



GLOBAL TASK FORCE ON
CHOLERA CONTROL

Interim Guiding Document to Support Countries for the Development of their

NATIONAL CHOLERA PLAN

ADVANCE COPY

CONTENTS

INTRODUCTION	6
PURPOSE OF THIS DOCUMENT	8
INCEPTION OF NATIONAL CHOLERA PLAN	10
A. Country commitment	10
B. Identification of cholera hotspots	11
C. Situational analysis	12
1. Capacity assessment	12
2. Mapping of stakeholders and existing initiatives	13
D. Multisectoral leadership and coordination mechanism	15
E. Formulation of a national goal	16
DEVELOPMENT OF NATIONAL CHOLERA PLAN	17
A. Surveillance and reporting	18
B. Health care system strengthening	23
C. Use of Oral Cholera Vaccine	27
D. Water, Sanitation and Hygiene (WASH)	30
E. Community engagement	34
MONITORING AND REPORTING	37
A. Coordination	37
B. Surveillance and reporting	38
C. Health care system strengthening	39
D. Use of Oral Cholera Vaccine	40
E. Water, Sanitation and Hygiene	41
F. Community engagement	42

Appendix 1: National Cholera Plan: Summary of inception and development phases . .	45
Appendix 2: Partners resources available to countries	47
Appendix 3: SWOT Analysis	48
Appendix 4: Stakeholder Analysis	49

Abbreviations and Acronyms

AEFI	Adverse event following immunization
CFR	Case fatality rate
CHW	Community health workers
CTC	Cholera treatment centre
GTFCC	Global Task Force on Cholera Control
HCW	Health care workers
ICG	International Coordinating Group
IPC	Infection prevention and control
KAP	Knowledge, attitudes, and practices
M&E	Monitoring and evaluation
NCP	National cholera plan for control or elimination
OCV	Oral cholera vaccine
ORP	Oral rehydration point
ORS	Oral rehydration solution
PCR	Polymerase chain reaction
PHF	Peripheral health facilities
PPE	Personal protective equipment
RDT	Rapid diagnostic test
SDG	Sustainable development goal
SOP	Standard operational procedure
SWOT	Strengths, weaknesses, opportunities and threats
WASH	Water, sanitation and hygiene
WHO	World Health Organization

INTRODUCTION

The Global Task Force on Cholera Control (GTFCC) launched *Ending Cholera: A Global Roadmap to 2030 (Global Roadmap)*⁽¹⁾, a strategy that aims to **reduce global cholera deaths by 90% and eliminate the disease in at least 20 countries by 2030**. It is organized according to three main axes:

- Ensuring **early detection and response** to contain outbreaks;⁽²⁾
- Adopting a **multisectoral approach** to prevent and control cholera in hotspots; and
- Establishing an **effective coordination mechanism** for technical support, resource mobilization and partnership at local and global levels.

Achieving these global objectives requires effective implementation of multisectoral cholera control interventions at the country level. The GTFCC has identified **five pillars** that form the basis of effective cholera control strategies and require strong coordination:

- Surveillance and reporting
- Health care system strengthening
- Use of oral cholera vaccine (OCV)
- Water, sanitation and hygiene (WASH)
- Community engagement.

In countries affected by cholera today, context-specific interventions should be identified for each of these five pillars and organized in a **National Cholera Plan for Control or Elimination (NCP)**.

An NCP is a **multisectoral and comprehensive** document that states a country's goal regarding cholera control or elimination and details all aspects of the national cholera prevention and control strategy. The **NCP should be country-led and context-specific**.

All relevant ministries, government agencies and institutions, including those outside the health sector, should be involved in the NCP development, implementation and monitoring. The activities included in the NCP should be budgeted and aligned with the objectives and axes stated in the *Global Roadmap*.

An NCP is also a **dynamic, multi-year and operational document** that contains detailed implementation and monitoring plans. In its NCP, a country will define milestones to measure progress and implement any corrective action to improve results and efforts toward the goals set. As activities move forward, the **operational plans should be reviewed and revised on a regular basis – at a minimum annually** – and updated to reflect ongoing cholera epidemiology.

National Cholera Plans may be **built upon or be integrated into existing plans** (e.g., cholera preparedness and response plans, National Action Plan for Health Security, etc.), initiatives (e.g., water, sanitation and hygiene for all) **or programmes** (e.g., national diarrheal disease programme), and should not impede or replace what has already been developed.

It is important to note, the development and implementation of NCPs should be **guided by universal values**, in line with the 2030 Agenda for Sustainable Development. These values include a human rights-based approach (including gender equality and women's empowerment) and should be all-inclusive. The activities conducted as part of the NCP should be carried out equally – without discrimination of any sort – and should focus on the most vulnerable and marginalized members of society.

The GTFCC can support countries throughout the development process and can actively contribute technical support for the implementation of activities once the plan is endorsed at national level. The GTFCC has established an **Independent Review Panel**⁽³⁾ (IRP), which is a team of impartial experts responsible for providing rigorous and independent technical assessment of country NCPs.

PURPOSE OF THIS DOCUMENT

The objective of this document is to provide practical guidance to countries in developing and monitoring the implementation of their NCPs. This document is aligned to the requirements of the *Global Roadmap* and the criteria that will be used by the GTFCC Independent Review Panel to review the NCPs. It also provides a set of indicators that can be used by countries to report progress on the implementation of their NCP.

This document is intended for professionals working in all relevant sectors of the national government (i.e., health, water, construction, finance, education, etc.), public health institutes and technical partners involved in cholera prevention and control activities. The process is also summarized in **Appendix 1**.

The conception and execution of an NCP can be divided into four phases, illustrated in Figure A on page nine. Of those, this document describes three steps of the process:

- **Inception** describes the preparatory phases for NCP development.
- **Development** provides guidance for the content of each technical pillar and for the development of a monitoring and evaluation framework for the implementation of the NCP.
- **Monitoring & Reporting** provides indication on the timelines for periodic reviews and reporting to national authorities, as well as the GTFCC.

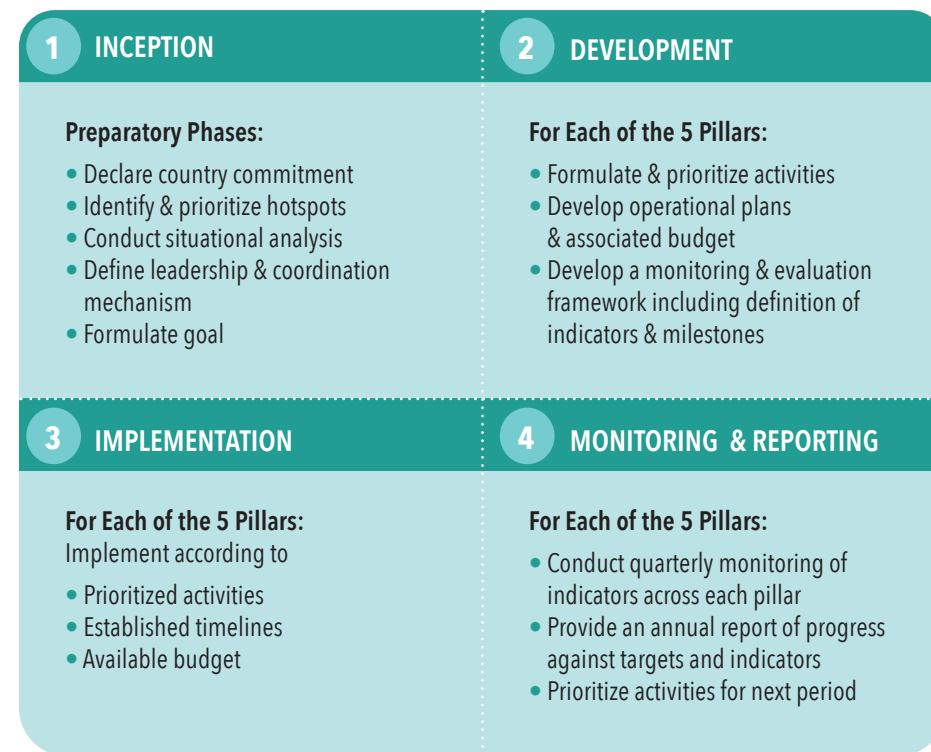
GTFCC TOOLBOX & REFERENCES



- 1) **A call to action: launching the *Global Roadmap to 2030***
<http://www.gtfcc.org/about-gtfcc/roadmap-2030/>
- 2) **Cholera Outbreak Response Field Manual, October 2019**
<https://choleraoutbreak.org/>
- 3) **Independent Review Panel Terms of Reference**
<http://www.gtfcc.org/wp-content/uploads/2019/11/gtfcc-terms-of-reference-review-panel.pdf>

The **implementation phase** will be critical and dependent on the activities that each country will have identified to address its needs. This document does not provide specific guidance on how to conduct the implementation of the country NCP but provides basic principles such as the prioritization of activities based on their logic sequence (and the available resources that will be required).

