



# Initial assessment and multisectoral response to control a cholera outbreak

# Initial assessment



# Field investigation

## 1. Review the registers at the health facilities

- Check the register for identifying potential previous cases
- Collect data of suspected cholera per age group and week, from the register
- Try to collect data from at least one month prior to the first suspected cases to identify when the number of cases increased
- Collect data on where patients live when available

## 2. Examine patients and review clinical management

## 3. Collect laboratory specimens to confirm the diagnosis

## 4. Review water, sanitation and hygiene, and IPC measures at the HF level

## 5. Conduct a community WASH investigation

## 6. Conduct active case finding, social mobilization and community engagement

## 7. Conduct HH visits and interviews

## 8. Conduct risk and needs assessment



# What's a Risk assessment ?

## Likelihood of transmission

- Access to safe water and sanitation ?
- Population behavior ? and gender related barriers for WASH and Health
- Geographical, environmental and climate conditions ?
- Areas with high population density ?

## Potential impact of the disease

- Availability of health services and functional status of health system?
- **Existing cholera preparedness ?**
- Access to treatment (ORS, intravenous fluids) ?
- Capacity of health care workers to provide case management ?
- Supplies available ?
- Health seeking behaviors ?
- Malnutrition status ?
- Population immunity (previous exposure to cholera, previous cholera vaccination) ?

Water sources used?  
Chlorination ?  
Open defecation?  
Handwashing ?  
...

Slums ?  
Camps for refugees or In-Displaced Population ?  
Areas with high transit of people ?



# Tools available for assessing the situation

- Preparedness plan to cholera epidemics
- Cholera national plan
- E-Dews and community-based surveillance
- KABP surveys
- Partner surveys done in the area
- Humanitarian reports
- Press/ newspapers
- Etc....

Existing data

## Formats:

- Polling through cellphones
- Hotlines/ call centres
- Social media pages,
- Surveys
- Focus group discussions.
- Information Feedback Centres

## Community-Based Feedback Mechanisms:

- Iterative tuning of programmatic responses
- Epidemiological intelligence
- Feedback from the Health cluster partners, and local NGOs

The Accountability to Affected Populations (AAP)



# Group Exercise Scenario 2

You will be divided into breakout rooms.

