



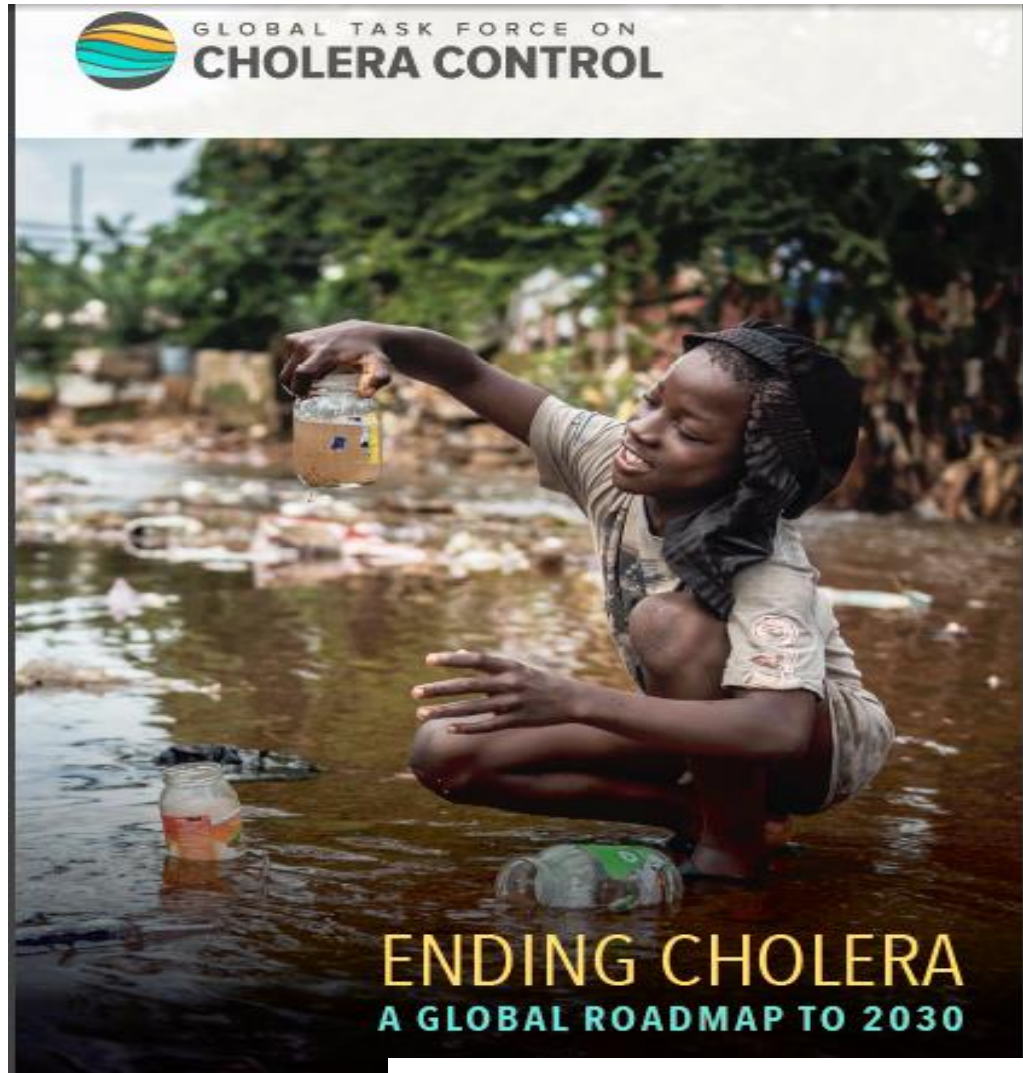
GLOBAL TASK FORCE ON  
**CHOLERA CONTROL**

COUNTRY NAME:  
**BANGLADESH**



GTFCC  
5-6 Dec 2018

# Ending Cholera for Bangladesh- one of the 20 countries that hopefully will eliminate the disease



The overall objective of the renewed strategy is to reduce the mortality resulting from cholera by 90 percent by 2030, and to eliminate cholera in as many as 20 countries

The Global Roadmap is based on three strategic axes:  
✓ **Axis 1:** Early detection and quick response to contain outbreaks at an early stage

✓ **Axis 2:** A multisectorial approach to prevent cholera in hotspots in endemic countries

✓ **Axis 3:** An effective mechanism of coordination for technical support, resource mobilization, and partnership at the local and global level