Figure A



Although in this document the development of a National Cholera Control Plan is schematically presented as a linear process, the true planning process is dynamic. The preparatory and development phases are interlinked, and the steps presented in the chart below may not be conducted sequentially.

Once implementation begins, regular monitoring and evaluation will feed into the annual review process and the plan will be revised over time in accordance with outcomes of the monitoring and evaluation process.

INCEPTION OF NATIONAL CHOLERA PLAN

Engaging in the development of an NCP means that cholera is recognized as a national priority by the country. Demonstrating political will and engagement in the *Global Roadmap* is considered a prerequisite for the development of an NCP. It will mark the beginning of the NCP preparatory phase that includes the identification of the priority areas for intervention (also called cholera hotspots), and identification of mechanisms and stakeholders that can be leveraged to ensure strong coordination of the NCP development, implementation and monitoring. The situational analysis will facilitate the formulation of the national goal regarding cholera control or elimination, and the establishment of a coordination mechanism that will guide the NCP implementation.

A. Country commitment

Countries formally express their **political, technical and financial engagement** to control or eliminate cholera through a multisectoral approach. Countries should commit to the following guiding principles:

- **An alignment with the approach described in the *Global Roadmap*.**
- The NCP should be **multisectoral and comprehensive**. Relevant ministries, government agencies and institutions at all levels (national, regional, municipal levels) – as well as the private sector – should be involved in the process (relevant sectors include health, water, construction, finance, education, food production, etc.).
- The NCP should be **linked with existing health and WASH systems and relevant emergency and development frameworks and plans**.
- The NCP should be **multi-year** and should include plans for monitoring and evaluation of the country's progress over time.
- The NCP states the country's goal regarding cholera control or elimination.



Examples of activities to be considered:

Expressions of commitment will vary depending on the country. Examples include:

- Establishment of a national cholera programme.
- Development of specific legislation on cholera control.
- Organization of a high-level workshop with key stakeholders.
- Written or public commitments to achieve the *Global Roadmap* goals.

B. Identification of cholera hotspots

Following the expression of commitment, the country should conduct a situational analysis. This analysis should first include the **identification of the priority areas for intervention, often referred to as cholera hotspots**.⁽⁴⁾ Cholera hotspots are geographically limited areas where cultural, environmental and socioeconomic conditions facilitate the transmission of disease and where cholera persists or reappears regularly.

It is important to note that as part of the monitoring and evaluation of the plan, the list of cholera hotspots should be reviewed and updated annually.



Suggested tools:

Hotspot definition: *A geographically limited area (such as a city, administrative level 2 or health district catchment area or lower) where environmental, cultural and/or socioeconomic conditions facilitate the transmission of the disease, and where cholera persists or reappears regularly.*

- The first step in hotspot identification is an analysis of data from within the last 5 years. Mandatory information to be reviewed include mean annual incidence and persistence. The GTFCC has developed a tool to facilitate this process: <http://www.gtfcc.org/wp-content/uploads/2019/11/gtfcc-tool-for-identification-of-cholera-hotspots.xlsx>



- Once an initial analysis is done, cultural, geographical, environmental and socioeconomic factors (e.g., WASH conditions, presence of vulnerable groups, etc.) shall be considered.
- When the hotspots are identified, it will be important to convene stakeholders from different sectors and administrative levels to undertake a critical review of the findings of the analysis.



Examples of activities to be considered:

- Collect and compile all data on historical cholera burden. At a minimum, the past five years should be reviewed.
- Develop relevant graphs and maps to illustrate epidemiological information.
- Based on the analysis of data, identify the hotspots in the country and their priority ranking for cholera risk.
- Review the social, cultural, political and linguistic context that could impact the implementation of the NCPs, as well as community strengths and resources.

C. Situational analysis

1. Capacity assessment

Countries are encouraged to undertake a review of their own capacities across the five technical pillars of the NCP, including the identification of existing services, funding and capabilities. The capacity assessment should also provide a description of main constraints, challenges and bottlenecks (e.g., lack of funding or technical resources, lack of political leadership or institutional coordination, etc.). In addition, any lessons learned from historical and ongoing work should be highlighted in each pillar. Whenever possible, a comprehensive approach across pillars should be considered.

Countries may use the results of assessments and exercises (simulation exercises, after action reviews, etc.) that have already been conducted and that are relevant for cholera (e.g., evaluation of surveillance system, laboratory assessment, etc.).



Suggested tools:

- Countries may consider utilizing strengths, weaknesses, opportunities and threats (SWOT) matrices to conduct this capacity assessment. (See Appendix 3.)



Examples of activities to be considered:

For each of the pillars, conduct geographic mapping of relevant infrastructures and resources available in cholera hotspots (e.g., health care facilities, cholera treatment centres, laboratories, cold chain capacity, community health workers and key community stakeholders, etc.) and assess their functionality.

- Describe the existing WASH services, programmes at household, community and institutional levels (including schools and health care facilities, markets, factories, etc.).
- Identify specific sites (e.g., religious sites, construction, mining, etc.) and vulnerable¹ populations (e.g., refugees, internally displaced populations, nomads, ethnic minorities, professions at risk, etc.) in cholera hotspots.
- Complete a summary table of all relevant information on implemented oral cholera vaccine campaigns conducted in-country, including post-campaign reports and assessments.

2. Mapping of stakeholders and existing initiatives

The third part of the situational analysis is a **mapping of stakeholders and existing initiatives**. The objectives are to: 1) identify, assess and prioritize the roles and responsibilities of active stakeholders in cholera prevention and control in the country (within and outside the government and at all levels), and 2) proceed with a detailed mapping of all existing initiatives and programmes – and associated funding – (e.g., health security, safe water and sanitation projects, diarrheal diseases programmes, etc.) that

¹ Vulnerability is the degree to which a population, individual or organization is unable to anticipate, cope with, resist and recover from the impacts of disasters. Environmental health in emergencies and disasters: a practical guide. (WHO, 2002).

contribute – directly or indirectly – to the goal of controlling cholera. This will also include the identification of existing coordination mechanisms that may be used to organize and oversee the implementation and monitoring of the NCP.

The stakeholders and initiatives/plans to be considered should not only include those within the public health sector. To effectively address cholera in a multisectoral manner, stakeholders from the WASH, education, finance, construction and food production sectors should also be included. Local governments and municipalities are also critical actors and will be responsible for implementing several components of the plan. The private sector should also be part of the mapping process and should be consulted during the planning process.

Suggested tools:

- Countries may consider using a stakeholder analysis tool to identify stakeholders and define their level of engagement in the NCP (see Appendix 4).



Examples of activities to be considered:

- Identify and map the roles and responsibilities of the government, national/international partners and institutions and donors regarding cholera prevention and control across all pillars, including identification of areas for collaboration and coordination.
- Map all actors (state and non-state) and their roles/capacities in the elimination/control of cholera, both present and in the future.
- Identify existing initiatives and programmes in relevant sectors (e.g., health security, safe water and sanitation projects, diarrheal diseases programmes, etc.) that contribute to cholera control/elimination and map all relevant activities (with associated funding).
- Conduct a mapping of existing funding streams available in cholera hotspots across the *Global Roadmap* pillars.