- The following link will be sent to you

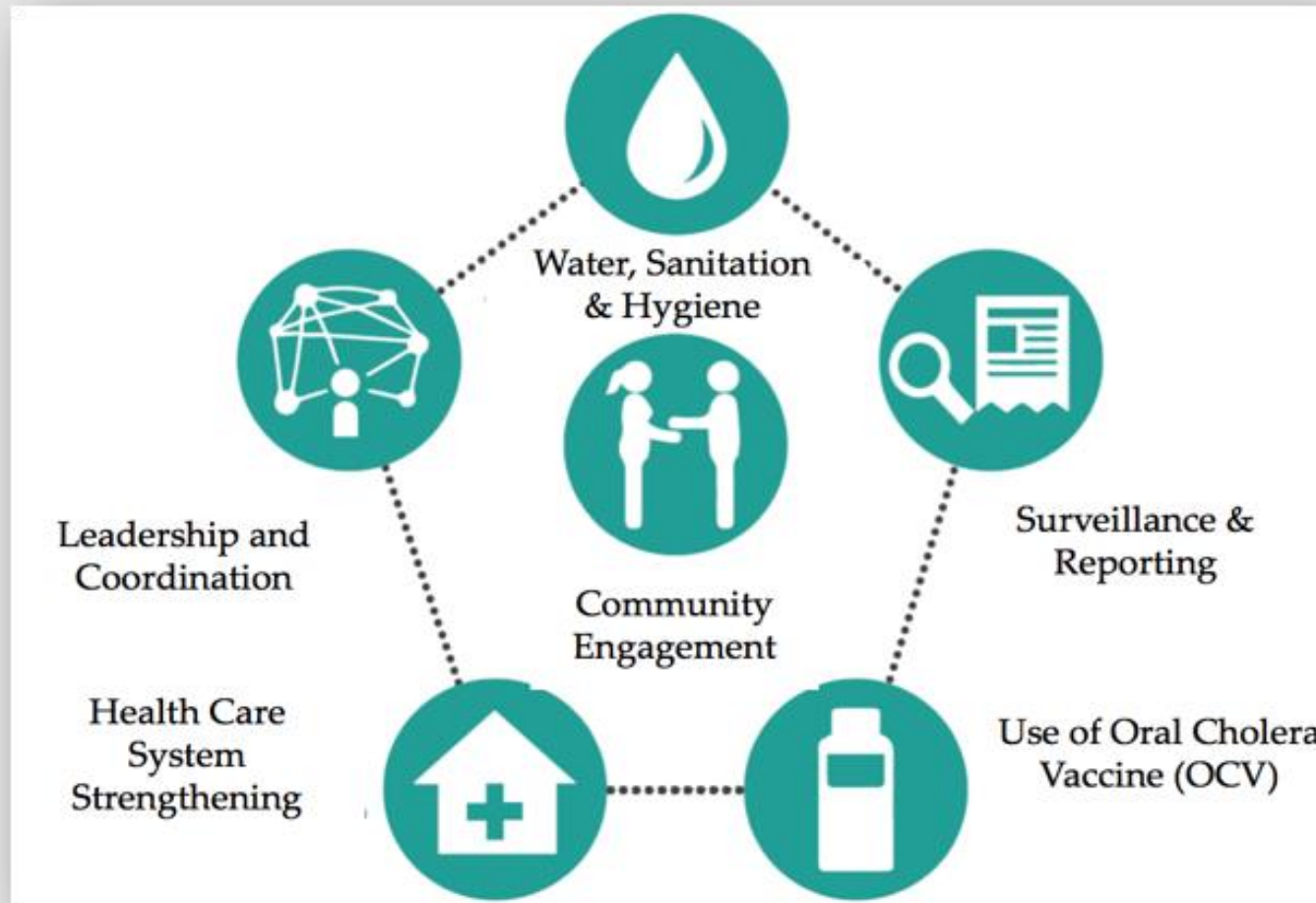
## **Scenario Two : The Onset?**

[https://docs.google.com/forms/d/e/1FAIpQLSf3WSS5WOzOzXPA8JVPgevlgUc8-GubDRT8KwiQ8uvLrGtsaA/viewform?usp=pp\\_url](https://docs.google.com/forms/d/e/1FAIpQLSf3WSS5WOzOzXPA8JVPgevlgUc8-GubDRT8KwiQ8uvLrGtsaA/viewform?usp=pp_url)

- Read the scenario, discuss the questions and be ready to report back

# Break

# Axis 1: A multisectoral approach to cholera response

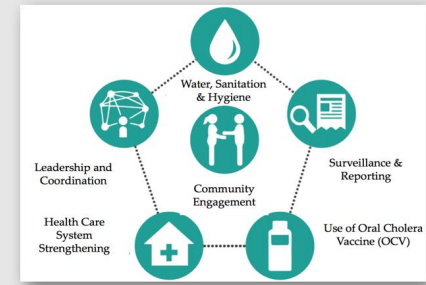


## Gender dimension influence all 5 pillars

- restricted mobility affect reporting
- Need for female staff or separate units
- Concerns about fertility risks of OCV
- Biological needs for WASH



# Surveillance

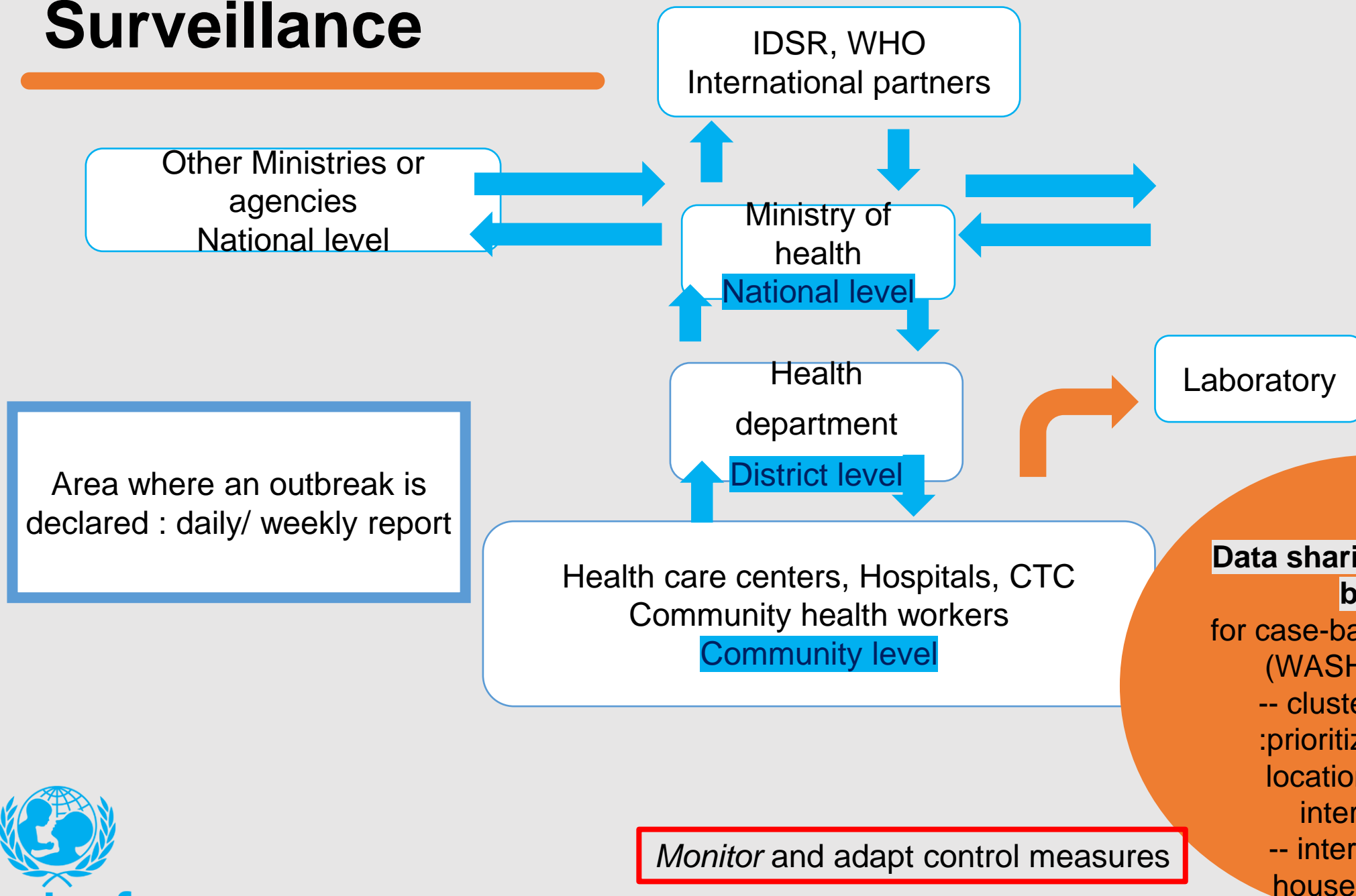
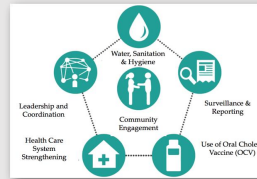


