

Multi-country outbreak of cholera

External Situation Report #4, published 6 July 2023

Risk assessment Global risk – Very high	Countries/areas/territories affected 24
In this edition: Highlights Epidemiological update 	
 Focus on selected countries Operational updates Key Challenges Next Steps 	

Highlights

Data as of 15 June 2023

- Since the last situation report on the multi-country outbreak of cholera was published on 1 June 2023 (covering data reported until 15 of May), no new country reported a cholera outbreak. In total, 24 countries have reported cases since the beginning of 2023.
- The overall capacity to respond to the multiple and simultaneous outbreaks continues to be strained due to the global lack of resources, including shortages of the Oral Cholera Vaccine (OCV) and cholera supplies, as well as overstretched public health and medical personnel, who are dealing with multiple parallel disease outbreaks and other health emergencies.
- Based on the large number of outbreaks and their geographic expansion, as well as a lack of vaccines and other resources, WHO continues to assess the risk at global level as very high.
- The WHO African Region remains the most affected region with 14 countries reporting cholera cases since the beginning of the year. Since mid-May 2023, a surge in the number of cases has been reported in South Africa with an ongoing geographic spread to new areas. While the number of weekly reported new cases remains high, the outbreaks in Cameroon, Democratic Republic of the Congo, Mozambique, and Zimbabwe appear to have stabilized in recent weeks. Significant improvements in the epidemiological situation have been reported in Malawi in recent weeks.
- In the Horn of Africa, the major region of concern remains the so-called 'Mandera triangle' region, where the borders
 of Ethiopia, Kenya, and Somalia meet. Both Kenya and Ethiopia have now reported over 10 000 cases as of the middle
 of 2023, and Somalia is not far behind. Both Ethiopia and Kenya continue to report spread to newly affected areas.
 Ongoing security concerns and movements among internally displaced population and refugees remain the major
 challenges in the response operations.
- On 11 June 2023, the Ministry of Health of Lebanon declared the outbreak over. With a total of 8007 cases and 23 deaths, case fatality ratio (CFR) 0.3%, this had been the first outbreak reported in the country since 1993.
- WHO continues to work with partners at global, regional and country level to support Member States in outbreak response activities.

Epidemiological update

Since the beginning of the year and as of 15 June 2023, at least 24 countries have reported cholera cases (Table 1). During the same period in 2022, 16 countries reported cases. With reference to historical transmission patterns and seasonality, countries in West Africa have entered the high transmission period with the rainy season between May and October. On the other hand, heavily affected countries such as Mozambique are in preparedness mode for the upcoming rainy season in September, while still managing ongoing outbreaks.

The mortality associated with these outbreaks is of particular concern. Many countries continue to report higher CFR than in previous years. The average cholera CFR reported globally in 2021 was 1.9% (2.9% in Africa), a significant increase above the targeted rate (<1%) and the highest recorded in over a decade. The global annual report for 2022 will be consolidated in the coming months.

Considering the varying surveillance systems, case definitions and confirmatory capacities among countries reporting cholera, cases and deaths reported need to be interpreted with caution and cannot readily be compared between countries. In this document, cholera cases refer to the sum of suspected and confirmed cases, if not further specified within the country-specific context.



Figure-1: Global situation of epidemics of cholera and acute watery diarrhea reported in 2023, as of 15 June 2023

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WHO regions	Country, area,	Suspected	Total	Cases	CFR	Reporting	Reporting
	territory	/Confirmed	deaths	per 100	(%)	start	end
		cases		000			
Region of Africa	Burundi	529	9	4	1.7	08/12/2022	15/06/2023
	Kenya	11 359	184	22	1.6	05/10/2022	14/06/2023
	Malawi	58 821	1 761	294	3	28/02/2022	12/06/2023
	Nigeria	1 851	52	1	2.8	01/01/2023	28/05/2023
	Zambia	757	14	4	1.8	21/01/2023	15/06/2023
	Cameroon	19 087	450	68	2.4	01/10/2021	12/06/2023
	Democratic Republic	24 562	156	26	<1	01/01/2023	12/06/2023
	of the Congo						
	Ethiopia	11 082	154	10	1.4	01/08/2022	15/06/2023
	Mozambique	32 665	141	102	<1	01/09/2022	15/06/2023
	South Africa	924	38	2	4.1	29/01/2023	15/06/2023
	Zimbabwe	2 594	65	15	2.5	12/02/2023	15/06/2023
	Eswatini ¹	2	0	< 1	0	27/03/2023	18/04/2023
	South Sudan ²	348	1	2	<1	22/02/2023	18/03/2023
	United Republic of	85	3	< 1	3.5	01/02/2023	05/06/2023
	Tanzania						
Region of the	Haiti	50 026	745	432	1.5	02/10/2022	15/06/2023
Americas	Dominican Republic	99	0	1	0	17/10/2022	15/06/2023
Eastern	Afghanistan**	68 634	31	209	< 1	01/01/2023	10/06/2023
Mediterranean	Pakistan***	9 343	0	< 1	0	01/01/2023	15/06/2023
Region	Somalia	9 768	28	79	<1	01/01/2023	11/06/2023
	Yemen	3 878	4	13	<1	01/01/2023	11/06/2023
	Syrian Arab Republic	74 482	6	337	< 1	01/01/2023	15/06/2023
	Lebanon	8 007	23	146	<1	05/10/2022	02/06/2023
	Northwest Syria	92 461	712	1 998	<1	16/09/2022	11/06/2023
South-East Asia	Bangladesh (Cox's	116	0	13	0	01/01/2023	15/06/2023
Region	Bazar)						
Western Pacific	Philippines	1 911	10	2	<1	01/01/2023	03/06/2023
Region							

