



Cholera Case Investigation - Abyan, Yemen

Key Findings Presentation

February 2024



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A light gray world map is centered in the background. Overlaid on the map is a complex, light gray geometric pattern of interconnected lines forming various sized triangles and polygons. The map shows the outlines of continents and countries. The text '01' is positioned in the upper center, over Europe and North Africa.

01

Introduction

Cholera Situation in Yemen



Current Cholera Outbreak*

- From October - December 2023, Yemen experienced a **cholera outbreak**, with nearly **1018** cases of AWD recorded.*
- The outbreak has started among **migrant communities** in Ataq district of Shabwah governorate.*
- Since the last surge in suspected cholera cases during the last quarter of 2023 and until 22nd of April 2024, more than 18,000 suspected cholera have been identified.**
- Out of the 18,000 suspected cases, there 109 associated deaths.**
- 18 out of 21 (86%) governorate were affected by the widespread disease.**

* [Yemen Humanitarian Update: Issue 11, December 2023 \[EN/AR\] | OCHA \(unocha.org\)](#)

** [Yemen Cholera and Acute Malnutrition Situation Report #1 - April 22, 2024 - Yemen | ReliefWeb](#)



WASH Response

- As part of the response to the cholera outbreak, REACH, in collaboration with the Yemen WASH Cluster, **updated the CIF tool** with a specific focus on cholera. This tool is designed to collect data that helps understand **potential sources**, **risk factors**, and **vulnerabilities** associated with a cholera outbreak.
- Following the recent outbreak, the Yemen WASH Cluster has requested partners to use the CIF tool to **conduct interviews with patients**, especially in the affected areas. The tool is available to all YWC partners for use, and below you can find examples of both the paper and Kobo versions.



Cholera Investigation Form (CIF)

CIF_08_FEB_2024

► Metadata

*P1. Were you tested for cholera through a laboratory test of your stool?
(If response is "results were negative," end the interview)

☒ Yes, results were positive
☐ Yes, results were negative
☐ Yes, results have not yet been received
☐ No
☐ Don't know
☐ Refuse to answer

▼ Positive & The results have not yet been received.

► Patient information

► Risk factors

► Health

*X1. Was this interview done using a mobile telephone or a paper-form?
This question is to be answered by the enumerator

☐ Mobile phone
☐ Paper form

Cholera Case Investigation Form - Yemen

GENERAL

G1. Date of the interview

G2. Enumerator First Name

G2.1 Enumerator Last Name

G3. Enumerator Agency

G3.1 If other, please specify:

G4. Governorate

G5. District

G6. Sub-district

G7. Location name

G8. Type of location (select one)

☐ 1. Urban ☐ 2. Peri-Urban ☐ 3. Rural ☐ 4. IDP Hosting Site

G9. Status of the respondent (select one)

☐ 1. Host community ☐ 3. Migrants ☐ 5. Returnees
☐ 2. IDPs ☐ 4. Refugees ☐ 6. Don't know

G10. Name of health facility

G10.A What is the GPS coordinates of your current location (N.E. Altitude)?

N: E: Elevation:

G11. Phone number of health facility (Enter integer)

+967 xx xxx xxxxx

G11.A Name of Chief Medical Officer

G12. Hello, my name is [SAY YOUR NAME] and I am working for [SAY NAME OF ORGANIZATION THAT YOU WORK FOR], and we are conducting interviews to inform the cholera response for Yemen. This interview will take around 15 minutes. Information that you provide will not be identifiable and will be anonymous. Participation in this interview is voluntary and you can choose not to answer any or all of the questions. You are free to stop this interview at any time. Are you willing to be interviewed?

