

Multi-country outbreak of cholera

External Situation Report #3, published 1 June 2023

Risk assessment	Countries/areas/territories affected			
Global risk – Very high	24			

In this edition:

- Highlights
- Epidemiological update
- Focus on selected countries
- Operational updates
- Key Challenges
- Next Steps

Highlights

Data as of 15 May 2023

- Since the last situation report on the multi-country outbreak of cholera was published on 11 May 2023 (covering data reported until 18th of April), no new country reported a cholera outbreak. In total, 24 countries have reported cases since the beginning of 2023.
- The WHO African Region remains the most-affected region with 14 countries reporting cholera cases since the beginning of 2023. Clusters of cases in new geographic areas have been reported in Cameroon, the United Republic of Tanzania, Zambia, and Zimbabwe. While Mozambique and the Democratic Republic of the Congo continue to report large number of weekly new cases, declining trends with lower number of weekly new cases have been observed in Malawi. After initial reports of imported cases and limited local transmission between February and March 2023 in South Africa, the situation is deteriorating since mid-May with increased local transmission and geographic spread (not covered by this report, which is based on data as of 15 May 2023). 1
- Since the middle of April 2023, further geographic spread continues to be reported in the Horn of Africa, especially around the Mandera triangle, where borders of Ethiopia, Kenya and Somalia meet and population movement drives transmission across borders.
- 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, as well as overstretched public health and medical personnel, who are dealing with multiple disease outbreaks and other health emergencies at the same time.
- Based on the increasing 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.

¹ South African government media statement: https://www.gov.za/speeches/minister-joe-phaahla-updates-cholera-outbreak

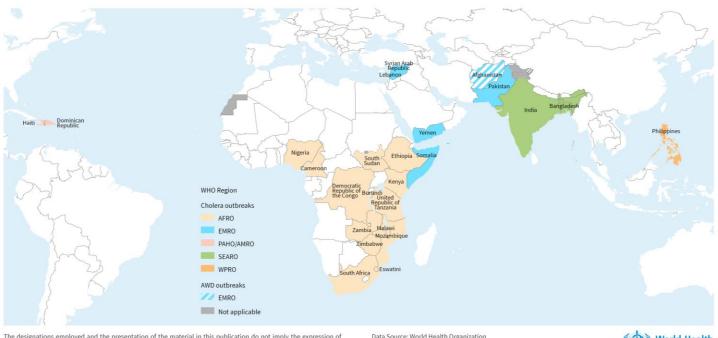
Epidemiological update

As of 15 May 2023, at least 24 countries have reported cholera cases since the beginning of the year (Table 1). During the same period in 2022, 15 countries had reported cholera cases. With reference to historical transmission patterns and seasonality, it is important to note that large parts of the world are currently in low or interepidemic transmission periods, therefore this number could increase in the months to come. The focus in the coming months will be on West Africa where the rainy season between May and October may result in heavy rains and flooding.

The mortality associated with the outbreaks is of particular concern as many countries continue to report higher case fatality ratios (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 May 2023



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Data Source: World Health Organization Map Production: WHO Health Emergencies Programme Map Date: 31 May 2023



