Evaluation of Cholera Rapid Response Teams (RRT) Program in Yemen

Final Evaluation report

Evaluation Object	Evaluation of Cholera Rapid Response Teams (RRT) Programme in Yemen-LOT 1
Period	October 2018 – December 2021
Country	Yemen
Regions	Middle East and North Africa Regional Office
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Duration of the evaluation	December 2021 – March 2023
Version of document	Final

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March 2023

Acknowledgement

This final report of the Evaluation of Cholera Rapid Response Teams (RRT) Programme in Yemen was developed by the Evaluation Team of the Oversee Advising Group which includes Dr. Ngozi Akwataghibe, Evaluation Team Lead, Natalie Bockel, WASH Specialist, Justin Tcheutchoua, Data Analyst and Hubal Pfumtchum, Quality Assurance, Project Coordinator. We appreciate the review and input of Adnan Qatinah, Team Lead, and AFCAR Consulting.

Data collection for this evaluation was carried out by AFCAR Consulting.

The Evaluation Team appreciates the support received from UNICEF Yemen Country Office during this evaluation. We are especially grateful to Sarah Capper, Evaluation Specialist, for her valuable support and direction; and for making the relevant programme information package available to us for the desk review.

We are also very thankful to Ibrahim Shamakh, Evaluation Officer; Chiranjibi Tiwari, the WASH Manager Adane Bekele, the former WASH Manager, and the WASH specialist Ahlam Al Mutawakel, for their valuable support and input during meetings and the preliminary presentation of findings.

We also express our gratitude to the WASH Section Chief at UNICEF Yemen, Georges Tabbal for his support; and to Dominique Porteaud, the former WASH Section Chief at UNICEF Yemen; for the useful information and insights during the kick-off meeting.

We are very thankful to Helmi Ana'am, Emergency Unit, and Aden, Hub Coordinator who provided great support to our field team. We appreciate his support in providing the lists of RRT teams, and rights-holders.

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List of Acronyms

AWD	Acute Watery Diarrhoea
BMGF	Bill & Melinda Gates Foundation
CAWD	Cholera and Acute Watery Diarrhoea
CEDAW	Convention to Eliminate All Forms of Discrimination Against Women
CRC	Convention on the Rights of the Child
C4D	Communications for Development
COVID	Coronavirus disease
CSOs	Civil Society Organisations
CFR	Case fatality ratios
CDRSCs	Crisis and Disasters Response Sustainable committees
DFG	De Facto Government
DG-ECHO	Directorate General of European Civil Protection and Humanitarian Aid Operations
eDEWS	Electronic Disease Early Warning System
EOC	Emergency Operations Center
FCDO	Foreign, Commonwealth & Development Office
FGD	Focus Group Discussions
GARWSP- EU	General Authority for Rural Water Supply Project Emergency Unit
GEROS	Global Evaluation Reports Oversight System
IDP	Internally Displaced People
IEC	Information, Education, And Communication
IRG	Internationally Recognized Government of Yemen
KAP	Knowledge, Attitude and Practice
KII	Key Informant Interviews
HRBA	Human Rights Based Approach
HH	Households
MoH	Ministry of Health
MoPHP	Ministry of Public Health and Population
MoWE	Ministry of Water and Environment
MWE	Ministry of Water & Environment
NGOs	Non-governmental organizations
OECD/DAC	Organization for Economic Co-operation and Development's Development Assistance Committee
ORS	Oral Rehydration Salts
RRTs	Rapid Response Teams
SDR	Secondary Desk Review
SOP	Standard Operating Procedures
SSI	Semi-Structured Interviews
ToC	Theory of Change
ToR	Terms of Reference
TPM	Third-Party Monitoring
UNEG	United Nations Evaluation Group
UNICEF	United Nations International Children's Emergency Fund.
USAID	United States Agency for International Development
WASH	Water, Sanitation and Hygiene
WHO	World Health Organization
YWC	Yemen WASH Cluster

EXECUTIVE SUMMARY

A. Introduction

1. In humanitarian emergencies, water and sanitation systems are often vulnerable to attack, especially during conflict. With no potable water or adequate sanitation and hygiene facilities, communities, children especially (particularly those already malnourished and with weakened immune systems) become even more susceptible to outbreaks of water-borne diseases, including Cholera and Acute Watery Diarrhoea (AWD).[1] In such recent outbreak settings, the use of Rapid Response Teams (RRTs) to support the Water Sanitation and Hygiene (WASH) sector has increased. Different models of RRTs have been used as part of the response to cholera outbreaks in countries such as Yemen, Haiti, Nigeria, Somalia, South Sudan, and the Democratic Republic of the Congo.[2]
2. Yemen is currently in the grip of one of the world's worst humanitarian disasters, exacerbated by over seven years of active conflict. Access to basic services has been radically reduced against a backdrop of escalating rates of food insecurity, malnutrition, the re-emergence of cholera, and near-complete economic collapse.[3] In 2017, Yemen had one of the world's worst outbreaks of Cholera and AWD. More than 1.3 million people were infected, and over 2,800 people died. Children were the biggest victims. In 2018, over 361,000 suspected cases were registered, with 493 associated deaths across the country.[3]
3. UNICEF worked in conjunction with health and water authorities to set up agile and mobile RRTs in 2017 at the time of the largest outbreak of cholera and the goal was to reduce the cost of blanket coverage among the affected population. It was also only possible to take mitigation-level measures in many cases, as the outbreak was so large that often, nothing else could be handled.[4] Between January and December 2019, there were further critical investments in the WASH RRTs to combat cholera. In addition, UNICEF provided financial compensation to healthcare providers at that time.[5]
4. This evaluation is part of UNICEF's responsibility to generate sound evidence that would show results achieved with the RRTs in Yemen during the cholera outbreak from 2018-2019 and up till December 2021, lessons learned from this investment, and potentials for a sustainable model. This report presents the findings of the independent evaluation of the cholera RRTs undertaken by the Oversee Advising Group (OAG).

B. Evaluation Purpose and Objectives

5. The purpose of the evaluation is to provide an impartial and independent assessment of cholera RRT performance in Yemen and identify key achievements, challenges, lessons learned, and practical recommendations for the upcoming phase of the programme. The evaluation has systematically generated evidence on cholera RRT programming in Yemen, assessing the effectiveness of the programme in achieving its stated objectives.
6. The evaluation purposes include learning, accountability, and subsequent phase improvement of the RRT cholera intervention within UNICEF Yemen. The learning will benefit cholera response planning, as well as inform further improvement. It will also benefit UNICEF and other UN agencies, as well as the Ministry of Water and Environment (MoWE) and the Ministry of Public Health and Population (MoPHP), and other partners, for future programme planning, coordination, resource advocacy, and allocation. Accountability will benefit programme stakeholders in the public, private, and donor sectors supporting both UNICEF and the Government of Yemen as clearly stated in the Terms of Reference (TOR).

C. Evaluation Scope

7. In terms of **thematic scope**, the evaluation focused on the RRT programme, interventions, and implemented strategies. It reviewed the work done by UNICEF, local authorities, other UN agencies, donors, communities, private sector partners, and rights-holders UNICEF/WASH programming in Yemen. The programmatic aspects covered include outputs and outcomes. The activities of the agile and mobile RRTs and their coordination formed key points around which their performance and contexts were examined. **Geographically**, the evaluation focused on the work done in four governorates – Sana'a, Hajjah, Aden, and Ad Dali' but data collection was carried out in two (Aden and Ad Dali') due to contextual constraints. **Chronologically,** the evaluation covered the period from October 2018 – December 2021. **Intended users** of the evaluation include the WASH Section of the UNICEF

[1] UNICEF. Water, sanitation and hygiene (WASH) in emergencies Available from URL: https://www.unicef.org/wash/emergencies
[2] Global Review of Water, Sanitation and Hygiene (WASH) Components in Rapid Response Mechanisms and Rapid Response Teams in Cholera Outbreak Settings - Haiti, Nigeria, South Sudan and Yemen. https://www.unicef.org/media/73121/file/UNICEF-WASH-Global-Review-Rapid-Response-Teams.pdf
[3] USAID Yemen Water, Sanitation and Hygiene Fact Sheet 2021 Available from URL: https://www.usaid.gov/yemen/fact-sheets/water-sanitation-and-hygiene-fact-sheet
[4] UNICEF Technical Committee on the RRT Evaluation in Yemen.
[5] Ibid

Country Office, MoWE, the General Authority for Rural Water Supply Project Emergency Unit (GARWASP-EU), MoPHP, WASH Cluster, and partners.

D. Evaluation Criteria and Questions

8. The evaluation covered selected Organization for Economic Co-operation and Development's (OECD) Development Assistance Committee (DAC) evaluation criteria aspects including **relevance, effectiveness, and efficiency** and excluding coherence, impact, and sustainability as well as connectedness due to lack of relevant data. **Coordination and coverage** criteria were also addressed, as well as **cross-cutting issues of human rights-based approach (HRBA) and gender**. The key evaluation question was whether the RRT intervention was designed and structured strategically to respond to the outbreak of cholera and other diseases currently and in the future.

E. Methodology

9. The evaluation was **non-experimental and utilization-focused**, adopting **modified theory-based and mixed methods approaches**. It focused on determining which aspects of the programme worked well or not and why. Evidence was collected primarily through an extensive desk review of programme documents, complemented by information gathered directly at national and local levels through Semi-structured interviews (SSI) of key UNICEF, government, and other stakeholders, Focus Group Discussions (FGDs), a household survey and an RRT survey. The Evaluation team was aware of limitations in available data and the primary quantitative and qualitative tools were designed to generate the required data to answer the evaluation questions and to mitigate the gaps as much as possible.

F. Findings and Conclusions

RELEVANCE

10. The Evaluation Team concluded that the cholera RRT Interventions were relevant in addressing the needs and priorities related to the Cholera Outbreak from October 2018 to December 2021 in Yemen. **The RRT intervention logic and the ToC proved to be consistent with the complexity and the existing context in Yemen,** as they reflected the evidence generated in the field. **The RRT programme logic was robust, structurally sound and plausible** – and proved that if implemented as designed, it was able to contribute to the intended results (especially in tackling the emergency context).
11. **The evidence-based criteria in the design of the WASH Cholera RRT ToC proved relevant and appropriate to a large extent though some of the assumptions did not hold.** For instance, the RRTs did not always have adequate funding to carry out their tasks, and the MoPHP was not always able to share quality information in a timely manner**. Parallel capacity-building initiatives served to reinforce the programme strategies and enabled the partners and the teams to implement the RRT working mechanism.**
12. Human rights and the determinants of equity (income, sex, disability, age, location/ rural) were considered in the design, implementation, monitoring, and evaluation of the RRT programme. Specific criteria for prioritizing cases included age, areas with malnutrition, and IDPs camps.
13. Overall, the interventions considered different districts and stakeholders' needs and interests (relevance) but did not address long-term results due to the emergency focus of its design. The necessary improvements of water and sanitation infrastructure which would have created a potential for sustainability (though outside the scope of the RRT programme) were not carried out by the broader WASH sector.

EFFECTIVENESS

14. The Evaluation team concluded that the cholera RRT interventions were effective but there were limitations that affected the achievement of the programme's expected results.
15. **There was evidence of increased knowledge and awareness of the importance of hygiene in the community with changes in negative community practices and behaviours.** This was seen in both case and firewall households. Community men and women in focus group discussions and the household survey attributed positive behaviour changes to their awareness of personal and public hygiene due to the educational messages delivered by the RRTs as well as the hygiene kits and chlorine distributed by them. However, **there was a reported decline in interest at the community level due to the perceived elimination of the problem of cholera, the high cost of soap, and competing priorities related to household basic needs**.
16. In terms of practices adopted after the RRT intervention, **hand-washing with water and soap in the proper way and at appropriate times was the most frequently reported positive behaviour change** by the community

men and women in the household survey. Treating water with chlorine products was the least frequently reported practice.