1 million vaccinated to optimize OCV strategies from 2011 onwards





# OBJECTIVES AND TIMELINES

## Objectives

- Alignment of **National Program on Diarrheal Diseases Prevention, Management & Control** with the GTFCC Global Roadmap 2030, with the ultimate objectives of:
  - **reducing cholera deaths in the country by  $\geq 90\%$  by 2030;**
  - **eliminating cholera from the country by 2030;**
- Strengthening of AWD & cholera information & surveillance system;
- National Cholera Control Action Plan
- Deployment of national OCV campaigns

## Timelines

- **2018:** Review & alignment of **National Program on Diarrheal Diseases Prevention, Management & Control** with the GTFCC Global Roadmap;
- **2018 & onward:** Increasingly effective engagement of the WASH partners in the agenda;
- **2019:** **Introduction of phased OCV campaign for national scale up by 2030.**

# IMPLEMENTATION



## What we have already done

- Bangladesh played key role in WHO (2011) Resolution 64.15 & in its implementation;

*AWD outbreak response, inclusion of cholera management in diarrheal disease management guideline, WASH partnership; OCV feasibility study; world's largest 4 successive OCV campaigns for the FDMNs (Rohingyas); ~2.2 million OCV doses from ICG/WHO;*

*capacity building to manufacture OCVs are few examples;*

- Bangladesh is home of ORS & created widespread community-based ORS practice;
- We championed AWD (including cholera) management ;
- Not cholera mortality – rather severity of cholera morbidity is our concern;

## What more we will do

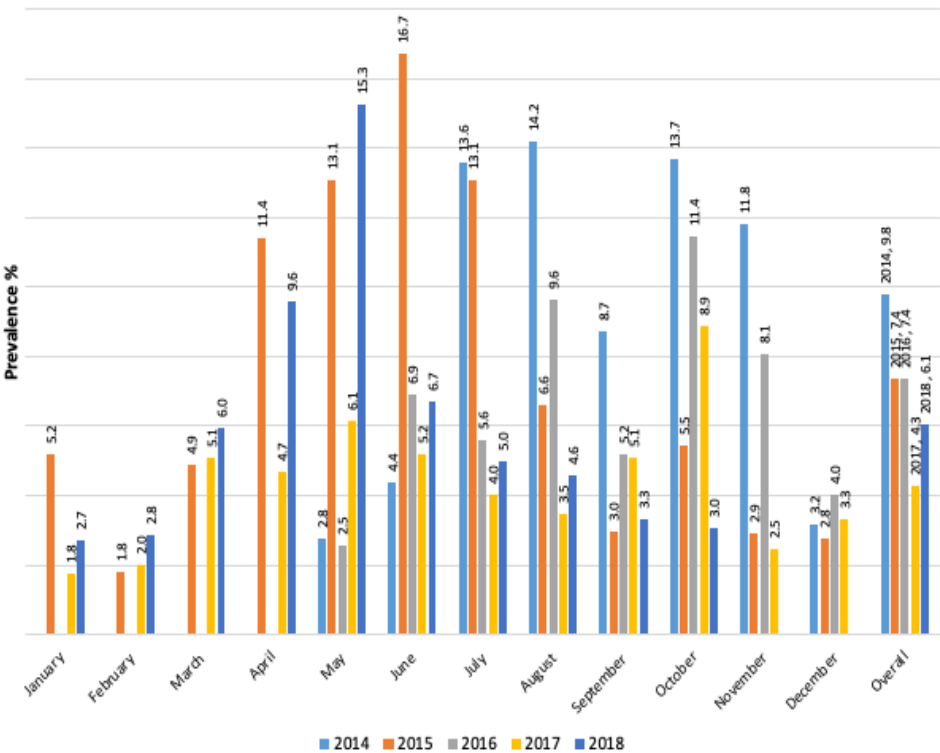
- ~~This year:~~ Review & updating of the National Program on Diarrheal Diseases Prevention, Management & Control in alignment with the GTFCC Global Roadmap; a urban slum
- ~~This year & onwards:~~ Holding consultation with the national WASH partners to prepare joint engagement plan & collectively implement the GTFCC Global Roadmap 2030;
- ~~2019:~~ Introduction of 1<sup>st</sup> phase OCV PLUS campaign in a high risk urban setting & scaling up in other high risk areas.



