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# National Cholera Control Operational Plan 2022/23

Federal Democratic Republic of Ethiopia  
September 13, 2022



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MINISTRY OF HEALTH-ETHIOPIA

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## Forward

The Government of Ethiopia takes securing the health of people as a national priority. This is evident as the health agenda has been enshrined in all national development strategies, including the Vision 2030 agenda to ensure health, well-being, and prosperity of Ethiopia's citizens—the social and human development pillar.

The Ethiopian Public Health Institute (EPHI) made a strategic decision to ensure public health security of the country, including a coordination platform for addressing disease outbreaks and other public health emergencies. Outbreaks of cholera are among those threatening Ethiopia's public health security.

With an estimated 2.9 million cases and 95,000 deaths occurring globally each year, cholera is a global public health challenge. Ethiopia remains threatened by recurrent outbreaks of cholera with reported 19,844 cholera cases and 327 deaths (CFR = 1.6%) since 2019.

The Ethiopian Government has joined global efforts to eliminate cholera through subscribing to the Global Task Force on Cholera Control strategy, which aims to eliminate cholera by 2028—two years prior to the global cholera roadmap 2030. To emphasize a commitment to this agenda, Ethiopia, through the Ministry of Health, committed to cholera elimination by 2030 during the 71st World Health Assembly. During the 75th World Health Assembly, Ethiopia's multi-sectorial cholera elimination plan was endorsed and brought global cholera control and elimination into the limelight.

The Government of Ethiopia is committed to eliminating cholera and having a 90% reduction of mortality by 2028 through a multi-sectoral approach to be anchored under the Deputy PM office. The agenda is supported at the highest levels of leadership, with unprecedented political will and action.

This NCP will be used as a guiding document to ensure Water, Sanitation and Hygiene (WaSH) infrastructure and services are established in all high-risk areas. As WaSH interventions are implemented, other complimentary measures will be implemented concurrently: oral cholera vaccines, case management with infection prevention control; community engagement and risk communication, effective surveillance and laboratory, and effective and efficient coordination and leadership.

I am confident with committed leadership, adequate funding from government and partners, and full participation from all sectors, in accordance with this NCP, cholera will certainly be eliminated from Ethiopia. I, therefore, urge all stakeholders to work together with the Government of Ethiopia in committing to invest in our health and mobilize all required resources to guarantee the full implementation of the Ethiopian National Cholera Plan/NCP 2022-28, thereby achieving Ethiopia's cholera elimination goal by 2028

Thank you.

## Acknowledgements

The Ethiopian Public Health Institute (EPHI) is the result of the merger in April 1995 of the former National Research Institute of Health (NRIH), the Ethiopian Nutrition Institute (ENI) and the Department of Traditional medicine (DTM) of the Ministry of Health. Hence, it is the technical arm of Ethiopian Ministry of Health (MoH) to avert public health emergencies. The merger was affirmed by the Council of Ministers Regulation No 4/1996, which recognized the institute as an autonomous public authority having its own legal personality.

The EPHI is grateful to all partners, collaborators and individual experts involved in the development of the National Cholera Plan (NCP) Operation Plan 2022/23, Ethiopia. EPHI acknowledges the Ministry of Health, Ministry of Water and Energy, universities, and other partners.

The Global Task Force on Cholera Control (GTFCC), WHO, UNICEF, CDC, USAID, Resolve to Save Lives (RSL), and Red-Cross (IRC) are recognized for their intensive technical and financial support for the development of Ethiopian multi-sectorial Cholera Elimination Operational Plan 2022/23. Gratitude also goes to all the experts who have devoted long hours in the development of the National Cholera Plan (NCP) Operation Plan 2022/23.

Generally, EPHI wishes to recognize and highlight the unwavering high-level coordination and leadership of the institute for championing the achievement of the NCP annual goal.

## Abbreviations

<b>AEFI</b>	Adverse Event Following Immunization
<b>CFR</b>	Case Fatality Rate
<b>CTC</b>	Cholera Treatment Center
<b>DRM</b>	Disaster Risk Management
<b>EPHI</b>	Ethiopian Public Health Institute
<b>EPSA</b>	Ethiopian Pharmaceutical Supply Agency
<b>GTFFC</b>	Global Task Force for Cholera Control
<b>HCWs</b>	Health Care Workers
<b>HF</b> s	Health facilities
<b>ICG</b>	International Coordinating Group
<b>IPC</b>	Infection Prevention and Control
<b>M&amp;E</b>	Monitoring And Evaluation
<b>NCE-TF</b>	National Cholera Elimination Task Force
<b>NCP</b>	National Cholera Plan for Control or Elimination
<b>NHSC</b>	National Health Security Council
<b>OCV</b>	Oral Cholera Vaccine
<b>ORP</b>	Oral Rehydration Point
<b>ORS</b>	Oral Rehydration Solution
<b>PCR</b>	Polymerase Chain Reaction
<b>PHEM</b>	Public Health Emergency Management
<b>PHEOC</b>	Public Health Emergency Operational Center
<b>PPE</b>	Personal Protective Equipment
<b>RDT</b>	Rapid Diagnostic Test
<b>RRT</b>	Rapid Response Team
<b>SOP</b>	Standard Operational Procedure
<b>ToR</b>	Terms of Reference
<b>TOT</b>	Training of Trainers
<b>TWG</b>	Technical Working Group
<b>WaSH</b>	Water, Sanitation and Hygiene
<b>WHO</b>	World Health Organization

## Executive Summary

Cholera is a diarrheal disease caused by the bacterium *Vibrio cholera*. The infection primarily spreads through contaminated water and food. Symptoms include the onset of acute diarrhea and/or vomiting, muscle cramps, and body weakness. If untreated, the infection can result in rapid dehydration and death within hours.

Cholera remains a global threat to humanity as the disease continues to affect more than 47 countries worldwide—predominantly developing countries where access to clean and safe water and sanitation remains a serious challenge. Researchers have estimated every year there are 1.3 to 4.0 million cases of cholera, and 21,000 to 143,000 deaths worldwide due to the infection.

Due to risk factors of inadequate access to safe, sustainably managed water and sanitation, Ethiopia is at risk for cholera. Cases have been detected in all regions since the end of 2015. The main risk factors include inadequate access to clean and safe water, sub-standard sanitation facilities, poor solid waste management and consumption of contaminated food.

Consistent with the Global Task Force on Cholera Control (GTFCC) goal of ending cholera in endemic countries, which is articulated in the Global Roadmap to 2030, Ethiopia sponsored a resolution to eliminate cholera globally by 2030 at the 71st World Health Assembly in 2018. Furthermore, Ethiopia took a bold and ambitious step to eliminate cholera in Ethiopia by 2028— ahead of the global target. Ethiopia has developed its first country Multisector Cholera Elimination Operational Plan 2022/23 with the overall aim to reduce morbidity and mortality due to cholera and achieve cholera elimination in Ethiopia by 2028. This plan is a product of close collaboration of multiple disciplines and stakeholders including government line ministries, health partners and donors. The plan considers useful lessons, experiences, and best practices learned during responses to previous cholera outbreaks.

The plan identifies cholera control (short- to medium-term) and elimination (long-term) goals in line with the 2030 Global roadmap and relies on a comprehensive, multisector, and adaptable strategy to prevent cholera in 118 hotspot woredas. The plan articulates six strategies for an efficient leadership and coordination arm under the office of the Deputy Prime Minister, an efficient surveillance and laboratory capacity at all levels for early detection and confirmation of cases, an efficient case management and infection prevention and control system to reduce the overall mortality 90%, an efficient oral cholera vaccine campaign with more than 90% coverage, accelerated access to safe drinking water (achieving 80% coverage) and adequate sanitation (90% target by 2028), and an effective community engagement. A detailed multi-year monitoring and evaluation framework accompanies the key intervention strategies in the plan.



# 1. Introduction

Cholera is a diarrheal disease caused by the bacterium *Vibrio cholera*. The infection spreads primarily through contaminated water and food. Symptoms include the onset of acute diarrhea and/or vomiting, muscle cramps, and body weakness. If untreated, the infection can result in rapid dehydration and death within hours.

Diarrhea can be so severe it leads to severe dehydration and electrolyte imbalance within hours and can ultimately cause death. Symptoms may start anywhere from two hours to five days after exposure to cholera. Researchers have estimated every year there are 1.3 to 4.0 million cases of cholera, and 21,000 to 143,000 deaths worldwide due to the infection.

Cholera transmission is associated with unsafe water and food contaminated with human feces containing the bacteria. Humans are the only animal affected. Risk factors for the disease include poor sanitation, lack of clean drinking water, and poverty. There are concerns rising sea levels will increase the rates of disease. Prevention involves improved sanitation and access to clean water. Cholera vaccines given by mouth provide short-time protection for approximately 3-5 years and are costly compared to other interventions.

Although not mentioned in the sustainable development agenda as one of the diseases slated for elimination by the year 2030, cholera is considered one of the most important public health challenges of this era, and concurrently, one of the diseases of sustainable development goal importance. Cholera can have maternal (SDG 3.1), child health (SDG 3.2) and sanitation implications (SDG 6) –all of which are priorities

in the 2030 agenda. Cholera is an ancient disease and has been a health challenge for more than 2 centuries (since 1817); it currently has an annual case incidence of approximately 2.9 million, with up to 143,000 deaths globally. Fatalities due to cholera occur from its severe sequelae including extreme fluid and electrolyte loss associated with hypokalemia and hyponatremia. The effects of the disease can be disproportionate among certain age groups, notably children, among whom electrolyte loss and increase intestinal motility increase risk for malnutrition.

Cholera is a disease with diverse health implications in this era; its control and prevention were made a priority in the year 2017, with the launch of the Global Task Force on Cholera Control (GTFCC). The global strategy entails putting an end to Cholera by 2030 with a multi-prong approach which includes the promotion of sanitation, hygiene, proper nutrition, safe drinking water treatment, and vaccination to control cholera. However, with the increasing incidence of antimicrobial resistance and high direct costs of cholera treatment prevention is paramount. Approximately 47 countries are endemic for cholera, including Ethiopia; From 2015 – 2021, several outbreaks have occurred in different regions of the country. The outbreak in 2015 spread across the country, with over 30,000 cases, and 327 deaths (CFR 1%); 2017, alone, saw over 48,000 cases with 878 deaths (CFR 1.8%) recorded. The spatial distribution of the outbreak differs from year to year although some regions saw repeated outbreaks. In the year 2017, the Somali region was the most affected accounting for approximately 75% of the total cases and 87% of the total deaths reported nationally.

From April 2018 to the first week of May 2021, 19,844 Cholera cases with 327 deaths (CFR 1.6%) were reported from eleven regions; The highest number of cases was reported from SNNPR followed by Oromia region.

Population movement related to religious pilgrimages to holy sites and seasonal laborers moving across the country to work on commercial farms and mines greatly contributed to the resurgence of outbreaks in Oromia, Afar, Amhara, Tigray and SNNP regions. From 9 Aug 2021 to 15 January 2022, 674 cholera case were reported with CFR 1.04 and AR 201.7 per 100,000 population. Due to the history of cholera outbreaks in the country, cholera prevention and subsequent elimination is very important in the Ethiopian context.

Ethiopia was party to a resolution at the 71st World Health Assembly in 2018 and the Global Roadmap for the Control and Elimination of Cholera by 2030. The Global Roadmap to 2030 aims at reducing mortality from cholera by 90% in 2030 through strong commitment from all stakeholders. To meet the target, each endemic country must adopt a multi-sectoral approach that is effectively coordinated; Ethiopia has prepared its National Cholera Elimination Plan (NCP) 2021 – 2028 with aims to achieve interruption of cholera cases (zero cases) in cholera hotspot woredas by 2028.

The effectiveness of the NCP will depend on careful and well-organized execution, which justifies the need for a strategic operational plan with practical needs and application of the NCP. The goal of this operational plan is to provide a practical framework for the next year to guide the implementation of each activity in the NCP and to ultimately reduce cholera mortality by 30% in the next year.

## 1.1. Objectives of the operational plan

To provide practical guidance on how effective leadership and coordination for cholera elimination under the Deputy Prime Minister can be achieved.

To provide practical guidance on how surveillance and laboratory capacity can be improved at all levels for early detection and confirmation of cases by 2028.

To provide practical guidance to reduce the overall mortality resulting from cholera by 90% by 2028 and to ensure no local transmission reported in the 118 hotspot Woredas.

To develop an activity plan for the oral cholera vaccination campaigns to achieve vaccination coverage of more than 90% in hotspots and in outbreak situations.

To provide procedural guidance to improve access to basic water supply, sanitation, and hygiene at all levels of high risk kebeles within cholera hotspot woredas to eliminate cholera by increasing water supply from 65% to 90% and improve sanitation and hygiene coverage from 60% to 80% by 2028.

To provide procedural guidance on how to reach 100% of the population in identified cholera hotspot woredas by 2028 with cholera prevention and control messages targeted at behavioral change.

## 1.2. Purpose of the Operation plan

The NCP operation roadmap is a strategic plan that describes the steps Ethiopia will take to achieve the overall goal for the plan, including the activities/tasks prioritized for action in the immediate, medium, and long-term.

The roadmap includes milestones to allow regular tracking of progress towards achieving the overall goal and is intended to guide and support the effective and efficient implementation of the NCP.

### 1.3. Intended Users

The community, kebeles, woredas, zones, regions and national multi-sectoral teams will be the primary users of this operation roadmap.

### 1.4. Period of Implementation

This operational plan will serve for one year (EFY 2022/23). The plan performance will be reviewed at the end of the year and the inputs will be used to establish plans for consecutive years, each year updating the plan.

## 2. Operation Roadmap Pillars

This roadmap maximizes partner engagement to increase the operation roadmap priorities. It will evolve as progress is made and shall be updated every year to ensure it reflects the progress, changes in available resources or scheduling considerations. The roadmap consists of the following thematic/pillars areas:

- Leadership and Coordination
- Surveillance and Laboratory
- Case Management and Infection Prevention and Control
- Use of Oral Cholera Vaccine (OCV)
- Water, Sanitation and Hygiene (WaSH)
- Risk Communication and Community Engagement (RCCE).

### 2.1 Leadership and Coordination

The overall goal of the leadership and coordination thematic area is to ensure effective multi-sectoral leadership and coordination mechanisms for cholera elimination in Ethiopia.

#### 2.1.1. Strategic Objectives

The strategic objectives for the Leadership and Coordination Pillar are:

- Ensure strong political commitment, effective inter-ministerial and inter-agency coordination, and multi-sectoral engagement of all partners
- Develop and implement a leadership and coordination implementation plan/strategy
- Ensure systematic NCP activities are integrated into annual sectoral operational plans for all cholera control activities
- Identify and mobilize partners to advocate for cholera elimination

#### 2.1.2. Expected Outcomes

In line with the above objectives, the following outcomes are expected under the Leadership and Coordination Pillar:

- Adapt the DRM Council to undertake the coordination of the plan implementation in the interim of National Health Security Council (NHSC) establishment
- Establishment of National Health Security Council (NHSC) and a similar coordination platform at sub-national levels
- Establishment of task forces and technical working groups (TWG) at national, regional, and lower levels

- Develop and implement a leadership and coordination strategy
- Conduct a multi-sectoral cholera preparedness and response assessment
- Integrate and align the NCP across sectoral strategic and operational plans
- Conduct stakeholder mapping and resource mobilization advocacy at all levels

### 2.1.3. Activities and Timelines

To achieve the leadership and coordination objectives, the following activities will be implemented:

**Strategic Objective 1:** Ensure strong political commitment, effective inter-ministerial and inter-agency coordination, and multi-sectorial engagement of all partners.

1. Adapt the DRM Council to undertake the coordination of the implementation of the plan in the interim of National Health Security Council (NHSC) establishment

- Develop an emergency coordination booklet for officials and leaders
- Launch the NCP at national level
- Conduct coordination meetings on a bi-annual frequency

2. Establishment of the NHSC

- Prepare TOR or legal document for NHSC council establishment
- Conduct NHSC establishment meeting

3. Establish National Cholera Elimination Task Force (NCE-TF) to oversee the implementation of the plan and the achievement of the objectives and goals

- Establish national/regional/zonal and woreda Cholera Elimination Task Forces
- Prepare a TOR for task forces at all levels

4. Establish technical working groups (TWGs) by pillar

- Hold CE-Technical Working Group (TWGs) establishment meeting for all pillars at all levels

5. Incorporate NCP coordination under the roles and responsibilities of the NHSC and establish a similar coordination platform at sub-national/regional levels

- Write a letter from Deputy PM to regional presidents to establish RHSC structures at regional levels
- Develop TOR for RHSC structure

**Strategic Objective 2:** Develop and implement a leadership and coordination strategy-

1. Integrate and align the cholera elimination plan across sectors in line ministries.

- Write a letter from Deputy PM to line ministries advising integration of NCP activities into their sector wide budgeted work plan

- Organize a plan alignment workshop

2. Organize advocacy workshops and dissemination of NCP for national level, regional and woredas level

- Conduct national, regional, zonal, and woreda level advocacy workshops (one day)

3. Conduct periodic meetings across all coordination platforms as per the endorsed TORs.

- Conduct National Cholera Elimination Task Force (NCE-TF) meetings
- Conduct pillar TWG meetings at national level

4. Strengthen cross-border coordination as well as inter-regional communication within Ethiopia

- Conduct Inter-regional meetings
- Conduct coordination meeting to establish an information sharing platform
- Participate on cross-border and global meetings
- Invite neighboring countries to ARM meetings

**Strategic Objective 3:** Ensure systematic coordination for all cholera control activities.

1. Based on identified hotspot areas, conduct system level multi-sectorial capacity assessments. including coordination of human resource development

- Develop or adapt standard tools for baseline assessments
- Conduct base line assessments for each pillar in hotspot woredas

2. Establish/strengthen a multi-sectorial mechanism for information sharing

- Standardized reporting formats/ tools
- Develop a database for information sharing and storage

3. Conduct National Cholera Elimination Task Force (NCE-TF) technical support supervision

- Develop a supervisory checklist for supportive supervision

4. Strengthen PHEOC at national and regional levels

- Identify challenges or needs for national, and regional EOC strengthening
- Establish PHEOC at zonal levels
- Establish PHEOC at cholera-affected woreda level/include in operational budget
- Conduct PHEOC-IMS training for hotspot woredas
- Provide operational costs for regional PHEOC

**Strategic Objective 4:** Identify and mobilize collaborators to advocate for cholera elimination

1. Develop a resource mobilization plan for multi-sectorial cholera elimination plan in Ethiopia

- Recruit a consultant for resource mobilization
- Develop a resource mobilization plan

2. Conduct stakeholder mapping

- Identify stakeholders working on cholera

3. Develop resource mobilization strategy to fund the elimination plan

- Prepare mobilization strategy document
- Hold a consultative meeting on resource mobilization

4. Monitor progress and resource utilization according to the annual implementation plan

- Conduct annual review meeting

5. Introduce and advocate for development and humanitarian nexus

- Designate a nexus focal point
- Establish a nexus coordination mechanism at all levels
- Develop humanitarian and development nexus SOP for cholera response
- Conduct an advocacy workshop for development and humanitarian nexus

6. Procure and deploy 15 vehicles to support surveillance & implementation of NCP

- Government procures 15 vehicles for supporting NCP implementation
- Hire drivers and deploy to affected woredas
- Budget fuel cost
- Budget maintenance cost

7. Procure and provide office equipment, furniture, computers, and copy machines

- Prepare national office for NCP implementation
- Procurement of desktop computers, printers, and copy machines

8. Human resources

- Hire surveillance, WaSH, EPI, RCCE, and case management coordinators and professionals for NCP coordination office
- Hire program officers for regions
- Hire program officers for woredas

### 2.1.4. Leadership and Coordination Budget

The total budget for the proposed activities under the Leadership and Coordination thematic area is US\$5,233,980.40

Table 1: Coordination and leadership activities, budget of NCP operational plan 2022/23, Ethiopia

Goal: To have an effective leadership and coordination for cholera elimination under the Deputy Prime Minister												
Major activity	Sub activity	Output indicator	8-year Target	Annual Target	Jan	Feb	Mar	Apr	May	Jun	Budget (USD)	
Strategic Objective 1: To ensure strong political commitment, effective inter-ministerial, inter-agency coordination, and multi-sectorial engagement of all partners.												
Adapt the DRM Council to undertake the coordination of the implementation of the plan in the interim of National Health Security Council (NHSC) establishment	Develop an emergency coordination booklet for officials and leaders	Number of booklets prepared	10,000	10,000							\$30,000	
	Launch NCP at national level	Number of NCP launching workshops conducted	1	1							\$47,010	
	Conduct coordination meetings	Number of meetings organized	16	2					1		\$1,280	
Establishment of the NHSC	Prepare TOR or legal document for NHSC council establishment	Number of prepared TORs	1	1							\$5,014	
	Conduct NHSC establishment meeting	Number of meetings organized	1	1							\$3,200	
Establish National Cholera Elimination Task Force (NCE-TF) to oversee the implementation of the plan and the achievement of the objectives and goals	Establish National/regional/zonal and woredas Cholera Elimination Task Force	Number of CE-TF taskforces established	188	188						187	\$213,165	
	Prepare a TOR for task force	Number of TORs prepared and implemented	1	1							\$9,402	
Establish technical working group (TWGs) by pillar	Hold CE-Technical Working Group (TWGs) establishment meeting for all pillars at all levels	Number of functional TWGs organized by pillar	188	188	1							
					13	56	118					

