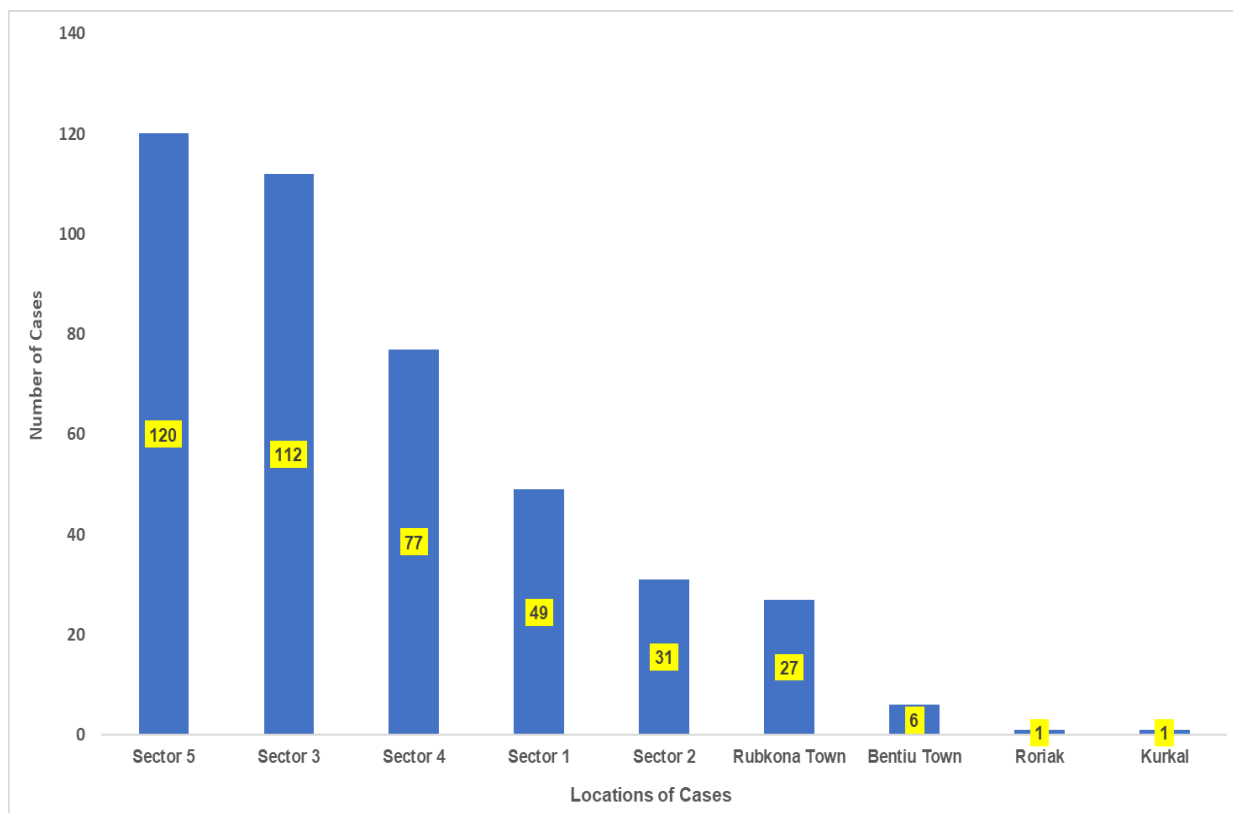


FIGURE 3: Distribution of Reported Cholera Cases by Community, Rubkona County, 20 March – 30 October 2022

Note: 389 (77.8%) of the cases are reported from the Bentiu ID Camp, because the IDP camp is where most of the cases reside with minimum WASH services, while 35 (8.8%) are from three locations outside of the IDP Camp.

