



GLOBAL TASK FORCE ON  
**CHOLERA CONTROL**

## **GTFCC LABORATORY SURVEILLANCE WORKING GROUP**

### **2021 GTFCC Lab WG Work Plan**

**Web Meeting  
22 January 2021**

# Proposed 2021 Work Plan (I)

- Update RDT performance results (literature review) and revise RDT performance evaluation protocol (finishing-documents to be circulated)
- Develop an assessment tool to define minimum laboratory capacities and suitable geographical coverage (PCR, culture, antibiotic susceptibility testing, genotyping)
- PCR guideline standardization

# Proposed 2021 Work Plan (I)

- Role of Lab testing in regional/global cholera spread (WGS)
- Protocol for environmental testing for toxigenic *V. cholerae* detection
- Laboratory role in determining/validating cholera elimination
- Revise GTFCC surveillance guidelines



Develop a grand diagnostic  
strategy

# Minimum country lab standards/capacity

- Define minimum essential technical capacity for countries actively engaged in cholera prevention and control (hotspots, capital/intra-country regional)
- Questionnaire to survey NCP-engaged countries on needs for minimum technical capacity

# Minimum lab capacity standards

- At least one lab (central lab, capital) able to:
  - Identify toxigenic *V cholerae* O1 (culture and/or PCR)
  - Perform antibiotic resistance testing to nalidixic acid/ciprofloxacin, tetracycline, azithromycin.
- RDT available in every **high-risk hotspot** district
  - Stored at district level or health facility
  - For detection and monitoring of new and on-going outbreaks
  - Standardized AWD surveillance over time.
- Integration of lab data/RDT (by date and district location) in the surveillance system through systematic reporting of:
  - number of suspected cases tested
  - number of positive and negative results
  - the method used in testing (RDT, culture and/or molecular).
- No cumulative stockouts or missing key personnel longer than 2 weeks during year
- Quality assurance program and annual refresher training/evaluation (include RDT)

❖ *Genomics testing and analysis is not essential but desirable*

# Antibiotic sensitivity testing

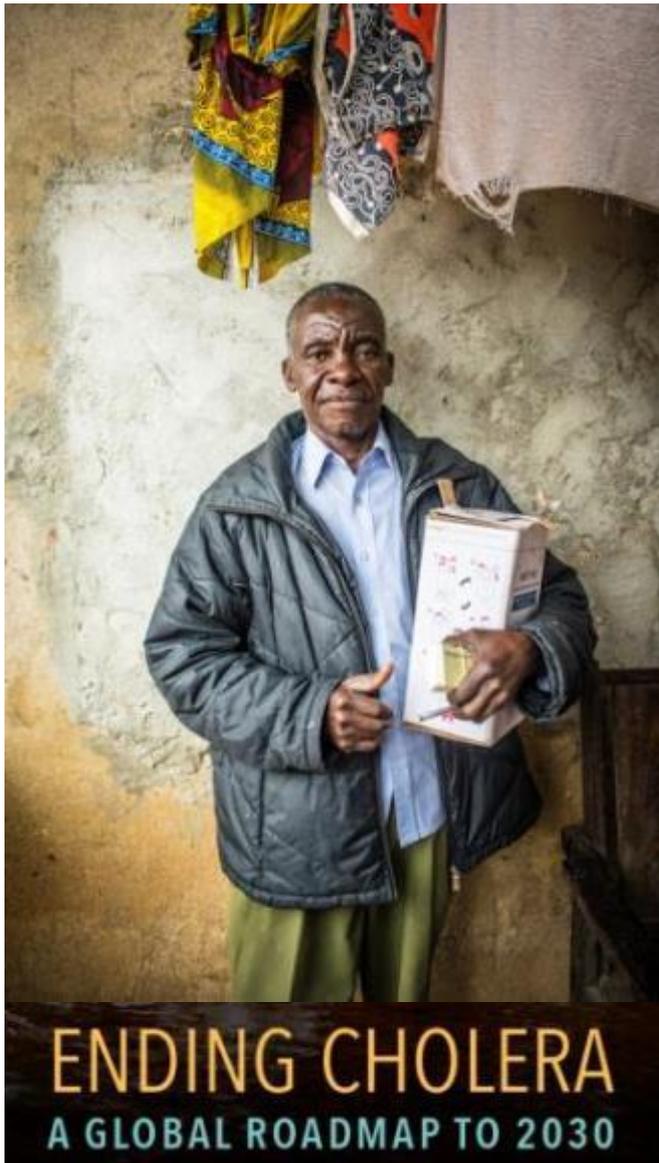
- Job aid completed
  - Antibiotic sensitivity testing SOP needed(?)
- Monitoring of antibiotic sensitivity patterns over time and place
- Adding AMR data to long-term global cholera databases

# Molecular testing

- PCR
  - Standard protocol: real-time vs conventional
  - Commercial tests vs in-house approach
- Leveraging recent COVID innovation/supply chain?
- For WGS: what is best approach to identifying “relatedness” of isolates?

# “Grand Diagnostic Strategy”

- The “counting suspect cases during outbreaks only” era is being brought to a close. *<polite applause>*
- A strategy that uses the tests currently available or will be in the near-term  
Reliable, available, (relatively) simple, and affordable lab tests that can be used to:
  - Identify toxigenic *Vibrio cholerae* in first patient before outbreak starts (before first symptomatic patient?)
  - Provide sufficient biological evidence to support true disease burden estimates without testing every case of AWD.
  - Provide antibiotic sensitivity data to guide treatment and prevention.
  - Provide genomic evidence for tracking and anticipating regional and global paths of transmission
  - Standardize testing regimen (patients, environment) to support elimination efforts



# Grazie mille

Together, we can #EndCholera