- Health facility-based surveillance  
Cholera line list at CTU/CTC level
- **Community based surveillance**
- **Laboratory surveillance**

- Lab confirmation by culture or PCR for each new area affected by the outbreak
- Periodic sampling of suspected cases (RDT+ or severe dehydration) per inpatient health facility
- For large/nation wide outbreak, use a representative number of Health Facilities (sentinel sites). Representative of the main affected areas

- **Real-time data collection and analysis**

# Surveillance



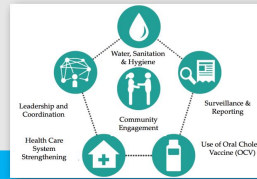
**Data sharing on a daily basis**

for case-based response (WASH strategy)  
-- cluster of cases  
:prioritize affected location for rapid intervention  
-- intervention at household level

**Monitor and adapt control measures**

# Case Management

Ensure patient social support and family reception linked to psychosocial (SBC/RCCE/PSY team)



## Within the community (Level 1)

### Oral rehydration Point (ORP) or Oral Rehydration Corner (ORC)

- No beds
- Located at community level
- Dedicated to people with mild/moderate dehydration
- Provision of ORS (and Zinc)
- Screening for severe dehydration : referral

## Small health facility (Level 2)

- Small health facility/ dispensary
- 1-5 beds
- May contain an ORC and a room with a small number of dedicated beds for occasional severe patients

## Cholera treatment Unit (CTU) (Level 3)

- 10-20 beds
- Settled when there are long distances between communities (decentralized facility)
- Located inside a health facility or close by
- In- cholera patient facility separated from others
- ORC + full range of treatment including for severe dehydration

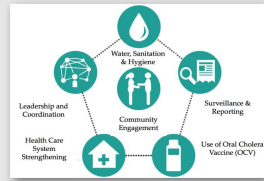
## Cholera treatment centre (CTC) (Level 4)

- Hospital based or distinct site
- 25- 200 beds
- Ideally constructed in a hospital compound
- Dedicated facility for cholera patients
- ORC + full range of treatment including for severe dehydration and additional medical complications (i.e malnutrition)
- Usually in urban areas where there are a large number of cases
- Stool sample collection, safely package and adequately label samples for transport to a laboratory

Should be trained on IPC, on prevention of cholera, to protect themselves, to prevent transmission at the treatment site and to provide information on prevention of cholera for the community




# Reactive Oral Cholera Vaccination - OCV

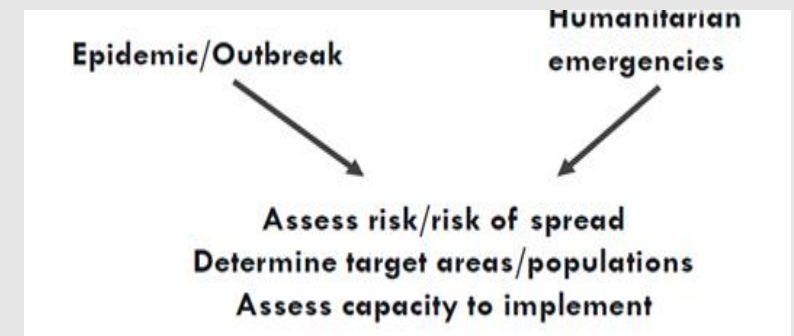


Series of criteria to guide the decision to vaccinate during epidemics

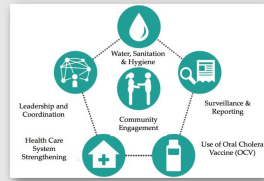
- The **risk of cholera among the targeted populations** and the **risk of geographic spread**
- The **programmatic capacity** to cover as many persons as possible who are eligible to receive the vaccine and living in the targeted area (e.g. those aged  $\geq 1$ )
- **Implementation of previous OCV campaigns.** Cholera vaccination should not be carried out if a campaign has been conducted in the previous 3 years in the same population, unless justified by continuous transmission resulting from inadequate vaccine coverage during the previous campaign and/or substantial population movements.