D. Multisectoral leadership and coordination mechanism

The situational analysis will help to **assess whether a new coordination mechanism should be created or if cholera control could be included in the mandate of an existing high-level multisectoral coordination body. The national coordination mechanism should:**

- Be inclusive of **all relevant ministries, stakeholders and partners** (see stakeholder mapping).
- **Clearly assign roles and responsibilities among all actors** and identify an in-country programme manager that focuses on bringing all the pieces together and ensures accountability to the country stakeholders, donors and beneficiaries.
- Be accountable to **the highest level of government** (e.g., Prime Minister, President).
- Establish **national reporting lines** across different sectors and platforms to share alerts and epidemiological information.

From the inception to the implementation and monitoring of the plan, the high-level multisectoral coordination body should be mandated to:

- Maintain multisectoral political commitment at all levels toward the *Global Roadmap* goals.
- Guide and direct the planning process and ensure that the NCP is endorsed and approved across all relevant sectors.
- Build and maintain systematic and effective coordination for all cholera prevention and control activities.
- Monitor and report progress both to high-level national authorities and the GTFCC on implementation of cholera interventions and impact.



Examples of activities to be considered:

- Identify existing coordination bodies and mechanisms involved in cholera (e.g., National Cholera Task Force, Emergency Operation Center, clusters [Health, WASH]), technical working groups (e.g., Community Engagement, regional platforms), and identify their terms of reference, ongoing activities and funding.
- If appropriate, select one of these bodies and adapt the terms of reference. If none of the existing coordination mechanisms are appropriate, develop new terms of reference and have them endorsed at the highest level of government.

E. Formulation of a national goal

Based on the information gathered in the situational analysis, the country should formulate the overarching goal for the national cholera programme. This goal must be aligned with those of the *Global Roadmap*, including the reduction of cholera deaths by 90% by 2030. **The national goal should also define whether the country chooses elimination or control, and by what year** (e.g., “Achieve cholera elimination by 2025”). The goal of “control” should also be defined by desired outcome indicators (i.e., national or district disease burden below a specific annual incidence). The goals should have a set of annual milestones to continuously monitor and report progress to GTFCC, donors and key stakeholders. An example of potential milestones toward the overarching goal might be:

	Baseline	1st Year of Implementation	5th Year of Implementation	10th Year of Implementation
Reduction of Cholera Deaths	5-year* average	50%	90%	90%
Case-Fatality Rate	5-year* average	<1%	<1%	< 1%
Reduction of Incidence	5-year average /1000 population	N/A	75%	100%**

*If available ** Control or elimination according to national goal

GTFCC TOOLBOX & REFERENCES

4) Guidance and tool for countries to identify priority areas for intervention

<http://www.gtfcc.org/wp-content/uploads/2019/11/guidance-and-tool-for-countries-to-identify-priority-areas-for-intervention.pdf>

<http://www.gtfcc.org/wp-content/uploads/2019/11/gtfcc-tool-for-identification-of-cholera-hotspots.xlsx>



DEVELOPMENT OF NATIONAL CHOLERA PLAN

Using the conclusion of the situational analysis, countries will **develop operational plans for each pillar with budgeted activities targeted at cholera hotspots**. Operational plans should include activities that are budgeted, and for which a timeline, available resources and responsible person are identified. These plans should be reviewed and updated on a regular basis (see Monitoring and Reporting section).

This section focuses on providing **guidance on the type of interventions that may be included in an NCP**, depending on the context and the needs of each country. The interventions are organized by the pillar to which they are most linked. The interventions should be adapted to the context and capacities of each country.

In each of the sections, a set of GTFCC references has been identified to help countries conduct the activities. In addition to GTFCC material, partner resources are available in **Appendix 2**.



Examples of activities to be considered:

This section does not provide specific direction on how countries should practically organize the development of their NCP, but offers key activities/considerations, including:

- Ensuring that relevant ministries, stakeholders and organizations across sectors are involved from the beginning of the process and continue to be engaged throughout the process.
- Setting up a timeline and workplan for the development process.
- Identifying one person or a group of people responsible for coordinating the development process.

- Creating working groups for each of the pillars that will be responsible for developing the operational plans. For each pillar, a lead person or institution should be responsible for coordinating the development of the plan.
- Organizing several workshops to ensure that all stakeholders involved can discuss and review the progress made in the development of the NCP.



A. Surveillance and reporting

Strengthening epidemiological and laboratory capacities to rapidly detect, investigate, confirm and monitor cholera cases are key parts of the *Global Roadmap*. Surveillance activities **should be integrated within the existing surveillance system** (e.g., Integrated Disease Surveillance and Response) and focus on improving the ability of a country to detect and confirm cholera cases promptly and quickly respond to cholera outbreaks. Surveillance must also allow close monitoring of cholera incidence and case fatality over time in hotspots to inform and adapt strategic planning, implementation priorities and progress toward NCP goals. The strengthening of cholera surveillance should encompass all aspects of surveillance including event-based based surveillance (i.e., non-health, informal sources, etc.), the media, indicator-based surveillance (i.e., healthcare-based surveillance, laboratory, sentinel surveillance, etc.) and community-based surveillance.

Strategic objectives:

- To rapidly detect all signals potentially related to cholera through all relevant sources, to verify these signals in a timely manner (i.e., within 48 hours between the occurrence of the signal and its verification) and to allow for timely implementation of full control measures (i.e., within five days of laboratory confirmation).
- To maintain, regularly update, analyse and share datasets² at each administrative area (down to the same level used for hotspots). This data should be integrated into existing surveillance systems and include a “zero reporting” feature.

² Logs of signals, weekly or monthly case counts, line-lists of suspected confirmed cases, health care facility and community death, demographic information, etc.

Proposed interventions to be included in an NCP:

1. Engage communities

- Develop and disseminate materials to the community (e.g., recognition on cholera symptoms, how to report suspected cases and deaths). Ensure that materials are provided in local languages using local wording and/or pictures and categories that ensure comprehension.
- Conduct regular trainings for community health workers (CHW), traditional healers and volunteers to ensure that they can identify cholera symptoms.
- Develop and communicate a clear process for the reporting of suspected cases and deaths to health facilities.
- Consider the establishment of structured community-based surveillance systems that are integrated into the overall surveillance framework (i.e., event-based and indicator-based) to both empower communities and to improve early detection and reporting.

2. Regularly update cholera surveillance protocols and tools⁽⁵⁾

- Develop and regularly update national cholera surveillance guidelines, including standardized case definitions, standard operational procedures (SOP) for early signal detection, data collection, analyses and reporting; including community-based surveillance and environmental surveillance, SOP for specimen collection, SOP for the use of rapid diagnostic tests (RDT)⁽⁶⁾ and testing strategies and SOP for transportation and storage.
- Standardize data collection and reporting in a format allowing data integration at country-level and ideally at regional or global level, either by developing or adapting existing tools to the national context.

3. Build capacity for early detection and reporting of suspicion of cholera

- Deliver adapted training in early warning procedures to health care workers (HCWs), community health workers (CHW), traditional healers, volunteers and other stakeholders in cholera hotspots; training in understanding and applying the case definitions; and training in the criteria and procedures for timely reporting a signal to the investigation/response teams.

- Integrate volunteers and traditional healers in the surveillance framework (i.e., event-based surveillance and/or community-based surveillance according to the context) and train them on what to report, to whom, at what frequency and provide them with the means to do so.
- Adapt or develop/update suspected cholera investigation tools, such as standardized questionnaires, reporting forms, investigation logbooks and mobile applications (as required).

