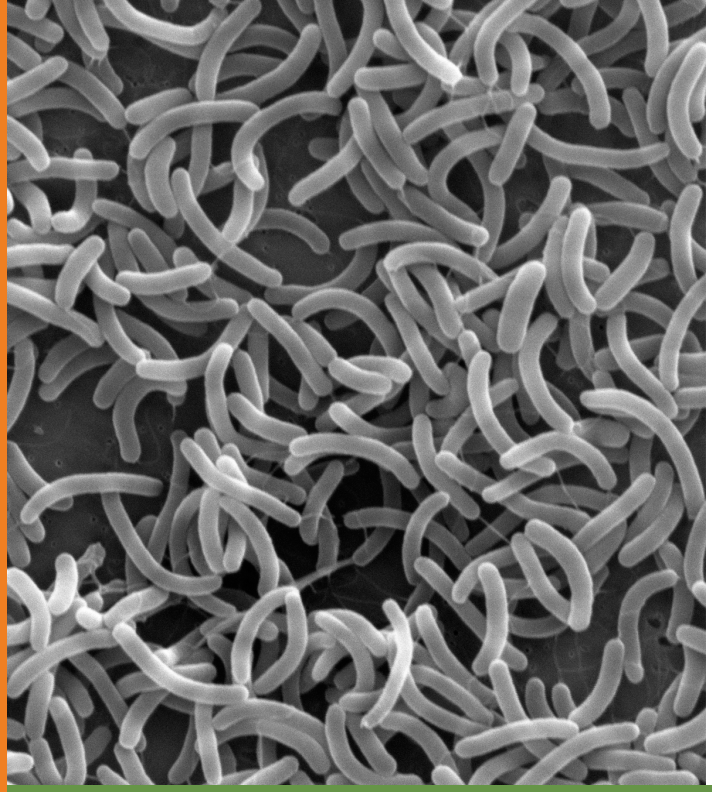


ZAMBIA MULTISECTORAL CHOLERA ELIMINATION PLAN

2019-2025

THE GOVERNMENT OF THE REPUBLIC OF ZAMBIA

ZNPHI ZAMBIA NATIONAL PUBLIC HEALTH INSTITUTE

GLOBAL TASK FORCE ON CHOLERA CONTROL

unicef for every child

World Health Organization

Contents

Foreword

The Government of the Republic of Zambia takes securing the health of her people as a national priority. This is evident as the health agenda has been enshrined in all her national development strategies. These include the Vision 2030 agenda that aims at ensuring health, wellbeing and prosperity of Zambia's citizens; the social and human development pillar of the Seventh National Development Plan; and the Health in All Policies approach among others.

The establishment of a specialised disease intelligence agency, the Zambia National Public Health Institute (ZNPHI), was a strategic decision made to assure public health security of the country, including providing a coordination platform for addressing disease outbreaks and other public health emergencies. Outbreaks of cholera are among those threatening Zambia's public health security.

Cholera remains a global public health challenge, with an estimated 2.9 million cases and 95,000 deaths occurring globally each year, with Africa accounting for 37% of these cases. Zambia remains threatened by recurrent outbreaks of cholera, with more than 10 cholera hotspots spread across peri-urban areas and fishing camps. Zambia has recorded 29 cholera outbreaks with the first one in 1977. The last major outbreak recorded between October 2017 and June 2018 affected mostly Lusaka District with 5,935 cases and 114 deaths.

The Zambian Government has joined global efforts to eliminate cholera, subscribing to the Global Task Force on Cholera Control strategy which aims to eliminate cholera worldwide by 2030. In emphasising her commitment to this agenda, Zambia through the Ministry of health sponsored a resolution at the 71st World Health Assembly in 2018 to eliminate cholera globally by 2030 (Resolution WHA 71.4). This resolution was adopted by the World Health Assembly and brings global cholera control and elimination into the limelight. Furthermore, Zambia has set a legacy goal to eliminate cholera in the country by 2025.

The Government is committed to eliminating cholera by 2025 in Zambia through a multisectoral approach to be anchored under the Office of the Vice President (OVP). This agenda is supported at the highest levels of leadership, with unprecedented political will and action. As such, this Multisectoral Cholera Elimination Plan (MCEP) has been developed to ensure that the cholera elimination agenda is implemented.

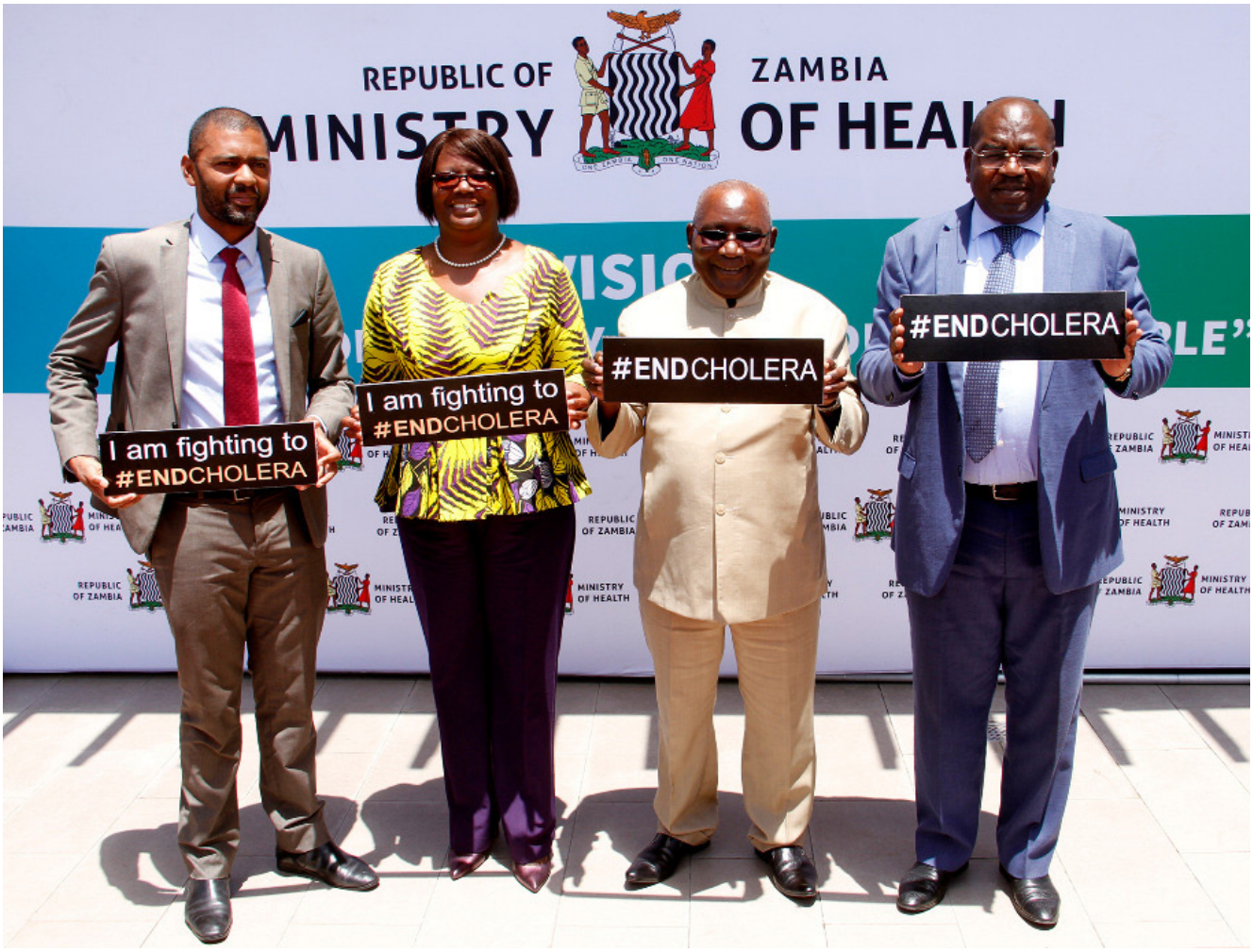
This MCEP is aimed at reducing morbidity and mortality due to cholera, and eventually achieving cholera elimination in Zambia by 2025. The Plan will be used as a guiding document to ensure Water, Sanitation and Hygiene (WASH) infrastructure and services are established in all high-risk areas. This is one of the core interventions in elimination of cholera. As WASH interventions are implemented, other complementary measures will be implemented concurrently: oral cholera vaccines will be delivered to targeted communities; any cholera cases managed with high quality and efficiency; risk communication strategies will be effectively implemented with engagement of communities; and effective surveillance and laboratory support systems put in place.

I am confident that with committed leadership, adequate funding from government and partners, and full participation of all sectors in accordance with this MCEP, cholera will certainly be eliminated from Zambia.

I therefore urge all stakeholders to work hand-in-hand with the Government of Zambia in committing to investing in our health and mobilising all required resources to guarantee the full implementation of the Zambia Multisectoral Cholera Elimination Plan 2019–2015, thereby achieving Zambia's cholera-elimination goal by 2025.

I thank you all.

Her Honour Mrs Inonge Mutukwa Wina
Vice-President of The Republic of Zambia



From left to right, Minister of Local Government Hon. Vincent Mwale MP, Minister Office of the Vice President, Hon. Sylvia Bambala Chalikosa MP, Minister of Water Development Sanitation and Environmental Protection Hon. Dr Dennis Musuku Wanchinga MP and Minister of Health Hon. Dr Chitalu Chilufya MP, MCC pledge to support the implementation of Zambia's Multisectoral Cholera Elimination Plan 2019-2025.

Acknowledgement

Public Health Security, including response to outbreaks and health emergencies, is currently anchored under the Ministry of Health through the Zambia National Public Health Institute (ZNPHI). The Ministry of Health has adopted a multisectoral approach in prevention and response to public health emergencies. This approach was highlighted during the 2017/18 cholera outbreak that affected mostly Lusaka District. The Ministry collaborated with various government line ministries, bilateral and multilateral partners, individuals and organizations in responding to this outbreak, which had high potential for countrywide spread. Further to that, the multisectoral partners have all been instrumental in the development of the Zambia Multisectoral Cholera Elimination Plan 2019-2025 (MCEP). This important strategic document will guide our bold and ambitious goal to eliminate cholera from Zambia by 2025.

The Ministry of Health is grateful to all partners, collaborators and persons involved in the 2017/18 cholera outbreak response and to all contributors to the development of the MCEP. The Ministry acknowledges the Ministers in the Office of The Vice President, Local Government, Water Development Sanitation and Environmental Protection, General Education, Higher Education, Defense, Home Affairs, Chiefs and Traditional Affairs, National Guidance and Religious Affairs, Finance and other line ministries for the joint efforts in containing the 2017/18 cholera outbreak and subsequent development of this MCEP. The World Health Organization (WHO) and the Global Task Force on Cholera Control (GTFCC) is also recognised for technical guidance and financial support to the MCEP development process. The Ministry of Health is also grateful to the United Nations Children's Fund (UNICEF) and to the United States Centers for Disease Control and Prevention (US CDC) for technical, logistical and material support. Special gratitude also goes to all technocrats and individuals who devoted long hours to develop this vital strategic document.

Finally, I wish to recognize and highlight the unwavering high-level leadership of The Government of The Republic of Zambia in championing the goal of eliminating cholera from the country by 2025.
I thank you all.

Honourable Dr Chitalu Chilufya MP, MCC
Minister of Health

Abbreviations

CFR	Case Fatality Rate
CTC	Cholera Treatment Centre
CTU	Cholera Treatment Unit
DMMU	Disaster Management and Mitigation Unit
EBS	Event Based Surveillance
FETP	Field Epidemiology Training Program
GRZ	Government of The Republic of Zambia
GTFCC	Global Task Force on Cholera Control
IDSR	Integrated Disease Surveillance and Response
IV	Intravenous
JMP	Joint Monitoring Program for Water Supply, Sanitation and Hygiene
MLG	Ministry of Local Government
MoH	Ministry of Health
MSCEP	Multisectoral Cholera Elimination Plan
MWDSEP	Ministry of Water Development, Sanitation and Environmental Protection
NRWSSP	National Rural Water Supply and Sanitation Programme
NUWSSP	National Urban Water Supply and Sanitation Programme
OCV	Oral Cholera Vaccine
OVP	Office of the Vice President
PCR	Polymerase Chain Reaction
PHEOC	Public Health Emergency Operating Centre
SOP	Standard Operating Procedures
UNICEF	United Nations Children's Fund
WARMA	Water Resources Management Authority
WASH	Water, Sanitation and Hygiene
WHO	World Health Organisation
ZAMRA	Zambia Medicines Regulatory Authority
ZEMA	Zambia Environment Management Authority
ZNPHI	Zambia National Public Health Institute

Executive Summary

Cholera is a diarrhoeal disease caused by the bacterium Vibrio cholerae. The infection is spread primarily through contaminated water and food. Symptoms include acute onset diarrhoea and 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. In 2017, an estimated 2.9 million cases and 95,000 deaths were reported globally.