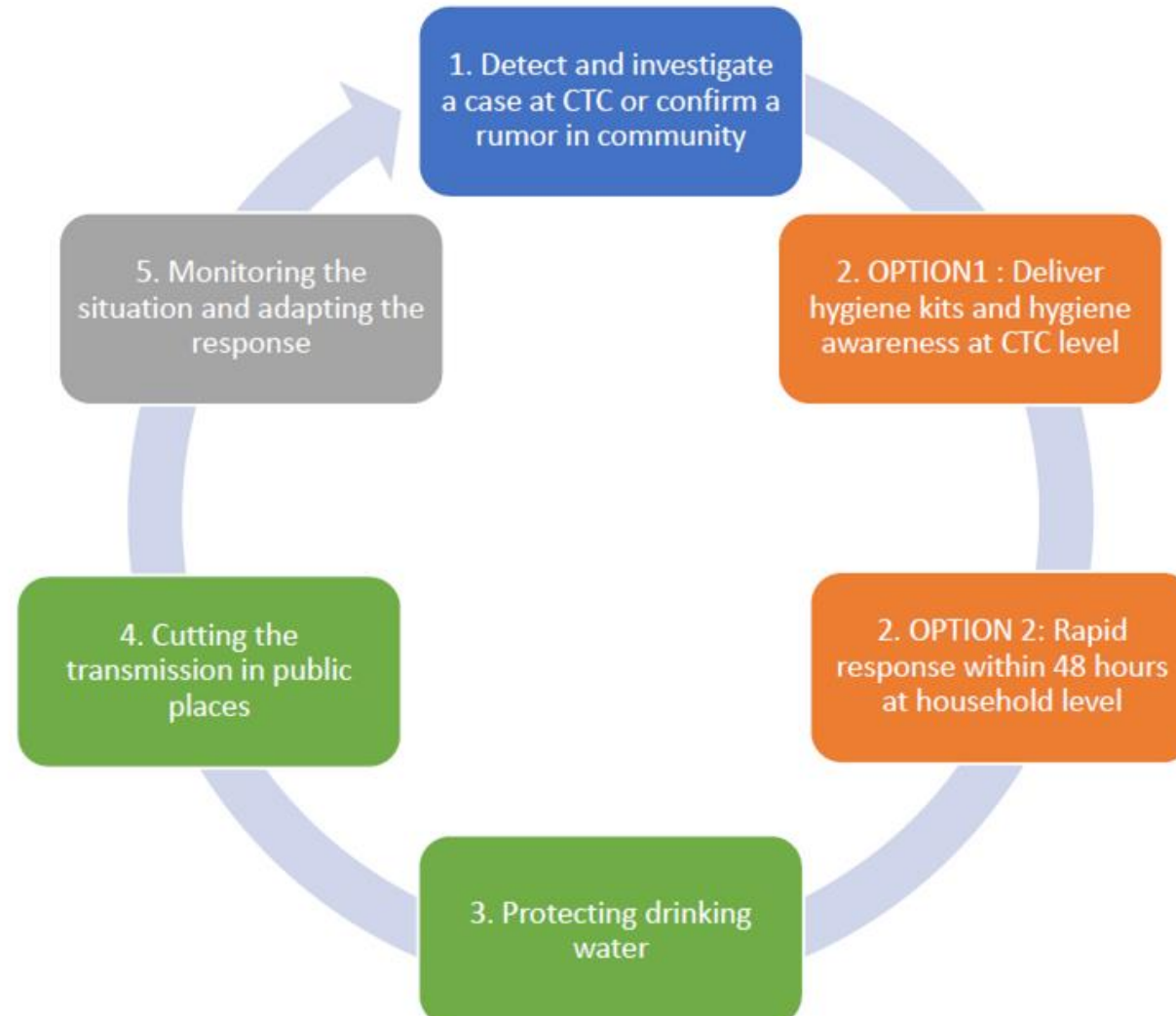
Vaccination should be **ALWAYS** done in conjunction with other cholera prevention and control strategies



# Water, Sanitation and Hygiene



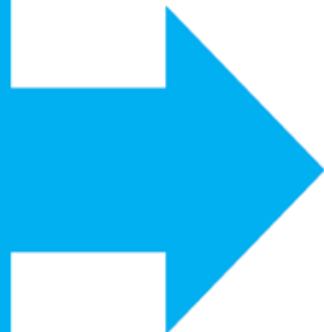
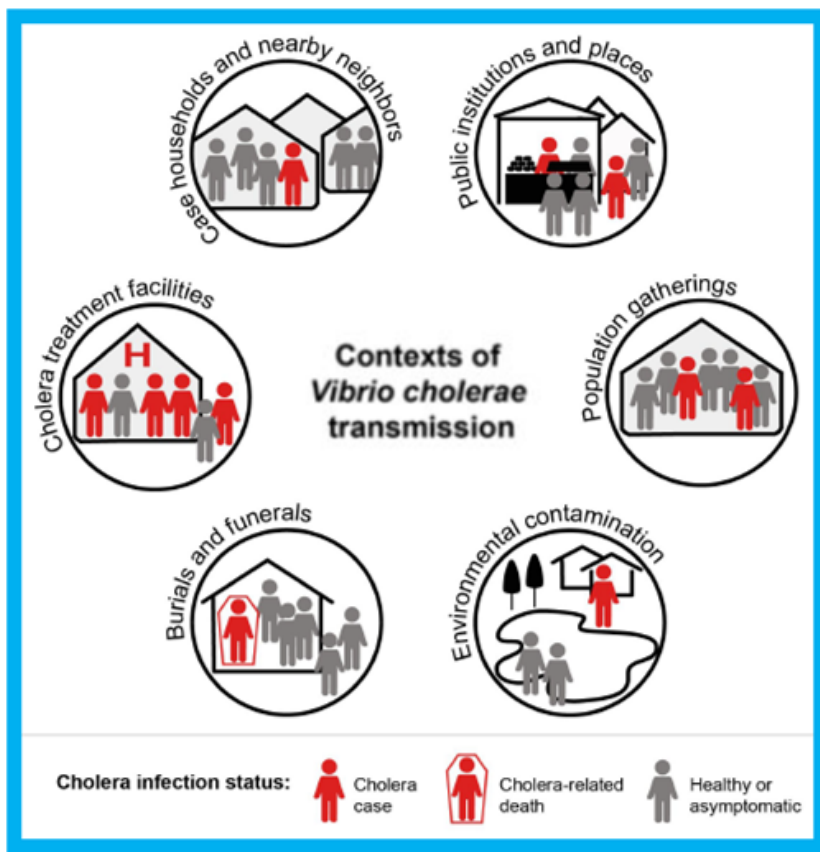
Blended approach to control cholera outbreak: **targeted interventions** coupled with **community-wide actions**.