4. Build capacity for data collection, reporting and analyses

- Integrate all potential sources of information at hotspot administrative level (district or lower) to adequately capture and report signals (e.g., informal sources and non-medical sources, such as schools, pharmacies, religious institutions, water supply services, etc.).
- Develop plans to train surveillance officers and data clerks at central and peripheral levels, including community-based surveillance.
- Regularly analyse data (population at risk, cholera risk factors, estimation of burden, updating cholera hotspots data, etc.).
- Routinely disseminate surveillance data to all levels, including multisectoral partners, and adapt the support of the feedback to the audience (e.g., partners health facilities, community health workers, affected communities, etc.).
- Routinely report surveillance data globally (including zero reporting) to contribute to the global monitoring of cholera transmission patterns.
- Train stakeholders on data interpretation and when to alert the presence of a potential outbreak.

5. Build capacity for sample collection and transportation and rapid diagnostic test (RDT) use

- Update or develop/disseminate job aids, standard operating procedures, training materials for RDTs, SOP for specimen collection and transportation, etc.
- Procure sufficient supplies (i.e., cholera RDTs, specimen collection kits and transport media) at all peripheral health care facilities.
- Update or develop testing protocols defining SOPs for cholera confirmation by RDT, culture and/or PCR.
- Adapt the testing strategies to account for specific situations (e.g., during outbreaks, intra-epidemic phase, seasonality, high endemicity or close to elimination).⁽⁵⁾

6. Build capacity for laboratory confirmation of suspected cases in cholera hotspots ⁽⁷⁾

- Strengthen laboratories to ensure they have the capacity to conduct culture or polymerase chain reaction (PCR) testing.
- Ensure that all hotspots have access to the needed laboratory capacity to screen suspected cholera cases and confirm the presence of *Vibrio Cholerae* with culture/PCR (e.g., establish procedures for access to reference laboratories, decentralize laboratories where relevant, add additional human resources focused on cholera, upgrade equipment or improve access to central laboratories).
- Update/develop multi-year training plans and roll out trainings on laboratory testing procedures and packaging/transport of samples.
- Provide sufficient hardware, reagent and supplies in all laboratories.
- Set up a reporting system to collect information on the number of tests performed and the procedures used to analyse samples.

7. Develop national reference laboratory capacity

- Consider pooling resources for a supra-national reference laboratory that integrates cholera and other diarrhoeal diseases or establishing/strengthening a national reference laboratory (e.g., identify location, trained staff, etc.) to reinforce technical and diagnostic capacity.
- Organize annual quality controls in reference and peripheral laboratories.

8. Establish collaboration with national and international reference laboratories

- Develop and implement a quality assurance programme at central and peripheral level.
- Establish cross-border communication and collaboration mechanisms between the reference laboratories of neighbouring countries.
- Establish a mutually beneficial partnership with an international reference laboratory for global epidemiology investigations and support for country priority capacity-building needs.

9. Establish/strengthen international collaboration

- Establish procedures for timely cross-border communication of cholera alerts.
- Promote elaboration implementation of coordinated cross-border early response measures.

10. Enhance surveillance during outbreaks

- In the affected area(s) and the area(s) at risk of spread, reinforce awareness on cholera case definitions and reporting procedures to support early detection and timely reporting, both at community level and health facility level.
- If reporting to district level is not weekly (at minimum), increase data reporting frequency (weekly or daily).
- Ensure adequate supplies are available (i.e., reporting forms, cholera RDTs, specimen collection kits and transport media) at all peripheral health care facilities, and ensure samples can be shipped and processed for confirmatory laboratory tests in a timely manner.
- Consider implementing active case findings in the population(s) at risk.
- Increase the periodicity of routine surveillance data analysis to closely monitor trends and promptly identify any population(s)/group(s) at risk.

GTFCC TOOLBOX & REFERENCES

5) Interim guidance document on cholera surveillance

<http://www.gtfcc.org/wp-content/uploads/2019/10/gtfcc-interim-guidance-document-on-cholera-surveillance.pdf>

6) Interim technical note on use of cholera rapid tests

<http://www.gtfcc.org/wp-content/uploads/2019/10/gtfcc-interim-use-of-cholera-rapid-diagnostic-tests.pdf>

7) Interim technical note on an introduction of DNA-based identification and typing methods to public health practitioners for epidemiological investigation of cholera outbreaks

<http://www.gtfcc.org/wp-content/uploads/2019/10/gtfcc-introduction-of-dna-based-identification-and-typing-methods-for-epidemiological-investigation-of-cholera-outbreaks.pdf>



B. Health care system strengthening

To reduce cholera mortality, individuals with cholera must have access to quality treatment as soon as symptoms appear. The health care system should be prepared to treat individual cases within the existing system, as well as have the capacity to scale-up treatment response in the event of an outbreak. The capacity to treat cholera cases within the existing system will reduce mortality and limit the spread of the disease. This includes the engagement of a cholera treatment network and the implementation of strategies ranging from home-based or community care through overnight stay structures with highly trained medical staff as soon as cholera is suspected. Depending on the context, the treatment network may need to be scaled-up during a cholera event or outbreak.

Strategic objective:

- To increase access to early effective treatment at community and health facility levels to reduce overall cholera deaths by 90%.

Proposed interventions to be included in an NCP:

1. Engage with communities to improve early access to treatment

- Building on existing programmes where possible, engage communities, including community leaders and traditional leaders, to develop locally adapted messaging, programmes and activities to help community members prevent and identify symptoms of cholera and the need to seek early treatment.
- Engage with communities to build trust among local health care service providers, in the use of Oral Rehydration Points (ORP) and Cholera Treatment Centres (CTC) and seeking early treatment.
- Train traditional healers and volunteers so they can identify cholera symptoms and encourage referrals to ORPs and CTCs.
- Collaborate with local media to promote knowledge and behaviours related to the identification of cholera symptoms, prevention and the need to seek early treatment.
- Develop the interpersonal communication and counselling skills of frontline health care workers (HCWs) to promote early treatment.

2. Build capacity of community health workers to identify, provide treatment and refer patients with suspected cholera

- Include cholera prevention and the identification, treatment and referral of patients with suspected cholera in the curricula of community health workers (CHWs).
- Train CHWs on standard infection prevention and control (IPC) and WASH measures to be implemented in homes and when to provide treatment to suspected cholera patients in the community.
- Develop the interpersonal communication and counselling skills of frontline CHWs to promote early treatment.
- Plan for and provide supplies in sufficient quantities throughout the year.
- Monitor and supervise CHWs and implement feedback sessions and refresher trainings.

3. Build capacity to treat patients at health care facility level

- Include identification and treatment of suspected cholera in the national responsibilities for health care workers (HCWs).⁽⁸⁾
- Develop a training plan for HCWs on cholera case management.
- Train HCWs on the standardized tools for health care-based data collection; ensure that they know what to report, to whom and at what frequency. Additionally, ensure that HCWs have the means to do this.
- Regularly develop and update all guidance, job aids, protocols and SOPs regarding triage, diagnosis, clinical management and IPC, including dead body management, etc.
- Distribute SOPs, protocols and job aids, and display them for easy access at all levels.
- Implement minimum WASH and IPC standards in health care facilities, including separate wards or units to isolate cholera patients from other patients, safe food preparation and safe waste disposal.⁽⁹⁾
- Implement annual supply plans to estimate supply and infrastructure needs at all levels and reassess regularly.
- Plan for, stock and manage supplies in sufficient quantities throughout the year in health care facilities at all levels, depending on the calculated need.
- Develop emergency response plans; identify sites where CTCs and ORPs can be established in the event of an outbreak, surge capacity and stock management.

4. Monitor and evaluate the interventions at community and health facility levels

- Integrate cholera into the existing supervision plans for the assessment of the quality of treatment given in hotspots.
- Assessments should include CHW supervision, supervision in health care facilities and supervision of cholera-specific treatment structures during emergencies. Prioritize supervision before and during known cholera seasons. Supervision should include:
 - Protocols and supplies available.
 - Timely access to appropriate rehydration methods.
 - Quality of treatment provided.
 - Identifying and correcting any delays of supplies arriving to the facilities, or delays to receiving treatments.
 - Availability and implementation of basic WASH and IPC.
- Implement feedback sessions and refresher trainings, considering the results of supervision.

