

Regional Strategic Preparedness, Readiness and Response Plan for Cholera





Regional Strategic Preparedness, Readiness and Response Plan for Cholera

January To December 2024



Table of Contents

List of acronyms	7
1. Introduction	9
2. Cholera transmission and clinical manifestation	11
2.1. Modes of transmission	11
2.2. Cholera in the environment	11
2.3. Clinical presentation	11
2.4. Laboratory diagnosis	12
2.5. Case management	12
2.6. Case reporting	13
2.7. Prevention and control	13
2.8. Cholera vaccine	14
3. The cholera situation in the WHO African Region	17
3.1. Overview	17
3.2. Challenges and complexities	17
3.3. Epidemiological data (Week 04, 2024)	17
3.4. Subregional analysis	19
3.5. Impact of concurrent epidemics and humanitarian crises	20
4. Objectives	23
4.1. General objective	23
4.2. Specific objectives	23
5. Rationale for cholera preparedness and readiness	25
6. Thematic areas and strategy	29
6.1. Strategic leadership, planning and multisectoral coordination	29
6.2. Early warning, surveillance and laboratory	30
6.3. Case management	31
6.4. WASH/IPC	32
6.5. Risk communication and community engagement	34
6.6. Vaccination	35
6.7. Operational support and logistics	36
6.8. Operational research and knowledge management	36
6.9. Strategic and operational partnership	36
7. Monitoring and Evaluation	41
8. Planning and Budget	43
8.1 Planning assumptions	43
8.2 Budget	43
References	45
Annex 1. Key performance indicators	46
Annex 2. Cholera outbreaks in 17 affected countries in WHO African Region in 2023	48



List of acronyms

AEFI	Adverse events following immunization	MYPOA	Multiyear plan of action
AFRO	WHO Regional Office for Africa	OCV	Oral cholera vaccine
AWD	Acute watery diarrhoea	ORP	Oral rehydration point
CFR	Case fatality ratio	ORS	Oral rehydrating solution
CHW	Community health worker	OSL	Operational support and logistics
CSO	Civil society organization	PAMI	Priority Area for Multisectoral Interventions
CTC	Cholera treatment centre	PCR	Polymerase chain reaction
CTU	Cholera treatment unit	PHEOC	Public Health Emergency Operation Centre
EMT	Emergency medical team	POE	Point of entry
FP	Focal point	PPE	Personal protective equipment
GOARN	Global Outbreak Alert and Response Network	PRSEAH	Preventing and responding to sexual exploitation, abuse and harassment
GTFCC	Global Task Force on Cholera Control	RCCE	Risk communication and community engagement
HAI	Health care-associated infection	RDT	Rapid diagnostic test
HCF	Health care facility	RRT	Rapid response team
HCW	Health care worker	SBC	Social and behaviour change
ICG	International Coordinating Group	SBP	Standby partnership
IDSR	Integrated Disease Surveillance and Response	SDB	Safe and dignified burial
IMS	Incident Management System	SDG	Sustainable Development Goal
IPC	infection prevention and control	SEAH	Sexual exploitation, abuse and harassment
JMP	WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene	SOP	Standard Operating Procedure
KPI	Key Performance Indicator	UNICEF	United Nations Children's Fund
MOH	Ministry of health	WASH	Water, sanitation and hygiene
		WHO	World Health Organization



1. Introduction

Cholera remains a global threat to public health and an indicator of inequity and inadequate social development. The World Health Organization (WHO) African Region is one of the regions most affected by cholera and, along with the Eastern Mediterranean Region, accounted for 90% of global cases and deaths in 2023 (1). The WHO African Region faces multiple challenges in controlling cholera, including poor water, sanitation and hygiene (WASH) infrastructure, population displacement, conflict, urbanization, climate change and weak health systems. However, there are also opportunities to accelerate action against cholera. These include the availability of effective tools and interventions, political commitment and leadership in the affected countries, the commitment of Member States to the implementation of the Regional Roadmap for cholera elimination by 2030, and the support and coordination of the Global Task Force on Cholera Control (GTFCC) and its partners.

Every death caused by cholera is preventable with access to safe WASH services, early detection, timely and effective case management, and the oral cholera vaccine (OCV). The Region is committed to the Global Roadmap to eliminate cholera by 2030. In October 2018, Member States adopted the Regional Framework for the Implementation of the Global Strategy for Cholera Prevention and Control, 2018–2030. This defines clear targets, indicators and milestones to address cholera's predisposing factors and to contribute to the Sustainable Development Goals (SDGs) and universal health coverage. Several countries across the African Region are implementing the Framework. Ending the public health impacts of cholera is within our reach.



2. Cholera transmission and clinical manifestation

2.1. Modes of transmission

Toxigenic *Vibrio cholerae*, the bacteria causing cholera, naturally inhabit fresh or brackish water. The primary source of cholera infection is typically water that either naturally contains *V. cholerae* or has been contaminated with the bacteria from the faeces of an infected individual, whether they show symptoms or not. Other frequent sources of infection include tainted fish and shellfish products, or leftover food that has not been adequately reheated. Person-to-person transmission, including of health care workers (HCWs) during outbreaks, is rare.

2.2. Cholera in the environment

V. cholerae can be found in a variety of aquatic environments, both temperate and tropical. Its presence is influenced by several factors, such as inorganic and organic matter in water and sediments, pH levels, changes in temperature and salinity. In times of epidemics, the toxigenic strains of *V. cholerae*, O1 or O139, can be found in local freshwater sources and in patients but they typically vanish from the environment once the epidemic is over. It is important to note that surface water sources are generally vulnerable to contamination by faecal matter. However, appropriate treatment can easily eliminate the organism from drinking water.

2.3. Clinical presentation

Cholera infection is primarily asymptomatic or results in mild gastroenteritis and is indistinguishable from other mild diarrhoea. Approximately one in 20 (5%) infected persons will have severe disease, characterized by:

- sudden onset;
- profuse diarrhoea, painless and watery, probably with flecks of mucus in the stool (“rice water” stools). The presence of blood in stools is not a characteristic of cholera;
- vomiting, usually early on in the illness;
- lack of fever (in the majority) – children are more often febrile than adults;
- dehydration, leading to tachycardia, loss of skin turgor, dry mucous membranes, hypotension and thirst;
- complications resulting from the effects of loss of fluids and electrolytes in the stool, such as muscle cramps and weakness;
- acidosis, peripheral vasoconstriction and, ultimately, renal and circulatory failure, arrhythmias and death if treatment is not given accurately and promptly.



2.4. Laboratory diagnosis

Isolation and identification of *V. Cholerae* serogroup O1 or O139 by means of the culture of a stool specimen or rectal swab with accompanying serotyping remains the gold standard for the laboratory diagnosis of cholera (2). When available, polymerase chain reaction (PCR) can be used for species identification (*V. cholerae*) and serogroup identification (O1/O139) and, if needed, confirmation of toxigenicity.

Rapid diagnostic tests (RDTs) for *V. cholerae* O1 and O139 are not a substitute for stool culture but can be used as an emergency diagnostic aid in the early detection of probable outbreak situations where stool culture is not immediately available, and in ongoing transmission scenarios to triage samples for culture and sensitivity confirmation. In such circumstances, arrangements should be made to preserve RDT positive samples in Cary-Blair transport medium, maintained at room temperature, and a proportion of these should be shipped to the next available microbiology laboratory with capabilities to perform culture and sero agglutination for presumptive identification of species (*V. cholerae*) and serogroup (O1/O139) and, if warranted, PCR for confirmation of toxigenicity (3). Rapid tests are ideal for surveillance purposes for sample triaging for further testing in laboratories (3), as the sensitivity and specificity may still need improvement.

Antibiotic sensitivity testing may be performed on confirmed *V. cholerae* O1/O139 case(s) to determine sensitivity patterns and inform on prevailing antibiotic resistance that occur in an outbreak. While sequencing does not inform public health response interventions, it may be considered, when resources and capacities permit, to generate data to understand regional or global transmission patterns and for pathogen genetic epidemiology. Laboratories may be required to provide other supportive testing services such as biochemistry (blood renal function tests, electrolyte analyses) to support clinical case management of suspected kidney injury and severe electrolyte imbalance.

2.5. Case management

Cholera treatment is focused on rehydration. Cholera patients should be evaluated and treated quickly. Oral rehydration solution (ORS), combined with intravenous rehydration, has been shown to reduce case fatality rates to below 1%, though the case fatality rate can go up to 30–50% if untreated (4).