## Surveillance for cholera in Bangladesh 2014-2018

### 22 sentinel surveillance sites

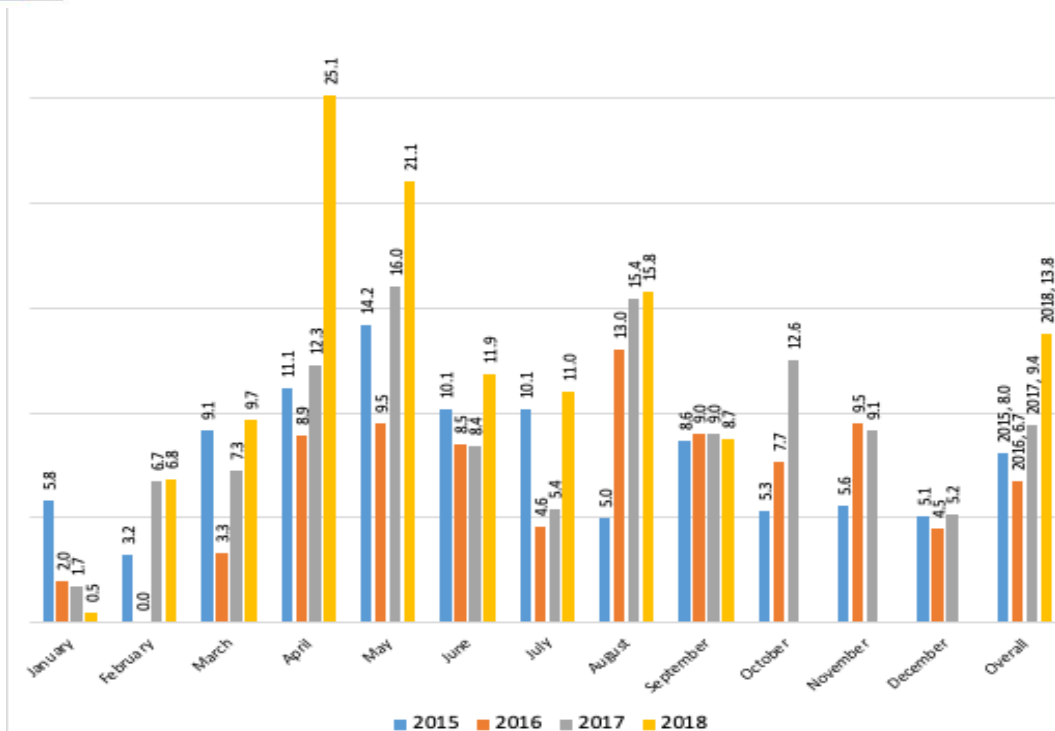
Nationwide cholera monthwise prevalence (FBIS-ECBS), %



Cholera rates highest in Dhaka  
 Chittagong, Narayanganj, Comilla, Cox's Bazar, Bakerganj followed by other sites

icddr, b hospital, Dhaka 2015-2017

2% Surveillance prevalence, %



# Development of National Cholera Control Plan Bangladesh (NCCAP)

For development of Country Cholera Control Plan, Director, Disease Control and Line Director CDC, DGHS, MoH&FW, interacting with WHO Regional office for technical and financial support;

This proposal includes deployment of consultant for 3 months to prepare the country plan with stakeholders using a multisectorial approach; **Consultant selected**

The existing National Committee for Water and Foodborne diseases is being expanded and a new Committee for Cholera Control initiated – Cholera was kept within the earlier committee because of sensitivity. This is diminished with *Cholera* becoming the focus of the committee

Includes stakeholders – icddr,b, EPI, IEDCR, UNICEF, WHO, WASA, WATER AID, Public Health Engineering Dept and Dhaka City Corporation;

High level core committee meetings with CDC, DGHS, MoH&FW and others stakeholders from Oct 2017 to decide on the National Cholera Control initiatives

Working groups with vaccine, surveillance and WaSH experts to prepare a plan for Bangladesh



# OCV CAMPAIGN STRATEGY

Area of intervention	No. of at risk individuals to be vaccinated	OCV doses required for 6.5 million individuals @2 doses/head	Wastage s (5%)	Total OCV doses to be required	Unit price of OCV @US\$ 1.1 per dose	Operational cost @US\$ 1.67 per individual	Grand Total
<b>1<sup>st</sup> phase:</b> High risk zone of urban Dhaka	6.5 million	13 million	0.65 million	13.65 million	US\$ 15.02 million	US\$ 10.86 million	US\$ 25.88 million
<b>2<sup>nd</sup> phase:</b> Chittagong, Narayanganj, Comilla districts	5 million	10 million	0.25 million	10.25 million	US\$ 11.28 million	US\$ 8.35 million	US\$ 19.63 million
<b>Recurrent phase</b>	2 doses of OCV to each child <5 yrs; 1 dose of OCV to each individual >=5 yrs						

