



GLOBAL TASK FORCE ON  
**CHOLERA CONTROL**

---

# Update and objectives of the Laboratory Surveillance Working group

Joint Meeting of the Working Groups on Surveillance (Laboratory & Epidemiology)

16 to 18 April 2018 – Annecy, France

# The laboratory Working Group

- Part of the surveillance Working Group
  - Working Group on Laboratory Methods for Cholera Surveillance (Laboratory WG)
  - Working Group on Epidemiology for Cholera Surveillance (Epidemiology WG).
- Four meetings
  - On 19 December 2014 in Paris, France (Lab)
  - On 26-27 November 2015 in Faridabad, India (Lab)
  - On 12-13 April 2016 in London, UK (Lab&Epi)
  - On 2-4 May 2017, Tunis, Tunisia (Lab&Epi)

# Tasks of the Lab WG

- To reinforce cohesion, coordination, and capacity at laboratory level to support global cholera control
  - Present results and recommendations for validation during GTFCC meetings and develop guidance notes
  - Facilitate the establishment of a laboratory network for global cholera surveillance and control within the GTFCC framework
  - Build-up a “cholera strains data bank” for the exchange of the characteristics of pathogens identified, antimicrobial susceptibility testing results and other items related to surveillance of *V. cholerae*

# Laboratory Surveillance Working group achievements

## 👉 The Use of Cholera Rapid Diagnostic Tests, Interim Technical Note, 2016

[http://www.who.int/cholera/task\\_force/Interim-guidance-cholera-RDT.pdf?ua=1](http://www.who.int/cholera/task_force/Interim-guidance-cholera-RDT.pdf?ua=1)

- Describes the tests including limits and performance
- Gives recommendations on how, when and where to use them
- Provides guidance on how to interpret the results
  - Target Product Profile (TPP) for the development of improved Cholera diagnostic tests, GTFCC, 2017 (Group of experts)

[http://www.who.int/cholera/task\\_force/cholera-rapid-diagnostic-](http://www.who.int/cholera/task_force/cholera-rapid-diagnostic-)

- Engagement in a prequalification process (update on cholera RDTs

2)

# Laboratory Surveillance Working group achievements

- Introduction of DNA based identification and typing methods to public health practitioners for epidemiological investigation of cholera outbreaks, Interim Technical Note, June 2017

[http://www.who.int/cholera/task\\_force/GTFCC-Laboratory-support-public-health-surveillance.pdf?ua=1](http://www.who.int/cholera/task_force/GTFCC-Laboratory-support-public-health-surveillance.pdf?ua=1)

**Intends to promote the use of molecular testing to answer public health questions for country PH practitioners to systematically collect samples in a timely and manner.**

- Provides a brief technical overview of the molecular techniques to be applied cholera samples (identification, characterization, typing)
- Gives technical details and Regulatory and Administrative Requirements for collection, storage and shipment of samples to the recipient laboratory for testing

# Surveillance Working group achievements

## ☞ Interim Guidance Document on Cholera Surveillance, June 2017,

[http://www.who.int/cholera/task\\_force/GTFCC-Guidance-cholera-surveillance.pdf?ua=1](http://www.who.int/cholera/task_force/GTFCC-Guidance-cholera-surveillance.pdf?ua=1)

Aimed at health professionals working at Ministries of Health, Public Health Institutes, WHO Country Offices and partners who are involved in cholera surveillance, as a support in implementing effective surveillance of cholera in at risk, endemic and epidemic areas.

Prepared by the Epidemiology surveillance Working Group  
Contribution of the Lab WG in testing strategies before, during and towards the end of the outbreak

# Objectives of the meeting

- Define how the GTFCC Lab WG can **concretely** support countries in their laboratory capacities
- Agree on recommandations for National Laboratories for the management of cholera strains
- Agree on technical guidances requirements

To define a « Lab package »

# Environmental surveillance

- When is the environmental surveillance relevant  
Laboratory & Epidemiology transversal questions (Day 2)
- Environmental surveillance methodologies, if it is relevant for public health perspective

Lab WG separate session, (Day 2, Michele Parsons and Marann Turnsek, CDC)



# MOLECULAR TESTING, GENOMIC, ACCESS AND ANALYSIS

- How to increase access to WGS analysis,
- Define a « terminology » in the description of cholera strains:
  - what are the important and accessible molecular tests to perform to characterize and describe a strain in terms of variant, epidemic wave, transmission events ... allowing to compare strains internationally.
- A discussion about the need for guidance in sending samples, which is a critical step (sample preservation and preparation before sending, logistic and administrative aspects of the shipment)

Lab WG separate session, (Day 2, Nick Thomson, Sanger Institute)

# Use of sero-surveillance

- The use of serosurveillance for disease burden estimate,  
Limits and challenges
- First approach to harmonize the protocols

Lab WG separate session, (Day 2, Jason Harris, Massachusetts General Hospital)