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

WHO regions	Country, area, territory	Suspected /Confirmed cases	Total deaths	Cases per 100 000	CFR (%)	Reporting start	Reporting end
Region of Africa	Burundi	412	5	3	1.2	08/12/2022	15/05/2023
	Cameroon	16 859	374	60	2.2	01/10/2021	14/05/2023
	Democratic Republic of the Congo	20 098	104	21	<1	01/01/2023	14/05/2023
	Eswatini ²	2	0	<1	0	27/03/2023	18/04/2023
	Ethiopia	7 031	108	6	1.5	01/08/2022	15/05/2023
	Kenya	10 381	166	20	1.6	05/10/2022	15/05/2023
	Malawi	58 690	1 759	293	3	28/02/2022	15/05/2023
	Mozambique	30 425	131	95	<1	01/09/2022	15/05/2023
	Nigeria	1 917	72	1	3.8	01/01/2023	14/05/2023
	South Africa	122	1	<1	<1	29/01/2023	15/05/2023
	South Sudan ³	348	1	2	<1	22/02/2023	18/03/2023
	United Republic of Tanzania	85	3	<1	3.5	01/02/2023	05/05/2023
	Zambia	633	12	3	1.9	21/01/2023	14/05/2023
	Zimbabwe	961	25	6	2.6	12/02/2023	15/05/2023
Region of the Americas	Dominican Republic ²	99	0	1	0	17/10/2022	15/05/2023
	Haiti	45 029	686	389	1.5	02/10/2022	15/05/2023
Eastern	Afghanistan**	51 174	27	156	<1	01/01/2023	13/05/2023
Mediterranean Region	Lebanon	1 931	0	35	0	01/01/2023	15/05/2023
	Pakistan***	7 314	0	<1	0	01/01/2023	15/05/2023
	Somalia	7 973	26	65	<1	01/01/2023	14/05/2023
	Syrian Arab Republic ⁴	40 862	6	185	0	01/01/2023	08/04/2023
	Yemen	3 014	3	10	<1	01/01/2023	07/05/2023
	Northwest Syria	78 012	23	1 686	0	16/09/2022	13/05/2023
South-East Asia Region	Bangladesh (Cox's Bazar)	107	0	12	0	01/01/2023	14/05/2023
Western Pacific Region	Philippines	1 214	13	1	1.1	01/01/2023	29/04/2023

^{*} 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.

² There were no further cases reported since last situation report (sitrep#2)

³ 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.

⁴ No further information available since last situation report (sitrep#2).

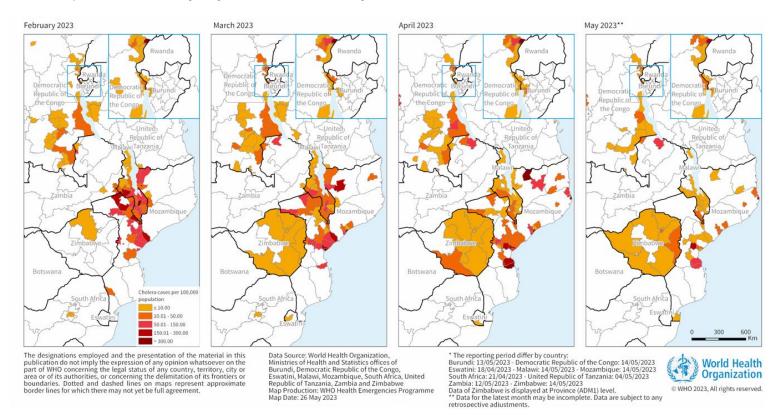
Focus on selected countries

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

South-East Africa

In South-East Africa, the epidemiological situation has been stabilizing and the weekly trend in cases has continued to decrease in Malawi and is plateauing in Mozambique since the region was hit by the devastating tropical Cyclone Freddy between February and March 2023. Conversely, further geographic spread has been reported in Tanzania and Zambia, and an increasing number of cases in Zambia and Zimbabwe, since the middle of April.

Figure-2. South-East Africa attack rate per 100 000 (suspected and confirmed cholera cases per month) between January - April 2023, as of 14 May 2023*