Early administration of ORS is the mainstay for cholera treatment. It should begin as soon as symptoms develop, continue while the patient seeks medical care and be maintained until hydration returns to normal in the health care facility. Up to 80% of patients can be treated adequately by administering ORS (WHO/United Nations Children’s Fund [UNICEF] ORS standard sachet). Very severely dehydrated patients are treated through intravenous fluids, preferably Ringer’s lactate solution. Appropriate antibiotics can be given to severe cases to diminish the duration of diarrhoea, reduce the volume of rehydration fluids needed and shorten the period of *V. cholerae* (5). For children up to five years of age, supplementary zinc administration has proven effective in reducing the time of diarrhoea and the duration of subsequent diarrhoea episodes. To ensure timely access to treatment, oral rehydration points, cholera treatment centres (CTCs) or cholera treatment units (CTUs) should be set up among the affected populations when and wherever feasible (6).

Posters on signs and treatment protocols within health care facilities (HCFs) and oral rehydration points (ORPs) are essential to routinely guide HCWs to enable

prompt interventions. Early case detection with well-guided case management will contribute significantly to reduced case fatality and support the prevention of transmission. Good command of cholera case management will also reduce the risk of nosocomial infection within facilities and cholera care centres.

2.6. Case reporting

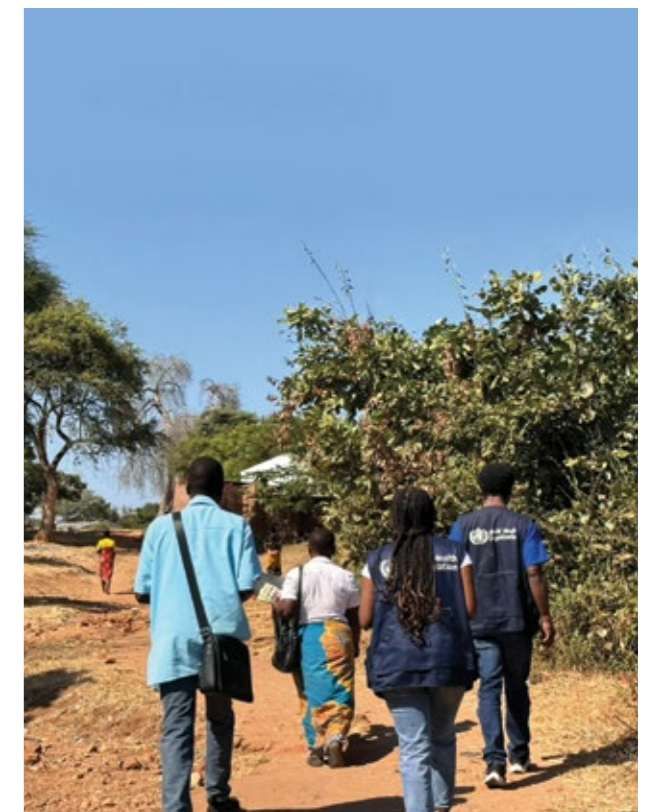
The International Health Regulations require National Health Authorities to assess the event based on the decision instrument so as to report the first confirmed cholera cases to WHO as soon as possible. Daily reporting is required where cholera is confirmed. Reports should include the number of new cases and deaths since the previous report and the cumulative totals for the current year. If available, information on the location of the cases should be provided. Once the presence of cholera in an area has been confirmed, it is not necessary to confirm all subsequent cases.

2.7. Prevention and control

Prevention and preparedness for cholera requires a coordinated multidisciplinary approach. Measures for the prevention of cholera consist mainly of providing proper sanitation and clean water to populations that do not yet have access to essential services (7). Health education and good food hygiene are equally important. Communities should ensure good hygiene behaviours, including effective handwashing with soap after defecation and before handling food or eating, as well as safe preparation and conservation of food (7). Appropriate media, such as radio, television and newspapers, should disseminate health education messages widely. Community and religious leaders and community health workers (CHWs) should complement mass media through grassroots networks for social mobilization.

In addition, strengthening surveillance and early warning helps significantly in detecting the first cases and putting in place control measures. Once an outbreak is detected, the usual intervention strategy aims to reduce case fatality below 1% by ensuring access to treatment and controlling the spread of the disease. The main control methods are:

- early detection and confirmation of cases;
- proper and timely case management in CTCs/CTUs;
- specific training for proper case management, including avoidance of nosocomial infections;
- sufficient pre-positioned medical supplies for case management (e.g. diarrhoeal disease kits);
- improved access to safe drinking water, safe excreta disposal, proper waste management and vector control;
- enhanced hygiene and food safety practices (e.g. safe food handling, preparation and storage);
- customized context-specific community engagement, communication and public information for behaviour change.



2.8. Cholera vaccine

OCV is an important tool for preventing and reducing cholera-related illness and death. WHO recommends that cholera vaccines be used in areas where the disease is endemic, during active outbreaks and in high-risk humanitarian areas in conjunction with other prevention and control strategies (8). During a cholera outbreak, OCV should be used in selected cholera hotspots. OCV should always be used in conjunction with other cholera prevention and control strategies (such as case management and emergency WASH).

WHO currently has three pre-qualified OCV; Dukoral®, Shanchol™ and Euvichol-Plus®. The vaccine can be given to all individuals above the age of one year. Two doses of Shanchol™ and Euvichol-Plus® protect against cholera for at least three years, while one dose provides short-term protection.

The International Coordinating Group (ICG) is an international group that manages and coordinates the

provision of emergency vaccine supplies and antibiotics to countries during major disease outbreaks. It is composed of members of WHO, Médecins Sans Frontières, UNICEF and the International Federation of Red Cross and Red Crescent Societies. Since 2013, the ICG has managed the global stockpile of OCV, which was created as an additional tool to help control cholera epidemics. Since the establishment of the cholera vaccine stockpile in 2013, more than 140 million doses of OCV have been shipped, of which 66% have been approved for use in emergency responses. The global surge in cholera cases has put a strain on the ICG OCV stockpile, and the dose supply is not sufficient to meet demand. The strained global supply of cholera vaccines obliged the ICG to make the decision in October 2022 to temporarily suspend the standard two-dose vaccination regimen in cholera outbreak response campaigns, to use instead a single-dose approach, and to cease preventive campaigns in at-risk cholera hotspots. This strategy allows for the doses to be used in more countries, at a time of an unprecedented rise in cholera outbreaks worldwide.





3. The cholera situation in the WHO Africa Region

3.1. Overview

In the WHO African Region, cholera outbreaks have become distressingly common over the past three years, affecting the lives of countless individuals across 17 countries in 2023 and resulting in over 2 000 otherwise preventable deaths. Currently, the southern subregion is grappling with a resurgence of outbreaks, intensified by the rainy season. The increased rainfall has led to flooding and landslides, worsening the spread of cholera, especially in areas where infrastructure is lacking. So far, outbreaks in six countries – Democratic Republic of the Congo, Ethiopia, Mozambique, United Republic of Tanzania, Zambia and Zimbabwe – have been classified as acute crises.

3.2. Challenges and complexities

Despite commendable efforts to contain cholera in four countries (Congo, Kingdom of Eswatini, South Africa and Uganda) in 2023, many Member States continue to report cholera cases in 2024. Cameroon, Democratic Republic of the Congo, Ethiopia and Nigeria (particularly the northeast) are grappling with complex humanitarian crises marked by insecurity, fragile health systems,

limited access to clean water and sanitation, and inadequate response capacities. The onset of the rainy season in the central, eastern and southern African regions, combined with the predicted severity of the El Niño and cyclone season, threatens to exacerbate the situation and further propagate the disease across southern Africa.

3.3. Epidemiological data (Week 04, 2024)

During Epidemiological Week 04 of 2024, eight countries – Burundi, Cameroon, Ethiopia, Mozambique, United Republic of Tanzania, Uganda, Zambia and Zimbabwe – reported a total of 5 341 new cholera cases. Transmission remains active in 11 countries. As of 28 January 2024, a total of 26 436 cholera cases and 727 deaths (case fatality ratio [CFR] of 2.8%) were reported to the WHO Regional Office for Africa (AFRO). Since 1 January 2022, a cumulative total of 312 338 cholera cases have been reported, including 5 811 deaths, with Democratic Republic of the Congo, Ethiopia, Malawi, Mozambique and Nigeria accounting for 75.7% of the cumulative cases and 68.2% of all cumulative deaths reported.

