GLOBAL TASK FORCE ON
CHOLERA CONTROL

GTFCC LABORATORY WORKING GROUP: VISION FOR LABORATORY TRAINING

Maryann Turnsek (CDC)

5th May, 2023

BACKGROUND

GTFCC TRAINING SUPPORT: THE GLOBAL ROADMAP

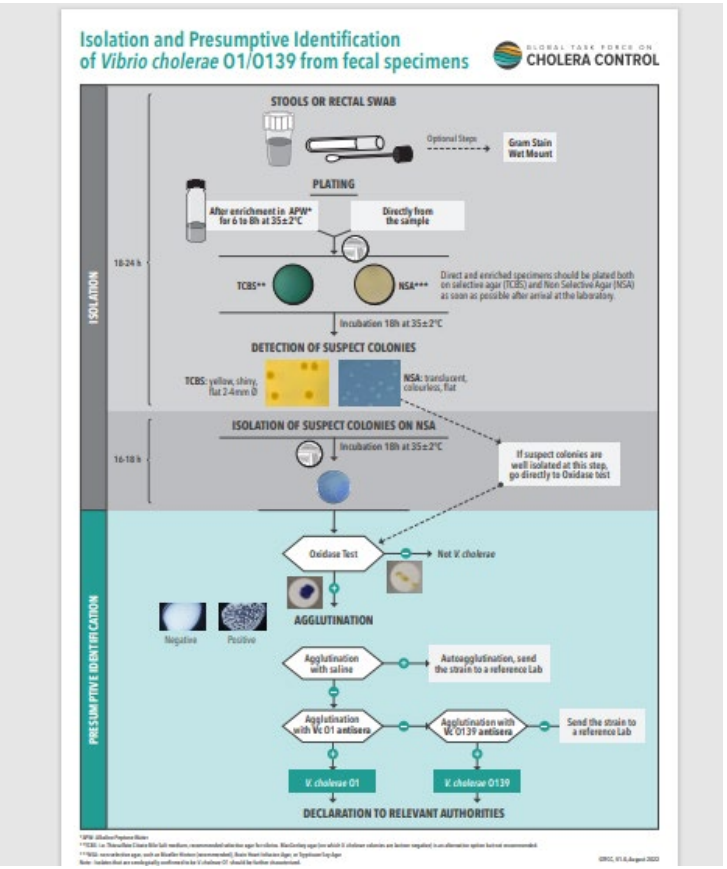
Axis 1:

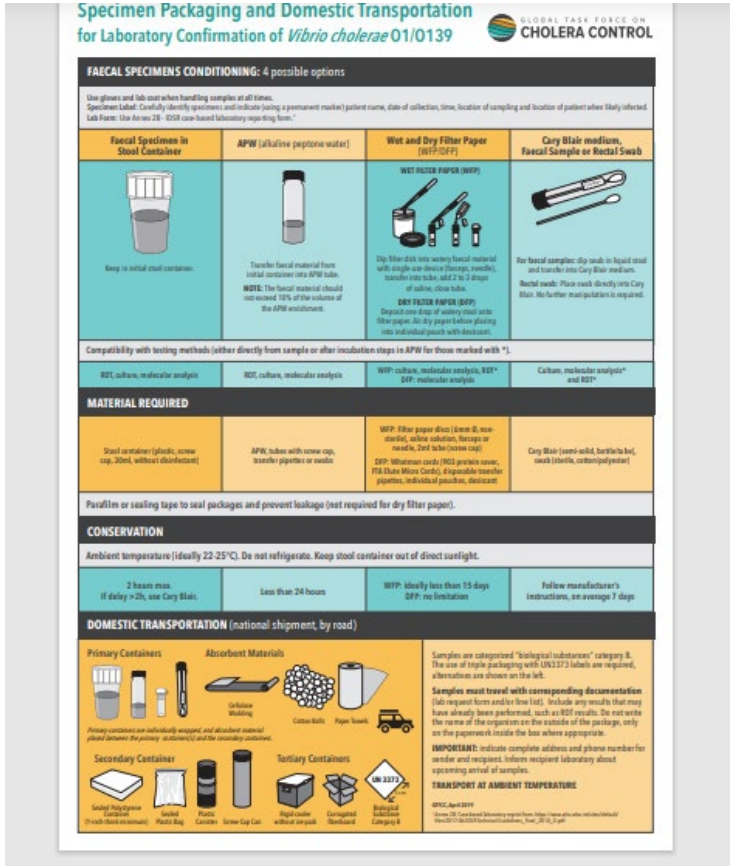
Early detection and response to contain outbreaks

Axis 2:

A targeted multi-sectoral approach to prevent cholera recurrence

Effective *routine surveillance and* ***laboratory capacity*** *at the peripheral level* ***to*** *confirm suspected cases,* ***inform the response****, and track progress towards control and elimination*