Zambia is at risk for cholera as risk factors such as inadequate access to safe, sustainably managed water and sanitation still exist. outbreaks occur mainly during the rainy season. During the period January 1977 to December 2018, Zambia experienced 29 cholera outbreaks that have varied in magnitude from 14 to 13,500 cases, with case fatality rates (CFR) ranging between 0.5% and 9.3%. Generally, most cases occur in peri-urban areas of the highly populated Lusaka and Copperbelt provinces and in fishing camps in rural areas. 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.

In line with its vision 2030 of becoming a prosperous middle income country, the Zambian Government aims to foster a healthy and economically productive population. Ensuring public health security is one of the pillars to achieve this agenda.

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, Zambia sponsored a resolution to eliminate cholera globally by 2030 at the 71st World Health Assembly in 2018. Further to that, Zambia took a bold and ambitious step to eliminate cholera in Zambia by 2025, ahead of the global target. Zambia has therefore developed its first country Multisectoral Cholera Elimination Plan 2019-2025 (MCEP). The overall aim of the plan is to reduce morbidity and mortality due to cholera, and eventually achieve cholera elimination in Zambia by 2025. 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, best practices, and weaknesses experienced during responses to previous cholera outbreaks. The MCEP builds on ongoing efforts towards the establishment of the country's cholera control and elimination programme, which is based on a full situational analysis of cholera in the country, including a review of the epidemiological situation of cholera in the country, the current control capacities, as well as existing technical and financial support from partners.

The MCEP identifies cholera control (short to medium term) and elimination (long term) goals in line with the 2030 Global roadmap. The plan is based on a comprehensive, multisectoral and adaptable strategy with a three-pronged approach: early detection and quick response to timely mitigate any outbreak, a multisectoral approach to prevent cholera in hotspots, and an effective mechanism of coordinating technical support, resource mobilisation and partner engagement. Emphasis is placed on ensuring adequate safe water and sanitation coverage in identified cholera hotspots in the medium to long term, and on implementing oral cholera vaccination campaigns in the short term. The MCEP also articulates other strategies to improve prevention and response measures and stem disease spread; these include, inter alia, continued surveillance, community engagement and risk communication, and facilities for case management as close to the community.

Six targets are set in the MCEP: (i) to have an effective leadership and coordination arm for cholera elimination under the office of the Vice President; (ii) to improve effectiveness of surveillance and laboratory capacity at all levels for early detection and confirmation of cases; (iii) to reduce the overall mortality rate resulting from cholera by 90%; (iv) to increase the uptake of cholera prevention and treatment behaviours among 80% of the

population; (v) to accelerate access to safe drinking water and adequate sanitation at the basic level of service in all cholera hotspots in Zambia by 80% by 2025 and improved higher levels of WASH services by 100% by 2030; and (vi) to conduct oral cholera vaccination campaigns with a coverage of 85% in all hotspots and in outbreak situations.

The key intervention strategies included in the MCEP are accompanied by a detailed multi-year monitoring and evaluation framework. A complimentary implementation plan will be developed to provide operational details, timeframe, cost, implementation agencies involved.

Cabinet Ministers and partners during validation of the Zambia's Multisectoral Cholera Elimination Plan 2019-2025 20th February 2019, Lusaka.

1

CHOLERA – THE ZAMBIAN SITUATION

Historical Perspective

Cholera remains a significant public health problem globally, mostly affecting communities with low socio-economic status and limited safe water and sanitation services. By end of 2018, Zambia experienced 29 cholera outbreaks since 1977 that have varied in magnitude from 14 to 13,500 cases and in case fatality rates (CFR) from 0.5% to 9.3% (Figure 1). Four outbreaks involving more than 10,000 cases occurred in 1991, 1992, 1999 and 2004. Generally, most cases are recorded in the peri-urban areas of Lusaka and Copperbelt provinces and fishing camps. Cholera outbreaks in Zambia typically occur from week 40 to week 23 of the following year. The country experienced its last major outbreak from October 2017 to June 2018 with a total of 5,935 reported cases and 114 deaths (CFR 1.9%). Although the outbreak gradually spread to seven other provinces in the country (all epi-linked to the Lusaka outbreak), 92% of these cases occurred in Lusaka district.

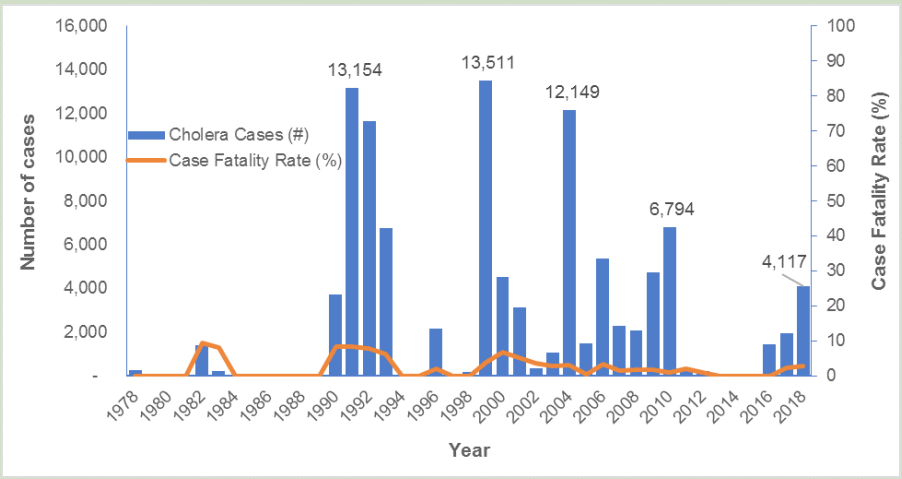


Figure 1: Cholera Cases by Year, 1977 - 2018, Zambia

Lusaka district is densely populated (100 people per square kilometre) with a large portion of the population living in the peri-urban areas, where overcrowding, poor solid waste management and inadequate access to safe water and sanitation are prevalent. In addition, there is inadequate drainage systems with associated frequent flooding in the rainy season. All these factors increase the risk of epidemic prone diseases particularly cholera and typhoid. These peri-urban areas also consist of highly mobile populations that further increase the risk of the spread of communicable diseases. Outbreaks can spread quickly, and this constitutes a further health burden especially on most vulnerable groups. In addition, Zambia hosts about 60,000 refugees (2017) from neighbouring countries. The influx of refugees has led to overcrowded settlements with high needs of shelter, healthcare and WASH facilities.

Cholera hotspots in Zambia

Cholera "hotspots" are specific and relatively small areas where the cholera burden is most concentrated. Cholera hotspots play a central role in the spread of the disease to other regions or areas. In these areas, cholera-related fatality rates are above the WHO targeted threshold of less than 1%, access to health care is limited, and there is inadequate safe water supply and sanitation systems. Targeting cholera hotspots as a priority will help focus cholera control programmes on the most vulnerable populations. In Zambia approximately 3.5 million people live in cholera hotspots (Annex 1 and Annex 2).

In order to effectively control and eliminate cholera, a mapping exercise was conducted that led to the identification of 14 districts at risk of cholera (hotspots) and 15 high risk districts (Figure 2). The hotspots were selected based on geographical and contextual factors such as the recurrence of outbreaks within the last 10 years, poor WASH services, transit points, presence of slums, areas prone to flooding, fishing camps, and influx of refugees. Prioritising and targeting these hotspots with cholera prevention and response interventions will reduce the burden of cholera in these vulnerable populations and restrict its spread to other parts of the country. In the long term, these interventions will, eventually lead to cholera elimination. Further to that a second set of high-risk areas identified by history of cholera outbreaks, vulnerability due to poor water and sanitation facilities, and high population density are targeted for the Improvement in safely managed water and sanitation to ensure the elimination agenda is achieved by 2025. Review of hotspots will be conducted annually by analysing surveillance data and contextual situations to further guide decision making, including use of OCV.

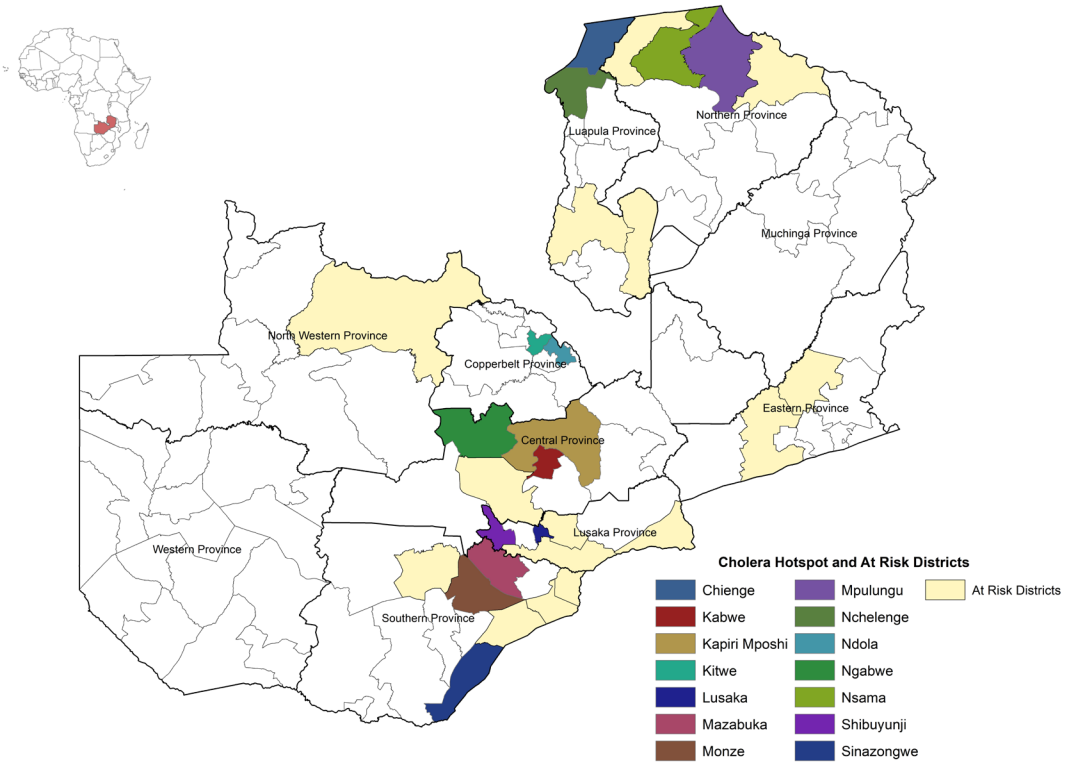


Figure 2: Cholera Hotspots in Zambia

[1] Definition of Cholera Hotspot: a geographically limited area where environmental, cultural, and / or socioeconomic conditions facilitate the transmission of the disease; where cholera persists or re-appears regularly

Table 1 – Cholera Hotspots identified in Zambia

Province	District	Contextual factors	Targeted Area / At Risk Population (E.G. Sub-Districts, Special Population, Etc.)	Target population (2019 update)
Central	Kapiri Mposhi	Recurrent cholera outbreaks; poor WASH; proximity to Lukanga swamps; prone to flooding; transit point / major intersection hub; presence of fishing camps	Fishing camps and community	297,484
Central	Ngabwe	Poor WASH; proximity to Lukanga swamps; prone to flooding; presence of fishing camps	Fishing camps and community	27,169
Central	Kabwe	Poor WASH; proximity to Lukanga swamps; high population density; large slum area; transit point; recurrent cholera outbreak	Community; slum area (Makululu, Nagoli, Shamabase)	258,864
Central	Shibuyunji	Poor WASH; proximity to Kafue Flats; prone to flooding; presence of fishing camps	Fishing camps and community	74,860
Copperbelt	Kitwe	Poor WASH; presence of slums; high population density	Bulangililo, Chamboli, Kamitondo, Kawama, Luangwa, Mulenga, Twatasha, Wusakile and Ipusukilo	293,612
Copperbelt	Ndola	Poor WASH; presence of slums; high population density	Chipulukusu, Mushili, New Masala, Twapia, Kabushi, Nkwazi and Main Masala	264,729
Luapula	Chiengi	Poor WASH; international border (DRC); humanitarian crisis (influx from DRC); presence of fishing camps; prone to flooding; history of cholera outbreaks (more than 3 years ago)	Fishing camps; refugee camp; community	143,706
Luapula	Nchelenge	Poor WASH; international border (DRC); humanitarian crisis/influx of refugees; presence of fishing camps; prone to flooding; history of cholera outbreaks (more than 3 years ago)	Fishing camps; refugee camp; community	192,243