Figure 1. Epidemiological curve showing weekly trend of cholera cases, deaths and CFR in WHO African Region, 2022–2024

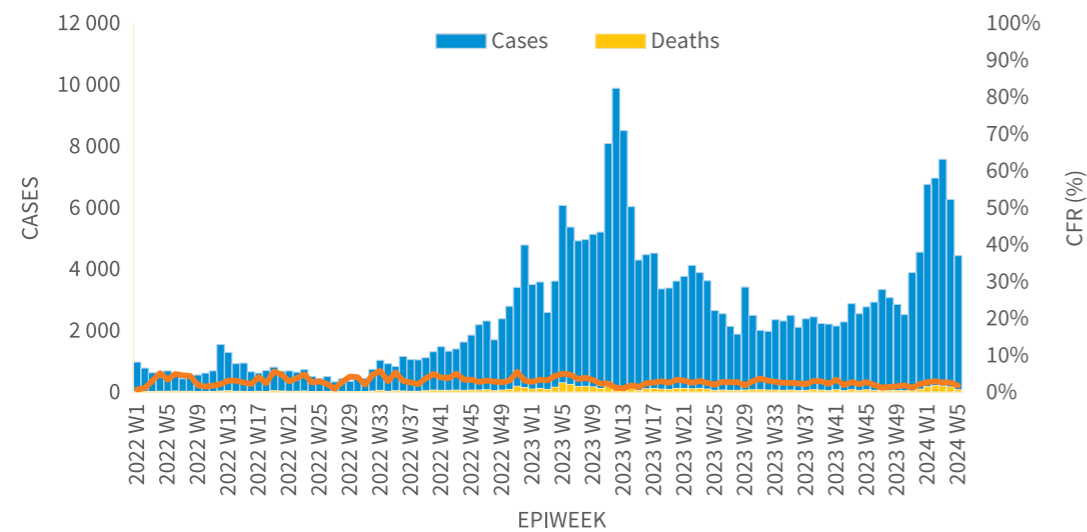
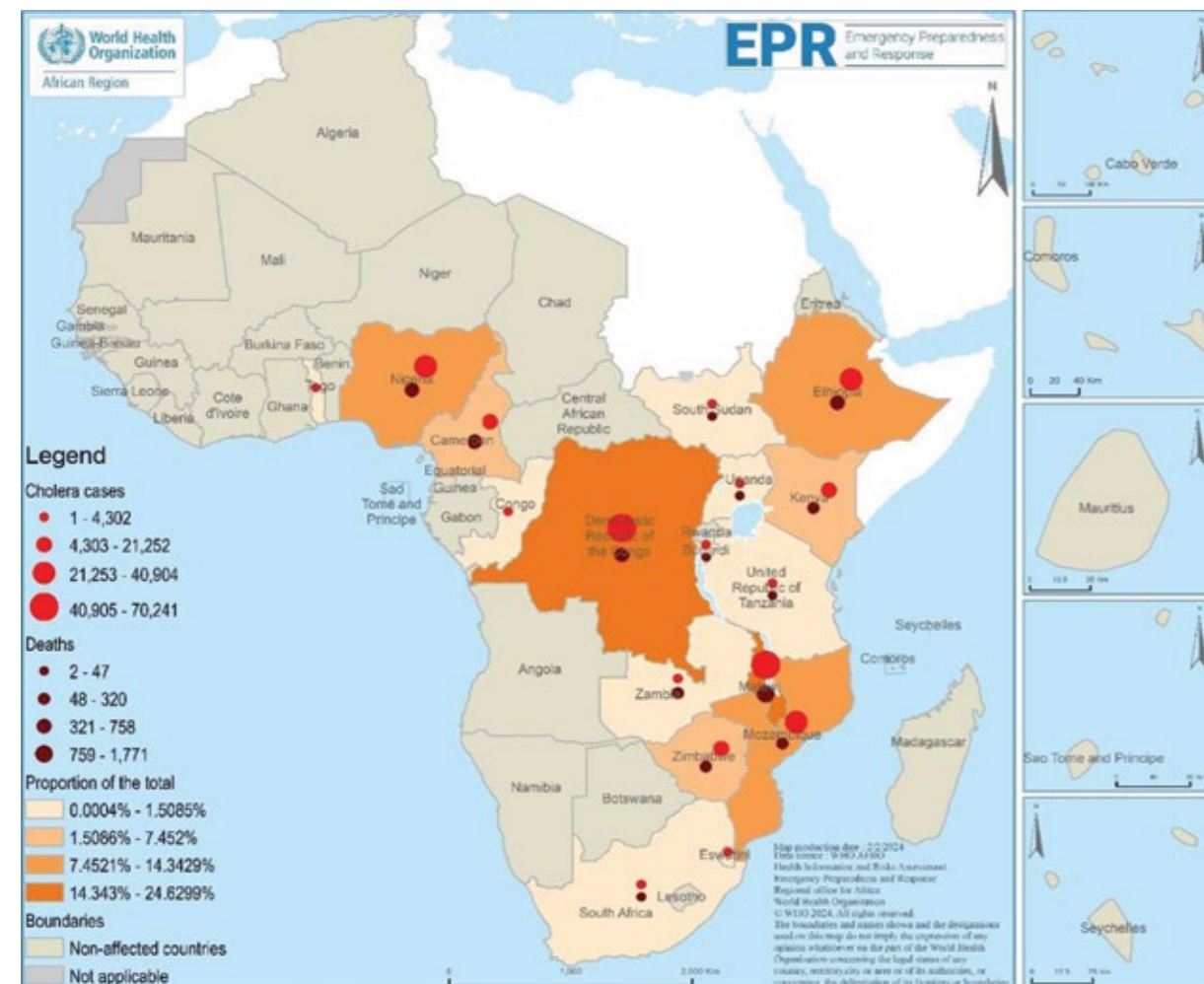


Figure 2. Map of AFRO Region showing cholera-affected countries and proportion of cases



3.4. Subregional analysis

Intensified transmission in southern Africa: In the southern region, several countries, including Democratic Republic of the Congo, Mozambique, Zambia and Zimbabwe, are facing acute cholera crises characterized by high case incidence, high fatalities and scarce resources. Zambia is currently responding to its worst-ever outbreak, with over 17 000 cases and 629 deaths (CFR 3.62%). Zimbabwe is tackling its second-worst outbreak, surpassing 23 000 cases and resulting in over 500 deaths (CFR 2.2%) (see attack rates in Figure 3). Democratic Republic of the Congo is also reporting a steady rise in cases that has been compounded by recent heavy rains, and flooding. Although Malawi currently reports fewer cases, the country endured its worst-ever cholera outbreak from March 2022 to June 2023, with over 3 000 cases and 100 deaths reported weekly at the peak in January 2023. In the southern subregion, rainy seasons exacerbate outbreaks, elevating the risk of floods and landslides.

Cross-border transmission is a significant concern owing to shared water sources and population movements. South Africa has already reported three cases imported from Zimbabwe.

The Greater Horn of Africa has experienced the longest drought, leading to severe food insecurity. The onset of El Niño in October 2023 brought unusual rains, resulting in floods in parts of Ethiopia, Kenya and United Republic of Tanzania. Kenya and Ethiopia face an elevated risk of increased transmission, while United Republic of Tanzania has witnessed a surge in cases, partly because of mass gatherings and associated travel during the recent festive season. Ethiopia, Sudan and Somalia are facing ongoing transmission, compounded by conflict and displacement. Limited access to safe water and sanitation exacerbates the situation.

West Africa: There have been recurrent cholera outbreaks among cholera-endemic countries in West Africa (Table 4). Cameroon and Nigeria are struggling with cholera transmission amid conflict and displacement. These countries face ongoing challenges in preventing and controlling cholera as a result of factors such as inadequate access to clean water, poor sanitation infrastructure, rapid urbanization and limited health care resources. Climatic factors such as heavy rainfall with flooding, and cross-border transmission owing to high population movement and shared water resources, are critical factors in recurrent cholera outbreaks in West Africa. Therefore, the risk is always high.

