



Knowledge Management Series for Health

30<sup>th</sup> October 2025

# Cholera in South Sudan — One Year On

South Sudan experiences recurring cholera outbreaks, driven by risk factors such as frequent flooding, displacement due to political instability, limited access to healthcare and inadequate water and sanitation services. Between 2014 and 2023, five cholera outbreaks of different size and spread occurred in the country with between **424** to **20038** cases and **1** to **436** deaths reported. Before the current outbreak, the largest outbreak started in mid-June 2016 and lasted until August 2017 (14 months) with a national attack rate of **1.8/1000** inhabitants.

The current outbreak was declared by the Ministry of Health (MOH) on 28th October 2024 following confirmation by culture of Vibrio cholerae O1 in samples from Renk County, bordering Sudan. This outbreak has lasted 12 months and it is different from previous outbreaks because it emerged at the end of the rainy season rather than during the typical beginning or peak and started outside of Juba before quickly spreading to 55 of the 80 counties in the country. As of October 27, 2025, the outbreak had totalled **95 450** cases and **1587** deaths, a case fatality rate (CFR) of **1.7%**, of which **812** are health facility deaths (HF CFR: 0.9%), reported across 9 states and all three administrative areas (that is Ruweng, Greater Pibor, and Abyei). Unity State continues to account for the highest burden of cholera cases at **32%** (30166) followed by Jonglei State at **14%** (13218) and Central Equatorial State at **13%** (12119). Western Equatoria remains the only state to not report any cholera case in the current outbreak. The rapid spread of the disease was driven by inadequate access to clean water and sanitation, widespread flooding, and mass displacement—both from within South Sudan and across the border due to the ongoing crisis in Sudan.

While cases have declined steeply in the last three months (~100 new cases weekly), a few counties in Unity (Rubkona, Mayom, and Mayendit), Jonglei (Duk), Eastern Equatoria (Ikwotos), Warrap (Tonj North), Upper Nile (Renk), and Northern Bahr-el-Ghazal (Aweil Centre and Aweil South) continue to report new cases. With the country's limited Water, Sanitation and Hygiene (WASH) infrastructure, further worsened by waning immunity from the oral cholera vaccine (OCV) campaigns conducted late last year and this year, population movements and displacement, and flooding; the risk of a resurgence of cases in currently quiet counties remains very high.

To ensure the transmission chain of the current outbreak is broken, we urge for risk-based and proactive response measures in hotspot counties including preventative oral cholera vaccines, climate-resilient WASH interventions, and targeted risk communication and community engagement. Long-term efforts to prevent similar outbreaks in the future requires sustainable investments particularly in infrastructure for WASH together with a proactive readiness to prevent cholera outbreaks as outlined in the National Cholera Preparedness and Response Plan.

The current outbreak started with Renk as the epicentre but as response efforts were being intensified, new epicentres (e.g., Malakal, Rubkona, Mayom, and Mayendit) emerged as transmission spread across the country. As of October 27, 2025, **95 450** cholera cases and **1587** deaths have reported in 55 of the 80 counties in the country. The most affected counties are Rubkona (**19557 cases, 20.5%**), Juba (**11346 cases, 11.9%**), Mayom (**6084, 6.4%**), Aweil West (**5361, 5.6%**), and Nyirol (**5320, 5.6%**).

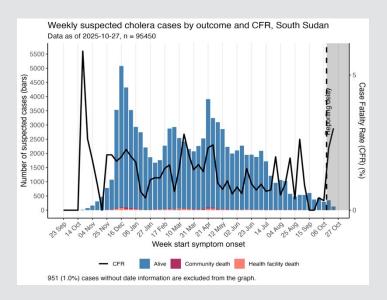
Table 1: Summary of suspected cholera cases and deaths in seven top affected counties. AR = attack rate per 1000, HF = health facility, CFR = case fatality rate

County	Cases	% of total	Deaths	HF Deaths	% HF Deaths	CFR	HF CFR	AR
Rubkona	19557	21.5%	215	164	76.3%	1.1%	0.8%	5.4
Juba	11346	11.9%	116	58	50.0%	1.0%	0.5%	2.0
Mayom	6084	6.4%	106	52	49.1%	1.8%	0.9%	3.7
Aweil West	5361	5.6%	5	4	80.0%	0.1%	0.1%	2.5
Nyirol	5320	5.6%	58	0	0.0%	1.1%	0.0%	3.6
Akobo	3149	3.3%	42	42	100.0%	1.3%	1.3%	1.3
Abyei	3041	3.2%	23	18	78.3%	0.8%	0.6%	2.3