Goal: To have an effective leadership and coordination for cholera elimination under the Deputy Prime Minister												
Major activity	Sub activity	Output indicator	8-year Target	Annual Target	Jan	Feb	Mar	Apr	May	Jun	Budget (USD)	
Incorporate NCP coordination under roles and responsibilities of the NHSC and establish similar coordination platform at sub-national/ regional level	Write a letter from Deputy PM to regional presidents to establish RHSC structures at regional levels	Number of RHSC structures organized	13	13								
	Develop TOR for RHSC structure	Number of TOR developed	1	1							\$14,103	
Strategic objective 2: To develop and implement leadership and coordination implementation plan/strategy.												
Integrate and align the cholera elimination plan across sectors in line ministries	Write a letter to line ministries from the Deputy PM advising integration of NCP activities into their sector wide budgeted workplan	Number of sectors integrated NCP in their annual plan	16	16							\$0	
	Organize a plan alignment workshop	Number of plan alignment workshop conducted	8	1							\$15,670	
Organize advocacy workshops and dissemination of NCP for national, regional and woredas level	Conduct national, regional, zonal, and woreda level advocacy workshops	Number of workshops conducted	28	13							\$66,020	
	Conduct National Cholera Elimination Task Force (NCE-TF) meetings	Number of Taskforce meetings conducted	32	4							\$3,000	
Conduct periodic meetings across all coordination platforms as per the endorsed TORs	Pillars conduct TWG meetings at national level	Number of TWG meetings conducted	96	12							\$9,000	



Goal: To have an effective leadership and coordination for cholera elimination under the Deputy Prime Minister																	
Major activity	Sub activity	Output indicator	8-year Target	Annual Target	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Budget (USD)
Strengthen cross-border coordination as well as inter-regional communication within Ethiopia	Conduct Interregional meetings	Number of meetings conducted	32	4			1			1			1				\$12,536
	Conduct coordination meeting to establish an information sharing platform	Number of shared reports	32	12													\$0
	Participate in cross-border and global meetings	# of cross border meetings conducted	16	2						1							\$10,000
	Invite neighboring countries to ARM meeting	# of invitations sent to neighboring countries to annual ARM meeting (in collaboration with WHO)	8	1													
Strategic objective 3: To ensure systematic coordination for all cholera control activities.																	
Based on the identified hotspot areas, conduct system level multi-sectorial capacity assessment including coordination and human resource development	Develop standard tools for baseline assessment	Number of standard tools developed	1	1							1						\$9,402
	Conduct base line assessment foreach pillar in hotspot woredas	Number of conducted baseline assessment	1	1							1						\$1,180,000
Establish/strengthen a multi-sectorial mechanism for information sharing	Standardized reporting formats/ tools	Number of developed standard reporting formats/tools	2	1													\$2,000
	Develop a data base for information sharing and storage	Number of developed data bases	1	1									1				
Conduct National Cholera Elimination Task Force (NCE-TF) technical support supervision	Develop a supervisory checklist for supportive supervision	Number of supportive supervision visits by the NCE-TF	8	1													\$10,000

Goal: To have an effective leadership and coordination for cholera elimination under the Deputy Prime Minister												
Major activity	Sub activity	Output indicator	8-year Target	Annual Target	Jan	Feb	Mar	Apr	May	Jun	Budget (USD)	
Strengthen PHEOC at national and regional level	Identify challenges or needs for national, and regional EOC strengthening	Number of need assessment conducted	1	0							\$0	
	Establish PHEOC at zonal level	Number of established PHEOC at zonal level	56	10	2	2	2	2	2	2	\$100,000	
	Establish PHEOC at cholera-affected woredas level/operational budget	Number of PHEOC established	118	36							\$288,000	
	PHEOC-IMS trainings for hotspot woredas	Number of PHEOC-IMS trainings										
	Provide operational cost for regional PHEOC	# of regions received operational cost	13	13	3						\$65,000	
Strategic objective 4: To identify and mobilize partners to advocate for cholera elimination												
Develop a resource mobilization plan for multisector cholera elimination plan in Ethiopia	Recruit a consultant for resource mobilization	Number of employed consultants	1	1	1	1	1	1	1	1	24,000\$	
	Develop resource mobilization plan	Number of prepared resource mobilization plans	8	1							7835\$	
Conduct stakeholder mapping	Identify stakeholders working on cholera	Number of stakeholder mapping conducted	8	1								
	Prepare mobilization strategy document	Number of strategy document developed	1	1	1						\$38,934	
Develop resource mobilization strategy to fund the elimination plan	Hold a consultative meeting on resource mobilization	Number of consultative meetings conducted	320	40	40						\$18,804	
	Conduct annual review meeting	Number of review meetings conducted	8	1							\$31,340	

Goal: To have an effective leadership and coordination for cholera elimination under the Deputy Prime Minister												
Major activity	Sub activity	Output indicator	8-year Target	Annual Target	Jan	Feb	Mar	Apr	May	Jun	Budget (USD)	
Introduce and advocate for development and humanitarian nexus	Designation of a nexus focal point	Designated nexus focal point			1							
	Establish a nexus coordination mechanism at all levels	Number of humanitarian nexus & outbreak response coordination meeting reports/minutes produced	8	1					1			
	Develop humanitarian and development nexus SOP or guide in cholera response	Number of SOP/ guides developed	1	1		1					\$28,206	
	Conduct an advocacy workshop for development and humanitarian nexus	Number of advocacy workshops conducted	8	1					1		\$10,969	
Government procure and deploy 15 vehicles to support surveillance & implementation of NCP	Procure 15 vehicles for supporting NCP implementation	Number of vehicles procured	15	0							\$288,450	
	Hire drivers and deployed	Number of hired drivers	15	0							\$3,000	
	Budget and procure Fuel cost	Number of liters purchased	15	0							\$120	
	Budget and ensure scheduled maintenance cost	Maintenance conducted on scheduled basis	15	0							\$70	
Procure and provide office equipment, furniture, computers, and copy machines	Prepare national office for NCP implementation	Rented national NCP office	1	1					1		\$36,000	
	Procurement of desktop computers, printers, and copy machines	Computers, printers & copy machines, & chairs available for use	1	1						1	\$50,000	

Goal: To have an effective leadership and coordination for cholera elimination under the Deputy Prime Minister												
Major activity	Sub activity	Output indicator	8-year Target	Annual Target	Jan	Feb	Mar	Apr	May	Jun	Budget (USD)	
Human resources	Hire surveillance, WaSH, EPI, RCCE, and case management coordinators and professionals for NCP coordination office	Number of personnel hired	24	24		24					\$380,400	
	Hire program officers for regions	Number of program officers hired	26	26	26						\$624,000	
	Hire program officers for woredas	Number of program officers hired	118	118		118					\$1,416,000	
Grand Total Leadership & Coordination											\$5,012,335	

### 2.1.5. Coordination and Leadership Pillar Budget Summary

Pillars, Strategic Objectives & Major Activities of Leadership and Coordination Pillar	Total (USD)	Budget for Strategic Objectives	Grand Total USD	Funding Gap
Strategic Objective 1: Ensure strong political commitment, effective inter-ministerial, inter-agency coordination, and multi-sectorial engagement of all partners.				
Adapt the DRM Council to undertake the coordination of the implementation of the plan in the interim of National Health Security Council (NHSC) establishment	\$78,290.00			
Establishment of the NHSC	\$8,214.40			
Establish National Cholera Elimination Task Force (NCE-TF) to oversee the implementation of the plan and the achievement of the objectives and goals	\$222,567.00	\$325,414	\$5,233,980.40	
Establish technical working groups (TWGs) by pillar	\$2,240.00			
Incorporate NCP coordination under the roles and responsibilities of the NHSC and establish similar coordination platform at sub-national/regional level	\$14,103.00			

Pillars, Strategic Objectives & Major Activities of Leadership and Coordination Pillar	Total (USD)	Budget for Strategic Objectives	Grand Total USD	Funding Gap
Strategic Objective 2: Develop and implement a leadership and coordination implementation plan/strategy.				
Integrate and align the cholera elimination plan across sectors in line ministries	\$15,670.00			
Organize advocacy workshops and dissemination of NCP for national level, regional and woredas level	\$66,020.00			
Conduct periodic meetings across all coordination platforms as per the endorsed TORs	\$12,000.00	\$116,226		
Strengthen cross-border coordination as well as inter-regional communication within Ethiopia	\$22,536.00			
Strategic Objective 3: Ensure systematic coordination for all cholera control activities				
Based on the identified hotspot areas, conduct system level multi-sectorial capacity assessment including coordination and human resource development	\$1,189,402.00			
Establish/strengthen a multi-sectorial mechanism for information sharing	\$2,000.00	\$1,654,402		
Conduct National Cholera Elimination Task Force (NCE-TF) technical support supervision	\$10,000		\$5,233,980.40	
Strengthen PHEOC at national and regional level	\$453,000.00			
Strategic Objective 4: Identify and mobilize partners to advocate for cholera elimination				
Develop a resource mobilization plan for multi-sector cholera elimination in Ethiopia	\$31,835			
Conduct stakeholder mapping	\$0			
Develop resource mobilization strategy to fund the elimination plan	\$57,738			
Monitor progress and resource utilization according to the annual implementation plan.	\$31,340	\$3,137,938		
Introduce and advocate for development and humanitarian nexus	\$39,175			
Procure and deploy 15 vehicles for supporting surveillance & implementation NCP	\$471,450			
Procure and provide office equipment, furniture, computers, and copy machines	\$86,000			
Human resources	\$2,420,400			

## 2.2 Surveillance and Laboratory

The goal is to improve surveillance and laboratory capacity to all levels for early detection and confirmation of cases by 2028.

### 2.2.1. Strategic Objectives (SO)

- Enhance surveillance systems for early detection, confirmation, reporting, and timely response to cholera outbreaks and monitoring the impact of the cholera control program.
- Enhance laboratory capacity for confirmation of cholera cases (laboratory culture capacity and rapid diagnostic tests) and assessment of antibiotic susceptibility of the bacteria and tracking strains.

### 2.2.2. Expected outcome

- Strengthen the existing surveillance system to timely detect, confirm, report, and respond to cholera outbreaks and monitor the impact of the cholera control program. International Health Regulations (IHR) state cholera should be reported within 48 hours.
- Strengthen laboratory capacity for confirmation of cholera cases, testing of environmental samples for the presence of pathogens, and assessment of antibiotic susceptibility of the bacteria and tracking strains.

### 2.2.3. Activities and Timelines

To achieve the surveillance and reporting objectives, the following activities will be implemented:

**Strategic Objective 1:** Enhance surveillance systems for early detection, confirmation, reporting, and timely response to cholera outbreaks and monitoring the impact of the cholera control program.

1. Strengthen cholera surveillance (community and indicator-based surveillance) through capacity building

- Preparation of Emergency Preparedness Response Plan (EPRP) at all levels
- Develop training manual on cholera prevention and control
- Train PHEM officers
- Provide training laboratory professionals
- Provide training for Frontline Field Epidemiologists
- Provide training for Rapid Response Teams
- Provide training for Health Development Armies and community volunteers
- Mentor Lab Professionals
- Train cross-border health care workers
- Ensure utilization of GTFCC cholera mobile application for cholera focal persons to share with their fellow HCWs for professional development

2. Equip health facilities with electronic tools for reporting and sustaining mechanisms for transmission of data

- Conduct gap assessments on electronic tools
- Equip health facilities with electronic accessories (tablet, internet modem) based on the established gaps
- Develop and deliver standardized surveillance reporting electronic tools (DHIS2, ODK, or both)

### 3. Establish Rapid Response Teams (RRTs) at all levels

- Establish RRTs at all woredas, all health facilities, zones, and regions
- Provide technical support on EPRP preparation, early detection, active case searching, verification of outbreak existence, timely outbreak investigation, and timely report sending to stakeholders (within 48 hours based on IHR)

### 4. Review cholera case definition

- Standardize and publish the cholera case definition job aid (acute watery diarrhea, suspected cholera case, confirmed cholera case, cholera alert, cholera outbreak, cholera endemic area, and cholera hotspot)
- Distribute printed case definition in outpatient and inpatient departments, health facilities, and port of entry sites
- Print and distribute cholera guidelines

### 5. Strengthen timely rumor notification and registration at all levels

- Provide and ensure existence of rumor logbook and rumor reporting formats
- Notify rumors within 30 minutes by CBS actors/community
- Verify rumors within 24 hrs
- Report verified rumors of cholera suspected cases
- Investigate rumor within 48 hours
- Prepare cholera outbreak investigation report

### 6. Ensure the timeliness and completeness of the surveillance data flow system

- Ensure timeliness
- Ensure completeness
- Develop and utilize electronic reporting system (ODK)
- Report complete cholera line list during outbreak to next level according to the national PHEM guideline

### 7. Collect and integrate different data sources (climate, nutrition, WaSH, events, environmental and public health surveillance data); Use the data to develop cholera occurrence prediction model

- Develop national data interfacing platform
- Update and utilize integrated data
- Develop cholera outbreak prediction/forecasting model
- Forecast outbreak using the prediction model

### 8. Strengthen active case searching, contact tracing, follow-up, and household disinfection

- Conduct active case searching
- Perform contact tracing and follow-up during cholera outbreak
- Assess surveillance knowledge of community on cholera prevention and control measure
- Conduct post-outbreak risk assessment to evaluate the risk of cholera spreading in cholera outbreak area or 42 days from last case
- Deliver 70 cars for woredas by clustering 118 woredas (Taken by WaSH and Case Mx team)

9. Strengthen surveillance cluster network and provide feedback and supportive supervision

- Create surveillance cluster network
- Conduct regular monthly cluster meeting
- Conduct supportive supervision quarterly
- Produce weekly bulletin and provide feedback

10. Strengthen cross-border collaboration and build a strong sub-regional early warning and alerting strategy

- Map points of entry
- Establish cross-border screening sites (including HR and logistics like RDT)
- Distribute cross border screening SOPs (conduct workshop for development of SOPs)
- Conduct screening activities at points of entry and notify cases
- Conduct integrated supportive supervision with engagement of regional PHEMs
- Create cross border standardized communication and data sharing platform

11. Update hotspot woredas on a yearly basis

- Conduct capacity assessment on cholera surveillance system
- Conduct rapid OCV post campaign coverage assessment
- Provide cholera RDT kits

**Objective 2:** Enhance laboratory capacity for confirmation of cholera cases (laboratory culture capacity and rapid diagnostic tests) and assessment of antibiotic susceptibility of the bacteria and tracking strains.

1. Strengthen national, regional, sub-regional laboratory capacity

- Assess cholera diagnostic capacity in regional reference labs
- Enrollment of regional reference laboratories for cholera diagnostics proficient testing/external quality assessment (EQA) schemes
- Review labs Proficiency Testing PT/EQA performance
- Develop and disseminate Standard Operating Procedures (SOP) and job aids for the collection, transportation, and storage of laboratory specimens
- Conduct supportive supervision visits quarterly
- Conduct regular review meetings
- Collect environmental samples during occurrence of outbreak
- Test all collected environmental samples
- Conduct genomic sequencing on cholera to identify circulating strains during the outbreak
- Conduct a “hot wash” to prepare an after-action report identifying gaps and areas where improvement is needed for future years



## 2. Strengthen sample referral and transportation system

- Establish sample referral system
- Build inter-regional consensus on sample referral system based on geographical proximity
- Support cholera suspect sample collection and shipment to reference labs and university hospitals labs
- Print and distribute cholera case-based formats in paper format
- Distribute triple packaging and cold boxes for sample transportation

## 3. Ensure provision of logistics and supplies for all designated laboratories

- Conduct cholera diagnostics supplies inventory regularly
- Provide cholera lab logistics and supplies based on identified need
- Incorporate cholera lab reagents and supplies management in LMIS (Logistic Management Information system)

## 2.2.4. Surveillance and Laboratory Activities, Timeline and Budget

The total budget under the surveillance and laboratory pillar of NCP operational plan 2022/23 is US\$3,965,849.

Table 2: 2.2.4. Surveillance and Laboratory Activities, timeline and budget, NCP operational plan 2022/23, Ethiopia.

Goal: To improve surveillance and laboratory capacity at all levels for early detection and confirmation of cases by 2028																
Major activity	Sub-Activities	Output indicator	8-year Target	July	August	September	October	November	December	January	February	March	April	May	June	Budget (USD)
Strategic Objective 1: To enhance surveillance system for early detection, confirmation, reporting, and timely response to cholera outbreaks and monitoring the impact of the cholera control program																
Strengthen cholera surveillance (community and indicator-based surveillance) through capacity building	Preparation of EPRP	# of EPRP document developed	210		1	12	79	118								\$257,800
	Develop training manual	# of participants	180				1	1								\$51,102
	Provide training to PHEM officers	# of trainees	354			1	1	1								\$99,996
	Provide training to laboratory professionals	# of trainees	206		1	1	1	1								\$58,408
	Provide training to Frontline FETP	# of trainees	154			1	1	1								\$43,796
	Provide training to RRT	# of trainees	354			1	1	1								\$98,796
	Provide training to HDAs and community volunteers	# of trainees	88,500		22125	22125	22125	22125	22125							\$1,446
	Provide mentorship for lab professionals	# of trainees	52			13			13			13			13	\$21,645
	Provide training for cross-border health care workers	# of trainees trained	60		20	20	20									\$17,604
	Initiate and ensure utilization of GTFCC cholera mobile application for cholera focal persons to share during the next HCWs professional development	# of cholera focal persons assigned	50		50	50	50									\$13,800

Goal: To improve surveillance and laboratory capacity at all levels for early detection and confirmation of cases by 2028

Major activity	Sub-Activities	Output indicator	8-year Target	Month												Budget (USD)			
				July	August	September	October	November	December	January	February	March	April	May	June				
Equip health facilities with electronic tools for reporting and sustaining mechanism for transmission of data	Conduct gap assessment on electronic tools	# of assessed hotspot woredas	12	6															\$40,320
	Equip health facilities with electronic accessories	# of health facilities equipped with electronic accessories	3,540	1770	1770														\$1,239,000
	Develop standardized surveillance reporting electronic tools (DHIS2 or ODK or both)	# of workshop conducted	3	1	1	1													\$22,700
Establish Rapid Response Teams (RRTs) at all levels	Ensure RRT establishment	% of woredas established RRTs	100%	1	1	1													\$0
Review cholera case definition	Publish the cholera case definition job aid	# of woredas and HFs having job aid	6000		3000	3000													\$120,000
	Distribute published case definition	# of woredas and HFs received SCD	43,750		43750														\$0
	Distribute printed cholera guidelines	# of woredas and HFs received cholera guidelines	42,000		42000														\$840,000

Goal: To improve surveillance and laboratory capacity at all levels for early detection and confirmation of cases by 2028															
Major activity	Sub-Activities	Output indicator									Budget (USD)				
		8-Year Target	July	August	September	October	November	December	January	February		March	April	May	June
Strengthening timely rumor notification and registration at all levels	Provide rumor logbook and rumor reporting formats	# of woredas and HFs having rumor logbook	2,950		2950										\$324,000
	Notify rumors within 30 minutes by CBS actors/community	% of notified rumors within 30 minutes	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	\$0
	Verify rumors within 24 hrs	% of verified rumors within 24 hours from notified rumors	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	\$0
	Report verified rumors of cholera suspected cases	% of verified rumors reported	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
	Investigate rumors and report confirmed cases within 48 hours	% of investigated rumors and report confirmed cases within 48 hrs	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	\$129,210
	Prepare cholera outbreak investigation report	% of reported outbreak investigations from its occurrence	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	\$0
	Ensure timeliness	% of timely reported surveillance data	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	\$0
	Ensure completeness	% of completed (facility and content) surveillance data	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	\$0
	Utilize electronic reporting system (ODK)	# of health facilities reporting via electronic format	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	\$300
	Report all cholera cases by line list	% woredas having active cholera outbreak	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	\$0



Goal: To improve surveillance and laboratory capacity at all levels for early detection and confirmation of cases by 2028																		
Major activity	Sub-Activities	Output indicator		8-year Target	Budget (USD)													
		Sub-Activities	Output indicator		July	August	September	October	November	December	January	February	March	April	May	June		
Strengthen surveillance cluster network and provide feedback and supportive supervision	Create surveillance cluster network	# of clusters	1														\$370	
	Conduct regular monthly cluster meeting	# of cluster meeting minute	12	1	1	1	1	1	1	1	1	1	1	1	1	1	\$0	
	Conduct supportive supervision quarterly	# of supportive supervision conducted	4														\$0	
	Produce weekly bulletin	# of produced weekly bulletin	52	4	4	4	4	4	4	4	4	4	4	4	4	4	\$15,000	
Strengthen cross-border collaboration and build a strong sub-regional early warning and alerting strategy	Map points of entry (PoE)	# of identified PoE	27	27	27	27	27	27	27	27	27	27	27	27	27	27	\$0	
	Establish cross-border screening sites (including HR and logistics like RDT)		27	27	27	27	27	27	27	27	27	27	27	27	27	27	\$90,072	
	Develop and distribute cross border screening SOPs (Conduct workshop for development of SOPs)	# of SOP workshop	3															\$11,665
	Conduct screening activities at points of entry	# of daily base screening	27	27	27	27	27	27	27	27	27	27	27	27	27	27	\$360,288	
	Conduct integrated supportive supervision with engagement of regional PHEM	# of integrated supportive supervision conducted	2	1	1	1	1	1	1	1	1	1	1	1	1	1	\$0	
	Create cross border standardized communication and data sharing platform	# of communication platform	1															\$0
Revise hotspot woredas on a yearly basis	Conduct capacity assessment on cholera surveillance system	% of surveillance capacity assessment done	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	\$0	
	Conduct rapid OCV post campaign coverage assessment	% of OCV post campaign assessment done	100%														\$0	
	Provide RDT kits estimated number of cases within a year as essential kit for hotspot woredas, health centers and health posts	# of RDTs distributed	885,000	221250	221250	221250	221250	221250	221250	221250	221250	221250	221250	221250	221250	221250	\$0	