Table -1. Cholera cases and deaths reported to WHO from WHO regions, as of 15 June 2023^{*}

* Case and death numbers presented are unreliable due to differences in case definitions, reporting systems, and underreporting overall. All data are subject to verification and change due to data availability and accessibility. Respective figures and numbers will be updated as more information becomes available. The data in Table 1 includes suspected, rapid diagnostic test (RDT) positive and culture confirmed cholera cases. No cholera cases of local transmission have been reported in the European Region.

- ** Afghanistan reports Acute Watery Diarrhoea (AWD).
- *** Refers to the number of tests conducted.

¹ There were no further cases reported since situation report #2

² As of 18 March, confirmation of the outbreak by culture conducted on 13 samples, including three PCR positive samples, was unsuccessful. The reported case numbers in this situation report are updated to reflect those test results.

Focus on selected countries

The epidemiological situation and additional analysis of selected provinces, countries and regions with active cholera outbreaks as of 15 June 2023 are described below.

South Africa

Since the reporting of two initial imported cases in February 2023 in Gauteng Province, and a period of low local transmission during March and April 2023, the country has seen an upsurge of cases since mid-May 2023, with the majority of cases reported from Hammanskraal township in Gauteng Province. As of 15 June 2023, a total of 924 cases and 38 deaths with CFR 4% have been reported from 12 districts in five provinces: Gauteng, Free State, Limpopo, Northwest and Mpumalanga. While the number of new weekly reported cases is decreasing each week, cases were reported in new areas in the last four weeks.

Figure- 2. South Africa cumulative cholera cases reported nationally (left) and number of suspected and confirmed cholera cases reported nationally per notification date (right) as of 15 June 2023



South-East Africa

Since mid-May in Malawi and Mozambique, significant improvements in the epidemiological situations have been reported with a fewer number of cases and less geographic spread. In contrast, a surge in the number of cases has been reported in South Africa with an ongoing spread to new areas. The Democratic Republic of the Congo, Mozambique, and Zimbabwe continue to report a few hundred cases each week, while the trend is plateauing in recent weeks.





Malawi

In Malawi, a downward trend in both number of cases and deaths continues to be observed. As of 12 June 2023, a total of 58 821 cases and 1761 deaths with CFR 3% have been reported. In the last four weeks (16 May – 12 June 2023), 223 new cases and five deaths were reported. This is a decrease of over 80% in both cases and deaths compared to the preceding four-week period. Most of the recent cases have been detected from Chikwawa district in the Southern region, including some imported cases from Mozambique. Eleven out of all 29 districts in Malawi have not reported any new cases in the last four weeks.



Figure-4. Malawi cholera attack rates in the last 28 days (left), number of cases in Chikwawa district (right), as of 15 June 2023

Mozambique

In Mozambique as of 15 June 2023, 32 665 cases and 141 deaths have been reported with a CFR of 0.4% from all 11 provinces. While the national epidemiological situation is beginning to show signs of stabilization, 21 districts continue to report an average of over 400 new cases each week. The majority of new cases are reported from Cabo Delgado, Nampula, Zambezia, and Sofala provinces. Despite this, more than two-thirds of the 64 cholera-affected districts in the country have not reported any new cases in the last four weeks.



