

Multi-country outbreak of cholera

External Situation Report #7, published 5 October 2023

Risk assessment
Global risk – Very high

Countries/areas/territories affected
29

In this edition:

- [Highlights](#)
- [Epidemiological update](#)
- [Focus on selected countries](#)
- [Operational updates](#)
- [Key Challenges](#)
- [Next Steps](#)

Highlights

Data as of 15 September 2023

- Since the last [situation report](#) on the multi-country outbreak of cholera was published on 6 September 2023 (covering data reported until 15 of August), and as of 15 September 2023, a new outbreak of acute watery diarrhoea (AWD) was reported from Iraq. In total, 29 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 16 countries reporting cholera cases since the beginning of the year. While the number of reported cases has been plateauing at low levels in several countries including Malawi and Mozambique, flare-ups of cases and geographic spread to new areas are observed in some countries including the Democratic Republic of the Congo, Burundi and Zimbabwe.
- In the Horn of Africa, the number of cases and deaths in the 'Mandera triangle', where the borders of Ethiopia, Kenya, and Somalia meet have remained stable since mid-August. In Ethiopia, further geographic spread has been observed in the last four weeks. As of 13 September 2023, a total of 143 woredas in eight regions (Afar, Amhara, Benishangul Gumz, Dire Dewa, Harari, Oromia, Sidama, Southern Nations, Nationalities and Peoples (SNNP)) are experiencing an active cholera outbreak. In Sudan, amid the ongoing conflict, around 500 suspected cases of cholera have been reported.
- WHO continues to work with partners at the global, regional and country levels to support Member States in responding to the outbreaks.

Epidemiological update

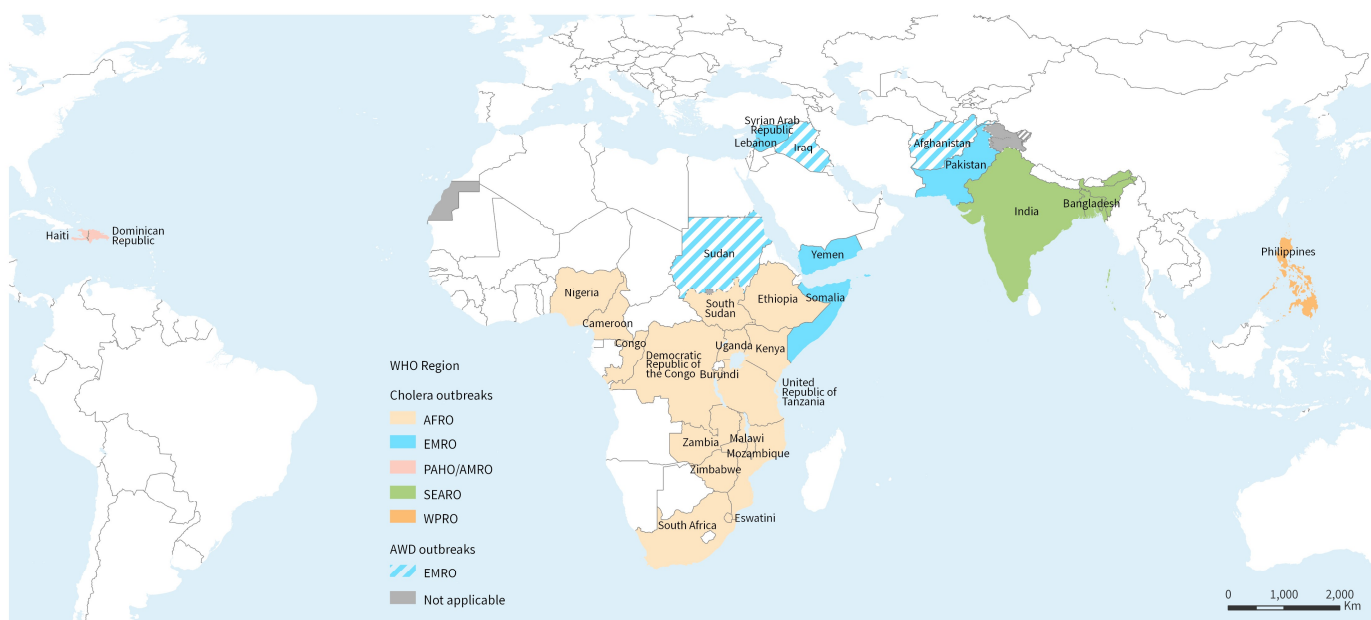
Since the beginning of the year and as of 15 September 2023, at least 29 countries have reported cholera and/ or AWD cases (Table 1). Countries in West Africa are currently in the rainy season, which typically spans from May to October, and is historically associated with an elevated risk of transmission. The rainy season is also approaching in many south-eastern African countries over the coming months including, Malawi, Mozambique, Burundi, Tanzania, and Zimbabwe, indicating a need for stronger cholera preparedness activities will be required in these countries.