Goal: To improve surveillance and laboratory capacity at all levels for early detection and confirmation of cases by 2028																
Major activity	Sub-Activities	Output indicator	8-year Target	July	August	September	October	November	December	January	February	March	April	May	June	Budget (USD)
Strengthen national, regional, sub-regional laboratory capacity	Assess cholera diagnostic capacity in the regional reference lab	# of assessment conducted	15													\$3,110
	Enrollment of regional reference laboratories for cholera diagnostics proficient testing external quality assessment (EOA) schemes	# purchased EOA	16	7	16											\$8,000
	Review labs Proficiency Testing PT/EOA performance	# of labs passed PT	16		4				4						4	\$0
	Distribute Standard Operating Procedures (SOP) and job aids for the collection, transportation, and storage of laboratory specimen.	# of Lab SOP and job aids distributed	16		6	10										\$6,871
	Conduct supportive supervision quarterly	# of SS conducted	4		1				1						1	\$3,044
	Conduct regular review meetings	# of RM conducted	4		1				1						1	\$0
	Collect environmental samples during occurrence of outbreak	# of environmental samples collected	2						1	1					1	\$3,840
	Test all collected environmental samples	% of tested samples	100							1					1	\$0
	Conduct genomic sequencing to identify circulating strains	# of GS conducted	2							1					1	\$2,000
	Conduct a "hot wash" to prepare an after-action report identifying gaps and areas where improvement is needed for future years	% staff participating in "hot wash"  Data compiled and after-action report finalized	75% staff  1 report													

Goal: To improve surveillance and laboratory capacity at all levels for early detection and confirmation of cases by 2028																		
Major activity	Sub-Activities	Output indicator	8-year Target	Budget (USD)														
				July	August	September	October	November	December	January	February	March	April	May	June			
Strengthen sample referral and transportation system	Map sample referral system of hot spot woredas with cholera diagnostic laboratories	# of mapped hotspot woredas	1		1												\$0	
	Build inter-regional consensus and create networking between proximal labs	%	100%		1													\$0
	Support cholera suspect sample shipment	# of cholera samples transported to reference lab	35		3	3	3	3	3	3	3	3	3	3	4	4	4	\$9,240
Ensure provision of logistics and supplies for all designated laboratories	Print and distribute cholera case-based formats in pad	# of distributed CBF	3,540		1770	1770	1770											\$28,320
	Distribute triple packaging and cold chain equipment for sample transportation and storage	# of woredas with triple packaging and cold chain equipment for sample transportation	118		40	39	39	39										\$11,800
	Conduct cholera diagnostics supplies inventory regularly	# of lab inventory conducted	4		1				1						1			\$0
Ensure provision of logistics and supplies for all designated laboratories	Provide cholera lab logistics and supplies for estimated number of cases within a year	# of labs supplies provided	16		1				1									\$307,696
	Incorporate cholera lab reagents and supplies management in LMIS (Logistic Management Information system) -Dagu	# of woredas utilizing lab LMIS system	1		1													\$10,570
	<b>Grand total</b>																	<b>\$4,321,097</b>



## 2.2.5. Surveillance and Laboratory Pillar Budget Summary

Table 3: Surveillance and laboratory pillar budget Summary, NCP operational plan 2022/23, Ethiopia.

Pillars, Strategic Objectives & Major Activities of Surveillance and Laboratory Pillar		Total (USD)	Budget for Strategic objectives	Grand total USD surveillance and Lab	Funding Gap
Strategic objective 1: Surveillance and Report Pillar NCP Operational Plan in 2022, Ethiopia NCP (2021-22)					
Strategic objective 1: Surveillance and Report Pillar					
Strengthen cholera surveillance (community and indicator-based surveillance) through capacity building		\$279,445		\$3,965,849	
Equip health facilities with electronic tools to report and sustain mechanism for transmission of data		\$1,302,020			
Strengthen and establish Rapid Response Teams (RRTs) at all levels		\$0			
Review cholera case definition		\$960,000			
Strengthening timely rumor notification and registration at all levels		\$453,210			
Ensure timeliness and completeness of the surveillance data flow system		\$30,000			
Collect and integrate different data sources (climate, nutrition, WaSH, events, environmental and public health surveillance data); Use the data to develop cholera disease occurrence prediction model		\$7,200	\$3,571,358		
Strengthen active case searching, contact tracing, follow-up, and household disinfection		\$62,088			
Strengthen surveillance cluster network and provide feedback and supportive supervision		\$15,370			
Strengthen cross-border collaboration and build a strong sub-regional early warning and alerting strategy		\$462,025			
Revise/identify hotspot wordas on a yearly basis		\$0			
Surveillance and Report Pillar Sub-Total		\$3,571,358			
Strategic objective 2: Laboratory Sub Pillar NCP operational Plan in 2022, Ethiopia NCP (2021-22)					
Strengthen the national, regional, sub-regional laboratory capacity		\$26,865			
Strengthen sample referral and transportation system		\$49,360			
Ensure provision of logistics and supplies for all designated laboratories		\$318,266	\$788,982		
Laboratory Sub Pillar Sub-Total		\$394,491			
Surveillance and Laboratory Pillar Grand Total		\$3,965,849			

## 2.3. Case Management and Infection Prevention and Control

The goal is to provide practical guidance on how to reduce the overall mortality resulting from cholera by 30% in the first year and by 90% by 2028 and ensure there is no local transmission reported in the 118 hotspot Woredas by 2028.

### 2.3.1. Strategic Objectives

- To increase the accessibility of early treatment to all categories of people by strategically setting up CTC/U based on the peculiarities of the communities.
- To strengthen health care systems to ensure availability of adequate resources and effective referral pathways
- To strengthen capacity for cholera case management to reduce CFR to zero by 2028 by ensuring adequate infection, prevention, and control in treatment centers to prevent cross-contamination and local transmission

### 2.3.2. Expected Outcomes

- Early identification and proper treatment for cholera
- IPC/WaSH, staff accessibilities and referral systems and protocols are established and put in place
- Reduce cholera CFR by 30%
- IPC practices and principles are implemented per the national standard

### 2.3.3. Activities and Timelines

To achieve the case management and infection prevention and control objectives, the following activities will be implemented:

**Strategic Objective 1:** Increase the accessibility of early treatment to all categories of people by strategically setting up CTU based on the peculiarities of the communities

1. Mapping of hotspots and special populations in the various woredas

- Identify and map special populations, mass gathering areas and spiritual places where potential cholera outbreak could emerge in hotspot woredas
- Develop an audit tool to assess availability and access of water and sanitation services at special populations, mass gathering areas and spiritual places in hotspot woredas

2. Identify and map health facilities to be used as cholera treatment facilities and those that regularly receive suspected cholera patients in hotspot woredas

- Assess, identify, and map advance healthcare facilities with adequate space and resources to be used to set up oral rehydration points and CTU/CTC for all hotspots woredas

3. Set up a network of treatment facilities in hotspot woredas

- Establish oral rehydration points, CTCs/CTUs in cholera-affected hotspot woredas
- Building incinerator at CTC

- Establish a direct communication link and networking platform for all CTCs/CTUs in hotspot woredas within the region and across the region
- Provide duty payment for healthcare workers involved in the CTCs/CTUs
- Procure landline phones
- Procure asymmetric digital subscriber line (ADSL)
- Procure desktop computers
- Purchase airtime top-up
- Provide capacity building to strengthen traditional ambulance systems in hard-to-reach areas with ambulances in hotspot woredas

**Strategic Objective 2:** Strengthen health care systems by ensuring availability of adequate resources and effective referral pathways

1.Ensure adequate access and availability of safe water and sanitation services in all health care facilities, including CTUs/CTCs, in areas all hotspot areas

- a.Develop an audit tool to assess availability and access of water and sanitation services at healthcare facilities including CTUS/CTSS
- b.Select appropriate and provide training for local supervisors to conduct the assessment
- c.Conduct appropriate audits on a regularly scheduled basis

2.Ensure CTCs function according to IPC measures in the context of COVID-19

a.Assesses appropriate protocols for IPC measures as per standard in the context of the local situation

b.Procure Facemasks and sanitizer for prevention of covid-19

3.Ensure the availability of ambulances for referral purposes to transport patients to health facilities in the hotspots

a.Assess availability and map the local referral system of the hotspot woreda

b.Strengthen an appropriate two-way referral system

c.Assess and map availability and functionality of ambulances for referral system (with appropriate supplies and professionals) to transport patients 24/7

d.Procure spare parts to functionalize ambulances

e.Ensure availability of ambulance for referral system 24/7 for cholera-affected woreda

4.Strengthen communication and transport systems for staff and supervisors working at CTCs/CTUs

a.Assess the availability of communication and transportation system for staff and supervisors for CTUs/CTCs

b.Procure transportation system for staff and supervisors working at CTCs/CTUs

**Strategic Objective 3:** Strengthen capacity for cholera case management to reduce CFR by 30% by 2022/23

1. Hold a workshop at the national level for reviewing cholera clinical management

a. Conduct a national workshop to review, update and publish cholera clinical case management guidelines

2. Hold curriculum development meetings for inclusion of cholera guidelines in institutions of higher learning (medical, health and nursing schools)

a. Conduct a workshop at national level for curriculum development to incorporate cholera treatment guideline to the learning curriculum for healthcare professionals

3. Hold a launch and dissemination meeting for the national cholera clinical management guidelines

a. Nationally launch the revised cholera treatment guideline

b. Disseminate the revised cholera treatment guideline to all regions, zones, woredas and health facilities.

4. Conduct capacity building workshops for health workers on the appropriate procedures for case management, infection control, and referral pathways for cholera in hotspot woredas

a. Develop national training material

b. Train PHEM and FETP officers on Master TOT Training

c. Provide TOT for health professionals from 11 regions

d. Cascade the training to zonal and woreda level training

e. Provide TOT for laboratory professional

f. Cascade lab training to laboratory professionals

g. Provide cascade training for healthcare professionals on appropriate procedures for case management, and referral pathways from 118 cholera hotspot woredas

h. Conduct incident management training for woreda health offices

5. Train community health workers on preparation and provision of ORS and other infusions in all hotspot woredas

a. Develop training package for health extension workers in selected local languages

b. Conduct onsite training for health extension workers on preparation and provision ORS by RRTs in all hotspot woredas

6. Conduct mentorship and technical supervision for community health workers in preparation and provision of ORS

a. Conduct mentorship and technical supervision for CTC/CTU and health post on preparation and provision of ORS in cholera-affected hotspot woredas

7. Maintain and preposition adequate cholera treatment stocks at the various hotspots

a. Conduct a national level workshop to develop a stock preposition document for various levels

b. Disseminate guiding documents to RHBs, zones, woredas

c. Provision of TOT training on treatment supplies prepositioning to technical focal points from national and regional level

d. Cascade treatment supplies prepositioning training to zonal and woreda level training

e. Assess and identify area for nearby storage sites for cholera treatment stock in all hotspot woredas

f. Procure cholera treatment kits for CTCs/CTUs for selected regions

g. Update list and assess the availability of cholera treatment stock at the national level

h. Distribute cholera treatment kits to cholera-affected hotspot woredas

i. Conduct inventory bi-annually

8. Establish and maintain a roster of health workers, including support staff, for case management of cholera

a. Keep an appropriate roster of all the trained healthcare workers, auxiliary staff, and RRTs for case management, infection control and referral pathways in cholera-affected hotspot woredas

9. Develop and regularly update deployment plan of health workers and support staff in the event of cholera outbreaks

a. Develop SOPs for deployment of trained health care worker based on surge capacity in cholera-affected hotspot woredas

b. Annually update SOPs for deployment of trained health care worker based on surge capacity in cholera-affected hotspot woredas

10. Establish, train, and operationalize Rapid Response Teams in all hotspot areas

a. Reactivate/operationalize RRT teams in cholera-affected hotspot woredas

b. Train/sensitize RRT members in all hotspot woredas

11. Ensure availability of well-equipped gender sensitive CTCs/CTUs and prefabricated Cholera Treatment Units (CTUs) for hotspots to improve access and provide quality patient care

a. Incorporate gender parity in CTCs/CTUs designs and setup in cholera-affected hotspot woredas

12. Maintain adequate medical stocks at national/regional/zonal/woredas hotspot sites.

a. Assess availability of appropriate stock as per the national standard at national, regional, zonal and hotspot woreda level

- Conduct inventory bi-annually

**Strategic Objective 4:** Ensuring adequate infection, prevention, and control in treatment centers to prevent cross-contamination and decrease the local transmission to zero in hotspot woredas

1. Provide orientation to CTC/CTU health workers, including support staff, on infection prevention and control of cholera and other diarrheal diseases including effective waste disposal and disinfections

a. Provide training for healthcare professionals on infection prevention and control for cholera and other diarrheal disease as well as waste disposal from cholera-affected hotspot woredas

2. Train RRTs in safe handling and disposal of cholera bodies

- a. Provide training to RRT members in cholera-affected hotspot woredas on safe handling and disposal of cholera bodies

3. Procure cadaver bags, disinfectants, and cleaning supplies for CTC/CTUs

- a. Assess the availability of cadaver bags need for established CTCs/CTUs cholera-affected hotspot woredas

- b. Procure cadaver bags to established CTCs/CTUs for cholera-affected hotspot woredas

- c. Distribute cadaver bags to cholera-affected hotspot woredas

4. Train auxiliary staff who are at increased risk of cholera on cleaning and disinfection procedures, infection prevention and control

- a. Develop and adopt training material for auxiliary staff on cleaning and disinfection and infection prevention and control for cholera-affected hotspot woredas in their respective local language

- b. Provide training on cleaning and disinfection procedures, and infection prevention and control for auxiliary staff per woreda in CTUs/CTCs in cholera outbreak-affected hotspot woredas

- c. Conduct inventory of stocks bi-annually

5. Ensure adequate PPE materials in health facilities and CTC/CTUs

- a. Assess availability of PPE Kit Material in cholera-affected woredas

- b. Procure PPE Kits for cholera-affected hotspot woredas

- c. Distribute PPE for cholera-affected hotspot woredas

- d. Conduct inventory of stocks bi-annually

6. Ensure availability of disinfectants & sanitation materials

- a. Assess availability of 70% HTH disinfection and sanitation materials for cholera-affected hotspot woredas

- b. Procure 70% HTH disinfection and sanitation material for cholera-affected hotspot woredas

- c. Distribute 70% HTH disinfectant for cholera-affected hotspot woredas

- d. Conduct inventory of stocks

### 2.3.4. Case Management and Infection Prevention and Control budget

The total budget for the proposed case management and infection prevention and control area amount is US\$53,581,808

Table 4: Case Management and Infection Prevention and Control Budget, NCP Operational Plan 2022/23, Ethiopia.

Activity	Sub Activity	Output Indicator	8-year target	Annual Target	July	August	September	October	November	December	January	February	March	April	May	June	Budget	
Target: To reduce the overall mortality resulting from cholera by 90% by 2028 and ensure no local transmission reported at the in the 118 hotspot districts/Woredas																		
Strategic Objective 1: To increase the accessibility of early treatment to all categories of people by strategically setting up CTUs based on the peculiarities of the communities																		
Mapping of hotspots and the special populations in the different woredas	Identify and map special populations, mass gathering areas and spiritual places where potential cholera outbreaks could emerge in hotspot woredas	Number of woredas with identified special populations, mass gatherings and spiritual places where potential cholera outbreaks could occur	118	118				118									\$436,969	
	Develop an audit tool to assess availability and access of water and sanitation services at special populations, mass gathering areas and spiritual places in hotspot woredas	Prepared Audit tool	7	1					1									\$22,342
Identify and map health facilities that can be used as cholera treatment facilities and those that regularly receive suspected cholera patients in hotspot woredas	Conduct assessment in advance healthcare facilities with adequate space and resources to set up oral rehydration points and CTU/CTC for all hotspots woredas	Number of assessed HFs (CTC/U)	118	118				118										\$116,525

Activity	Sub Activity	Output Indicator	8-year target	Annual Target	Month												Budget	
					January	February	March	April	May	June	July	August	September	October	November	December		
Establish a network of treatment facilities in hotspot woredas	Establish oral rehydration points, CTCs/CTUs in cholera-affected hotspot woredas	Percent of established ORP/CTU/CTC	118	35														\$94,792
	Building or link incinerator in CTC	Number of incinerators built	70															\$2,916,667
	Establish a direct communication link and networking platform all CTCs/CTUs in a hotspot woredas within and across the region	Proportion of direct communication links and networking platforms created among all CTCs/CTUs in hotspot woredas	100															\$0
	Provide duty payment for healthcare workers involved in the CTCs/CTUs		100		100%													\$63,375
	Procure landline phones	Number of landline phones for CTC/CTU procured	70	70				70										\$7,292
	Procure Asymmetric Digital Subscriber Lines (ADSL)	Number of ADSL for CTC/CTU procured	70	70				70										\$10,209
	Procure desktop/laptop computers	Number of desktop/laptop for CTC/CTU procured	70	70									70					\$175,000
	Procure airtime top up	Percentage of staff with airtime top-up procured	100	100				70										\$35,000
	Provide capacity building to strengthen traditional ambulance systems in hard-to-reach areas with ambulances in hotspot woredas	Number of health development army taking orientation	100	100													1	\$32,813
		Sub Total																\$3,910,984





Activity	Sub Activity	Output Indicator	8-year target	Annual Target	July	August	September	October	November	December	January	February	March	April	May	June	Budget	
Ensure the availability of ambulances for referral purposes and transporting patients to the health facilities in the hotspots	Develop an assessment tool to assesses availability and access of water and sanitation services at special populations, mass gathering areas and spiritual places in hotspot woredas	Prepared assessment tool		1					70								\$0	
	Assess availability and map the local referral system of the hotspot woreda	Number of hotspot woredas assessed for the availability of proper referral system		118		118											\$17,479	
	Strengthen an appropriate two-way referral system	Number of woredas with two-way referral system established		118			59	59									\$94,179	
	Assess and map availability and functionality of ambulances for referral system (with appropriate supplies and professionals) for transportation of patients 24/7	Number of hotspot woredas assessed for the availability of ambulances		118			59	59										\$0
	Procure spare parts to functionalize ambulances	Number of ambulances provided with maintenance as required		118					118									\$2,950,000
	Avail an ambulance for referral system 24/7 for cholera-affected woreda	Number of woredas received ambulances for referral systems 24/7		118					118									\$21,387,500

Activity	Sub Activity	Output Indicator	8-year target												Annual Target	Budget							
			January	February	March	April	May	June	July	August	September	October	November	December									
Strengthen communication and transport systems for staff working at CTCs/CTUs as well as supervisors	Assess the availability of communication and transportation system for staff and supervisors for CTCs/CTUs	Number of CTCs/CTUs assessed for the availability of communication and transport system							59	59											\$0		
	Procure transportation system for staff and supervisors CTCs/CTUs	Number of cars procured										70										\$11,165,000	
Strategic Objective 3: Strengthen capacity for cholera case management to reduce CFR by 90% in 2028																							
Hold a workshop at the national level for reviewing cholera clinical management	Conduct a national workshop to review, update and publish the cholera clinical case management guideline	Number of workshops conducted							1	1												\$67,025	
	Conduct a workshop at national level for curriculum development to incorporate cholera treatment guideline to the learning curriculum for healthcare professionals	Number of workshops conducted  % of institutions who adopted the guidelines for inclusion in curriculum											1								1	1	\$67,025
Conduct launch and dissemination meeting for the national cholera clinical management guidelines	Nationally launch the revised cholera treatment guidelines	Number of meetings conducted																			1		\$22,342
	Disseminate the revised cholera treatment guideline to all regions, zones, woredas and health facilities	Number of facilities with cholera guidelines disseminated																				9805	\$870,603

Activity	Sub Activity	Output Indicator	8-year target	Annual Target	8-Year target												Budget		
					July	August	September	October	November	December	January	February	March	April	May	June			
Conduct capacity building workshop of health workers on the appropriate procedures for case management, infection control, and referral pathways for cholera in hotspot woredas	Develop national training material	National TOT training material developed		6														\$134,050	
	Training PHEM and FETP officers on master TOT training	Number of PHEM and FETP officers trained		45	45														\$31,758
	Provide TOT for health professionals from 11 regions	Number of health professionals/ regions provided TOT		2772	154														\$1,736,882
	Cascading the training to zonal and woreda level training	Number of healthcare professionals trained		1012				660	352										\$657,943
	TOT of laboratory professional	Number of laboratory officers trained on TOT		45	45														\$17,685
	Cascade training to HCF laboratory professionals	Number of laboratory officers trained		880	675	900	205												\$228,588
	Provide cascading training for healthcare professionals on appropriate procedures for case management, and referral pathways from all cholera hotspot woredas	Number of healthcare professionals trained		3068	900	900	900				368								\$1,439,334
	Conduct Incident Management Training for Woreda Health Offices	Number of Healthcare workers trained		948	474	474													\$250,046
Training of community health workers on preparation and provision of ORS and other infusions in all hotspot woredas	Develop training package for Health extension workers in selected local languages	Number of training packages developed in a various, local languages		10	10													\$17,685	