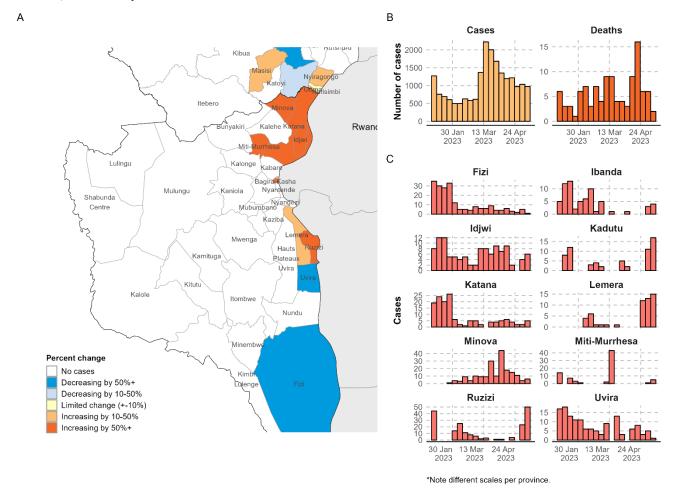
Democratic Republic of the Congo

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 over 1000 cases per week. As of 14 May 2023, a total of 20 170 cases and 108 deaths were reported, with a CFR of 0.5% (95% Confidence Interval (CI) 0.4-0.6%). From 17 April to 14 May 2023, 4195 cases and 30 deaths with CFR 0.7% (95% CI 0.4-1.0%) were reported. This represents a much higher weekly case incidence compared to the same time over the last two years, during which less than 500 cases per week were reported. While the highest burden of cases this year was in the Nord-Kivu province, the past two weeks have shown increases in case incidence in the neighboring Sud-Kivu (211 cases between 1-14 May vs 70 cases between 17-30

April). Districts observing a spike in cases in the past week include Lemara, Kadutu and Ruzizi. Affected areas share borders with Burundi and hitherto unaffected Rwanda, increasing the risk for cross-border transmission.

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 this district as of 15 May, the situation needs close monitoring.

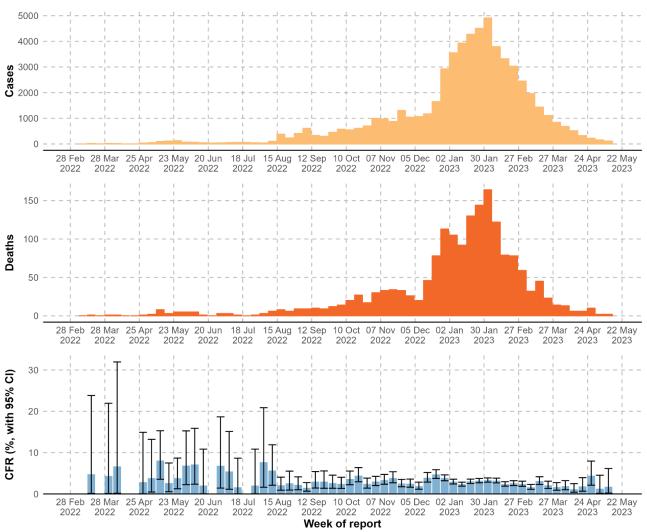
Figure-3. Cholera situation in DRC. A) Weekly percentage change in cholera cases, Sud-Kivu province (1-7 May compared to 8 – 14 May). B) National cholera cases and deaths DRC. C) Cases of cholera by district for select districts, Sud-Kivu province.



Malawi

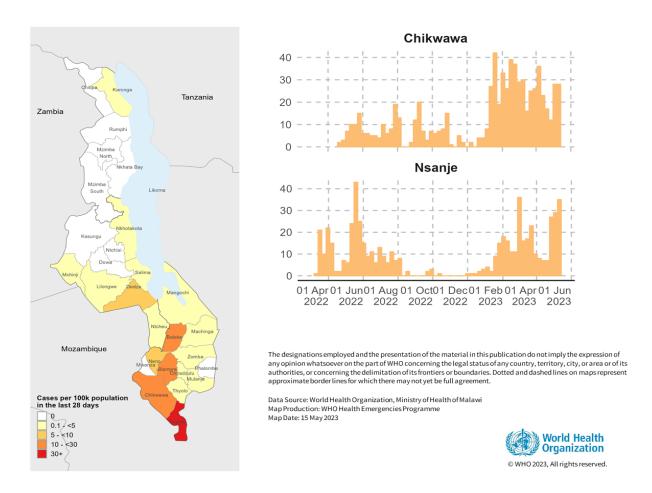
The cholera outbreak in Malawi has lasted for over a year. From 28 Feb 2022 to 15 May 2023, 58 690 cases and 1759 deaths with cumulative CFR 3.0% have been reported from all 29 districts of the country, making it the biggest active cholera outbreak in Africa. Since the middle of April, both the numbers of weekly cases and deaths continue to decline. In the last 28 days (17 April – 15 May 2023), 1722 new cases and 32 new deaths with CFR 1.9% were reported. This is a decrease of 45% and 43% in the incidence of cases and deaths respectively, compared to the preceding 28-day period (20 March – 16 April 2023). In the past four weeks, most of the cases have been reported from the Nsanje and Chikwawa districts in the Southern region, where cross-border surveillance activities with neighboring Mozambique are ongoing.