Figure 3. Southeast Africa attack rate per 100,000 (suspected and confirmed cholera cases per month)

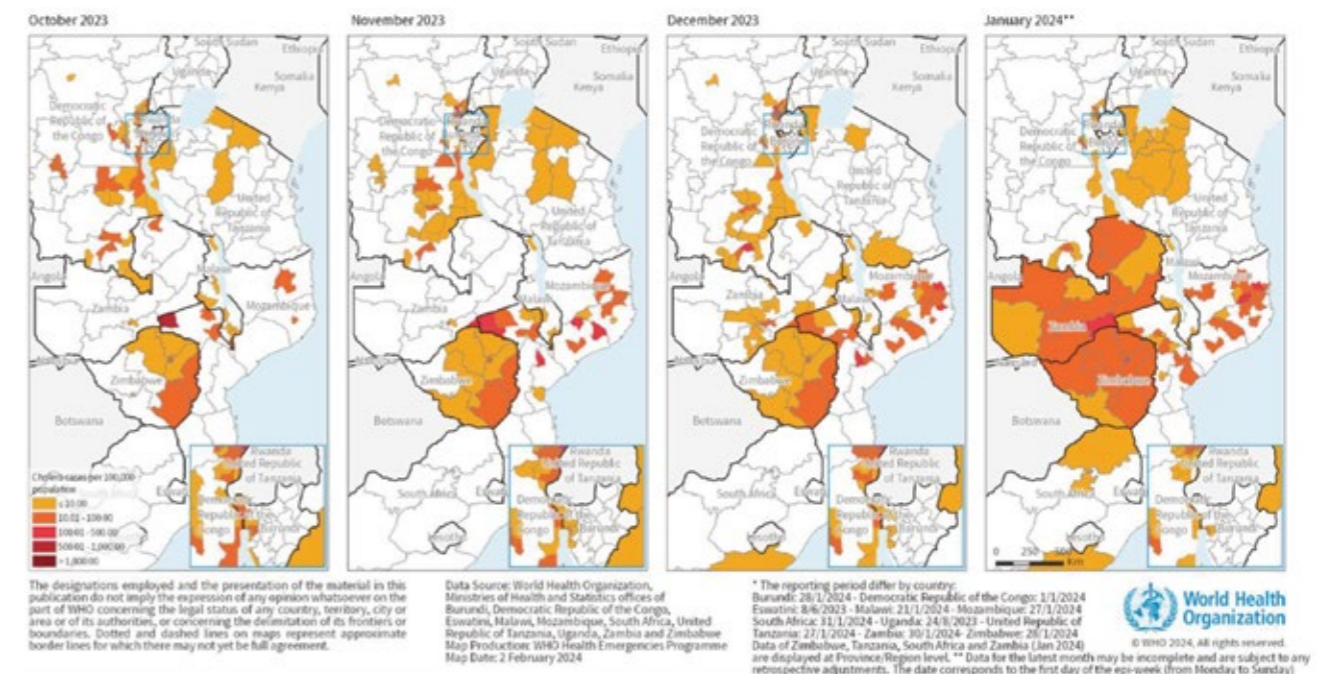


Table 1. Cholera outbreaks in the WHO Africa Region

Years	Cumulative cases	Cumulative deaths	CFR	Countries affected
2021	137 116	4 062	2.96	Benin, Burkina Faso, Burundi, Cameroon, Côte d'Ivoire, Democratic Republic of the Congo, Ethiopia, Ghana, Kenya, Malawi, Mali, Mozambique, Niger, Nigeria, South Sudan, Togo, Uganda, United Republic of Tanzania, Zambia
2022	86 986	2 211	2.43	Nigeria, Cameroon, Democratic Republic of the Congo, Ethiopia, Kenya, Malawi, Togo
2023	192 919	2 780	1.44	Burundi, Cameroon, Congo, Democratic Republic of the Congo, Kingdom of Eswatini, Ethiopia, Kenya, Malawi, Mozambique, Nigeria, South Africa, South Sudan, United Republic of Tanzania, Togo, Uganda, Zambia, Zimbabwe

3.5. Impact of concurrent epidemics and humanitarian crises

The cholera outbreak has coincided with the COVID-19 pandemic; concurrent epidemics, such as of diphtheria and dengue; and humanitarian crises, placing additional strain on already-burdened health systems. High population mobility and rapid urbanization in peri-urban areas without access to basic WASH facilities compound the situation.

Inadequate WASH infrastructure, low population immunity, adverse climatic events like droughts and cyclones, unusual rainfall patterns leading to flooding and El Niño phenomena have contributed to the outbreaks. The region made progress on WASH between 2000 and 2022, according to the WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP), but still lags other regions. The JMP reveals that:

- Only **28% of the population** had access to **basic sanitation services** in 2022, compared with 22% in 2000.
- Only **16% of the population** had access to **safely managed sanitation services** in 2022, compared with 9% in 2000.
- Only **24% of the population** had access to **basic hygiene services** in 2022, compared with 15% in 2000.
- Only **10% of the population** had access to **handwashing facilities with soap and water** in 2022, compared with 4% in 2000 (9).

These low levels of WASH access pose a substantial risk of cholera transmission, increasing exposure to faecal contamination and reducing the ability to practice preventive hygiene measures. The JMP report also highlights inequalities in WASH access, underscoring the need for targeted interventions to reach vulnerable populations (9). Strengthening WASH systems, including governance, monitoring, regulation, human resources and finance, is essential to achieving SDG targets related to WASH and cholera elimination.

Building on lessons learnt from the 2023 cholera outbreak response, the regional strategic cholera preparedness and response plan will focus on ensuring:

- that affected countries and non-affected neighbouring countries are ready to investigate, prevent and detect, and then respond and recover to, cholera cases and any imported cases, and to minimize the risk of local spread until sufficient domestic or international resources can be mobilized;

- that Member States, with the support of WHO and other partners, seek more funding, stronger leadership and decisive action in responding to cholera outbreaks;
- that ministries of health in affected and non-affected countries, international and in-country partners, and WHO support cholera response and preparedness actions, including the following:
 - establishment and strengthening of multisectoral, whole-of-government coordination mechanisms;
 - laboratory training and capacity-building;
 - strengthening of facility and community-based surveillance systems;
 - strengthening of risk communication and community engagement;
 - reinforcement of cross-border collaboration;
 - establishment of CTCs/CTUs and ORPs, ensuring care is decentralized to affected regions/districts;
 - Infection prevention and control (IPC);
 - WASH;
 - operational support and logistics.



4. Objectives



4.1. General objective

In line with the Regional Framework for the Implementation of the Global Strategy for Cholera Prevention and Control, 2018–2030, this plan aims to reduce the morbidity, mortality and socioeconomic impact of cholera epidemics in the African Region.

4.2. Specific objectives

1. Strengthen cholera surveillance and reporting systems in all countries in the region and achieve timely detection and confirmation of outbreaks.
2. Improve access to quality health care and case management for cholera patients and reduce the CFR to less than 1%.
3. Increase the coverage of OCV campaigns in high-risk areas and protect at least 80% of the target population.
4. Advocate and collaborate with partners to enhance WASH interventions in cholera hotspots and ensure at least 50% of the affected communities have access to safe water and improved sanitation facilities.
5. Engage and empower communities in cholera prevention and control and raise awareness and knowledge about the disease and its risk factors.
6. Coordinate and mobilize resources and partners for cholera response and preparedness and ensure adequate and timely funding and technical support.
7. Ensure efforts related to preventing and responding to sexual exploitation, abuse and harassment (PRSEAH) are in place across the response and ensure accountability mechanisms for PRSEAH in emergencies.



5. Rationale for cholera preparedness and readiness

On 28 January 2023, WHO graded cholera as a multi-region Grade 3 Public Health Emergency, in response to its high scale, the potential for international spread, high urgency and current capacity. To respond successfully, countries need to enhance readiness and preparedness in the region. The cholera outbreak situation was reviewed on 18 May 2023 and 21 September 2023 and maintained as a Grade 3 event. The outbreak remains active as a Grade 3 response. The next grade review will be conducted in March 2024.

The overall goal of preparedness and readiness is to ensure all high-risk countries have the required capacities and capabilities to manage the threat of cholera in a timely and effective manner and minimize the negative health consequences of cholera.

Although cholera is a well-known disease and has been so since ancient times, and although many evidence-based interventions and tools are available, it continues to affect many countries, especially in the WHO African Region. These outbreaks have been associated with high transmission and high mortality rates. One major contributing factor is inadequate preparedness and readiness to prevent and control outbreaks.

To assess a country's readiness status, WHO AFRO has developed a readiness assessment tool to determine capacities by pillar (coordination; rapid response team [RRT]; surveillance; laboratory; point of entry [POE]; infection prevention and control [IPC] and safe and dignified burial [SDB]; operations support and logistics [OSL], risk communication and community engagement [RCCE];

vaccination; WASH and food safety) to identify areas for capacity-strengthening. In 2021, a comprehensive assessment of countries' preparedness and readiness revealed that not all countries in the region were adequately prepared to prevent or control cholera outbreaks (10). As at the end of quarter three of 2023, twenty-two countries had assessed their capacity on the online regional cholera readiness dashboard; only two (9%) of these countries had adequate readiness capacity, seven (32%) had moderate readiness capacity and thirteen (59%) had limited readiness capacity. Overall, the average regional capacity for cholera readiness in Q3 of 2023 was 48.7% (which is limited capacity), and thus the region is far from being prepared and ready to prevent, detect and respond to cholera outbreaks. This was confirmed by the findings of the assessment of the implementation of the Regional Framework for the Implementation of the Global Strategy for Cholera Prevention and Control, 2018–2030. This revealed that the region was on track on only four milestones out of 20 and had performed poorly on 10 that form the main bedrock for cholera prevention and control. Therefore, this plan places a great emphasis and priority on timely cholera preparedness and readiness.