GTFCC LABORATORY TRAINING SUPPORT – CURRENTLY AVAILABLE RESOURCES

- [Resources – Global Task Force on Cholera Control (gtfcc.org)]
- Job aids, fact sheets

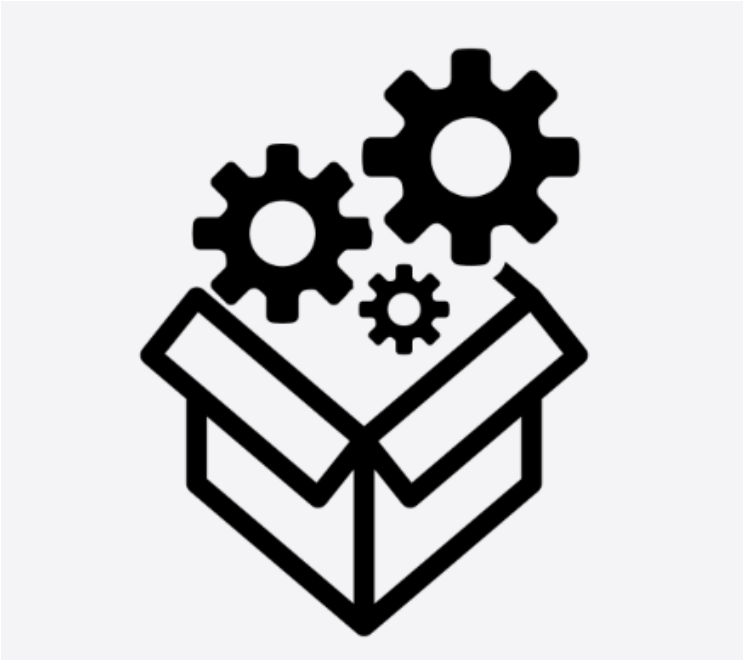
  - RDT, AST, Isolation/identification, Specimen transport / packaging, strain conditioning
- Technical guidelines

  - surveillance guidance / adaptive testing strategy, reporting guidance / template

GTFCC TRAINING SUPPORT – FUTURE RESOURCES

GTFCC Laboratory Training Package

- Develop standardized material
  - (Presentations, training plans, checklists, etc.,)
- Package available via GTFCC website
- Online training courses (OpenWHO)
- Laboratories and stakeholders can access and use the materials as needed



What else can GTFCC do to support laboratory training?

BENEFITS OF LABORATORY TRAINING

- **Build increased capacity for lab confirmation**
- **Improve ability to inform decision making**
- Promote accuracy and consistency for testing and reporting results
- Support the development of staff / increase competence
- Improve staff preparedness and response
- Improve quality of the test system
- Better confidence in results

WHAT ARE THE KEY TRAINING TOPICS?

- Cholera basics (e.g., disease, pathogen, response, etc.)
  - Context can be broad or very specific
  - Detail will depend on the audience
- Specimen collection, preservation and transport
- Adaptive testing strategy
- Rapid Diagnostic Tests (RDTs)
- Primary isolation of *Vibrio cholerae* from stool specimens
- Strain conditioning for shipment and storage (short-term and long-term)
- Identification of toxigenic *Vibrio cholerae* O1 / O139
  - Culture-based methods (e.g., agglutination in VC-specific antisera)
  - Molecular methods (e.g., PCR)
- Antimicrobial susceptibility testing (AST)
- Data management and reporting laboratory results

Are there other key topics to include?

WHO SHOULD BE TRAINED?

- Target audience depends on the topic of interest
- Consider broader audience / other stakeholders

	Cholera basics (disease, pathogen, response)	Specimen collection, preservation, and transport	Adaptive testing strategy	RDTs	Test methods	Reporting lab results
Healthcare workers: - Technicians - Clinicians - Nurses	✓	✓	✓	✓		
Surveillance officers	✓	✓	✓	✓		
Laboratory staff	✓	✓	✓	✓	✓	✓

Are there other stakeholders to include?

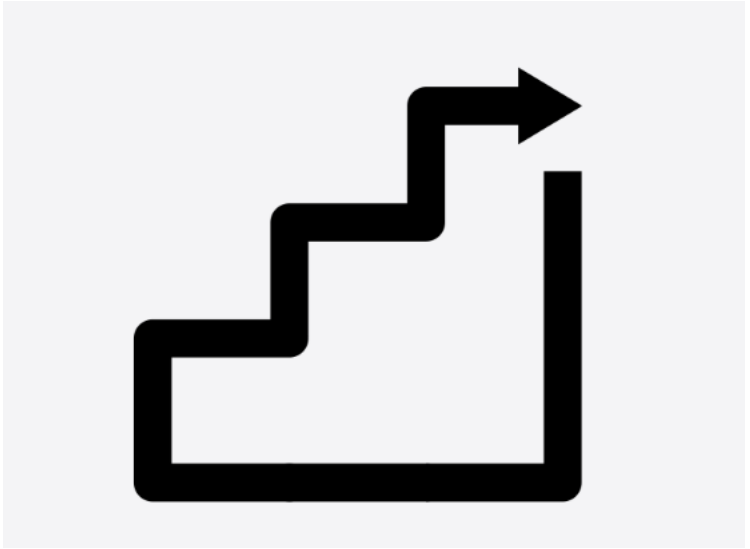
HOW TO STRUCTURE TRAINING

Proposal - Tiered training plan

Tier 1:
- Basics (disease, pathogen, response)
- Specimen collection, preservation, and transport
- RDTs
- Isolation, culture-based confirmation methods