Figure-5. Mozambique cholera attack rates in the last 28 days (left), number of cases in affected districts (right), as of 15 June 2023

Zimbabwe

The cholera outbreak in Zimbabwe began on 12 February 2023, in Chegutu town, Mashonaland West Province. As of 15 June 2023, there have been 2594 total cases reported, of which 663 were culture confirmed, and 65 deaths with CFR 2.5%. Since the middle of May, an upsurge in the number of cases has been observed, with over 75% of the new cases reported from Manicaland and Harare provinces. In the last four weeks (16 May – 15 June 2023), 1633 new cases and 40 new deaths with CFR 2.4% were reported. Cumulative, 601 RDTs with 121 positive (20 % positivity) and 663 of 783 positive cultures (79% positivity) have been conducted.



Figure-6. Zimbabwe cholera attack rates in the last 28 days (left), number of cholera cases in affected districts (right), as of 15 June 2023

Democratic Republic of the Congo

Since the surge in the number of cases in the Democratic Republic of the Congo (DRC) in mid-March 2023, the country has seen a decrease in cases which has reached a plateau at an average of roughly 1000 cases per week. This represents a much higher weekly case incidence compared to the same time period over the last two years, where less than 500 cases per week were reported. As of 12 June 2023, a total of 24 562 cases and 156 deaths were reported with CFR 0.6%. From 15 May to 12 June 2023, 5295 cases and 47 deaths with CFR of 0.9% were reported. While the majority of cases in 2023 were reported from the North-Kivu province, the past four weeks have shown increases in case incidence in the neighboring South-Kivu (1455 cases between 15 May to 12 June vs 165 cases between 18 April to 14 May, 782% increase) and Tanganyika (601 cases between 15 May to12 June vs 225 cases between 18 April to 14 May, 167% increase). Especially health zones along the lake shores of Lake Tanganyika and Lake Kivu are showing an increase in cases in recent weeks.

In addition, severe flooding occurred in the Kalehe district, South Kivu between 2 to 4 May, displacing large numbers of people and causing damage to infrastructure, further increasing the risk of a cholera outbreak. While no cases have been reported from the flood affected district as of 12 June, the situation needs close monitoring. Affected areas share borders with Burundi and hitherto unaffected Rwanda, increasing the risk for cross-border transmission.

Figure-7. Cholera situation in DRC. A) Weekly percentage change in cholera cases in North and South Kivu. B) National cholera cases and deaths DRC. C) Cases of cholera by district for select districts in North and South Kivu as of 12 June 2023.



*Note different scales per province.

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Data Source: World Health Organization, Ministry of Health Democratic Republic of the Congo Map Production: World Health Organization Map Date: 15 June 2023

Horn of Africa

In Kenya since October 2022 and as of 14 June 2023, 11 359 cases and 184 deaths with CFR 1.6% have been reported. In the last four weeks (16 May – 14 June 2023), 978 new cases and 18 new deaths have been reported with CFR 1.8%, which indicates a decrease of 31% in cases and 25% in deaths, compared to the preceding four weeks. On average, around 200 new cases are reported each week, including from newly affected areas.

In Ethiopia, since August 2022, and as of 15 June 2023, a total of 11 082 cases and 154 deaths with CFR 1.4% have been reported. In the last four weeks, around 900 new cases are reported each week from Oromia, Somali, Sidama and Southern Nations, Nationalities and Peoples (SNNP) regions located in the southern part of the country, which borders with Kenya.

In Somalia, since the beginning of the year, and as of 11 June 2023, a total of 9768 cases and 28 deaths with CFR 0.3% have been reported. In the last four weeks, 1795 new cases and two deaths have been reported with CFR 0.1%. While the epidemiological trends have been stabilizing, an average of about 400 new cases are reported each week. Jubaland and Southwest regions near the borders with Kenya and Ethiopia remain the most affected areas of the current outbreak.

Figure-8. The Horn of Africa region cholera attack rate per 100 000 population between March to June 2023, as of 15 June 2023*



Northwest Syria

From 16 September 2022 and as of 10 June 2023, 92 461 suspected cholera cases, and 23 deaths with CFR <1% have been reported in Northwest Syria. It is important to note that the drop in the number of reported suspect cases from week 5 (30 January – 4 February 2023) to week 6 (5 – 12 February 2023) is likely the result of disruption to surveillance activities following the severe earthquake on 6 February 2023. In the weeks following the earthquake, the incidence of suspected cholera cases quickly increased to levels observed prior to the earthquake. Since mid-April an increase in cases to over 3000 new cases each week has been observed, with cases reaching their historical peak in the current outbreak, between 4 to 10 June 2023.