Children under 15 years account for the highest burden of suspected cases (46%), while males aged 5–44 years represent the largest share of cholera-related deaths (58%). Most deaths were among people aged 5-14 years (18%), followed by the age group 0-4 years (17%) while males constitute 56% of the total deaths. About 52% of the reported deaths occurred in the cholera treatment facilities and the rest (48%) in the community. Majority (90%) of the cases who died had presented at treatment

centres with severe dehydration, likely indicating challenges in accessing health facilities, low risk perception, and/or delayed health-seeking behaviours. For instance, of the cases that died, **17%** and **4%** presented to the treatment facility after 1 and 2 days from symptom onset respectively. Unity and Jonglei States accounted for **26%** and **17%** of the total deaths respectively.

As can be seen from Figure 1, the CFR generally declined over time likely due to improvements in case management and the rollout of reactive OCV campaigns across the country. No new county has reported cases since June 6, 2025, when Lafon became the latest county to report cholera cases; however, low number of new cases are being reported from Duk, Tonj North, Ikwotos, Kapoeta South, Aweil South, and Aweil Centre, after periods of relative quiet in these locations.



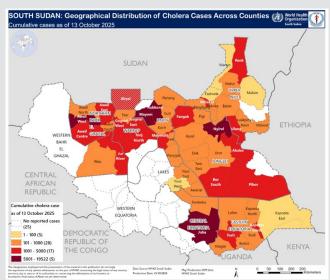


Figure 1. Map of counties with suspected cholera cases and the cholera epi curve as of 27 October 2025

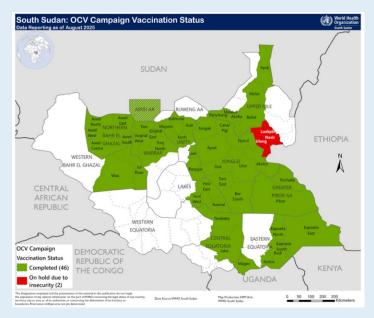
The epi curve shows three distinct waves/peaks, with the last occurring between late April and mid-May 2025. Since the last peak, we have observed a decreasing trend but numbers may go up again due to a combination of factors including the rainy season, flooding, population movements, and waning immunity. As of October 27, 2025, **40** counties (of the 55) did not report any new cases in the last four weeks and only **seven** counties including Mayom, Mayendit, Rubkona, Juba, and Ikwotos reported new cases in the last seven days.

#### **Response Interventions and Actions**

The following are the main interventions and actions that were supported by WHO and other partners in response to the cholera outbreak in the country.

**Coordination:** Over **100** multisectoral coordination meetings were conducted at the national and sub-national levels with technical support from WHO and other partners. There were also several cross-border meetings with Sudan and Ethiopia led by WHO to share experiences and coordinate cholera response efforts. With support from WHO, the MOH deployed surge capacity staff to over **30** affected counties across nine states and all three administrative areas to support response efforts. Furthermore, WHO-supported Health Cluster meetings were used to coordinate and reinforce response efforts by partners across the country.

**Surveillance and Laboratory:** WHO provided cholera testing supplies, including rapid diagnostic tests (RDTs) and sample collection kits for laboratory testing. As of October 27, 2025, **20050** cholera RDTs have been conducted with **12680** (**63.2%**) testing positive. Of the **4345** stool samples tested by culture, **453** (**10.4%**) tested positive for *Vibrio Cholerae*.



In addition WHO supported the deployment of nationally coordinated rapid response teams (RRTs) to most of the affected counties to support active case search, sample collection, and case management. Screening of incoming travelers at both official and unofficial points of entry (PoEs) especially in Renk was active for most part of the outbreak despite funding challenges for implementing partners

**OCV Campaigns:** With support from WHO and UNICEF, the MOH competed reactive OCV campaigns in 46 counties across 9 states and 2 administrative areas (Greater Pibor and Abyei) with 25 counties achieving > 80% coverage. From the national OCV target of **10 184 408** doses, a total of **8 628 298** individuals were vaccinated with single dose OCV, achieving a coverage of (**84.7%**).