17. The planned RRT activities were perceived by stakeholders as sufficient at case level to control the epidemic outbreak in the affected areas but not completely at community level. The targeting of the households was perceived by community members in the FGDs and stakeholders in the SSI as not comprehensive enough. Furthermore, **not addressing underlying causes of the epidemic related to sanitation and water infrastructure did not allow for sustainable change.** For instance, 74% of households reported having another AWD case after the RRT intervention (less (64%) in the more urban Aden than in the rural Ad Dali' (82%).
18. **Factors that contributed the most to the achievement of results** during the cholera outbreak of 2018-2019 included the keenness of the RRTs to access the reported cases, even when the data for access was sometimes complicated; communities' acceptance of the RRT interventions; the collaboration between the MoWE and the MoPHP and timely availability of information and data about the epidemic including its accuracy and reliability**. Factors that hindered the achievement of results the most** during the cholera outbreak of 2018-2019 included fiscal limitations due to the perceived short-term support from the donors reported by several key stakeholders (though donor investments targeted both immediate and longer-term response, the financial burden due to the cholera outbreaks outweighed the available resources); late delivery of some data and information by health epidemic monitoring units and inaccuracy or incompleteness of some data, resulting in more effort and time for the RRT to reach the cases.

EFFICIENCY

19. The Cholera RRT Interventions were perceived as efficient but with limitations in the achievement of the programme's expected results. **Funding for the cholera RRT activities from October 2018-October 2019 up till December 2021 was provided exclusively by donors**. Project reports indicated that due to the current context, GARWAP-EU did not have the resources necessary to contribute as a governmental counterpart. All project activities were funded by UNICEF and donors (WB, KSA, UAE, CERF and Kuwait), and funds were allocated systematically. For instance, in 2018, the average monthly cost range was US$1,500,000 – 1,875,000 for an average of 625 teams, with costs varying depending on rural and urban settings (average monthly cost of approximately US$2,400 for urban teams and US$3,000 for rural teams).
20. There was limited information on the comprehensive funding of the programme and associated costs of implementation in urban and rural settings, or by population density, and the cost-efficiency of the RRT model could not be determined in this evaluation. However, the majority of the stakeholders reported that the resources had been efficiently and optimally used and that field activities had been carried out according to the prepared plans.
21. The composition, governance, and management structures of the RRTs were also deemed by the stakeholders as adequate to allow the achievement of results. **The human resources were indicated as qualified, experienced, and competent, however, a weakness was the lack of fixed teams and the rapid turnover of RRT team members** who sometimes had to be replaced by untrained members, resulting in poor targeting and inaccurate delivery of educational messages in some areas. There were also reported inefficiencies due to the governorate level at which team members were selected – there was a **noted need to select teams at district level to enable better community acceptance, quick response, ease of movement, and access to avoid material transportation issues.**
22. The RRTs displayed considerable dissatisfaction with their incentives. Only 31% of the RRT members in the survey reported that they were satisfied with the incentives given to them, and about half (51%) reported being motivated by the incentives. There was a reported need by stakeholders to increase incentives given to team members, especially with regard to the issue of differences in the exchange rate in the Internationally Recognized Government of Yemen (IRG) areas and De Facto Government (DFG), since the end of 2019.
23. The majority of the RRTs in the survey perceived the alert system and deployment as effective, and 86% of the RRTs judged the timeliness of their responses as satisfying. However this differed somewhat from the timeliness of the RRT responses reported in the household survey: **Approximately 54.4% of case households reported that the RRTs got there in less than 24 hours; 16.5% of the HHs reported that it took between 24 to 48 hours** for the RRTs to respond, **17.5% reported that it took between 48-72 hours** for RRTs to respond and **for 11.6%, the RRTs responded after 72 hours**.

COORDINATION

24. UNICEF's main partnership is with the government (emergency unit of GARWSP and the emergency unit of the Aden MoWE) to support RRTs. Coordination was led by, and under the responsibility of the MoWE and MoPHP, with support from WHO and UNICEF. In 2018, there was a documented need for improved coordination in the planning and implementation of RRT activities between the health and WASH sectors. This led to further harmonization in terms of the planning and implementation of activities to further strengthen the overall response.
25. During the cholera epidemic of 2018-2019, a Joint Operations Room was established between the two ministries with the support of UNICEF, to coordinate and share data. There was evidence of a clear and effective coordination mechanism especially between 2018-2020, with an effective information unit, and continuous reporting; and data was shared via the Joint Operations Room. Tools such as the Interactive Dashboard were updated continuously, openly, and publicly, whether for partners, UNICEF, or the Cluster. **However, since 2020, information-sharing and coordination have been sub-optimal.** The i**nterruption of the Task Force meetings led to a significant decline in coordination between the relevant authorities and partners,** which greatly affected the flow of required data and information. There was limited evidence of an integrated response plan with common planning and monitoring of the dashboard guiding the overall response.

COVERAGE

26. Qualified people were available and mobilized to ensure appropriate cholera RRT coverage across the evaluation focal areas to a large extent. Specialised staff with experience in water and sanitation, within the GARWSP EU / EU Aden and the rest of the water sector staff in all governorates were prioritised and training reinforced capabilities.
27. **There was evidence that different groups in the community (men, women, girls and boys) had access to information and other RRT services without discrimination.** The programme design incorporated the rights-based principles elaborated in the in line the CEDAW and CRC frameworks. Information from the interviews, FGDs and the project progress reports detailed that vulnerable groups (including IDPs and those in disadvantaged communities) were covered by the intervention from October 2018-2019 outbreak up till December 2021. **Groups in the communities who had no reports about their needs were the most disadvantaged in accessing the services of RRTs.** These included people in remote rural areas with challenging terrains and poor access roads, especially those who could not visit health centers to get the necessary treatment and consequently were not registered in the monitoring system, and therefore, were not targeted.

G. Lessons Learned

28. Collaboration and sharing of information and data between the Health and WASH sectors are critical to the success of the RRT model. When the MoWE and the MoPHP collaborate and share information and data in the cholera emergency response, the effectiveness of the model is enabled. Sustainable results would require systematic refresher trainings and uninterrupted and consistent (Task Force) meetings to enable coordination between the relevant authorities and partners, even after outbreaks. This ensures the continued flow of required data and information, which in turn would allow a balanced response that would address the four emergency phases of mitigation, preparedness, response, and recovery and ensure the provision of effective emergency services that have the ability to mitigate, control, protect and prevent risks and threats as an integrated emergency management.
29. Effective coordination between different partners and sectors leads to an integrated approach with better information flow that enables an effective emergency response. Alignment between UNICEF and WHO from the outset; a better flow of line lists and health information to RRTs; an integrated RRT composition; the development of a ToR and ToC for the entire response which clarifies the RRT contribution to managing expectations; are all important success factors.
30. The current design of the RRT model in Yemen is responsive to cholera outbreaks but sustainability of results is challenged by broader WASH infrastructural issues. The case responsive format of the RRT model is effective for short-term emergency responses and reduces morbidity and mortality due to cholera outbreaks. However sustainability of outcomes is not feasible without addressing the root causes of the epidemic.
31. Higher educational qualification coupled with training is predictive of competence of RRT staff to deliver appropriate health education messages to communities. Targeting is more accurate, and there are fewer errors in implementation.
32. The intentional tracking of vulnerable groups by the RRT programme enables the effective coverage of those populations. Integrating human rights and the determinants of equity (income, sex, disability, age, location/ rural)

in the design, implementation, monitoring, and evaluation of the RRT model enables systematic responsiveness to and prioritisation of disadvantaged and vulnerable groups in the community.

H. Recommendations

33. Based on the evidence from this evaluation, the evaluation team has developed a series of recommendations that were validated by the in-country partners and UNICEF staff. A summary overview is presented here and elaborated in section 11.

Strategic Recommendations

i. Incorporate the RRT model into other national control and elimination programmes that focus on overall AWD and broader public health measures. This could provide a platform to sustain the interventions and enable the efficient use of the capabilities built to address other issues.

ii. Improve timeliness, strengthen the alert-response strategy, and make it more comprehensive with the RRT model as one of the key components. The criterion for the activation and deployment of RRTs should clearly demonstrate information sharing and decision-making for monitoring and accountability.

iii. Reactivate regular Task Force meetings and strengthen the coordination between all relevant government institutions, UNICEF, WHO, and other agencies and implementation partners /NGOs. It is important to ensure timely information and data-sharing to enable a rapid coordinated response against future outbreaks. Establish an integrated response plan with common planning and monitoring of the dashboard guiding the overall response. Also, improve the use of epidemiological data-driven decision-making at taskforce level.

Operational Recommendations

i. Systematically scale-up preventive activities. People's response to sensitization activities and households' access to soap and chlorine controlled the outbreak of complications. The RRT C4D and the provision of soap and chlorine are activities that should be scaled-up in this context for more sustained results and to prevent frequent resurgence of the disease.

ii. Improve the governance of the RRTs. Structure an inter-ministerial team made up of both MoWE and MoPHP as well as representatives of development partners and the WASH Cluster as the governing body/coordination mechanism at national, governorate and district levels. Tackle logistical challenges leading to delayed response time by ensuring that the RRTs are linked more to the district / local levels.

iii. Advocate for resource mobilization from the donor community based on long-term elimination and control efforts. Advocate government commitment to address basic services related to water and sanitation infrastructure.

iv. Review the incentives criteria and calculations to systematically arrive at a scale that would motivate RRTs more and improve response rates. However, it is noted that there is evidence of intrinsic motivation of RRTs in this evaluation with their work being rated positively in both the household survey and FGDs.

v. Address human resource issues. In addition to retaining RRTs on a regular scale, consider domiciling the RRT beyond the GARWSP EU / EU Aden and expanding the focus of the RRT model without compromising their readiness for emergency responses. Also, structure systematic training of RRT members to ensure that there is a competent pool of RRTs to draw from in the event of deployments.

vi. Strengthen the surveillance system and timely sharing of epidemiological data and line lists based on a well-defined alert system. Advocate for the necessary political support to create the enabling environment for information-sharing, coordination, and accountability at national and local levels.

1. CONTEXT OF THE EVALUATION

1.1 Background

34. The global burden of cholera is largely unknown because the majority of cases are not reported, however, the World Health Organization (WHO) in previous studies[6] estimated that approximately 2.9 million cases and 95,000 deaths occur globally annually.[7] Nevertheless, more recently (2022), there has been an increase in global reported cholera outbreaks within 29 countries, mainly in the WHO African and Eastern Mediterranean Regions, with many of them reporting higher case numbers and case fatality ratios (CFR) than in previous years.[8] Many of these countries are experiencing natural disasters such as cyclones (Mozambique, Malawi), flooding (Pakistan, Nigeria), and drought (countries in the Horn of Africa)[9] while several are in humanitarian crises due to conflict or political violence in affected areas (Afghanistan, Cameroon, the Democratic Republic of Congo, Haiti, the Islamic Republic of Iran, Nigeria, Somalia, the Syrian Arab Republic, and Yemen).[10]

35. In humanitarian emergencies, water and sanitation systems are often vulnerable to attack, especially during conflict. With no potable water or adequate sanitation and hygiene facilities, communities, especially children (particularly those already malnourished and with weakened immune systems) become even more susceptible to outbreaks of water-borne diseases, including Cholera and Acute Watery Diarrhoea (AWD).[11] In recent outbreak settings, the use of Rapid Response Teams (RRTs) to support the WASH sector has increased. Different models of RRTs have been used as part of the response to cholera outbreaks in countries such as Yemen, Haiti, Nigeria, Somalia, South Sudan, and the Democratic Republic of the Congo.[12] The RRT programme is in line with the 2030 Agenda for Sustainable Development and its Sustainable Development Goals (SDGs) with its central human rights-based commitment to 'leave no one behind.[13] It is also in line with other human rights-based frameworks such as the Convention to Eliminate All Forms of Discrimination against Women (CEDAW) and Convention on the Rights of the Child (CRC).[14]

36. A Global Review of Water, Sanitation, and Hygiene (WASH) components in rapid response mechanisms noted that RRT was evidence-based and had proved to be an essential mechanism for supporting cholera response and prevention activities in the different countries in which it had been used.[2] Through the systematic use of surveillance systems and available epidemiological data, affected households and at-risk populations in the communities had been targeted. Early detection at the start of an outbreak and the prompt use of RRTs were demonstrated to have played crucial roles in preventing the further spread of the disease. The RRT model provided an integrated and harmonized package that specifically targeted pathways for cholera transmission.