Figure-4. Malawi national cholera cases, deaths and CFR reported per epidemiological week as of 15 May 2023



CFR shown for cases with 10+ cases and 1+ death

Figure-5. Malawi cholera attack rates in the last 28 days (left), number of cases in Chikwawa and Nsanje districts (right), as of 15 May



Mozambique

Cholera is endemic in Mozambique. The current outbreak in the country started in Niassa province on 14 September 2022, however the situation worsened after heavy rains in February 2023 and the impacts of Cyclone Freddy (first landfall on 22 February and the second on 11 March) causing floods and affecting 1.2 million people in eight provinces of the country. This situation contributed to the geographic expansion of the cholera outbreak in the country, which has now affected 60 districts across all 11 provinces, including the capital of Maputo City. From 14 September 2022 to 15 May 2023, 30 425 cases and 131 deaths were reported with CFR 0.4%. The epidemiological situation is beginning to show signs of stabilization in almost the entire country, however outbreaks persist in the remaining active districts across 10 provinces.

Figure-6. Mozambique national cholera cases, deaths and CFR reported per epidemiological week as of 15 May 2023

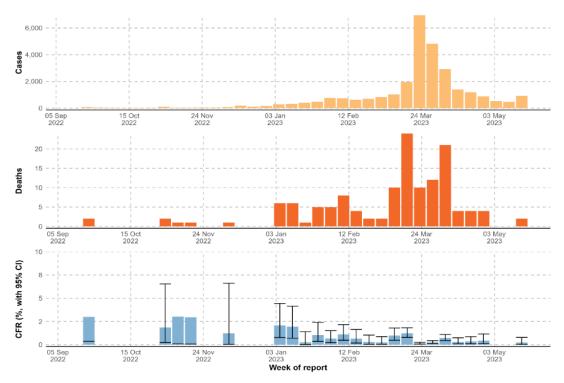
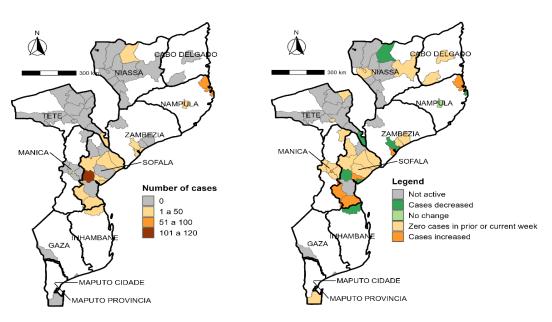


Figure-7. Mozambique number and trend of cholera cases reported in the past seven days per district, as of 15 May 2023



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



Zimbabwe

Zimbabwe has been reporting cases of cholera since 12 February 2023. As of 15 May 2023, there have been 961 suspected cholera cases reported, of which 278 were culture confirmed, and 25 deaths (CFR 2.6%). Cases have been reported from all ten provinces in the country, without epidemiological link to each other. The majority (75%) of cases have been reported from Manicaland, Matabeleland South, and Harare. In the last 28 days (19 April – 15 May 2023), 486 new cases and 16 new deaths with CFR 3.3% were reported. Among samples tested, 101 of 254 tested positive by rapid diagnostic tests (RDTs) (40 % positivity) and 278 of 506 tested positive by culture (49% positivity).

