Research Terms of Reference

Cholera Surveillance at Health Facilities in Northeast Syria
SYR2214
Syria

Nov 2022
Version 1

REACH Informing
more effective
humanitarian action

1. Executive Summary

Country of intervention	Syria					
Type of Emergency	□	Natural disaster	x	Conflict	□	Other *(specify)*
Type of Crisis	□	Sudden onset	□	Slow onset	x	Protracted
Mandating Body/ Agency	*NES Forum / NES Health Working Group*					
IMPACT Project Code	*16AXF*					
Overall Research Timeframe *(from research design to final outputs / M&E)*	31 October 2022 to 22 December 2022 (or longer depending on the cholera outbreak)					

Research Timeframe *Add planned deadlines (for first cycle if more than 1)*	1. Training: 31 Oct 2022	6. Preliminary presentation: As needed to the partners
	2. Start data collection: 01 Nov 2022	7. Outputs sent for validation: 09 Nov 2022
	3. Data collected: Daily basis	8. Outputs published: Daily basis on the dashboard; additional outputs are TBD
	4. Data analysed: Daily basis	9. Final presentation: NA
	5. Data sent for validation: Daily basis for the first week of the assessment; as needed thereafter (e.g. if the methodology or tool changes)	

Number of assessments	x	Single assessment (one cycle)
	□	Multi assessment (more than one cycle) *[Describe here the frequency of the cycle]*

Humanitarian milestones *Specify **what** will the assessment inform and **when** e.g. The shelter cluster will use this data to draft its Revised Flash Appeal;*	**Milestone**		**Deadline**
	□	Donor plan/strategy	_ _/_ _/_ _ _ _
	□	Inter-cluster plan/strategy	_ _/_ _/_ _ _ _
	x	Cluster plan/strategy	Using the health facility surveillance data, the NES Forum and Health Working Group will inform partners about the burden of cholera in Northeast Syria and guide programmatic responses.
	□	NGO platform plan/strategy	_ _/_ _/_ _ _ _
	□	Other (Specify):	_ _/_ _/_ _ _ _
	Audience type		**Dissemination**

Audience Type & Dissemination *Specify who will the assessment inform and how you will disseminate to inform the audience*	□ Strategic x Programmatic x Operational □ [Other, Specify]		□ General Product Mailing (e.g. mail to NGO consortium; HCT participants; Donors) □ Cluster Mailing □ Presentation of findings (e.g. at HCT meeting; Cluster meeting) □ Website Dissemination (Relief Web & REACH Resource Centre) x Dashboard tracking of cholera cases in NES, hosted by REACH
Detailed dissemination plan required	□	Yes	x No
General Objective	The objective of the assessment is to track cholera cases at health facilities in Northeast Syria (NES) that are not otherwise under surveillance. Cholera case counts collected by REACH will be compiled with other sources of cholera surveillance (e.g. cases collected by partner organizations at other health facilities) to develop a surveillance dashboard of cholera in NES.		
Specific Objective(s)	- To collect timely (daily) data on the number of new cholera cases in NES health facilities. - To record data into a dashboard, managed by REACH; this will enable all partners working in NES to have data about the number of cholera cases and their geographic distribution.		
Research Questions	- How many cholera cases are in NES? (To be reported as both cumulative cases and new cases reported daily.)Where are the geographic locations of the cases? - Who are the patients with cholera (demographic data)? - What is the case fatality rate (percent of deaths out of all confirmed cases)?		
Geographic Coverage	Up to 50 health facilities throughout NES, across Aleppo, Al-Hasakeh, Ar-Raqqa, and Deir-ez-Zor governorates (beginning with 35 health facilities on 01 November 2022, with more to be added on as needed).		
Secondary data sources	N/A		
Population(s) *Select all that apply*	□	IDPs in camp	□ IDPs in informal sites
	□	IDPs in host communities	□ IDPs [Other, Specify]
	□	Refugees in camp	□ Refugees in informal sites
	□	Refugees in host communities	□ Refugees [Other, Specify]
	□	Host communities	x **Suspected and confirmed cholera cases[1]**
Data collection tool(s)	x	Structured (Quantitative)	□ Semi-structured (Qualitative)
		Sampling method	**Data collection method**
Structured data collection tool # 1 *Select sampling and data collection method and specify target # interviews*	x Purposive □ Probability / Simple random □ Probability / Stratified simple random □ Probability / Cluster sampling □ Probability / Stratified cluster sampling		**x Key informant interview (Target #): 35 health facilities (may increase up to 50 health facilities as needed)[2]; one KI per health facility will be interviewed** □ Group discussion (Target #):_ _ _ _ _

[1] Suspected cholera case: An individual with acute watery diarrhoea without a laboratory test. / Confirmed cholera case: An individual with a positive laboratory test for *Vibrio cholerae*.