Activity	Sub Activity	Output Indicator	8-year target	Annual Target	July	August	September	October	November	December	January	February	March	April	May	June	Budget
Conduct mentorship and technical supervision for community health workers on preparation and giving of ORS	Conduct onsite training for health extension workers on preparation and provision of ORS by RRTs in all hotspot woredas	Number of HEW provided onsite training		5,900							1500	1400					\$3,399,187
	Conduct on job mentorship and technical supervision for CTC and HPs on preparation and giving ORS in cholera-affected hotspot woredas	Number of HEW provided mentorship and technical supervision		875													\$129,610
Maintain and preposition adequate cholera treatment stocks at the various levels where there are hotspots	Conduct a national level workshop to develop a stock preposition guiding document at different levels	Number of workshops conducted		3				1	1	1							\$67,025
	Dissemination of guiding documents to RHBs, Zones, Woredas	Number of guiding documents distributed		78								78					\$2,084
Provision of TOT training on treatment supplies prepositioning to technical focal points from at national and regional level	Cascading treatment supplies prepositioning training to zonal and woreda level training	Number of professionals trained on TOT		90		32	32										\$25,307
		Number of professional trained		172				172									

Activity	Sub Activity	Output Indicator	8-year target	Annual Target	July	August	September	October	November	December	January	February	March	April	May	June	Budget
Maintain and preposition adequate cholera treatment stocks at the various levels where there are hotspots	Assess and identify area for nearby storage sites for cholera treatment stock in all hotspot woredas	Number of woredas assessed for storage sites		118			59	59									\$0
	Procure cholera treatment kits for CTCs/CTUs for selected regions	Number of CTC kits procured		70					70								\$15,915,211
	Update list and assess the availability of cholera treatment stock at the national level			100		100									3		\$0
	Distribute the cholera treatment kits to cholera-affected hotspot woredas	Number of CTC Kits and PPE distributed		70				Distribute during cholera outbreak									\$1,836,371
Establish and maintain roster of health workers, including support staff, in case management of cholera	Conduct inventory bi-annually	Number of inventory conducted		2			1					1					\$0
	Keep appropriate roster of all trained healthcare workers, auxiliary staff, and RRTs on case management, infection control and referral pathways in cholera-affected hotspot woreda	Number of trained health workers listed on facility rosters		2800													\$4,167

Activity		Sub Activity		Output Indicator	8-year target	Annual Target	July	August	September	October	November	December	January	February	March	April	May	June	Budget	
Develop and regularly update deployment plan of health workers and support staff in the event of cholera outbreaks	Develop SOPs for deployment of trained health care worker based on surge capacity in cholera-affected hotspot woredas	Number of SOPs developed for deployment	118			118			118										\$114,657	
		Annually update SOPs for deployment of trained health care worker based on surge capacity in cholera-affected hotspot woredas	Number of cholera-affected hotspot woredas with annually updated SOPs	118						35										\$0
	Establish, train, and operationalize Rapid Response Teams in all hotspot areas	Reactivate/operationalize RRT teams in cholera-affected hotspot woredas	Number of cholera-affected hotspot woredas with reactivated RRTs	118																\$0
		Train/sensitize RRT members in all hotspot woredas, zone and region	Number of trained RRT members	7650						906	900	900	604							\$3,279,963
Ensure availability of well-equipped gender sensitive CTCs/CTUs and prefabricated Cholera Treatment Units (CTUs) for hotspots to improve access and provide quality patient care	Incorporate gender parity in established CTCs/CTUs designs and setup in cholera-affected hotspot woredas	Number of CTCs/CTUs with well-equipped gender sensitive setups	70						70										\$0	

Activity	Sub Activity	Output Indicator	8-year target	Annual Target	July	August	September	October	November	December	January	February	March	April	May	June	Budget	
							100%											
Maintain adequate medical stocks at federal/regional/zonal/woreda hotspot sites.	Assess availability of appropriate stock as per the national standard at national, regional, zonal and hotspot woreda level	Proportion of federal/regional/zonal/woredas hotspot sites assessed for availability of appropriate stock		100													\$0	
	Conduct inventory bi-annually	Number of inventory conducted		2			1					1					\$0	
	Sub Total																\$30,362,277	
Strategic Objective 4: Ensuring Adequate Infection, Prevention and Control in Treatment Centers to Prevent Cross-contamination and Decrease Local Transmission to Zero in Hotspot Woredas																		
Orientation of CTC/CTU health workers, including support staff, on infection prevention and control of cholera and other diarrheal diseases including effective waste disposal and disinfectants	Provide training for healthcare professionals on infection prevention and control for cholera and other diarrheal disease as well as waste disposal from cholera-affected hotspot woredas	Number of healthcare professionals trained on IPC and waste disposal		910														\$677,294
Training of RRTs in safe handling and disposal of cholera bodies	Train/sensitize RRT members in cholera-affected hotspot woredas on safe handling and disposal of cholera bodies	Number of RRT Members trained		980														\$0
								490										
									490									
										330								
											250							
									330									



Activity	Sub Activity	Output Indicator	8-year target	Annual Target	July	August	September	October	November	December	January	February	March	April	May	June	Budget
Procurement of cadaver bags, disinfectants, and cleaning supplies for CTC/CTUs	Assess the availability of cadaver bags need for established CTCs/CTUs cholera-affected hotspot woredas	Number of cholera-affected woredas assessed		35			35										\$0
	Procure cadaver bags to established CTCs/CTUs for cholera-affected hotspot woredas	Number of cadaver bags procured		73													
	Distribute cadaver bags to cholera-affected hotspot woredas	Number of woredas with cadaver bags available		35					35								\$0
Training auxiliary staff in areas at increased risk of cholera on cleaning and disinfection procedures, infection prevention and control	Develop and adopt training material for auxiliary staff on cleaning and disinfection and infection prevention and control for cholera-affected hotspot woredas in their respective local language	Number of training material developed and adopted		10				10									\$17,685
	Training on cleaning and disinfection procedures, and infection prevention and control for auxiliary staff per woreda in CTCs/CTUs in cholera-affected hotspot woredas	Number of auxiliary staff trained		910													\$330,940
	Conduct inventory of stocks bi-annually	Number of inventory conducted		2		1						1					\$0

Activity	Sub Activity	Output Indicator	8-year target	Annual Target	July	August	September	October	November	December	January	February	March	April	May	June	Budget	
Ensure adequate PPE materials in health facilities and CTC/CTUs	Assess availability of PPE Kit Material in cholera-affected woredas	Number of cholera-affected hotspot woredas assessed		35													\$0	
	Procure PPE Kits for cholera-affected hotspot woredas	Number of PPE kits procured		70													\$4,259,008	
	Distribute PPE for cholera-affected hotspot woredas	Number of PPEs distributed		35													\$638,852	
	Conduct inventory of stocks bi-annually	Number of inventory conducted		2		1						1					\$0	
	Assess availability of 70% HTH disinfection and sanitation materials for cholera-affected hotspot woredas	Number of cholera-affected hotspot woredas assessed		35														\$0
Ensure availability of disinfectants & sanitation materials	Procure 70% HTH disinfection and sanitation material for cholera-affected hotspot woredas	Number of HTH disinfectant procured		70													\$14,560	
	Distribute 70% HTH disinfectant for cholera-affected hotspot woredas	Number of cholera-affected hotspot woredas with HTH disinfectants made available		35													\$2,184	
	Conduct inventory of stocks woredas	Number of inventory conducted		2		1						1					\$0	
	<b>Sub Total</b>																	<b>\$5,940,523</b>
<b>Grand Total</b>																		<b>\$76,017,164</b>

### 2.3.5. Case management Budget Summary

Table 5: Case Management Pillar Budget Summary, NCP Operational Plan 2022/23, Ethiopia

Target, Strategic Objectives and Activities	Total (USD)	Remark
Target: To reduce the overall mortality resulting from cholera by 90% by 2028 and ensure no local transmission reported at the in the 118 hotspot districts/woredas		
Strategic Objective 1: Increase the accessibility of early treatment to all categories of people by strategically setting up CTU based on the peculiarities of the communities		
Mapping of the hotspots and the special population in the different woredas	459,311	
Identify and map health facilities to be used as cholera treatment facilities and those that regularly receive suspected cholera patients in hotspot woredas	116,525	
Establish a network of treatment facilities in hotspot woredas	3,335,148	
Sub-total	3,910,984	
Strategic Objective 2: Strengthen health care systems by ensuring availability of adequate resources and effective referral pathways		
Ensure adequate access and availability of safe water and sanitation services in all health care facilities, including CTUs/CTCs, in all hotspot areas	81,026	
Ensure CTCs function according to IPC measures in the context of COVID-19	108,196	
Ensure the availability of ambulances for referral purposes to transport patients to health facilities in the hotspots	9,405,408	
Strengthen communication and transport systems for staff working at CTCs/CTUs as well as supervisors	11,165,000	
Sub-total	20,759,630	
Strategic Objective 3: Strengthen capacity for cholera case management to reduce CFR by 30% by 2022/23		
Hold a workshop at the national level to review cholera clinical management	67,025	
Hold curriculum development meetings for inclusion of cholera guidelines in institutions of higher learning (medical, health and nursing schools)	67,025	
Hold a launch and dissemination meeting for the national cholera clinical management guidelines	892,945	
Conduct capacity building workshops of health workers on the appropriate procedures for case management, infection control, and referral pathways for cholera in hotspot woredas	2,762,125	

Target, Strategic Objectives and Activities	Total (USD)	Remark
Train community health workers on preparation and provision of ORS and other infusions in all hotspot woredas	3,416,872	
Conduct mentorship and technical supervision for community health workers on preparation and provision of ORS	129,610	
Maintain and preposition adequate cholera treatment stocks at the various levels of hotspots	17,981,158	
Establish and maintain roster of health workers, including support staff, in case management of cholera	4,167	
Develop and regularly update deployment plan of health workers and support staff in the event of cholera outbreaks	0	
Establish, train, and operationalize Rapid Response Teams in all hotspot areas	2,283,448	
Ensure availability of well-equipped gender sensitive CTCs/CTUs and prefabricated Cholera Treatment Units (CTUs) for hotspots to improve access and provide quality patient care	0	
Maintain adequate medical stocks at federal/regional/zonal/woreda hotspot sites	0	
<b>Subtotal</b>	<b>27,604,375</b>	
<b>Strategic Objective 4: Ensure adequate infection, prevention, and control in treatment centers to prevent cross-contamination and decrease the local transmission to zero in hotspot woredas</b>		
Provide orientation to CTC/CTU health workers, including support staff, on infection prevention and control of cholera and other diarrheal diseases including effective waste disposal and disinfections	677,294	
Train RRTs in safe handling and disposal of cholera bodies	0	
Procure cadaver bags, disinfectants, and cleaning supplies for CTC/CTUs	0	
Training auxiliary staff in areas at increased risk of cholera on cleaning and disinfection procedures, infection prevention and control	348,625	
Ensure adequate PPE materials in health facilities and CTC/CTUs	4,897,860	
Ensure availability of disinfectants & sanitation materials	16,714	
<b>Sub-total</b>	<b>5,940,523</b>	
<b>Grand total</b>	<b>58,215,512</b>	

## 2.4. Oral Cholera Vaccine (OCV)

Goal: To achieve oral cholera vaccination (OCV) coverage of more than or equal to 90% in hotspots and in outbreak situations

### 2.4.1. Strategic Objectives

- To implement reactive large-scale mass vaccination campaigns with OCV, with coverage of more than 90% for maximum impact
- To implement large scale use of OCV in cholera hotspot woredas achieved with coverage of more than 90% for maximum impact

### 2.4.2. Expected outcomes

- Implemented reactive large-scale mass vaccination campaigns with OCV and ensured the coverage more than 90%
- Implemented large-scale use of OCV in cholera hotspot woredas achieved with coverage of more than 90%.

### 2.4.3. Activities and Timelines

To achieve use of OCV objectives, the following activities will be implemented:

**Strategic Objective 1:** Implement large-scale use of OCV in cholera hotspot woredas achieved with coverage of more than 90% for maximum impact

#### 1. Preventive OCV request (GTFCC)

- Prepare completed request forms (epidemiologic info, LAB information, estimate vaccine need and operational cost) for targeted hotspot woredas
- Schedule shipment of OCV to Ethiopia (after approval) for two rounds.

#### 2. Conduct detailed micro-plans for targeted woredas

- Collect detailed information from targeted hotspot woredas
- Develop detailed micro-plans at woreda level

#### 3. Conduct pre-campaign assessment on cold chain equipment and capacity.

- Prepare cold chain assessment proposal and data collection tools
- Conduct pre-campaign cold chain assessment
- Conduct assessment finding dissemination workshop
- Build cold storage warehouse
- Procure SDD (solar direct drive refrigerator)
- Procure vaccine carriers
- Procure of cold boxes

#### 4. Standardize OCV training materials, technical guidelines and tools, and post-campaign coverage assessment tools

- Host a workshop to standardize OCV training materials, technical guidelines and recording & reporting tools, assessment checklist for OCV
- Print and distribute standardize OCV training materials and other tools (reporting format, assessment check list) to woredas

#### 5. Conduct training for supervisors and vaccinators

#### 6. Conduct OCV training for supervisors, social mobilizers, recorders, and vaccinators

7. Distribute OCV and other supplies from Ethiopian Pharmaceutical Supply Agency (EPSA) to woredas and health facilities.

- Prepare distribution plan for OCV and other supplies to the targeted woredas
- Schedule transportation of OCV and supplies to the woredas and facilities

8. Distribute funds for operational cost

- Allocate/distribute funds for operational cost

9. Integrate risk communication and community education activities as well as WaSH activities into OCV campaigns

- Conduct training for social mobilizers from health development army
- Procure and distribute RCCE supplies.
- Prepare temporary hygiene and sanitation facilities

10. Conduct OCV campaign (two rounds of campaigns with 2-week interval)

- Conduct OCV vaccination

11. Report any AEFI (adverse effect following immunization) within XXX hours

- Conduct AEFI assessment, follow up and event-based response during and post campaign at vaccination posts

12. Monitor intra and post campaign assessment

13. Report daily vaccination performance

- Develop OKD for daily reporting during OCV campaign

- Ensure OCV wastage rate less than 3%
- Conduct supervisions (pre, intra and post) OCV campaign at all levels
- Conduct post-campaign evaluation

14. Conduct an impact assessment on OCV implementation

- Impact assessment on OCV implementation

Objective: Establish contingency agreements with governments, agencies, and suppliers to ensure efficient planning and coordination for effective supply management, including rapid procurement, importation, warehousing, and prompt distribution of equipment.

Strategic Objective 1: Implement reactive large-scale mass vaccination campaigns with OCV, with coverage of more than 90% for maximum impact.

1. Reactive OCV request (ICG)

- Identify targeted Hotspot areas for OCV
- Prepare completed request form (epidemiologic info, LAB information, estimate vaccine need and operational cost) for targeted hotspot woredas
- Schedule shipment of OCV to Ethiopia (after approval) for two rounds.

2. Conduct detailed micro-plan for targeted woredas

- Collect detailed information from targeted hotspot woredas
- Develop detailed micro-plan at woreda level

3. Conduct pre-campaign assessment on cold chain equipment and capacity

- Prepare cold chain assessment proposal and data collection tools
- Conduct pre-campaign cold chain assessment

4. Standardize OCV training materials, technical guidelines and tools, and post-campaign coverage assessment tools

- Print standardized OCV training materials and other tools (reporting format, assessment check list) for woredas
- Distribute printed OCV training materials and other tools (reporting format, assessment check list) to woredas

5. Conduct training for supervisors and vaccinators

- Conduct OCV training for supervisors, social mobilizers, recorders, and vaccinators

6. Distribute OCV and other supplies from Ethiopian Pharmaceutical Supply Agency (EPSA) to woredas and health facilities.

- Prepare distribution plan for OCV and other supplies to the targeted woredas

7. Schedule transportation of OCV and supplies to the woredas

- Allocation/distribution of funds for operational cost

8. Integrate risk communication and community education activities as well as WaSH activities into OCV campaigns

- Provide training to social mobilizers
- Procure and distribute RCCE supplies
- Distribute sanitation and hygiene supplies for cholera-affected woredas

9. Conduct OCV campaigns (two rounds of campaigns with 2-week interval)

- Conduct OCV campaigns

10. Report on AEFI (adverse effect following immunization) within XXXX hours

- Conduct AEFI assessment and follow up during and post campaign at vaccination posts

11. Monitoring/post campaign assessment

- Report daily vaccination performance
- Ensure OCV wastage rate less than 3%
- Conduct supervision visits (pre, intra and post) during OCV campaign at all levels

### 2.4.4. Oral Cholera Vaccine (OCV) Activity, Timeline and Budget

The total budget for the proposed for oral cholera vaccine to control cholera amounts is US\$4,321,189

Table 6: Oral Cholera Vaccine (OCV) Activity, Timeline and Budget, NCP Operational Plan 2022/23, Ethiopia

Major Activity	Sub activity	Output Indicator	8 years target	Annual target	Goal: To achieve oral cholera vaccination (OCV) coverage of more than or equal to 90% in hotspots and in outbreak situations												Budget	
					September	October	November	December	January	February	March	April	May	June				
Preventive OCV request (GTFCC) for Hotspot woredas	Prepare completed request	# of requests accepted by GTFCC	5	1	1												0	
	Shipment of OCV doses	# of OCV doses delivered	30,983,832	6,814,500					1,703,625							1,703,625	0	
Conduct detailed micro-plan for targeted woredas.	Collect detailed information from hotspot woredas	# of hotspots woredas with detailed micro-plan at woreda level	118	29						1							0	
	Develop detailed micro-plans at woreda level																	
Conduct pre-campaign assessment on cold chain equipment and capacity.	Prepare cold chain assessment proposals	# of tools prepared	1	1						1								
	Prepare data collection tools																	
	Conduct pre-campaign cold chain assessment	# of woredas with completed pre-campaign cold chain assessments	118	29														54,597
	Conduct assessment finding dissemination workshop	# workshop conducted	5	1														28,909
	Build cold storage warehouses	# of cold storage warehouse built	15	7														332,696
	Procurement of SDD (solar direct drive refrigerator)	# of SDD refrigerator distributed	1457	162														1,215,000
	Procurement and distribution of vaccine carriers	# of vaccine carrier distributed	14754	1,623														330,118
Procurement and distribution of cold box	# of cold boxes procured and distributed	1457	162														356,400	



Goal: To achieve oral cholera vaccination (OCV) coverage of more than or equal to 90% in hotspots and in outbreak situations																
Major Activity	Sub activity	Indicator	8 years target	Annual target	Output											
					September	October	November	December	January	February	March	April	May	June	Budget	
Standardize OCV training materials, technical guidelines and tools, post-campaign coverage assessment tools and checklist	Conduct workshop to standardize OCV campaign supporting materials	# of workshops conducted	4	2		1	1									57,818
	Print standardize OCV campaign supporting materials	# of printed	118	118				118								15,000
	Distribute printed standardized OCV campaign supporting materials	# of woredas received	118	118				118								5,252
Conduct training for supervisors and vaccinators	Provide OCV training	# of trained trainees	59,018	12,981					3245							592,753
Distribute OCV and other supplies from Ethiopian Pharmaceutical Supply Agency (EPSA) to woredas and health facilities.	Prepare distribution plan for OCV and other supplies to the targeted woredas	# of woredas included in the distribution plan	118	29												0
	Schedule transportation of OCV and supplies to the woredas and facilities	# of woredas conducted OCV campaign	118	29					3245	17	17	17	17	12	12	292,938
Allocation/distribution of funds for operational cost	Allocation/distribution of funds for operational cost	# of woredas received OCV campaign operational cost	118	29												
	Conduct training for health development army	# of trainees	5901	1450					850	17	17	17	17	12	12	180,142
Integrate risk communication and community education activities as well as WASH activities into OCV campaigns	Procurement and provision of RCCE supplies.	# of woredas received RCCE supplies	118	29												96,971
	Prepare temporary hygiene and sanitation facilities	# of hotspot woredas received hand washing supplies	118	29												307,655

Goal: To achieve oral cholera vaccination (OCV) coverage of more than or equal to 90% in hotspots and in outbreak situations																	
Major Activity	Sub activity	Indicator	8 years target	Annual target	July	August	September	October	November	December	January	February	March	April	May	June	Budget
Conduct OCV campaign (two rounds of campaigns with 2-week interval)	Conduct OCV vaccination campaign	# individuals vaccinated with two OCV doses	30,983,834	6,814,500			1703625			1703625			1703625		1703625		1,239,776
	Report on AEFIs (adverse effect following immunization)	# of event-based responses for AEFI	619,677	136,290			34073			34073			34073		34073		0
Monitor intra- and post-campaign assessments	Report daily vaccination performance	# of woredas performed 95% of daily plan	118	29			17			12			17		12		0
	Develop OKD for daily reporting during OCV campaign	# of tools developed	1	1			1	1									0
	Ensure OCV wastage rate less than 3%	% of woredas having wastage rate less than 3%	100%	100%			100			100			100		100		0
Conduct impact assessment on OCV implementation	Conduct supervision visits (pre, intra and post) during OCV campaigns at all levels	# of hotspot woredas supervised	118	29			17			12			17		12		769,267
	Conduct post campaign evaluations	# of post campaign evaluation conducted	20	4				1			1			1		1	154,090
Conduct impact assessment on OCV implementation	Impact assessment on OCV implementation	# impact assessments conducted	2														0
Sub-total for Preventive Campaign																	
Strategic Objective 1 : Implement reactive large-scale mass vaccination campaigns with OCV, with coverage more than 90% for maximum impact.																	