Province	District	Contextual factors	Targeted Area / At Risk Population (E.G. Sub-Districts, Special Population, Etc.)	Target population (2019 update)
Lusaka	Lusaka	Urban areas; history of cholera outbreaks (less than 3 years ago); current cholera outbreak; presence of slums; poor WASH access; transit point / major hub; high population density/ overcrowding	Chipata (Chipata, Kabanana, Garden, Marapodi, Mandevu, Chaisa, Mazyopa, Ngòmbe, Chazanga; SOS)	281,166
			Chelstone (Mtendere, Kalikiliki, Kalingalinga; Kamanga; Chainda, Mtendere East)	262,772
			Kanyama (Kanyama,Chibolya, Linda, Garden House, John Laign,)	273,282
			Chawama (Chawama, Misisi, Kuku, John Howard, Freedom, Jack, Kamwala South)	323,209
			Matero (Matero, George, Soweto, Lilanda, Chunga, Barlastone, Chingwere)	472,989
			Chilenje (Bauleni)	105,109
Northern	Mpulungu	Transit point; flood prone area; presence of fishing camps; transit point / international port; humanitarian crisis; history of cholera outbreaks (less than 3 years ago)	Fishing camps; refugee camp; community (Nyamukolo, Muzabwela, Kaizya, Kapembwa fishing camp, Iyendwe, Sondwa, Mopata, Kasakalawe, Kapoko, Chisanza)	129,350
Northern	Nsama	Transit point; flood prone area; presence of fishing camps; humanitarian crisis; history of cholera outbreaks (less than 3 years ago)	Fishing camps	64,142
Southern	Mazabuka	Fishing camps; high population density / overcrowding; poor WASH; history of cholera outbreaks (less than 3 years ago)	Fishing camps	241,597
Southern	Monze	Fishing camps; high population density / overcrowding; poor WASH; recurrent cholera outbreaks	Fishing camps	270,939
Southern	Sinazongwe	Fishing camps; poor WASH; recurrent cholera outbreaks	Fishing camps	143,474
TOTAL				**4,120,696**

Risk Factors for Cholera Outbreaks in Zambia

Cholera is referred to as a disease of poverty because of the lack of social development in the areas in which it occurs. The series of cholera outbreaks experienced since 1977 suggests that Zambia is prone to cholera; from 1999 to date there have been annual outbreaks in epidemic prone districts with a total of over 59,000 cases and an annual average of 2821 cases. Cholera is endemic to the poorest populations with low socio-economic development and living in high density communities. These communities are characterised by poor water and sanitation infrastructure. The constant threat of natural catastrophes such as flooding, and droughts makes management and prevention of cholera a huge challenge in most of epidemic prone districts in Zambia.
Several factors in Zambian communities facilitate for diarrheal disease outbreaks, including cholera, and rapid spread. These include:

- Inadequate access to clean water and sanitation facilities, especially in peri-urban slums (shanty compounds) and fishing camps where basic WASH infrastructure is not adequate.
- Humanitarian crises and climate change impact resulting from flooding and droughts that causes disruption of access to water and sanitation services

Approximately 40% of the Zambian population have inadequate access to clean and safe water with 50% having poor sanitation (ZDHS, 2013, 2014) and 85% having poor access to solid waste management (LCS, 2015). The majority of these are in the cholera hotspots. Although 86% of the population in the urban and peri-urban areas have access to paid for basic water supply, water supply is erratic and unaffordable particularly for the most vulnerable in society leading to households in the shanty compounds using water from self-placed shallow wells as an option. The rural population with only 44% of access to basic water supply are more vulnerable; they get water from boreholes, wells, rivers, lakes and dams. In addition, 30% of the ground water in Lusaka is contaminated thereby increasing the risk of cholera transmission through use of boreholes, shallow wells and other ground water sources. In fishing camps, there is lack of proper WASH facilities.

Other risk factors include food safety practices, poor personal hygiene, poor household water treatment and storage. Studies have shown that handWASHing with soap behaviours can reduce the incidence of diarrhoeal diseases by up to 44% (Burton et. al.). According to the 2013-2014 Zambia Demographic Health Survey, only 57% of the population in the urban areas and 28% in the rural areas have a handWASHing location. Further, proper water treatment practices both at the water source and within the households significantly reduce the spread of diarrhoeal diseases like cholera. During the 2017/2018 cholera outbreak in Zambia, water tests showed that 73% of drinking water sources had inadequate levels of residual chlorine out of which 31% showed faecal contamination in Lusaka. The ZDHS shows that most of the population in Zambia (66%) do not treat their drinking water.

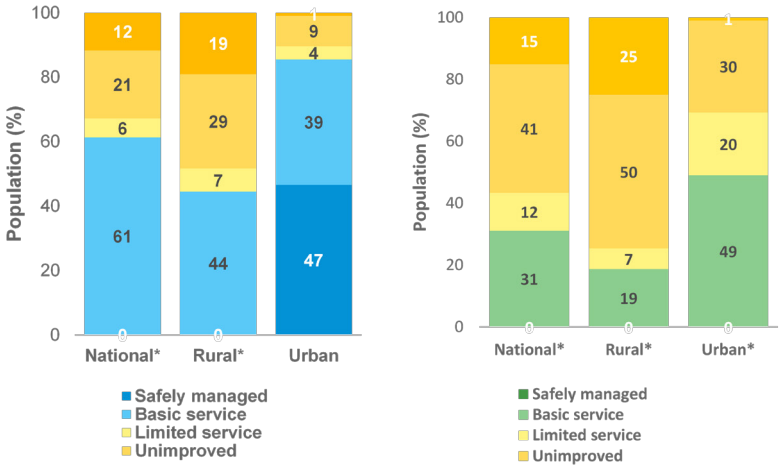


Figure 3. Left: Percentage of population with access to drinking water. Right: percentage of population with access to sanitation services

Zambia WASH Status

According to the 2017 WHO/UNICEF Joint Monitoring Programme (JMP) for Water Supply and Sanitation, 39 per cent of Zambia's population (around 6.4 million people) does not have access to basic drinking water services while 69 per cent (around 11.3 million people) does not have access to basic sanitation services. An estimated 15 per cent of the population practices open defecation. Some 86 per cent of households do not have access to a handWASHing facility with soap and water. As regards access to WASH services in schools, 21% and 34% of the schools' lack access to basic water supply and basic sanitation service, respectively. Figure 3 shows the coverage of basic WASH services in Zambia.

The JMP for Water Supply and Sanitation also shows that, although progress is being made in terms of improving access to basic WASH services in Zambia, the marginal increase in access does not correspond to the gaps and growing demand. Based on this report, it has been estimated that in order to reach the Sustainable Development Goals (SDGs) targets of providing universal access to WASH by 2030 (SDG 6), Zambia will need to provide basic water supply to 660,000, basic sanitation to 1.16 million and basic hygiene services to 1.46 million people per year.

Policy framework and institutional environment.

Recognizing the critical role of leadership and coordination for successful WASH and eventual social and economic development and public health, the Government of Zambia (GRZ), in late 2016, created a dedicated Ministry namely, Ministry of Water Development, Sanitation and Environmental Protection (MWDSEP) and a full-fledged Department of Water Supply and Sanitation in the Ministry to provide strong leadership to the WASH sector. The creation of the new Ministry has contributed to streamlining of coordination mechanisms for the WASH sector in Zambia and will result in increased synergies and effectiveness in the planning and financing of different programmes in the sector. In line with the Vision 2030 for Zambia which aspires to become a prosperous middle income nation by 2030 and the United Nations Sustainable Development Goals 2030 (SDGs); the Government has further renewed its commitment to WASH sector in the 7th National Development Plan 2017-2021, which includes improving access to water and sanitation as one of the key outcomes. The provision of WASH services in Zambia under the MWDSEP, department of Water Supply and sanitation is guided by two National program documents namely: The National Urban Water Supply and Sanitation Programme (NUWSSP) which runs from 2011 to 2030 and the second National Rural Water Supply and Sanitation Programme (NRWSSP) running from 2016 to 2030. These programmes are supported by strategies such as the national urban and sanitation strategy, water supply and sanitation capacity building strategy and the open defecation free Zambia strategy 2030.

The Ministry of Local Government has further developed the legal framework (Solid Waste Regulation and Management Act No. 20 of 2018) for the management and regulation of solid waste services in the country. Further the Ministries of Local Government and Water Development, Sanitation and Environmental Protection are in the process of developing the Water Supply, Sanitation and Solid Waste Management Policy to guide the policy framework and sector coordination.

2

ENDING CHOLERA OUR COMMITMENT

COMMITMENT STATEMENT

"The Government of Zambia has decided to take a bold step and make a 'legacy goal'; to eliminate cholera in Zambia by 2025."

Cholera is an ancient disease that still claims thousands of lives globally, each year[1]. It is endemic to the poorest of populations with poor social economic status and living in high density communities characterised by poor water, sanitation and hygiene standards. Each year, an estimated 2.9 million cases and 95,000 people die from cholera [1, 2].

Cholera infection is caused by the ingestion of food or water contaminated with bacteria called vibrio cholerae. The lives lost to cholera are unfortunate because it is a disease that can be prevented with the right political commitment, effective and targeted strategies, adequate implementation, effective monitoring systems and financial support. These moving pivots cannot be done in isolation but require a multi sectoral approach.

In realisation of this, the Zambian Government successfully co-sponsored a Cholera prevention and control resolution (WHA 71.4) to end Cholera by 2030 at the 71st session of the World Health Assembly in May 2018. The Minister of Health affirmed Zambia's allegiance to the global cholera control strategy launched by the Global Task Force on Cholera Control (GTFCC) – 'Ending Cholera: A Roadmap to 2030'. The government has further committed to ending cholera by 2025 in Zambia. Various efforts have been put in place and are still being planned to meet this ambitious goal. The Ministry of health with key line ministries remain committed to the elimination agenda in Zambia and have mapped a strategy which requires the Government to action and accelerate with urgency.

To resolve and move towards elimination of cholera in Zambia, the Government of the Republic of Zambia guided by the lessons learnt in previous outbreaks has planned the following actions:

1. Upgrade WASH and infrastructure in peri-urban areas.
2. Improve the capacity of the Local Authorities to effectively fulfil their obligations.
3. Enhance Capacity of the Water Utility Companies.
4. Engage communities through social mobilisation and risk communication.
5. Reinforce systems for surveillance, epidemic preparedness and response so that they are robust to detect epidemics early and guide control measures in all known cholera hotspots in the country.
6. The Ministry of health commits to be the ambassador of the 'Health-in-all-policy' agenda.
7. Strengthen Multisectoral leadership and coordination

These actions will be realised through the Zambia Multisectoral Cholera Elimination Plan (2019-2025) upon which all stakeholders will join hands to end cholera by 2025.

3

ENHANCED CHOLERA ELIMINATION STRATEGY

TARGET

No confirmed cholera cases with evidence of local transmission for at least three consecutive years by 2025.

Based on the evidence presented on the history of cholera and the risk factors associated with it in Zambia, an enhanced Multisectoral cholera elimination strategy has been developed under the guidance of the global task force on cholera control (GTCC) global roadmap to ending cholera in 2030. Efforts to eliminate cholera require concerted efforts to prevent cholera through the implementation of a set of measures – such as long-term WASH in areas most affected by cholera and by containing outbreaks through early detection and rapid response to alerts.

The cholera elimination strategy focusses on the six pillars: leadership & coordination, surveillance, case management, community engagement and risk communication, WASH and OCV (Figure 4). In order to reach the ultimate target by 2025, these areas cannot function in isolation. For example, to achieve 100% vaccine coverage with OCV, effective social mobilisation strategies must be in place. Additionally, in order to effectively treat every case of cholera, an active surveillance system is required.

Developing and strengthening a Multisectoral policy frameworks, partnerships, and cross-sectoral coordination mechanisms at different levels of government and across sectors are important for achieving cholera control or elimination. Leadership and coordination are required in order to effectively work with multiple sectors. To this effect, local and international partners at different levels of the sector have been mobilised to work together towards fulfilling the activities outlined in the Zambia Multisectoral plan to end cholera.

Reliable routine surveillance systems supported by strong laboratory capacity for detection and confirmation of cholera cases are required to be put in place to inform strategic decision making. Based on data from a functioning surveillance system, further analysis of factors associated with cholera outbreaks as well as the level of risk can be calculated. There is a need for surveillance systems at all levels including community, workspaces and laboratory to reduce cholera outbreaks and zero deaths from cholera. Surveillance systems are also crucial for the early detection of cholera cases and prompt interventions.

Case management in the control of cholera is an important element in the Multisectoral approach. It is dependent on an established and efficient surveillance system in order to manage cholera cases at the health facility. Currently, in Zambia, temporary Cholera Treatment Centres (CTCs) are erected during an outbreak where

Figure 4. Multisectoral interventions to end cholera (Adapted from (GTFCC, 2017)

all suspected and confirmed cholera cases are managed. Not all facilities have the capacity to perform laboratory tests to confirm cholera cases. Therefore, most cases are treated based on symptomatic presentation. Improved case management is needed to avoid any future deaths from cholera.

Community Engagement and Risk Communication is the real-time exchange of information, advice and opinion between experts and officials and people who face a treat to their survival, health, economic or social wellbeing. It is based on trust and depends on the credibility of the senders of the message. The goal of risk communication is to enable people facing risk to make informed decision to mitigate the effects of a disease outbreak and take protective and preventive actions. Listening to and understanding people's beliefs, concerns and perceptions is as important as providing them with credible information.
The presence of functioning WASH facilities available to all households has been an important element of achieving zero cholera cases in continents like Europe. However, much of the population in Zambia rely on unimproved sanitation (69%) and a large proportion (39%) on unsafe water sources. Further, they fail to effectively perform hygiene behaviours like handWASHing with soap after contact with faecal matter (86%); and fail to treat drinking water and safely handle their food. Thus, this Multisectoral plan will look towards achieving basic WASH facilities for all and work closely with the community to deliver effective behaviour change strategies.