Cholera readiness will utilize a multisectoral approach that encompasses critical sectors of government led by the ministry of health (MOH) and including the key relevant sectors of WASH, the environment and emergency management, as well as key development and health/humanitarian partners from the health and WASH sectors. These will coordinate the implementation of cholera preparedness and readiness under the framework of the national health taskforces in the respective countries.

Table 2. Risk categorization of countries

Category	Description of category	Member States	Key actions
Category 1	Member States with a high number of at-risk districts/ province (hotspot mapping/ Priority Areas for Multisectoral Interventions (PAMIs), attack rate and current trends)	Burundi, Cameroon, Democratic Republic of the Congo, Ethiopia, Kenya, Malawi, Mozambique, Niger, United Republic of Tanzania, Togo, Zambia, Zimbabwe	Response actions in line with the response plan
	Unaffected provinces/districts in Member States with an active cholera outbreak	Nigeria	
	Member States at risk of cross-border transmission	Angola, Botswana, Chad, Comoros, Eritrea, Kingdom of Eswatini, Ghana, South Africa, South Sudan	
	Countries with limited capacity using cholera readiness checklist assessment tool	Burkina Faso, Congo, Lesotho, Madagascar, Mali, Namibia	
Category 2	Member states with:	Benin, Côte d'Ivoire, Liberia, Rwanda, Sierra Leone, Uganda	Implementation of minimum preparedness and operational readiness requirements
	Member States at moderate risk of importation of a cholera case from one or any of the above countries (Category 1)		
	Member States with few districts with high risk of cholera outbreak		
Category 3		All the other countries in the AFRO region	Minimum preparedness measures



Minimum requirements of readiness for cholera

- effective mechanism for multisectoral leadership and coordination for cholera at national and subnational levels;
- availability of cholera elimination or preparedness plans;
- increased awareness of cholera through RCCE on different issues, including dissemination of working case definitions to communities, the private and public health sectors, and partners;
- enhanced active surveillance for early detection, reporting and monitoring;
- capacity for swift laboratory confirmation of suspected cases of cholera and monitoring of ongoing outbreak;
- ensuring the readiness of RRTs for case investigation, case finding and tracing, and sample collection;
- preparation of health facilities and health workers for case management;

- establishment/activation of IPC mechanisms;
- WASH in health facilities and water quality monitoring and surveillance;
- provision of equipment and supplies, including personal protective equipment (PPE) and cholera kits in high-risk counties and at subregional level
- risk assessment and mapping to identify high-risk areas for cholera transmission;
- contingency planning for an imported cholera case scenario, with 72-hour planning, including incident management and response planning
- presence and activation of leadership and coordination structures at the national and subnational level;
- POE capacities to screen and identify cases, with mechanisms for cross-border sharing of information and joint planning and response;
- a competent health workforce and cholera readiness focal point (FP) available.



6. Thematic areas and strategy

6.1. Strategic leadership, planning and multisectoral coordination

A multisectoral coordination mechanism and structure at national and subnational levels is needed to rapidly mount an effective preparedness and response strategy to the ongoing cholera outbreak and any other emergencies.

Thematic goal: Enhance multisectoral coordination through existing structures and resources (national and international)

All countries MUST:

Establish effective coordination mechanisms with the MOH and other national actors and facilitate coordination with United Nations country teams and partners.

- prioritize cholera as a national concern within and beyond the health sector;
- establish/activate the national multisectoral policy group/task force at national and subnational levels;
- activate multi-hazard Public Health Emergency Operation Centres (PHEOCs) and establish an Incident Management System (IMS) as per the national guidance;
- ensure affected countries develop Incident Action Plans with Key Performance Indicators (KPIs), informed by relevant information;

- ensure all priority countries develop National Cholera Control/Elimination Plans and Cholera Preparedness and Response Plans, including Standard Operating Procedures (SOPs);
- build capacity in integrated cholera preparedness and response (trainings, simulation exercises, etc.);
- establish/strengthen response monitoring and accountability;
- ensure partner mapping – who is doing what, where and when (4Ws matrix) – and coordination;
- strengthen information management and dissemination;
- establish/reactivate functioning cholera coordination mechanisms at all levels of health service delivery;
- mobilize resources for the cholera preparedness and response plan;
- strengthen cross-border coordination, collaboration and communication;
- ensure government entities and partners are taking safeguarding precautions for managing the risks of sexual exploitation, abuse and harassment (SEAH)/gender-based violence and at least one PRSEAH FP is assigned to the response and works in close collaboration with WHO PRSEAH FPs.

In addition, the affected country will:

- establish and maintain national PHEOCs for coordinating the emergency response, including infrastructure, plans and procedures with trained staff;
- identify and prepare subnational coordination hubs for high-risk districts to be activated if required;
- participate in cross-border coordination platforms.

6.2. Early warning, surveillance and laboratory

Rapid detection and isolation of cholera cases are key to preventing onward transmission and the ability to initiate appropriate control measures in a timely manner. Additionally, timely information-sharing as part of early warning is critical for the stakeholders engaged, including communities, to take timely and appropriate actions.

Thematic goal: Strengthen the country's capacity for prompt case detection, confirmation and management



All countries MUST:

Be supported and guided on early detection of cholera cases and emphasize the strong links between public health surveillance systems, communities and local health facilities by reinforcing Integrated Disease Surveillance and Response (IDSR) systems and processes. Event-based surveillance enables a timely follow-up on alerts and rumours from any source.

- identify and address risk factors that contribute to cholera outbreaks;
- identify PAMIs/hotspots for cholera;
- accelerate surveillance and early warning activities in high-risk districts by strengthening IDSR systems, including community and event-based surveillance systems, and verify and investigate all alerts within 24–48 hours;
- ensure availability of RDTs at all facilities for countries in epidemic response, and at least at the district laboratory for districts at high risk of cholera spread;
- ensure an efficient sample referral system for shipment of selected samples to the nearest microbiology laboratory for culture and sensitivity or internationally;
- identify and equip at least one national reference laboratory to confirm diagnosis using culture and sensitivity on RDT positive samples;
- strengthen cholera data management;
- ensure proper management of operational and contextual information, besides cholera-specific data.

AFRO will:

- provide a standardized approach for information management, planning and response monitoring;
- ensure availability of regional integrated data and information;
- regularly produce and disseminate regional information products;
- conduct regular risk and readiness assessments;
- conduct training (webinars/physical) for preparedness, readiness and response.

In addition, affected countries will:

- identify and train a pool of community volunteers in all high-risk regions, including CHWs and partners;
- provide targeted training for early case detection in HCWs and CHWs in high-risk regions;
- support regular supervision/mentoring of surveillance officers and community-based FPs.

6.3. Case management

Cholera can be treated easily and successfully through prompt and adequate rehydration, for example by means of administration of ORS in easily accessible safe structures within communities (ORPs). Severely dehydrated patients are at risk of shock and require rapid access to intravenous rehydration and other treatment in established treatment units/centres.

Thematic goal: Reduce mortality associated with cholera to less than 1% and ensure safe and scalable care to all affected communities

All countries will:

- ensure health care providers are trained in cholera management and referral protocols for transfer to a designated CTU/CTC;
- establish ORPs in affected communities and ensure a referral system from the community to health facilities;
- update mapping of HCFs, including detailing gaps in human resources, infrastructure (isolation and bed capacity) and access to WASH services in HCFs, particularly in PAMIs/hotspots;
- designate priority HCFs based on a readiness assessment for the management of cholera patients (acknowledging that all HCFs should have the capacity to recognize cholera patients and rapidly separate them from others);
- identify appropriate transportation capacity for suspect/confirmed cases and ensure the safety of all involved in the referral pathway;



- develop, update and/or adapt cholera case management guidelines and SOPs and print and pre-position as appropriate;
- identify surge health personnel and train them in managing cholera cases and ensure they are ready for deployment/repurposing;
- ensure adequate logistics for care of cholera cases.

In addition, affected countries will:

- ensure priority and high-risk HCFs are trained in cholera-specific precautions and signs for classification of disease severity;
- ensure case management is linked closely with epidemiology and logistics to predict supply needs and pre-position them as needed;
- ensure IPC and WASH protocols are implemented in all HCFs designated to care for cholera cases;
- establish at least one functional CTC as needed, with ORPs established in each affected community.