Figure 2. Map of counties with OCV campaigns as of 27 October 2025

Case Management: WHO supported the MOH to setup 102 oral rehydration points (ORPs), 88 cholera treatment units (CTUs) and 19 cholera treatment centers (CTCs) across the country. With technical guidance from WHO, the State Ministries of Health (SMOH) and County Health Departments (CHDs) trained Boma Health Workers (BHWs) and established ORPs for managing Plan A and Plan B cholera cases in hard-to-reach areas. As of October 27, 2025, 93 789 cases are fully recovered and discharged, representing a 98.3% recovery rate of the total case burden, while 74 cases are reported as still admitted at various CTCs/CTUs in the country. As of 27 October 2025, about 99% of symptomatic cholera patients received treatment, with intravenous (IV) fluids and antibiotics being the most common regimens provided, especially among severe cases (75%). Assuming a CFR among symptomatic patients without treatment of 30%, an estimated 26404 deaths were averted due to the case management measures put in place.

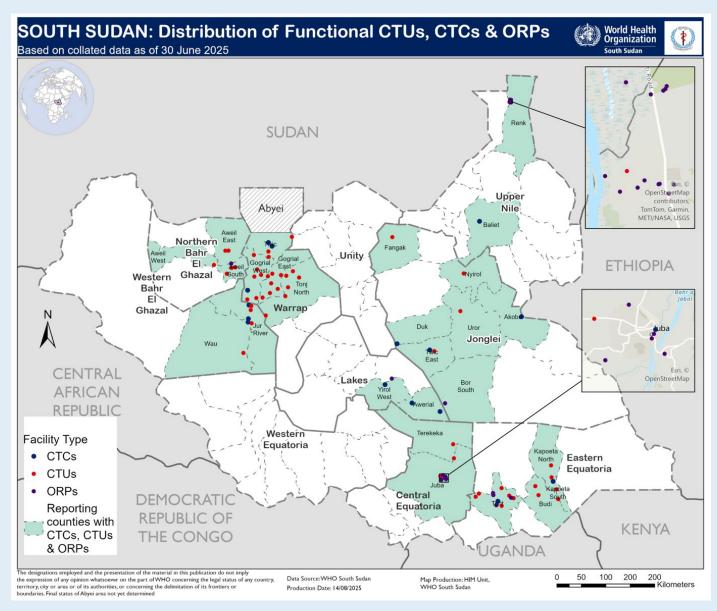


Figure 3. Map of cholera treatment facilities as of 30 June 2025

**Infection Prevention and Control (IPC)/WASH:** WHO and partners have implemented case-area targeted IPC and WASH interventions, including construction and desludging of toilets, provision of safe water for home use, water sample testing, water treatment, hygiene kit distribution, and borehole rehabilitation, notably in Abyei, Renk, Rubkona, and other cholera affected areas.

**Risk Communication and Community Engagement:** WHO and partners conducted cholera risk communication and community engagement activities through radio talk shows, door-to-door visits, and distribution of Information, Education, and Communication (IEC) materials, including posters, flyers, and radio jingles in affected counties.

## **Impact of OCV campaigns on Mortality**

After 50% OCV coverage was reached in early April 2025, weekly cholera cases declined consistently and substantially. The counterfactual (modelled scenario without the OCV scale-up) remains consistently higher than observed cases throughout the post-intervention period. Due to the OCV intervention, an estimated **449 917** cholera cases were averted.