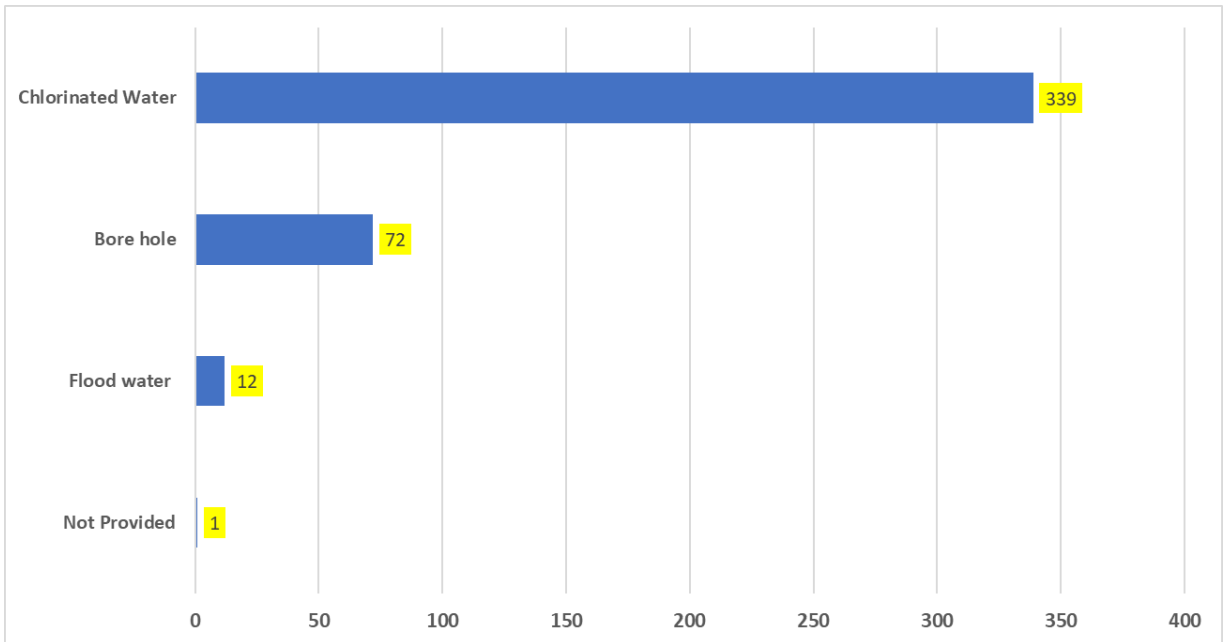


FIGURE 4: Distribution of Drinking Water Sources Reported by Cases, Rubkona County, 20 March – 30 October 2022

Note: Drinking water sources of the reported cases include chlorinated 339 (80%), Borehole 72 (17%), Flood Water 12 (2.8%) and 1 (0.2%) source of drinking water were not provided.

Current Response Interventions by Thematic Areas

1. Coordination

- National IMS team continues to provide technical and operational support to the multi-hazard coordination platform at the state level.
- National cholera Taskforce is activated and meets every Friday 10-12pm to review progress and take informed public health decisions to address gaps and challenges. Minutes of meetings have been duly shared with partners and stakeholders for remedial actions.
- State and county surveillance officers including partners at state and county levels are attending the weekly coordination meetings.
- The multidisciplinary Rapid Response Team (RRT) that conducted an in-depth epidemiological investigation after four cholera alerts were reported during week 35 in Juba County presented the key findings and actionable recommendations to improve case detection, testing and management of cases.

2. Surveillance and Reporting

- Surveillance and reporting from facilities are being supported and strengthened.
- Implementing partners (IRC, WR, IOM and CORDAID) supporting health facilities screened all cases meeting cholera outbreak case definitions.
- Suspected cholera cases are being investigated at the sub national level by implementing partners.
- Active case search is ongoing in Juba County and the Bentiu IDP camp, Bentiu Town and Rubkona Town involving community health workers.
- Suspected cholera cases were investigated, and cholera ruled out in Leer, Parieng and Awerial counties.
- Line list shared with CCCM and WASH partners to aid Targeted response at household level being conducted for identified cases.

3. Laboratory and Testing

- Health facilities are testing all suspected cases with RDT; WHO and other implementing partners continues to supply RDTs for timely detection, isolation, and treatment of suspected cases.
- Results of the five suspected V. cholera isolates sent to Pasteur Institute in Paris, France for confirmatory testing during week 32 still pending.
- WHO is ensuring that testing reagents are procured and prepositioned at the NPHL.