6.4. WASH/IPC

The most likely source of cholera transmission during an outbreak is water, through drinking or through preparation and/or washing of uncooked food, with water contaminated with faecal matter. Water may be contaminated at access/collection points, during transport, at home or in storage containers. Poor access to or insufficient quantity and quality of water negatively affects hygiene practices, leading to the spread of cholera. Therefore, providing the population with safe water is essential, by setting up temporary water distribution points or treating existing distribution points, and training the community on how to treat water. It is also important to engage the community in proper faecal waste disposal and promote environmental hygiene to curb the spread of cholera.

Cholera is also known to spread in health care settings where safe WASH conditions cannot be assured and where the onset of acute watery diarrhoea (AWD) is not met with appropriate standard and transmission-based precautions. Health workers, caregivers and visitors to CTC/CTU settings remain vulnerable to faecal oral

transmission if appropriate mitigation measures cannot be enacted. The activation of standard IPC protocols in HCFs will ensure quality of care of patients and environmental hygiene within HCFs.

Thematic goal: Support countries in reducing the transmission of faecal to oral diseases

All countries will:

- establish/activate IPC/WASH coordination mechanism at the national level;
- develop with the MOH an operational IPC plan with a focus on developing indicators for prioritization of IPC interventions and improvement strategies in the context of AWD transmission:
 - support implementation and monitoring of syndromic surveillance, referral pathways and health care-associated infection (HAI) surveillance for cholera in non-CTC/CTU health facilities;
 - support implementation of HAI surveillance for health workers, caregivers and visitors in CTCs/CTUs;
 - support the evaluation and improvement of WASH and IPC measures in HCFs, CTCs/CTUs and ORPs;

- work with national authorities to ensure the safety of drinking water through monitoring of water quality of at all levels;
- develop and disseminate cholera IPC/WASH SOPs:
 - rapid identification and isolation of cases;
 - standard and transmission-based IPC precautions;
 - WASH in communities and facilities.
- assess supply needs in CTCs/CTUs/ORPs and outpatient/home care settings (chlorine, soap, PPE, etc.) and ensure availability of IPC/WASH supplies (in collaboration with logistics and case management);
- in collaboration with RCCE, initiate public awareness on cholera (how it spreads, signs and symptoms, benefits of early health care-seeking, how patients are usually treated, what the key risk factors are, what the key protection and prevention measures, etc.);
- train health workers to safely care for patients with cholera and in future outbreak response.

In addition, affected countries will:

In the community:

- increase access to safe water:
 - assess and map existing water sources (i.e., availability, types, access, quantity of water, risk of contamination, etc.);
 - based on risk, upgrade/rehabilitate existing water sources or construct new water sources;
 - conduct water treatment of all rehabilitated or newly constructed water sources using the most appropriate technical solution based on an analysis of the water parameter (at the source or point of use);
 - consider household water treatment strategies;
 - implement water quality monitoring and surveillance to regularly measure free residual chlorine. Consider putting in place Water Safety Plans to support water quality monitoring and surveillance;
- enable safe food preparation:
 - reinforce food safety laws and inspection of restaurants, food vendors and food processing factories and avoid unsafe agricultural practices;
 - promote hand hygiene and set up handwashing stations with soap and safe water in markets and places selling food;

- improve hygiene and access to improved sanitation:
 - set up hand hygiene stations in public places (markets, schools, churches, etc.);
 - upgrade and rehabilitate existing and/or construct new sanitation and wastewater infrastructure;
 - support efforts to stop open defecation through promoting and supporting infrastructure enhancement and resources for sanitation;
 - plan community cleaning campaigns, including emptying of open drainages.

In HCFs:

- ensure CTCs/CTUs are built in respect of IPC requirements;
- ensure access to safe potable water;
- Ensure availability of latrines blocks with at least two cubicles, sex-separated, in CTCs/CTUs;
- integrate supervision and mentorship into CTCs, CTUs, ORPs and communities;
- promote and strengthen the collection, storage and disposal of waste in CTCs/CTUs and HCFs;
- ensure each HCF has the capacity for screening, isolation, notification and transfer of suspect cases;
- implement all IPC standard precautions in all facilities including CTCs/CTUs;
- support training of health workers on IPC standard and transmission-based precautions where required.



6.5. Risk communication and community engagement

Engaging with communities and facilitating communication between cholera response teams and community members is critical to prevent and/or stop the spread of cholera outbreaks. A two-way communication with communities, their leaders and health personnel improves knowledge of cholera response based on community contexts, addresses community concerns, and builds and maintains trust and confidence, resulting in pre-emptive health-seeking behaviours.

Thematic goal: Inform, educate and mobilize target populations of all age groups to adopt positive behaviours for cholera prevention and control

All countries will:

- establish/activate RCCE coordination mechanism at the national and subnational levels;
- develop a national RCCE operational plan and map out key partners and stakeholders, and their capacities and coverages;
- develop SOPs for RCCE;
- conduct rapid analysis of community contexts in high-risk areas and identify key community influencers and networks;
- initiate public awareness on cholera (develop and disseminate information, education and communication materials on how it spreads, signs, symptoms and risk factors; benefits of early health care-seeking; treatment of cholera patients; protection and prevention measures, among others);
- promote positive health-seeking behaviour on water safety, safe disposal of faeces and handwashing;
- support capacity-building at all levels and establish cascade-based community feedback mechanisms;
- identify and engage trusted, accessible communication and feedback channels (mass media, social media, community leaders, radio stations, print and audio);
- develop age-appropriate key messages adapted to the country's cultural and religious context and languages.

In addition, affected countries will:

- deploy social and behaviour change (SBC)/RCCE specialists, including socio-anthropologists, to support the implementation of the response plan within the RCCE national/subnational committee/commission;
- deploy RCCE officers in hot spot areas to support event response rollout and monitoring;
- train dedicated risk communication teams in high-risk regions, including the prevention of SEAH;
- activate community networks on and offline, such as community volunteers, faith-based communities, schools, clubs, community radio and social media groups;
- conduct a rapid anthropological assessment of the sociocultural context of the community related to health-seeking behaviour;
- establish interpersonal communication via non-governmental organizations and civil society with internally displaced communities and urban slum-dwellers via door-to-door visits and distributed communication materials such as posters and leaflets;
- deliver key messages (such as vaccination dates, target age groups, location of vaccination sites) via public announcements using mobile vans mounted with speakers;
- make public announcements led by religious and community leaders and influencers in religious sermons, one-to-one or group meetings and community gatherings;
- establish community feedback mechanisms, including a hotline on adverse events following immunization (AEFI) and SEAH through inter-agency community-based complaint mechanisms.
- monitor discussions on community radio and in electronic and print media, social media and community gatherings, etc.

6.6. Vaccination

OCV is an important tool for preventing and reducing cholera-related illness and deaths. WHO Member States in acute crisis and active outbreaks will be supported to respond to these outbreaks with OCV campaigns, while improving their capacity to plan for longer-term strategies, such as preventive vaccination when supply improves. They will also be supported to implement timely and effective reactive vaccination.

Thematic goal: Prevent cholera outbreaks in endemic and high-risk areas

Affected countries will:

- vaccinate all health care workers supporting the response;
- develop a proposal for submission to the ICG for support;
- conduct a preventive vaccination campaign when global OCV supply allows, including the development of multiyear plans of action (MYPOAs);
- map national functioning cold chain equipment.

Prioritized countries by risk category will:

Acute crisis:

- sensitize the MOH on vaccination with OCV to ensure response teams and high-risk communities are vaccinated;
- plan and implement OCV campaigns, as appropriate, including all pre-campaign formalities and evaluation activities, such as post-campaign coverage surveys and impact assessments;
- develop MYPOAs to improve preparedness and prevention of future outbreaks and inform global vaccine supply planning;
- engage communities in planning and implementation of vaccination campaigns;
- collect, analyse and use socio-behavioural data on community knowledge, trust and demand for vaccination.



Active outbreak:

- perform risk assessment of targeted areas for vaccination;
- submit ICG requests for OCV doses to vaccinate the targeted population in affected communities;
- engage communities in planning and implementation of vaccination campaigns.

Preparedness/readiness:

- orient the MOH on OCV use during an outbreak;
- strengthen capacity for timely development of OCV requests and facilitation of OCV registration (where needed);
- obtain emergency use approval from the national regulatory authority on importation and use of OCV (in countries where OCV is not registered);
- review previously identified geographical areas and populations to be targeted and develop contingency plans for the implementation of OCV campaigns;
- develop MYPOAs to improve preparedness and prevention of future outbreaks and inform global vaccine supply planning;
- conduct preventive vaccination campaigns in high-risk areas when global OCV supply allows;
- engage communities in planning and implementation of vaccination campaigns.

