

# Cholera surveillance for health care workers

## Module 6



GLOBAL TASK FORCE ON  
**CHOLERA CONTROL**



# Cholera surveillance for health care workers

Supporting  
material



# What will you learn?

- Where to find **supporting material** on cholera surveillance

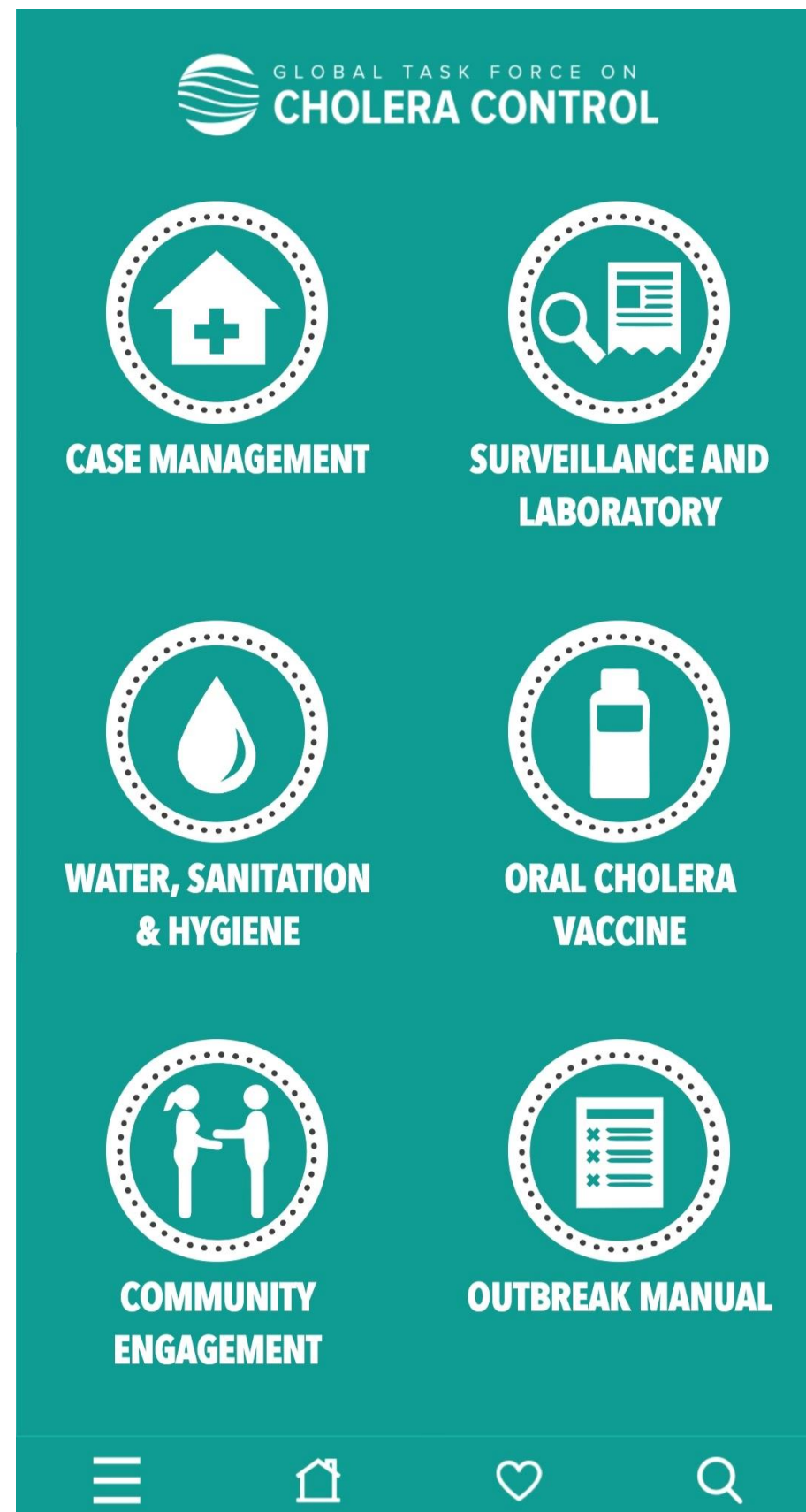


A healthcare worker in a white lab coat and glasses is pointing at a tablet held by a pregnant woman in a yellow and blue uniform. They are both looking at the tablet. The woman is also holding a blue pen. In the background, there are papers on the wall and a stack of books on a table.