Goal: To achieve oral cholera vaccination (OCV) coverage of more than or equal to 90% in hotspots and in outbreak situations		Sub activity																
Major Activity	Sub activity	Indicator	8 years target	Annual target	July	August	September	October	November	December	January	February	March	April	May	June	Budget	
Reactive OCV request (ICG)	Identify targeted Hotspot areas for OCV	# of woredas included in the request	77	35														0
	Prepare completed request																	
Conduct detailed micro-plan for targeted woredas.	Shipment of OCV to Ethiopia (after approval) for two rounds.	# of OCV doses delivered	20,218,264	9,190,120														0
	Collect detailed information from hotspot woredas	# of targeted hotspot woredas developed detail micro-plan.	77	35														
Conduct pre-campaign assessments on cold chain equipment and capacity	Develop detailed micro-plan at woredas level																	
	Prepare cold chain assessment proposal	# of woredas conducted pre-campaign cold chain assessment	77	35														75,841
Standardize OCV training materials, technical guidelines and tools, and post-campaign coverage assessment tools	Conduct pre-campaign cold chain assessment																	
	Print standardized OCV campaign supporting materials	# of woredas received	77	35														50,000
Conduct training for supervisors and vaccinators	Distribute printed OCV campaign supporting materials	# of woredas received	77	35														6,588
	Provide OCV training	# of trained trainees	38,511	17,504														301,101
Distribution of OCV and other supplies from Ethiopian Pharmaceutical Supply Agency (EPSA) to woreda and health facilities	Prepare distribution plan for OCV and other supplies to the targeted woredas	# of woredas included in the distribution plan.	77	35														
	Transportation of OCV and supplies to the woredas and facilities	# of woredas received OCV	77	35														353,253

Goal: To achieve oral cholera vaccination (OCV) coverage of more than or equal to 90% in hotspots and in outbreak situations																		
Major Activity	Sub activity	Indicator	8 years target	Annual target	July	August	September	October	November	December	January	February	March	April	May	June	Budget	
Allocation/distribution of funds for operational cost	Provide funds for operational cost	# of woredas received OCV campaign operational cost	77	35														
	Provide training for social mobilizer	# of trained trainees	3850	1750													217,412	
Integrate risk communication and community education activities as well as WaSH activities into OCV campaigns	Provision of RCCE supplies	# of hotspot woredas integrating RCCE activities during OCV Campaign	77	35													121,426	
	Distribute sanitation and hygiene supplies for cholera-affected woredas	# of woredas received sanitation and hygiene supplies	77	35													406,346	
Conduct OCV campaign (two rounds of campaigns with 2-week interval)	Conduct OCV vaccination campaigns	# of individuals vaccinated with two OCV doses	20,218,264	9,190,120													1,400,862	
	Conduct AEFI assessment	# of event-based response for AEFI Time between adverse event and report sent	404365 <24 hours	183802 <48 hours													143,063	
Report on AEFI (adverse effect following immunization)	Report daily vaccination performance	# of woredas perform 95% of daily plan	77	35													0	
	Ensure OCV wastage rate less than 5%	# woredas having wastage rate less than 5%	100%	100%													0	
Monitoring/post campaign assessment	Conduct supportive supervision visits	# of outbreak affected woredas supervised	77	35													821,217	
	Sub-total budget for reactive campaign																	3,903,135
Grand total budget for OCV																	9,932,517	

## 2.4.5. OCV pillar Budget Summary

Table 7: Budget Summary for OCV, NCP Operational Plan 2022/23, Ethiopia

Pillars, Strategic Objectives & Major Activities of Use of Oral Cholera Vaccine (OCV) Pillar		Budget Total (USD)	Budget for Strategic Objectives (USD)	Funding Gaps
Strategic Objective 1: To implement large-scale use of OCV in cholera hotspot woredas achieved with coverage of more than 90% for maximum impact				
Preventive OCV request (GTFCC) and shipment to Ethiopia (after approval) for two rounds		0		
Conduct detailed micro-plan for targeted woredas		0		
Conduct pre-campaign assessment on cold chain equipment and capacity		2,317,720		
Standardize OCV training materials, technical guidelines and tools, and post-campaign coverage assessment tools		78,070		
Conduct training for supervisors and vaccinators		592,753		
Distribution of OCV and other supplies from Ethiopian Pharmaceutical Supply Agency (EPSA) to woreda and health facilities		292,938	6,029,382	
Allocation/distribution of funds for operational costs		0		
Integrate risk communication and community education activities as well as WaSH activities into OCV campaigns		584,768		
Conduct OCV campaign (two rounds of campaigns with 2-week intervals)		1,239,776		
Conduct AEFI assessment, follow up and event-based response during and post-campaign at vaccination posts		0		
Monitor post campaign assessment		923,357		

Pillars, Strategic Objectives & Major Activities of Use of Oral Cholera Vaccine (OCV) Pillar	Budget Total (USD)	Budget for Strategic Objectives (USD)	Funding Gaps
Strategic Objective 2: Implement large-scale use of OCV in cholera-affected woredas to achieve coverage of more than 90% for maximum impact			
Submit OCV request (ICG) and schedule shipment to Ethiopia (after approval) for two rounds	0		
Conduct detailed micro-plan for targeted woredas	0		
Conduct pre-campaign assessment on Cold Chain Equipment and capacity	75,841		
Print and distribute standardize OCV training materials and other tools (reporting format, assessment checklist) to woredas	56,588		
Conduct training for supervisors and vaccinators	301,101		
Distribute OCV and other supplies from Ethiopian Pharmaceutical Supply Agency (EPSA) to woreda and health facilities	353,253	3,754,046	
Allocate/distribute funds for operational costs	0		
Integrate risk communication and community education activities as well as WaSH activities into OCV campaigns	754,184		
Conduct OCV campaign (two rounds of campaigns with 2-week intervals)	0		
Monitor/conduct post-campaign assessment	821,217		
<b>Total for Budget for both strategic objectives</b>		<b>9,783,428</b>	

## 2.5. Water, Sanitation and Hygiene (WaSH)

The overall goal of WaSH is to increase access to safe drinking water, adequate sanitation and hygiene at all levels of high-risk kebeles within cholera hotspot woredas to eliminate cholera by increasing basic water supply from 65% to 90% and improving sanitation and hygiene coverage from 6% to 80% by 2028.

### 2.5.1. Strategic Objectives

- To strengthen emergency WaSH preparedness and response during cholera outbreak and implementation of OCV campaigns
- To improve access to a sustainable, adequate, and safe water supply, sanitation, and hygiene services in communities in most affected kebeles of cholera hotspot woredas
- To increase the availability and utilization of a safe and adequate water supply, sanitation and hygiene facilities in specific settings such as religious sites, investment corridors, bus stations and marketplaces

### 2.5.2. Expected Outcomes

- Established community engagement in all pillars to facilitate meaningful participation of all stakeholders and sustain cholera prevention and response interventions
- Increased community awareness of cholera prevention mechanisms and detection (based on community case definition) during mass gathering
- Ability of communities to detect diarrheal diseases, prevent and control cholera outbreaks and participate in OCV campaigns

### 2.5.3. WaSH Activities and Timeliness

To achieve WaSH objectives, the following activities will be implemented:

#### ***Objective 1. Strengthen emergency WaSH preparedness and response during cholera outbreak and implementation of OCV campaigns***

1. Conduct WaSH stakeholder mapping in cholera hotspots by region and woredas.

- Identify WaSH stakeholders in regions and hotspot woredas
- Conduct WaSH stakeholder meetings
- Develop joint action plan

2. Establish rapid emergency WaSH teams for field investigation, risk evaluation and immediate response.

- Prepare TOR for emergency WaSH team
- Revitalize/establish emergency WaSH team
- Provide training to WaSH team lead/coordinator

3. Support development of EPRP for WaSH during natural and human made disasters such as flooding, drought, and conflict

- Prepare risk assessment checklist
- Conduct vulnerability risk assessment and mapping (VRAM)
- Develop EPRP for WaSH during natural and human made disasters

4. Provide WaSH supplies during reactive OCV campaigns

- Procure and distribute WaSH supplies during OCV campaign

5. Conduct hygiene education and community awareness with OCV campaigns

- Deploy and orient hygiene promoter
- Provide health education to community during OCV campaigns

6. Procure and distribute WaSH supplies to CTCs

- Conduct assessment using standard checklist to CTC
- Procure and distribute WaSH supplies to CTC
- Installation of water storage tanks
- Construct latrine
- Construct washing facilities (Hand washing, shower, laundry basin, etc.)
- Construct waste management sites

7. Ensure basic hygiene, sanitation, and isolation procedures in health facilities

- Conduct WaSH gap assessment using standard checklist in all health facilities in hotspot woredas
- Procure and distribute WaSH supplies to all health facilities hotspot woredas
- Construct and install basic WaSH facilities (latrine, waste disposal sites, water storage tank, washing facilities, footbath, etc.)
- Renovate existing WaSH facilities
- Construct incinerators in health centers

8. Promote hygiene among staff, patients, and caretakers in CTC setting

- Provide orientation to health care workers, cleaners, patient, and caretakers about WaSH
- Provide training to health professionals and supportive staff who will work at CTC

9. Procure and distribute water treatment chemicals, disinfectants, water tanker, and other WaSH NFIs in cholera-affected areas

- Conduct WaSH assessments in cholera-affected areas/risk areas
- Procure and distribute WaSH supplies to cholera-affected areas/risk areas

**Objective 2. Improve access to a sustainable, adequate, and safe water supply, and sanitation and hygiene services in communities of cholera hotspot woredas**

1. Conduct a rapid assessment to determine water and sanitation coverage and hygiene practice uptake at high-risk kebeles of hotspot woredas

- Develop/adopt a standard assessment tool
- Identify and deploy a team for the assessment
- Conduct rapid assessment

2. Conduct regular inspections of sewer line and promote the installation of septic tanks in urban setting of hotspot areas

- Inspect sewer lines
- Organize cleaning campaigns in towns



- Enforce urban households to construct latrines and manage properly (not to connect with rivers and ditch)
- Procure and provide garbage cart with wheel for towns of hotspot woreda

3.Promote establishment of wastewater treatment facilities in selected city and towns of hotspot areas

- Identify city and towns in hotspot areas that need wastewater treatment facilities
- Conduct high-level advocacy workshops with identified city or town leaders and implementing partners
- Procure and provide sewage vacuum truck

4.Promote sanitation facilities like compost latrine, biogas latrine, etc.

- Conduct advocacy and create awareness for woreda administrators of hotspot areas
- Construct sanitation facilities like compost latrine, biogas latrine in hotspot woredas
- Conduct consultative meetings with kebele leaders, HEWs, Kebele manager, and DAs
- Conduct consultative workshop on sanitation marketing
- Support sanitation marketing centers/enterprises working on sanitation products

5.Provide safe and adequate water supply to hotspot areas

- Rehabilitate existing non-functional water schemes
- Extend pipeline
- Construct new water schemes
- Provide training to water and sanitation committee at kebele level
- Procure portable water quality test kits
- Procure and provide water quality monitoring reagents and consumables
- Procure and provide water supply tools box
- Establish water quality surveillance / monitoring
- Provide training on water quality monitoring and sanitary survey

6.Conduct regular inspection of food and drinking establishments to improve their hygiene and sanitation conditions

- Conduct regular inspection food and drinking establishments
- Enforce food and drinking establishments to fulfil the requirements

7.Implement climate resilient water and sanitation safety plan and ensure its implementation in hotspot woredas

- Develop climate resilient water and sanitation safety plan
- Implement climate resilient water and sanitation safety plan and ensure its implementation in hotspot woredas

**Objective 3. Increase the availability and utilization of safe and adequate water supply, sanitation, and hygiene facilities in institutions/specific settings (health facilities, schools, IDPs, religious sites, investment corridors, bus stations and marketplaces)**

1. Provision of safe and adequate water supply in all settings (healthcare facilities, schools, public gathering: bus station, market, religious places, investment corridors and IDPs) of hotspot woredas

- Rehabilitate existing non-functional water schemes at institutions/specific setting
- Extend pipeline at institutions/specific setting
- Construct new water schemes at selected institutions

2. Promote sanitation and hygiene at institution/specific setting (health facilities, schools, public gatherings, bus stations, religious places, marketplaces, IDPs sites) of hotspot areas

- Renovate existing non-functional latrines at institutions and specific settings
- Construct new latrine at selected institutions and specific setting
- Construct public latrines on main roads crossing regions at selected bus stops
- Provide training to institution's focal person and representative of specific settings on WaSH

3. Provide WaSH services to investment corridors

- Conduct consultative meetings with focal persons of investment corridors

4. Procure and distribute vehicles to hotspot woredas

- Procure and distribute cars to hotspot woredas
- Procure vehicles for National NCP coordination office
- Procure and distribute motorbikes to hotspot woredas

5. Conduct supportive supervision and follow up

- Conduct baseline, mid-term, and final assessment
- Conduct supportive supervision

6. Establish WaSH coordination unit

- Recruit WaSH consultant
- Recruit office management personnel
- Arrange office for coordination
- Furnish office with necessary materials and equipment
-

## 2.5.4. WaSH Activities, Timeline and Budget

Table 8: WaSH Activities, Timeline and Budget, NCP Operational Plan 2022/23, Ethiopia.

Activity		Sub-activity	Output Indicator	8-year Target	Annual Target	Ju	Au	Se	Oc	No	De	Ja	Fe	Ma	AP	Ma	Ju	Budget		
Objective 1. To strengthen emergency WaSH preparedness and response during cholera outbreak and implementation of OCV campaigns																				
Conduct WaSH stakeholder mapping in cholera hotspots by region and woredas	Identify WaSH stakeholders in regions and hotspot woredas	Number of regions and woredas with identified stakeholders	125	125				35	30	30	30								-	
	Conduct WaSH stakeholder meetings	Number of meetings per month	11552	1444			35	65	95	125	118	118	118	125	118	118	125		-	
	Develop joint action plans	Number of action plans developed	125	125			35	30	30	30										-
Establish rapid emergency WaSH teams for field investigation, risk evaluation and immediate response	Prepare TOR for emergency WaSH team	Number of prepared TOR	1	1								1								-
	Revitalize/establish emergency WaSH teams	Number of Established e-WaSH teams	118	118									118							-
	Provide training to WaSH teams	Number of WaSH teams trained	118	59							30			29						14,060
Support development of EPRP for WaSH during natural and human made disasters such as flooding, drought, and conflict	Prepare risk assessment checklist		1	1			1													-
	Conduct vulnerability risk assessment and mapping (VRAM)	Number of VRAM reports	8	1				1												100,000
	Develop EPRP for WaSH during natural and human made disasters	Number of EPRP developed	8	1						1										11,500

Goal: Increase access to safe drinking water, adequate sanitation, and hygiene at all levels of high-risk kebeles within cholera hotspot woredas to eliminate cholera in hotspots by increasing basic water supply from 65% to 90% and improve sanitation and hygiene coverage from 6% to 80% by 2028																			
Activity	Sub-activity	Output Indicator	8-year Target	Annual Target	Ju	Au	Se	Oc	No	De	Ja	Fe	Ma	AP	Ma	Ju	Budget		
Provision of WaSH supplies during reactive OCV campaigns	Procure and distribute WaSH supplies during OCV campaign	Number of HHs supplied with WaSH supplies	3098384	681470				170367	170368	170367	170368							8,177,640	
	Deploy and orient hygiene promoters	Number of deployed hygiene promoters	14754	3245				649	649	649	649							-	
	Provide health education to community during OCV campaign	Number of people received basic hygiene messages	8,830,392	1,938,000				387600	387600	387600	387600								-
Conduct hygiene education and community awareness along with OCV campaigns	Conduct assessment using standard checklist with CTC	Number of assessments conducted	280	70									70						-
	Procure and distribute WaSH supplies to CTC	Number of CTC provided with WaSH supplies	280	70									70					140,000	
	Installation of water storage tanks	Number of CTC with installed water storage tanks	280	70									70					210,000	
Procurement and distribution of WaSH supplies to CTCs	Construction of latrines	Number of CTC with latrine with genders separated	280	70									70					420,000	
	Construction of washing facilities (hand washing, shower, laundry basin, etc)	Number of CTU/CTC with washing facilities	280	70									70					490,000	
	Construction of waste management sites	Number of CTU/CTC with waste disposal sites	280	70									70					140,000	

Goal: Increase access to safe drinking water, adequate sanitation, and hygiene at all levels of high-risk kebeles within cholera hotspot woredas to eliminate cholera in hotspots by increasing basic water supply from 65% to 90% and improve sanitation and hygiene coverage from 6% to 80% by 2028																			
Activity	Sub-activity	Output Indicator	8-year Target	Annual Target	Ju	Au	Se	Oc	No	De	Ja	Fe	Ma	AP	Ma	Ju	Budget		
Ensure basic hygiene, sanitation, and isolation procedures in health facilities.	Conduct WaSH gap assessment using standard checklist in all health facilities in hotspot woredas	Number of gap assessment reports	590	708								708							
	Procure and distribute WaSH supplies to all health facilities hotspot woredas	Number of health facilities provided with WaSH supplies	708	708								708						2,124,000	
	Construction and installation of basic WaSH facilities (Latrine, waste disposal sites, water storage tank, washing facilities, footbath, etc)	Number of health facilities with new constructed WaSH facilities	590	177											177				1,239,000
	Renovate existing WaSH facilities	Number of health facilities with renovated WaSH facilities	590	236								59	59	59	59	59			944,000
Promotion of hygiene among staff, patients, and caretakers in CTC setting	Construct incinerators in health centers	Number of health centers with incinerators	88	20										10		10		120,000	
	Provide orientation to health care workers, cleaners, patient, and caretakers about WaSH	Number of health care workers, cleaners, patient, and caretakers oriented	28000	7000										2333	2333	2334		-	
	Provide training to health professionals and supportive staff who will work at CTC	Number of staff trained	2700	1050												1050		319,680	

Goal: Increase access to safe drinking water, adequate sanitation, and hygiene at all levels of high-risk kebeles within cholera hotspot woredas to eliminate cholera in hotspots by increasing basic water supply from 65% to 90% and improve sanitation and hygiene coverage from 6% to 80% by 2028																		
Activity	Sub-activity	Output Indicator	8-year Target	Annual Target	Ju	Au	Se	Oc	No	De	Ja	Fe	Ma	AP	Ma	Ju	Budget	
Procurement and distribution of water treatment chemicals, disinfectants, water tanker, and other WaSH NFIs in cholera-affected areas.	Conduct WaSH assessments in cholera-affected areas/ risk areas	Number of woredas with assessment conducted	118	118					39	39	40						44,250	
	Procure and distribute WaSH supplies to cholera-affected areas/ risk areas	Number of HH in affected areas received WaSH NFIs	192	5000													1,000,000	
Objective 2. To improve access to sustainable, adequate, and safe water supply, and sanitation and hygiene services in communities of cholera hotspot woredas																		
Conduct a rapid assessment to determine water and sanitation coverage and hygiene practice uptake at high-risk kebeles of hotspot woredas	Develop/adopt a standard assessment tool	Tool developed	1	1					1								2,000	
	Identify and deploy a team for the assessment	Number of teams deployed	236	118					118								2,950	
	Conduct rapid assessments	Number of assessments on community WaSH	236	118					118								44,250	
Rehabilitation and regular inspection of sewerage line and promote the installation of septic tanks in urban setting of hotspot areas	Inspect sewerage line	Number of towns in woreda inspected	118	118					118							118	3,500	
	Organize cleaning campaigns in towns	Number of cleaning campaigns	11328	708							118	118	118	118	118	118	1,180,000	
	Enforce urban households to construct latrines and manage properly (not to connect with rivers and ditch)	Number of towns conducted enforcement	944	118													-	
	Procurement and provision of garbage carts with wheels for towns of hotspot woreda	Number of garbage carts provided to towns	118	118													23600	

Goal: Increase access to safe drinking water, adequate sanitation, and hygiene at all levels of high-risk kebeles within cholera hotspot woredas to eliminate cholera in hotspots by increasing basic water supply from 65% to 90% and improve sanitation and hygiene coverage from 6% to 80% by 2028																	
Activity	Sub-activity	Output Indicator	8-year Target	Annual Target	Ju	Au	Se	Oc	No	De	Ja	Fe	Ma	AP	Mu	Budget	
Promote establishment of wastewater treatment facilities on selected city and towns of hotspot areas	Identification of city and towns in hotspot areas that need wastewater treatment facilities	Identified towns/cities	10	10							10						-
	Conduct high-level advocacy workshop with identified city's or town's leaders and implementing partners	Number of advocacy workshops conducted	10	10									10				250,000
	Procurement and provision of sewage vacuum trucks	Number of vacuum trucks purchased and provided	12	12													1200000
Promote sanitation facilities like compost latrine, biogas latrine, etc.	Conduct advocacy and create awareness for woreda administrators of hotspot areas	Number of advocacy sessions conducted	472	59							29				30		354,000
	Construct sanitation facilities like compost latrine, biogas latrine in hotspot woredas	Number of compost/biogas latrines constructed	236	47						10	12	15	10				1,410,000
	Consultative meeting with kebele leaders, HEWs, Kebele manager, and Das	Number of meetings	944	944						236		236		236			944,000
Support sanitation marketing centers/enterprises working on sanitation products	Conduct consultative workshop on sanitation marketing	Number of consultative workshops conducted	16	4								2	2				60,000
	Support sanitation marketing centers/enterprises working on sanitation products	Number of sanitation marketing centers/enterprises supported	531	59						19			20				708,000