4. Community engagement and Risk Communication

- RCCE activities have been intensified in Juba, Rubkona and Leer counties to improve OCV uptake and enhance case detection and reporting during the campaigns.
- Mapping of health and hygiene promoters in the Camp and the rest of the county being conducted by C4D to better utilize them for disseminating cholera messages.

5. Water Sanitation and Hygiene (WASH)

- The WASH ongoing support towards providing and treating water at the treatment plants and the SWATs located in Rubkona IDPs and Bentiu IDP camp.
- WASH cluster has outlined six key WASH strategic intervention areas that they will be implementing to strengthen cholera response.
- Targeted response including water quality testing at household level being conducted for identified cases.



6. Case Management and Infection Prevention and Control (IPC)

- Zero case in admission as of 30 October 2022.
- The MSF 5-bed treatment centre in Bentiu IDP camp is admitting and managing severe cases.

7. Oral Cholera Vaccines (OCV)

- A total 1,667,500 doses of Oral Cholera Vaccines (OCV) have been received in South Sudan.
- So far, 1,584,147 OCV doses have been administered in six locations (Awerial, Leer, Yirol East, Rubkona, Malakal and Juba).
- WHO in collaboration with the MOH, UNICEF and partners has concluded Round one OCV campaign on 2nd November 2022 in Malakal. Data compilation is ongoing to determine the coverage achieved, while round two is planned to be conducted within two weeks.

Challenges

- Inadequate surveillance activities across the at-risk counties
- Inadequate safe and clean water supply poses risk for surface waters consumption within the camp
- Sub-optimal community engagement and risk communication in affected and high-risk populations on cholera prevention and control
- Delay in receiving cholera outbreak laboratory data from the national reference laboratory in Juba negatively impacting the response.
- Delay in receiving laboratory reagents which were requested by the NPHL since April 2022.
- Multiple ongoing disease outbreaks and health emergencies in the country leading to resource constraints

Next Steps Based on Context Analysis

- Address the WASH gaps as the mainstay for cholera control in affected and at-risk populations including Juba, Rubkona and other counties across the country.
- Test the chlorinated water from the source to the household level including transportation and handling of the said water in the IDP camp
- Continuous mentorship for surveillance officers and health clinicians on priority diseases case definitions – especially cholera to improve case detection, reporting and investigation



- Improve sharing of cholera outbreak laboratory data from the national reference laboratory in Juba for appropriate public health measures.
- Fast track the procurement and delivery process for the laboratory reagents to ensure better preparedness.
- Implement OCV campaigns in identified hotspot and at-risk locations.

Conclusion

The Ministry of Health has confirmed an outbreak of cholera in Rubkona county with all the cases reported in vulnerable IDP populations. The gaps in surveillance, case management, community engagement and WASH need to be urgently addressed to prevent a widespread outbreak and avert needless deaths. It is also critical that countrywide preparedness and response readiness are enhanced in the other high-risk counties and states to prevent or mitigate the impact of cholera outside Rubkona county.

Acknowledgement

The South Sudan Ministry of Health appreciates the partnership and support from:

- Line ministries (Ministry of Water Resources and Irrigation)
- UN agencies (WHO, UNICEF, IOM, WFP, OCHA)
- Médecins Sans Frontiers – Holland
- Humanitarian cluster partners (Health, WASH, Camp Coordination and Camp Management)
- Development partners and Donors





Notes

Outbreak Case definition: The outbreak case definition being used in Rubkona county by surveillance officers to detect, report, investigate, and respond to cholera cases “is any person presenting with or dying from acute watery diarrhoea”.

For other counties where cholera outbreak has not been declared the cholera suspect case definition is

“Any person aged 2 years and older presenting with acute watery diarrhoea and dehydration or dying from acute watery diarrhoea”.

Cholera death- Any person who dies after having lots of watery diarrhoea

Note: Children under 2 years of age can be affected by cholera and need to be treated immediately. When a cholera outbreak has been declared, children under 2 years of age who meet the cholera case definition should be recorded in the register, reported to the surveillance unit.

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