Oral cholera vaccines (OCV) are an effective tool for cholera prevention and control. OCV in a 2-dose regimen given at least 2 weeks apart prevents cholera for at least three years and can act as a bridge between emergency response and longer-term cholera control with a WASH focus . OCV presents an opportunity to mobilise resources and partners for WASH by:

1. Defining areas to prioritise as OCV is used in cholera hotspots and facilitates the identification of priority areas.
2. Demonstrating immediate impact as OCV helps to dispel the notion that cholera is inevitable, thereby breaking the vicious cycle of inaction and defeat.
3. Motivating government and partners to implement WASH programmes. (Figure 5).

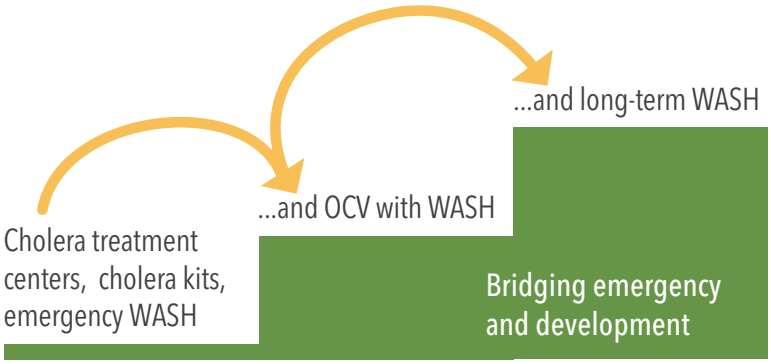


Figure 5. From preparedness and response to prevention and control (GTFCC. 2017)

OCV works well as a short-term mitigation strategy to prevent the spread of cholera; during the 2017/2018 cholera outbreak, the Ministry of Health with the support and resources from the World Health Organization (WHO) conducted oral cholera vaccination as one of the interventions in control of the outbreak.

2017 WHO Cholera Position Paper
https://www.who.int/immunization/policy/position_papers/cholera/en/

4

ZAMBIA CHOLERA ELIMINATION ROADMAP TO 2025

The Zambia cholera elimination plan is in line with the global roadmap for the control of cholera outbreaks and eventually elimination from endemic areas. As part of the cholera prevention and response activities, a comprehensive package of services has been planned to be offered in an integrated manner at national, institutional, public places, communities and household levels to mitigate the risk of cholera outbreaks. Generally, the response has been organised along the three axes of the roadmap (1) early detection and response to contain outbreaks at an early stage (2) a Multisectoral approach to control cholera in hotpots in the long term and (3) an effective mechanism of coordination for technical support, resource mobilization and partnership at local and global levels. As outlined in the implementation plan in this document, the response has been planned along key thematic areas of (1) leadership and coordination, (2) surveillance, (3) case management, (4) community engagement & risk communication, (5) WASH and (6) OCV. For the cholera elimination plan to succeed, basic WASH interventions aimed at households are paramount.

Our vision

A healthy and productive Zambian population free from cholera.

Our aim

The overall aim is to reduce morbidity and mortality due to cholera and to eliminate cholera in Zambia by 2025.

Strategic Axes

As outlined in the GTFCC Roadmap, we plan to realise our aims through adopting a three-pronged strategy.

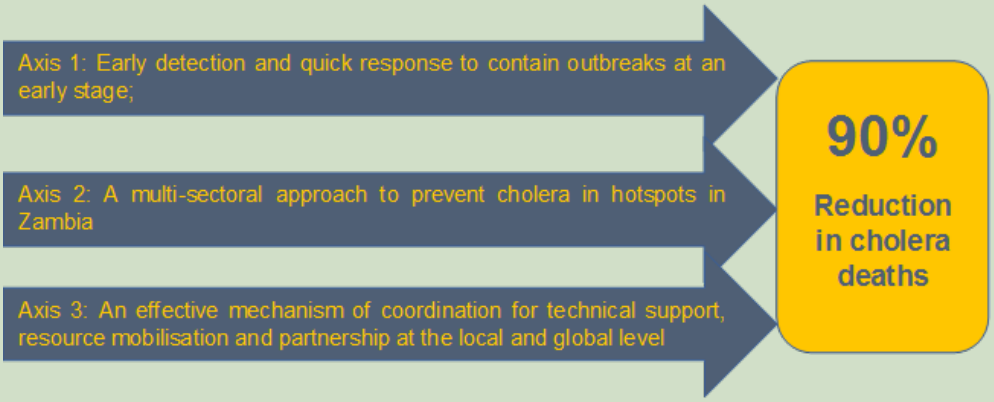


Figure 6: Strategic axes for Cholera elimination

Outlined below is how the strategy shall be implemented for each of the six key areas in light of the three axes.

LEADERSHIP AND COORDINATION

Leadership and Coordination of the National Cholera Elimination Plan (NCEP) 2019- 2025 will be managed under the office of the Vice-President. The Office of the Vice President will ensure that the Multisectoral cholera elimination plan is effectively implemented. There will be an independent Cholera elimination Certification Committee appointed by the Minister of Health.

Committee of Ministers

The committee of Ministers will be chaired by the Vice President and will comprise Ministers from the line ministries including Office of the Vice President, Water Development, Sanitation and Environmental Protection, Health, Finance, Housing and Infrastructure, Community Development and Social Services, Chiefs and Traditional Affairs, Local government, National Development Planning.

Committee of the Permanent Secretaries

The Committee of Permanent Secretaries will be set up comprising institutions that will be implementing programmes under each of the strategic areas of focus. The Committee will be required to meet under the Chairmanship of the Secretary to Cabinet.

National Coordinator for Cholera Elimination

The National Coordinator for Cholera Elimination, will work, will be responsible for implementation of the plan. The National Coordinator will be part of the committee of permanent secretaries.

To support the National Coordinator, there will be a task force comprised of technical focal point persons will be drawn from line Ministries and departments (replicated at provincial, district and sub district) responsible for:

1. Water Sanitation and Hygiene (WASH).
2. Case Management.
3. Surveillance and Laboratory.
4. Community engagement and risk communication.
5. Oral Cholera Vaccine (OCV).
6. Solid waste management.

Table 2: Strategic objectives for Leadership and Coordination

Target:	Effective leadership and coordination arm for cholera elimination under the Office of the Vice-President put in place
Strategic objective 1:	To ensure strong political commitment, effective inter-ministerial and inter-agency coordination and multi sectoral engagement of all partners.
Strategic objective 2:	To develop and implement a leadership and coordination implementation strategy.
Strategic objective 3:	To ensure systematic coordination for all cholera control activities.
Strategic objective 4:	To identify and mobilise partners to advocate for cholera elimination.

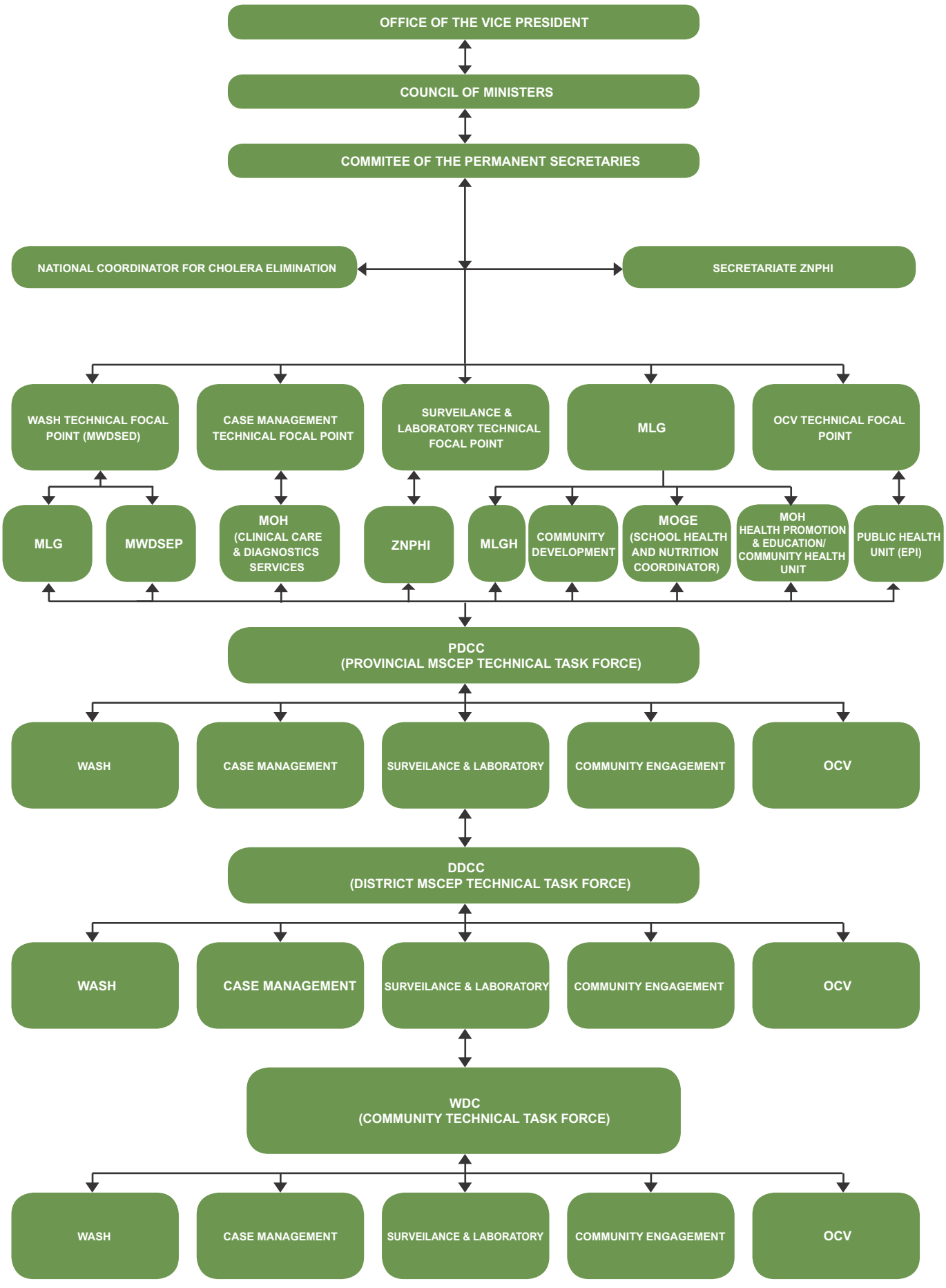
Leadership and coordination activities will be step wedged and will include first identifying relevant stakeholders

and together developing an implementation strategy. Subsequently, the office of the National Coordinator will focus on implementation of the strategy and monitoring and evaluating its effect on the implementation of the Multisectoral strategy.

Functions of Leadership and Coordination

1. Establish a cross – ministerial task force and develop terms of reference for the task force.
2. Conduct a stakeholder mapping at sub-district, district, provincial, national and global level.
3. Establish technical working groups to oversee the implementation of the plan and the achievement of the objectives and goals.
4. Develop, implement, monitor and evaluate leadership and coordination strategy.
5. Develop a resource mobilization plan and mobilize resources for the implementation of Zambia Multisectoral cholera elimination plan.
6. Conduct implementation planning and monitor activities at all levels.
7. Monitor financial expenditure for the implementation of the Multisectoral plan.
8. Ensure the engagement of the relevant stakeholders in the coordination of activities.
9. Monitor technical teams on progress of sector activities.
10. Conduct dissemination meetings locally and internationally to share experiences.
11. Conduct advocacy at all levels, including religious, political, traditional leaders, for cholera elimination in Zambia.
12. Enhance cross-border and intercountry collaboration
13. Secure vehicles, to improve transport for the hot spots in the country for all cholera elimination activities

NCEP GOVERNANCE STRUCTURE



SURVEILLANCE

Surveillance systems in Zambia need to be strengthened at community and health facility levels through a reliable alert system and fully fledged laboratory capacity and proper sample mangement to detect and confirm cholera cases early.

Cholera surveillance in Zambia is guided by the Integrated Disease Surveillance and Response strategy whose goal is to detect and respond promptly and appropriately to events and outbreaks. Critical steps in the IDSR system include detection, reporting, data analysis, outbreak investigation and response. Information is transmitted from the community to health facility to the district, provincial and national offices.

To confirm a cholera outbreak, stool samples will be subjected to laboratory or other modern diagnostics techniques such as PCR may also be used culture including genotyping.

The national surveillance system provides for an alert threshold where response is instituted with only a single suspected case reported. Once there is one laboratory confirmed case, response activities are scaled up including WASH intervention, community engagement, and case management.

Table 3: Strategic objectives for Surveillance

Target	Improve effective surveillance and laboratory capacity at all levels for early detection and confirmation of cases by 2025.
Strategic objective 1:	To improve 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.
Strategic objective 2:	To enhance an integrated surveillance system for early detection, confirmation, reporting, and timely response to cholera outbreaks and monitoring the impact of the cholera control program.