According to the [2022 global cholera annual report](#) published on 22 September 2023, in 2022 globally, the number of cholera cases reported to WHO more than doubled, from 223 370 cases reported in 2021 to 472 697 cases in 2022. In terms of mortality, 2349 cholera-associated deaths were reported to WHO globally in 2022 with a case-fatality rate (CFR) of 0.5% (1.9% in Africa). Despite the apparent decrease in CFR both globally and in Africa, excluding Nigeria, there was a threefold increase in crude deaths. In 2022, several countries that had not reported cholera in many years, reported large outbreaks including Lebanon and Syria. In addition, seven countries reported very large outbreaks (> 10 000 cases), more than double the number of countries reporting these outbreaks in the past three years.

In 2023, based on preliminary reporting from Member States (which may not be directly comparable to the official reporting to WHO from the previous years), the number of cases has surpassed that of the previous years as of 15 September 2023 with 582 219 cases and 4543 deaths, with an associated CFR of 0.8%.

Considering the varying surveillance systems, case definitions and laboratory 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 diarrhoea reported in 2023, as of 15 September 2023



The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: World Health Organization
 Map Production: WHO Health Emergencies Programme
 Map Date: 15 September 2023

 **World Health Organization**
 © WHO 2023, All rights reserved.

Table -1. Cholera cases and deaths reported from WHO regions, as of 15 September 2023*

WHO Region	Country, area, territory	Suspected /Confirmed cases	Total deaths	Cases per 100 000	CFR (%)	Reporting start	Reporting end
Region of Africa	Burundi	884	9	7	1	08/12/2022	15/09/2023
	Cameroon	20 460	484	73	2.4	01/10/2021	10/09/2023
	Democratic Republic of the Congo	35 965	286	38	< 1	01/01/2023	10/09/2023
	Eswatini ¹	2	0	< 1	0	27/03/2023	18/04/2023
	Congo	21	5	< 1	23.8	17/07/2023	12/08/2023
	Ethiopia	23 449	317	21	1.4	01/08/2022	13/09/2023
	Kenya	12 102	202	23	1.7	05/10/2022	10/09/2023
	Malawi	58 996	1 768	295	3	28/02/2022	12/09/2023
	Mozambique	34 501	144	108	< 1	01/09/2022	15/09/2023
	Nigeria	2 860	84	1	2.9	01/01/2023	27/08/2023
	South Africa	1 388	47	2	3.4	29/01/2023	31/08/2023
	South Sudan ²	348	1	2	< 1	22/02/2023	18/03/2023
	United Republic of Tanzania	289	1	< 1	< 1	14/05/2023	30/07/2023
	Zambia	891	19	5	2.1	21/01/2023	12/09/2023
	Zimbabwe	3 974	101	23	2.5	12/02/2023	15/09/2023
	Uganda	77	10	< 1	13	07/07/2023	24/08/2023
Region of the Americas	Dominican Republic	111	0	1	0	17/10/2022	15/09/2023
	Haiti	62 693	879	541	1.4	02/10/2022	13/09/2023
Eastern Mediterranean Region	Somalia	13 069	33	306	< 1	01/01/2023	10/09/2023
	Afghanistan**	158 809	79	485	< 1	01/01/2023	09/09/2023
	Lebanon	8 007	23	146	< 1	05/10/2022	02/06/2023
	Pakistan***	14 065	0	< 1	0	01/01/2023	15/09/2023
	Sudan [§]	500	13	1	2.6	15/04/2023	14/09/2023
	Syrian Arab Republic ³	119 152	7	539	< 1	01/01/2023	02/09/2023
	Yemen	5 674	7	19	< 1	01/01/2023	15/09/2023
South-East Asia Region	India ⁴	1 043	1	< 1	< 1	22/06/2023	21/07/2023
	Bangladesh (Cox's Bazar)	121	0	14	0	01/01/2023	12/08/2023
Western Pacific Region	Philippines	2 732	16	3	< 1	01/01/2023	19/08/2023

* 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 AWD through the sentinel site surveillance system.