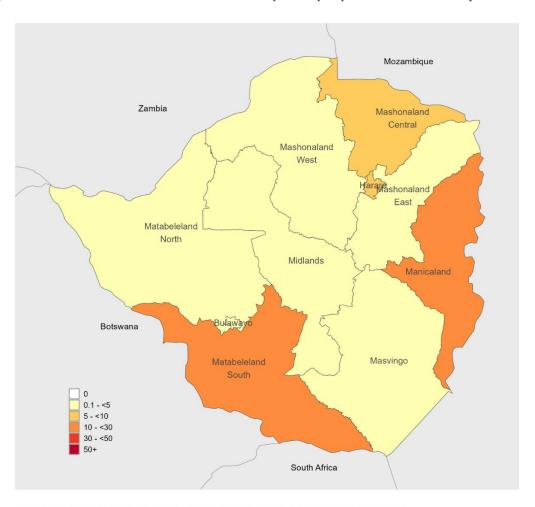


Figure-8. Zimbabwe number of cholera cases reported per province as of 15 May 2023

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Data Source: World Health Organization

Map Production: WHO Health Emergencies Programme

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Figure- 9. Zimbabwe number of cholera cases reported nationally per epidemiological week as of 15 May 2023

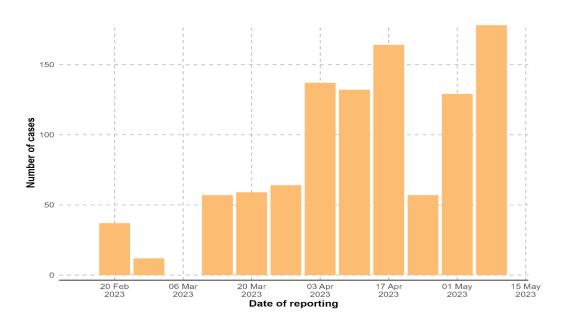
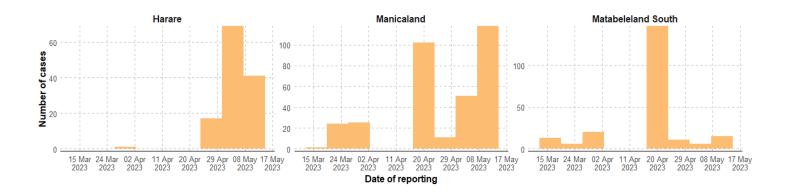


Figure- 10. Zimbabwe cholera cases reported in most affected provinces per epidemiological week as of 15 May 2023



Horn of Africa

The Horn of Africa countries, Ethiopia, Kenya and Somalia, continue to report active outbreaks of cholera. While recent rains are starting to ease the impacts of the most prolonged drought on record, they have also resulted in flash flooding across parts of the region, with additional flooding expected later this year.5 The outbreaks are also impacted by the ongoing conflicts in the region. A large number of cases have been reported in areas where the borders of the three countries meet (Mandera triangle).

In Kenya, where the outbreak began in October 2022, the outbreak reached a large geographic spread with 23 out of 47 counties affected. As of 15 May 2023, 10 381 cases and 166 deaths with CFR 1.6% were reported. In the last 28 days, 1421 new cases and 24 deaths have been reported with CFR 1.7%, which indicates a decrease of 14% in both cases and deaths, compared to the preceding 28-day period. Despite this decrease in cases the geographic spread continues with three additional counties – Kisumu, Siaya, and Isiolo – starting to report cases in the reporting period.

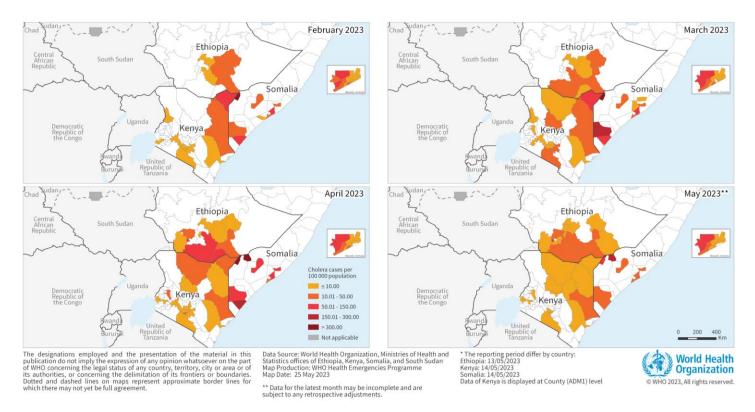
In Ethiopia, since August 2022 and as of 15 May 2023, a total of 7031 cases and 108 deaths have been reported. The country continues to report increasing number of cases and deaths in Oromia, Somali, and Southern Nations, Nationalities and People's regions located the southern part of the country. In the last 28 days, 3170 new cases and 39 new deaths have been reported with CFR 1.2%, which is an increase of 80% and 56% in cases and deaths, respectively.