37. Assessment of the effectiveness and impact of RRTs was recognized in the Global Review[2] as a knowledge gap, and further action is recommended in this area. This evaluation is part of UNICEF's responsibility to generate sound evidence that would show results achieved with the RRTs in Yemen during the cholera outbreak from 2018-2019 and up till December 2021, lessons learned from this

[6] Ali M, Nelson AR, Lopez AL, Sack DA. Updated global burden of cholera in endemic countries. PLoS Negl Trop Dis. 2015 June 4;9(6):e0003832. doi: 10.1371/journal.pntd.0003832. PMID: 26043000; PMCID: PMC4455997.
[7] WHO. Cholera - Global Situation. Available at URL https://www.who.int/emergencies/disease-outbreak-news/item/2022-DON426
[8] Ibid (7)
[9] Drought-related cholera outbreaks in Africa and the implications for climate change: a narrative review [WWW Document], n.d. URL https://www.tandfonline.com/doi/full/10.1080/20477724.2021.1981716
[10] WHO. Cholera - Global Situation. Available at URL https://www.who.int/emergencies/disease-outbreak-news/item/2022-DON426
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[12] Global Review of Water, Sanitation and Hygiene (WASH) Components in Rapid Response Mechanisms and Rapid Response Teams in Cholera Outbreak Settings - Haiti, Nigeria, South Sudan and Yemen. https://www.unicef.org/media/73121/file/UNICEF-WASH-Global-Review-Rapid-Response-Teams.pdf
[13] UN Sustainable Development Group. Leave No One Behind. Available from URL: https://unsdg.un.org/2030-agenda/universal-values/leave-no-one-behind
[14] *UNHCR & UNICEF Convention on the Rights of the Child*, Quick Reference Guide Statelessness And Human Rights Treaties. Available from URL: https://www.unhcr.org/ibelong/wp-content/uploads/UNHCR-CRC-02-UNHCR-UNICEF.pdf

investment, and potentials for a sustainable model. This report presents the findings of the independent evaluation of the cholera RRTs undertaken by the Oversee Advising Group (OAG).

1.2 The Yemen Context

38. In Yemen, approximately 18 million people are in urgent need of WASH assistance.[15] The people of Yemen are facing intensified exposure to communicable disease outbreaks and critical undernutrition driven in part by the critical WASH conditions, including irregular and insufficient access to safe water, and inadequate sanitation and hygiene provisions. WASH needs remain considerably high due to the growing number of internally displaced people (IDP) as a result of the escalation of conflict along the coastal areas of Al Hudaydah and other frontlines; natural disasters, food insecurity, and epidemic outbreaks. Yemen is currently in the grip of one of the world's worst humanitarian disasters, exacerbated by over six years of active conflict. Access to basic services has been radically reduced against a backdrop of escalating rates of food insecurity, malnutrition, the re-emergence of cholera, and near-complete economic collapse.[16]

39. In 2017, Yemen had one of the world's worst outbreaks of Cholera and AWD. More than 1.3 million people were infected, and over 2,800 people died. Children were the worst victims. In 2018, over 361,000 suspected cases were registered, with 493 associated deaths across the country.[3] In 2019, Yemen saw a new upsurge of AWD/suspected cholera cases. In December 2019, the Ministry of Public Health and Population of Yemen (MoPHP) reported a total 43 950 suspected cholera cases, including 9 related deaths from 22 governorates (case fatality rate: 0.02%).[17] As of December 2020, overall, cholera had affected 96 percent of the governorates in Yemen, with nearly 2.5 million suspected cases since April 2017, including 3,852 deaths.[4] Financial barriers due to inflation and reduced purchasing power further limit access to safe water and personal hygiene items; creating an exacerbated risk of cholera and other WASH-related diseases, malnutrition, as well as the current coronavirus disease COVID-19 infections.[18]

40. Years of conflict have resulted in a serious erosion of health, and water, sanitation, and hygiene (WASH) systems. Public water infrastructure and systems are in disrepair, and less than 50 percent of health facilities are functional.[2] The 2019 Yemen Humanitarian Needs Overview estimated that over two-thirds of Yemenis were in need of WASH-related assistance, with 12.6 million of those in acute need of support.[19] Due to a lack of comprehensive, nationwide WASH needs assessment data, the Yemen WASH Cluster (YWC) initiated a Secondary Desk Review (SDR)[20] to collate existing information related to WASH needs in Yemen. The key findings published in May 2020 revealed that of the 16.1 million people found to be in need of WASH assistance, 10.4 million were in acute need. Of the 66 districts where mixed populations were assessed, 49 districts (74%) were assessed to be in acute need of improved access to water. This lack of improved access to WASH facilities was particularly problematic for women and children, as they were traditionally tasked with fetching water and were more vulnerable to protection concerns when traveling[21,22] and faced gender-based violence or other hazards when practicing open defecation and hygiene at night.[23] Other marginalized groups such as people living with disabilities and the large population of IDPs also face considerably limited access to WASH facilities.[24] An important challenge due to contextual realities, is that the government units within the country do not have

[15] UNICEF. Yemen - Water, Sanitation and Hygiene 2019. Accessed 19th December 2021. Available from URL: https://www.unicef.org/yemen/water-sanitation-and-hygiene
[16] USAID Yemen Water, Sanitation and Hygiene Fact Sheet 2021 Available from URL: https://www.usaid.gov/yemen/fact-sheets/water-sanitation-and-hygiene-fact-sheet
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[19] United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA), "Yemen: 2019 Humanitarian Needs Overview,"2019.
[20] Yemen Water, Sanitation and Hygiene Secondary Desk Review – May 2020 https://reliefweb.int/sites/reliefweb.int/files/resources/reach_yem_report_wash_secondary_desk_review_may_2020.pdf
[21] JMP/UNICEF/WHO, "Drinking water | JMP." [Online]. Available: https://washdata.org/monitoring/drinking-water.
[22] B. Zabara, "Enhancing Women's Role in Water Management in Yemen Background and Challenges," Center for Applied Research in Partnership with the Orient (CARPO), 2018. .
[23] REACH Initiative, "Yemen WASH Household Assessment 2018," 2019.
[24] UN International Organization for Migration. YEMEN: clean water and safe sanitation for displaced people in the world's largest crisis. Available from URL: https://yemen.iom.int/stories/yemen-clean-water-and-safe-sanitation-displaced-people-worlds-largest-crisis

revenues to cover their basic operations, and the WASH sector still relies on external grants to sustain the operation of water and sanitation utilities. There are multiple risk factors that impact vulnerable communities, with the needs even more magnified while resources are overstretched.[25] Vulnerable populations are at risk of WASH-related diseases including 7.6 million people living in 169 districts at high risk of cholera and 83 districts with critical general acute malnutrition; and approximately 4 million IDPs, including almost 1 million in and around IDP sites.[26] The cumulative effect of the crisis has resulted in the considerable degradation of the social fabric and living conditions. By the end of 2021, Yemen's conflict was estimated to have led to 377,000 deaths – with almost 60 percent due to indirect issues associated with conflicts such as the lack of access to food, water, and healthcare.[27]

41. The Evaluation team notes and accepts all the details of the Yemen context provided on pages 1 and 2 of the Evaluation Terms of Reference (ToR)[4] as the background to this evaluation see Annex 12.1.

42. UNICEF worked in conjunction with health and water authorities to set up agile and mobile RRTs in 2017 at the time of the largest outbreak of cholera and the goal was to reduce the cost of blanket coverage among the affected population. It was also only possible to do mitigation-level measures in many cases, as the outbreak was so large that often, nothing else could be handled.[28] Between January and December 2019, there were further critical investments in the WASH RRTs to combat cholera. In addition, UNICEF provided financial compensation to healthcare providers at that time.[29]It is also important to be aware that during this time period, generic acute watery diarrhoea (AWD) was frequently reported as cholera. The cholera situation in Yemen as of December 2020 is summarized in the infographic (figure 1) below:

43. The UNICEF WASH section in Yemen is implementing one of the biggest programmes globally. Numerous components of the programme aim to reduce the exposure of the population to cholera and, on a longer-term, to improve access to WASH services. The RRT component of the programme was highly visible, expensive, time and effort consuming and required an examination of its overall quality and likely impact. In order to achieve this mandate, UNICEF Yemen and The Government of Yemen commissioned this evaluation of the performance and results of the mobile RRTs.

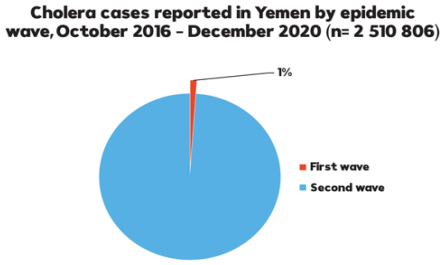
[25] Ibid (24)

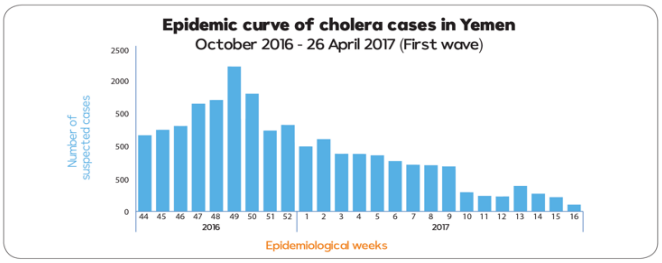
[26] Terms of Reference – Evaluation of Cholera RRTs in Yemen

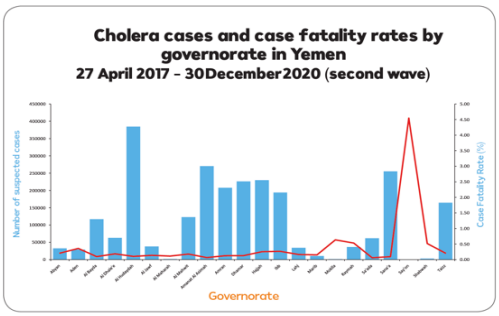
[27] UNDP. Assessing the impact of war in Yemen: Pathways for recovery. https://www.undp.org/yemen/publications/assessing-impact-war-yemen-pathways-recovery

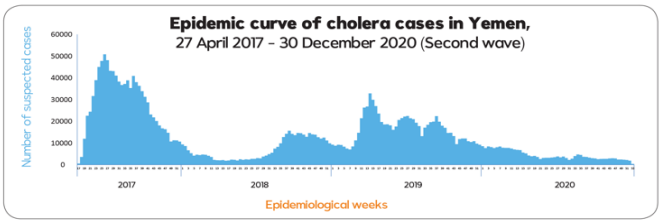
[28] UNICEF Technical Committee on the RRT Evaluation in Yemen.

[29] Ibid









Highlights

- In December 2020, the Ministry of Public Health and Population of Yemen reported a total 8 684 suspected cholera cases including 4 related deaths (case fatality rate: 0.05%) from 16 governorates.
- The cumulative number of suspected cholera cases reported in Yemen from October 2016 to December 2020 is 2 510 806 including 3981 related deaths with a case fatality ratio of 0.16%. During the second wave of this outbreak that started on 27 April 2017, the total number of suspected cholera cases were 2 484 979 including 3852 related deaths with a case fatality ratio of 0.16%.
- During year 2020, a total of 1347 stool specimens were tested. Out of these, 130 were laboratory confirmed for Vibrio cholerae.
- The 5 governorates with the highest cumulative attack rate per 10 000 were Amran (1780.86), Sana'a (1718.64), Al Mahwit (1661.80), Al Bayda (1524.79) and Al Hudaydah (1172.77). The national attack rate is 882.22 per 10 000. The governorates with a high number of deaths are Hajjah (585), Ibb (515), Al Hudaydah (409) and Taizz (339).