*** Refers to the number of tests conducted.

§ Sudan reported AWD cases.

¹ There were no further cases reported since situation report #2, 15 May 2023

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

³ In previous editions, cases were reported separately for the Northwest governorates (Idlib and Aleppo). From this edition onwards, data from all Syrian governorates will be consolidated.

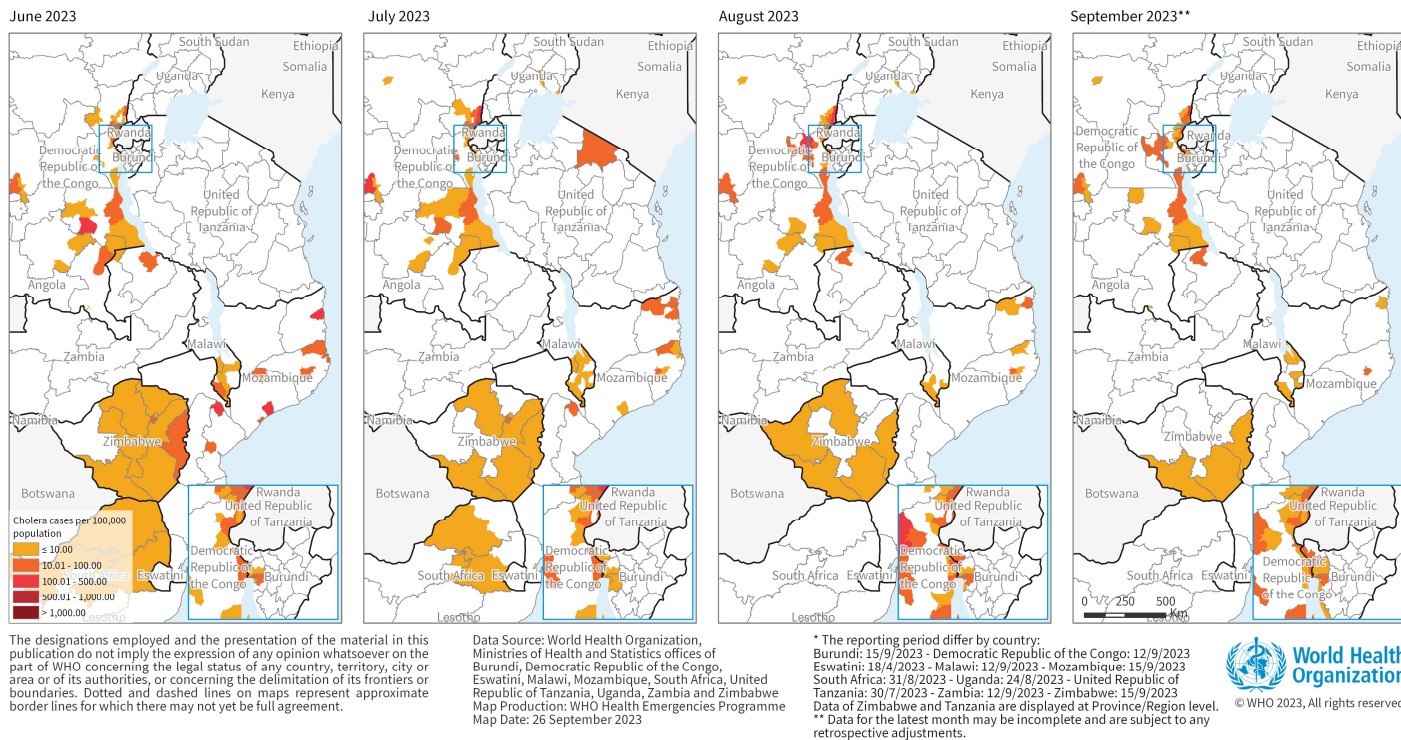
⁴ Integrated Disease Surveillance Program: National Centre for Disease Control, Directorate General of Health Services:
<https://idsp.nic.in/index4.php?lang=1&level=0&linkid=406&lid=3689>

Focus on selected countries

Central and south-east Africa

The WHO African Region remains the most affected region with 16 countries reporting cholera cases since the beginning of the year. The outbreaks in many south-east African countries, continue to slow down and plateau in several countries including Malawi and Mozambique. However, flare-ups of cases and further geographic spread to new areas are observed in some countries, including the Democratic Republic of the Congo, Burundi and Zimbabwe.