[2] The health facilities (35 initially and up to 50 if needed) were selected because they are not otherwise under surveillance by other partners in NES.

	□ Secondary Data and Snowballing			□ Household interview (Target #):_ _ _ _ _		
				□ Individual interview (Target #):		
				□ Direct observations (Target #):_ _ _ _ _		
				□ [Other, Specify] (Target #):_ _ _ _ _		
Data management platform(s)	x	IMPACT		□	UNHCR	
	□	[Other, Specify]				
Expected ouput type(s)	□	Situation overview #: _ _	□	Report #: _ _	□	Profile #: _ _
	□	Presentation (Preliminary findings) #: _ _	□	Presentation (Final) #: _ _	□	Factsheet #: _ _
	x	**Interactive dashboard #: 1**	□	Webmap #: _ _	□	Map #:
	□	[Other, Specify] **#:**				
Access	x	Public (available on REACH resource center and other humanitarian platforms)				
	□	Restricted (bilateral dissemination only upon agreed dissemination list, no publication on REACH or other platforms)				
Visibility *Specify which logos should be on outputs*	*REACH*					
	Donor: *n/a*					
	Coordination Framework: *n/a*					
	Partners: *NES Health Working Group*					

2. Rationale

2.1 Background

Since late August 2022, cases of severe acute watery diarrhoea have been increasingly reported across Syria, concentrated particularly along the Euphrates river. These were later confirmed to be cholera cases.[3] Cholera is a disease caused by bacteria that can be found in faeces, and spreads through people consuming contaminated water or food. It causes severe watery diarrhoea and vomiting which lead to dehydration. If treated immediately, less than 1% of cases result in patients dying. However, if timely treatment is not available, cholera can lead to death within hours in 25 to 50% of cases. The situation is critical in Syria as the local population is facing a severe water crisis due to drought, falling groundwater levels, reduced flow in the Euphrates River, and reduced functionality of Alouk water station. REACH has been monitoring developments in Northeast Syria through regular data collection cycles, remote sensing data, and rapid needs assessments. The initial REACH brief of the cholera outbreak in NES is published here.

A multi-partner response – led by the NES Forum and Health Working Group – is conducting surveillance of cholera in NES. The assessment specified in this TOR will be in support of this overall cholera response.

2.2 Intended impact

In order to have a complete understanding of the number, location, and outcome of individuals with cholera in NES, a comprehensive surveillance system must be in place. REACH will fill the surveillance gap by doing daily data collection at health facilities that are not otherwise being contacted by other partners. The collected data will be displayed on a REACH-hosted dashboard, and this dashboard will also compile all other cholera surveillance data collected by partners in NES. The dashboard will be easily accessible to all partners working on the NES cholera response, therefore informing programmatic responses to the outbreak through the use of timely and actionable data. While the primary audience of the dashboard is the NES Health Working Group, it will be accessible to NGOs and local authorities responding to cholera.

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[3] Source: UN News, Syria: Cholera outbreak is a 'serious threat' to whole Middle East, 13 September 2022

3. Methodology

3.1 Methodology overview

Data collection will begin on 01 November 2022. Initially, 35 health facilities will be called on a daily basis; however, additional health facilities (up to 50 total) will likely be added overtime. The 35 health facilities were selected because they are not otherwise under surveillance for cholera by any other partner organization in NES; therefore, REACH was requested to initiate daily surveillance of these health facilities. The list of health facilities, including their names and contact details, were provided to REACH by the NES Forum and Health Working Group.

The assessment will take place in Aleppo, Al-Hasakeh, Ar-Raqqa, and Deir-ez-Zor governorates. Data collection will be conducted remotely, whereby the assigned enumerators will call each health facility once per day (in the afternoon). Depending on security and access constraints, the enumerators will visit the health facility in-person at the beginning of data collection and every two to three weeks thereafter in order to build a relationship with the health facility staff and obtain key informant contact details.