☐ 1. Yes ☐ 2. No

PATIENT INFORMATION

P1. Were you tested for cholera through a laboratory test of your stool? (If response is "results were negative," end the interview) (select one)

☐ 1. Yes, results were positive
☐ 2. Yes, results were negative
☐ 3. Yes, results have not yet been received

☐ 4. No
☐ 5. Don't know
☐ 6. Refuse to answer

Methodology Overview



CIF tool – the basics

- In-person patient-level surveys with an adult member (18 years or older) who is waiting for the results or tested positive for cholera.
- The CIF includes a section to collect data on each household member who might be sick, as well as details on **potential exposure** to cholera within the household and community.
- The CIF examines the patients' recent travels to identify **potential routes of cholera transmission**.
- Patient **Access to WASH services and behaviors** were assessed to monitor associated risk factors.
- Data collection with the patient **ideally** within **two weeks of health facility discharge** of the patient



DATA COLLECTION

- With the support of the Health Cluster, Data collection was carried out in **Health facilities** that provide contact information for positive and potential cholera patients.
- Following coordination with the Yemen WASH Cluster, **WASH partners volunteer to collect CIF data** to inquire about positive and potential cases.



POPULATION OF INTEREST

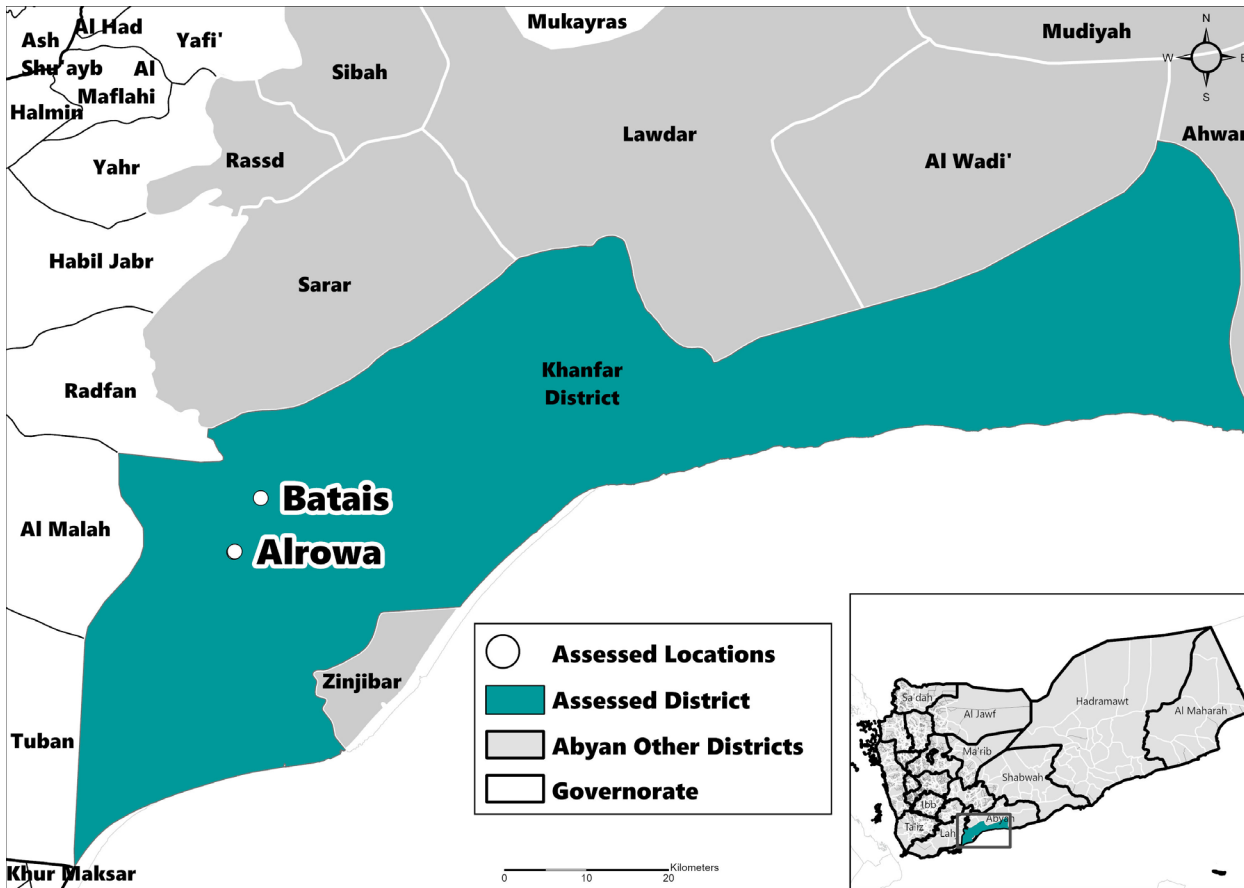
- **All households (HH) members**, people from host communities, displaced populations, refugees, and migrants who are suspected of having cholera and have visited a medical centre due to illness.
- Ideally, and if there are enough resources available, the **form should be used for all people** who seek treatment for Acute Watery Diarrhea (AWD) at the health center / Diarrhea Treatment Center (DTC) when a cholera outbreak is suspected in the area.