Source : Pierre-Yves Ogier, UNICEF cholera webinars 2023.

# Outbreak control: Tailored WASH response packages (1/3)

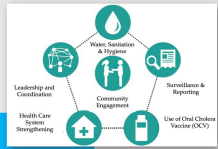
Cholera control measures must be tailored according to the local disease transmission contexts as well as the at-risk populations and practices, which may evolve over the course of an epidemic.



**For each context of transmission:**

- 1 Dedicated WASH packages**
- 2 Specific service delivery mechanisms**

# Package for Water, Sanitation and Hygiene (1)



## Improved access to safely managed water

- Chlorination of water sources and distribution systems or networks
- 'Quick fixes' to existing water infrastructure
- Temporary measures for provision of safe water (e.g. installation of emergency distribution tanks and/or water, trucking schemes)
- Distribution of water treatment products and safe water storage containers
- Water quality monitoring and surveillance

## Improved access to safely managed sanitation and clean environment

- 'Quick fixes' to existing sanitation and wastewater infrastructure
- Cleaning and decommissioning of areas used for open defecation
- Upgrading, cleaning and emptying pit latrines (HH, communal or institutional)
- Temporary measures for provision of sanitation facilities including cleaning and maintenance in public places (i.e. communal or institutional)
- Community cleaning campaigns supported by rapid response teams, community health workers, community influencers and leaders



# Package for Water, Sanitation and Hygiene (2)



## Improved health and hygiene practices

- Household visits conducted by rapid response teams, community health workers, community influencers and leaders
- Installation and maintenance of hand washing stations, with soap and water (public places, institutions, vaccination sites)
- Provision of hygiene items, including soap, water treatment products, disinfection materials (e.g. cholera kits)

## Community engagement

- Training of rapid response teams, community health workers, community influencers and leaders
- Community awareness campaign conducted by rapid response teams, community health workers, community influencers and leaders
- Dialogue and engagement with key stakeholders for the planning, implementation and monitoring