5. Scale-up community engagement and access to treatment during outbreaks

- At the community level, reinforce messaging on cholera prevention and identification, including the importance of seeking care rapidly when symptoms appear. Messages should also include the location of treatment centres/facilities and information on all services put in place to respond to the outbreak.
- Prioritize capacity building in health care facilities where CHWs are trained on triage, diagnosis, case management supplies, IPC and reporting (as described above).
- Use surveillance data to identify areas to establish and maintain Cholera Treatment Centres (CTC) and Oral Rehydration Points (ORP) that are accessible to the most affected populations; organize appropriate patient flow in health care facilities and CTCs.^(10,11)
- Distribute treatment protocols, job aids, job descriptions and SOPs to all treatment facilities.
- Identify and support means of transport for patients in accessing care.
- Estimate and regularly reassess supply and infrastructure needs at all levels, including provision of adequate safe water and food, material for sanitation to cover the needs of patients, caregivers and staff.

- Identify, determine availability and train additional surge staff, including for WASH and IPC measures.
- Establish a plan for management of treatment facilities, including rotation of staff to ensure that all facilities are functional 24/7 during outbreaks.

6. Establish coordination mechanisms between health care providers

- Verify that treatment strategies and protocols are consistent and coherent at all levels of care provision and between all actors (state and non-state); this may be a sub-group of a broader coordination mechanism.
- Disseminate information on the location of different structures at all levels to facilitate referral of patients.
- Coordinate ambulance services for all health care providers/structures.



GTFCC TOOLBOX & REFERENCES

8) Technical note on the use of antibiotics for the treatment and control of cholera
<http://www.gtfcc.org/wp-content/uploads/2019/10/gtfcc-technical-note-on-use-of-antibiotics-for-the-treatment-of-cholera.pdf>

9) Technical note on water, sanitation and hygiene and infection prevention and control in cholera treatment structures
<http://www.gtfcc.org/wp-content/uploads/2019/10/gtfcc-technical-note-on-water-sanitation-and-hygiene-and-infection-prevention-and-control-in-cholera-treatment-structures.pdf>

10) Technical note on the organization of case management during a cholera outbreak
<http://www.gtfcc.org/wp-content/uploads/2019/10/gtfcc-technical-note-on-the-organization-of-case-management-during-a-cholera-outbreak.pdf>

11) Cholera kit content and calculation tool
<https://openwho.org/courses/cholera-kits>

C. Use of Oral Cholera Vaccine

OCVs should be used in selected cholera hotspots and during cholera outbreaks. The vaccines should always be used in conjunction with other cholera prevention and control strategies (e.g., case management, emergency WASH, etc.). In addition, in order to increase visibility of OCV and to have more efficient OCV campaigns, it is important to actively engage/collaborate with the Expanded Programme on Immunization (EPI) and to use/adapt relevant existing tools, such as for monitoring and evaluation, Knowledge, Attitudes and Practices (KAP) studies, risk communication strategies, etc.

Detailed guidance to support countries in implementing and monitoring OCV campaigns has been developed by the Global Task Force on Cholera Control.⁽¹²⁾

Strategic objectives:

- To implement preventive OCV campaigns in selected cholera hotspots and reach high coverage of target populations.
- To implement reactive OCV campaigns (when appropriate) in case of emergency and reach a high coverage of target population.

Proposed interventions to be included in an NCP:

1. Develop a request for preventive vaccination in selected hotspots

- Identify and set up a cross-disciplinary OCV planning team, including immunization, surveillance, case management, WASH and community engagement.
- Select hotspots that will be targeted for preventive OCV campaigns.
- Develop medium-term vaccination plans (phases for the duration of the NCP).
- Develop timelines of activities and identify key responsible parties, including identification of dates for each campaign, training of frontline workers, identify community networks to be mobilized, evaluate touchpoints to debrief on lessons learned, etc.
- Develop contingency plans for vaccination campaigns in unexpected locations, including identifying decision pathways for determining the use of OCV, preparation of readily available data for applications, etc.
- Submit requests (per phase) to the GTFCC Secretariat. The request should also include a detailed plan of WASH interventions.

2. Develop a request for a reactive vaccination campaign

Emergency requests can be initiated when a culture-confirmed cholera outbreak is reported in any given area, or in humanitarian crises where there are no cases but a high risk of cholera outbreak. The next steps are:

- Submit an [International Coordinating Group \(ICG\) request form](#) – duly filled and accompanied with [annexes](#) – to the ICG Secretariat.
- Develop and submit a vaccination plan and a map of areas to be vaccinated, including adjacent areas.
- Verify and confirm that an OCV campaign has not been conducted in the previous 3 years in the same area (with consideration for the quality of implementation of the campaign, vaccination coverage and population movement).

3. Implement vaccination campaigns in line with the approved request

a) Provide supplies and vaccines at all relevant levels⁽¹²⁾

- Calculate the quantities of vaccines and supplies needed by site, according to a calendar of implementation.
- Develop distribution plans for supplies and vaccines to reach health care facilities *five days prior* to planned vaccination dates.
- Ensure appropriate cold chain available when campaigns are conducted.
- Identify a process for reporting and requesting additional supplies and vaccines when stocks are running low.

b) Establish and train vaccination teams⁽¹³⁻¹⁴⁾

- Determine the composition and number of vaccination teams. Calculate:
 - ▶ The number of persons to be vaccinated per team and per day; and
 - ▶ The number of teams needed to cover target populations and for how many days these teams are needed.
- Develop a training plan for vaccination teams.
- Develop a plan for supervising and monitoring of OCV campaigns.
- Ensure that standardized tools for data collection are available at peripheral health care facilities and that the vaccination team is trained on reporting requirements.
- Identify and engage implementing institutions to assist in the roll-out of the OCV campaigns; assign roles and responsibilities.

c) Engage communities

- Before OCV campaigns, identify social, cultural, economic and other barriers to immunization; adapt vaccination strategies accordingly.
- Develop risk communication and community engagement micro-plans and materials that cover OCV characteristics; address vaccine hesitancy and the timing and locations of campaigns.
- Work with local media to ensure that misinformation and disinformation are not disseminated to the local population.
- Develop and conduct communications around the timing of vaccination campaigns and delivery strategies. Ensure that community engagement activities precede the roll-out of vaccinations and ensure that these activities continue during and after the vaccination period.

4. Conduct monitoring & evaluation activities⁽¹³⁾

- Ensure that vaccination teams are equipped and trained on vaccination data recording and reporting requirements during the campaign.
- Ensure formal planning and budgeting for post-campaign evaluations (e.g., coverage surveys, etc.).
- Collect and report³ all campaign data to national surveillance officers for further compilation at national level.
- Ensure that the standardized tools for *Adverse Event Following Immunization (AEFI)* action and reporting are available and that staff are trained on how to use them appropriately.
- Prepare contingency communication plan and materials in case of occurrence of AEFI or other negative reactions to the OCV campaign.
- Conduct a coverage survey that includes data collection on WASH conditions in communities targeted by the vaccination campaign.
- Conduct any other relevant M&E activities (e.g., effectiveness of alternative delivery strategies, cost-effectiveness studies, etc.), as needed.

³ Minimum data requirements include collecting information on the number of doses received and delivered, number of doses wasted, target population vaccine registers, and tally sheets for the second round.