CHOLERA CASES AND DEATHS REPORTED DURING THE SECOND WAVE BY GOVERNORATE / 27 April 2017 - 30 December 2020

Governorate	Cases	Deaths	(%) CFR	rate (per 10 000)
Abyan	32508	68	0.21	562.82
Aden	29200	105	0.36	310.50
Al Bayda	116701	115	0.10	1524.79
Al Dhale'e	62973	117	0.19	847.02
Al Hudaydah	384722	409	0.11	1172.77
Al Jawf	38135	53	0.14	652.52
Al Maharah	1740	2	0.11	114.71
Al Mahwit	123134	222	0.18	1661.80
Amanat Al Asimah	270267	184	0.07	931.31
Amran	207938	265	0.13	1780.86
Dhamar	226338	292	0.13	1109.11
Hajjah	229702	585	0.25	960.64
Ibb	194146	515	0.27	649.38
Lahj	34363	57	0.17	337.11
Marib	10511	16	0.15	288.74
Moklla	1417	9	0.64	31.68
Raymah	36658	195	0.53	595.95
Sa'ada	61874	38	0.06	659.82
Sana'a	255237	247	0.10	1718.64
Say'on	88	4	4.55	2.30
Shabwah	2902	15	0.52	47.46
Taizz	164425	339	0.21	542.69
Total	2484979	3852	0.16	882.22

Source: WHO

Figure 1: Cholera situation in Yemen as of December 2020

2. OBJECT OF THE EVALUATION

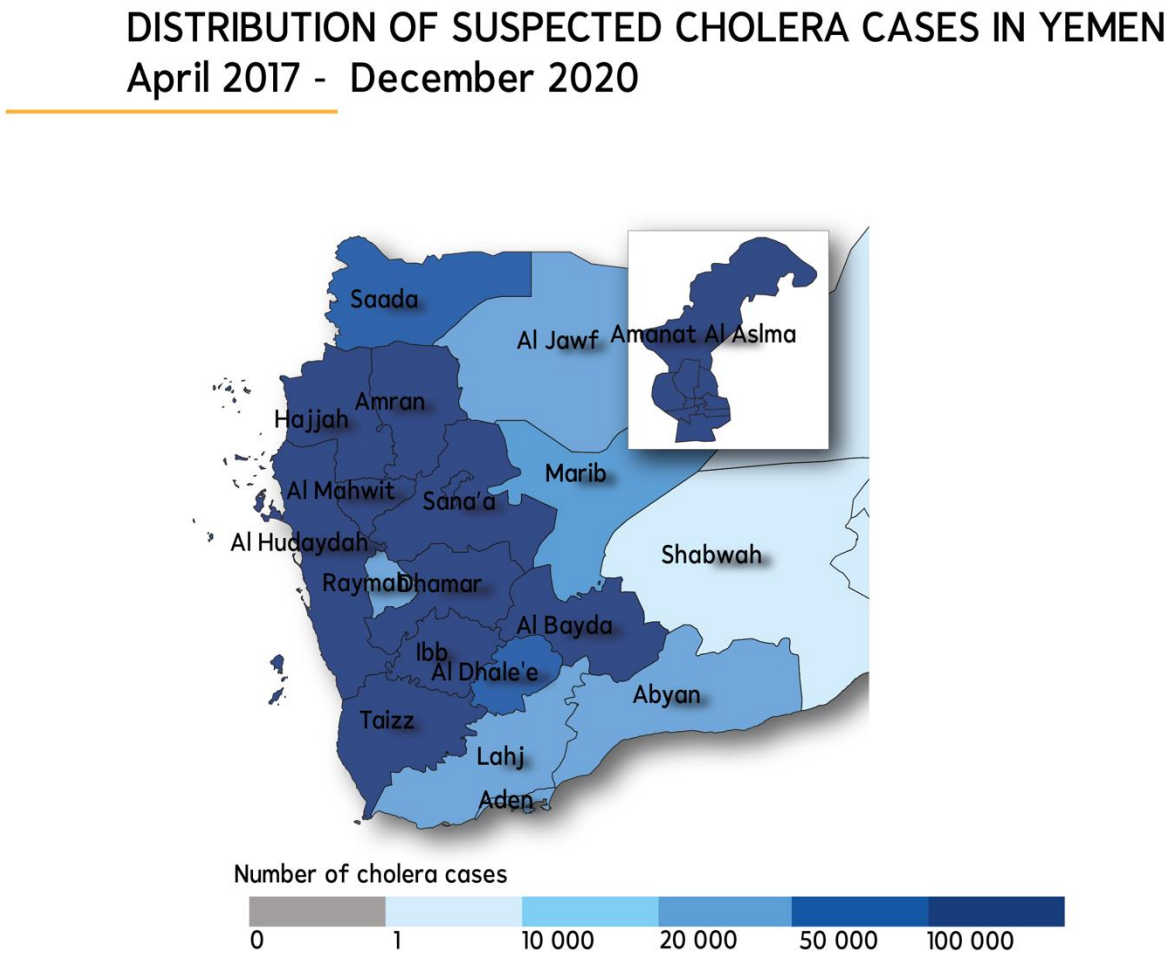
Table 1: Overview of the evaluation object

Project/programme title	Cholera Rapid Response Teams (RRT) Programme in Yemen
Country	Yemen
Sources of funding / donors	UNICEF, WB, KSA, UAE, CERF, Kuwait
Total Budget	USD 45,295,582
Duration	October 2018-December 2021
Overall objective	In response to cholera outbreaks in Yemen, UNICEF worked in conjunction with health and water authorities to set up agile and mobile Rapid Response Teams (RRTs), reporting to the General Authority for Rural Water Supply Project Emergency Unit (GARWSP- EU) under the Ministry of Water & Environment (MoWE), and the Emergency Unit of the MoWE in Aden to allow quick, flexible, and targeted control measures to be implemented in affected areas.
Components (axis, effects, results, etc.)	Components: RRTs were deployed in communities where clusters of suspected cholera cases (20 or more at the village level) were identified and provided case and firewall cholera / AWD-infected households with: 1) cholera prevention kits 2) Information, education, and communication material and cholera prevention messages Effects/Results: Households adopt better hygiene and sanitation practices; prevention and reduction of cholera/ AWD cases; and ultimately reduced morbidity and mortality from cholera/AWD in Yemen.
Expected rights-holders	180,000 household families (1.26 million people) per week based on their risk status for cholera transmission. WASH Cluster target (2020) included 7.6 million people living in districts at high risk of cholera (169) and critical general acute malnutrition (83); 3.2 million IDPs, including almost 1 million in and around IDP sites, plus an additional potential 1.2 million newly displaced.
Partners (institutional, implementing)	GARWASP EU, EU Aden, MoWE, MoPHP, NGOs, INGOs,

2.1 The Cholera RRT Programme

44. The Cholera RRT programme in the four governorates in Yemen (Aden, Ad Dali', Sana'a, and Hajjah) involved UNICEF Yemen and key stakeholders in the WASH Cluster between 2017 and 2019. The Cholera RRT Programme was conceived and implemented by UNICEF Yemen in conjunction with health and water authorities of the Government of Yemen to respond to cholera outbreaks in Yemen, heightened exposure to other communicable disease outbreaks and critical undernutrition. These outbreaks were driven in part by critical WASH conditions, including irregular and insufficient access to safe water, and

inadequate sanitation and hygiene provisions. The agile and mobile RRTs were developed to allow quick, flexible, and targeted control measures to be implemented in affected areas. The programme being evaluated was designed as an emergency response in a fragile environment that still had poor WASH development indicators during a pandemic. This has necessitated significant operational, technical, and conceptual adjustments to programme planning, monitoring, and evaluation. For instance, the evaluation was only conducted in four governorates- Sana'a, Hajjah, Aden, and Ad Dali' out of the 22 governorates of Yemen; and data collection was carried out in only two governorates (Aden, and Ad Dali'). Figure 2 displays the distribution of suspected cholera cases in Yemen across the governorates from April 2017 to December 2020



Source WHO
Figure 2 Distribution of suspected cases in Yemen from April 2017 to December 2020

45. Ordinarily, emergency, as well as development interventions implemented by UNICEF and development actors are intentionally designed, structured, and defined with indicators to guide implementation, measurement, learning, and accountability. Although this was not fully executed for the RRT Cholera response intervention from October 2018 to December 2021, there were key programme design elements which are "evaluation assets" to enable the generation of relevant evidence to determine programme performance, learning, and accountability.

46. In 2021, the RRT Theory of Change (ToC) was developed and is illustrated in figure 3. It is important to note that there were some RRTs operated by the World Health Organization (WHO) at the same time as these UNICEF RRTs..

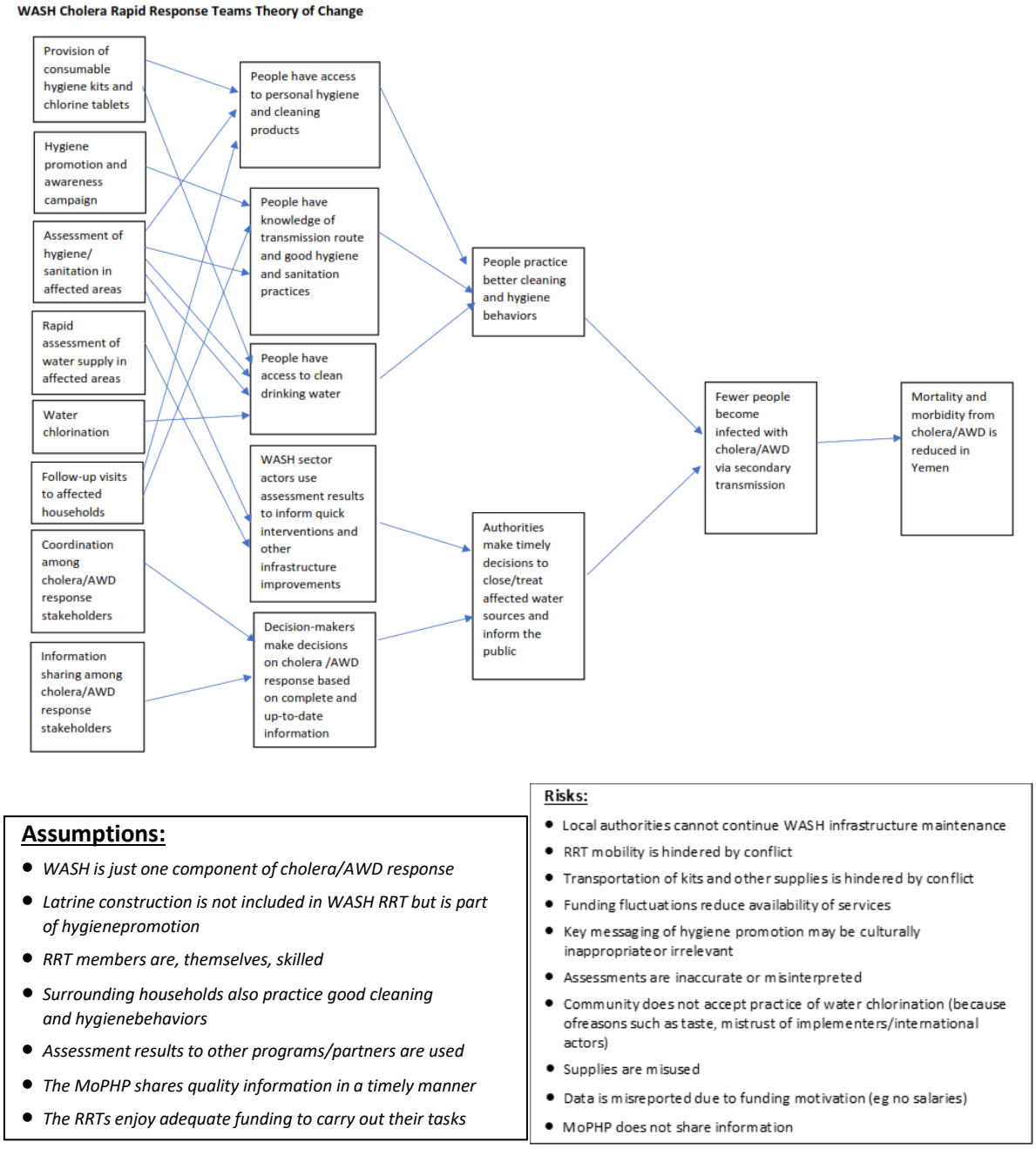


Figure 3: Cholera RRT theory of change

The causal hypotheses are as follows:

47. Provision of consumable hygiene kits and chlorine tablets and assessment of hygiene/ sanitation in affected areas result in people having access to personal hygiene and cleaning products;

48. Hygiene promotion and awareness campaigns, assessment of hygiene/ sanitation in affected areas, and follow-up visits to affected households result in people having knowledge of transmission routes and good hygiene and sanitation practices;

49. Provision of consumable hygiene kits and chlorine tablets, assessment of hygiene/ sanitation in affected areas, and water chlorination result in people having access to clean drinking water;

50. Assessment of hygiene/ sanitation in affected areas, rapid assessment of water supply in affected areas allow WASH sector actors to use assessment results to inform quick interventions and other infrastructure improvements;

51. Coordination among cholera /AWD response stakeholders and Information sharing among cholera/AWD response stakeholders result in decision-makers making decisions on cholera /AWD response based on complete and up-to-date information;

52. Once people have access to personal hygiene and cleaning products; have knowledge of transmission routes and good hygiene and sanitation practices; and have access to clean drinking water; they improve cleaning and hygiene behaviours;

53. Once WASH sector actors use assessment results to inform quick interventions and other infrastructure improvements and decision-makers make decisions on cholera /AWD response based on complete and up-to-date information, then Authorities make timely decisions to close/treat affected water sources and inform the public;

54. People adopting better cleaning and hygiene behaviours and Authorities making timely decisions to close/treat affected water sources and inform the public result in fewer people becoming infected with cholera/AWD via secondary transmission.