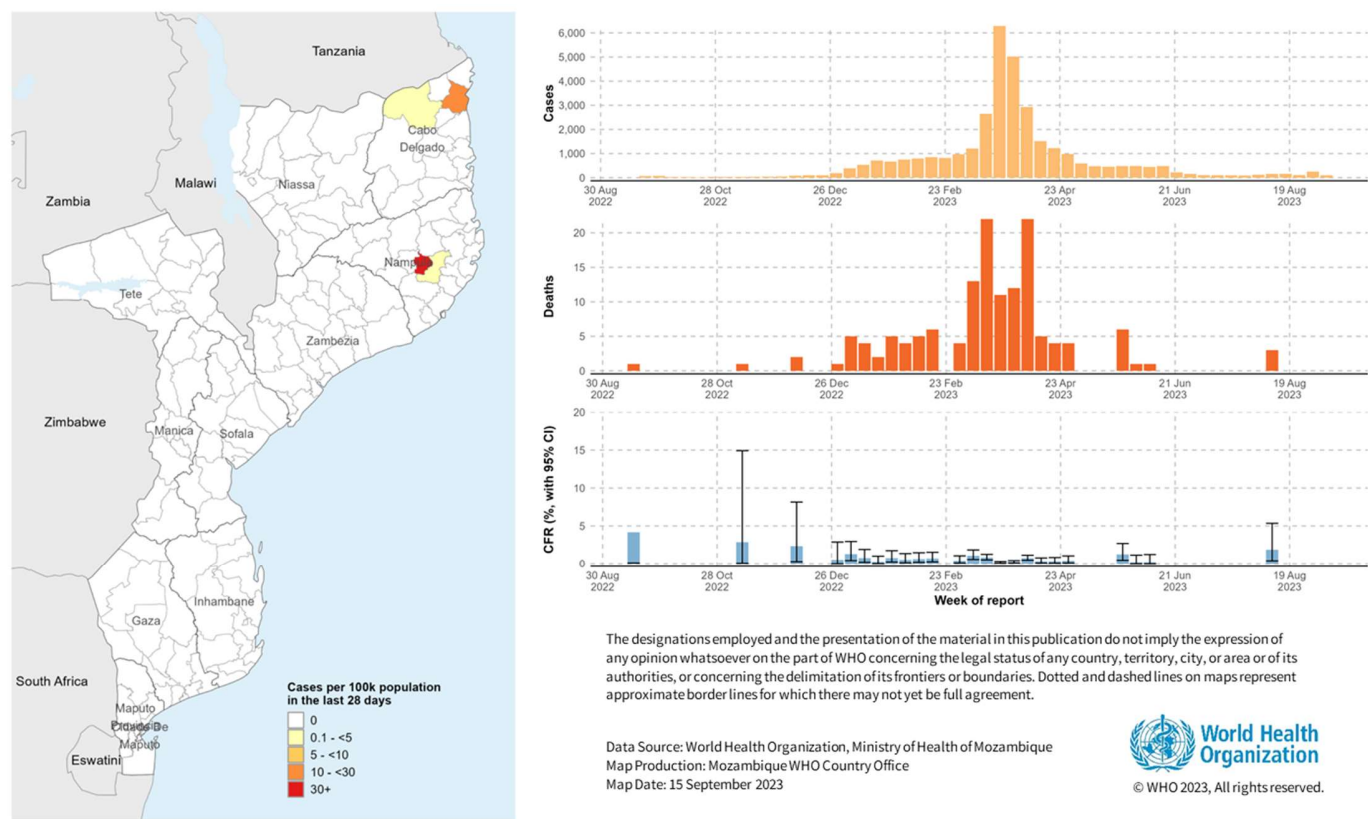
Figure 2: Central and South-East Africa attack rate per 100 000 (suspected and confirmed cholera cases per month) between June to September 2023, as of 15 September 2023*



Mozambique

In Mozambique as of 15 September 2023 cumulatively, 34 501 cases and 144 deaths have been reported from all 11 provinces, with a CFR of 0.4%. The epidemiological situation continues to stabilize in almost the entire country. In the last four weeks, new cases have been reported mainly from two provinces, Cabo Delgado and Nampula, with an average of 150 cases reported each week. As of week 36, 2023, three out of 161 total districts in the country are reporting an active outbreak of cholera (with cases reported in the last 30 days).