6.7. Operational support and logistics

Operational and programme support logistics are critical to scaling up operations rapidly and effectively. Assessing current capacities and filling gaps in OSL is one of the priorities in preparing to respond.

Thematic goal: Ensure timely, effective and prompt outbreak response through timely and effective operation support and logistics

All countries will:

- develop and adopt an OSL plan with the MOH, relevant partners and sectors, including POE;
- maintain a sufficient stock of essential medicine and medical supplies;
- conduct mapping of available warehouse and storage capacities in potential epidemic areas;
- train national teams able to set-up CTCs/CTUs where and when needed.

Affected countries will:

- maintain logistics expertise in the country to provide operations support to the response;
- establish efficient storage and distribution mechanisms of logistics supplies.



6.8. Operational research and knowledge management

Operational research and knowledge management is critical to generate knowledge to improve implementation of preparedness and response interventions, and to document lessons learnt during the cholera response.

Thematic goal: Ensure scientifically sound response interventions are implemented and document lessons for future responses

All countries will:

- review and analyse historic data on cholera outbreaks and predict possible outbreaks considering possible risk factors;
- undertake relevant research to enhance preparedness and the response to cholera.

Affected countries will:

- develop and conduct operational research to improve and guide the response interventions;
- conduct intra-action reviews to identify gaps in the response coordination.

6.9. Strategic and operational partnership

In the context of cholera outbreaks, the role of partnerships extends across a broad spectrum of actors, including emergency medical teams (EMTs), the Global Outbreak Alert and Response Network (GOARN), standby partnerships (SBPs), Health Clusters, civil society organizations (CSOs) and the private sector. In addition, strategic engagement will occur with subregional bodies such as the Southern African Development Community (SADC), the East African Community (EAC), the Intergovernmental Authority on Development, the Economic Community of West African States and the Economic Community of Central African States to advocate for leadership at the political level to monitor implementation of the regional framework for cholera control and to facilitate resource allocation for cholera response. These collaborations form the cornerstone of a

comprehensive approach to both preparedness and response efforts. They facilitate the sharing of best practices, foster collaboration and ensure effective coordination to address cholera outbreaks.

All countries:

EMTs:

- develop frameworks for rapid deployment and provide training modules for local HCWs on cholera treatment and prevention;
- in affected countries, EMT coordination cells deploy to establish and manage CTCs and ORPs, offering direct clinical support to mitigate the outbreak.

GOARN:

- enhance global surveillance systems to detect cholera outbreaks early and facilitate knowledge exchange on best practices and lessons learnt;
- coordinate international support for affected countries, including deploying epidemiologists, laboratory experts and public health specialists to strengthen outbreak investigation and control measures.

SBPs:

- pre-arrange agreements with partners for rapid deployment of resources and personnel for emergency response;
- mobilize logistics and WASH experts to affected areas to ensure timely provision of clean water and sanitation facilities and hygiene promotion activities.

Health Clusters:

- strengthen coordination mechanisms at national and subnational levels to ensure effective multisectoral collaboration for cholera preparedness and response;
- use the Health Clusters wherever activated to coordinate the health response, identify gaps and mobilize resources and partners to address identified needs promptly.

CSOs:

- engage in advocacy and awareness-raising activities to promote cholera prevention and preparedness among communities;



- engage with CSOs to mobilize community networks for rapid dissemination of information on cholera prevention, support community-based surveillance and facilitate access to treatment and vaccination.

Private sector:

- leverage partnerships with the private sector to support infrastructure development for water and sanitation and engage in corporate social responsibility initiatives for health education;
- engage with the private sector to provide critical logistics support, donate supplies (e.g. water purification tablets, ORS) and assist in the distribution of vaccines and medical supplies.

Affected countries:

Engaging with affected countries in the context of health emergencies, particularly for cholera outbreaks, involves a multilayered response mechanism that capitalizes on the strengths and capabilities of diverse partnerships. Here is how these collaborations can be effectively utilized for a coordinated response, focusing on the mechanisms of engagement rather than specific cholera response activities:



EMTs:

- rapidly deploy EMTs to provide immediate clinical support and reinforce local health care systems. This includes not only direct patient care but also training and capacity-building for local health care providers to ensure sustainability beyond the immediate response;
- enhance use rapid response mobile laboratories and diagnosis wherever applied.

GOARN and SBPs:

- utilize GOARN’s global network for mobilizing international expertise and resources. This involves bringing in specialists in epidemiology, laboratory diagnostics and case management to fill critical knowledge and skill gaps in the affected countries.

Health Clusters:

- support Health Clusters, wherever activated, to lead the coordination of response activities among all partners, aligning efforts across different sectors (health, WASH, logistics) to ensure a unified and strategic approach to outbreak management.

CSOs:

- CSOs are pivotal in engaging communities, promoting hygiene practices and disseminating crucial information. As such, their grassroots networks can be used to facilitate rapid communication and foster trust, encouraging community participation in prevention and control measures.

Private sector:

- The private sector plays a crucial role in providing logistical support and essential supplies. This includes setting up mobile laboratories for enhanced diagnostic capacity and ensuring the continuous supply of WASH equipment and medical materials.
- The private sector can focus on enhancing WASH infrastructure in communities and health care settings. This goes beyond mere supply distribution to include the development and maintenance of sustainable WASH facilities.

Engagement strategy:

- in collaborating with Africa Centres for Disease Control (CDC), establish a platform to track implementation of the regional framework and other commitments from the subregional leadership fora (SADC and EAC);
- establish a platform for continuous dialogue and collaboration among all stakeholders, ensuring each partner’s contribution is aligned with the overall response strategy;
- focus on building long-term capacities in affected countries, ensuring the response to current and future outbreaks is more resilient and self-sufficient;
- encourage the adoption of innovative solutions and adapt strategies based on real-time feedback and evolving outbreak dynamics.

Strategic engagement with the subregional level:

- in collaboration with Africa CDC, establish a platform to track implementation of the regional framework and

other commitments from the subregional leadership fora (SADC and EAC);

- engage with political leaders and policy-makers to advocate for the importance of cholera control and prevention at the subregional level. This may involve leveraging existing networks, conducting advocacy campaigns and presenting evidence-based arguments to garner political support;
- promote the exchange of information, best practices and lessons learnt among participating entities. This could involve organizing workshops, webinars and knowledge-sharing platforms to facilitate dialogue and collaboration.

By leveraging the strengths and resources of these diverse partnerships, cholera preparedness and response efforts can be significantly enhanced, ensuring a coordinated, efficient and effective approach to mitigate the impact of cholera outbreaks in the WHO African Region.



7. Monitoring and evaluation

WHO AFRO will oversee the implementation, monitoring and evaluation of the updated regional strategic cholera preparedness and response plan. At the country level, a national multisectoral cholera taskforce or equivalent, of which the MOH is the lead, will oversee the implementation and monitoring of the national response and contingency plan with the support of the WHO Country Office and partners.

During the next six months, WHO will continue to regularly review progress on implementing the country plans using the cholera KPIs and the monitoring framework, which will be available online as a KPI dashboard (see Annex 1). Additionally, AFRO will monitor the Emergency Response Framework performance standard for graded cholera incidents.

As needed, partner meeting(s) will be conducted to discuss further strategic approaches for jointly strengthening the cholera preparedness and response in line with this regional cholera plan. The meeting will also offer the opportunity for advocacy, resource mobilization and documentation of best practices for decision-making.



8. Planning and budget

8.1. Planning assumptions

- The number of countries affected will not significantly exceed the 17 affected in 2023.
- There will no significant adverse deviation from the projected effect of El Niño and cyclones in 2024.
- Member States will continue to transparently report on cholera outbreaks and maintain the high political commitment and strong multisectoral coordination required to control outbreaks.
- Communities will take up preventive measures, cooperate with the response and lead cholera control measures in their areas.
- The global OCV supply will continue to be insufficient in 2024, with one dose strategy prevailing and prevention and control being anchored on provision of clean WASH facilities.

8.2. Budget

An estimated **US\$ 32 973 371** is required for WHO to support the national plans of MOHs to implement the most urgent preparedness and response activities. This budget aligns with the regional component of the global cholera appeal for 2024.

Table 4 provides a summary of the funding requirements for responding to cholera in the affected countries. The listed figures pertain to prioritized activities outlined in the countries' response plans. Funding needs change as the outbreaks progress, and, as of 7 January 2024, a total of US\$ 24 996 922 is necessary to address essential response interventions in the 12 countries currently experiencing outbreaks.