Collected data for each health facility will include:

1. Total suspected cases
    a. Number of male/ female
    b. Age of cases: <2, 2-5, and >5+
2. Total confirmed cases
    a. Number of male/ female
    b. Age of cases: <2, 2-5, and >5+
3. Total cases resulting in death
    a. Number of male/ female
    b. Age of cases: <2, 2-5, and >5+
4. Communities of origin for cases

REACH will also host the Kobo tool to be used by partner organisations in NES for their cholera surveillance activities. The NES Health Working Group is coordinating with all partners to ensure there is not duplication of data collection at each health facility. The partners' Kobo tool was previously hosted by another organisation, and data collection began at the beginning of the cholera outbreak. The REACH-hosted dashboard will include all previous data in order to give a full picture of cholera cases in NES.

In order to do daily updates of the cholera dashboard, the Database Specialist will download data from the Kobo tools (both for REACH and the partners) each day and add the data to a Google sheet. The Google sheet will be automatically connected to the dashboard in order to have real-time updates that can be easily accessed by key stakeholders.

In addition, the Database Specialist will email the cleaned data on a daily basis to the NES Forum Director and Health Working Group Coordinator. The data will be used to operationalize the overall response to cholera in NES.

3.2 Population of interest

The population of interest is the general population in the catchment area of the health facilities under surveillance by REACH.

3.3 Secondary data review (outline key bibliography/sources you will use and for what).

Both the tool questions and the dashboard formatted were given to REACH directly by the NES Forum and Health Working Group. The definitions for suspected and confirmed cholera cases were provided by the Health Working Group and are as follows:

- Suspected cholera case: An individual presenting with acute watery diarrhoea, but without a confirmed laboratory test.
- Confirmed cholera case: An individual with a positive laboratory test for *Vibrio cholerae*.

Outbreak and Alert Thresholds

The Sphere[4] thresholds for defining an alert and outbreak of cholera are applicable to this assessment. They are as follows:

Alert Threshold:
- 2 cases with acute watery diarrhoea and severe dehydration in people age 2 or above, or dying from actue watery diarrhoea in the same area within one week of each other
- 1 death from severe acute water diarrhoea in a person age 5 or above
- 1 case of acute watery diarrhoea, testing positive for cholera by rapid diagnosis tests in an area

Outbreak Threshold:
- 1 confirmed case

3.4 Primary Data Collection

Data collection will begin on 01 November 2022 and be conducted on a daily basis through at least 22 December 2022. Each afternoon, enumerators will call their assigned health facilities and ask the questions in a Kobo tool created for this assessment. Data collection will not be conducted on weekends; therefore, the survey completed on Sunday (the start of the work week in Syria) will account for cholera cases over the weekend as well.

The list of health facilities is provided to REACH by the NES Health Working Group. These facilities are selected because they are not otherwise under cholera surveillance by any other partner working in NES. At the start of data collection, 35 health facilities will be called; however, this number may increase to up to 50 health facilities depending on the needs of the Health Working Group.

The KIs will be health facility staff that can report on the number of new suspected and confirmed cholera cases in their facility that day; KIs will not report on the cumulative total of suspected and confirmed cholera cases. Ideally, the enumerators will speak to the same KI each day in order to confirm continuity of reporting. However, additional KI details for each health facility will be obtained as backups. In case the original KI is not working or is unable to be contacted, the enumerators will call the backup KI(s) to collect the required data.

3.5 Data Processing & Analysis

The data will be checked and cleaned by REACH staff on a daily basis. For example, enumerators will collect in the afternoon of 01 November, and REACH staff will check, clean, and report on that data by the afternoon of 02 November. Data cleaning and processing will be done in accordance with the IMPACT Quantitative Data Processing Checklist. Personally identifiable information will be deleted following the required mitigations as identified in the risk indicator table in the data management plan that is available upon request.

On a daily basis, the collected data will be inputted into the NES cholera dashboard – managed by REACH – and available for use by the NES Forum, Health Working Group, and other relevant partners.

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[4] Source: The Sphere Handbook, 2018 Edition

4. Key ethical considerations and related risks

The proposed research design meets / does not meet the following criteria:

The proposed research design…	*Yes/ No*	*Details if no (including mitigation)*
… Has been coordinated with relevant stakeholders to **avoid unnecessary duplication** of data collection efforts?	Yes	
… **Respects respondents, their rights and dignity** (*specifically by: seeking informed consent, designing length of survey/ discussion while being considerate of participants' time, ensuring accurate reporting of information provided*)?	Yes	
… Does not **expose data collectors to any risks as a direct result** of participation in data collection?	Yes	
… Does not **expose respondents / their communities to any risks as a direct result** of participation in data collection?	Yes	
… Does not involve **collecting information on specific topics which may be stressful and/ or re-traumatising** for research participants (both respondents and data collectors)?	No	In health facilities with excess mortality resulting from cholera, it may be stressful for a single KI to report on cholera case counts on a daily basis. In health facilities with greater than five (5) cholera deaths per week, enumerators will be instructed to rotate between two or three KIs.
… Does not involve **data collection with minors** i.e. anyone less than 18 years old?	Yes	
… Does not involve **data collection with other vulnerable groups** e.g. persons with disabilities, victims/ survivors of protection incidents, etc.?	Yes	
… Follows IMPACT SOPs for management of **personally identifiable information**?	Yes	