Figure-9. Northwest Syria cumulative cholera cases by affected districts (left), number of cholera cases (right), as of 10 June 2023



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Data Source: World Health Organization, EWARN, Assistance Coordination Unit Map Production: World Health Organization Map Date: 15 June 2023



Haiti

From September 2022 to 15 June 2023, 48 653 suspected cholera cases and 750 deaths with CFR of 1.5% have been reported across all ten departments in Haiti. The majority of cases were reported from the Ouest, Artibonite, Centre, and Nord departments. As of 15 June 2023, among confirmed cases, age groups 1-4 and 5-9 are the most affected. Since the beginning of 2023, the number of new suspected cases per week has gradually declined month over month, stabilizing at approximately 700 per week from March to May. The first half of June has seen a resurgence in cases in the Ouest, Centre, and Nord departments. In the most recent week (8 - 15 June), 2548 suspected cases and seven deaths with a CFR of 0.3% were reported. There is a risk of further deterioration due to the start of the hurricane season which is expected to last until late November. Recent heavy rains and flooding have thus far caused displacement of over nine thousand people.

Figure-10. Haiti suspected cholera cases and deaths by administration level-1 (left) and suspected cholera cases (right), as of 15 June 2023



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Operational updates

WHO is working with partners at global, regional and country level to support Member States in the following cholera outbreak response activities:

Coordination

- In response to acute needs in countries and with thanks to key partners, supporting the deployment of experts through the Global Outbreak Alert and Response Network (GOARN), Standby Partners (SBP), Emergency Medical Teams (EMT) in addition to weekly information exchange on operational updates for cholera response through GOARN Weekly Ops call forum
 - As of 29 June 2023, seven experts have been deployed to Malawi, Mozambique, and Kenya through GOARN to support the cholera response, for the functions of health operations, case management, social anthropologist and epidemiology. Following the Inter-Agency Standing Committee (IASC) System wide scale-up, a Request for Assistance was issued for Haiti on 13 June 2023.
 - As of 29 June 2023, six experts have been deployed to four countries (Malawi, Mozambique, Cameroon, Haiti) through SBPs to support the cholera response for the functions of Information Management, Partner/Cluster Coordination, Preventing and Responding to Sexual Exploitation, Abuse and Harassment (PRSEAH), Infection Prevention and Control (IPC)/ Water, Sanitation and Hygiene (WASH). An additional, a WASH specialist will be deployed to Haiti from early August for 6 months.
- The Global Task Force on Cholera Control (GTFCC) annual meeting took place in late June 2023, providing an additional forum to interact, coordinate and align with multi-sectoral partners on the response to the multi-country resurgence in cholera. The Global Incident Management Support Team presented to the GTFCC, outlining the support from WHO and UNICEF to the WHO Cholera Team and global cholera partners.

Surveillance

- Public health surveillance
 - Disseminating and promoting Global Task Force on Cholera Control (GTFCC) revised guidance on public health surveillance for cholera [EN] [FR].
 - Disseminating and promoting GTFCC technical recommendations on standard data and metadata sets for cholera reporting to the regional and global level. The template is available for cholera reporting at the regional and global levels.
 - Providing technical support to countries/regions as well as assistance in data management and analysis on a case-by-case basis.
 - Fostering coordination with countries, regions and partners for strengthening cholera surveillance.
 - Disseminating and promoting GTFCC revised guidance for the identification of <u>Priority Areas for Multisectoral Interventions</u> to maximize the use of surveillance data for cholera-affected countries to develop or revise a National Cholera Plan (NCP) for cholera control.
 - Developing updated GTFCC guidance on public health surveillance for cholera, including additional guidance and practical tools for data collection, reporting, and analysis.

- Laboratory
 - Disseminating and promoting GTFCC recommendations for testing for cholera [EN] [FR].
 - Disseminating and promoting GTFCC laboratory resources (Job Aids, Fact Sheet, other guidance).
 - Providing technical support to countries as well as assistance in development of country laboratory strengthening plans on a case-by-case basis.
 - Developing a GTFCC toolkit and associated guidance for detailed cholera laboratory capacity assessments to highlight gaps and needs to target for support, particularly in relation to Priority Areas for Multisectoral Interventions.
 - Developing recommendations for minimum standards for laboratory capacity in cholera affected countries.
 - Developing GTFCC tools and materials for cholera diagnostics training of trainers for laboratory personnel.