A light gray world map is centered in the background. Overlaid on the map is a complex, light gray geometric pattern of interconnected lines forming various sized triangles and polygons. The number '02' is printed in a bold, red, sans-serif font, positioned centrally over the map.

02

Demographics

Positive Case Demographics



- The following key findings were derived from 4 patient-level interviews conducted through the CIF tool in February 2024, collected by CARE International.
- Locations of the four cases are in 2 rural areas Batais and Al-Rowa, in the district of Khanfar.
- All cases live within 10km of the medical center visited for treatment.

Batais cases (2):

- 30 y.o female
- 80 y.o male

Al-Rowa cases (2):

- 34 y.o male
- 80 y.o male

- All positive cases have at least 6 or more HH members.
- Patients reported being unaware of other confirmed/suspected cases in the same neighborhood.
- One confirmed case indicated the presence of cholera symptoms in a one-year-old female household member.
- One positive case reported travelling to different locations while having symptoms within Al-Rowa.

A light gray world map is centered in the background. Overlaid on the map is a complex, light gray geometric pattern of interconnected lines forming various sized triangles and polygons. The number '03' is printed in a bold, red, sans-serif font, positioned centrally over the map's landmasses.

03

Main Findings

A light gray world map is centered in the background. Overlaid on the map is a complex, light gray geometric pattern of interconnected lines forming various sized triangles and polygons. The text '03.1' is positioned in the upper center, over the European and Asian landmasses.

03.1

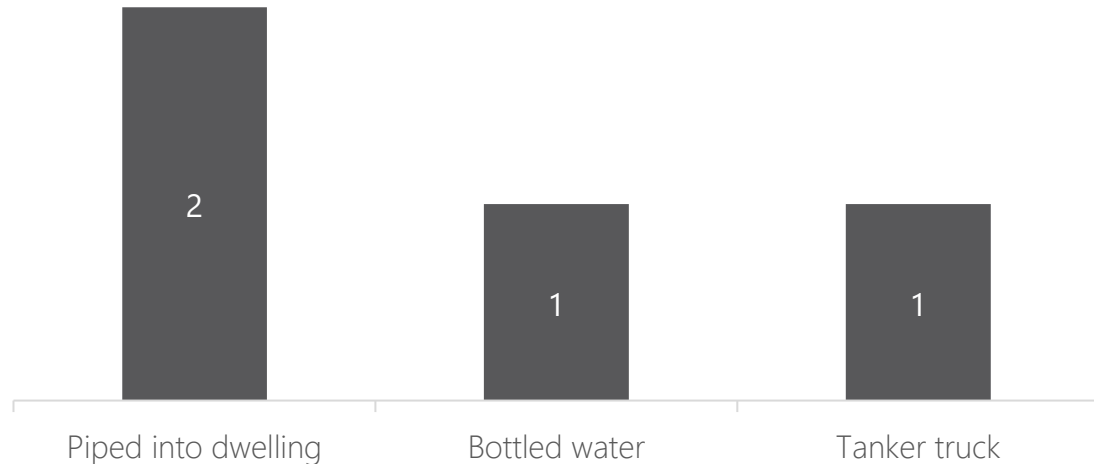
Risk Factors

WASH Practices



Key Findings

Main source of drinking water reported by patients.
(n=4)



All 4 patients reported using **Improved water sources** as their main source of drinking water. One patient who reported using **pipled water into dwelling**, mentioned using **bottled water** as a secondary source of drinking water.