# GTFCC App



# GTFCC cholera app



- Phone-based application for health professionals
- **Free** of charge
- Compatible with Android and iOS
- Can be used **offline**
- Includes summary **guidance and practical tools** including on:
  - Case management
  - Surveillance
  - Testing



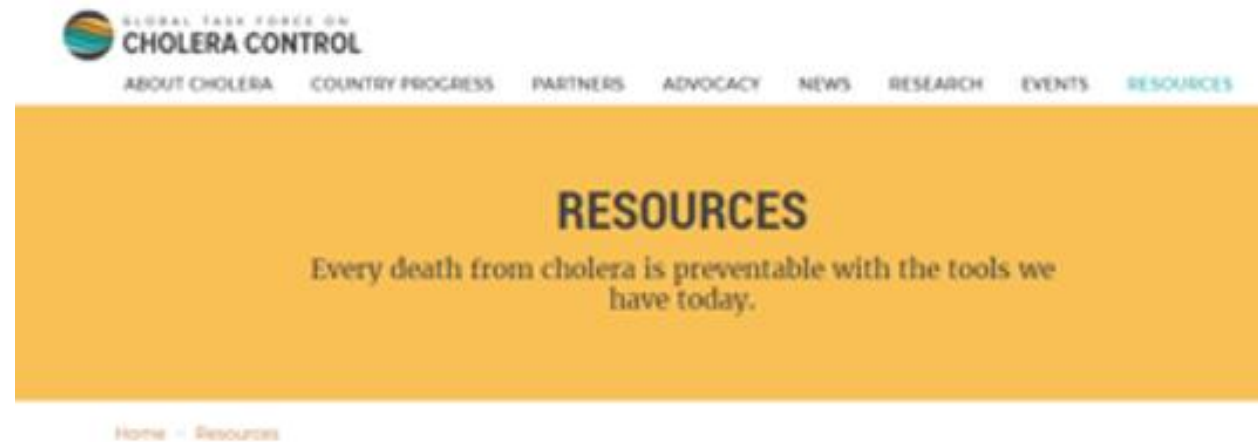
<https://www.gtfcc.org/cholera-app/>



A man with short dark hair and glasses, wearing a white lab coat over a blue shirt and a blue lanyard, is seated at a desk. He is looking down at a silver laptop. The desk has a patterned cloth and a black Canon printer to the left. A window with a wooden frame is in the background, showing greenery outside. A teal banner with white text is overlaid on the left side of the image.

GTFCC website

# GTFCC website – Resources tab



<https://www.gtfcc.org/resources>

INTERVENTION ×

- ☐ All
- ☐ Advocacy
- ☐ Case Management
- ☐ Laboratory
- ☐ Oral Cholera Vaccines
- ☐ Surveillance
- ☐ WASH

➡ Detailed technical guidance including on:

- Case management
- Surveillance
- Testing



## Detailed guidance

### Public health surveillance for cholera

Guidance Document  
2024



## Template case report form

General information	
Date of reporting by the health facility: [Y_][Y_][Y_][Y_] - [M_][M_] - [D_][D_]	
Name of the reporting health facility:	
1. Patient information	
Unique patient identifier	
First name(s) of the patient	
Last name(s) of the patient	
Age of the patient (in years) <small>(if the patient is under 1 year, record 0)</small>	____ years
Patient's sex at birth	<input type="checkbox"/> Female <input type="checkbox"/> Male
Place of residence	Admin level 1 <small>[e.g., region or province of residence of the patient]</small>
	Admin level 2 <small>[e.g., district of residence of the patient]</small>
	Admin level 3 <small>[e.g., health area or commune of residence of the patient]</small>
	Admin level 4 <small>[e.g., ward, municipal sector or village of residence of the case]</small>
	Address of residence <small>[neighbourhood, street, house]</small>