55. Similarly, **though the cholera RRT programme had no existing TOC in 2018/2019, the programme operated under the following programme logic in practice:**

    ➔ If the RRTs provide cholera prevention kits composed of chlorine, soap, laundry powder, chlorinated solutions, and informational material with cholera prevention messaging, then secondary transmission of cholera within households will be reduced.

    ➔ These results will be achieved provided there is coordination of different sectors and partners working on the cholera response and WASH preventive interventions, communities are receptive, and adequate funding is available, in spite of the current conflict and continued community displacement and movement and influx of refugees in Yemen.

56. The lack of a monitoring framework in 2018/2019 was addressed by the programme output and outcome monitoring data that was collected on a weekly basis.

2.2 Structure and Activities of the Rapid Response Teams (RRTs)

57. **The RRTs were activated at the height of the outbreak in August 2017 and provided tailored activities to control cholera transmission by targeting affected populations in hot spots, along with preparedness and prevention activities targeting at-risk populations.** The RRTs comprised personnel from the emergency unit of the GARWSP which operates under the MoWE (GARWSP EU) / and the emergency unit of the MoWE in Aden (EU Aden).

58. RRTs targeted communities where clusters of suspected cholera cases were identified (where 20 or more cases were reported the week before). The **RRTs were expected to respond to and support 25% of reported cholera cases all over the country.** The team composition of the RRTs field teams who visited the households consisted of two individuals (one male and one female). One team covered 22

households (2 cases and 10 direct neighbours/firewall) in urban areas and 21 households (1 case and 20 direct neighbours/ firewall) in rural areas. In addition to the field teams, there was also one national coordinator (RRT project Manager), one deputy national coordinator, and five national hub coordinators (Manager's Assistants), along with 22 RRT coordinators at the governorate level. The structure also included support for logistics, surveillance, information management, data collection, reporting, and monitoring at all levels. The wider composition of the RRTs is shown in Table 2:

Table 2: Composition of the RRTs

National Level	Hub Level	Governorate Level
▪ 1 RRT Project Manager ▪ 1 Manager's Deputy ▪ 5 Manager's Assistants ▪ Surveillance Officer ▪ Project Accountant	▪ 1 RRT Hub Coordinator ▪ Coordinator's Assistants ▪ 1 Hub Technical Assistants	▪ 1 RRT Governorate Coordinator ▪ RRT Governorate Data assistant ▪ Surveillance Specialist ▪ Investigation Data Assistant ▪ RRT Team Members ▪ 1 Accountant ▪ Districts Coordinator ▪ Community Entry Facilitator ▪ 1 Stok Keeper ▪ Guards

59. **The cholera-integrated response plan guided the triggering of alerts and the activation and deployment of RRTs**. In August 2017, the Ministry of Health (MoPHP) established a national alert system, which was designed to monitor the outbreak and response strategy, based on cholera surveillance data at the district and governorate levels. Alerts were based on the surveillance system that relied on epidemiological data collected daily from the line lists in healthcare facilities or treatment institutions. However, while targeting criteria were established to define an alert, the framework was basic, and there was no categorization to support the prioritization of alerts.[30] The system compiled daily suspected cases, which were transmitted from the district and governorate level to the MoPHP, at national level.

60. **Data was centralized nationally using the electronic disease early warning system (eDEWS).** Owing to the scale of outbreaks and high number of suspected cases, the triggering of an alert was designed to respond to approximately 25 percent of all reported cases, based on a 'clusters of cases' approach. This was based on the limited capacity of the country to respond to every suspected or confirmed case.[13] This data was also used to identify cholera hot spots during an outbreak. The epidemiological data from these identified hot-spots supported decision-making to pre-position and target the locations for RRT interventions.[31]

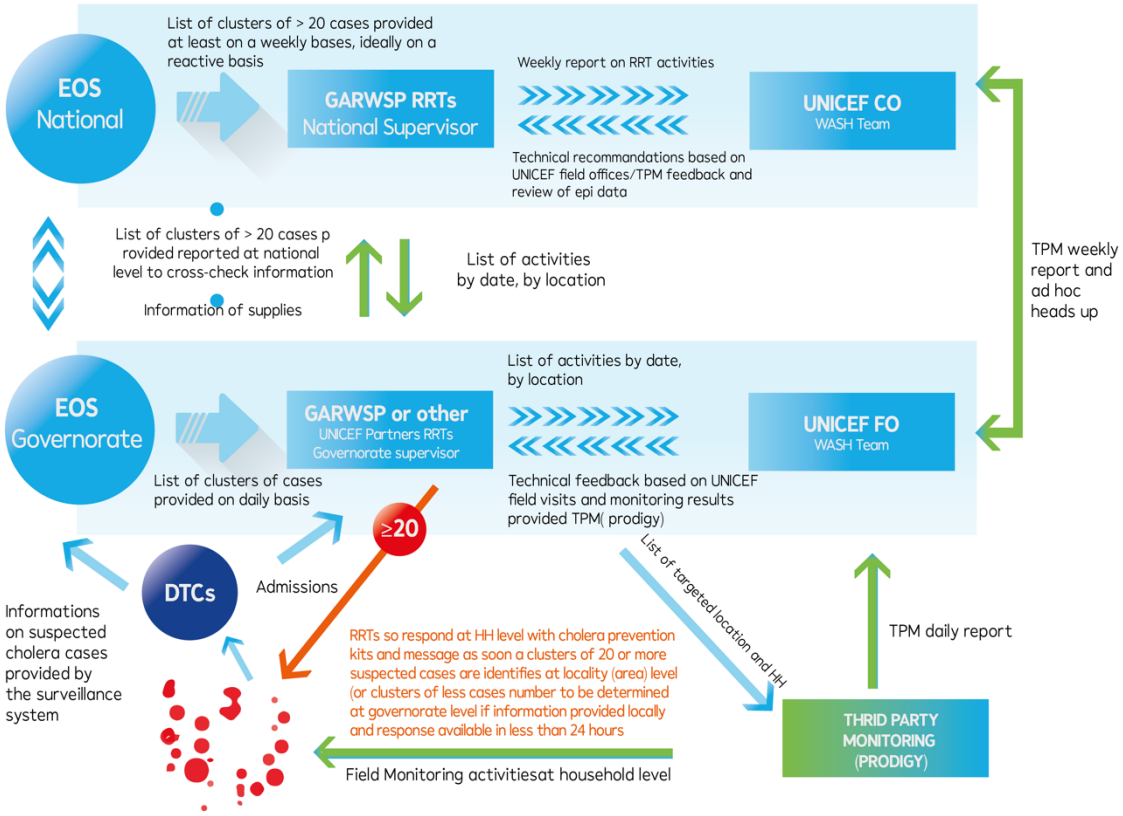
61. In addition to the surveillance system, regular data collection and analysis of rainfall patterns by Foreign, Commonwealth & Development Office (FCDO), UK, along with efforts by the Directorate General of European Civil Protection and Humanitarian Aid Operations (DG-ECHO), have supported decision-making on the pre-positioning of RRTs, material, and supplies, and in the targeting of 92 percent of areas with rainfall. However, it is noted that there was no clear association between cholera attack rates and rainfall patterns in the governorates from studies carried out with surveillance data between 2016-

[30] UNICEF WASH Global Review RRTs https://www.unicef.org/media/73121/file/UNICEF-WASH-Global-Review-Rapid-Response-Teams.pdf

[31] . UNICEF (2017a), UNICEF Yemen, Integrated Cholera Plan, Final

2018. While outbreaks were high in coastal governorates with very little rainfall, they were low in more distant governorates located in the desert. [32], [33]

62. RRTs were initially designed to function as part of the emergency operations center (EOC) and to include teams at national, governorate, and district levels.[34] However, due to issues related to the activation of the EOC, RRTs function under the emergency unit of GARWSP EU / EU Aden with the EOC providing epidemiological data collected from the line lists in healthcare facilities or treatment institutions to support their activation and deployment. The setup and coordination of the cholera- integrated response plan are displayed in figure 4.



Source – UNICEF and WHO (2018a)

Figure 4: Set-up and coordination of cholera integrated response plan, Yemen

63. **RRTs report to the Emergency Unit of the GARWSP EU / EU Aden and play a key role in cholera prevention by targeting households (HHs) that are suspected cases and their direct neighbours (firewall).** The RRTs support these HHs by providing them with:

[32] Camacho A , Bouhenia M , Alyusfi R et al Cholera epidemic in Yemen, 2016–18: an analysis of surveillance data. *Lancet Glob Health.* 2018; 6: e680-e690

[33] Fekri Dureab, Khalid Shibib, Yazoumé Yé, Albrecht Jahn, Olaf Müller Cholera epidemic in Yemen Correspondence| Volume 6, Issue 12, E1283, December 2018 DOI: https://doi.org/10.1016/S2214-109X(18)30393-0

[34] UNICEF WASH Global Review RRTs https://www.unicef.org/media/73121/file/UNICEF-WASH-Global-Review-Rapid-Response-Teams.pdf

- ➔ Cholera prevention kits which are composed of chlorine for household water treatment, soap and laundry powder for handwashing, chlorinated solutions for water containers disinfection; and
- ➔ IEC materials related to handwashing, HH water treatment, and safe storage.

64. **The RRT intervention includes key activities, such as immediate investigation and active case identification, household disinfection, water quality monitoring, delivery of hygiene promotion sessions, and distribution of a cholera kit.** The hygiene promotion sessions are based on key messages that ensure the integration of communications for development (C4D) and WASH. At the community level, RRTs conduct a rapid assessment of the WASH situation to identify potential risk factors and provide temporary chlorination of water systems and points (public or private).

65. **There were standard operating procedures (SOP), guidelines, and protocols that defined the activation, deployment, and response criteria, spatial and temporal, for the RRTs.** These include detailed terms of reference outlining the team composition, key tasks, and data collection and reporting protocols.

2.3 Training and Capacity Building of RRTs

66. **Initial and refresher training programmes were carried out for the RRTs.** These included an initial two-day training event by UNICEF for 30 to 40 RRTs in August 2017, focused on transmission contexts, epidemiology, household interventions, logistics, and monitoring and reporting. This was followed by cascade training for 16 RRT coordinators at district level. An additional, one- to two-day training event was conducted by GARWSP with 1,320 RRTs in August 2017 and 888 RRTs in October 2017. A four-day training event was also conducted by UNICEF with RRT coordinators at district level, which focused on response criteria (spatial and temporal), intervention packages, data collection and reporting, and M&E. Refresher training was not systematically conducted and there was a noted high rate of staff turnover within RRTs. There was also a recognition that C4D should be better integrated in the training package.[35]

[35] UNICEF WASH Global Review RRTs https://www.unicef.org/media/73121/file/UNICEF-WASH-Global-Review-Rapid-Response-Teams.pdf

3. PURPOSE OF THE EVALUATION

3.1 The Evaluation Purpose

67. The purpose of the evaluation is to provide an impartial and independent assessment of cholera RRT performance in Yemen and identify key achievements, challenges, lessons learned, and practical recommendations for the upcoming phase of the programme. The evaluation has systematically generated evidence on cholera RRT programming in Yemen, assessing the effectiveness of the programme in achieving its stated objectives. Besides the assessment of the intended effects of the programme, the evaluation also aimed to identify potential unintended effects. The learning will benefit cholera response planning, as well as inform further improvement. It will also benefit UNICEF and other UN agencies, as well as MoWE and MoPHP, and other partners, for future programme planning, coordination, and resource advocacy and allocation.