Goal: Increase access to safe drinking water, adequate sanitation, and hygiene at all levels of high-risk kebeles within cholera hotspot woredas to eliminate cholera in hotspots by increasing basic water supply from 65% to 90% and improve sanitation and hygiene coverage from 6% to 80% by 2028																		
Activity	Sub-activity	Output Indicator	8-year Target	Annual Target	Ju	Au	Se	Oc	No	De	Ja	Fe	Ma	AP	Ma	Ju	Budget	
Provision of safe and adequate water supply to hotspot areas	Rehabilitate existing non-functional water schemes	Rehabilitated water schemes	1180	236						100	136						2,360,000	
	Extension of pipelines	Number of extended pipelines	1180	236						100	136						1,416,000	
	Construction of new water schemes	Number of water schemes constructed	472	118										59	59		25,960,000	
	Provide training to water and sanitation committee at kebele level	Number of WaSH members trained	14160	2950					490	490	490	490			500		59,000	
	Procurement of portable water quality test kits	# of test kits procured	118	118										118			1,770,000	
	Procurement and provision of water quality monitoring reagents and consumables	Frequency of procurement done	2	0														531,000
	Procurement and provision of water supply tools box	Number of water supply toolboxes procured	118	118										118			354,000	
	Establish water quality surveillance / monitoring	# of water quality test conducted per water schemes	32	4												1		21,240
	Provide training on water quality monitoring and sanitary survey	Number of trained professionals	708	236													236	100,000



Goal: Increase access to safe drinking water, adequate sanitation, and hygiene at all levels of high-risk kebeles within cholera hotspot woredas to eliminate cholera in hotspots by increasing basic water supply from 65% to 90% and improve sanitation and hygiene coverage from 6% to 80% by 2028																		
Activity	Sub-activity	Output Indicator	8-year Target	Annual Target	Ju	Au	Se	Oc	No	De	Ja	Fe	Ma	AP	Ma	Ju	Budget	
Regular inspection of food and drinking establishments (FDEs) to improve their hygiene and sanitation conditions	Regular inspection of food and drinking establishments	Number of food and drinking establishment inspected	4720	4720			4720			4720			4720				4720	0
	Enforce food and drinking establishments to fulfill the requirements	Number of FDEs enforced	472	472														0
	Develop climate resilient water and sanitation safety plan	Developed safety plan	1	1				1										2,000
	Implement climate resilient water and sanitation safety plan and ensure its implementation in hotspot woredas	Number of hotspot woredas implemented CR-WaSH safety standard	1	118														0
Objective 3. To increase the availability and utilization of safe and adequate water supply, sanitation, and hygiene facilities in institutions/specific settings (health facilities, schools, IDPs, religious sites, investment corridors, bus stations and marketplaces)																		
Provision of safe and adequate water supply in all settings (healthcare facilities, schools, public gathering: bus station, market, religious places, investment corridors and IDPs) of hotspot woredas	Rehabilitated existing non-functional water schemes at institutions/specific setting	Rehabilitated water schemes	708	284						100	100	84						7,100,000
	Extension of pipeline at institutions/specific setting	Number of extended pipelines	708	142							50	50	42					1,420,000
	Construction of new water schemes on selected institutions	Number of water schemes constructed	354	142										50	50	42		31,240,000

Goal: Increase access to safe drinking water, adequate sanitation, and hygiene at all levels of high-risk kebeles within cholera hotspot woredas to eliminate cholera in hotspots by increasing basic water supply from 65% to 90% and improve sanitation and hygiene coverage from 6% to 80% by 2028																	
Activity	Sub-activity	Output Indicator	8-year Target	Annual Target	Ju	Au	Se	Oc	No	De	Ja	Fe	Ma	AP	Ma	Ju	Budget
Sanitation and hygiene promotion at institution/ specific setting (health facilities, schools, public gathering, bus station, religious places, marketplaces, IDPs sites) of hotspot areas	Renovation of existing non-functional latrine at institutions and specific setting	Number of institutions/ specific setting with latrine	2124	425					100	100	100	125					1,700,000
	Construction of new latrine at selected institutions and specific setting	Number of institutions/ specific setting with latrine	1200	200					50	50	50	50					2,400,000
	Construction of public latrine on main road crossing regions at selected bus stops	Number of public latrines constructed	12	3										1	1	1	
Provision of WaSH services to investment corridors	Provide training to institution's focal person, and representative of specific settings on WaSH	Number of people trained	5900	2950				590	590	590	590	590					118,000
	Conduct consultative meetings with focal person of investment corridors	Number of consultative meetings conducted	6	6													120,000
Procurement and distribution of vehicles to hotspot woredas	Procurement and Distribution of cars to hotspot woredas	Number of hotspot woredas received car	77	77									77				9,240,000
	Procurement of Vehicles for National NCP Coordination Office	Number of cars procured	3	3									3				330,000
	Procurement and distribution of motorbikes to hotspot woredas	Number of hotspot woredas provided with motorcycles	118	118									118				590,000

Goal: Increase access to safe drinking water, adequate sanitation, and hygiene at all levels of high-risk kebeles within cholera hotspot woredas to eliminate cholera in hotspots by increasing basic water supply from 65% to 90% and improve sanitation and hygiene coverage from 6% to 80% by 2028																		
Activity	Sub-activity	Output Indicator	8-year Target	Annual Target	Ju	Au	Se	Oc	No	De	Ja	Fe	Ma	AP	Ma	Ju	Budget	
Conduct supportive supervision (SS) and follow-ups	Conduct baseline, mid-term, and final assessments	Number of baseline, mid-term and final assessments conducted at hotspot woredas	3	1				1										128,000
	Conduct supportive supervision	Number of SS conducted	16	2								1				1		128,000
Establish WaSH Coordination Office	Recruit WaSH consultants	Number of consultants recruited	2	2					2									480,000
	Recruit office management personnel	Number of office management personnel recruited	1	1					1									67,200
	Arrange office for coordination	Office arranged	1	1						1								192,000
	Furnish office with necessary materials and equipment	Furniture and materials purchased	10	10							1							250,000
<b>Sub Total WaSH</b>																	<b>110,314,870</b>	

Activity		Budget (USD)
1	Conduct WaSH stakeholder mapping in cholera hotspots by region, zone, woredas and kebeles	-
2	Establish rapid emergency WaSH teams for field investigation, risk evaluation and immediate response	14,060
3	Support development of EPRP for WaSH during natural and human made disasters such as flooding, drought, and conflict	111,500
4	Provision of WaSH supplies during reactive OCV campaigns	8,177,640
5	Conduct hygiene education and community awareness along with OCV campaigns	-
6	Procurement and distribution of WaSH supplies to CTCs	1,400,000
7	Ensure basic hygiene, sanitation, and isolation procedures in health facilities where patients with cholera are being treated	4,427,000
8	Promotion of proper hygiene among staff, patients, and caretakers in CTC setting	319,680
9	Procurement and distribution of water treatment chemicals, disinfectants, water tanker, and other WaSH NFIs in cholera-affected areas	1,044,250
10	Total	15,494,130
1	Conduct a rapid assessment to determine water and sanitation coverage and hygiene practice uptake at high-risk kebeles of hotspot woredas	49,200
2	Rehabilitation and regular inspection of sewerage line and promote the installation of septic tanks in urban setting of hotspot areas	1,183,500
3	Promote establishment of wastewater treatment facilities in select city and towns of hotspot areas	250,000
4	Promote sanitation facilities like compost latrine, biogas latrine, etc.	3,476,000
5	Provision of safe and adequate water supply to hotspot areas	32,571,240
6	Regular inspection of public establishments (food and drinking establishments) to improve their hygiene and sanitation conditions	-
7	Implement climate resilient water and sanitation safety plan and ensure its implementation in hotspot woredas	2,000
8	Total	37,531,940

Activity		Budget (USD)
1	Provision of safe and adequate water supply in all settings (healthcare facilities, schools, public gathering: -bus station, market, religious places, investment corridors and IDPs) of hotspot woredas	39,760,000
2	Sanitation and hygiene promotion at institutions/specific setting (health facilities, schools, public gathering, bus station, religious places, markets, IDPs sites) of hotspot areas	4,308,000
	<b>Total</b>	<b>44,009,000</b>
1	Procurement and distribution of vehicles to hotspot woredas	10,160,000
2	Conduct supportive supervision and follow-up visits	256,000
3	Establish WaSH Coordination Office	989,200
	<b>Total</b>	<b>11,405,200</b>
<b>Grand Total</b>		<b>108,499,270</b>

## 2.6. Risk Communication and Community Engagement

The overall goal of risk communication and community engagement is to provide procedural guidance to 90% of the population on how to improve safe hygiene and sanitation practices in hot spot woredas and kebeles by 2028

### 2.6.1. Strategic Objectives

- Mainstream community engagement into all pillars to assure sustainability of interventions for the elimination of cholera
- Increase risk communication activities in mass gathering areas (including seasonal workers, refugees, IDP, prison, special groups) for prevention of cholera cases, reporting and integrating COVID-19 pandemic preparedness and response activities
- Increase community engagement and participation of communities for early diarrheal disease detection, notification, and cooperation during OCV campaigns by integrating COVID-19 pandemic preparedness and response activities

### 2.6.2. Expected outcome

Communities at all levels have appropriate knowledge and practices on cholera prevention, response and health seeking behaviors:

- Community engagement is mainstreamed into all pillars to facilitate meaningful participation of all stakeholders and sustain cholera prevention and response interventions
- Communities are aware of cholera prevention mechanisms and detection (based on community case definition) during mass gathering
- Communities have the capacity to detect diarrheal diseases, prevent and control a cholera outbreak and participate on OCV campaigns

### 2.6.3. Activities and Timeliness

To achieve risk communication and community engagement objectives, the following activities will be implemented:

#### **Strategic Objective 1: Mainstream community engagement into all pillars to assure sustainability of interventions for the elimination of cholera**

1. Conduct high level advocacy with policy makers, law enforcers, members of House of Representatives, parliamentarians, highest level religious structures, private sectors, media editors, Regional Commissioners, and district level teams

- Conduct NCP advocacy /Sensitization workshop to target various actors (e.g., political leaders, law makers, private sectors, media) at national, zonal and woreda levels (organize workshops, media briefings, consultative meetings, etc.)
- Establish committee at woreda / kebele levels to facilitate cholera prevention and response interventions
- Orient the committee on cholera prevention and response interventions and community engagement
- Mobilize religious leaders on cholera prevention and response, focusing on cultural and religious events
- Provide logistic, technical, and financial support for social mobilization activities
- Establish/strengthen complaint and social listening and public feedback mechanisms at all levels/with all actors (if possible, link to the existing CBS) e.g., use of national emergency hotline, suggestion box, etc.

2. Develop evidence-based strategies, messaging, and interventions; strengthen the use of traditional media, and explore the potential of new media as a channel for

dissemination of cholera prevention and control messages to specific at-risk groups

- Conduct baseline assessments, rapid assessments, case studies, human interest stories with the most significant changes to generate evidence
- Adapt, design, produce & distribute messages based on the generated evidence applicable to the specific context and translate with local language
- Use trusted local or traditional entities/media as a channel to disseminate the messages (Edir, Ekub, mahiber...)
- Use hotline (SMS) to disseminate cholera messages – following seasonal calendar

3. Harmonize Social Behavior Change Communication (SBCC) for cholera prevention and control, including contextualized hygiene promotion in integration of COVID-19 preparedness and response activities

- Map existing SBCC materials
- Conduct assessment/research (using primary or secondary data) to identify needs, barriers, enablers, motivators for behavior change on cholera prevention and control
- Adapt, develop, and validate SBCC materials (by involving key actors)
- Conduct joint support supervision and monitoring

**Strategic Objective 2: Increase the risk communication activities in mass gathering areas, (including seasonal workers, refugees, IDP, prison, special groups) for prevention of cholera case reporting by integrating COVID-19 pandemic preparedness and response activities**

1. Engage public and private sectors in the production and dissemination of multimedia behavior change communication (hygiene promotion) messages to integrate COVID-19

preparedness and response activities

- a. Map all annual cultural, social, political, and religious events
  - b. Organize sensitization sessions targeting public and private sectors ahead of the events
  - c. Organize focused community conversations targeting prisons, IDPS, refugees, schools based on seasonal trends
2. Mobilize and engage various stakeholders, including community, cultural and religious leaders, teachers, market vendors, and others, in cholera prevention and response in integration of COVID-19 preparedness and response activities

a. Recruit, train and deploy staff (multi-sector) and volunteers on RCCE, Community Engagement, and SBCC

b. Organize social mobilization, awareness sessions supported by trained staff and volunteers (mobile cinema, community drama, role-play etc.)

c. Organize community forum to evaluate the cholera response interventions

**Strategic Objective 3: Increase community engagement and participation of communities for early diarrheal disease detection, notification, and cooperation during OCV campaigns by integrating COVID-19 pandemic preparedness and response activities**

1. Conduct regular Knowledge, Attitude, and Practice (KAP) surveys and, when possible, anthropological studies to gather information on behavioral drivers of the epidemic

- Conduct yearly Knowledge, Attitude, and Practice (KAP) surveys
- 2. Conduct assessments to identify behavioral and socio-cultural risk factors for cholera

- Conduct assessment to identify behavioral and socio-cultural risk factors for cholera
3. Develop evidence based comprehensive SBCC strategy for cholera prevention and control
- Map existing SBCC and RCCE strategies
  - Generate evidence-based strategies on existing SBCC strategies
  - distribute SBCC materials through appropriate channels
4. Produce and disseminate context-specific messages through multi-media channels (print, radio, TV) and mobile-audio visual vans
- Produce and disseminate context-specific messages through multi-media channels (print, radio, TV, social media) and mobile-audio visual vans megaphone
5. Develop and strengthen capacity of job aids for community mobilizers, volunteers, HEWs, and other frontline workers
- Provide RCCE training for HEWs, and other frontline workers
  - Prepare workshop on implementation of job aids
6. Conduct social mobilization and interpersonal communication (house-to-house sensitization and community dialogue) in hotspot areas to reach community groups who are at risk, including food and drink vendors
- Conduct house-to-house sensitization and inspection of behavior change
  - Conduct community dialogue for social mobilization
7. Engage with key community influencers, including religious leaders, community, and clan leaders, to mobilize communities
- Conduct sensitization workshops for key influencers and develop TORs on how to engage communities on cholera prevention and response
  - Conduct a regular forum with key influencers to ensure mobilization of the community
8. Train key mobilizers including Women Development Army, Health Extension Workers, faith-based organizations, community-based organizations, youth groups on interpersonal communication by considering the way forward for the national prevention COVID-19 pandemic preparedness and response
- Develop communication toolkit and train key mobilizers including Women Development Army, Health Extension Workers, faith-based organizations, community-based organizations, youth groups on interpersonal communication by considering the way forward for the national prevention COVID-19 pandemic preparedness and response
9. Implement hygiene promotion interventions in schools, orientation of teachers, school WaSH clubs as champions and school committees
- Conduct orientation for school WaSH clubs and school community on implementing of hygiene promotion
  - Conduct orientation for schoolteachers to implement hygiene promotion
  -



### 2.6.4. RCCE activities, Timeline and Budget

The total budget for the proposed activities under RCCE amounts to US\$1,306,169

Table 9: RCCE Activities, Timeline and Budget, NCP Operational Plan 2022/23, Ethiopia.

Goal: To provide procedural guidance to 90% of the population on how to improve safe hygiene and sanitation practices in hot spot woredas and kebeles by 2028																	
Activity	Sub activity	Output Indicator	78-year Target	1 year Target	July	August	September	October	November	December	January	February	March	April	May	June	Budget
Strategic Objective 1: Mainstream community engagement into all pillars to assure sustainability of interventions for the elimination of cholera																	
Conduct high level advocacy with policy makers, law enforcers, members of House of Representative, parliamentarians, highest level religious structures, private sectors, media editors, Regional Commissioners, and district level team	Conduct NCP advocacy workshops targeting different actors	Number of sensitization workshops conducted	7	1				1									\$169,659
	Establish committees at woreda level to facilitate cholera prevention and response interventions	Number of established functional project committees	118	118			59	59	59								\$11,079
	Orient the committee on cholera prevention and response interventions and community engagement	Number of orientation sessions conducted	7	1			1	1									\$71,307
	Mobilize religious leaders on cholera prevention and response, focusing on cultural and religious events	Number of sessions conducted	118	118			23		23		24		24		24		\$95,047
	Provide logistic, technical, and financial support for social mobilization activities	Compressive support provided	118	118			118	118	118	118	118	118	118	118	118	118	\$0
	Establish complaint and social listening and public feedback mechanisms	Number of complaints addressed	84	84			84										\$0

Goal: To provide procedural guidance to 90% of the population on how to improve safe hygiene and sanitation practices in hot spot woredas and kebeles by 2028																	
Activity	Sub activity	Output Indicator	78-year Target	1 year Target	July	August	September	October	November	December	January	February	March	April	May	June	Budget
Develop evidence-based strategies, messaging, and interventions, strengthen the use of traditional media, and explore the potential of new media as a channel for dissemination of cholera prevention and control messages to specific at-risk groups	Conduct baseline assessments	Number of assessments conducted	118	118			118										\$155,442
	Develop local language messages based on the generated evidence	Number of SBCC materials distributed	118000	118000													\$8,000
	Print messages based on the generated evidence	Number of SBCC materials distributed	118000	118000													\$35,000
	Distribute printed messages based on the generated evidence	Number of SBCC materials distributed	118000	118000													\$12,000
Harmonize Social Behavior Change Communication (SBCC) for cholera prevention and control, including contextualized hygiene promotion in integration of COVID-19 preparedness and response activities;	Use trusted local or traditional entities/media as a channel to disseminate the messages (Edir, Ekub, mahiber...)	Number of cultural media used	4	4					4			4				4	\$0
	Use hotline (SMS) to disseminate cholera messages following seasonal calendar	Number of cholera message disseminated through SMS	21	2			2										\$73,449
	Map existing SBCC materials	Number of identified SBCC materials	7	1					1								\$0
Conduct joint support supervision and monitoring	Conduct assessments (using Primary or Secondary data) to identify needs, barriers, enablers, motivators for behavior change on cholera prevention and control	Number of assessments conducted	118	35													\$46,106
	Develop SBCC materials (by involving key actors)	Number of validated SBCC materials	7	1													\$0
	Conduct joint support supervision and monitoring	Number supportive supervision visits conducted	7	1													\$31,855

Goal: To provide procedural guidance to 90% of the population on how to improve safe hygiene and sanitation practices in hot spot woredas and kebeles by 2028																	
Activity	Sub activity	Output Indicator	78-year Target	1 year Target	July	August	September	October	November	December	January	February	March	April	May	June	Budget
Strategic Objective 2: Increase the risk communication activities in mass gathering areas, (including seasonal workers, refugees, IDP, prison, special groups) for prevention of cholera case reporting by integrating COVID-19 pandemic preparedness and response activities																	
Engagement of public and private sectors in the production and dissemination of multimedia behavior change communication (hygiene promotion) messages in integration of COVID-19 preparedness and response activities;	Map all cultural, social, political, and religious events	Number identified events	49	7				7									\$0
	Organize sensitization sessions targeting public and private sectors ahead of the events	Number sensitization sessions conducted	118	35					35								
Mobilize and engage various stakeholders, including community, cultural and religious leaders, teachers, market vendors, and others, in cholera prevention and response in integration of COVID-19 preparedness and response activities	Organize focused community conversations targeting prisons, IDPS, refugees, schools based on seasonal trends	Number community conversions conducted	238	70						70							\$2,180
	Provide training staff (multisector) and volunteers on RCCE	Number deployed staff/volunteers	2360	600						300	300	300					\$14,169
	Organize social mobilization, awareness sessions supported by trained staff and volunteers	Number of social mobilization sessions	236	216					216								\$0
	Organize community forums to evaluate the cholera response interventions	Number of community forums conducted	354	105				35							35		\$15,089



Goal: To provide procedural guidance to 90% of the population on how to improve safe hygiene and sanitation practices in hot spot woredas and kebeles by 2028																	
Activity	Sub activity	Output Indicator	78-year Target	1 year Target	July	August	September	October	November	December	January	February	March	April	May	June	Budget
Produce and disseminate context-specific messages through multi-media channels (print, radio, TV) and mobile-audio visual vans	Disseminate local context specific messages through multi-media channels	Number of sessions transmitted through radio/TV	14	2				1							1		\$42,537
	Develop and strengthen job aids for community mobilizers, volunteers, HEWs, and other frontline workers	Provide RCCE training for HEWs and kebele leaders	2360	580					1								\$33,426
Conduct social mobilization and interpersonal communication (house-to-house sensitization and community dialogue) in hotspot areas to reach community groups who are at risk including food and drink vendors	Prepare workshops to implement job aids	Number of workshops conducted	118	29					29								\$35,510
	Conduct house-to-house inspections on behavior change	Number of house-to-house sessions conducted	236	58						24						24	\$0
	Conduct community dialogues for social mobilization	Number of community dialogues conducted	236	58					24								\$8,335

Goal: To provide procedural guidance to 90% of the population on how to improve safe hygiene and sanitation practices in hot spot woredas and kebeles by 2028																	
Activity	Sub activity	Output Indicator	78-year Target	1 year Target	July	August	September	October	November	December	January	February	March	April	May	June	Budget
Engage with community key influencers including religious leaders, community, and clan leaders to ensure mobilization of communities	Conduct sensitization workshops for key influencers	Number of sensitization workshops conducted	118	58					24						24		\$29,258
	Conduct regular forums with key influencers to ensure mobilization of the community	Number of regular forums conducted	236	58						24						24	\$4,167
Train key mobilizers including Women Development Army, Health Extension Workers, faith-based organizations, community-based organizations, youth groups on interpersonal communication by considering the way forward of national prevention COVID-19 pandemic preparedness and response	Develop communication toolkit for Women Development Army, Health Extension Workers, faith-based organizations, youth groups on interpersonal communication by considering	Number of trained social mobilizers	3540	870				870									\$42,594
	Conduct orientation for school community to implement hygiene promotion	Number of orientations provided on hygiene promotion	590	175					175								\$0
Implement hygiene promotion interventions in schools, orientation of teachers, school WaSH clubs as champions and school committees	Conduct orientation for schoolteachers to implement hygiene promotion	Number of orientations provided on hygiene promotion	590	175					175								\$0
<b>Total RCCE budget</b>																	<b>\$1,306,169</b>

**2.6.5. RCCE budget Summary**

Table 10 RCCE budget Summary of NCP Operational Plan 2022/23, Ethiopia.