The first step in controlling cholera and reducing the number of cholera deaths is to strengthen and integrate early warning surveillance systems, including the confirmation of suspected cholera cases (requiring laboratory culture capacity and rapid diagnostic tests) at the peripheral level. Well-performing laboratories are critical to confirm Vibrio cholerae as the causative agent and to monitor outbreaks, including testing for antibiotic susceptibility of the bacteria and tracking strains. Data generated through surveillance will be key to help all sectors prioritize areas for intervention. Strengthening of epidemiological surveillance of clinically suspected cholera cases, complemented by a strong laboratory capacity at the peripheral level to detect outbreaks early and monitor cholera burden accurately will be key in hotspot areas identified. Environmental surveillance activities including water and food quality monitoring shall equally be enhanced.

Functions of Surveillance

1. Establish rapid response teams for alert verification and outbreak investigation.
2. Revise and print the national cholera prevention and control guidelines.
3. Establish stool cultures and antibiotic susceptibility testing capacities.
4. Enrol central reference laboratory in quality assurance program for stool cultures or Polymerase Chain Reaction (PCR).
5. Establish a robust and efficient cholera supplies system
6. Develop and disseminate clinical laboratory guidelines, Standard Operating Procedures (SOP) for the collection, transportation and storage of laboratory specimens.
7. Strengthen courier systems and networks for sample referral and supply chain management
8. Train frontline health workers in Integrated Disease Surveillance and Response (IDSR), Frontline Field Epidemiology, Event Based Surveillance (EBS).
9. Engage communities for community-based surveillance.
10. Equip health facilities with modern, electronic tools for reporting including eIDSR and sustaining mechanisms for transmission of data.
11. Support the maintenance and sustainability of the Public Health Emergency Operating Centre (PHEOC).
12. Cross-border collaboration and building of a strong sub-regional preparedness and response strategy.
13. Ensure surveillance is sustained in the post-outbreak phase
14. Mentorship and support supervision.

CASE MANAGEMENT

Zambia has experienced several cholera outbreaks in the past years which have resulted into deaths due to the disease. The case management of cholera patients is usually undertaken in Cholera Treatment Centres (CTCs) which are usually improvised (makeshift tents). Apart from the inadequate infrastructure, lessons from 2017/2018 outbreak showed other factors associated with poor case management included shortage of experienced manpower, delayed health seeking, lack of transport to cholera treatment centres and stigma The case fatality rate during the 2017/2018 was 1.9%[3]

Table 4: Strategic objectives for Case Management

Target	Reduced transmission and overall death resulting from cholera by 90% by end of 2025.
Strategic objective 1:	To strengthen capacity for cholera case management with CFR less than 0.5% by end of 2025.
Strategic objective 2:	To ensure availability of adequate infrastructure for early access to effective patient care.
Strategic objective 3:	To strengthen health care systems by ensuring availability of adequate, trained human resource and appropriate equipment.

Improving case management will be achieved by strengthening the health care system to anticipate cholera outbreaks (readiness) through capacity building of human resources for health involved in all aspects of the cholera response.

This can be done by pre-positioning of resources for patient diagnostics and treatment (lab reagents, rapid tests, culture media for confirmatory test, medications), by setting up regional hubs in cholera high risk districts and provinces.

Additionally, patient care can be strengthened by strict use of standard operating procedures, treatment guidelines and protocols on use of ORS, IV fluids and antibiotics including the implementation of emergency WASH at health facility level (e.g. chlorine, soap) for maintaining infection prevention and control.

Functions of Case Management

1. Review, update and disseminate national cholera clinical management guidelines.
2. Build capacity among healthcare workers on appropriate procedures for clinical management, infection control, and referral.
3. Build capacity CTC/CTUs health workers in the prevention and control of faecal-oral diseases.
4. Build capacity among community health workers on preparation and giving of ORS
5. Identify and map health facilities that can be used as cholera treatment facilities and those that regularly receive suspected cholera patients.
6. Establish and maintain an updated inventory for healthcare workers trained in cholera case management including staff structure at CTCs/CTU in hotspots.
7. Develop staff deployment plan for anticipated outbreaks to address staff shortages.
8. Build capacity among auxiliary staff in areas at increased risk of cholera on cleaning procedures, infection prevention and control.
9. Maintain adequate stocks at central level and at provincial and district levels in cholera hot spots
10. Ensure access to safely managed water and sanitation services (including safe management of health care waste) in all health care facilities, including CTUs/CTCs, in areas at increased risk of cholera.
11. Include cholera guidelines as part of the curriculum in medical and nursing schools.
12. 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.

13. Ensure availability of appropriate motor vehicles for patients.
14. Strengthen communication and transport systems for staff working at CTCs/CTUs as well as supervisors.

COMMUNITY ENGAGEMENT & RISK COMMUNICATION

An epidemic of cholera can be effectively controlled when the affected population knows how to protect themselves and their relatives and the community is engaged to limit the spread of the disease.

As the cholera elimination plan promotes a Multisectoral approach with different pillars of interventions that will all require community engagement for its success, these activities should be brought under one umbrella to leverage its strengths and available resources.

Risk communication strategies include the setting up of risk communication systems; internal and partner communication and coordination; public communication; community engagement with affected communities; and dynamic listening and rumour management. Currently, there is a health promotion and communication team under the Ministry of Health and comprises of various partners from different sectors of the health system. This initiative provides a good foundation for the development of social mobilisation strategies for the elimination of cholera.

Table 5: Strategic objectives Community engagement and Risk Communication

Target	An uptake of cholera preventative and treatment behaviours among 90% of the population in the identified hot spots by 2025
Strategic objective 1:	To promote cholera prevention in public settings (including schools, markets, fishing camps, churches, villages, health facilities) among 90% of the population in the identified hot spots by 2025
Strategic objective 2:	To mobilise relevant multisectoral stakeholders, for all the six pillars at district, provincial and national levels, to provide an enabling environment for cholera prevention among 90% of the population in the identified hot spots by 2025.

Community engagement will be used to enhance communication on cholera control strategies, hygiene promotion, cholera risk and managing WASH facilities by mobilizing community leaders as agents of change. In order to ensure early detection and response to contain outbreaks, the community engagement efforts will be focused on educating the communities on cholera prevention behaviours, case finding and early health care seeking. Also, there will be a focus on advocacy, building partnerships and documentation of best practices and progress towards cholera control and elimination.

Target Audience

Depending on the location of the hotspot, target audience will include but limited to the following: Community leaders: counsellors, traditional leaders, ward development committees (WDCs), marketeers, food handlers, Opinion leaders: church leaders, headmasters, traditional healers. Others include Schools, Faith based organisations, Health volunteers, commuters.

Functions of Community Engagement and Risk Communication

1. Develop and disseminate an overarching national community engagement plan and communication strategy to be integrated in the other pillars.
2. Engage communities to increase preventive behaviours including improved personal hygiene, solid waste management, household water treatment and handling, and food safety practices
3. Promote the use of ORS at community and household level.
4. Conduct assessment of knowledge, attitude and practices on Cholera and local Risk factors.

5. Strengthen Multi sectoral Health promotion plans and budgets for Cholera targeting hotspots, cross-border areas and vulnerable populations.
6. Build capacity for Health workers, community Volunteers and Media on Cholera control.
7. Strengthen health promotion interventions strategies and messaging at cross borders.
8. Develop SOPs and guidelines for community engagement and risk communication.
9. Promote media advocacy efforts to improve the frequency and quality of media coverage about cholera and ensure decision makers and people with influence are targeted and that media managers decide which topics to cover and how.
10. Build capacity for risk communication for community leaders, popular opinion leaders
11. Conduct periodic research which will guide community engagement plan and risk communication strategy.
12. Develop and strengthen structures (i.e. local governance, community participation platforms and risk communication techniques).

WATER, SANITATION, HYGIENE (WASH) AND SOLID WASTE MANAGEMENT

Limited access to basic water supply, basic sanitation, basic hygiene and solid waste management services has been a major obstacle to achieving improvements in the health and development of children and women in Zambia. A basic level of WASH services not only prevents cholera, but also fulfils the human right to access to water and sanitation.

Table 6: Strategic objectives for Water, sanitation, hygiene and solid waste management

Target	Access to safe drinking water, and adequate sanitation and solid waste management at the basic level of service in all cholera hotspots in Zambia by 80% by 2025 and improved higher levels of WASH services by 100% by 2030
Strategic objective 1:	To strengthen the WASH and solid waste management surveillance, preparedness and emergency response in Cholera hotspots.
Strategic objective 2:	To enhance the rehabilitation & expansion of water supply, sanitation, hygiene, and solid waste services in Cholera hotspots.
Strategic objective 3:	To improve access to sustainable adequate safe water supply, sanitation, hygiene and solid waste management services in Cholera hotspots.
Strategic objective 4:	To strengthen the enforcement and regulation of existing legal and policy frameworks.

Ensuring basic water, basic sanitation, basic hygiene and good hygiene practices and solid waste management is vital for the successful prevention of cholera. The immediate WASH and solid waste response will focus on WASH surveillance, preparedness and on prioritizing and accelerating the provision of “basic services” to the cholera hotspots, whilst on the long term, sustainable solutions will be sought to ensure basic WASH and solid waste management practices to wider populations at risk of cholera.

Functions of WASH and Solid Waste Management

1. Map (identify and prioritize) existing strategic water sources (ground/surface) in the cholera hotspots for development of water supply.
2. Comprehensive stakeholder mapping for WASH and solid waste management in each of cholera hotspots by province, district, sub-district and community.
3. Design and establish of an early warning WASH and solid waste surveillance system.
4. Establish rapid emergency WASH, solid waste and Health response teams for field investigation, risk evaluation and immediate response.
5. Provide and promote access to basic drinking water sources (either household connection, public standpipe, borehole, protected dug well, protected spring, or rainwater collection) within a 30-minute round-trip.

6. Provide and promote access to basic sanitation facilities (connection to a public sewer, connection to a septic system, pour-flush latrine, simple pit latrine, ventilated improved pit latrine)
7. Conduct formative researches to inform basic hygiene interventions and Community engagement to manage WASH resources/ to promote safe hygiene practices.
8. Provide and promote access to basic solid waste services (subscribing to available systems, promote RRR and private sector participation)
9. Develop and deploy solid waste management guidelines, regulations and strategies
10. Engage communities in interventions promoting good sanitation, hygiene and solid waste management practices.
11. Construct of water supply systems for the cholera hotspots.
12. Implement long-term interventions to improve provision of basic and safely managed WASH and solid waste services in hotspots.
13. Prepare for implementation of WASH response and maintain stocks of WASH supplies (rapid microbial test kits, chlorine tests, water disinfection technologies including chlorine, water tanks and hygiene kits).
14. Promote and strengthen water treatment and water quality monitoring at source, facility and household levels.
15. Promote and provide handWASHing facilities with soap and water or alcohol-based hand rub in all health facilities, public places next to latrines, food preparation and serving areas, schools, churches etc and workplaces (with focus on high risk areas).
16. Ensure improved health care facility infrastructure, including WASH in facilities, availability of supplies, infection prevention and control, medical technologies, health care waste management, and decentralized access to health care (Oral Rehydration Points (ORPs)
17. Construct and promote on-site and off-site sanitation networks (bulk and decentralized sewerage systems), faecal sludge management systems in the hotspots where applicable.
18. Design and prepare harmonized WASH and solid waste management related materials for advocacy and promotion in cholera hotspots.
19. Harmonise standards for WASH and solid waste management sectors
20. Develop a platform for sharing WASH early warning information.
21. Strengthen institutional (including MoH, MoGE, MWDSEP, MLG, CUs, Local Authorities, NWASCO, WARMA and ZEMA) capacities and coordination for WASH and solid waste management.
22. Establish legal and policy framework for the regulation and enforcement of WASH and solid waste management.
23. Develop and promote a sustainable financing mechanism for WASH and solid waste management services.

ORAL CHOLERA VACCINE

Oral Cholera Vaccine (OCV) has been adopted as one of the pillars in the strategy to end cholera. There is a strong commitment to ensure 85% of the Zambian population living in the hotspots are vaccinated with the cholera vaccine.

Table 7: Strategic objectives for Oral cholera vaccine

Target	Oral cholera vaccination campaigns (2 doses within at least two weeks and no more than 6 months) with a coverage of 85% in hotspots and in outbreak situations conducted.
Strategic objective 1:	To Implement a reactive large-scale mass vaccination campaigns with OCV, to be initiated as soon as cases are confirmed for maximum impact.
Strategic objective 2:	To large-scale use of OCV to the population in cholera hotspots.

Strategic objective 3	To 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

A phased approach for the 12 identified hot spots across the country will be used. To prevent new occurrences, large scale pre-emptive use of OCV combined with WASH interventions such as water treatment at the point of use and handWASHing promotion to immediately reduce the disease burden will be employed.

In order to contain cholera outbreaks, reactive large-scale mass vaccination campaign with OCV will be initiated as soon as cases are confirmed for maximum impact.