68. This is largely a performance evaluation for learning, accountability, and subsequent phase improvement of the RRT cholera intervention within UNICEF Yemen. The evaluation considered programme evidence and effectiveness, intended and unintended effects, and cholera response planning, and coordination. The purpose is aligned with the Organization for Economic Co-operation and Development's Development Assistance Committee (OECD/DAC) evaluation criteria and the UN approaches to programme design, interests, implementation, and results.

69. Accountability will benefit program stakeholders in the public, private, and donor sectors supporting both UNICEF and the Government of Yemen as clearly stated in the Terms of Reference (TOR).

70. The key evaluation question is whether the RRT intervention was designed and structured strategically to respond to an outbreak of cholera and other diseases currently and in the future.

3.2 Overall Utility and Envisaged Use of the Evaluation

71. The evaluation has significance for UNICEF and WASH stakeholders in Yemen (refer to table 3 for evaluation stakeholders and their uses of this evaluation) in multiple ways. The description below lists different aspects that highlight the importance of the evaluation.

    i. The evaluation offered the opportunity to systematically and objectively assess achievements, successes, challenges, and document lessons learned from the Cholera RRTs. It has provided insights into how much progress was made by the RRTs in terms of their responsiveness to outbreaks. This is important to demonstrate UNICEF Yemen Country Office's commitment to accountability to her donors, the Government of Yemen, and communities.
    ii. The evaluation will inform UNICEF's future engagements with the Yemen government; and is significant for the demonstrated interest of both UNICEF Yemen, the GARWASP, and MoWE to reflect on the RRT interventions' strengths and challenges; lessons learned, and recommendations to inform future engagements of the RRT in emergencies.
    iii. The evaluation has enabled the systematic assessment of effectiveness and offers valuable insights into how cholera RRTs can leverage the resources of different ministries and what could be done to further strengthen the model.
    iv. The performance evaluation has provided an opportunity to assess the efficacious use of the rapid response mechanism and offers guidance on the potential for more innovation regarding the use of information for planning, dissemination, and advocacy.
    v. The evaluation assessed the effectiveness of the coordination mechanisms between UNICEF and its partners. It has also provided donors with insights into areas where the national government needs assistance, which should help define the focus of future support.
    i. The evaluation can be used for high-level advocacy activities to highlight the effectiveness of the Yemen cholera RRT model and its wider replicability in other emergency settings and to call for increased political investment in the face of the risk of pandemics which presents an additional challenge to already weak systems in humanitarian contexts.

Table 3: Users and Uses of the evaluation

Evaluation Users	Uses of the evaluation (how the findings and recommendations will be used)
WASH Section UNICEF Country Office	• To inform the scope and scale of future assistance to the Government of Yemen for the cholera rapid response. The evaluation adds to the knowledge base regarding the strategic contribution of the RRT programme in advancing the emergency response agenda in Yemen. • The evaluation has generated recommendations that will inform future RRT programme implementation strategies and provide insight into potential corrective actions. • Develop a new advocacy strategy for greater engagement of national actors in WASH emergencies • Gain clarity on what works - to understand the format in which the RRT model is best replicated -and what needs to be adjusted and communicate to the respective key country stakeholders • Enhance operationalization of the RRT strategies in the face of complexities • Understand how to best implement and manage the RRTs
Ministry of Water and Environment (plus district counterparts) in both the north and south of Yemen / GARWASP	• Strengthen high-level advocacy and resource mobilization with donors relating to the cholera response. • The evaluation has provided insight into *the* efficiency of the size and composition of the RRTs at the national and governorate levels and any adjustments needed. • The evaluation has also provided some clarity into how the RRT model can be used maximally – the possibility of use to address other challenges and in other sectors beyond WASH.
Ministry of Public Health and Population (plus district counterparts) of Department of Health Education	• The evaluation has also provided more insight into if there is a need for the RRT to be more integrated with the health and other sectors and if so, how to achieve better integration.
WASH cluster, including NGO partners	• Strengthen inter-agency intervention and integration packages.
WASH cluster partners	• Develop new intervention strategies • Become familiar with the approaches identified as successful by the evaluation and introduce them more systematically into operations. • Build on the lessons learned during the evaluation to strengthen their advocacy strategy with technical partners, government, and donors.
WASH technical working group	• Will use the evaluation to ensure adequate evidence-based planning for the RRT interventions and adopt a

	rigorous method of use of Theory of Change for deliberations on planning and budget.
Health cluster, including NGO partners	● The evaluation will provide information on the most appropriate structure for the RRTs. ● The evaluation will also provide more insight into if there is a need for the RRT to be more integrated with the health and other sectors and, if needed, how to achieve better integration.
Ministry of Religious Affairs	● Follow up on findings and recommendations to inform advocacy; to strengthen sensitization amongst communities on the value of the desired WASH behaviour change in the prevention and reduction of cholera /AWD infections.
FCDO and WHO	● The evaluation will be used to inform future programming & investment and ensure better realignment of programme support and accountability at all levels.

4. OBJECTIVES OF THE EVALUATION

72. The overall objective of the independent evaluation of WASH RRTs for Cholera is to provide accountability and learning. The evaluation provides accountability to UNICEF, local authorities, other UN agencies, donors, communities, private sector partners, and rights-holders with respect to whether UNICEF/WASH, through the implementation of its emergency WASH strategy, is fit for purpose and strategically well-positioned to respond to the further outbreak of cholera and other diseases. It also provides learning as to the relevance, effectiveness, and efficiency, as well as coverage and coordination of cholera RRTs in Yemen and has enabled the identification of some best practices in cholera prevention in general and in Yemeni contexts in particular.

73. The specific objectives of the evaluation were as follows:

i. To assess the Yemen cholera RRTs and whether the governance, structure, composition, and objectives of the RRTs were appropriate to respond to the outbreak of cholera over the period targeted by the evaluation;

   a. *It is important to understand the format in which the RRT model is best replicated and how this should be done – should it continue with the same approach or should it be modified?*

   b. *Is there a need for the RRT to be more integrated with the health and other sectors or not?*

   c. *How efficient are the size and composition of the RRTs at the national and governorate levels? Is there a need for an additional layer at district level?*

   d. *How can the RRT model be used maximally – for other challenges /sectors – not just limiting the use for cholera?*

   e. *How can the roles and responsibilities as well as the composition and expertise needed for the RRTs be expanded?*

   f. *Review of the structure – the RRTs is a unit under GARWSP – are all the human resources involved necessary? Are the activities carried out cost-effective?*

ii. To determine the degree to which cholera RRTs engaged stakeholders;

iii. To undertake an analytical (qualitative and quantitative) assessment of the progress achieved in implementing the cholera RRT program and examine programme relevance/appropriateness and performance, identifying key successes, good practices, weaknesses, and gaps/constraints that need to be addressed;

iv. Examine how the programme has addressed cross-cutting issues such as gender and equity protections.

74. Discussions with the WASH stakeholders during the inception phase also captured their expectations from the evaluation. The cholera RRTs are considered best practices and have yielded some very successful outcomes. The scale of implementation of the model is also unprecedented from UNICEF's perspective – having been used in Haiti, Democratic Republic of Congo, South Sudan, and other locations. The stakeholders considered it important to systematically establish the effectiveness of this type of response, especially in view of its replicability. Their additional input to the evaluation questions is indicated in italics under the first evaluation question above.

5. SCOPE OF THE EVALUATION

5.1 Thematic Scope

75. The evaluation focused on the RRT programme, interventions, and implemented strategies. It involved the work done by UNICEF, local authorities, other UN agencies, donors, communities, private sector partners, and rights-holders UNICEF/WASH programming in Yemen. It covered selected OECD-DAC evaluation criteria aspects including relevance, effectiveness, and efficiency, and excluding coherence, impact, and sustainability as well as connectedness due to a lack of relevant data. Coordination and coverage criteria were also addressed as well as cross-cutting issues of human rights-based approach (HRBA) and gender. The programmatic aspects covered include outputs and outcomes. The activities of the agile and mobile RRTs and their coordination formed key points around which their performance and contexts were examined.

76. The evaluability of the Cholera RRT Programme in the four Governorates within the context of stated limitations in Yemen was determined as noted in the ToR. The evaluation questions were the framework for data generation and analysis while the overall evaluation criteria were key parts of the report structure and content.

5.2 Geographic Scope

77. The evaluation focused on the work done in four governorates – Sana'a, Hajjah, Aden, and Ad Dali' (see figure 5) but data collection was carried out in two (Aden and Ad Dali') due to constraints related to the context. During sampling, the Evaluation team ensured an appropriate geographical balance between rural and urban districts.

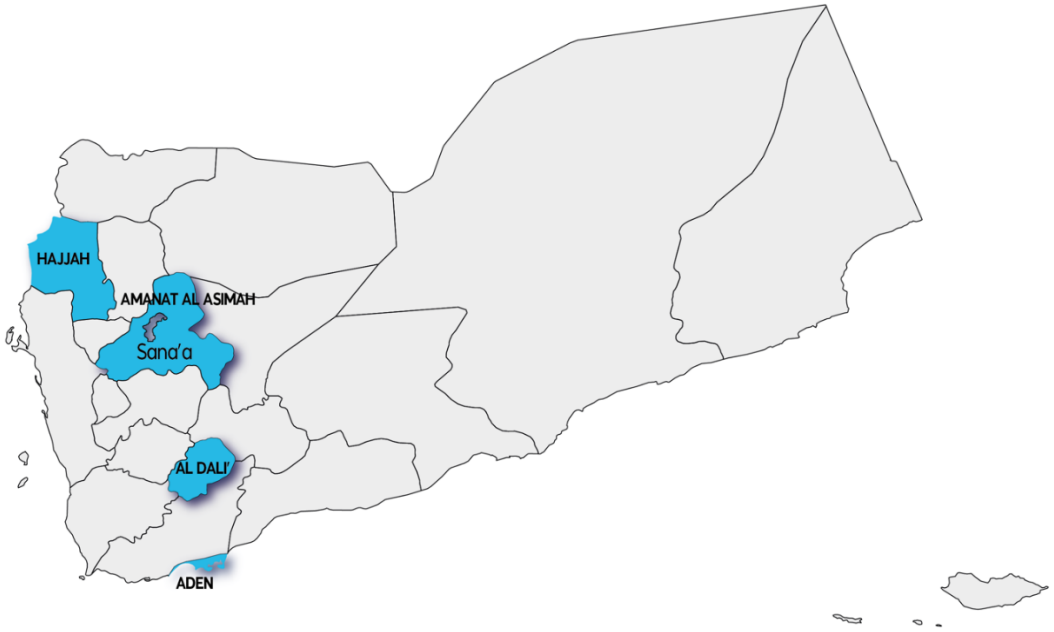


Figure 5 Map of Yemen highlighting only the four focal governorates of the evaluation

5.3 Chronological scope

1. The evaluation covered the period from **October 2018 – December 2021.**

6. EVALUATION CRITERIA AND QUESTIONS

6.1 The Evaluation Criteria

78. The evaluation design and approach were closely informed by the TOR and by the Organization for Economic Co-operation and Development's (OECD) Development Assistance Committee (DAC) criteria of relevance, effectiveness, and efficiency. The evaluation also used the criteria of gender, equity, and human rights. All these were integrated into the evaluation framework (see Annex 12.2).

79. The OECD/ DAC criteria were limited to relevance, effectiveness, and efficiency for this evaluation in order to focus on a number of evaluation questions manageable and appropriate for this evaluation. The humanitarian criteria of coordination and coverage were also included. In addition, given the current context of Yemen, which faced both conflict and COVID-19 at the time, the criteria selected were chosen because they were the most manageable criteria that could be employed to answer the key evaluation questions – How effective were the RRTs to contribute to the prevention of cholera outbreaks? Were the RRTs contributing to behaviour change or to the maintenance of existing systems? In this context. Given the programme's lack of a baseline, the impact criterion was removed. Some humanitarian criteria, connectedness and coherence, were also removed for reasons of access to relevant data. However, cross-cutting issues of gender and equity were integrated into the evaluation criteria.