S/No	Major Activities	Major Activities Budget (USD)	Strategic Objectives Total Budget
	Strategic Objective 1: Mainstream community engagement into all pillars to assure sustainability of interventions for the elimination of cholera		
1	Conduct high level advocacy with policy makers, law enforcers, members of House of Representative, parliamentarians, highest level religious structures, private sectors, media editors, Regional Commissioners, and district level teams	347,091	708,943
2	Develop evidence-based strategies, messaging, and interventions, strengthen the use of traditional media, and explore the potential of new media as a channel for dissemination of cholera prevention and control messages to specific at-risk groups	283,891	
3	Harmonize Social Behavior Change Communication (SBCC) for cholera prevention and control, including contextualized hygiene promotion in integration of COVID-19 preparedness and response activities	77,960	
	Strategic Objective 2: Increase risk communication activities in mass gathering areas (including seasonal workers, refugees, IDP, prison, special groups) for prevention of cholera case reporting by integrating COVID-19 pandemic preparedness and response activities		
1	Engage public and private sectors in the production and dissemination of multimedia behavior change communication (hygiene promotion) messages in integration of COVID-19 preparedness and response activities;	16,349	45,607
2	Mobilize and engage various stakeholders, including community, cultural and religious leaders, teachers, market vendors, and others, in cholera prevention and response in integration of COVID-19 preparedness and response activities	29,258	
	Strategic Objective 3: Increase community engagement and participation of communities for early diarrheal disease detection, notification, and cooperation during OCV campaigns by integrating COVID-19 pandemic preparedness and response activities		
1	Conducting regular Knowledge, Attitude, and Practice (KAP) surveys and, when possible, anthropological studies to gather information on behavioral drivers of the epidemic	46,106	551,619
2	Conduct assessments to identify behavioral and socio-cultural risk factors for cholera	31,855	
3	Develop evidence based comprehensive SBCC strategies for cholera prevention and control	277,831	
4	Produce and disseminate context-specific messages through multi-media channels (print, radio, TV) and mobile-audio visual vans	42,537	
5	Develop and strengthen job aids for community mobilizers, volunteers, HEWs, and other frontline workers	68,936	
6	Conduct social mobilization and interpersonal communication (house-to-house sensitization and community dialogue) in hotspot areas to reach community groups who are at risk, including food and drink vendors	8,335	
7	Engage with community key influencers including religious leaders, community, and clan leaders to mobilize communities	33,426	
8	Train key mobilizers including Women Development Army, Health Extension Workers, faith-based organizations, community-based organizations, youth groups on interpersonal communication by considering the way forward of national prevention COVID-19 pandemic preparedness and response	42,594	
9	Implement hygiene promotion interventions in schools, orientation of teachers, school WaSH clubs as champions and school committees	-	
<b>Grand Total Budget</b>		<b>2,612,393</b>	<b>1,306,169</b>

### 3. Human Resources

The EPHI in the Federal Government of Ethiopia will use the available human resource structure of the existing health system. Capacity building trainings will be conducted and focal persons for implementation of

all respective pillars will be appointed. In addition to supporting partners, EPHI may also designate focal persons to streamline the coordination and implementation with the Federal Republic of Ethiopia.

## 4. Risks and Mitigation Strategies

### 4.1. Risk 1: Lack of Adequate Financing

Resource mobilization activities will be implemented in the first quarter of the 8-year plan. However, there is a risk of failing to raise enough funds to implement the multi-sectoral plan. The realization of this risk will lead to a poorly implemented cholera control plan with other sectors having less funding, or no funding, to execute their activities.

#### 4.1.1. Mitigation Activities

Each sector will plan their activities within the GTFCC framework, indicating what is needed to implement their activities. The costs will be emphasized in the resource mobilization meeting/s and the risks of raising inadequate funding will be shown.

#### 4.1.2. Risk 2: Insufficient Quantities of OCV Vaccines

As countries jump on board to kickout cholera by 2030, the GTFCC highlights the need for an estimated 44 million, 59 million and 76 million doses of OCV for 2018, 2019 and 2020 respectively. However, the production capacity for OCV was only 25 million doses in 2017. As Ethiopia plans to use OCV as a preventive and reactive measure as opposed to a mitigation measure, the required number of OCV doses will increase. With the global picture, the country may not receive the desired number of OCV doses and thus fail to reach their intended target.

#### 4.1.2.1. Mitigation Activities

The OCV team will work closely with the GTFCC and partners like GAVI to receive the number of vaccines required in a specific period. Based on this partnership, vaccine requests and distribution strategies will be developed to ensure 100% vaccine coverage. Currently, Ethiopia is waiting to receive the requested and approved OCV doses for 2022/23.

#### 4.1.3. Risk 3: Cross Border Cholera Transmission

Ethiopia neighbors several countries, some of which regularly experience cholera outbreaks, which poses a threat for imported cholera outbreaks in Ethiopia.

#### 4.1.3.1. Mitigation Activities

Strengthen collaboration with line Ministries of Health of neighboring countries, border security, communities, and government structures like health facilities. Conduct trainings and quarterly meetings for cross border staff and regular OCV vaccinations in target populations around borders that pose a threat to Ethiopia.



## 5. Financial summary for the Operation Plan

Table 11: Financial Summary for the NCP Operation Plan 2022/22, Ethiopia.

Pillars	Estimated 2022/23	Actual 2022/23	Difference (Estimated 2022/23 - Actual 2022/23)	Grand Pillar Total (USD)							
				2023/24	2024/25	2025/26	2026/27	2027/28	2028/29		
Leadership and Coordination	962,500	3,152,145	-2,189,645	385,000	288,750	288,750	231500	231500	231500	231500	2,621,500
Surveillance	3,965,849	3,965,849	0	1,586,340	1,189,755	1,189,755	962,105	953,864	953,864	953,864	10,801,530
Case Management	80,358,187	58,215,512	22,142,675	12,305,027	11,728,636	11,440,441	11,152,245	11,152,245	11,152,245	11,152,245	149,289,026
OCV	6,029,382	7,787,400	-1,758,018	3,001,158	2,972,525	3,488,851	0	0	0	0	15,491,916
WaSH	111,428,479	108,499,270	2,929,209	47,609,776	22,138,241	22,126,526	18,626,526	506,526	506,526	258,590	222,694,664
RCCE	968,600	1251169.34	-282,569	471,000	466,000	468,000	460,000	456,100	456,100	439,700	3,269,400
Grand Year Total	203,712,997	182,871,345	20,841,652	65,358,301	38,783,907	39,002,323	30,972,376	13,300,235	13,300,235	13,035,899	404,168,036

## 6. Monitoring and Evaluation

A functional monitoring and evaluation system is vital to a successful cholera elimination strategy. Monitoring and evaluation guide the planning and implementation, assesses its effectiveness, identifies areas for improvement and optimizes the use of resources. The purpose of monitoring and evaluation is to enhance the system in the elimination programs and identify the gaps that need strengthened and integrated urgently to the PHEM system. Monitoring and evaluation activities are as follows:

1. Prepare NCP plan and other program related documents

- Prepare annual NCP operational plan
- Prepare EPRP and incident action plan
- Prepare MEAL (Monitoring Evaluation and Learning) plan for the NCP
- Prepare Dashboard
- Develop standardized monitoring and reporting tools

2. Performance monitoring & improvement for the program

- Produce monthly performance report & bulletins
- Conduct regular integrated supportive supervision for the implementation NCP
- Conduct pre, and post OCV campaign supportive supervision visits
- Provide training on M&E and reporting
- Conduct multi-sectoral performance review meetings bi-annually (national & regional)

3. Program Evaluation

- Conduct quarterly evaluations on graduated woredas based on standards
- Conduct post-campaign evaluations
- Evaluate impact of OCV
- Conduct end-term evaluations on NCP implementation
- Conduct After Action Review/AAR for all outbreaks that occur
- Utilize “lessons learned” from AAR to make needed

### 6.1. Monitoring and Evaluation Activities, Timeline and Budget Summary

Goal: To have an effective monitoring and evaluation system for cholera elimination program		Budget (USD)															
Major Activity	Sub-Activities	Output Indicators	2021-2028 Targets	2022/23 Target	July	August	September	October	November	December	January	February	March	April	May	June	
Target: To monitor and evaluate NCP implementation on each year																	
Prepare NCP plan and other program related documents	Prepare annual NCP operational plan	Number of developed plans	6	1				1									20,438
	Prepare EPRP and incident action plan	Number of developed plans	6	1					1								20,438
	Prepare MEAL (Monitoring Evaluation and Learning) plan for the NCP	Number of developed plans	6	1			1										20,438
	Prepare dashboard	Report timeliness & completeness	1	1			1										
Performance monitoring & improvement for the program	Develop standardized monitoring and reporting tools	Report timeliness & completeness	1	1		1											
	Produce regular monthly performance report & bulletins	Produced report/ bulletins	72	12	1	1	1	1	1	1	1	1	1	1	1	1	-
	Conduct regular integrated supportive supervision for the implementation NCP	Number of supportive supervision visits conducted	12	2						1						1	286,541
	Conduct pre-, and post-OCV campaign supportive supervision visits	Number of supportive supervision visits conducted	12	2						1						1	37,531
Performance monitoring & improvement for the program	Provide training on M&E and reporting	Number of trained experts on M&E	200	200					50			50				50	63,140
	Conduct multi-sectoral performance review meetings biannually (national & regional)	Number of reviewed meetings conducted minutes	14	2						1						1	54,635

Goal: To have an effective monitoring and evaluation system for cholera elimination program																			
Major Activity	Sub-Activities	Output Indicators	2021-2028 Targets		2022/23 Target		July	August	September	October	November	December	January	February	March	April	May	June	Budget (USD)
				Conduct quarterly evaluation on graduated woredas based on standards	Number of technical reports	24	1	1		1			1						
Program evaluation	Conduct post-campaign evaluation	6	1	1								1							20,875
	Evaluate impact of OCV	2	0	0															-
	Conduct end-term evaluation on NCP implementation	1	0	0															-
	Conduct After Action Review/AAR for all outbreak that occur	After action report	6	1	1												1	104,780	
	Utilize "lessons learned" from AAR to make needed changes to NCP on a quarterly basis	Changes made in NCP based on AAR																	
Total budget requested for M&E activities																			

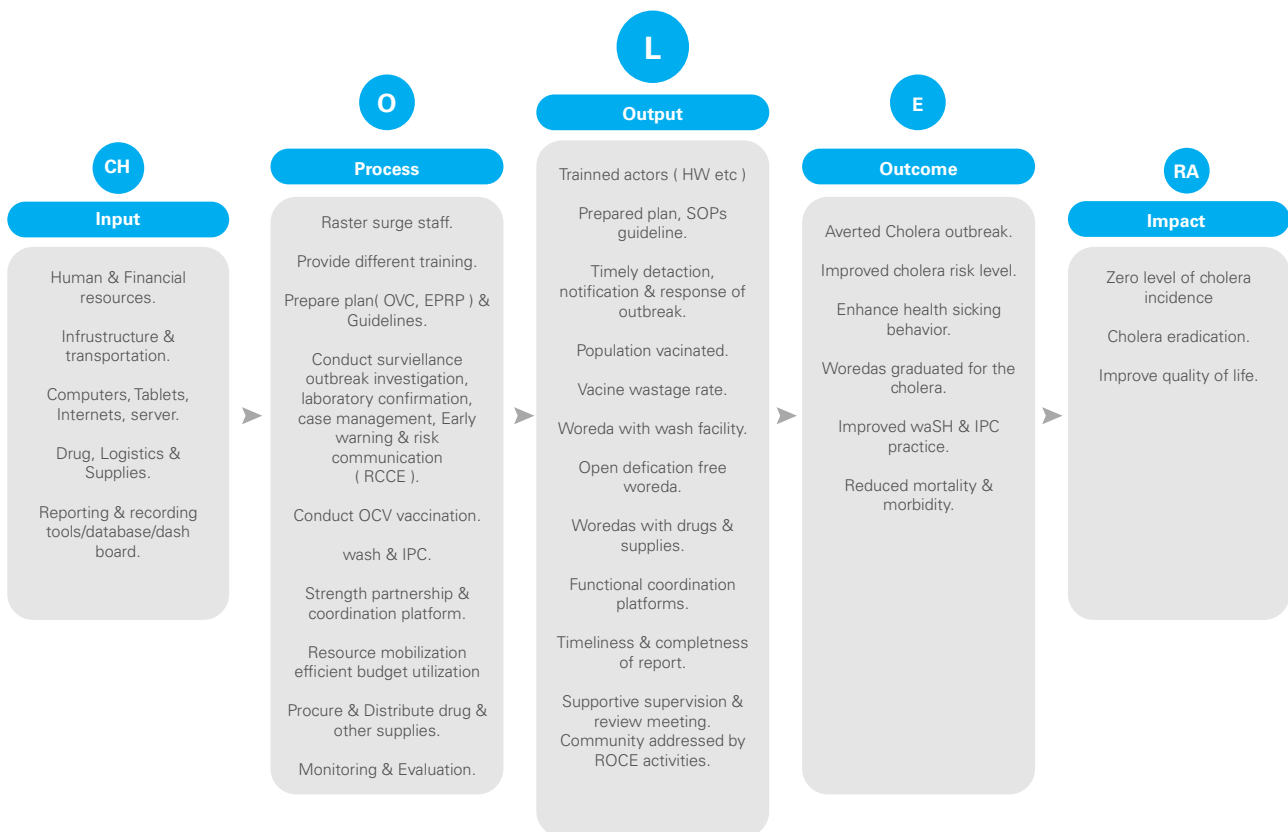
## 6.2. Cholera Elimination Plan Framework/Theory of change

The cholera elimination plan will describe and illustrate how and why a desired change by the end of 2028 will be happen in prioritized cholera hot spot woredas of the country, through the enhanced the intervention of the elimination strategies.

The interventions were planned thematically in six pillars, composed of major and sub-activities accordingly to attain the expected outputs for program outcome and impact.

The program requires various inputs to perform activities related to surveillance, laboratory confirmation, early warning, preparedness, response, WaSH, IPC, and other activities (Figure 1)

Figure 1: Cholera Elimination Plan Framework/ Theory of Change of Monitoring and Evaluation, Ethiopia, 2022/23



### 6.3. Monitoring and Evaluation Activity and Timeline

Table 12: Monitoring and Evaluation, NCP Operational Plan 2022/23, Ethiopia.

Indicator	Formula	Numerator		Targets					Frequency			Dis-aggregate
		Formula	Denominator	2022/23	2024/25	2025/26	2026/27	2027/28	Sources of Data	of Data Collection	Responsibility	
Number of monthly and quarterly coordination meetings conducted				12	12	12	12	12	Meeting minutes & report	Monthly	EPHI, Regions, Zones and Woredas	-Responsible body, -Objectives and -Time
Number of aligned sectoral plans				1	1	1	1	1	Aligned Operational Plan	Annual	EPHI, MOH & other sectors	-type of sectors -Time
Number of orientation sessions for standing committees of parliament on the plan				1	1	1	1	1	Meeting minutes & report	Annual	EPHI, MOH & Parliament members	-Time # of parliament participants
Number of coordination platforms placed at all levels (federal, regional and all hotspot woredas)				88	118	118	118	131	Meeting minutes Member profile/roster	Quarterly	All (EPHI, region, woreda)	-By woreda & region -Time established &/ or updated
Number of operational plans prepared				1	1	1	1	1	Operational Plan	Annual	EPHI, MOH & other sectors	-Time

Indicator	Numerator		Targets					Frequency			Dis-aggregate
	Formula	Denominator	2022/23	2024/25	2025/26	2026/27	2027/28	Sources of Data	of Data Collection	Responsibility	
Proportion of hotspot woredas with capacity assessments	# of hotspot woreda with assessments	Total of hotspot woredas	50	100	100	100	100	Assessment reports	Bi-Annual	EPHI, MOH & regions, woreda & other sectors	-By woredas & regions, -Time
Number of supportive supervision visits conducted by regions			2	4	4	4	4	Report	Quarterly	EPHI, regions, woredas, and other sectors	-Time -Woreda & region
Number of resource mobilization strategies developed			1					Developed strategic document	Once	EPHI, RHB and other sectors	-Time
Number of cholera elimination focal persons at national and regional level			13	13	13	13	13	Profile/Roster of focal	Annual	EPHI, RHB, and Woreda	- Region - Profession - Received training
Number of countries participated in cross-border coordination platforms			2	6	6	6	6	Meeting minutes & report	Annually	EPHI, MOH, RHB & neighboring country	- Participants - Time - Objective

Indicator	Formula	Numerator		Targets					Frequency			Dis-aggregate
		Denominator		2022/23	2024/25	2025/26	2026/27	2027/28	Sources of Data	of Data Collection	Responsibility	
Number of annual review meetings				1	1	1	1	1	Meeting minutes & report	Annual	EPHI, MOH, RHB, ZHD, woredas, and other sectors	-Type of participant -Objective -Time
Proportion of woredas with changed risk level	# of hotspot woredas with change in risk level	Total hotspot woredas		10	35	60	85	100	VRAM assessment report	Annual	EPHI, MOH, RHB, woredas, & other stakeholders	-Woredas, Regions -Time -Woredas with level of risk situated
Proportion of woredas with prioritization by kebele is finalized	#of woredas who prioritized kebeles	Total hotspot woredas		100	100	100	100	100	Parallel Report	Annual	EPHI, RHB and woredas	-Kebele, woreda, region -Time -Kebeles with level of risk situated
Proportion of regions, zones, woredas and health facilities with functional RRT	#of regions, zones, woredas and health facilities with functional RRT	Total number of regions, zones, woredas and health facilities expected to have RRT		75	100	100	100	100	Roster/profiles of RRT &/or assessment report	Bi-annual	EPHI and Region, Woredas, HF's & other stakeholders	-HF's, Woredas, Zone, Regions - List of RRT members -Time



Indicator	Numerator		Targets					Frequency			Dis-aggregate
	Formula	Denominator	2022/23	2024/25	2025/26	2026/27	2027/28	Sources of Data	of Data Collection	Responsibility	
Proportion of rumors notified within 30 minutes of detection to each reporting level	#of rumors notified within 30 minutes of detection to each reporting level	Total number of rumors	95	95	95	95	95	Rumor logbook, registration, report	Monthly	EPHI, RHB, zone, woreda, HFs	-Time -EPHI, RHB, zone, woreda, HFs
Number of trained PHEM officers and health facility PHEM focal persons for cholera surveillance			105	241	241	241	964	Training registration, report	Quarterly	EPHI, RHB, ZHD, woredas and HF	-Participant -Responsibility -Time
Proportion of regions, zones, woredas and health facilities which integrate different data sources (meteorological, environmental, climate sensitive sentinel site data)	#of regions, zones, woredas and health facilities integrate other non- health data sources	Total number of regions, zones, woredas and health facilities expected to use data	25	50	75	100	100	Bulletin, report generated	Monthly	Woredas and HF, metrology agency (nearby station)	-HFs, woredas, regions -Time
Number of cholera outbreak prediction models developed			4	4	4	4	4	Generated report	Quarterly	EPHI,	-Time -Prediction status