According to the risk classification in Table 2, there are 16 countries listed as Category 1 or 2. It is crucial that these countries put the necessary measures in place to achieve operational readiness. The planned activities aim to fill the gaps discovered during the cholera readiness evaluation. The costs for essential operational readiness actions per country are detailed in Table 5.

References

Table 3. Summary regional budget for readiness and response

Pillar	Timeframe	Planned costs (US\$)
P1. Leadership, coordination, planning, funding and evaluation	Jan–Dec 2024	4 509 399
P2. RCCE and infodemic management	Jan–Dec 2024	4 022 432
P3. Surveillance, case investigation and contact tracing	Jan–Dec 2024	5 673 992
P4. POE, travel, transport and gathering	Jan–Dec 2024	100 000
P5. Laboratory and diagnostics	Jan–Dec 2024	1 497 256
P6. IPC and WASH	Jan–Dec 2024	2 255 772
P7. Case management and therapeutics	Jan–Dec 2024	5 522 211
P8. OSL	Jan–Dec 2024	8 201 331
P9. Strengthening essential health systems and services	Jan–Dec 2024	100 000
P10. OCV	Jan–Dec 2024	503 808
P11. Research, innovation and evidence	Jan–Dec 2024	587 170
Grand total		32 973 371

Table 4. Summary budget for response in affected countries

Country/response location	Cost (US\$)
Regional response	3 094 585
Burundi	849 300
Cameroon	1 770 450
Comoros	310 000
Democratic Republic of the Congo	2 885 940
Ethiopia	2 000 000
Kenya	1 286 750
Malawi	1 660 000
Mozambique	1 056 750
Nigeria	3 837 910
Tanzania	813 550
Togo	1 393 750
Zambia	2 633 438
Zimbabwe	1 404 500
Grand total	24 996 922

Table 5. Summary budget for cholera readiness in unaffected Category 1 and 2 countries

Country/response location	Cost (US\$)
Regional	2 963 149
Angola	310 000
Benin	814 300
Botswana	208 000
Chad	313 000
Côte d'Ivoire	310 000
Congo	252 000
Eritrea	162 000
Kingdom of Eswatini	315 300
Ghana	227 000
Liberia	310 000
Malawi	50 000
Rwanda	358 500
Sierra Leone	307 000
South Africa	295 300
South Sudan	314 700
Uganda	466 200
Grand total	7 976 449

(1) About cholera. In GTFCC website (www.gtfcc.org/about-cholera/).

(2) Sharmila T, Thomas, TA. Pathogenesis of cholera: recent prospectives in rapid detection and prevention of cholera. In: Kirmusaoğlu S, editor. Bacterial pathogenesis and antibacterial control; 2018. doi: 10.5772/intechopen.68288.

(3) GTFCC. Public health surveillance for cholera, interim guidance; 2023 (www.gtfcc.org/wp-content/uploads/2023/02/gtfcc-public-health-surveillance-for-cholera-interim-guidance.pdf).

(4) Treatment. In: CDC website (www.cdc.gov/cholera/treatment/index.html).

(5) WHO. Cholera fact sheets; 2023 (www.who.int/news-room/fact-sheets/detail/cholera).

(6) GTFCC. Water, sanitation and hygiene and infection prevention and control in cholera treatment structures; 2019

(www.gtfcc.org/wp-content/uploads/2019/10/gtfcc-technical-note-on-water-sanitation-and-hygiene-and-infection-prevention-and-control-in-cholera-treatment-structures.pdf).

(7) WHO. Cholera overview; 2023 (www.who.int/health-topics/cholera).

(8) WHO. Cholera vaccines. Position Paper; August 2017.

(9) JMP. Progress on sanitation and hygiene in Africa 2000–2022; November 2023 (<https://washdata.org/reports/jmp-2023-progress-sanitation-and-hygiene-africa>).

(10) Sodjinou, VD, Keita, M, Chamla, D et al. Assessment of the countries' readiness to detect and control cholera outbreaks in the WHO African Region. Archives of Clinical and Biomedical Research. 2022;6: 656–62.

Annex 1.

Key performance indicators

Indicator	Target	Responsibility	Frequency
Strategic leadership and multisectoral coordination			
Number of target stakeholders/partners engaged	100%	WHO	Monthly
Number of strategic coordination meetings conducted	100%	WHO	Monthly
Early warning and surveillance			
Proportion of cholera signals investigated within 24–48 hours	90%	WHO	Weekly
Timeliness of cholera line list and situation report submission by 7:00 Brazzaville time on Mondays	100%	WHO	Weekly
Laboratory surveillance			
Testing centres reporting RDT results within 24 hours	100%	WHO	Weekly
Laboratories in high-risk regions fully capacitated to do culture and sensitivity testing	80%	WHO	Monthly
Percentage of laboratories with SOPs to test cholera	100%	WHO	Biweekly
Case management and SDB			
Percentage of affected communities with fully operational ORPs	100%	WHO	Weekly
CTUs/CTCs fully operational	100%	WHO	Weekly
CFR	<1%	WHO	Weekly
Dead bodies/corpses that received SDB	100%	WHO	Weekly
WASH/IPC			
Affected communities with ongoing water quality monitoring	80%	WHO	Weekly
Treatment facilities that meet IPC assessment requirements	100%	WHO	Weekly
RCCE			
Targeted community influencers reached with prevention and control messages	80%	WHO	Weekly
Trained community mobilizers actively engaged in risk communication	80%	WHO	Weekly

Vaccination			
OCV coverage in hotspot areas	95%	WHO	Whenever OCV campaign is ongoing
Targeted health workers receiving training on OCV implementation	100%	WHO	Pre-OCV campaigns
OSL			
Projected Ringer's lactate solution delivered for the response based on operational plan or request submitted to logistics hub	100%	WHO	Weekly
Projected RDTs delivered for response based on operational plan or request submitted to logistics hub	100%	WHO	Weekly
Health systems and service continuity			
Existence of at least one health services continuity FP at national level	100%	WHO	Weekly until FP identified
Bed occupancy ratio in designated CTUs	<65%	WHO	Weekly
Monitoring and reporting of essential service uptake trends through existing health information system platforms in affected countries	100%	WHO	Monthly
PRSEAH			
Responders who have had PRSEAH training within 1 week of engagement	100%	WHO	Weekly
Operational research and knowledge management			
Number of operational research conducted	x per month/quarter	WHO	Monthly/quarterly
Number of intra-/after action reviews conducted	x per semester (6 months)	WHO	6 months into outbreak/after outbreak
Operation partnership			
Time from outbreak notification to deployment of resources and personnel from different deployment mechanisms	< 2 weeks	WHO	Monthly
Measurement can be quantified by the number of days from the initial outbreak request for assistance to the actual on-the-ground presence of EMTs, activation of GOARN protocols, deployment of SBP resources or initiation of CSO community engagement activities. Shorter response times indicate more efficient operational partnerships and readiness.			

Annex 2.

Cholera outbreaks in 17 affected countries in WHO African Region in 2023

Indicator	Cumulative cases	Cumulative deaths	CFR (%)	Date outbreak started	Last update
Democratic Republic of the Congo	70 241	758	1.1	Jan-22	31-Dec-23
Malawi	59 124	1 771	3.0	Mar-22	31-Dec-23
Mozambique	40 904	165	0.4	Sep-22	31-Dec-23
Ethiopia	30 716	453	1.5	Aug-22	31-Dec-23
Nigeria	26 452	674	2.5	Jan-22	29-Oct-23
Cameroon	20 554	484	2.4	Jan-22	10-Dec-23
Zimbabwe	14 517	320	2.2	Feb-23	31-Dec-23
Kenya	12 232	205	1.7	Oct-22	10-Dec-23
Zambia	4 302	122	2.8	Jan-23	31-Dec-23
South Sudan	1 471	2	0.1	Feb-23	16-May-23
South Africa	1 388	47	3.4	Feb-23	31-Aug-23
Burundi	1 370	9	0.7	Jan-23	31-Dec-23
United Republic of Tanzania	1 070	23	2.1	Feb-23	31-Dec-23
Uganda	81	10	12.3	Jul-23	1-Sep-23
Congo	63	0	0	Jul-23	26-Jul-23
Kingdom of Eswatini	2	0	0	Mar-23	23-Jul-23
Togo	1	0	0	Dec-23	12-Dec-23
Total	284 488	5 043	1.8		



Credits

Production: Julie Pudlowski Consulting

Photography: ©WHO

©WHO 2024

World Health Organization

Regional Office for Africa

Cité du Djoué, P.O.Box 06

Brazzaville, Republic of Congo

Telephone: +(47 241) 39402

Fax: +(47 241) 39503

Email: afrgocom@who.int