OCV Interventions

- Integrate OCV as part of National Plan and include potential use of the vaccine as a reactive hand/or "pre-emptive" strategy in integration with WASH in hotspot areas
- Development of an OCV training plan to guide the implementation of capacity building interventions in a cascaded manner
- Registration with the Zambia Medicines Regulatory Authority (ZAMRA), if a new brand of OCV is required.
- Update/develop vaccination technical guidelines and monitoring assessment tools
- Strengthen capacity building of the related human resource personnel at all level in the hotspot areas
- Consider cold chain assessment to identify gaps in cold chain capacity at all levels for vaccine storage
- Standardise post- campaign coverage survey protocols

5

MONITORING FRAMEWORK

In line with the GTFCC, the Zambian monitoring framework is designed under the 3 axes of cholera elimination. The indicators match that of the GTFCC and only differs in the outcome. The GTFCC has the aim of reducing cholera deaths by 90% (2030), while the Zambian cholera control plan aims at reducing cholera deaths by 90% by the year 2025.

Table 8. Overview of outcome indicators

Roadmap three axes:	Output Indicator	Outcome indicators			
		Baseline	2019	2022	2025
Axis 1: Early detection and response to contain outbreaks	Severity of outbreaks as measured by CFR	1.9% CFR for 2017/2018 outbreaks	Reduce CFR by 20%	Reduce CFR by 50%	CFR below 0.5%
Axis 2: Prevention of disease occurrence by targeting Multisectoral interventions in cholera hotspots	Number of currently endemic districts that eliminate cholera as a threat to public health	12 districts remain affected by cholera	2 districts eliminate cholera	6 districts eliminate cholera	All 12 districts eliminate cholera
Axis 3: An effective mechanism of coordination for technical support, resource mobilisation and partnership locally and internationally	Presence of fully funded Multisectoral cholera control plan aligned to the global road map	Absence of funded Multisectoral cholera elimination plan	Development of a funded Multisectoral elimination control plan	Efficient implementation of Multisectoral cholera elimination plan	Fully implemented Multisectoral cholera elimination plan
IMPACT: A healthy and productive Zambian Population free from cholera	Reduction of morbidity due to cholera	2821 cholera cases	Reduce cholera cases by 30%	Reduce cholera cases by 60%	No confirmed cholera cases with evidence of local transmission

In line with the implementation timeline, progress towards these indicators will be monitored every year from 2019 to 2025. Monitoring systems including activity logs and registers will be closely and regularly reviewed and reported. Additionally, process evaluations and impact studies will provide scientific accuracy in determining the effect of the Multisectoral cholera control plan for Zambia.

Program indicators and targets

The tables below give an overview of program indicators and targets for the key interventions included in this multisectoral plan.

Table 9: Programme indicators and targets for leadership & coordination

#	LEADERSHIP AND COORDINATION INDICATORS	
	INDICATORS	TARGETS
1	National Plan for Cholera Control developed and disseminated	Plan developed and disseminated by 2019
2	Resources: funds received versus those requested (breakdown by donor and by sector)	Funding available for 100% components of the plan
3	Functional National Cholera Task Force in place	ToR of NCTF finalized and 1st meeting of NCTF by 2nd quarter 2019
4	Number of meetings held by coordination bodies (National Cholera Task Force, subcommittees or technical working groups, etc.) over the last year	Quarterly meetings (no outbreak) weekly/ daily during outbreak
5	Proportion of coordination bodies members attending meetings (last year)	At least 80% on average
6	Proportion of sectors (health sectors, WASH authorities, etc.) engaged in coordination bodies meetings (last year)	At least 90%
7	Proportion of districts (or geographic equivalents) with cholera control plan incorporated into the district (or equivalent) plan	100% for the areas at increased risk of cholera
8	Number of annual stakeholder meetings held	1 Annual meeting
9	Number of cross-border meetings held (last year)	Biannual meetings

Table 4. Programme indicators and targets for surveillance

#	SURVEILLANCE INDICATORS	
	INDICATORS	TARGETS
1	National Surveillance Guidelines developed and disseminated to health facilities	Guidelines developed by 2nd quarter 2019 and disseminated by 2nd quarter 2019
2	Data collection tools available in all heath facilities	Paper based tools available in all health facilities (100%) by 2019 Electronic data collection tools available in at least 80% off all health facilities by 2021
3	Proportion of staff by category who attended training sessions	At least 70%
4	Timeliness and completeness of weekly surveillance data (and alert reporting)	At least 80% completeness and timeliness (weekly surveillance report)
5	Proportion of communities in high risk areas with functioning community-based surveillance	At least 80%
6	Field investigations occur within 48 hours of notification of suspect cases	Field investigations conducted according to plan in 80% of time

7	Collection of specimens for culture or PCR, results available within 72 hours	Specimens collected, and culture results available according to plan in at least 80% of the time
8	National Laboratory Guidelines developed and disseminated	Guidelines developed by 2nd quarter 2019 and disseminated by 2nd quarter 2019
9	Proportion of laboratory personnel trained on appropriate laboratory techniques (culture or PCR, antibiotic susceptibility testing)	At least 90% of laboratory personnel trained (in areas at increased risk of cholera)
10	Availability during supervisory visit of health facilities of RDTs and Cary Blair transport medium	100% availability of RDT in high risk areas
11	Availability of logistics for confirmation and antibiotic susceptibility at health district laboratory of	100% availability in high risk areas
12	Availability at national referral laboratory of necessary technology for PCR characterization of isolated VC	100% of the time
13	Reporting of results within 72 hours of receipt of specimens to health facilities and health district offices	100% of the time in high-risk areas

Table 11: Programme indicators and targets for case management

#	CASE MANAGEMENT INDICATORS	
	INDICATORS	TARGETS
1	National cholera management guidelines developed and disseminated to health facilities	Guidelines developed by 3rd quarter 2019 and disseminated by 4th quarter 2019
2	Proportion of health personnel trained on appropriate procedures for case detection and clinical management of cholera cases	95% of staff in high risk areas trained by end of 4th quarter, 2019
3	Proportion of potential CTCs in hotspots mapped	100% of CTC in hot spots mapped by end of 4th quarter, 2019
4	Proportion of potential CTUs (Prefabs) installed in identified hotspots	100% of CTU installed in identified hotspots by end of 4th quarter, 2020.
5	Proportion of CTCs equipped in high risk areas	100% of CTC properly equipped in high risk areas by end of 4th quarter, 2019
6	Proportion of hubs with at least 80% of required supplies pre-positioned as per guidelines.	100% of hubs with at least 80% of required supplies by end of 2nd quarter, 2019
7	Proportion of CTCs implementing infection control (IC) procedures as per protocols	Infection control protocols and supplies in place in 100% of CTCs by 3rd quarter 2019
8	Proportion of CTCs implementing safe handling procedures for deceased cholera patients in health facilities and the community	100% of CTCs by end of 2nd quarter, 2019.

Table 12. Programme indicators and targets for Community engagement and risk communication

#	COMMUNITY ENGAGEMENT AND RISK COMMUNICATION	
	INDICATORS	TARGETS
1	National community engagement and risk communication plan developed and disseminated	Plan developed by 3rd quarter 2019 and starts to be implemented by 4th quarter 2019
2	Availability of all necessary logistical support for community engagement and risk communication campaign	Necessary logistic support available 75% of the time in high risk areas
3	Training programs for health promotion personnel takes place	100% of planned training occur by 2nd quarter 2019 in areas at increased risk of cholera
4	Implementation of social mobilisation campaigns in high risk areas prior and during risk/periods outbreaks	Evaluation occurs for 75% of social mobilization campaigns
5	Monitoring and evaluation surveys of social mobilization campaigns conducted	Evaluation occurs for 75% of social mobilization campaigns

Table 6. Programme indicators and targets for social mobilisation

#	WASH INDICATORS	
	INDICATORS	TARGETS
1	Proportion of Households treating and safely handling water at HH level.	50% by 2022 and 80% by 2025 in hotspots
2	Proportion of population using basic water sources with a total collection time of 30 minutes or less for a roundtrip including queuing	50% by 2022 80% by 2025 in. hotspots
3	Proportion of samples from water sources reporting 0.2 mg to 0.5 mg of free residual chlorine	At least 90% in hotspots by 2015
4	Proportion of water supply systems that have regular water quality testing	At least 90% in hotspots by 2025
5	Proportion of households with appropriate water storage	At least 90% in hotspots by 2025
6	Proportion of households with basic sanitation and hygiene facilities	At least 90% in hotspots by 2025
7	Proportion of household that are Open Defecation Free	At least 90% in hotspots by 2025
8	Proportion of Households practicing handWASHing with soap regularly	100% in hotspots by 2025
9	Proportion of schools, health care facilities, markets with appropriate hand WASHing facilities with water and soap	100% in hotspots by 2025
10	Proportion of households with safely managed solid waste,	90% in hotspots by 2025
11	Proportion of district with established solid waste management systems	100% in hotpots by 2025
12	Proportion of households adhering to safe food handling practices	100% in hotspots by 2025
13	Proportion of Districts with water quality monitoring equipment and regular monitoring systems	100% in hot spots by 2025

Table 14: Programme indicators and targets for OCV

#	OCV INDICATORS	
	INDICATORS	TARGETS
1	Oral Cholera Vaccines are registered in country	Vaccine registered by 2nd quarter 2019
2	OCV deployment integrated in national plan	OCV integrated in national plan by 2nd quarter 2019
3	Generic M&E protocol developed	Protocols developed by 3rd quarter 2019
4	OCV training workshop conducted prior to campaign implementation	Training workshop occur prior OCV campaign 100% of time
5	Rapidity of reactive OCV deployment during outbreaks	Initiation of OCV reactive campaigns within 1 week following vaccine arrival in country
6	Proportion of cholera high risk areas where OCV pre-emptive campaign implemented	OCV pre-emptive campaign implemented in all high-risk areas by 2020
7	Proportion of campaigns during which all logistics support was available in a timely manner	100%

Potential risk and mitigation plan

While the country remains optimistic in achieving a 100% reduction in deaths, there are a few risks that have been recognised. These risks and their mitigation strategies are discussed below:

RISK 1: LACK OF ADEQUATE FINANCING

Resource mobilisation activities will be implemented in the first quarter of the 7-year plan. However, there stands a risk of failing to raise enough funds to implement the Multisectoral plan. The realisation of this risk will lead to a poorly implemented cholera control plan with other sectors having less funds or nothing at all to execute their activities.

Mitigation Activities

Each sector will cost their activities within the GTFCC framework specifically indicating what is needed to implement their activities. These costings will be emphasised in the resource mobilisation meeting/s and the risks of raising less funds will be shown.

RISK 2: INSUFFICIENT QUANTITIES OF OCV VACCINES

As countries jump on board to kick out 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 at 25 million doses in 2017. As Zambia plans to introduce 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.

Mitigation activities

The OCV team will work closely with the GTFCC and partners like GAVI to plan for 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.

RISK 3: CROSS BORDER CHOLERA TRANSMISSION

Zambia is surrounded by several countries some of which regularly experience cholera outbreaks. This may pose a threat for imported cholera outbreaks in Zambia.

Mitigation activities

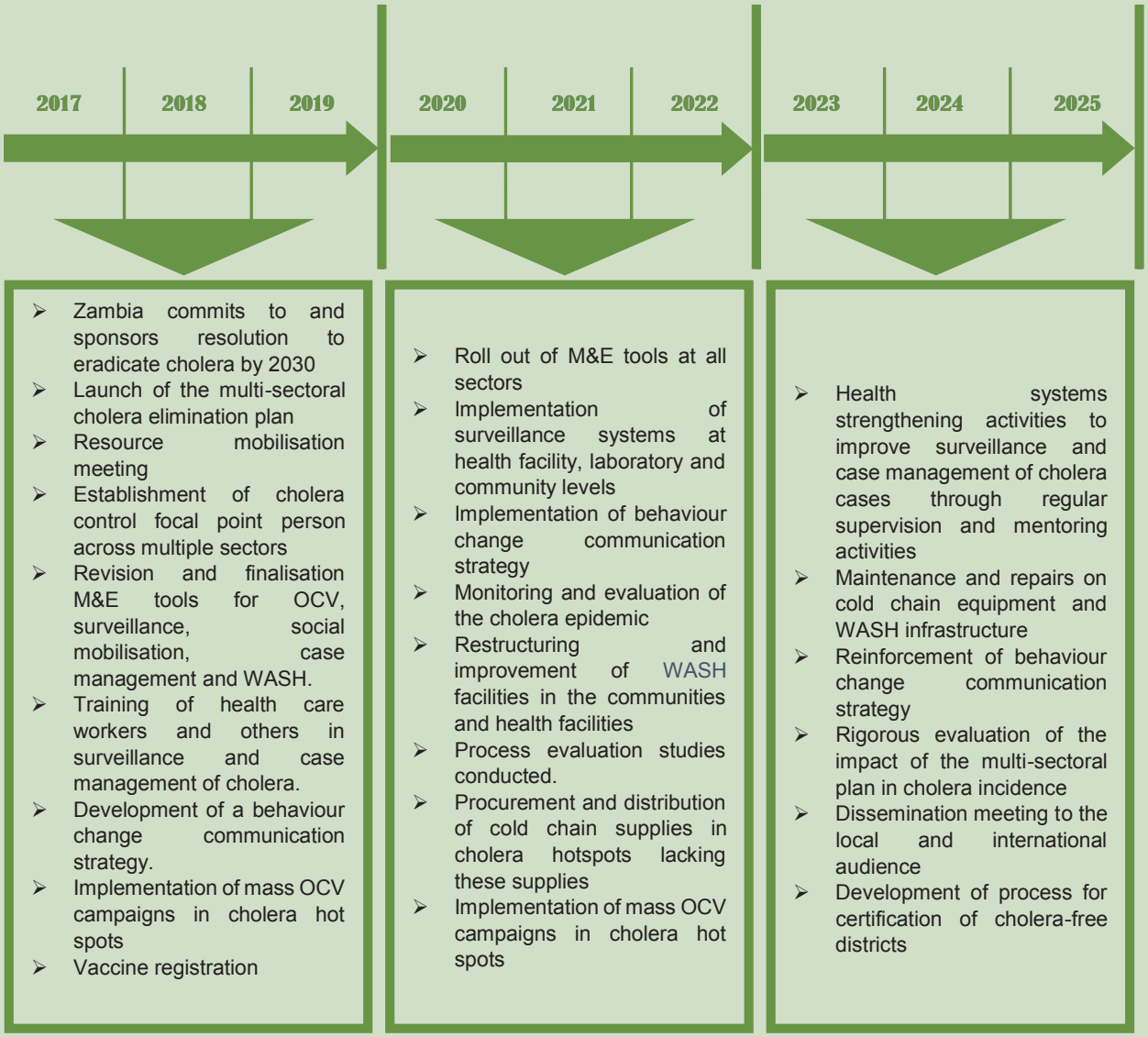
Strengthened collaboration with border security, communities and government structures like health facilities. Quarterly trainings will be held for cross border staff and regular OCV vaccination will be given to populations around borders that pose a threat