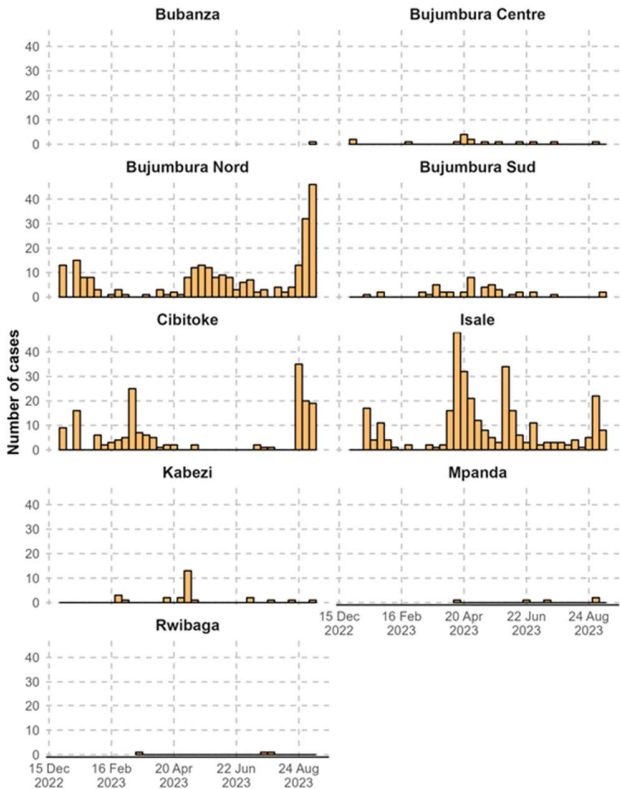
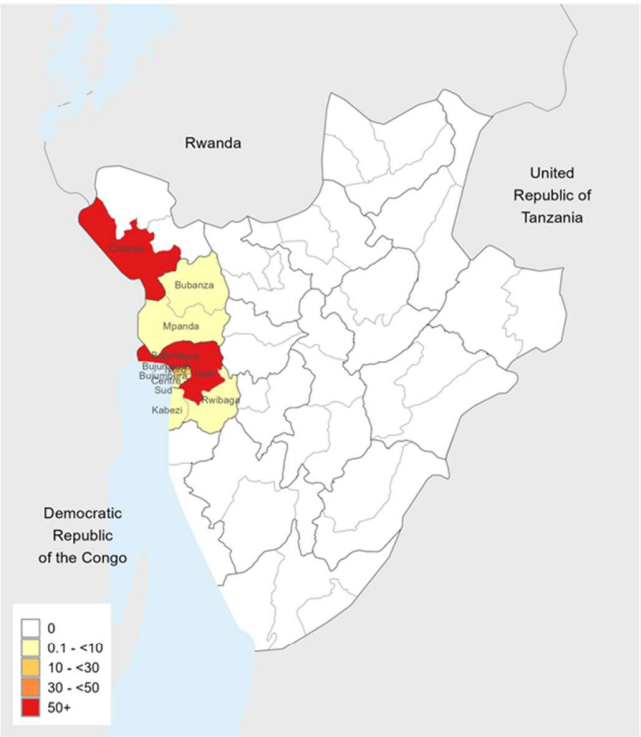
Figure-3. Mozambique: cholera attack rates in the last 28 days (left), number of cases, deaths, and CFR (right), as of 15 September 2023



Burundi

The current cholera outbreak in Burundi started in December 2022. As of 15 September, cumulatively 884 cases and nine deaths with CFR 1% have been reported from nine districts in four provinces: Bubanza, Bujumbura, Cibitoke, and Mairie. These areas are located mostly around Lake Tanganyika and share borders with the Democratic Republic of the Congo. Since mid-August, the highest number of cases have been reported since the onset of the outbreak, with an average of over 50 cases reported each week. Limited access to clean drinking water and poor hygiene conditions in some parts of the country remain the main challenges.