5. Roles and responsibilities

Table 3: Description of roles and responsibilities

Task Description	*Responsible*	*Accountable*	*Consulted*	*Informed*
Research design	Database Specialist	Research Manager	WWG, Senior Operation Manager	Country Representative
Supervising data collection	Database Specialist, Field Manager	Senior Operations Manager	NES Forum, Health WG	Country Representative
Data processing (checking, cleaning)	Database Specialist	Database Specialist	NES Forum, Health WG,	Country Representative

			IMPACT HQ RDDU	
Data analysis	Database Specialist	Database Specialist	NES Forum, Health WG, IMPACT HQ RDDU	Country Representative
Output production	Database Specialist	Database Specialist	NES Forum, Health WG, IMPACT HQ RDDU	Country Representative
Dissemination	Database Specialist	NES Forum, Health WG, Database Specialist	Senior Operations Manager, IMPACT HQ RDDU	Country Representative
Monitoring & Evaluation	Database Specialist	PD Officer	NES Forum, Health WG, IMPACT HQ RDDU	Country Representative
Lessons learned	Database Specialist, Field Manager	Database Specialist	NES Forum, Health WG, Senior Operations Manager	Country Representative

Responsible: *the person(s) who executes the task*

Accountable: *the person who validates the completion of the task and is accountable of the final output or milestone*

Consulted: *the person(s) who must be consulted when the task is implemented*

Informed: *the person(s) who need to be informed when the task is completed*

5. Data Analysis Plan

DAP attached as Annex 1.

6. Data Management Plan

The Data Management Plan is upon request. Please contact jaclyn.blachman-forshay@reach-initiative.org.

7. Monitoring & Evaluation Plan

- *Please complete the M&E Plan column in the table and use the corresponding Tools in the Monitoring & Evaluation matrix to implement the plan during the research cycle.*

IMPACT Objective	External M&E Indicator	Internal M&E Indicator	Focal point	Tool	Will indicator be tracked?
Humanitarian stakeholders are accessing IMPACT products	Number of humanitarian organisations accessing IMPACT services/products Number of individuals accessing IMPACT services/products	# of downloads of x product from Resource Centre	Country request to HQ	User_log	NA
		# of downloads of x product from Relief Web	Country request to HQ		NA
		# of downloads of x product from Country level platforms	Country team		NA
		# of page clicks on x product from REACH global newsletter	Country request to HQ		NA
		# of page clicks on x product from country newsletter, sendingBlue, bit.ly	Country team		x Yes
		# of visits to x webmap/x dashboard	Country request to HQ		x Yes
IMPACT activities contribute to better program implementation and coordination of the humanitarian response	Number of humanitarian organisations utilizing IMPACT services/products	# references in HPC documents (HNO, SRP, Flash appeals, Cluster/sector strategies)	Country team	Reference_log	x Yes
		# references in single agency documents			x Yes
Humanitarian stakeholders are using IMPACT products	Humanitarian actors use IMPACT evidence/products as a basis for decision making, aid planning and delivery Number of humanitarian	Perceived relevance of IMPACT country-programs	Country team	Usage_Feedback *and* Usage_Survey template	Regular REACH Syria research surveys
		Perceived usefulness and influence of IMPACT outputs			
		Recommendations to strengthen IMPACT programs			
		Perceived capacity of IMPACT staff			
		Perceived quality of outputs/programs			

	documents (HNO, HRP, cluster/agency strategic plans, etc.) directly informed by IMPACT products	Recommendations to strengthen IMPACT programs			
Humanitarian stakeholders are engaged in IMPACT programs throughout the research cycle	Number and/or percentage of humanitarian organizations directly contributing to IMPACT programs *(providing resources, participating to presentations, etc.)*	# of organisations providing resources (i.e.staff, vehicles, meeting space, budget, etc.) for activity implementation	Country team	Engagement _log	x Yes
		# of organisations/clusters inputting in research design and joint analysis			x Yes
		# of organisations/clusters attending briefings on findings;			x Yes