In Somalia, since the beginning of the year to 14 May 2023, a total of 7973 cases and 26 deaths with CFR 0.3% have been reported. In the last 28 days, 2444 new cases and nine deaths have been reported with CFR 0.4%. While the epidemiological trends have been stabilizing, on average about 600 cases continue to be reported each week. Jubaland and South-west regions near the borders with Kenya and Ethiopia remain the major focus of the current outbreak.

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⁵ Horn of Africa Drought Regional Humanitarian Overview & Call to Action (Revised 26 May 2023): https://reliefweb.int/report/ethiopia/horn-africa-drought-regional-humanitarian-overview-call-action-revised-26-may-2023

Figure-11. The Horn of Africa region cholera attack rate per 100 000 population between February to May 2023, as of 14 May 2023



Cameroon

In Cameroon, the current cholera outbreak was declared by health authorities on 29 October 2021 and has been ongoing since then. Following a period of low transmission from December 2022 to end of March 2023, a strong increase in cases has been noted in the weeks since late March 2023. From 25 March to 14 May 2023, 1508 cases and 64 deaths with CFR 4.3% have been reported from five regions, with the focus of the outbreak being Yaoundé in the Centre region, the capital of the country, where 1449 cases (96% of total cases) are reported.

Figure-12. Cameroon number of cholera cases reported per week as of 14 May 2023

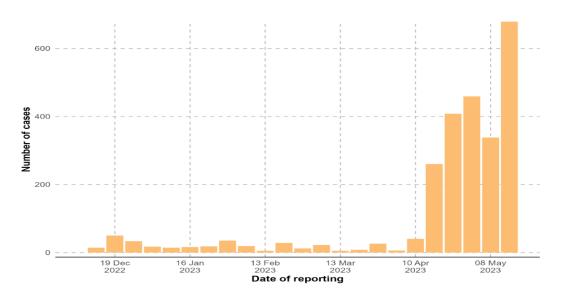
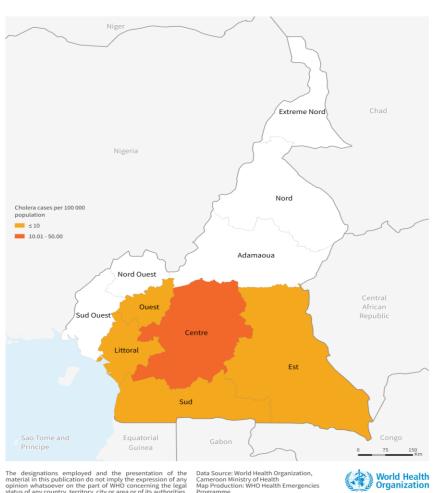


Figure-13. Cameroon cholera cases per 100 000 population per region as of 14 May 2023



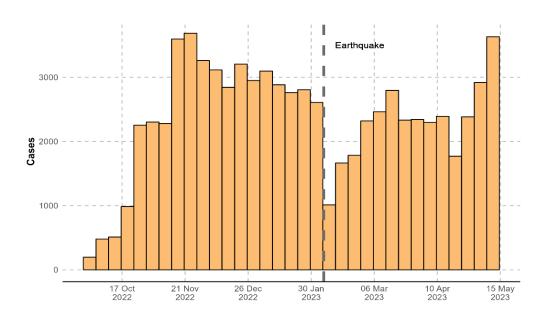
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Data Source: World Health Organization, Cameroon Ministry of Health Map Production: WHO Health Emergencies Programme Map Date: 26 May 2023

Northwest Syria

From 16 September 2022 to 14 May 2023, 78 012 suspected cholera cases, and 23 deaths with CFR <1% have been reported in Northwest Syria. 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 following weeks, the incidence of suspected cholera cases quickly increased to levels observed prior to the earthquake; in recent weeks a further weekly increase has been observed, with cases nearing a historical peak in the current outbreak, between 8 - 14 May.