Figure-4. Burundi: cumulative cholera cases by district (left), and number of cases(right), as of 15 September 2023



The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, city, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: World Health Organization, Ministry of Health of Mozambique
Map Production: Mozambique WHO Country Office
Map Date: 15 September 2023

 World Health Organization
© WHO 2023, All rights reserved.

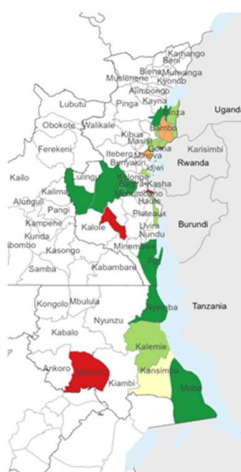
Democratic Republic of the Congo

Since the surge in cholera cases in the Democratic Republic of the Congo (DRC) in mid-March 2023, the country has seen a decrease in cases, which has plateaued at an average of roughly 1000 new cases per week. This represents a much higher weekly case incidence compared to the same time period over the last two years, where fewer than 500 cases per week were reported. As of 10 September 2023, cumulatively, 35 965 cases and 286 deaths were reported, with CFR 0.8%. Looking at the recent four week period from 14 August to 10 September 2023, 4084 cases and 56 deaths with a CFR of 1% were reported. While the majority of cases in 2023 were reported from the North Kivu province, a surge in cases in South Kivu and Tanganyika was observed in June and early July. These increases were most prominent in health zones along the shores of Lake Tanganyika and Lake Kivu. Cholera incidence declined in South Kivu in July; however, it has increased again in September to levels near the July peak. In Tanganyika, incidence has remained high and relatively stable since June.

Figure-5. Cholera situation in DRC. Cumulative cholera cases reported in 2023 and weekly percentage change in North Kivu, South Kivu, and Tanganyika (left). National cholera cases in DRC, by province (right).

DRC: Cumulative cases of cholera
reported between 02 January, 2023 and 10 September 2023

DRC: Changes in cases in the last 7 days
Comparing cases reported between 04 September and 10 September 2023 vs. 28 August and 03 September 2023

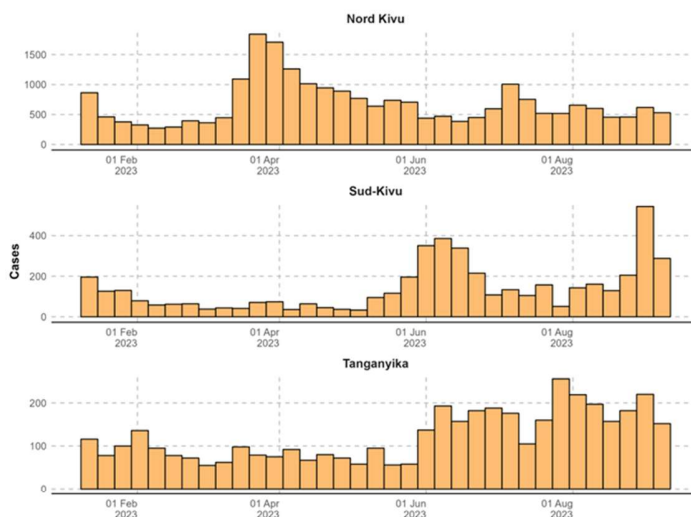


Cumulative cases

1 - <100 100 - <1000 1000 - <3000 3000 - <5000 5000+

Percent change

No cases Increasing by 50+% Limited change (10-10%) Increasing by 10-50% Decreasing by 10-50% Decreasing by 50+%



*Note different scales per province.

