

# Cholera surveillance for health care workers

## Module 2



GLOBAL TASK FORCE ON  
**CHOLERA CONTROL**



# Cholera surveillance for health care workers

Key principles



# What will you learn?

- **Identify** patients with suspected cholera
- **Collect standard information** on patients with suspected cholera
- **Test** patients with suspected cholera



A photograph showing a cholera treatment center. In the foreground, a patient lies on a green metal cot, appearing to be asleep or resting. They are wearing a light blue shirt and dark pants. A white cloth is draped over their head and shoulders. To the right of the patient, a red bucket sits on the ground. In the background, another cot is visible with a patient lying on it. The setting appears to be outdoors or in a semi-enclosed tent-like structure. The ground is covered with a blue tarp. Two plastic water bottles are visible on the ground in the foreground.

## Cholera signs and symptoms

# Acute Watery Diarrhoea

A sign to suspect cholera is **Acute Watery Diarrhoea (AWD)**

**AWD is not any type of diarrhoea**

- ➡ **Acute**: Lasts for **less than 7 days**
- ➡ **Watery**: Stools are **non-bloody and liquid** (and may contain mucous)
- ➡ **Diarrhoea**: There are  **$\geq 3$  loose stools within a 24-hour period**

# AWD & dehydration

Health care workers **assess the level of dehydration** of patients with AWD and **determine the rehydration plan accordingly**

A patient has severe dehydration if

**One or more danger signs**

- Lethargic or unconscious
- Absent or weak pulse
- Respiratory distress

**Or**

**At least two of the following**

- Sunken eyes
- Not able to drink or drinks poorly
- Skin pinch goes back very slowly

► Patients with **severe dehydration** need **intravenous rehydration**

► **Other patients** with AWD are treated with **oral rehydration** solution



A photograph of a hospital ward. In the foreground, the back of a person wearing a patterned wrap is visible. In the background, a patient lies in a bed, and a large window is visible. A red bucket sits on the floor. A teal text box is overlaid on the left side.

# Patients with Suspected cholera

Photo adapted from: Raissa Karama Rwizibuka/Wellcome Trust

# Cholera case definitions

Depending on the cholera situation, **different cholera case definitions** apply

In areas where there is no cholera outbreak

- ➡ Patients **aged 2 years or older with AWD and severe dehydration**  
or
- ➡ **Patients aged 2 years or older** who died from AWD

**Criteria on age and severe dehydration**

- **Limit false suspected cholera outbreaks**
- **Avoid overwhelming early detection systems**

In areas where there is a cholera outbreak

- ➡ Patients with **AWD** (or who died from AWD)

**NO criteria on age and severe dehydration**

- **For sensitive monitoring**





# Information collection



# Collection of information

**When a patient who meets the cholera case definition is identified, standard information is collected with a case report form or a line list**

## ► Patient information

- Age
- Sex
- Place of residence

## ► Clinical information

- Date of symptom onset
- Hospitalisation
- Dehydration level
- Outcome (alive, died after arriving at health facility, died before reaching the health facility,

## ► Information on tests

- Tests performed/requested
- Results



**Learn where to access standard data collection tools in Module 6**

**This information is reported to health authorities**



# Testing



# Testing for cholera

## Why to test for cholera

### ► For surveillance

- AWD can be caused by different diseases
- Testing is necessary to **characterize the cholera situation**

### ► But not for treatment

- Cholera test results **do not influence the treatment**
- Treatment depends on dehydration level

## Who to test for cholera



**Learn about testing strategies  
in Modules 3, 4, 5**

- Patients who meet the definition of a suspected cholera case
- Among those, **which patients to test depends on the cholera situation**