Haiti

After more than three years with no cases, on 1 October 2022, Haiti national authorities reported two confirmed cases of cholera in the greater Port-au-Prince area. As of 15 May 2023, the Department of Epidemiology, Laboratories, and Research (DELR) have reported 42 351 suspected cases and 2678 confirmed cases in all ten departments of the country. While a downward trend in the number of cases has been observed since January 2023, a recent upsurge in cases was noted in the beginning of May 2023, especially in the Ouest and Centre departments. Challenges remain in the response activities due to the complex humanitarian and socio-political crisis, with high levels of insecurity, fuel shortages and economic instability, limiting access to health and basic water, hygiene and sanitation services, as well supplies.

Figure-15: New suspected cholera cases in Haiti reported comparing EW 18 to EW 19, 2023

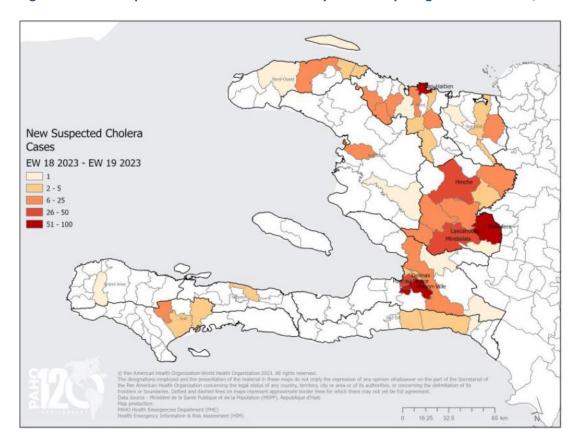
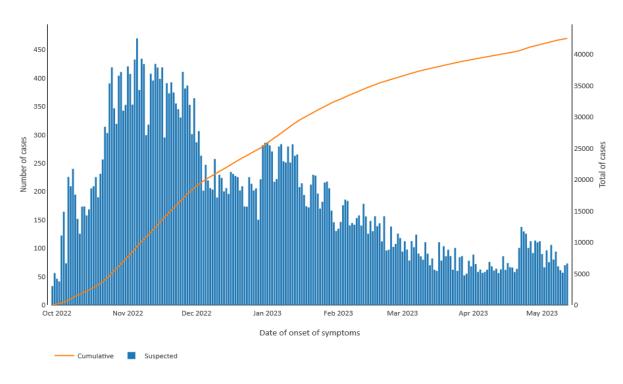


Figure-16: Daily distribution of suspected cases of cholera in Haiti from 29 September 2022 to 15 May of 2023



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

- Published the Global Strategic Preparedness, Readiness and Response Plan (SPRRP) on 19 May 2023, in coordination with the UNICEF Call to Action. The WHO SPRRP and UNICEF Call to Action intend to raise awareness and resources for the following 12 months of emergency response activities whilst continuing to support the long-term goal of cholera control through existing cooperation with the GTFCC and national governments.
- Following a global rapid risk assessment, WHO extended the internal acute grade 3 designation (major/maximal response) for the global cholera event. This will be reviewed again in September 2023.
- 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) in addition to weekly information exchange on operational updates through GOARN Weekly Ops call forum
 - As of 30 May 2023, five experts have been deployed to Malawi and Mozambique through GOARN to support the cholera response, for the functions of health operations, case management, social anthropologist and epidemiology.
 - As of 30 May 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)
- Providing a forum for technical expertise exchange through the Global Task Force on Cholera Control (GTFCC) platform, and cooperation with partners to strengthen countries' capacity to prevent and control.

Surveillance

Public health surveillance

- Disseminating and promoting 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.
- 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.
- Fostering coordination with countries, regions and partners for strengthening cholera surveillance.

Developing updated GTFCC guidance on public health surveillance for cholera, including additional guidance and practical tools for data collection, reporting, and analysis.