GTFCC TOOLBOX & REFERENCES

12) Oral cholera vaccines in mass immunization campaigns, guidance for planning and use <https://apps.who.int/iris/handle/10665/44448>

13) Additional resources available on GTFCC website

- GAVI operational cost budget template
- Generic protocol for vaccine coverage (post-implementation) of a mass vaccination campaign with oral cholera vaccine
- Generic protocol for vaccine effectiveness post-implementation of a reactive mass vaccination campaign with oral cholera vaccine
- Information on monitoring and evaluation
- *Knowledge, Attitudes, and Practices (KAP)* surveys during cholera vaccination campaigns
- Monitoring and evaluation of AEFI during OCV mass vaccination campaigns
- OCV in mass immunization campaigns: guidance for planning and use
- OCV request form
- Request form to access ICG support & annexes <https://www.who.int/csr/disease/icg/cholera/en/>

14) Technical note on the evidence of the risks and benefits of vaccinating pregnant women with WHO pre-qualified cholera vaccines during mass campaigns <http://www.gtfcc.org/wp-content/uploads/2019/10/who-technical-note-evidence-of-risks-and-benefits-of-vaccinating-pregnant-women-with-who-pre-qualified-cholera-vaccines-during-mass-campaigns.pdf>

15) Cholera position paper

https://www.who.int/immunization/policy/position_papers/cholera/en/

D. Water, Sanitation and Hygiene (WASH)

WASH is the key intervention to long-term cholera control. The *Global Roadmap* contributes directly to SDG 6 (*Water and sanitation for all*), SDG 3 (*Good health and well-being*), SDG 2 (*Zero hunger*) and SDG 10 (*Reduced inequalities*) by targeting investments in WASH in cholera hotspots, which are indicators of poor WASH and sanitary conditions.

The WASH interventions to be implemented in cholera hotspots should be defined based on a baseline assessment of water, sanitation and hygiene conditions in the area.

Interventions and messages should be evidence-based, adapted to the local context and adapted to cultural practices of the population. Once interventions are identified, cost recovery and operation and maintenance (O&M) plans should be developed.

This section provides a set of interventions that can be considered by countries, depending on the prevailing situation in the hotspots. This section also provides a set of interventions that can be undertaken to prepare for and respond to cholera outbreaks, if necessary.

Strategic objective:

- Increase (to 80%) the portion of the population with access to basic plus⁴ water and basic sanitation services and hygiene promotion in all cholera hotspots.

Proposed interventions to be included in an NCP:

1. Improve access to water sources for all

- Assess and map existing water sources (i.e., availability, types, access, quantity of water, risk of contamination, etc.) in cholera hotspots. This should be done during the inception phase, but a more in-depth analysis could be required.
- Based on risk, it may be necessary to upgrade, rehabilitate existing or construct new water sources (e.g., boreholes, protected wells, protected hand pumps, protected springs, water tankers, water distribution systems [including taps in public institutions], communal or households, etc.). Improvement of water sources should provide equitable access to safe drinking water and align with international and national standards for sufficient water quantities (depending on the context).
- Conduct water treatment of all rehabilitated or newly constructed water sources using the most appropriate technical solution based on an analysis of the water parameter (at the source or point of use). Selection of the water treatment method can include filtration, disinfection or chlorination (bulk or batch chlorination).⁵ The use of pre-treatments such as sedimentation, flocculation and coagulation may be required to remove suspended particles and reduce turbidity before disinfection or chlorination. Combining treatments (used together, either simultaneously or sequentially) will increase the effectiveness.

⁴ Access to basic plus water is defined as an improved facility within 30 minutes (round trip collection time) and low-cost water treatment to ensure safety.

⁵ Highly turbid water, at source, should not be chlorinated.

- Consider household water treatment (HWT) methods (at point of use, at the tap, vessels or storage containers).⁶ These include boiling, disinfection, chlorination and filtration. Ensure safe transport and storage of the water that has been treated to avoid contamination.
- Implement water quality monitoring and surveillance to regularly measure free residual chlorine (FRC). Consider putting in place Water Safety Plans (WSP) to support the water quality monitoring and surveillance.

2. Improve access to sanitation

- Support efforts to stop open defecation and work with communities to decrease the risk of contamination from open defecation. This can include cleaning and decommissioning of areas used for open defecation.
- Upgrade and rehabilitate existing and/or construct new sanitation and wastewater infrastructure (e.g., latrines, toilets, bathing units, sewage systems, etc.). All sanitation infrastructure must be accompanied by hand washing facilities with soap and water. When upgrading, rehabilitating or constructing sanitation infrastructure, ensure that facilities are available for females and males, and that they are “disability friendly.”
- Support desludging and safe disposal of excreta from existing latrines and toilets (e.g., in public institutions, communities and households).
- Provide hygiene equipment at local level.
- Plan community cleaning campaigns, including emptying of open drainages (particularly in urban areas) to promote and limit risks of vectors and stagnant water.

3. Improve health and hygiene practices

- Use formative research, including *Knowledge, Attitudes and Practices (KAP)* surveys and qualitative data to identify local risk, beliefs and practices.
- Conduct a behaviour analysis using appropriate guidance on behaviour change.
- Develop a hygiene promotion strategy defining key messages, target audience and communication channels. Participatory methods should be implemented to disseminate the hygiene promotion strategy. Key health and hygiene

messages should be tailored to different target groups through a diverse range of communication channels and methods using local languages and visual aids.

- Promote access to hygienic items that support good hygiene practices such as soap, cleaning and disinfection materials.

Relevant to the all the interventions described above:

- Assess and review capacity development plans related to the WASH sector. This should identify training and learning opportunities required for the broad range of stakeholders supporting the WASH sector (e.g., national and local governments, international partners, service providers, communities etc.).
- Consider Operation and Maintenance (O&M), proper management and cost recovery when developing plans for the WASH sector. This includes an analysis of financial viability and sustainability using tools (such as perception surveys) for willingness to pay and affordability.

4. Provide access to WASH infrastructure and promote good hygiene behaviours during outbreaks

- Provide temporary WASH infrastructure (e.g., water distribution systems, temporary bladders, water tanks and trucking, distribution of water treatment products, latrines or toilets, hand washing stations, etc.) in quality and quantity, per international standards. This should be accompanied by water quality monitoring and surveillance.
- Conduct mass communication campaigns (focused on key health and hygiene messages) to promote best practices using participatory methods. The messages should be tailored to different target groups, therefore use a diverse range of communication channels and methods and use local languages and visual aids. The key messages can include: the risks associated with the disease, disease transmission, importance of safe water, excreta disposal and handwashing at critical times. The mass communication campaigns should be conducted by trained personnel and community leaders.
- Promote or distribute hygienic items (adapted to the local context) that support good hygiene practices. These items should include soap, cleaning and disinfection materials (as needed). This should be accompanied by demonstrations performed by trained personnel and community leaders to illustrate the proper use of distributed items for households.

⁶ HWTS product selection should be based on water source parameters, availability, skill level of users and ease of use, acceptability, O&M and cost.

- Implement Post Intervention Monitoring (PIM) for all interventions conducted. A monitoring and reporting system should be put into place.



GTFCC TOOLBOX & REFERENCES

16) Technical guidance on integration of WASH and community engagement activities with OCV campaigns Draft (Sep. 2019), available at GTFCC secretariat

E. Community engagement

The engagement of populations is critical for the prevention of cholera and to ensure quick response to outbreaks when they occur. Communities should be made aware of the best ways to protect themselves and their relatives, and an enabling environment should be put in place to allow those protective behaviours to emerge. Community engagement focuses on empowering communities and their social networks to reflect on and address a range of behaviours, cultural and contextual factors, and decisions that affect their lives and encourage proactive involvement in their development. This can be done through strategies that span across health promotion, social mobilization, risk communication and behaviour change communication. Furthermore, by identifying barriers that impede the uptake of interventions, teams can better tailor activities to the needs of each community. Community engagement should be embedded into all the pillars of the NCP. This section addresses specific activities related to social mobilization and communication. The strategic objective and proposed interventions to be included in the NCP for this pillar are as follows:

Strategic objective:

- To further engage communities in cholera prevention and control to stop community-level transmission.

Proposed interventions to be included in an NCP:

1. Identify at-risk and vulnerable groups and understand the community beliefs and behaviours in cholera hotspots

- Identify community stakeholders and key leaders to begin consulting and engaging as part of the development process.
- Engage with communities through participatory processes, including involving them in the design of preparedness and response activities.
- Develop an understanding of community beliefs and behaviours toward cholera through informant interviews and focus group discussions.
- Ensure that community engagement strategies include the most marginalized, disabled and at-risk people.