# Rapid Diagnostic Tests

RDTs are useful screening tools but **cannot be used to confirm cholera**

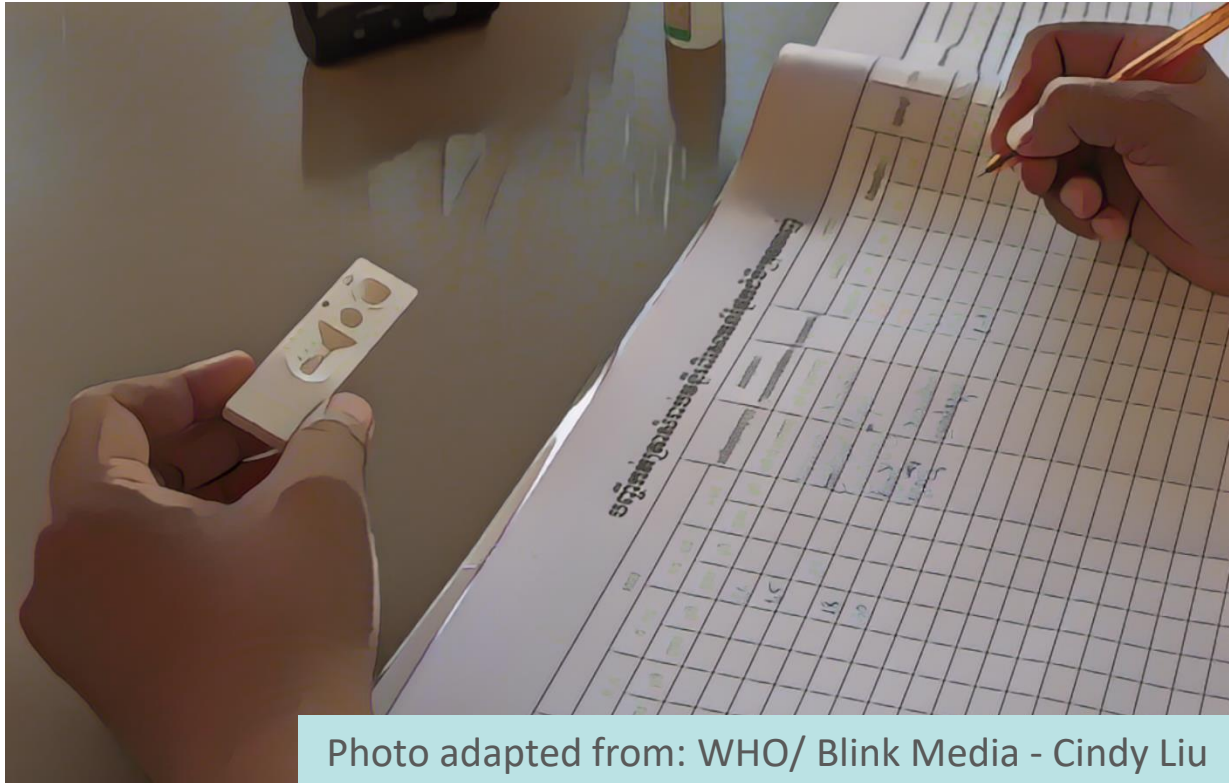


Photo adapted from: WHO/ Blink Media - Cindy Liu

## ► RDTs

- Can be **performed at health facility level**
  - Rapid and easy to use
- Performed
  - On stool samples
  - From **patients with suspected cholera**
- Used to **triage samples** for laboratory confirmation (i.e., RDT+)

## ► RDT results

- **Negative: sufficient to rule out cholera**
- **Recorded** with standard information (i.e., pos and neg results)



**Learn where to access information on RDT use in Module 6**

# Laboratory confirmation

For cholera to be confirmed, samples are sent to a laboratory for **confirmatory testing (culture/PCR)**



Photo adapted from: WHO / Fid Thompson

- ➡ Samples for confirmatory testing
  - **Fresh stools**
  - **Rectal swabs**
- ➡ Sample collection
  - Within the **first 4 days of illness**
  - **Before antibiotic** therapy
- ➡ **Do NOT wait for the results** to initiate treatment



**Learn where to access information on how to handle samples in Module 6**



# Wrap up

- ➡ Cholera causes **Acute Watery Diarrhoea (AWD)** and may lead to **severe dehydration**
- ➡ **Standard information** is recorded on **any patient with suspected cholera**
  - Case report form or line list
- ➡ To **confirm cholera**, stool samples are sent to a **laboratory for testing**
- ➡ If RDTs are available, confirmatory testing is on **samples tested positive by RDT**





# Question 1



## ► What is Acute Watery Diarrhoea (AWD)?

Select all that apply

### **Acute**

- a) It is acute if it lasts for less than 14 days
- b) It is acute if it lasts for less than 7 days

### **Watery**

- c) It is watery if stools are non-bloody and liquid (and may contain mucous)
- d) It is watery if stools don't contain mucous

### **Diarrhoea**

- e) It is diarrhoea if there are  $\geq 3$  loose stools within a 48-hour period
- f) It is diarrhoea if there are  $\geq 3$  loose stools within a 24-hour period

# Question 1 – Answers



## ► What is Acute Watery Diarrhoea (AWD)?

### Acute

a) It is acute if it lasts for less than 14 days

**b) It is acute if it lasts for less than 7 days**

### Watery

**c) It is watery if stools are non-bloody and liquid (and may contain mucous)**

d) It is watery if stools don't contain mucous

### Diarrhoea

e) It is diarrhoea if there are  $\geq 3$  loose stools within a 48-hour period

**f) It is diarrhoea if there are  $\geq 3$  loose stools within a 24-hour period**



## Question 2



► **How is standard information on suspected cholera cases tested by Rapid Diagnostic Test (RDT) recorded?**

- a) Standard information on suspected cholera cases is only recorded on patients tested positive by RDT
- b) Standard information on suspected cholera cases is always recorded regardless of the RDT result

## Question 2 – Answer



- **How is standard information on suspected cholera cases tested by Rapid Diagnostic Test (RDT) recorded?**
  - a) Standard information on suspected cholera cases is only recorded on patients tested positive by RDT
  - b) Standard information on suspected cholera cases is always recorded regardless of the RDT result**

## Question 3



■ **What is the recommended approach for samples tested negative by Rapid Diagnostic Test (RDT)?**

- a) RDTs are screening tests, therefore samples tested negative by RDT should be retested by culture / PCR
- b) RDTs can be used to rule out cholera, therefore it is not necessary to retest by culture / PCR samples tested negative by RDT



## Question 3 – Answer



■ **What is the recommended approach for samples tested negative by Rapid Diagnostic Test (RDT)?**

- a) RDTs are screening tests, therefore samples tested negative by RDT should be retested by culture / PCR
- b) RDTs can be used to rule out cholera, therefore it is not necessary to retest by culture / PCR samples tested negative by RDT**

Together we can  
#Endcholera



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