6

IMPLEMENTATION TIMELINE

The commitment to eliminate cholera was made in May 2018, and therefore, Zambia has 7 years to implement the Multisectoral plan across the three axes. The efforts made in the most recent 2017 – 2018 outbreak to contain the cholera outbreak already set a strong foundation to ignite the activities outlined in the Multisectoral strategy. The Zambian government remains committed and resolute in eradicating cholera and will take the driving seat in setting this Multisectoral plan in motion

Figure 7: Zambia Cholera Elimination Implementation Timelines



2017-2019

Between the year 2017 and 2019, preparation activities will take place for the implementation of the Multisectoral plan. So far, the Government of Zambia through the Minister of Health has committed to the resolution to eradicate cholera by 2030 during the last World Health Assembly (2018). This bold step will be followed by the launch of this Multisectoral plan document that will provide a roadmap for the activities to be put in place. A high-level resource mobilisation meeting will be held with distinguished guests from the MOH and multi-national organisations lead by the President of the Republic of Zambia, Minister of Health, Ministry of Water Development Sanitation and Environmental Protection, Ministry of Local Government and other relevant ministries and the Director General of WHO, WB, UNICEF and other partners. This meeting will culminate into finance plans for the Multisectoral plan, based on the pledges made by these key players. Simultaneously, focal point persons will be deployed to oversee the implementation of the Multisectoral plan and monitoring tools and planning documents will be developed or refined. Once funding has been secured, training of health care workers and other Multisectoral implementation staff will be conducted to ensure effective surveillance and case management of cholera cases. A review of the current messaging on cholera prevention will be done by the social mobilisation group and based on effective behavioural theoretical frameworks re-align the communication strategy to ensure the uptake of cholera preventative behaviours among the Zambian community. During the 3 years, OCV campaigns as a preventative strategy will be rolled out in cholera hotspots and efforts to obtain vaccine registration will be put in place.

2020-2022

The following 3-year period will largely involve implementation of the Multisectoral plan. Based on the preparations set in the preceding 3-years, players across the 5 Multisectoral arms will focus on the implementation of surveillance systems at community, health facility and lab levels in the 10 hotspot districts. Furthermore, based on the review and re-alignment of the communication strategy, activities promoting behaviour change will be rolled out. Cold chain supplies and equipment will also be distributed alongside the OCV preventative campaigns while WASH infrastructure will be improved of built in the hotspots. Opportunities to conduct process evaluation studies using data collected through regular monitoring will be encouraged.

2023-2025

During this last 3-years, health system strengthening activities will be intensified to ensure the efficient delivery of the Multisectoral plan activities. Each sector will plan for regular mentoring visits to mitigate any arising issues and ensure quality of service and delivery of strategies. Inspections will also be done on WASH infrastructure in order to execute the necessary repairs and maintenance works. Lastly, impact studies will be conducted to evaluate the effect of the Multisectoral strategy on morbidity and mortality by cholera.

7

FINANCING THE ZAMBIA MULTISECTORAL CHOLERA ELIMINATION PLAN

Globally, the annual estimated cost of controlling cholera is approximately US$ 2 billion. Case management, OCV campaigns and out of pocket expenditures are included in this amount. The cost of treating cholera is commonly calculated per person. For example, the GTFCC report calculates WASH interventions at US $5 to $10 per person per outbreak response. WASH interventions include the provision of household water treatment materials and services which also involve hygiene promotion through various media and cholera awareness campaigns.

Additionally, long-term WASH programming for the target population costs US $40 to $80 per person over a 10-year period. These programmes include the provision of safe and adequate water supply within a 30-minute round trip, basic sanitation and behavioural change campaigns. Other countries that have done economic evaluations for cholera campaigns have focused on the cost of vaccine campaigns. In Ethiopia, the average cost per OCV dose is US $2.60, while in Guinea and South Sudan it cost $1.90 and $3.77 respectively in 2012. The difference in price is contingent on the structure of the health system through which the vaccine is delivered. For those countries that worked through the existing public health system, the cost of vaccination was lower than those that implemented vaccinations in outbreaks and refugee camps.

Figure 1. The economic investment case for increasing access to water, sanitation and hygiene

The investment case for Zambia

The economic benefits arising from increased coverage of WASH are vast, elevating the importance of achieving WASH targets 6.1 and 6.2 of the SDGs, which call for universal access to safe water, and sanitation and hygiene, respectively.

1. Inadequate sanitation and water supply make countries poorer: The economic costs of not investing in water and sanitation are very significant. For 26 countries spread across South Asia, Southeast Asia and Africa, with a population in 2006 of 2.3 billion people, economic losses caused by poor sanitation alone amounted to about US $80 billion annually, or US $35 per person per year.
2. Add Zambian scenario
3. The economic benefits of both water supply and sanitation indicate excellent value for money: Attaining universal water supply and sanitation will have total annual benefits of US $220 billion. An update provided by WHO in 2012 showed that combined water supply and sanitation interventions have a US $4.30 return for every dollar spent.
4. The benefits from investments in water and sanitation are underestimated: Returns would be much higher than currently estimated if all benefits from investments in water supply and sanitation services

were to be included, such as exports, tourism, waste reuse or recycling, water quality savings, and social benefits (such as gender equity, safety, and dignity). However, no studies include all the potential benefits due to lack of underlying data, challenges in attributing broader changes over time to improved water and sanitation (i.e. determination of causality), as well as difficulties in converting social impacts to monetary values.

The total estimated cost for the implementation of the cholera Multisectoral plan over a 7-year period is US$ 99,345,493.

Table 15: Zambia Cholera elimination Budget for 7 Years

Budget (US$)	2017 - 2019 (30%)	2020 - 2022 (50%)	2023 - 2015 (20%)	TOTAL
Leadership & coordination	946,518	2,577,530	631,012	4,155,060
Surveillance & Laboratory	4,664,896	7,774,827	3,109,931	15,549,654
Case management	886,639	2,477,731	591,092	3,955,462
Community Engagement & Risk Communication	715,835	1,193,059	477,223	2,386,117
WASH	20,362,853	33,938,988	13,575,235	67,877,076
OCV	2,326,637	2,211,062	884,425	5,422,124
TOTAL	28,903,378	48,173,197	19,268,918	99,345,493

A large portion of the funds will be allocated to the WASH and solid waste management sector as the majority of the population lacks access to basic sanitation[4]. Another area that will receive substantial funding is surveillance and laboratory services. While the health system has an active surveillance system, the laboratory and environmental surveillance systems requires expansion. The remaining 3 areas will receive less funding as they will work through the existing public health system.

Figure. Importance of funding the Zambia Multisectoral Plan for the elimination of cholera

1. Zambia continues to suffer recurrent major outbreaks of cholera with 13,154 notified cases in 1991, 11,659 in 1992, 11,327 in 1999 [5] and in the 2016 outbreak, 1,341 recorded cases. As of March 2017, a further 20 cases were reported in Chiengi district in Northern Zambia. The most recent cholera outbreak that began at the end of December 2017 affected 5,421 people and claimed a total 109 lives by April 2018.
2. The potential risk factors for cholera that have been documented in Zambia include poor water, sanitation and hygiene (WASH) practices and facilities (lack of latrines, absence of a drainage system, poor handWASHing with soap and water treatment behaviours) and unhygienic food handling and storage practice. Environmentally, increased rainfall patterns have been associated with the incidence of cholera. It's assumed that mobility during rainy season increases exposure to contaminated water in areas such as markets and fishing camps where person to person contact is unavoidable.
3. Existing laboratory and environmental surveillance systems are weak and non-existent in most of the cholera hotspot areas. Heavy infrastructural and maintenance systems are required to end cholera by 2025.
4. The Zambian Ministry of Health has shown its commitment towards cholera elimination by showing its allegiance to the global cholera control strategy launched by the Global Task Force on Cholera Control (GTFCC) – 'Ending Cholera: A Roadmap to 2030' and committing to end cholera by 2025.

8

OPERATIONAL RESEARCH

Research Agenda

This MCEP will support various research activities to address topical issues of interest including, inter alia:

- Knowledge Attitudes and Practices (KAP) on cholera transmission, hand washing, water chlorination, disposal of waste
- Behaviors that need to change and how
- Impact of solid waste management policy on waste management practices
- Re-examining the waterborne/water body model of cholera transmission
- Dominant routes of cholera transmission at individual, household and community levels
- Possibility and role of person-to-person transmission of cholera
- Antimicrobial resistance (AMR) studies and trends in antibiotic susceptibility
- Seroprevalence studies to determine correlates and duration of protection from cholera post-OCV
- Determination of cholera hotspots
- Modelling mechanisms of cholera transmission
- Risk mapping, intervention modelling and forecasting future cholera cases during outbreaks

9

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ANNEX 1. DISTRICTS WITH RECURRENT CHOLERA OUTBREAKS

Province	District	2008	2009	2010	2011	2012	2013	2014	2015	2016	Total	Total Population	Incidence over last 5 year/ 100,000
Central	Kapiri-Mposhi					43	0	47	6	41	137	289,924	47.25
Central	Ngabwe						0	0	0	0	0	20,295	-
Luapula	Chiengi	0	50	38	26	0	225	0	0	0	339	141,989	158.46
Luapula	Nchelenge	0	74	48	0	13	63	0	0	0	198	191,092	39.77
Lusaka	Lusaka	0	8,284	15,609	294	11	11	14	0	3,123	27,346	2,467,467	128.03
Northern	Mpulungu	0	0	34	236	142	0	12	0	0	424	127,897	120.41
Northern	Nsama	0	0	0	12	31	0	3	0	69	115	127,897	80.53
Southern	Mazabuka	0	46	432	0	0	0	0	0	46	524	67,266	68.39
Southern	Monze	0	2	4	75	2	0	1	1	50	135	192,521	28.05
Southern	Sinazongwe	0	0	238	66	201	0	2	0	0	507	217,971	93.13

ANNEX 2. IDENTIFIED CHOLERA HOTSPOTS TO BE TARGETED BY VACCINATION

Province	District/Area	Total Population	Refugee Population	Target Population (96% of total)	Comments
Lusaka	Lusaka (Chelstone Sub District – Kalingalinga, Mtendere, Chainda, Mtendere East, Kamanga	362,625	-	348,120	High population density and slums
Luapula	Chiengi	111,249	-	106,800	Hosting refugees
Luapula	Nchelenge	149,168	-	143,200	Hosting refugees
Central	Kapiri Mposhi	289,924	-	278,327	Swamp area, fishing camps and flooding
Central	Ngabwe	20,295	-	19,483	Swamp area, fishing camps and flooding
Central	Kabwe District (Katondo, Kawama, Makululu, Natuseko, Kasanda)	118,717	-	113,968	High population density and slums
Central	Shibuyunji	74,860	-	71,866	Fishing camps and flooding
Northern	Mpulungu	127,897	-	122, 781	Swamp area, fishing camps and flooding
Northern	Nsama	67,266	-	64,575	Swamp area, fishing camps and flooding
Southern	Mazabuka	192,521	-	184,820	Swamp area, fishing camps and flooding
Southern	Monze	217,971	-	209,252	Swamp area, fishing camps and flooding
Southern	Sinazongwe	121,405	-	116,549	Swamp area, fishing camps and flooding
Total	-	1,593,481	-	1,529,741	-