2. Engage communities, establish and maintain relationships

- Develop regular check-ins for community engagement focal points and key stakeholders – across all pillars – to avoid silos.
- Develop processes to ensure strong collaborations between CHWs and HCWs.
- Conduct assessments and revise community engagement messages and materials.
- Establish and manage a systematic community feedback mechanism, i.e., collect and analyse the views of communities to regularly adapt strategies and ways of working.

3. Develop and distribute materials communicating goals and objectives

- Identify key community engagement and communication entry points to promote cholera prevention using a variety of communication channels.
- Based on contextual analysis, develop an understanding of priority behaviours and groups at-risk, and foster harmonized approaches to communicate with and involve affected populations.
- Distribute suggested materials for local adoption by all stakeholders, including HCWs, CHWs and community leaders. It is critical that stakeholders use the same messages to avoid confusion and mistrust.
- Engage with the community to ensure that the burials of people who die of suspected cholera adhere to/respect local customs without being a potential source of transmission (safe and dignified burial).
- Ensure that the identification and targeting of cholera-affected populations does not generate stigma or discrimination. Use information and dispel myths and rumours to protect more vulnerable populations from harm.
- Develop suggested media (e.g., radio, TV and social media) and print materials.

4. Strengthen risk communication and community engagement during outbreaks

- Build on existing programmes to understand local knowledge and behaviours toward cholera of communities affected by the outbreak and adapt messages accordingly.
- Involve and engage the community in the outbreak response through community leaders and influencers identified as part of the NCP implementation. Consider setting up local task team(s) composed of community representatives and leaders to interact with response teams.
- Provide real time information to the communities at risk of cholera (based on a risk assessment). Information should include how to reduce the risk of spreading the disease, how to take personal protective and preventive measures and how to proceed if someone gets sick. It should be easily understood, complete and free of misleading information.
- Communicate in a proactive and transparent manner to the public using a mix of preferred channels of populations affected by the outbreak (e.g., TV, radio, SMS, internet, social media, mass awareness initiatives and social mobilization). An open flow of information will avoid the spread of rumours.

MONITORING AND REPORTING

A continual monitoring and evaluation process should be put in place to measure progress of the implementation of the National Cholera Control Plan. Each NCP should include a monitoring and evaluation plan with a detailed set of indicators tailored to the activities included in the operational plans.

This monitoring and evaluation process should include regular updates (at least quarterly), periodic in-depth reviews (annually), as well as other monitoring and evaluation methods (such as simulation exercises and after-action reviews). The regular updates and periodic reviews should be led by the NCP coordination body.

In addition to the NCP monitoring and evaluation plan that should be put in place, the **GTFCC will collect indicators and report on progress toward the *Global Roadmap*** at its annual meeting. The indicators to be reported annually are the following:

A. Coordination

Indicator 1 – Proportion of the NCP which is funded through domestic and external funding

Definition and use: Measures the level of funding of the national cholera plan for elimination or control by the government and/or external partners.

Numerator: Amount of funding received from donors and allocated by the government (respectively) for implementation of the national cholera plan for elimination or control.

Denominator: Total budget of the national cholera plan for elimination or control.

Target: 100%.

Source: Country information on resources allocated to the NCP/budgeted NCPs.

Indicator 2 – Number of multisectoral meetings held annually by the NCP coordination body

Definition and use: Measures the functionality of the coordination mechanism. During these meetings, at least 75% of the NCP Committee members – representing at least 3 pillars – should be present. A meeting agenda and meeting minutes should be readily available.

Numerator: Number of multisectoral meetings related to the monitoring of NCP implementation conducted over the past 12 months.

Denominator: N/A

Target: Quarterly meetings (at minimum).

Source: Country data.

B. Surveillance and reporting

Indicator 3 – Incidence rate of suspected cholera

Definition and use: Incidence rate of suspected cholera in the country (over the preceding 12 months).

Numerator: Number of suspected cases of cholera reported.

Denominator: National population.

Target: As set in the national cholera control programme.

Source: National-level cholera surveillance data.

Indicator 4 – Proportion of cholera signals verified within 48 hours of detection

Definition and use: Measure a country's ability (over the preceding 12 months) to quickly verify signals of suspected cholera. Verification is the proactive cross-checking of the validity (veracity) of the signals collected by EWARS, by contacting the original source, additional sources, or by performing field investigation. Verification requires that hoaxes, false rumours and artifacts are eliminated from further consideration.

Numerator: Number of cholera signals detected (verified) within 48 hours.

Denominator: Number of cholera signals detected.

Target: 90%.

Source: National-level cholera surveillance data.

Indicator 5 – Proportion of peripheral health facilities (PHF) located in cholera hotspots with access to functional laboratory

Definition and use: Measure a country's ability (over the preceding 12 months) to quickly confirm cholera via laboratory methods.

Numerator: Number of PHF in all hotspots with access to functional laboratories for cholera confirmation.

Definitions:

- Access is defined by the capacity for delivery of viable clinical specimens from investigation of a suspected cholera event to a functional laboratory within 48 hours of collection for confirmatory testing.
- Functional laboratories:
 - Must have current accreditation according to national regulations.
 - Reports no out-of-stocks of reagents and supplies for more than 2 weeks in a one-year period.
 - Capable of turnaround time for communicating test results within 2 to 4 days of specimen reception at the laboratory.

Denominator: Total number of PHF in hotspots.

Target: 95%.

Source: Country surveillance data, laboratory data, surveys and assessments conducted during supervisory visits.

C. Health care system strengthening

Indicator 6 – Number of deaths from cholera

Definition and use: Number of deaths attributed to cholera in the country (over the preceding 12 months).

Numerator: Number of cholera deaths in the country reported from both health care facilities and from the community (over the preceding 12 months).

- At facility level (sub-indicator A).
- At community level (sub-indicator B).

Denominator: N/A

Target: 90% reduction of absolute (or average) annual mortality figures (nationally).

Source: National level cholera surveillance data, breakdown of deaths reported in the community and deaths reported in the facilities at whatever administrative level available and surveys in Cholera Treatment Centres and Oral Rehydration Points.

Indicator 7 – Case fatality ratio in treatment centres

Definition and use: Proportion of suspected cholera patients who die of cholera in a treatment structure (over the preceding 12 months).

Numerator: Number of deaths attributed to cholera in treatment structures (over the preceding 12 months).

Denominator: Number of patients with suspected cholera treated in the same structures (over the preceding 12 months).

Target: <1%.

Source: National-level cholera surveillance, databases or reports from health care facilities, including specific cholera treatment structures.

Indicator 8 – Proportion of the population living in hotspots who have access to ORS within a 30-minute walk from their home

Definition and use: Proportion of the population with rapid access to ORS for cholera suspected cases in health care facilities or via community members/volunteers and community health workers.

Numerator: Number of people living in hotspots with access to ORS within a 30-minute walk from their home.

Denominator: Total population in cholera hotspots.

Target: 100%.

Source: Surveys in hotspots (in conjunction with other pillars), national data on health care access and health workforce.

D. Use of Oral Cholera Vaccine

Indicator 9 – OCV administrative coverage in hotspot areas vaccinated (over the preceding 12 months)

Definition and use: OCV administration coverage implemented (over the preceding 12 months).

Numerator: Total number of doses administered for round 1 and 2 in the reporting year.

Denominator: Total number of persons targeted by the OCV campaigns (round 1 and 2).

Target: 95%.

Source: OCV post-campaigns reporting.

Indicator 10 – Proportion of hotspots targeted by the vaccination plan (in the reporting year) that have been vaccinated

Definition and use: Measure the reach of OCV in the country.

Numerator: Number of hotspots administrative units that have been vaccinated during the reporting year.

Denominator: Number of hotspots administrative units targeted by the vaccination plan during the reporting year.

Target: 100%.