Tier 2:
- Adaptive testing strategy
- Reporting lab results
- AST
- PCR

Tier 3:
- WGS



Thoughts?
Are there other considerations or alternative options?

FORMATS AND MODES OF DELIVERY

In person / virtual

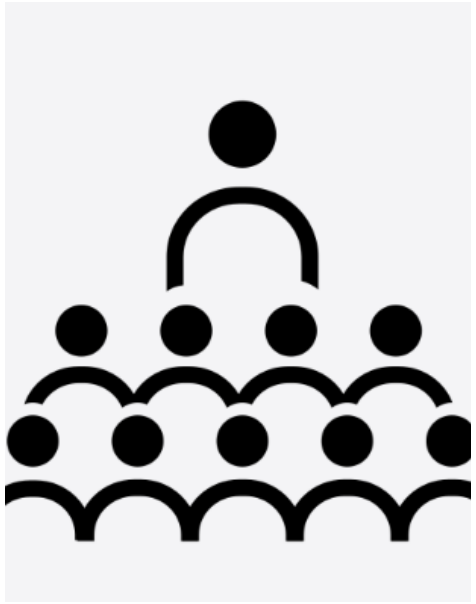
On site / external workshops

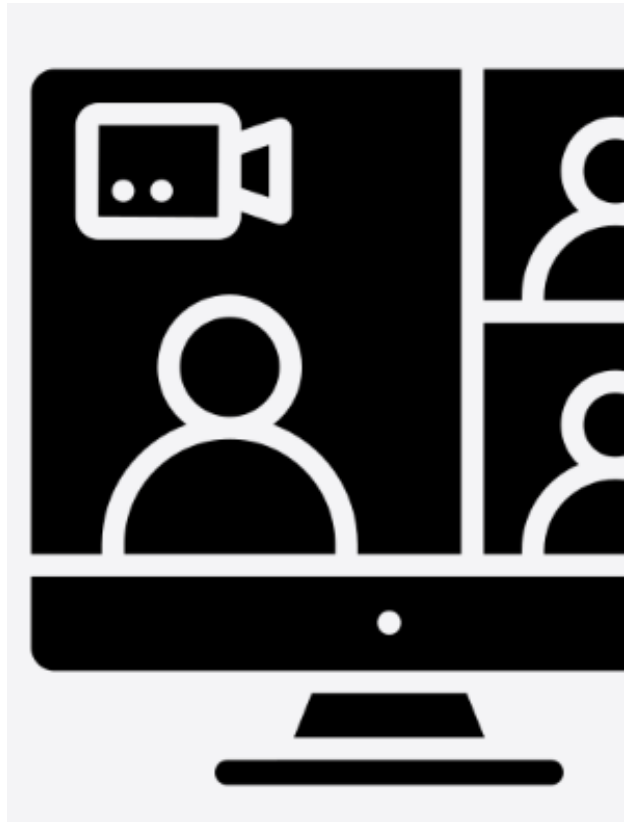
On demand / on line

Hands on / lecture based

Internally / externally led

What will work best for your laboratory?





VALIDATING TRAINING

Measuring the success of training is a crucial part of a capacity building program

- How effective was the course?

-What did the participants learn?

Measuring the success of tiered training program

- Step-wise certification at the end of each tier

- Move forward once the previous tier is mastered

HOW TO VALIDATE TRAINING

Recommendations for post training assessments

Lecture-based training

- In person, virtual or online
- Pre/post-test available
- Real-time score and feedback (e.g., correct answers if wrong)

Hands on training

- External Quality Assurance (EQA)
- Technical partner or EQA provider sends a blinded panel for identification
- Reporting forms, instructions, due date
- Performance letter may include score

HOW TO VALIDATE TRAINING

Recommendations for post training assessments

Post-training competency assessment

- Organized internally
- Customizable
- Potential to include more elements such as observation, use of equipment, recording data, etc.

DISCUSSION

What else can GTFCC do to support laboratory training?

Are there other key topics to include?

Are there other stakeholders to include?

What are your thoughts on the tiered training proposal?

- *Are there other considerations or alternative options?*

What format or mode of delivery will work best for your laboratory?

GLOBAL TASK FORCE ON
CHOLERA CONTROL

THANK YOU