Vaccination

- Since the start of 2023 and as of 30 June 2023, a total of 42.1 million doses have so far been requested of which 16.4 million (39%) have been approved for 11 countries.
- By the end of June, 15 reactive vaccination campaigns (Cameroon, the Dominican Republic, the Democratic Republic of the Congo, Ethiopia (2), Haiti, Kenya, Malawi, Mozambique (3), Somalia, Northwest Syria (2), Zambia) have been implemented (with start date in 2023)
- In the current outbreak context, only one-dose courses have been validated and implemented in these reactive campaigns. Doses for preventive campaigns cannot be supplied due to the low global stockpile.
- The available (not yet allocated) global OCV stockpile on 4 July was 2.6 million doses
- Additional OCV requests for Kenya and Ethiopia are being assessed
- Coordination between WHO offices in Ethiopia, Kenya and Somalia to address the required strategy for a potential OCV campaign in the border regions of the three countries (Mandera Triangle)

Case management, Infection Prevention and Control (IPC) & Water, Sanitation and Hygiene (WASH)

- Providing technical support to countries including field deployments to South Africa and dissemination of technical guidance
- Continue to promote decentralization of treatment and use of existing Community Health Worker programmes to support early treatment of cholera
- Ongoing development of a package of tools to support implementation and management of Oral Rehydration Points (ORPs), in collaboration with the GTFCC Case Management working group

Operations Support and Logistics (OSL)

- Ongoing fulfilment of supply orders for countries experiencing outbreaks.
- Work ongoing to resolve continued local administrative issues impeding deliveries in specific countries
- Replenishment of WHO supply hubs in numerous regions to ensure availability of stock for rapid action and sending of bulk supplies to countries with concerning outbreaks.
- Ongoing engagement with UNICEF to improve coordination on cholera supplies in an increasingly resource constrained environment.
- Multi agency global cholera supply dashboard undergoing testing

Key Challenges

As noted above the geographical spread and global surge in cases is due to and has resulted in numerous challenges:

- Exacerbation of cholera outbreaks due to natural disasters and climatic effects
- Data quality and reporting, including issues in consistency of reporting and insufficient disaggregation of data for vulnerable groups, especially for children aged under 5 years
- Constrained availability of critical cholera supplies, including case management materials and kits
- Insufficient OCV stock to respond to all concurrent cholera outbreaks, with OCV shortage leading to suspension of preventive campaigns and change from a two dose to a one dose strategy
- Exhausted national cholera response capacities and overall overstretched emergency response capacity due to numerous parallel large-scale and high-risk outbreaks and other public health emergencies
- Insufficient experienced cholera response staff available for deployments to support national emergency response
- Inadequate financial resources to respond in a timely and effective manner across all levels
- A lack of resources (financial and material) for readiness and preparedness activities.

Next Steps

To address the challenges identified above WHO, UNICEF and partners will continue to work together.

- Updated cholera scenario planning/prioritization for a potential severe El Nino event (global, regional and country level)
- WHO will continue to advocate for investment in cholera response, highlighting that long term investment is critical for a sustainable solution, and in interim investment is needed for rapid emergency response to the current surge in cases.
- WHO and UNICEF will continue to work together and with other partners to streamline the critical cholera material pipeline to maximize the availability based on prioritization of needs
- WHO and partners including the GTFCC will continue to support Ministries of Health and implementing partners with the latest available information and material to enable prevention and response activities in the current constrained environment
- WHO, UNICEF and partners will continue to work together to maintain focus on the cholera emergency, to mobilize resources and lobby for long term solutions to reduce the cholera burden.

Annex 1. Data, table, and figure notes

Caution must be taken when interpreting all data presented. Differences are to be expected between information products published by WHO, national public health authorities, and other sources using different inclusion criteria and different data cutoff times. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change. Case detection, definitions, testing strategies, reporting practice, and lag times differ between countries/territories/areas. These factors, amongst others, influence the counts presented, with variable underestimation of true case and death counts, and variable delays to reflecting these data at the global level.

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Technical guidance and other resources

- Cholera fact sheet
- Ending Cholera, A Global Roadmap To 2030
- Global cholera strategic preparedness, readiness, and response plan 2023/24
- WHO's Call for urgent and collective action to fight cholera
- Disease outbreak news Cholera Democratic Republic of the Congo
- Disease outbreak news Cholera Haiti
- Disease outbreak news Cholera Malawi
- Disease outbreak news Cholera Mozambique
- Disease outbreak news Cholera-Global situation
- Global Task Force on Cholera Control (GTFCC)
- Public health surveillance for cholera- Interim guidance, February 2023 [EN] [FR]
- AFRO Weekly outbreaks and emergency bulletin
- WHO AFRO Cholera Dashboard
- Cholera outbreak in Hispaniola 2022 Situation Report
- Cholera upsurge (2021-present) web page