Source: Reports of vaccination campaigns.

Indicator 11 – Proportion of emergency versus total OCV doses administered (over the preceding 12 months)

Definition and use: Measure the proportion of doses used in campaigns to respond to an outbreak compared to doses administered during preventive campaigns.

Numerator: Number of doses administered in the context of an outbreak.

Denominator: Total number of OCV doses administered (over the preceding 12 months).

Target: N/A

Source: Campaign reports, OCV requests.

E. Water, Sanitation and Hygiene

Indicator 12 – Proportion of people with access to safe water in hotspots

Definition and use: Measures the proportion of people with access to **basic plus water** in cholera hotspots. Access to basic plus water is defined as an improved facility⁷ – within 30-minutes round trip from a person's home – including collection time and low-cost water treatment to ensure safety.

Numerator: Number of people living in hotspots with access to basic water.

⁷ Improved sanitation facilities are those designed to hygienically separate excreta from human contact.

Denominator: Total number of people living in hotspots.

Target: At least 80% access to water in hotspots.

Source: National cholera programme, surveys in hotspots, OCV coverage surveys.

Indicator 13 – Proportion of people with access to sanitation in hotspots

Definition and use: Measures the proportion of people with access to **basic sanitation** in hotspots. Access to basic sanitation is defined as the use of an improved facility that is not shared with other households.

Numerator: Number of people living in hotspots with access to basic sanitation.

Denominator: Total number of people living in hotspots.

Target: At least 80% access to basic sanitation in hotspots.

Source: National cholera programme, surveys in hotspots, OCV coverage surveys.

Indicator 14 – Proportion of people with access to hygiene in hotspots

Definition and use: Measures the proportion of people with access to **basic hygiene** in hotspots. Access to basic hygiene is defined as the availability of a handwashing facility on premises with soap and water.

Numerator: Number of people living in hotspots with access to basic hygiene.

Denominator: Number of people living in hotspots.

Target: At least 80% access to basic hygiene in hotspots.

Source: National cholera programme, surveys in hotspots, OCV coverage surveys.

F. Community engagement

Indicator 15 – Proportion of trained focal points to support community engagement and cholera prevention and treatment per inhabitants in hotspots

Definition and use: Measures the availability of trained focal points in hotspots that can promote relevant behaviours for cholera prevention and control. Focal points can be a volunteer, a community health worker, a community leader or any other community member.

Numerator: Number of trained focal points to support community engagement and cholera prevention and treatment in hotspots.

Denominator: Total population in hotspots.

Target: TBD.

Source: Training lists, surveys.

Indicator 16 – Proportion of the population in hotspots who have correct knowledge on cholera prevention in communities

Definition and use: Proportion of the population living in hotspots who know how to prevent the transmission of cholera and actively implement these practices.

Numerator: Population in hotspots who have correct knowledge regarding cholera prevention.

Denominator: Total population of hotspots.

Target: 100%.

Source: KAP surveys, OCV coverage surveys, observational studies.

APPENDIX 1:

NATIONAL CHOLERA PLAN: SUMMARY OF INCEPTION AND DEVELOPMENT PHASES

Inception

ACTIVITIES	DESCRIPTION	OUTPUTS
Country commitment	Alignment with the <i>Global Roadmap</i> ; multisectoral, comprehensive and linked with health system framework	<ul style="list-style-type: none"> • Formal political, technical & financial engagement • Situational analysis conducted • Coordination mechanisms identified • Formulation of national goal
Hotspots identification	Identification of priority areas for intervention based on historical incidence and persistence of cholera; ponderation based on contextual factors and WASH situation	
Capacity assessment	Quick review of capacities across the five NCP technical pillars	
Stakeholder analysis & mapping of existing activities	Identification of roles and responsibilities of national stakeholders in cholera prevention and control activities	
Identification of coordination mechanisms	Inclusive of all relevant ministries and stakeholders; accountable to the highest level; establish national reporting lines across different sectors	

Development of NCP

PILLARS	STRATEGIC OBJECTIVES	OUTPUT
Surveillance & reporting	<ul style="list-style-type: none"> To timely detect all signals potentially related to cholera through all relevant sources, investigate and verify these signals in a timely manner (i.e., within 48 hours) to allow for timely implementation of full control measures (i.e., within five days of laboratory confirmation) To maintain, regularly update, analyse and share datasets at each administrative area (down to same level used for hotspots). This data collection should be integrated into existing surveillance systems and include a "zero reporting" feature 	<ul style="list-style-type: none"> Operational plan by pillar costed Timeline & responsible stakeholders identified
Health care system strengthening	<ul style="list-style-type: none"> To increase access to effective treatment at community and health facility levels to reduce overall cholera deaths by 90% 	
Use of cholera vaccine	<ul style="list-style-type: none"> To implement preventive OCV campaigns in selected cholera hotspots and reach high coverage of target populations To implement reactive OCV campaigns (when appropriate) in case of emergency and reach a high coverage percentage of the target population 	
Water, sanitation and hygiene (WASH)	<ul style="list-style-type: none"> To increase to 80% the portion of the population with access to basic plus water and basic sanitation services and hygiene promotion in all cholera hotspots 	
Community engagement	<ul style="list-style-type: none"> To further engage communities in cholera prevention and control to stop community-level transmission 	

APPENDIX 2:

PARTNERS RESOURCES AVAILABLE TO COUNTRIES

Below is a list of guidance developed independently by partners that can be used as resources in the NCP development process.

1. ACF (2013) Cholera Manual (French)
2. ACF (2005) Water, sanitation and hygiene for populations at risk
3. IFRC Hygiene promotion in Emergency guidelines
4. IFRC community engagement and accountability toolkit
5. IFRC Community Based Health and First Aid (eCBHFA)
6. IFRC Community Based Surveillance
7. MSF (2017) Management of a cholera epidemic
8. MSF (2010) Public health engineering in precarious situations
9. Oxfam: Cholera outbreak guidelines: preparedness, prevention and control
10. Sphere Humanitarian charter and minimum standards in humanitarian response
11. UNICEF: Cholera Toolkit
12. UN Water: Integrated Monitoring Guide for Sustainable Development Goal 6 on Water and Sanitation: Targets and global indicators.
13. WHO and UNICEF: Water and sanitation for health facility improvement tool (WASH FIT).
14. WHO Guidelines on Sanitation and Health
15. WHO: Water Safety Planning – A roadmap to supporting resources
16. WHO: Communicating risk in public health emergencies
17. WHO Guideline for the implementation of OCV campaigns

APPENDIX 3:

SWOT ANALYSIS

The template below provides examples of areas to be considered when identifying “strengths, weaknesses, opportunities and threats” for each of National Cholera Control Plan pillars.

AREA	OVERALL IMPORTANCE (high/medium/low)	STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS
Status of the current system, facilities and functionality (review existing assessments, national policies, SOPs, guidelines, etc.)					
Availability of funding to undertake critical activities					
Availability of human resources to undertake activities included in the plan					
Integration with activities of the other pillars					

APPENDIX 4:

STAKEHOLDER ANALYSIS

The objectives of a stakeholder analysis are to identify all relevant actors that can contribute to the elaboration and implementation of your plan and to assess their level of engagement and interest in order to develop an effective communication and engagement strategy.

The figure below can be used to assess the level of engagement required with the identified stakeholders. The commonly used parameters are the level of interest and level of influence of the stakeholders.

The stakeholder matrix presented below gives an indication of the engagement strategy that is useful for each group of stakeholders.

INFLUENCE OR POWER	High influence, low interest Keep in mind the objectives/areas of interest of these stakeholders and try to keep them satisfied.	High influence, high interest Build and keep a strong relationship with these stakeholders throughout the planning and implementation process. These stakeholders will be key to achieve the expected outcomes.
	Low influence, low interest Monitor the activities of these stakeholders regularly and keep them in the communication loop without specific outreach.	Low influence, high interest Keep these stakeholders informed of your goals and progress to improve chances of success.
		INTEREST