# Water, Sanitation and Hygiene : Service delivery mechanisms (1)



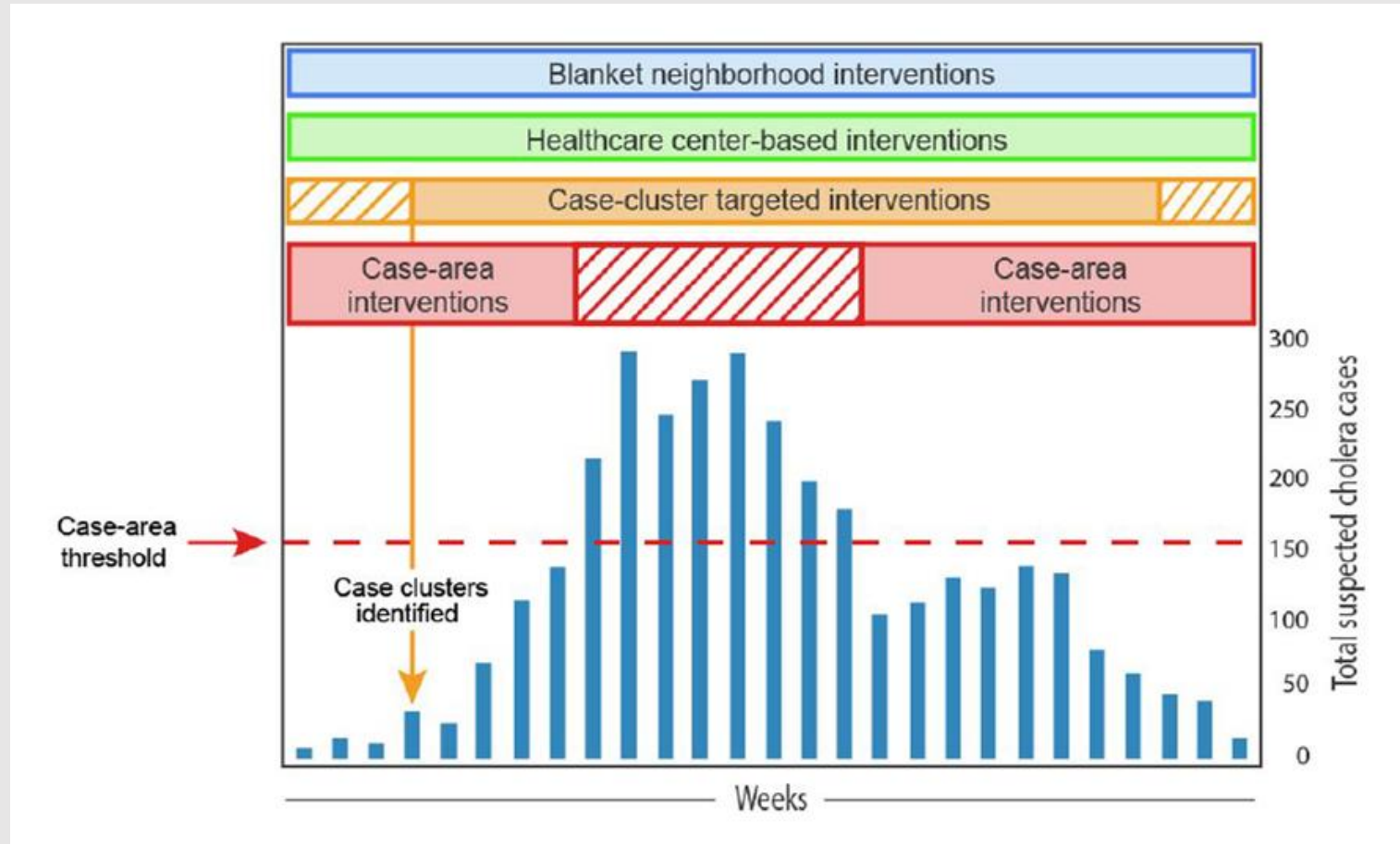
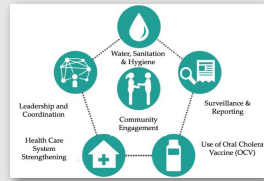
Case-area targeted interventions	Case-cluster targeted interventions	Healthcare facility-based interventions	Blanket neighborhood interventions
<p><b>Definition:</b> A specific package of tailored response activities implemented by a mobile response team targeting case households and neighboring households in a defined perimeter.</p> <p><b>Objective:</b> Limit cholera transmission around case residences.</p> <p><b>Rationale:</b></p> <ul style="list-style-type: none"> <li>- Risk of cholera infection is higher for household members of cholera patients (especially during the first week and up to three weeks after the cholera patient seeks treatment).</li> <li>- Nearby neighbors of cholera cases are at higher risk from cholera infection, compared with the general population (living within 150 meters of a cholera case).</li> </ul>	<p><b>Definition:</b> A specific package of tailored interventions implemented by a mobile response team targeting local clusters of cholera cases. Cholera case clusters are identified based on frequent analysis of the epidemiological data.</p> <p><b>Objective:</b> Limit cholera transmission in a given area by targeting local cholera case clusters.</p> <p><b>Rationale:</b></p> <ul style="list-style-type: none"> <li>- Limited line listing access/quality does not enable case-area interventions.</li> <li>- Too many cases and/or limited resources to ensure case-area interventions.</li> </ul>	<p><b>Definition:</b> A standardized package of interventions delivered in the healthcare facility to case household members.</p> <p><b>Objective:</b> Limit cholera transmission among case household members.</p> <p><b>Rationale:</b></p> <ul style="list-style-type: none"> <li>- Risk of cholera infection is higher for household members of cholera patients (especially during the first week and up to three weeks after the cholera patient seeks treatment).</li> <li>- Improve WASH conditions in the home in case of restricted access, insecurity and/or stigmatization.</li> </ul>	<p><b>Definition:</b> A specific package of tailored interventions implemented in affected neighborhoods and at-risk areas that are not yet affected.</p> <p><b>Objective:</b> Limit cholera transmission in affected neighborhoods and prevent cholera transmission in at-risk areas.</p> <p><b>Rationale:</b></p> <ul style="list-style-type: none"> <li>- Limited line listing access/quality does not enable case-area or case-cluster interventions.</li> <li>- Too many cases and/or limited resources to ensure case-area or case-cluster interventions.</li> <li>- Selection of the administrative level is based on analysis of the epidemiological data (i.e., incidence, attack rate).</li> <li>- Interventions can be conducted at the community and household levels (includes activities in all residences of the targeted area).</li> </ul>

**Legend:** ● Cholera case residences    ● Uninfected but at-risk households    ■ Case area (cholera case residence and close neighbors)    CTC (with +) Healthcare center treating cholera cases

Source : Pierre-Yves Ogier, UNICEF cholera webinars 2023.



# Water, Sanitation and Hygiene : Service delivery mechanisms (2)



Source : Pierre-Yves Ogier, UNICEF cholera webinars 2023.

# References

- Response to cholera outbreaks. Case areas targeted Interventions and community Outbreak Response Teams. UNICEF, 2020.
- Joint Operational Framework. Improving Integrated and Coordinated Cholera Preparedness and Response within humanitarian Crises. Joint collaboration between the global health cluster and the global WASH cluster. July 2020.

Community engagement system:  
who does what where

Monitoring uptake of  
key practices  
at various levels

Channels, reach, trust,  
influencers, social  
networks, rumors,  
perception of the response

Individual, social and  
structural drivers of  
WASH behaviors

Patients' feedback  
Accountability to  
Affected  
Population (AAP)