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, city, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

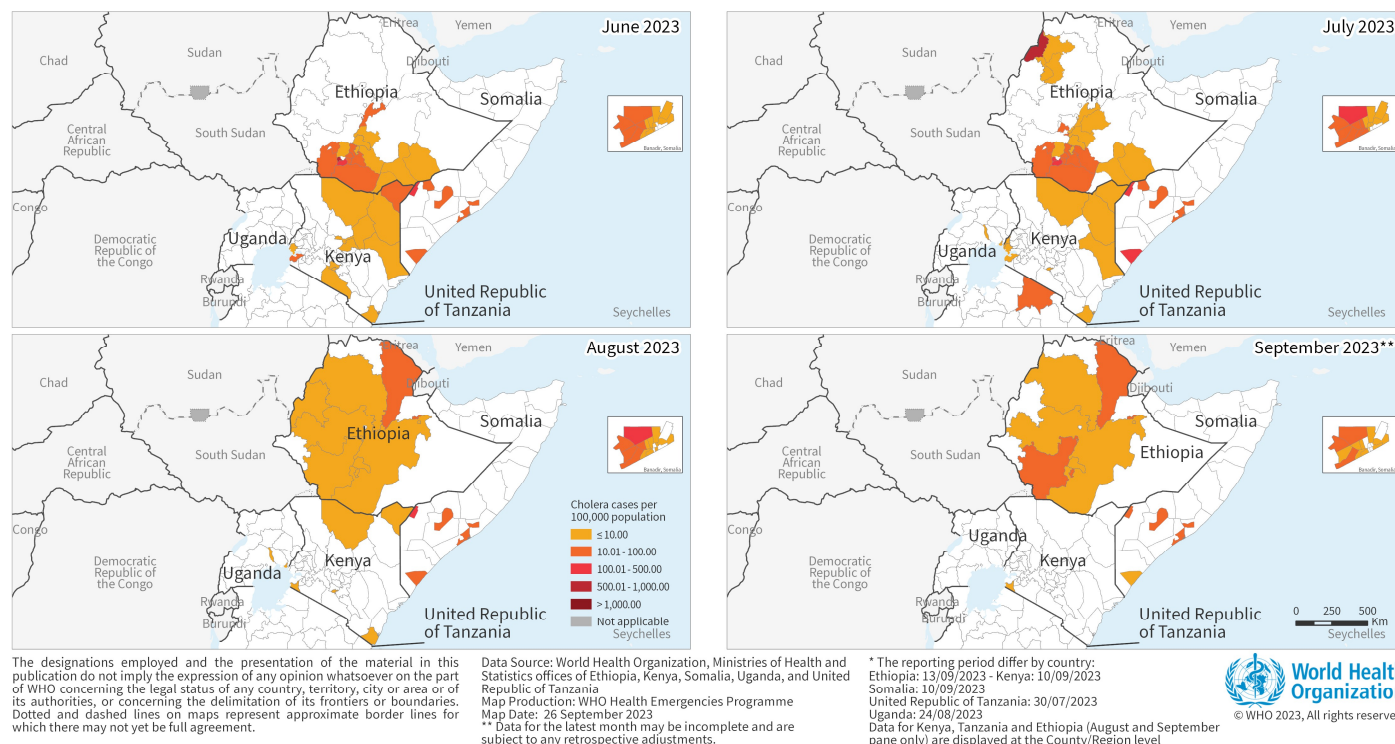
Data Source: World Health Organization, Ministry of Health Democratic Republic of the Congo
Map Production: World Health Organization
Map Date: 10 September 2023



© WHO 2023, All rights reserved.

Horn of Africa

Figure 6: The Horn of Africa region cholera attack rate per 100 000 population between June to September 2023, as of 15 September 2023



In Kenya since October 2022 and as of 10 September 2023, 12 102 cases and 202 deaths with CFR 1.7% have been reported. The number of new cases has been plateauing since the beginning of July. In the last four weeks, an average of around 30 new cases have been reported each week. The majority of the cases have been reported from Migori county which is located in the south-west part of the country sharing the border with Uganda and Tanzania.

In Ethiopia, since August 2022 and as of 13 September 2023, a total of 23 449 cases and 317 deaths with CFR 1.4% have been reported. In the last four weeks, around 800 new cases have been reported each week. Further geographic spread has been reported and as of 13 September 2023, a total of 143 woredas in eight regions (Afar, Amhara, Benishangul Gumuz, Dire Dawa, Harari, Oromia, Sidama, Southern Nations, Nationalities and Peoples (SNNP)) are experiencing an active cholera outbreak.

In Somalia, since the beginning of the year and as of 10 September 2023, a total of 13 069 cases and 33 deaths with CFR 0.3% have been reported. In the last four weeks, 927 new cases and three new deaths were reported. While the epidemiological trends have been stabilizing, an average of about 230 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.