Indicator	Formula	Numerator		Targets					Frequency			Dis-aggregate
		Denominator		2022/23	2024/25	2025/26	2026/27	2027/28	Sources of Data	of Data Collection	Responsibility	
Proportion of woredas, zones and regions utilizing the forecasting model	#of regions, zones, woredas utilized cholera forecast model	Total number of regions, zones, woredas expected to use		25	50	75	100	100	Assessment report	bi-annual	EPHI, region, zone	-Utilization type -Regions -Time
Proportion of forecasted outbreaks averted/prevented	#of forecasted outbreaks averted/prevent from occurrence	Total number of forecasted outbreaks		50	100	100	100	100	Outbreak reports, assessment report	Monthly	EPHI, region, zone, woredas	- Region, zone, woredas -Time
Number of computers with internet modem distributed				100	200	250	250	250	-Roster of distributed computer with modem -Model 20	Annually	EPHI, region, zone, woreda, HF's	-Region, zone, woreda, HF's -Time

Indicator	Numerator		Targets					Frequency			Dis-aggregate
	Formula	Denominator	2022/23	2024/25	2025/26	2026/27	2027/28	Sources of Data	of Data Collection	Responsibility	
Number of printers and copy machines distributed			30	60	80	100	118	Roster of distributed printers and copy machines -Model 20	Annually	EPHI, region, zone, woreda,	-Region, zone, woreda, HFs -Time
Proportion of regions, zones, woredas and health facilities achieving the WHO minimum requirement on completeness and timeliness of surveillance reports	Number for HF, woreda, zone And region achieving minimum requirement of T& C	Total number of HF, woreda, zone, region expected to achieve minimum requirement of T& C	80	90	100	100	100	Report and line-list and registrations	Weekly	EPHI, region, zone, woreda, HFs	-Region, zone, woreda, HFs -Time
Proportion of health facilities in priority woredas utilizing electronic reporting	Number of health facilities in priority woredas utilizing electronic reporting	Total Number of health facilities in priority woredas expected to utilize electronic reporting	30	55	80	95	100	Report and line-list and registrations	Weekly	EPHI, regions, zone, woreda & HFs	-Regions, zone, woreda & HFs -Time

Indicator	Formula	Numerator		Targets					Frequency			
		Denominator		2022/23	2024/25	2025/26	2026/27	2027/28	Sources of Data	of Data Collection	Responsibility	Dis-aggregate
Number of woreda PHEM officers trained on data management (data recording, documentation, reporting, analyses, interpretation) and dissemination system				59	118	177	236	236	-Training registration, report	Bi-Annual	MOH, EPHI, regions, zone, woreda	-Time -Woreda
Proportion of regions producing bulletin and feedback	$\frac{\text{Number of regions producing bulletin and feedback}}{\text{Total number of regions expected to produce bulletin and feedback}}$			50	80	100	100	100	Bulletins, Reports	Weekly	EPHI, regions	-Time - Regions
Number of PHEM officers in woreda who have completed frontline FETP course				35	70	100	118	118	-Training registration, report	Annually	EPHI, regions, zones, and woredas	-Woredas -Time
Number of woredas with trained EW/HDA/WDGs/Community actors on community-based surveillance (estimate number)									-Training registration, report	Quarterly	EPHI, regions & stakeholders	-Time -Woredas

Indicator	Numerator		Targets					Frequency			Dis-aggregate
	Formula	Denominator	2022/23	2024/25	2025/26	2026/27	2027/28	Sources of Data	of Data Collection	Responsibility	
Proportion of communicated cross-border early warning and alerts	Number of communicated early warning and alerts	Total number of early warnings and alerts	50	80	95	100	100	-Meeting minutes -Report	Bi-annual	EPHI, regions, stakeholders and neighboring country	-Participant country -Region & woreda -Time
Number of regional quarterly surveillance meetings			4	4	4	4		-Meeting minutes -Report	Quarterly	EPHI, MOH, regions,	-Participant -Time
Number of meetings held to revise cholera guidelines					4			Meeting Minutes and revised guidelines	once in planed year	MOH, EPHI, RHB, woredas and other sectors	-Participants
Proportion of rumors reported by the CBS actors/community	Number of rumors reported by the CBS actors/ community	Total number of rumors received from all type of source	50	80	95	100	100	Rumer registration logbook	Annually	EPHI, RHB, woredas	-Time

Indicator	Formula	Numerator Denominator	Targets					Sources of Data	Frequency of Data Collection	Responsibility	Dis-aggregate
			2022/23	2024/25	2025/26	2026/27	2027/28				
Proportion of health facilities in priority woredas with posted cholera case definition in OPDs	Number of health facilities in priority woredas with posted cholera case definition in OPDs	Total number expected health facilities in priority woredas with posted cholera case definition in OPDs	75	90	100	100	100	-Assessment reports -Supervision reports	-Quarterly	EPHI, RHB, woredas	-Time -Health Facility
Proportion of health facilities in priority woredas that have access to updated cholera guideline, cholera case/rumor/suspect reporting formats/system	Number of health facilities in priority woredas that have access to updated cholera guideline, cholera case/rumor/suspect reporting formats/system	Total number of \ health facilities in priority woredas to have access to updated cholera guideline, cholera case/rumor/suspect reporting formats/system	75	85	100	100	100	-Assessment reports -Supervision reports	-Quarterly	EPHI, RHB, woredas	-Time -Woredas

Indicator	Formula	Numerator		Targets					Frequency			Dis-aggregate
		Denominator	2022/23	2024/25	2025/26	2026/27	2027/28	Sources of Data	of Data Collection	Responsibility		
Proportion of cases detected by active case searching	Cases detected by active cases searching	Total Number of cases reported	50	65	75	75	80	-Line list, Patient registration books	Quarterly	EPHI, RHB, Woredas, health facilities, HEW	-RHB, woredas, health facilities -Time	
Proportion of contacts traced and registered under follow-up	Number of contacts traced by contact tracing and follow up team	Total number of contacts registered	75	85	100	100	100	-contact registration books	Quarterly	Woredas, health facilities & RRT	-RHB, woredas, health facilities -Time	
Number of newly established environmental laboratories			2	5	8	10	12	Annual reports	Annually	EPHI, RHB, zone, woredas	-RHB, zone, woredas -Time	
Proportion of regional and zonal laboratories and general, teaching, and referral hospital laboratories capable of doing culture, PCR, and antimicrobial sensitivity test	Number of regional and zonal laboratories capable of doing culture, PCR and AMR test	Total number of expected regional and zonal capable of doing culture, PCR, and antimicrobial sensitivity test	25	50	75	85	100	-Assessment reports -Annual reports	Bi-annual	EPHI, RHB, zone	-RHB, zone -Time	

Indicator	Formula	Numerator Denominator	Targets					Sources of Data	Frequency of Data Collection	Responsibility	Dis-aggregate	
			2022/23	2024/25	2025/26	2026/27	2027/28					
Proportion of hotspot woredas with RDT kits for estimated number of cases within a year	Number of hotspot woredas with RDT kits for estimated number of cases within a year	Total number of expected hotspot woredas with RDT kits for estimated number of cases within a year	80	100	100	100	100	100	Assessment & Supervision	Bi-annual	EPHI, MOH, RHB, zone, woredas	-RHB, zone, woredas -Time
Proportion of designated laboratories with logistics and supplies for estimated number of cases within a year	Number of designated laboratories having logistics and supplies for estimated number of cases within a year	Total number of designated laboratories with logistics and supplies for estimated number of cases within a year	80	100	100	100	100	100	Assessment & supervision reports	Bi-annual	EPHI, MOH, RHB, zone, woredas	-RHB, zone, woredas -Time
Proportion of referral samples processed in expected time	Number of referral samples processed in expected time	Total number of referral samples processed	70	85	95	100	100	100	Reception sample registration forms	Quarterly	EPHI, RHB, zone, woredas	-RHB, zone, woredas -Time



Indicator	Formula	Numerator Denominator	Targets					Sources of Data	Frequency of Data Collection	Responsibility	Dis-aggregate
			2022/23	2024/25	2025/26	2026/27	2027/28				
Proportion of health facilities found in priority woredas with sample transportation media sufficient for the estimated number of cases for a year	Number of health facilities found in priority woredas with sufficient sample transportation media for the estimated number of cases for a year	Total number of health facilities found in priority woredas with sufficient sample transportation media for the estimated number of cases for a year	70	80	95	100	100	Assessment & Supervision reports	Quarterly	EPHI, RHB, zone, woredas, health facilities	-Health Facilities -Time
			70	80	95	100	100				
Proportion of laboratories with SOPs	Number of laboratories with SOPs	Total number of laboratories expected to have SOPs	70	80	95	100	100	Assessment & Supervision reports	Quarterly	EPHI, RHB, zone, woredas, health facilities	-Health Facilities -Time

Indicator	Formula	Numerator		Targets					Frequency			Dis-aggregate
		Denominator		2022/23	2024/25	2025/26	2026/27	2027/28	Sources of Data	of Data Collection	Responsibility	
Proportion of laboratories with case-based format sufficient for estimated number of cases in a year	Number of laboratories who have sufficient case-based format for estimated number of cases in a year	Total number of laboratories expected to have sufficient case-based format for estimated number of cases in a year		70	80	95	100	100	Assessment & supervision reports	Quarterly	EPHI, RHB, zone, woredas, health facilities	-RHB, zone, woredas, health facilities -Time
Proportion of laboratory facilities with trained laboratory professionals for cholera sample	Number of laboratory facilities with trained laboratory professionals for cholera sample	Total number of laboratory facilities expected to have trained laboratory professionals for cholera sample		50	65	80	95	100	Training Rosters, assessment & supervision report	Quarterly	EPHI, RHB, zone, woredas, health facilities	-Time -Participants -RHB, zone, woredas, health facilities
Number of vehicles purchased and dispatched to regions			0	12	34	54	70		-Roster of distributed vehicles to regions	Annually	-EPHI, MOH, RHB	-Regions -Time

Indicator	Formula	Numerator Denominator	Targets					Sources of Data	Frequency of Data Collection	Responsibility	Dis-aggregate
			2022/23	2024/25	2025/26	2026/27	2027/28				
Proportion of laboratories with a refrigerator	Number of laboratories with a refrigerator	Total number of laboratories expected to have refrigerator	70	85	95	100	100	Assessment & supervision reports	Annually	EPHI, RHB, zone, woredas, health facilities	-EPHI, RHB, zone, woredas -Time
Case Management and IPC	# of HFs having cholera outbreak management guidelines	Total number of HFs	100	100	100	100	100	Distribution list, assessment report	Bi-annually	EPHI, RHB, zone, woreda	-HFs -Time
Proportion of cholera outbreak management guidelines distributed per HF in 2021/2022			100	100	100	100	100	Registration data base	Annual	EPHI, RHB, woredas	-Profession -Woredas, regions Time
Number of woredas with cholera case management team roasters as per the standard team composition			118	118	118	118	118				
Proportion of deployed staff as requested for surge capacity during outbreak	# of deployed staff as requested for surge capacity during outbreak	Total number of surge capacity required	75	90	100	100	100	Surge staff request letters	During outbreak	Woreda, HFs	-Outbreak -Time

Indicator	Formula	Numerator Denominator	Targets					Sources of Data	Frequency of Data Collection	Responsibility	Dis-aggregate
			2022/23	2024/25	2025/26	2026/27	2027/28				
number of health facilities, including woredas, with trained staff on infection prevention and control of cholera			218	236	236			Training registration	Bi-annually	EPHI, RHB, woredas	-Training organizer -Participant profession -Education status -HFs & woredas
Proportion of health extension workers trained on ORS											Will be on IPC
Proportion of CTCs established at outbreak-affected woreda	#of CTCs established at outbreak-affected woreda	Total number of cholera outbreaks	75	90	100	100	100	Response report	Annual	EPHI, RHB, woredas	-Woredas -Time
Proportion of ORPs established at outbreak affected kebele	#of ORPs established at outbreak affected kebele	Total number of established ORPs expected	75	90	100	100	100	Response report	Annual	EPHI, RHB, woredas	-Woredas -Kebeles -Time
Proportion of CTCs with full availability WASH facilities	Number of CTCs with full available facilities	Number of established CTCs	75	90	100	100	100	Assessment report	During outbreak	EPHI, RHB, woredas	-Type of WaSH facility -Woredas -Time

Indicator	Formula	Numerator		Targets					Frequency				Dis-aggregate
		Denominator		2022/23	2024/25	2025/26	2026/27	2027/28	Sources of Data	of Data Collection	Responsibility		
Proportion of CTCs/CTUs supervised during active outbreak	#of CTCs/CTUs supervised during active outbreak	Total number of cholera outbreaks	100	100	100	100	100	100	Assessment reports	During outbreak	EPHI, RHB, woredas	-Woredas -Time	
Proportion of sites in hotspot areas with cholera treatment stock	#of hotspot woredas with cholera treatment stock	Total hotspot woredas	40	75	90	100	100	100	RRF, Inventory report	Bi-annually	RHB, woredas	-Expiry status -Stock status -Woredas -Time	
Proportion of federal/ regional/zonal/districts with IPC materials in their stocks	#of hotspot woredas with IPC materials in their stocks	Total national, regions, zone, woredas	40	75	90	100	100	100	RRF, Inventory report	Bi-annually	RHB, woredas	-Functional status -Stock status -Woredas -Time	
Proportion of OCV doses delivered to country	Number of OCV doses delivered to country	Number of OCV requested according to micro-planning	95	100	100	100	100	100	Invoice, micro-plan, Model 20	MOH, EPHI, EPSA	Annual	-Time	

Indicator	Formula	Numerator		Targets					Frequency			Dis-aggregate
		Denominator		2022/23	2024/25	2025/26	2026/27	2027/28	Sources of Data	of Data Collection	Responsibility	
Proportion of hotspot woredas covered by preventive OCV campaign with two rounds	Number of hotspot woredas covered by 2 rounds of preventive OCV	Total number of hotspot woredas	50	85	100	100	100	100	Campaign report	Annual	EPHI, RHB, woredas, Partners	-Kebele, woreda, region -Status in round -Time
Proportion of people covered with OCV in targeted hotspot woredas that conducted OCV campaigns in the first round	# of people vaccinated for the 1st round of OCV	Total target group for 1st round OCV	95	97	100	100	100	100	Campaign reports	Annual	EPHI, MOH, RHB, zone, woredas, partners	-Age, Sex -Kebeles, woredas, regions -Time
Proportion of people covered with OCV in targeted hotspot woredas that conducted OCV campaigns in the second round	# of people vaccinated for the 2nd round of OCV	Total target group for 2nd round OCV	95	97	100	100	100	100	Campaign report	Annual	EPHI, MOH, RHB, zone, woredas, partners	-Age, Sex -Kebeles, woredas, regions -Time

Indicator	Numerator		Targets					Frequency			Dis-aggregate
	Formula	Denominator	2022/23	2024/25	2025/26	2026/27	2027/28	Sources of Data	of Data Collection	Responsibility	
Number/percent of targeted hot spot woredas developed detailed micro-plan to implement preventive OCV campaign	# of OCV targeted hotspot woredas developed micro-plan	Total number of OCV targeted hotspot woredas	100	100	100	100	100	micro-plan	Biannually	EPHI, RHB, Zone, Woredas	-Woreda, region -Time
Number of sensitization meeting/ training conducted for OCV campaign per woreda			100	100	100	100	100	Minutes, reports, pre-campaign assessment	Bi-annually	EPHI, RHB, zone, woredas	-Participant type -Woreda, region -Time
Number (percentage) of woredas with social mobilization and communication funds transferred and available											
Percent of families that received message on OCV before OCV campaign											
Number of hotspot woredas affected by cholera outbreak after OCV campaign conducted											

Indicator	Formula	Numerator	Targets					Sources of Data	Frequency of Data Collection	Responsibility	Dis-aggregate
			2022/23	2024/25	2025/26	2026/27	2027/28				
OCV wastage rate											
Number of immunization (AEFI) assessments conducted during the campaign and post campaign in each round.											
Number of days interval between first and second round of OCV campaigns											
Proportion of hotspot woredas targeted with conducted pre-campaign assessment on cold chain equipment and capacity for OCV campaign											



Indicator	Numerator		Targets					Frequency			Dis-aggregate
	Formula	Denominator	2022/23	2024/25	2025/26	2026/27	2027/28	Sources of Data	of Data Collection	Responsibility	
<p>WaSH indicators</p> <p>Number of WaSH kits distributed to hotspot woredas during OCV campaigns</p>			94	94	94	95	95	-Roster of distributed WaSH kits	Annually	EPHI, region, zone, woreda, HFs	-Region, zone, woreda, HFs -Time
<p>Percentage of population reached through hygiene and sanitation promotion campaign during OCV</p>	# of population reached through hygiene and sanitation	Total No of vaccinated population	50	70	80	90	100	-Report -Line-list -Registrations	Quarterly	EPHI, region, zone, woreda,	-Age group -Time -Woredas
<p>Proportion of targeted households for water treatment chemicals distributed in all hotspot woredas</p>	# of households received water treatment chemicals	total # of household in all hotspot woredas	30	50	70	90	100	- Report - Line-list	Quarterly	EPHI, region, zone, woreda,	-Time -Woredas
<p>Number of EPRP prepared at each level</p>			1	1	1	1	1	-Documented Plan -Report	Annually	EPHI, region, zone, woreda	-Number

Indicator	Formula	Numerator Denominator	Targets					Sources of Data	Frequency of Data Collection	Responsibility	Dis-aggregate
			2022/23	2024/25	2025/26	2026/27	2027/28				
Percentage of population using an improved water source with a total collection time of 30 minutes or less for a round-trip including queuing	# population using an improved water source with a total collection time of 30 min or less	3,031,266	20	40	60	80	90	-Report	-Annually	-Water Minister - Region - Woredas	-Woredas
Percentage of population with basic hand washing facilities at least near to toilet and at home	# population with basic hand washing facilities	3,031,266	20	30	40	60	80	-Report -Line list	-Quarterly	-EPHI -Region -Zone - Woreda	-Type
Percentage of population with access to improved latrines	# population with access to improved latrines	3,031,266	20	40	50	70	80	-Report	-Quarterly	-Region -Zone - Woreda	-Time -Type - Woredas

Indicator	Formula	Numerator	Targets					Sources of Data	Frequency of Data Collection	Responsibility	Dis-aggregate
			2022/23	2024/25	2025/26	2026/27	2027/28				
Percentage of hospitals, health centers and health posts with an adequate water supply	# hospitals, health centers and health posts with an adequate water supply	total # of hospitals, health centers and health posts in the hotspot woredas	20	40	60	80	90	-Report -line list	-Quarterly	-water minster -Region -Zone -Woreda	-Time - woredas
Percentage of hospitals, health centers and health posts with improved latrines and hand washing	# of hospitals, health centers and health posts with improved latrines and hand washing	total # of hospitals, health centers and health post in the hot spot woredas	20	40	60	80	90	-Report -Line list	-Quarterly	-Region -Zone -Woreda	-Time -Woredas -Type -Time

Indicator	Formula	Numerator		Targets						Frequency			Dis-aggregate
		Formula	Denominator	2022/23	2024/25	2025/26	2026/27	2027/28	Sources of Data	Frequency of Data Collection	Responsibility		
Percentage of religious sites, investment corridors, bus station and markets with at least one public stand and one functional VIP Latrine with hand washing	# of religious sites, investment corridors, bus station and markets with at least one public stand and one functional VIP Latrine with hand washing	total # of religious sites, investment corridors, bus station and markets in the total hotspot woredas	10	30	50	70	90	-Report	-Annually	- Regions - Woredas	-Type -Woredas -Time		
			8										
Number of people trained on hygiene and sanitation promotion, water quality monitoring, water schemes operation and maintenance			472	472	472	472	472	-Training Report -Registration	Annually	-EPI -Region	-Time -Objective -Participant Type		

Indicator	Formula	Numerator Denominator	Targets					Sources of Data	Frequency of Data Collection	Responsibility	Dis-aggregate
			2022/23	2024/25	2025/26	2026/27	2027/28				
Percentage of schools in hotspot woredas with an adequate water supply	# of schools in hotspot woredas with an adequate water supply	total # of schools in hotspot woredas									
Percentage of schools in hotspot woredas with improved latrines and hand washing.	# of schools in hotspot woredas with improved latrines and hand washing.	total # of schools in hotspot woredas	10	30	60	80	100	-Report -Line list	Biannually	-Regions -Zone -woredas	Type Time Woredas
Proportion of water sources for which water quality analysis is conducted	# water sources for which water quality analyses is done	Total # water sources	5	10	20	25	30	Report	Annually	-Water Minster -Region -Zone	-Type of analysis -Time
Number of hotspot woredas with portable water quality test kits	—		20	40	70	90	118	-Report -Line list	Bi-Annually	-Water Minster -Region -Zone	-Type of kit -Time -Woredas

Indicator	Formula	Numerator Denominator	Targets					Sources of Data	Frequency of Data Collection	Responsibility	Dis-aggregate
			2022/23	2024/25	2025/26	2026/27	2027/28				
Number of water quality complaints appropriately responded to	# of water quality complaints appropriately respond / total # of complaints	100	100	100	100	100	100	-Report -Registration book	Bi-Annually	-Water Minster -Region -Zone	-Type of complaints -Time -Woredas
Number of food and drinking establishments that have improved with regular inspection.		5000	13000	24800	34800	41,600	-Report -Line list -Registration book	Annually	MoH FDA EPHI Regions Zone Woredas	-Type -Time	
Number of prepared implementation manuals/ SOPs for WaSH NCP		1	—	—	—	—	-Documented SOP	Annually	All stakeholders	Time	
Percentage of hotspot woredas free of open defecation (ODF)	#of hotspot woredas ODF free	Total hotspot woredas	25	45	65	80	95	Report Line list	Annually	All stakeholders	-Time