**OCV PLUS STRATEGY WILL NOW NEED TO BE PLANNED**

# DEMONSTRATION OF CHOLERA CONTROL PROGRAM

## **Aims:**

**Aim 1:** To generate evidence on the feasibility, acceptability and affordability of an integrated control strategy (e.g., enhanced oral cholera vaccination coverage, health education, and early warning surveillance system) for the elimination of cholera in highly endemic slums of Dhaka

**Aim 2:** To generate evidence on the acceptability of the use of solar powered water purifier in selected urban slums

**Aim 3:** To determine the cost associated with bringing the proven integrated control strategy to national scale in order to achieve cholera elimination by 2030

## **Approaches:**

**Group A:** Mass vaccination campaign with OCV in 150,000 people and also give health education (HE) on hygiene, safe water and sanitation

**Group B:** In 2500 people, in a separate urban slum setting, where 50 solar powered water purifiers (WP) to obtain proof of concept. These will be installed at the compound level comprising of 10 families or 50 individuals



# DEMONSTRATION OF CHOLERA CONTROL PROGRAM

**Passive surveillance :** Passive surveillance will be conducted at 12 or more designated health facilities. Based on our experience from ongoing surveillance of cholera in 22 urban and rural sites in Bangladesh, we have provided evidence that rapid diagnostic test (RDT; Cholkit) can be used for early detection of cholera in facilities which lack laboratory capacity

**Laboratory assessment:** In addition to testing by RDT in the surveillance sites, all specimens will be microbiologically evaluated for *V. cholerae*

**Early Warning and Response System (EWAR):** Households of cholera positive cases identified by RDT at the surveillance site. We will visit households of the index cases detected in the surveillance sites to identify other active diarrheal case(s) in the households who share common living facilities. Diarrheal stools will be tested with RDT. At the same time, water samples will be collected from the drinking water sources, both at source and in storage containers to test for microbiological contamination.

Re-training and re-assessment of the use of safe water and hygiene facilities and behavioral change materials will be provided to the families as well as to people living in a proximity of 150 meters of the home of the index case. Soapy water dispensers will be given to the homes in addition to safe water (chlorinated water- Aquatabs-sodium dichloroisocyanurate).

# DEMONSTRATION OF CHOLERA CONTROL PROGRAM

**Cost analysis of intervention package:** Costs of the intervention packages will be included in this cost analysis. The societal perspective will be undertaken for analysing costs, meaning that costs of the intervention from programmatic perspective as well as costs incurred by the beneficiaries will be considered

**Knowledge attitudes and practices (KAP) related to cholera:** A number of promotional activities related to cholera, cholera vaccine and WaSH will be used to assess, knowledge, attitudes, and preventive practices (KAP) with regards to cholera, oral cholera vaccine, WaSH and health education

**Coverage and acceptability assessment:** Household survey will be conducted to assess the coverage immediately after the completion of vaccination. A sub-sample of vaccine recipients and staff members involved in implementation of the interventions for obtaining information related to acceptability of vaccine and use of WaSH and filter

# OCV campaigns among the Rohingya population in Cox's Bazar Oct,2017-Dec 2018



## First round: October 10<sup>th</sup> to 18<sup>th</sup>, 2017

Approximately 700,487 doses of OCV was deployed during this round icddr,b provided technical assistance along with other national and international partners. Around 150 staff from icddr,b cholera vaccine team were involved during the first round of the mass campaign

## Second round: November 4 to 9, 2017

Second dose of OCV was delivered to 200,000 children aged 1- 5 years along with oral polio vaccine (OPV)



## Third round: May 6-13, 2018

One dose recipient from the earlier campaign, newly arrived Rohingyas and the host community were included in this round. A total of 879,273 FDMNs received OCV

## Fourth round : 428,556 doses of OCV for Delivery - *Ongoing from 17 November, 2018*

Delivery with the regular EPI vaccines (Penta, bOPV, PCV-10)

Targeted population -328,556 people which includes 224,788 FDMNs and 103,768 surrounding host community (plus 100,000 left over vaccine)



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## Emergency deployment of oral cholera vaccine for the Rohingya in Bangladesh

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