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 a support from key partners, experts were deployed 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 Operations call.
- As of 15 September 2023, thirteen experts have been deployed to Malawi, Mozambique, Kenya, Lebanon and Haiti through GOARN to support the cholera response, for the functions of health operations, case management, social anthropology and epidemiology/surveillance.
- As of 15 September 2023, eleven experts have been deployed (for a duration of 3 to 6 months each) to five countries (Malawi, Mozambique, Cameroon, Haiti, Turkey) through the Standby Partners 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) and Risk Communication and Community Engagement (RCCE). Additional experts for RCCE, Surveillance, IPC are in process to be deployed to support the cholera outbreak response in Ethiopia in the coming weeks.
- WHO appreciates the support received from Standby Partners for this response so far: Norwegian Refugee Council (NORCAP) and CANADEM (deployment funded by United Kingdom Foreign, Commonwealth & Development Office (UK FCDO)).

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 [Priority Areas for Multisectoral Interventions](#) to maximize the use of surveillance data for cholera-affected countries to develop or revise a National Cholera Plan (NCP) for cholera control. The guidance is available in English, Arabic, French, and Portuguese.
- 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).
- Fostering coordination with countries, regions, and partners for strengthening cholera laboratories.
- Providing technical support as well as assistance in the development of country laboratory strengthening plans on a case-by-case basis.
- Developed a GTFCC toolkit and guidance for detailed cholera laboratory capacity assessments to highlight gaps and needs to target for support. Preparing for roll out in first four countries.
- Working with the operations support and logistics team to facilitate ordering and access to laboratory supplies using the WHO catalogue resources; Technical support at regional and country levels for identification of field and laboratory diagnostic supply needs as required.
- Working with the Gavi Alliance to support procurement of RDT to support cholera surveillance (including outbreak monitoring) for Gavi-eligible countries.
- 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 26 September 2023, a total of 60 million doses of OCV have been requested, of which 22 million (36%) have been approved for 11 countries and 7 million are pending ICG decision or further information from the countries. The available (not yet allocated) global OCV stockpile is 7.2 million doses as of 25 September.
- Since the beginning of the year, 21 reactive vaccination campaigns (Cameroon (2), the Dominican Republic, DRC, Ethiopia (4), Haiti, Kenya (3), Malawi, Mozambique (3), Somalia (2), Northwest Syria (2), Zambia) were implemented.
- 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.

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

- During recent outbreaks, the lack of decentralization of care has been identified as a potential contributing factor to high case fatality. To support countries to strengthen decentralization of treatment, WHO and the GTFCC Case Management Working Group have drafted guidance to set-up and manage oral rehydration points (ORPs). The package is currently being reviewed by partners, including partners in the field.
- Additional tools to improve clinical care in treatment centres were also developed (posters, job aids).
- Ongoing support to Mozambique, Burundi and DRC on specific topics – Water Quality Monitoring, decommissioning, WASH coordination.
- Dissemination of GTFCC guideline for the Water Quality Monitoring during outbreaks (environmental surveillance).
- Capacity building webinar with national health authorities and WHO staff from affected countries on the WASH response. The webinar focused on cross-pilar response, transmission route, direct WASH action in health care facilities, communities and specific cases.
- WASH impact related to the El Niño phenomenon presented to the regional cholera platform for western Africa.
- Ongoing support to Ethiopia for infection prevention and control activities has been enhanced by the arrival of an IPC specialist deployed through Standby Partners to Amhara to support quality of care in cholera treatment centres and cholera treatment units.

Operations Support and Logistics (OSL)

- Rebuilding cholera kit stocks in various hubs.
- Stocking bulk items for 50 000 patients, however there are challenges to source Ringer Lactate and possibly RDTs in the mid-term.
- Ongoing shipment of several orders for cholera kits, including laboratory material and bulk items, to various countries from the different supply platforms
- Ad hoc donation of short shelf-life items expiring next year.
- Ongoing discussion to identify the optimum stock level in the different supply hubs, keeping in mind both cost and efficiency.

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 under 5 years of age.
- 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.
- Limited 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 prevention, 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 Niño 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 the 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 cut-off 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.

‘Countries’ may refer to countries, territories, areas or other jurisdictions of similar status. The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories, and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers’ products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted; the names of proprietary products are distinguished by initial capital letters.

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](#)