None of the patients reported using methods to **treat the drinking water** to make it safer to drink.

All patients reported using a bucket with a lid as a common **water storage method** in the HH. In addition to that, two patients reported having **water tanks on the roof** that were used for storage, while one reported having an **underground water tank**. **One patient** reported using only a **bucket with a lid**.

Water Treatment Practices:

0/4

Patients reported treating their water using any method to make it safer to drink.

Handwashing Practices



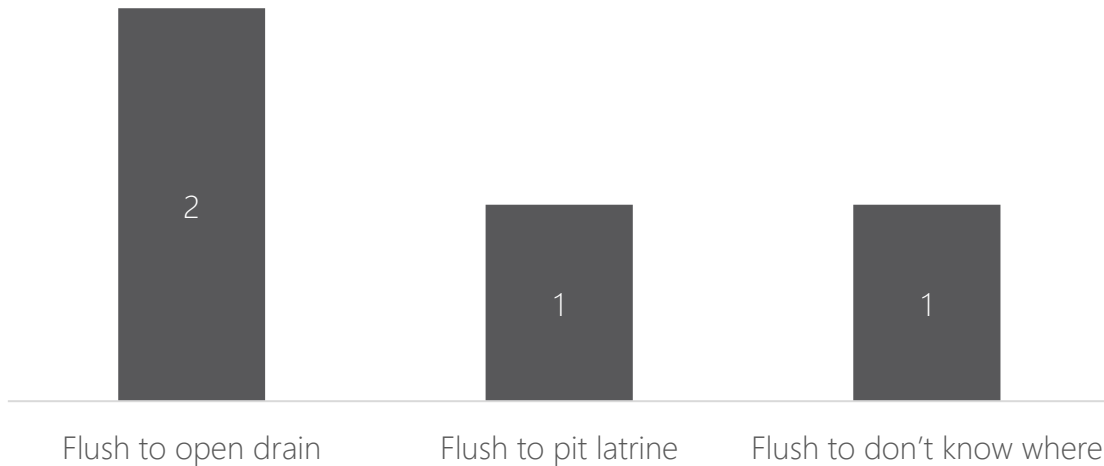
- Patients who reported washing their hands reported doing so usually before eating (n=3) using a **fixed facility tap in their dwelling or mobile bowl**. Of these patients, the use of soap along with the handwashing varied:
 - One patient reported using soap.
 - One patient reported using the same soap used for laundry
 - One patient reported not using soap because of the high cost
- One patient** reported **rarely** washing their hands and lacked a dedicated handwashing device.

WASH Practices



Key Findings

Type of sanitation facility reported being used by the patients. (n=4)



Only 1 patient reported using **Improved sanitation facilities** for their household while the rest (n=3) of the patients reported using **Unimproved sanitation facilities**. The open drains are associated with an open latrine, while the pit latrine is a closed pit. The household who responded with "Flush to don't know where" as a sanitation facility also **frequently** reported seeing visible **solid waste/trash** and overflowing sewage, and **sometimes** observed visible traces of **human feces** in the vicinity of their accommodation

Patients reported **frequently** (n=3) seeing visible **solid waste/trash**, **human faeces** (n=2), or **stagnant water** (n=2) in the vicinity of their accommodation in the last 30 days.

Environmental Sanitation Systems:

4/4

Patients reported that there is frequently overflowing **sewage** in the vicinity of the accommodation in the last 30 days, most reported a **pit latrine** as the source of the sewage.