80. Additionally, the principles of independence, technical rigour, transparency, validity, reliability, partnership, and usability were safeguarded by ensuring that:

- verifiable facts were collected towards measurable indicators;
- robust methods of measurement were used to ensure the validity of measurements and reliability of findings;
- a clear distinction was made in the evaluation report between facts (findings) and opinions (personal statements or conclusions not corroborated by multiples lines of evidence) of the evaluation team;
- Findings, conclusions, and recommendations were shared in a timely and transparent fashion as per UNICEF and other users' needs (this includes the sharing of preliminary findings and conclusions after the fieldwork and the timely conduct of the data analysis in real-time even when data collection is still ongoing);
- the methodology, findings, conclusions, and recommendations were clearly described and the logical sequential link amongst the three is clearly explicated;
- the evaluation questions and methodology were clearly described and agreed upon with key stakeholders before the evaluation activities started;
- there was the involvement of key stakeholders in the establishment of the TOC, contextual analysis, identification, and reflection around implementation– and they presented their perspectives and views through participatory workshops at different levels;
- there was regular and structured consultation with the evaluation reference groups, both at the regional and country level;
- there was a close partnership with the national data collection team; and
- the formulation of conclusions and recommendations were designed to be clear and useful to enable the different evaluation envisaged uses as per table 3 included for future interventions.

81. The Evaluation team which is made up of professionals from different disciplines and different backgrounds and countries ensured that the evaluation was conducted to high professional standards, with open and enquiring minds and free from any form of discrimination or prejudice.

The evaluation aimed to answer the questions listed below.

6.2 Evaluation Questions

Relevance

a. To what extent have cholera RRT strategies and interventions responded to district needs and priorities? To what extent do stakeholders consider RRT the most relevant possible response to a cholera outbreak, out of all possible responses?

b. To what extent has the project been aligned with the Yemen cholera response plan, wash cluster strategy, and the government's agenda, guidelines, and policies?

c. To what extent has the RRT programme incorporated human rights principles and instruments, including those related to gender equality (To what extent was the programme designed to address the (usually) disproportionate emotional, physical, and socio-economic toll of the outbreaks on the women and girls which usually result from their roles as primary caregivers, food preparers and water fetchers)?

Efficiency

d. How systematically have funds been allocated and utilized across programme strategies and activities to realize programme objectives?

e. How did the provision of incentives for RRT team members facilitate and/or hinder the work of the RRTs in the cholera response?

f. How timely have the RRTs been in responding to the cholera outbreak in each governorate?

Effectiveness

g. To what extent has the project achieved its stated objective of behaviour change aimed at sharing information to address the WASH-related issues contributing to the spread of cholera and to implement protective measures?

h. To what extent has an intervention strategy, including related indicators, been developed to monitor the effectiveness of the RRT and provide adequate corrective measures?

i. How adequate, according to the standards set by programme documents, has the technical and organizational support provided for planning and implementing the cholera RRT programme been?

j. To what extent has the service delivery met expected quality standards? What factors have contributed to and hampered the achievement of quality standards?

Coordination

k. How well has the coordination mechanism between the RRTs (who worked with MoWE) and the MoPHP in the provision of cholera RRT services functioned?

l. How well have the RRTs been integrated into broader WASH second-line and health-related work in the selected governorates?

Coverage

m. To what extent have qualified people been available and effectively mobilized to ensure appropriate cholera RRT coverage across the districts included in the evaluation?

n. To what extent did different groups in the community (men, women, girls, and boys) have access to information and other services of the RRTs? Which vulnerable groups in society have faced the most difficulty accessing the services of the cholera RRTs, and why?

7. METHODOLOGY

7.1 Evaluation Approach

82. The goal of the evaluation was not only to appreciate if the strategies worked, but also how they worked where, why, and for whom. This perspective of evaluating was especially important to effectively inform future interventions and national policymakers/decision-makers. The best way to respond to this was to use a mixed methods approach: combining qualitative and quantitative methods.

83. This evaluation has generated recommendations that will help UNICEF Yemen Country Office staff as well as other in-country partners. The evaluation followed a consultative approach ensuring appropriate and regular consultations with all relevant stakeholders. To ensure the quality of evidence, the evaluation was carried out following the ToR's guidance; the United Nations Evaluation Group (UNEG) checklist on Quality Evaluation Reports; the Global Evaluation Reports Oversight System (GEROS) Quality Assessment Criteria; the UNEG Guide on the Integration of Gender Equality and Human Rights in Evaluation; and UNICEF's Ethical Research Involving Children. The evaluation was also guided by the chosen OECD/DAC criteria, coordination, and coverage as well as gender, human rights, and equity criteria. Furthermore, the evaluation was guided by the 2030 Agenda for Sustainable Development with its central principle to 'leave no one behind', and other human-rights-based frameworks such as CEDAW and CRC.

84. Information and data collection were carried out at national, governorate, district, and community levels and triangulated in order to enhance the reliability of the findings and conclusions, thus ensuring scientific rigour of evidence. To achieve this, results from the desk review were triangulated with results obtained from primary quantitative and qualitative data analysis.

85. The contracting approach for the evaluation involved two evaluation firms. The Lot 1 Consultant (OAG) was in charge of the evaluation design, management, analysis, and reporting while the Lot 2 Consultant (AFCAR Consulting) was in charge of data collection and contextual input. Both consultants are referred to in this report as the Evaluation team.

7.2 Evaluation design

86. The evaluation was non-experimental and utilization-focused, adopting modified theory-based and mixed methods approaches. It focused on determining which aspects of the programme worked well or not, and why. Evidence was collected primarily through an extensive desk review of programme documents and data available, complemented by information gathered directly from key stakeholders at national and local levels through Semi-structured interviews (SSI) of key UNICEF, government, and other stakeholders, Focus Group Discussions (FGDs), a household survey and an RRT survey. The Evaluation team was aware of limitations in available data and the primary quantitative and qualitative tools were designed to generate the required data to answer the evaluation questions and to mitigate the gaps as much as possible.

7.3 Quantitative Methods

Household Survey

87. A High-Level Indicative & Descriptive Assessment of RRTs at Household Level was carried out in Yemen in 2020. That household survey focused on determining the effectiveness and success of the RRT programme and aimed at establishing a baseline against which initiative progress can be measured. The indicators assessed covered the RRT process, response rate, and activities; all of which were implemented at household level. The survey covered one urban governorate (Amanat Al Asimah) and one rural governorate (Sana'a). The Evaluation team was not able to carry out household surveys and focus group discussions in Sana'a and Hajjah due to difficulties with obtaining approvals; therefore the 2020 survey could not be leveraged as a baseline for comparison.

88. The Evaluation team carried out a household survey in Aden and Ad Dali' using interviewer-administered questionnaires. For fiscal reasons, the team was not able to create a representative sample. Purposive sampling of 125 households who used RRT services was used. The survey focused on determining the effectiveness of RRT activities in rights-holder households. The RRT process and activities were reviewed and the Evaluation team focused on changes in behaviour at household level due to past RRT activities. It should be noted that the findings cannot be generalized to the population because of the non-representation of the sample but provides quantitative information that gives useful insight into progress made due to the RRT activities. Modelling variations in utilization across different socio-economic and demographic factors were constrained by the small sample size of the survey, and the results were mostly descriptive in nature. However, the evaluation gained an increased scope of understanding in household perceptions of the RRT process, activities, and the resultant behaviour change that the Evaluation team considers has compensated to some extent for the loss of precision and limitations in the power to generate statistically significant results.

RRT Survey

89. A survey of the 100 RRT team members - who were involved in the distribution of cholera kits and the weekly data collection was carried out using interviewer-administered questionnaires. This enabled insight into the team's composition, management and governance structures as well as the implementation of the RRTs in the two governorates from October 2018 to December 2021.

7.4 Qualitative Methods

90. **Desk Review –** of programme documents including national and international literature. The desk review included all programme related documents such as UNICEF RRT third-party reports; Field mission and progress reports, previous evaluation reports, Strategic documents, Standard operating procedures; The Global Review of Water, Sanitation, and Hygiene (WASH) Components in Rapid Response Mechanisms and Rapid Response Teams in Cholera Outbreak Settings (Haiti, Nigeria, South Sudan, and Yemen); The Rapid Response Team High-Level Indicative & Descriptive Assessment at Household Level and other documents included in the Background documents shared by the Country Office. This was supported by preliminary discussions with UNICEF Yemen Office Evaluation Advisor and the ERG to provide additional context and clarifications during the inception phase.

91. **Semi-Structured Interviews (SSIs)** were conducted with key stakeholders. These SSIs were used to collect in-depth information from UNICEF and government, non-governmental and, Development partners including health sector partners and health RRT members. The list of stakeholders for the SSIs, their organizations, and roles/functions are included in Annex 12.10.

92. **Focus Group Discussions (FGDs)** were carried out with community men and women who had been RRT service users in the two southern governorates – Aden and Ad Dali'.

93. The qualitative interviews were used to gain more insight into contextual factors. A convergent (concurrent) mixed methods design was used - the primary quantitative and qualitative data were collected in parallel, within the same time frame for this evaluation.

94. The qualitative data was used to further explain the quantitative results. If areas of divergence emerged, the Evaluation team ascertained the cause of the disparity before drawing conclusions. For instance, it was checked if the difference was caused by answers given by stakeholders due to hierarchy or social desirability; or due to researcher error such as framing of questions.

7.5 Activities and Implementation

Phase I: Inception

95. The assignment commenced with the mobilization of the teams and the clarification of the assignment objective with UNICEF Yemen. The main activities during the inception phase included:

Kick-off meeting at Inception

96. The kick-off meeting with UNICEF Yemen took place on the 5th of December 2021. This enabled us to further understand the needs of the evaluation beyond the ToR and the expectations of the UNICEF stakeholders from the evaluation. This was important for clarifying the scope of the work, the terms of engagement, and the expected results of the assignment, and to map all stakeholders involved at all the programme levels. It also enabled us to identify health-related risks and sensitivities to be taken into consideration due to the COVID-19 pandemic and other contextual issues and to devise a more relevant and effective risk management strategy.

Development of tools and Drafting of the inception report

97. The desk review was conducted to support the development of the inception report as well as data collection tools. The inception report was reviewed by the UNICEF Evaluation Reference Group including methodology, final evaluation matrix, and evaluation instruments/tools.

Phase I Outputs: Quality inception report, with data collection tools and detailed work plan.

Phase I Outputs: Quality inception report, with data collection tools and detailed work plan.

Phase II: Training, Piloting and Data collection

98. Data collection was carried out by the Evaluation team and was preceded by training of the data collection teams in the use of the tools. This included the pre-testing of tools. Data collection consisted of household and RRT surveys, SSIs, and FGDs.

Selection and Training of Field Research Teams:

99. As part of the evaluation preparation, data collection teams were identified from -qualified field researchers/enumerators who were experienced in conducting similar data collection activities within the same targeted governorates and groups. The researchers comprised six men and six women.

100. The first two days of the training aimed to build the knowledge and skills of the field evaluation team in regard to evaluation objectives and scope, as well as to refresh the knowledge and skills of the team in qualitative and quantitative research and some specific participatory tools needed for the evaluation. The third day of training was used for the pre-testing of the evaluation tools. The training workshop agenda is illustrated in table 4.

Table 4: Training workshop agenda

Day	Subject

Day One	- Overview of the evaluation objectives and scope
	- Brief introduction of the RRT programme
	- Target groups characteristic and how to deal with them
	- Orientation and practice on the data collection tools;
	  o Review the data collection tools
	  o Modifying the tools to the local context
	  o Using KOBO
	- Data collection methods and instruments; pre-developed checklists; Participatory evaluation tools; targeted groups of each tool, and principles about the selection of targeted groups and individuals, sample units in the field.