Annex 1: Data Analysis Plan

Research questions	IN #	Data collection method	Indicator group / sector	Indicator / Variable	Questionnaire Question	Instructions	Questionnaire Responses	Data collection level	Maps planned?
N/A	1.1	Individual Interview	Basic Information	Date	Date of data collection:	Date			
	1.2	Individual Interview	Basic Information	Enumerator_ID	Enumerator ID:	Enter name			
	2.1	Individual Interview	Demographic Information	Governorate	Governorate of health facility	Select one	Admin list (of Governorates)	Individual	
	2.2	Individual Interview	Demographic Information	District	District of health facility	Select one	Admin list (of District)	Individual	
	2.3	Individual Interview	Demographic Information	Sub-district	Sub-district of health facility	Select one	Admin list (of Sub-district)	Individual	
	2.4	Individual Interview	Demographic Information	Community	Community of health facility	Select one	Admin list (of Community)	Individual	
	3.1	Individual Interview	Health Facility Information	Health_facility_name	Health facility name	Select one		Individual	
	3.2	Individual Interview	Health Facility Information	Health_facility_code	Health facility code	Select one		Individual	
How many suspected cholera	4.1	Individual Interview	Suspected Cases	Total new suspected cholera cases for the day (since the last data collection at this health facility)	Total suspected cases	Enter number (integer)		Individual	yes

cases are reported? How many suspected cases by gender and age?				- Suspected cholera case: An individual presenting with acute watery diarrhoea, but without a confirmed laboratory test.					
	4.2	Individual Interview	Suspected Cases - Male	Q4_2_Number_of_male	Total suspected cases - Male	Enter number (integer)		Individual	yes
	4.3	Individual Interview	Suspected Cases - Female	Q4_3_Number_of_Female	Total suspected cases - Female	Enter number (integer)		Individual	yes
	4.4	Individual interview	Suspected cases – age	Age categories: - <2 years - 2-5 years - 5+ years	Total suspected cases - age	Select one		Individual	yes
How many confirmed cholera cases are reported? How many confirmed cases by gender and age?	*5.1*	Individual Interview	Confirmed Cases	Total new confirmed cholera cases for the day (since the last data collection at this health facility) - Confirmed cholera case: An individual with a positive laboratory test for *Vibrio cholerae*.	Total confirmed cases	Enter number (integer)		Individual	yes
	5.2	Individual Interview	Confirmed Cases - Male	Q5_2_Number_of_male	Total confirmed cases - Male	Enter number (integer)		Individual	yes
	5.3	Individual Interview	Confirmed Cases - Female	Q5_3_Number_of_Female	Total confirmed cases - Female	Enter number (integer)		Individual	yes
	5.4	Individual interview	Confirmed cases – age	Age categories: - <2 years - 2-5 years - 5+ years	Total confirmed cases - age	Select one		Individual	yes

How many confirmed cholera death cases are reported? How many confirmed deaths by gender and age?	*6.1*	Individual Interview	Death Cases	Total new cholera death cases for the day (since the last data collection at this health facility)	Total confirmed deaths	Enter number (integer)		Individual	yes
	6.2	Individual Interview	Death Cases - Male	Q5_2_Number_of_male	Total confirmed deaths - Male	Enter number (integer)		Individual	yes
	6.3	Individual Interview	Death Cases - Female	Q5_3_Number_of_Female	Total confirmed deaths - Female	Enter number (integer)		Individual	yes
	6.4	Individual interview	Death cases – age	Age categories: - <2 years - 2-5 years - 5+ years	Total death cases - age	Select one		Individual	yes
Where did suspected/ confirmed cholera cases originate from? (to be repeated for each case/ community)	*7.1*	Individual Interview	Demographic Information	Q7_1_Governorate_from_which_the_case_come_from	Governorate of cases	Select one	Admin list (of Governorates)	Individual	yes
	7.2	Individual Interview	Demographic Information	Q7_2_District_from_which_the_case_come_from	District of cases	Select one	Admin list (of District)	Individual	yes
	7.3	Individual Interview	Demographic Information	Q7_3_Sub_district_from_which_the_case_come_from	Sub-district of cases	Select one	Admin list (of Sub-district)	Individual	yes
	7.4	Individual Interview	Demographic Information	Q7_4_Community_from_which_the_case_come_from	Community of cases	Select one	Admin list (of Community)	Individual	yes
	7.5	Individual Interview	Demographic Information	Q7_5_how_many_cases_in_this_Community	Number of cases in community	Enter number (integer)		Individual	yes