Social Behaviors

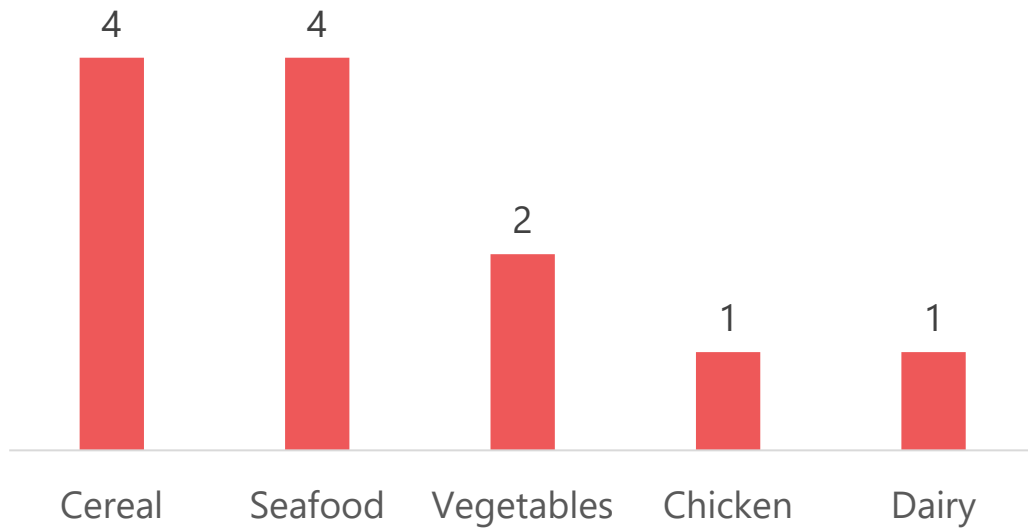
No patients reported **visiting a sick person** in a health facility the week before experiencing symptoms.

One patient reportedly **attended a funeral ceremony** in the week before experiencing symptoms. The deceased did not reportedly die from cholera.

Food Consumption

Key Findings

Types of foods consumed by the patients in the week before the start of symptoms (n=4)*



*Multiple answers could be selected

Hygiene Practices:

4/4

Patients reported washing fruits and vegetables before consumption, using **untreated water**.

- **Two patients** reported buying food from a **restaurant** in the week before the first symptoms.
- **One patient** reported buying food from a **street kiosk** in the week before first experiencing symptoms.

A light gray world map is centered in the background. Overlaid on the map is a complex, light gray geometric pattern of interconnected lines forming various sized triangles and polygons. The text '03.2' is positioned in the upper-middle part of the image, over the European continent.