## Example of a line list

Last name	Age (in years)	Date of symptom onset	Hospitalization	Level of dehydration
LASTNAME	AGE	DATEOFONSET	HOSPITALIZATION	DEHYDRATION
mmmm	22	2023-01-01	Inpatient	Unknown
oooo	35	2023-01-01	Inpatient	Severe dehydration
nnnnn	7	2023-01-02	Inpatient	Some dehydration
ppppp	45	2023-01-02	Inpatient	Severe dehydration
qqqqq	46	2023-01-03	Outpatient	Some dehydration
rrrrr	0	2023-01-03	Inpatient	Severe dehydration
ssss	17	2023-01-03	Outpatient	Some dehydration
ttttt	13	2023-01-03	Inpatient	Some dehydration
uuuuu	33	2023-01-04	Inpatient	Some dehydration
vvvvv	19	2023-01-10	Inpatient	Some dehydration
wwwww	52	2023-01-15	Inpatient	Some dehydration
yyyy	20	2023-01-21	Inpatient	Severe dehydration





# GTFCC Website – Testing

## RDT - Job aid

### Rapid Diagnostic Test (RDT) for cholera detection Quick Reference Guide – For more detailed instructions please refer to the manufacturer's Package Insert



**Indication of use**

- RDTs are not used for individual diagnosis.
- RDTs are used as a tool **for early outbreak detection only** and once the outbreak is declared **for triaging the samples** to be sent to the laboratory.
- Perform RDT on fresh stool specimens and process within 2 hours of collection (or according to manufacturer specifications).

**Before you start**

- Check the expiry date. If expiry date has passed, use another kit.
- Read carefully the instructions for use in its entirety.
- Ensure the reagent bottle is intact and solution is not turbid or discoloured. Discard bottle if unsatisfactory.

**At the end**

- Place all waste in a double-lined plastic bag labelled "Biohazard."
- Record the test results in the patient's information record or registers.
- Keep samples under adequate conditions and send them to the laboratory for culture or PCR (see GTFCC packaging and shipping job aids).
- Report results accordingly.

**1** Wear appropriate personal protective equipment. Put on the gloves. Use new gloves for each patient.

**2** Open the cap of the sample processing vial or specimen collection tube. Label tube with patient identifier.

**3** **Solid fecal specimens:** Collect the sufficient fecal specimens using the specimen collection swab. **Liquid fecal specimens:** Draw liquid fecal specimens up to the fill line using disposable dropper.

**4** Tightly recap sample processing vial or collection tube and shake to mix contents.

**5** Break or open the outer end of the cap (point away or cover with tissue to avoid splash). Dispense 4 drops of processed sample into labelled 5 ml test tube.

**6** Carefully open test pouch. Discard if damaged, or if desiccant is missing or changed in color. Write patient's name on the dipstick or cassette.

**7** **Dipstick:** Place the dipstick in the test tube with the arrows facing down. Confirm the end of the dipstick is submerged in the processed sample. **Cassette:** Hold the collection tube vertically and dispense 3 drops into specimen well "S".

**8** **Dipstick:** Wait 15-30 minutes. Remove dipstick and read the result. **Cassette:** Wait 15 minutes and read the results.

## Referral form for testing



### GTFCC Laboratory Referral Form for Cholera Suspected Case

The referring health worker is to complete this form and send a copy to the laboratory with the specimen (one form per specimen sent).

Please attach a copy of the Admission and Triage Form (Appendix 12 of the Cholera Outbreak Manual).

For specific instructions for packaging and transportation please refer to Specimen Packaging and Domestic Transportation for Laboratory Confirmation of *Vibrio cholerae* O1/O139.