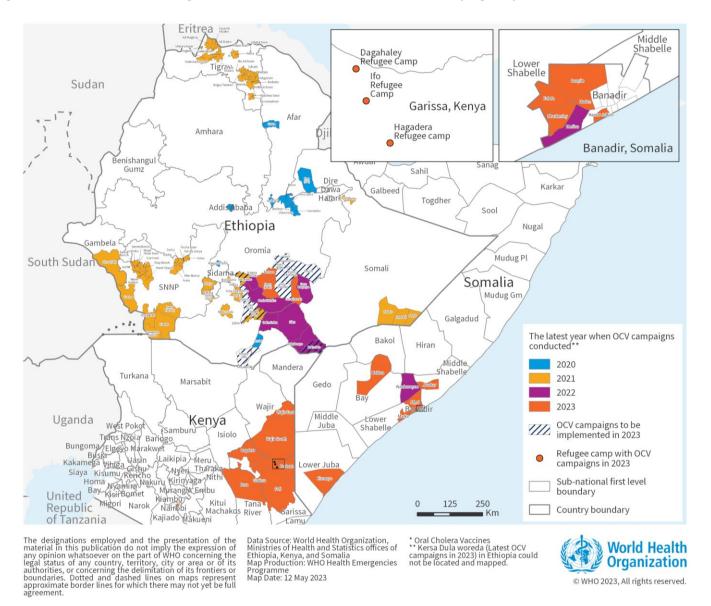
Laboratory

- Providing technical support to countries as well as assistance in development of country laboratory strengthening plans on a case-by-case basis
- Developing GTFCC toolkit and associated guidance for detailed cholera laboratory capacity assessments
- Developing recommendations for minimum standards for laboratory capacity in cholera affected countries
- Planning cholera diagnostics training of trainers for laboratory personnel

Vaccination

- In 2023, nearly 8.2 million doses of the oral cholera vaccine (OCV) have been approved by the International Coordination Group (ICG). By the end of May, 12.3 million OCV doses have been shipped, of which 8.2 million are related to 2023 requests.
- > By the end of May, 13 reactive vaccination campaigns have been implemented or are under implementation (the Democratic Republic of the Congo, Somalia, Cameroon, Kenya, Ethiopia (two), Mozambique (three), Northwest Syria, the Dominican Republic, Malawi and Haiti) of which eight are related to 2023 requests.
- 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.
- > WHO South-East Asia Regional Office conducted international training on the use of OCV in outbreak response and prevention from 22 to 26 May.

Figure-17. The Horn of Africa region status of oral cholera vaccine (OCV) campaigns by second-level administrative unit



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

- Working to improve access to cholera treatment by decentralization of care.
- > Implementing a scale-down strategy in countries with decreasing cases while ensuring adequate levels of clinical care, maintenance of IPC measures and adequate WASH services.
- > Ongoing support to countries on rational use of personal protective equipment based on risk exposure assessment.

• Risk communication and community engagement (RCCE)

- > Since March 2023 four webinars have been organized which focused on communities' role in managing cholera. The fifth and final webinar in the series will be held in June.
- > Interim guidance for RCCE in cholera outbreaks is under development, developed in coordination with the Collective Service.
- Infographics with key RCCE messages on cholera protective behaviours are under development. A key message bank is available in Arabic, Chinese, English, French, Russian, Spanish and Portuguese.

Operations Support and Logistics (OSL)

- The decreased case trend in the past month in some of the countries release the pressure on the existing tension with the suppliers, however some unavailable kits continue to be substituted with bulk items that are in stock currently being replenished in Dubai.
- > The team is working to avail a stock for emergency laboratory items in bulk in the coming weeks.
- An emergency shipment of cholera supplies was sent to Cameroon; support is being given to South-East Asia Regional Office to respond to the Mocha cyclone in Myanmar.
- > All priority countries in Southern Africa have received most of needed material especially for case detection and laboratories, however there are still bottlenecks due to strict and long importation procedures in places.

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 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 at country level

Next Steps

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

- WHO and UNICEF will continue to work together and with 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 except, 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
- 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)
- AFRO Weekly outbreaks and emergency bulletin
- WHO AFRO Cholera Dashboard
- Cholera outbreak in Hispaniola 2022 Situation Report
- WHO Health Emergency Appeal 2023
- Cholera upsurge (2021-present) web page