Awareness, social  
reasons for missed  
targets

## BEHAVIORAL DATA & RCCE ACTIVITIES ACROSS THE PACKAGE



Water, Sanitation  
& Hygiene



Leadership and  
Coordination



Health Care System  
Strengthening



Surveillance &  
Reporting



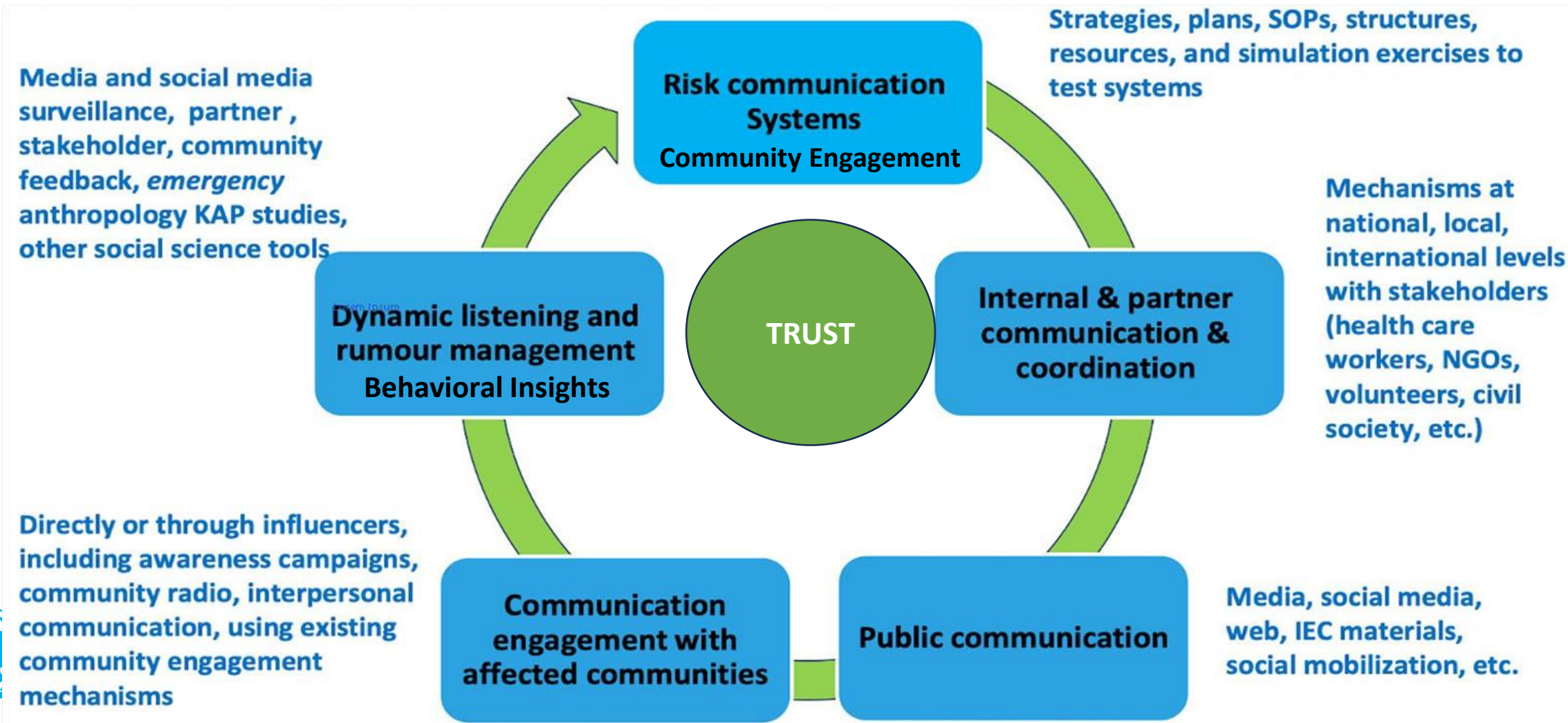
Use of Oral  
Cholera Vaccine



Community  
Engagement



# Risk Communication and Community Engagement (RCCE) approach



# COORDINATION

- Establish or activate RCCE coordination mechanisms at national, district and local level
- Mapping local and national partners, crisis cells and other coordination mechanisms
- Collaborate with all stakeholders to create clear and culturally sensitive RCCE strategies and plans
- Set up platforms for continuous, two-way communication between all parties, promoting transparency and trust
- Provide training, resources, and support to local and national partners for effective risk communication and community engagement

- The Public Health Emergency Operation Centre (PHEOC) at the national and sub-national levels
- Health Promotion working groups
- Health and WASH and other clusters/sectors, when existing
- Inter-ministerial Risk communication task force (COVID-19 pandemic heritage ?)
- Local Community Organizations and Groups



# Data generation, Dynamic Listening and rumors management

- **Localize the response :** Conduct a rapid assessment of community knowledge, attitudes, perceptions, behaviours structural barriers, drivers, levels of trust and social norms that could impact AWD/cholera transmission
- Draw on existing sources of data
- Gather data continuously over time and use to realign strategies and plans as needed.
- Strengthen two-way community listening and feedback mechanisms (online and offline) and ensure feedback is provided to communities on changes made

## Household/community behavioral risks

**Knowledge:** knowledge of cholera, aetiology, misinformation, rumours, perceptions of severity, identification of symptoms, transmission pathways, awareness of available services, FAQ

**Attitudes:** beliefs, preferences, likes and dislikes

**Practices:** actions, behaviours – independent, inter-dependent, dependent (who, where, how) identify HSB and the factors that condition it (practical, socio-cultural, economic and empirical)

**Norms:** socio-cultural traditions, costs, benefits

**Gender & Power analysis:** roles in relation to cholera: home, community and service delivery levels (identify practitioners, decision makers, influencers and gatekeepers at every level)  
decision-making

**Social networks:** Key influencers and stakeholders

**Media and communication landscape:**

- Monologic & dialogic channels: reach, penetration
- Trusted sources



Assessing social norms : See  
Everybody wants to belong | UNICEF Middle East and North Africa

# Public communication

- Distribute risk communication materials and messages through trusted channels and trusted, influential voices to at-risk communities on preventative, protective and care-seeking behaviours.
- Engage and collaborate with media, influencers and stakeholders who can listen, advocate, educate, address rumours and misinformation, and build health literacy.
- Social listening and community feedback to track and monitor rumors, and better inform to programming and activities.