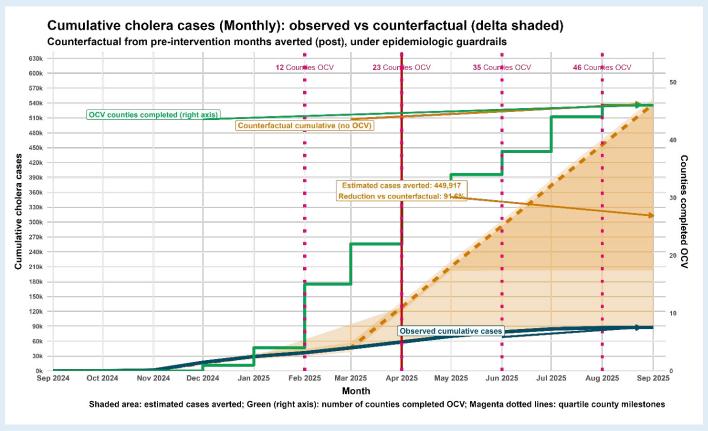


Figure 4. Modelled impact of the OCV intervention in South Sudan

## **Risks and Challenges**

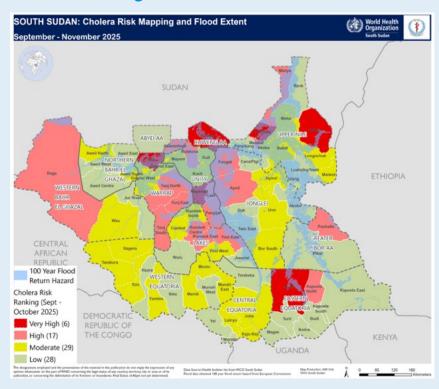


Figure 5. Map of cholera hotspot counties and flood extent

Flooding and poor WASH conditions: With extensive flooding reported in several of the cholera affected counties especially in Jonglei and Unity States, including Mayendit, Panyijiar, and Fangak, the risk of cholera resurgence is high in these locations. In the affected counties, flooding has contaminated water sources especially submerged boreholes, shallow wells, and piped water. Latrines have also been affected, leading to poor hygiene and sanitary practices including open defecation. Moreover, displacement due to flooding has led to limited access to health services and overcrowding with inadequate sanitary facilities and safe drinking water, a situation that increases the risk of cholera transmission.

Waning immunity: Majority of the cholera affected counties completed their OCV campaigns more than five months ago. This poses a risk of cholera resurgence in these location as immunity from the single vaccine dose could be waning. The vaccine provides protection for approximately four to six months. Since completion of OCV campaign in the respective counties, a total number of 1590 cholera cases have been reported among RDT positive or culture confirmed individuals who had received the OCV single dose, highlighting the risk of breakthrough infections among those who have received the vaccine.

Other risks and challenges during the response to the current outbreak are highlighted below.

- **Limited access to safe water and sanitation:** This was a challenge throughout the response with 36.2% of cases reporting river water as the main source of drinking water and evidence of widespread practice of open defecation in some locations. Poor WASH conditions remains the primary driver of cholera transmission, especially in displacement camps and flood-prone areas.
- Insecurity and logistical constraints: These have affected response actions including timely deployment of vaccines and surge teams. A case in point is the insecurity in Ulang, Nasir, and Panyikang which has affected the implementation of OCV campaigns in these counties.
- **Funding gaps:** Continuity of prevention efforts, especially for long-term WASH infrastructure and community health systems have been threatened by the funding shortfalls which have affected the humanitarian and development fields worldwide. For example, funding shortages have caused partner withdrawal from some WASH activities in the Unity corridor and internally displaced persons (IDPs) settlements, disrupting provision of WASH services. Moreover, there is limited domestic budget allocation for cholera control in the country.
- **Underreporting and delayed data sharing:** This has affected the timely provision of information for decision-making at both the national and sub-national levels.

## **Way Forward/Recommendations**

#### 30 Days surge activities

- Activate County Cholera Task Forces, deploy RRTs, restart CTUs, and conduct shock chlorination
- Conduct household chlorination, door-to-door risk communication and community engagement, data micromapping, and verify supplies
- Conduct targeted OCV campaigns, chlorine follow-up, and zero-case verification
- · Sustain zero transmission, conduct risk assessment, and handover activities to CHDs

#### **Immediate**

- · Integrate surveillance with One Health risk analysis for timely outbreaks detection and swift response.
- · Pre-position supplies in priority counties for rapid response to minimize the time from arrival to on-the-ground deployment of supplies. This should focus on locations that are hard-to-reach or inaccessible due to flooding and/or insecurity
- Enhanced community engagement promoting vaccine uptake and good hygiene practices. Especially in hard-to-reach areas and underserved communities where a limited number of implementing partners are present
- · Increased water supplies ensuring sufficient access to safe drinking water. Safe drinking water from improved water sources is estimated at 50% (48% rural and 60%). Response should prioritize areas with community transmission and particular weak WASH infrastructure.

### **Medium to long term**

- Scaling up sustainable investment in WASH infrastructure: Access to improved sanitation facilities in South Sudan is less than 10% (6% rural and 28% urban) Ensuring sufficient supply of safe water and availability of latrines is essential to prevent similar outbreaks in the future.
- Strengthening testing and laboratory capacity: With 18 affected counties having no laboratory confirmation and 56% of facilities not performing RDT testing, efforts should focus on enhancing national reference lab capacity, and establishing reliable systems for RDT distribution, sample collection and transport, particularly to remote areas.
- Introduce preventive vaccination: Complete the Priority Areas for Multisectoral Interventions (PAMI) activity and request for preventive cholera vaccination, particularly in very high-risk locations and counties. This should extend immunity to beyond the period at risk.