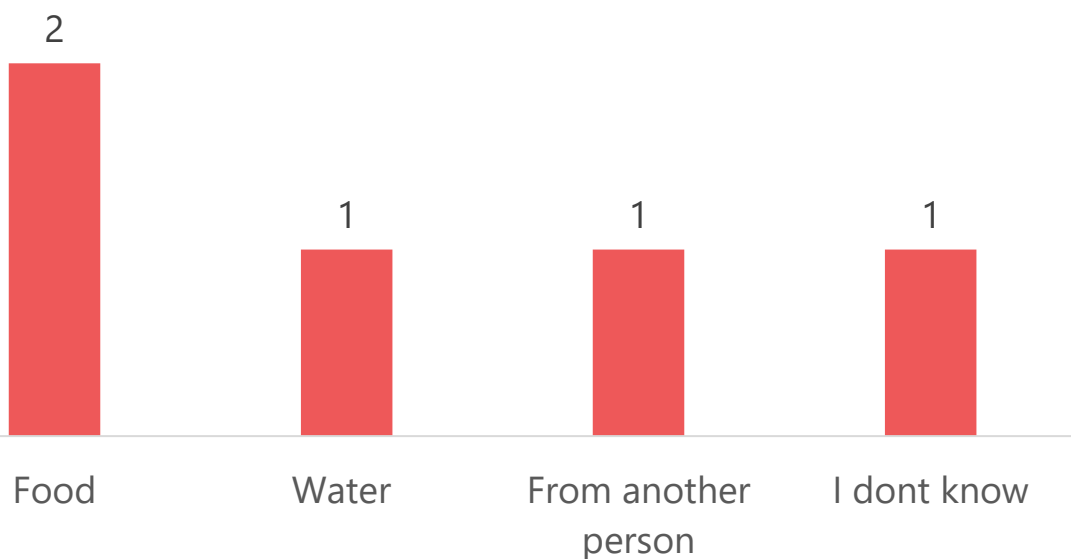
03.2

Health Education

Health Education

Key Findings

Patients perceived source of illness (n=4)*



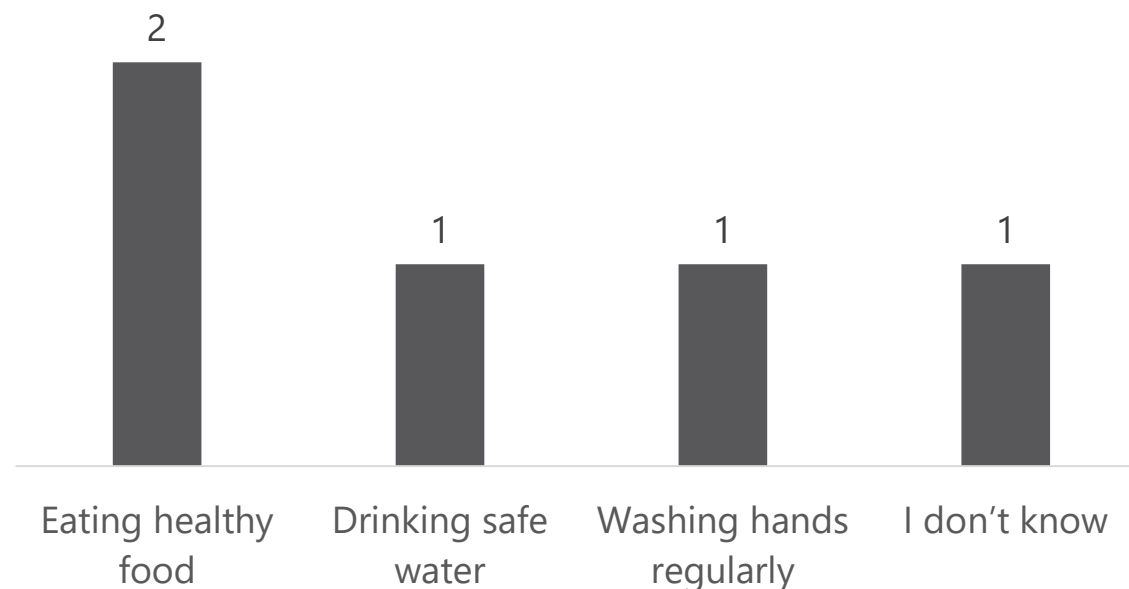
3 out of 4 patients reported having received education about cholera in the past 12 months. The sources of information reported were television, radio, or from a community volunteer.

*Multiple answers could be selected

Two patients reported that eating healthy food would help to prevent cholera. While one patient reported drinking safe water and washing hands regularly were methods of cholera prevention.

The patient that reported not knowing if they had received any cholera education, was also unaware of methods of cholera prevention.

Patients perceived methods of cholera prevention (n=4)*



Limitations

- Data collection partners raised some concerns regarding **difficulties in accessing patient lists** from health facilities to facilitate interviews. This challenge, coupled with reliance on health center data, poses obstacles to effectively conducting interviews.
- In December 2023, a joint report on cholera by the WASH and Health Cluster revealed that approximately 36% (1,262) of suspected cholera cases involved children under the age of five. However, the CIF tool restricts partners to interviewing only individuals aged 18 and older. Consequently, cases involving **individuals under 18 may be overlooked**, potentially impacting coverage and comprehension of the total suspected cases within the assessed areas.
- Patients might encounter **challenges in recalling specific details** about locations visited or individuals encountered.
- Respondents might be reluctant to disclose personal information or details regarding their illness or sick family members due to privacy concerns, **cultural or traditional sensitivities**.
- There might be constraints on following up with patients for clarifications or additional information (especially migrants/refugees) , which could result in having **incomplete data**.
- The **timeframe** between sharing the patient's name to the WASH partner and actually reaching the patient could be substantial, potentially resulting in the patient being in a different location upon arrival of the partner/enumerators. Additionally, since the WASH partner should conduct the interview within **two weeks** of the patient's discharge from the health facility, any delays could impact the accuracy and reliability of the information collected.
- Given the constraints **of limited resources and funding allocation**, coupled with the unexpected nature of the cholera outbreak outside partners' response planning strategy, we encounter **challenges in expanding the coverage** and assessing additional locations

Thank you for your attention



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