Messages should focus on recognizing symptoms of cholera, how it is transmitted, encouraging early treatment seeking behaviors and increasing awareness of prevention practices and strategies

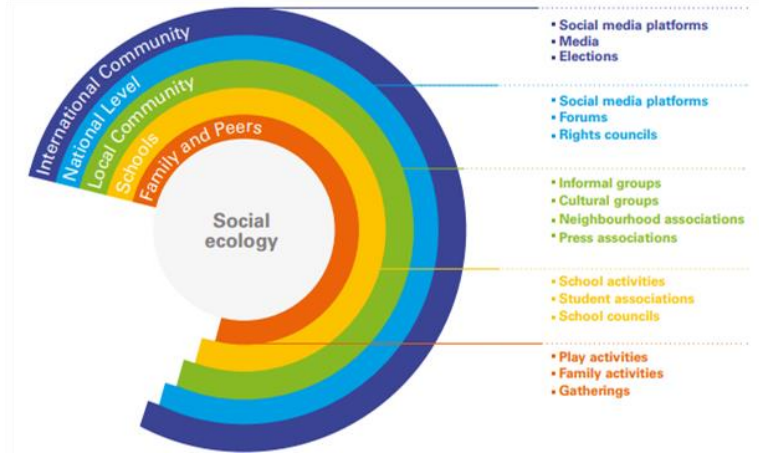
Focus messaging and interventions over time to address main risks and gaps with positive actions that can be taken





# Community Engagement

- Engage and empower communities to participate in planning and implementation of response
- Engage in continuous capacity development of the community health workforce, frontline workers, volunteers, community leaders and community/social mobilizers from civil society organizations, faith-based organizations, local women and youth groups, empowering them and allowing issues to be adjusted locally
- Engage and collaborate with media, influencers and stakeholders who can listen, advocate, educate, address rumours and misinformation, and build health literacy
- Identifying trusted channels/influencers



Engagement of religious leaders as change agents

Partnerships with schools and learning institutions as engagement points and for community mobilisation

Engagement of Community Health Workers CHW & Female Health Workers to create awareness on the health issues and diversity of services available to promote uptake

Private sector engagement



# References

- [Global strategic preparedness, readiness and response plan for cholera \(who.int\)](#) – April 2023- April 2024
- Communicating risk in public health emergencies. WHO, 2017.  
[9789241550208-eng.pdf \(who.int\)](#)
- [Assessing Social Norms : Everybody wants to belong | UNICEF Middle East and North Africa](#)
- [The Behavioural Drivers Model | UNICEF Middle East and North Africa](#)
- Accountability to affected populations. A handbook for UNICEF and partners. UNICEF 2020.

# Writing a cholera preparedness and response plan ?

*The ten pillars of the Global Strategic Preparedness, readiness and Response Plan*

Pillar 1: Leadership, coordination, planning and monitoring

Pillar 2: Risk communication and community engagement (RCCE)

Pillar 3: Surveillance and outbreak investigation

Pillar 4: Water, sanitation and hygiene (WASH)

Pillar 5: Laboratory diagnostics and testing

Pillar 6: Infection prevention and control (IPC)

Pillar 7: Case management

Pillar 8: Operational support and logistics


Pillar 9: Continuity of essential health and social services

Pillar 10: Vaccination


Core Components of WHO's Global Architecture for Health Emergency Preparedness, Response and Resilience	Pillars of the Global Cholera Strategic Preparedness, Readiness and Response Plan
Coordination	<b>Pillar 1</b> Leadership, coordination, planning and monitoring
Collaborative surveillance	<b>Pillar 3</b> Surveillance and outbreak investigation <b>Pillar 5</b> Laboratory diagnostics and testing
Community protection	<b>Pillar 2</b> Risk communication and community engagement (RCCE) <b>Pillar 4</b> Water, sanitation and hygiene (WASH) <b>Pillar 10</b> Vaccination
Safe and scalable care	<b>Pillar 6</b> Infection prevention and control <b>Pillar 7</b> Case management <b>Pillar 9</b> Continuity of essential health and social services
Countermeasures and research	<b>Pillar 8</b> Operational support and logistics

# A Useful tool : [Cholera Outbreak Toolbox \(who.int\)](https://www.who.int/outbreak-toolbox)

Updated | July 2022



Home Disease Outbreak Toolboxes Data Collection Standards About



- Learn basic knowledge about the suspected disease
- Develop the case definition
- Organise the data collection with tools
- Confirm the outbreak with laboratory confirmation
- Learn about responses tools & resources
- Watch online training
- Find other resources

**Key reference documents**

- [About Cholera](#) Global Task force on Cholera Control.
- [Cholera Outbreak Response: Field Manual](#) (Global Task Force on Cholera Control; 2019).
- [Interim Guidance document on Cholera surveillance](#); (World Health Organization Global Task Force on Cholera Control Surveillance Working Group; June 2017).
- [Cholera fact sheet](#) (Geneva: World Health Organization; 2022).
- Global Task force on cholera control [Cholera App](#).

# Group Exercise Scenario 3

- You will be divided into breakout rooms.
- The following link will be sent to you

## **Scenario 3 : the multisectoral response**

[https://docs.google.com/forms/d/e/1FAIpQLScB-co9Xw5T\\_wU5IAZpBK0UqXeJyN1so11ShgdzAvZvVxVLfw/viewform?usp=pp\\_url](https://docs.google.com/forms/d/e/1FAIpQLScB-co9Xw5T_wU5IAZpBK0UqXeJyN1so11ShgdzAvZvVxVLfw/viewform?usp=pp_url)

- Read the scenario, discuss the questions and be ready to report back

# What we have learned in this session

- Each participant to write in the chat one new thing they have learned in this session