Request made by

Name of health facility (or stamp or health facility identifier)

Date of request: DD / MM / YYYY

Name of referring health worker:

Address:

Phone: E-mail:

Request made for

☐ Laboratory identification of Cholera ☐ Antimicrobial Susceptibility Testing ☐ Other, specify

Specimen

Specimen ID: Date and time of collection: DD / MM / YYYY Hour Minute

Location specimen collected:

Type of specimen collected: ☐ Stool ☐ Rectal swab ☐ Other, specify:

Blood observed in stool: ☐ Yes ☐ No

Appearance of specimen: ☐ Formed ☐ Soft ☐ Watery ☐ Bloody-mucus

Conditioning of stool sample<sup>1</sup>: ☐ Stool in container (no added reagents) ☐ in Cary Blair ☐ in Alkaline Peptone Water (APW) ☐ on filter paper ☐ other, specify:

Date specimen sent to referral laboratory: DD / MM / YYYY

If date of specimen collection and date specimen sent are different, how was the specimen stored (media, temperature)?

Was an RDT performed on the same specimen? ☐ No ☐ Yes, specify: ☐ Enriched RDT ☐ Direct RDT

Result: ☐ Positive ☐ Negative ☐ Indeterminate

Name of RDT kit used:

1 To be sent at ambient temperature (ideally 22-25°C). Do not refrigerate or freeze. Keep out of sun/light.

## Handling samples

### Specimen Packaging and Domestic Transportation for Laboratory Confirmation of *Vibrio cholerae* O1/O139



**FAECAL SPECIMENS CONDITIONING:** 4 possible options

Use gloves and lab coat when handling samples at all times. Specimen Label: Carefully identify specimens and indicate (using a permanent marker) patient name, date of collection, time, location of sampling and location of patient when likely infected. Lab Form: Use Annex 2B - IDSR case-based laboratory reporting form.<sup>1</sup>

Faecal Specimen in Stool Container	APW (alkaline peptone water)	Wet and Dry Filter Paper (WFP/DFP)	Cary Blair medium, Faecal Sample or Rectal Swab
<p>Keep in initial stool container.</p>	<p>Transfer faecal material from initial container into APW tube. <b>NOTE:</b> The faecal material should not exceed 10% of the volume of the APW enrichment.</p>	<p><b>WET FILTER PAPER (WFP):</b> Dip filter disk into watery faecal material with single-use device (forceps, needle), transfer into tube, add 2 to 3 drops of saline, close tube. <b>DRY FILTER PAPER (DFP):</b> Deposit one drop of watery stool onto filter paper. Air dry paper before placing into individual pouch with desiccant.</p>	<p>For faecal samples: dip swab in liquid stool and transfer into Cary Blair medium. <b>Rectal swab:</b> Place swab directly into Cary Blair. No further manipulation is required.</p>
Compatibility with testing methods (either directly from sample or after incubation steps in APW for those marked with *).			
RDT, culture, molecular analysis	RDT, culture, molecular analysis	WFP: culture, molecular analysis, RDT* DFP: molecular analysis	Culture, molecular analysis* and RDT*
<b>MATERIAL REQUIRED</b>			
Stool container (plastic, screw cap, 30ml, without disinfectant)	APW, tubes with screw cap, transfer pipettes or swabs	WFP: Filter paper discs (6mm Ø, non-sterile), saline solution, forceps or needle, 2ml tube (screw cap) DFP: Whatman cards (903 protein saver, FIA Elute Micro Cards), disposable transfer pipettes, individual pouches, desiccant	Cary Blair (semi-solid, bottle/tube), swab (sterile, cotton/polyester)
Parafilm or sealing tape to seal packages and prevent leakage (not required for dry filter paper).			
<b>CONSERVATION</b>			
Ambient temperature (ideally 22-25°C). Do not refrigerate. Keep stool container out of direct sunlight.			
2 hours max. If delay >2h, use Cary Blair.	Less than 24 hours	WFP: ideally less than 15 days DFP: no limitation	Follow manufacturer's instructions, on average 7 days
<b>DOMESTIC TRANSPORTATION (national shipment, by road)</b>			
<p><b>Primary Containers</b></p> <p>Primary containers are individually wrapped, and absorbent material placed between the primary container(s) and the secondary containers.</p>		<p><b>Absorbent Materials</b></p> <p>Cotton Balls, Paper Towels</p>	
<p><b>Secondary Container</b></p> <p>Sealed Polyethylene Container (1-inch thick minimum), Sealed Plastic Bag, Plastic Canister, Screw-Cap Can</p>		<p><b>Tertiary Containers</b></p> <p>Rigid cooler without ice-pack, Corrugated fiberboard</p>	
<p>Samples are categorized "biological substances" category B. The use of triple packaging with UN3373 labels are required, alternatives are shown on the left.</p> <p><b>Samples must travel with corresponding documentation</b> (lab request form and/or line list). Include any results that may have already been performed, such as RDT results. Do not write the name of the organism on the outside of the package, only on the paperwork inside the box where appropriate.</p> <p><b>IMPORTANT:</b> indicate complete address and phone number for sender and recipient. Inform recipient laboratory about upcoming arrival of samples.</p> <p><b>TRANSPORT AT AMBIENT TEMPERATURE</b></p> <p>GTFCC, April 2019 <small><sup>1</sup> Annex 2B - Case-based laboratory reporting form. <a href="https://www.who.int/diseases/cholera/files/Annex2017-04/IDSR-Technical-Guide/lines_Final_2010_3.pdf">https://www.who.int/diseases/cholera/files/Annex2017-04/IDSR-Technical-Guide/lines_Final_2010_3.pdf</a></small></p>			