ANNEX 3 – POPULATION ESTIMATES AND DOSES NEEDED FOR 2019 OCV CAMPAIGN FOR HOTSPOT DISTRICTS

Province	District	Target 100% Population	Target 96 %	Target 96 %	Total doses required for 1st & 2nd dose	Dates for First Round	Dates for Second Round	Dates for OCV campaign coverage surveys
			Population for Round 1 OVC	Population for Round 2 OCV				
Luapula	Chiengi	111, 249	106, 800	106, 800	213,600	8 -14 April, 2019	29th April-5th May 2019	8-15 May,2019
Luapula	Nchelenge	149, 168	143, 200	143, 200	286,400	8 -14 April, 2019	29th April-5th May 2019	8-15 May,2019
-	-	-	-	250,000	500,000	-	-	-
Central	Kapiri Mposhi	289,924	278,327	278,327	556,654	3-9 June, 2019	24-30 June, 2019	3-10 July, 2019
Central	Ngabwe	20,295	19,483	19,483	38,966	3-9 June, 2019	24-30 June, 2019	3-10 July, 2019
Central	Kabwe	118,717	113,968	113,968	227,936	3-9 June, 2019	24-30 June, 2019	3-10 July, 2019
Central	Shibuyunji	74,860	71,866	71,866	143,732	3-9 June, 2019	24-30 June, 2019	3-10 July, 2019
-	-	-	-	483,644	967,288	-	-	-
Northern	Mpulungu	127,897	122,781	122,781	245,562	6-11 August, 2019	26th August-1st September, 2019	4-11 September, 2019
Northern	Nsama	67,266	64,575	64,575	129,150	6-11 August, 2019	26th August-1st September, 2019	4-11 September, 2019
-	-	-	-	187,356	374,712	-	-	-
Southern	Mazabuka	192,521	184,820	184,820	369,640	30th September-6th October, 2019	21-27 October, 2019	30th October-6 November, 2019
Southern	Monze	217,971	209,252	209,252	418,504	30th September-6th October, 2019	21-27 October, 2019	30th October-6 November, 2019
Southern	Sinazongwe	121,405	116,549	116,549	233,098	30th September-6th October, 2019	21-27 October, 2019	30th October-6 November, 2019
-	-	-	-	510,621	1,021,242	-	-	-
Lusaka	Lusaka	362,625	348,120	348,120	696,240	30th September-6th October, 2019	21-27 October, 2019	30th October-6 November, 2019
-	-	-	-	348,120	696,240	-	-	-
-	Totals	1,593,481	1,529,741	1,529,741	3,059,482	-	-	-

ANNEX 4. RESOLUTION WORLD HEALTH ASSEMBLY 71.4

Agenda item 11.2 26 May 2018

Cholera prevention and control

The Seventy-first World Health Assembly,

Recalling resolution WHA64.15 (2011) on cholera: mechanism for control and prevention, which led to the revitalization of the Global Task Force on Cholera Control to support Member States to reduce the public health, social and economic consequences of cholera by strengthening WHO's work in this area, and improving collaboration and coordination among stakeholders;

Recognizing the report by the Director-General on WHO's work in health emergencies1 and the Global Task Force on Cholera Control's recently launched strategy, Ending Cholera: A Global Roadmap to 2030,2 large-scale outbreaks of cholera continue to cause significant morbidity and mortality among vulnerable populations in both emergency and endemic settings. With an estimated disease burden of 2.9 million cases and 95 000 deaths every year worldwide, the disease still affects at least 47 countries around the globe, with a potential to spread where water, sanitation and hygiene conditions are inadequate;

1. Document A71/6.

Ending cholera: a global roadmap to 2030 (http://www.who.int/cholera/publications/global-roadmap.pdf?ua=1, accessed 21 May 2018).

Acknowledging that the prevention and control of cholera require a coordinated and multisectoral approach that includes access to appropriate health care, early case management, access to safe water, sanitation, education, health literacy and improved hygiene behaviours, with adjunct use of oral cholera vaccines, strengthened surveillance and information sharing, strengthened laboratory capacity and community involvement, including action on the social determinants of health;

Acknowledging also that cholera control is both a matter of emergency response in the case of outbreaks, and a matter of development when the disease is endemic in high-risk contexts, such as in camps for refugees and internally displaced people;
Affirming that progress towards the 2030 Agenda for Sustainable Development including commitment to Goal

(Ensure healthy lives and promote well-being for all at all ages); Goal 6 (Ensure availability and sustainable management of water and sanitation for all); and Goal 11 (Make cities and human settlements inclusive, safe, resilient and sustainable), would reduce the prevalence and spread of cholera, along with other diarrhoeal diseases and enteric infections;

Recalling that all States Parties must comply with the International Health Regulations (2005);
Acknowledging that cholera, as a disease of epidemic potential, has to be recognized in itself and reported separately from other diarrhoeal diseases, within national surveillance systems, as not doing so hampers effective control measures, URGES Member States and, where applicable, regional economic integration organizations.

1. to foster the identification by governments of cholera epidemics and to elevate cholera as a State priority in affected countries through its inclusion in national policies and plans, either as a stand-alone plan or embedded within broader diarrhoeal disease control initiatives, or within national health, health security,

water, sanitation and hygiene, development and Sustainable Development Goal implementation plans, where relevant, and national disaster and/or emergency management agencies;

2. to develop and implement, in affected countries, a multisectoral package of selected effective prevention and control measures, including long-term water, sanitation and hygiene services, access to appropriate health care, access to safe water, sanitation and improved hygiene behaviours, as well as infrastructure development along with associated capacity-building activities for operations, maintenance and repairs and sustainable financing models adapted to the local transmission pattern for long-term control or elimination;
3. to ensure that national policies and plans regarding the prevention and management of cholera comprise all areas with high-risk of cholera transmission;
4. to establish national multisectoral cholera and acute diarrhoea prevention and surveillance mechanisms in affected countries to coordinate the implementation of the control or elimination plan, ensuring representation of the different ministries, agencies, partners and communities involved in cholera control efforts;
5. to strengthen capacity for: preparedness in compliance with the International Health Regulations (2005), early detection and treatment, laboratory confirmation, case management and immediate and effective response to outbreaks in order to reduce the public health, social and economic impact;
6. to strengthen surveillance and early reporting of cholera in line with the International Health Regulations (2005), and build capacity for data collection and analysis, including information on critical determinants including water and sanitation coverage;
7. to strengthen community involvement, social mobilization in cholera prevention, early detection, household water treatment and storage, and other related water, sanitation and hygiene response activities;
8. to support, including through international cooperation, research for better prevention and control, including research for improved vaccines and better rapid diagnostics and treatment; and to support monitoring of antimicrobial resistance;
9. to refrain from implementing health measures that are more restrictive of international traffic and more invasive or intrusive to persons than reasonably available alternatives that would achieve the appropriate level of health protection, in line with the International Health Regulations (2005);
10. to establish national targets, when applicable, and make financial and political commitments to cholera control with national Sustainable Development Goal implementation plans;

2. REQUESTS the Director-General:

11. to strengthen surveillance and reporting of cholera in line with the International Health Regulations (2005) and to further reinforce advocacy, strategic leadership and coordination with partners at all levels via the Global Task Force on Cholera Control secretariat and working groups, including by providing technical support and operational guidance to countries for cholera prevention and control;
12. to increase capacity to support countries to scale up their ability to implement and monitor multisectoral, integrated interventions for long-term cholera prevention, control and elimination; interventions for preparedness and response to cholera epidemics in accordance with the global initiatives of Ending Cholera: A Global Roadmap to 2030 and aligned with national plans to encourage reporting, monitor progress and disease burden in order to inform country and global strategies; and interventions for control or elimination;
13. to support countries, upon request, in the assessment of cholera risk factors and capacity for multisectoral engagement within existing technical resources;
14. to continue leading the management of the oral cholera vaccine stockpile to enable a sufficient global supply, including the support to and monitoring and evaluation of oral cholera vaccine use, and where appropriate vaccine campaigns, in cooperation with relevant organizations and partners, including UNICEF and the GAVI Alliance;
15. to monitor and support long-term cholera prevention and control and elimination programmes at country and regional levels;
16. to develop and promote an outcome-oriented research and evaluation agenda for cholera, targeted to address important knowledge gaps, to the improvement of implementation of existing interventions,

including for water sanitation and hygiene, and to the development of improved vaccines for better and more durable prevention and outbreak control covering all aspects of cholera control;

17. to raise the profile of cholera at the highest levels on the global public health agenda, and to strengthen coordination and engagement of multiple sectors, particularly water, sanitation and hygiene, and other non-health sectors such as finance and infrastructure development;
18. to report to the Seventy-third World Health Assembly, through the Executive Board at its 146th session, on the global cholera situation and evaluate efforts made in cholera prevention and control.

Seventh plenary meeting, 26 May 2018 A71/VR/7
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ANNEX 5: PLEDGES BY HONOURABLE MINISTERS

PLEDGE OF COMMITMENT TO THE ZAMBIA MULTI-SECTORAL CHOLERA ELIMINATION PLAN (2019-2025)

I, **Hon. David Mabumba MP,** being **Minister of Generation Education,** together with my Ministry fully commit to supporting the Implementation of the Zambia Multisectoral Cholera Elimination Plan (2019-2025) in order to ensure Zambia **ends cholera by the year 2025**. The plan will contribute towards achieving health and well-being of the Zambian people in line with the Seventh National Development Plan, Vision 2030 and the Sustainable Development Goals (SDGs). My office shall provide the needed Leadership, guidance and support as vested in me and my Ministry to ensure the timely and effective implementation of this cholera elimination plan.

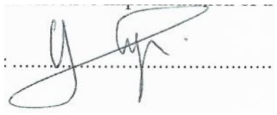
Signature: ……..

Lusaka, Zambia

20th February,2019

PLEDGE OF COMMITMENT TO THE ZAMBIA MULTI-SECTORAL CHOLERA ELIMINATION PLAN (2019-2025)

I, **Hon. Dr. Chitalu Chilufya MP, MCC,** being **Minister of Health** together with my Ministry fully commit to supporting the Implementation of the Zambia Multisectoral Cholera Elimination Plan (2019-2025) in order to ensure Zambia **ends cholera by the year 2025.** The plan will contribute towards achieving health and well-being of the Zambian people in line with the Seventh National Development Plan, Vision 2030 and the Sustainable Development Goals (SDGs). My office shall provide the needed Leadership, guidance and support as vested in me and my Ministry to ensure the timely and effective implementation of this cholera elimination plan.

Signature: 

Lusaka, Zambia

20th February,2019

PLEDGE OF COMMITMENT TO THE ZAMBIA MULTI-SECTORAL CHOLERA ELIMINATION PLAN (2019-2025)

I, **Hon. Sylvia Bambala Chalikosa MP,** being **Minister in the Office of Her Honour the vice President**, fully commit to supporting the Implementation of the Zambia Multisectoral Cholera Elimination Plan (2019-2025) in order to ensure Zambia **ends cholera by the year 2025**. The plan will contribute towards achieving health and well-being of the Zambian people in line with the Seventh National Development Plan, Vision 2030 and the Sustainable Development Goals (SDGs). My office shall provide the needed Leadership, guidance and support as vested in me and my Ministry to ensure the timely and effective implementation of this cholera elimination plan.

Signature:……..

Lusaka, Zambia

20th February,2019

PLEDGE OF COMMITMENT TO THE ZAMBIA MULTI-SECTORAL CHOLERA ELIMINATION PLAN (2019-2025)

I, **Hon. Vincent Mwale MP**, being **Minister of Local Government** together with the Ministry fully commit to supporting the Implementation of the Zambia Multisectoral Cholera Elimination Plan (2019-2025) in order to ensure Zambia **ends cholera by the year 2025.** The plan will contribute towards achieving health and well-being of the Zambian people in line with the Seventh National Development Plan, Vision 2030 and the Sustainable Development Goals (SDGs). My office shall provide the needed Leadership, guidance and support as vested in me and my Ministry to ensure the timely and effective implementation of this cholera elimination plan.

Signature:  .....

Lusaka, Zambia

20th February,2019

PLEDGE OF COMMITMENT TO THE ZAMBIA MULTI-SECTORAL CHOLERA ELIMINATION PLAN (2019-2025)

I, Hon. Dr. Dennis Musuku Wanchinga MP, being **Minister of Water Development, Sanitation and Environmental Protection**, fully commit to supporting the Implementation of the Zambia Multisectoral Cholera Elimination Plan (2019-2025) in order to ensure Zambia **ends cholera by the year 2025**. The plan will contribute towards achieving health and well-being of the Zambian people in line with the Seventh National Development Plan, Vision 2030 and the Sustainable Development Goals (SDGs). My office shall provide the needed Leadership, guidance and support as vested in me and my Ministry to ensure the timely and effective implementation of this cholera elimination plan.

Signature: .....

Lusaka, Zambia

20th February,2019

ZAMBIA MULTISECTORAL CHOLERA ELIMINATION PLAN

2019–2025

THE GOVERNMENT OF THE REPUBLIC OF ZAMBIA

ZNPHI
ZAMBIA NATIONAL PUBLIC HEALTH INSTITUTE

GLOBAL TASK FORCE ON CHOLERA CONTROL

unicef
for every child

World Health Organization