# GTFCC Website – Testing

## Trainings on sample collection and testing with RDT for cholera for health care workers







Local guidance



# Local guidance



## ► Stay in contact with your health authority

- To know the **ongoing cholera situation** in your geographic area
- To receive **practical guidance** to implement cholera surveillance
  - Forms/tool/channels to report
  - Contact details of laboratories
  - Etc



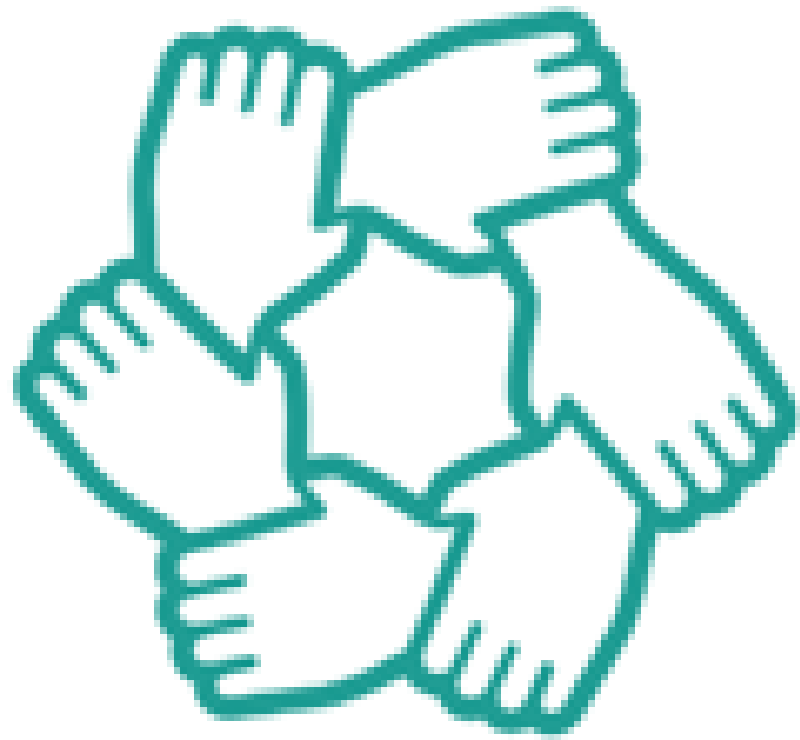


# GTFCC network



# GTFCC network

**The GTFCC and its network of partners is here to support you**



**For any question or technical assistance,  
contact the GTFCC Secretariat**

**[GTFCCsecretariat@who.int](mailto:GTFCCsecretariat@who.int)**



Together we can  
#Endcholera



GLOBAL TASK FORCE ON  
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