Day	Subject
Day Two	- Review of the ways of working in the field approaches of data collection, management of the fieldwork, group analysis in the field, documentation, etc. - Preparing for fieldwork for Piloting/Testing the tools at the individual, and community level. o Reaching agreement on a fieldwork schedule, team members (who work with whom), days (how many, when to finish), areas, communities, sharing information, logistics, transportation and accommodation, insurance, etc. - Conflict sensitivity, and exploitation - Data Confidentiality - Orientation on collecting and recording documentary evidence from the field

Day Three	- **Morning:**
	  o Conducting the pilot test.
	- **Afternoon**
	  o Discussion on any challenges faced due to the approaches, guiding tools, checklists, or anything else.
	  o Review the data collection tools and making modified them according to the pilot test.
	  o Sharing the final tools and fieldwork schedules.

Pre-testing of tools

101. The data collection activity was preceded with pre-testing of tools in the selected locations in the target governorates to check the validity of tools and methodology as well as to assess the challenges for data collectors in accessing and collecting information. The tools were revised or fine-tuned as needed based on the feedback from the field team.

Phase III: Data analysis and report writing

102. Data analysis is detailed in subsequent sections. The OAG team has carried out the reporting of the evaluation as outlined in the TOR and as agreed with the UNICEF evaluation Group during the inception phase. A PowerPoint presentation of the preliminary findings of the evaluation has been carried out. In the preparation of the evaluation report, the Evaluation team has followed the sample structure presented and agreed upon and will further incorporate all the components, comments, and suggestions realized during the validation period.

103. This final report has been structured around each of the overarching evaluation criteria – relevance, effectiveness, efficiency, coverage, and coordination.

7.6 Data collection tools

7.6.1 Quantitative

Household Survey

104. The interviewer-administered household data questionnaire aimed at collecting data on household access to IEC information and other RRT services and benefits from previous RRT activities and perceived behaviour change as a result of those activities. The Evaluation team used retrospective recall – asking before and after questions to enable the assessment of the RRT activities and the service users' perceptions of access and effectiveness.

Survey of RRTs

105. The survey obtained primary data from programme implementation teams in two governorates. The questionnaire was administered by interviewers face-to-face. The questions were designed based on the evaluation questions along each evaluation criteria and aligned to the evaluation purpose and objectives. We included questions on coordination, gender, and equity as well as projections for the next phase. The RRT and household survey questionnaires are found in Annexes 12.8 and 12.9.

7.6.2 Qualitative

Desk review

106. The Evaluation team obtained two types of programme documents to review, the primary from UNICEF and the secondary, from the key stakeholders. The team reviewed the documents suggested including the proposal and results framework to develop the evaluation analysis matrix and finally the evaluation. This desk review helped to establish some contextual matters and nuances within which the project was implemented which may have determined project success or limitations. List of documents reviewed are found in Annex 12.13.

Semi Structured (In-depth) Interviews

107. SSIs using topic guides targeted key stakeholders including representatives of UNICEF; government sector offices and relevant line ministries; UN and other developmental partners; non-governmental partners and other duty-bearers. The SSIs were used to get information and data on the relevance, effectiveness, efficiency, coordination, and coverage of the RRT interventions and the extent to which the programme design, implementation, and monitoring had integrated equity and gender; good practices and gaps to be addressed; and institutional based information such as capacity in the thematic areas and collaboration among key partners that could not be captured quantitatively or through FGDs. The interviews also explored lessons learned from the implementation of the RRT interventions as well as the factors that facilitated the achievement of the key results.

108. Respondents were purposively selected on the basis of their involvement with the RRT programme, the WASH Cluster, and the integrated cholera response; and cut across all categories of key stakeholders. Informed consent forms and topic guides for the SSI are detailed in Annexes 12.3 and 12.4 respectively.

Focus Group Discussions (FGDs)

109. FGDs were were carried out with community women and men who used RRT services in two governorates – Aden, and Ad Dali'. Female and male participants were grouped separately to promote open and active participation. The FGDs using topic guides provided information on the quality of the RRT activities and behavioural change achieved during the period October 2018 to December 2021: as well as equity and gender; what worked and did not work in terms of access to RRT services and suggestions for improvement. This enabled an in-depth understanding of the relevant community-level issues of interest. Users' experiences and opinions on the key services, benefits, and changes in health status related to the RRT programme interventions were captured. The key point in the FGDs was change in service users' well-being status as a result of exposure to the interventions. The discussions were tailored to provide responses to the evaluation questions over key issues that the project targeted. For example, reporting of cholera / AWD-infected households and firewall households with cholera prevention kits, chlorine for household water treatment, soap and laundry powder for hand washing, chlorinated solutions for water containers disinfection with information, education, and communication (IEC) material and adequate cholera prevention messages

110. The selection of participants for FGDs was carried out using purposive sampling methods (the Evaluation team developed some clear eligibility criteria contextualized to Yemen for participation in FGDs, also with the support of government and UNICEF stakeholders. The FGDs were audio recorded and transcribed. To maintain anonymity, the participants' names were only captured on an attendance sheet and were not mentioned during the FGDs and therefore were not captured by the audio-recorder. Upon transcription, findings were presented in a structured template.

111. FGD with female participants was organised separately from FGD with male participants. This enabled the Evaluation team to create safe spaces for the participation of women and aimed to

prevent reticence in their answers. Informed consent forms and topic guides for the FGDs are in Annexes 12.5 and 12.6 respectively.

7.7 Sampling strategy

7.7.1. Quantitative Sampling

112. Given the set small sample size of the household survey, we adopted a non-probability sampling approach. It is important to note that there is no statistical theory to guide the use of non-probability samples, they can only be assessed through a subjective evaluation which means that the survey estimates can be biased. Cost was the primary consideration for the sampling approach and size, but it is also noted that a random sample may not properly represent the target population. The Evaluation team used judgmental sampling[36] in the household survey and in collaboration with UNICEF and RRT stakeholders communities and households were purposively sampled for the survey. As already noted, the survey sample consisted of 125 households in Aden and Ad Dali' (see table 5). Household sites visited are listed in Annex 12.11.

Table 5: Sample of household survey

Government	Male	Female	Total
Aden	30	29	59
Al-Dali'	34	32	66
Total	64	61	125

2. The RRT survey also adopted a purposive sampling approach. The Evaluation team requested the list of the relevant rapid response team members for interviews. These were RRT members who had interacted long enough with the programme, preferably from 2018. We surveyed a sample of 100 RRT members (see table 6). RRT sites visited are listed in Annex12.12.

Table 6: Sample of RRT team members survey

Government	Male	Female	Total
Aden	25	25	50
Al-Dali'	27	23	50
Total	52	48	100

7.7.2. Qualitative sampling

113. Purposive sampling was also employed for the selection of stakeholders for the SSIs based on the criteria of level of interaction with the RRT programme, organization, and role/function. For the FGD participants, they were purposively selected using the criteria of level of interaction with the RRT programme, gender, socio-economic status, and vulnerability (such as disability status, single mothers, etc.)

Sampling and recruitment – FGDs

114. For the FGDs, we sampled people from areas/households that were case and firewall households in October 2018- October 2019 but we collected information relevant up till December 2021.

115. Purposive sampling **for the FGDs** was carried out using the criteria of occupation, sex, marital status, age, location, vulnerability including disability, etc. and interaction with the RRT interventions. This ensured that different groups in the communities are well represented and also allowed for a

[36] United Nations. Designing Household Survey Samples: Practical Guidelines United Nations New York, 2005. Available from URL: https://unstats.un.org/unsd/demographic/sources/surveys/handbook23june05.pdf

diversity of opinions of the participants. Each focus group consisted of 10 participants. We anticipated a total of 8 FGDs in Aden and Ad Dali'.

116. The recruitment of the FGD participants was carried out by the Evaluation team in collaboration with the community gatekeepers and government stakeholders, especially the RRT teams.

Sampling and recruitment – SSI of key stakeholders

117. Purposive sampling was carried out using the criteria of function, organization and interaction with the RRT interventions. The recruitment of the key stakeholders was carried out in collaboration with the Yemen Country Office. The Evaluation team used snowball sampling to locate some of the respondents. The stakeholders included UNICEF Country Office, WASH sector stakeholders Key government stakeholders, GARWSP which operates under the MoWE; MoWE EU in Aden and Ad Dali', health sector partners, health RRT members, community leaders and representatives of community water management committees, development stakeholders, WHO and Implementing partners including civil society organizations (CSOs) / Non-governmental organizations, (NGOs).

118. A total of 51 key informant interviews were conducted; types of organizations interviewed are summarized in Table 7 below.

Table 7: Key informant interviews sample

Group	Achieved		
	Male	Female	Total
National government (MWE and MoPHP officials)	4	3	7
UNICEF	2		2
WHO	2		2
WASH Cluster Partners	4	1	5
UNICEF RRT Team Leaders	4	2	6
RRT Project Manager/Hub Coordinators/ Governorate Coordinators	5		5
Health and Nutrition Stakeholders	6	5	11
Community leaders and representatives of community water management committees	13		13
Total	40	11	51

7.8 Data analysis and quality assurance

7.8.1. Data quality assurance plans

119. Data quality control measures applied included a review the evaluation tools, developing interview schedules and data collection movement plans, the translation of the tools into local language where necessary, the standardization of the training (pre-testing and ensuring that the field researchers were familiar with terminologies used in the evaluation tools) and regular supervision and cross-checking of the uploaded data.

120. The evaluation followed the UNEG Norms and Standards for Evaluations as well as the UNICEF procedure for Ethical Standards in Research, Evaluation, Data Collection, and Analysis. The evaluation also considered UNEG Guidance on integrating Human Rights and Gender Equality and UN- system-wide Action Plan Evaluation Performance Indicators. The final evaluation report will comply with UNICEF-adapted UNEG Evaluation Reports standards and UNICEF-GEROS review criteria.

121. The Evaluation team adhered to the UNEG and UNICEF evaluation guidance documents throughout the evaluation process. The team has also ensured that all the deliverables are compliant with UNICEF-Adapted UNEG Evaluation Report Standards, UNEG Norms and Standards for Evaluations, and GEROS Evaluation Quality Assurance Tool before the submission to UNICEF.

7.8.2. Supervision

122. At the time of the interviews, the field researchers were observed by supervisors to ensure that they followed the schedule strictly. After deploying field researchers, the supervisors randomly travelled around the governorate locations of interviews to track and confirm that all field researchers were gathering information from identified stakeholders. The supervisor had a list of all interviewees for the day and made arrangements and a timetable to see them. The Evaluation team conducted face-to-face SSIs and focus groups. Qualitative interviews were audio-taped, transcribed, and translated into English for interpretation and analysis.

123. At the end of each workday, all field researchers submitted their filled interview schedule forms to the supervisor. The supervisor confirmed that the coding of all sheets had been done correctly. Following this cross-check, the field researchers sent filled tools of the day to the server, and then the data manager gave feedback the following day on the quality of data and the progress of the work towards the planned time of data collection.

7.8.3. Data Processing and Analysis

Quantitative data

124. Data processing of the primary quantitative data essentially included all the corrective actions (in particular cleaning, weighting, etc.) to be carried out in response to the various problems detected in the raw data from the household and RRT surveys in order to have databases ready for analysis. It should be noted that part of the processing was done at the time of collection with the help of the collection application, which automatically manages the inconsistencies identified before the collection; for the rest, the processing) included the following actions:

I. Classification and post-coding of responses to open-ended questions (those where the respondent was given the opportunity to give his/her opinion without the survey having identified specific responses) and semi-open-ended questions (those for which some of the possible responses were known and proposed, but where the respondent could go beyond the scope of these proposed responses): Response tabulation, nomenclature development, post-coding, and verification;

II. Data review and validation: identification of data problems/errors (missing data, inconsistencies, atypical data, erroneous data), selection of corrective actions;

III. Editing and imputation: execution of appropriate corrections and verifications.

IV. Deriving new variables and units

V. Preparation and distribution of files for analysis

VI. Checking and saving the files (raw, audited).

125. The Household and RRT surveys once processed were analyzed using the SPSS 25 software and combined with Excel (for the beauty of the graphical outputs) – this allowed us to better interrogate our data through descriptive (tables, graphs, central tendency and dispersion characteristics, etc.,) and inferential statistics tools (statistical tests, etc.). Data were disaggregated by gender and location.

Qualitative data

126. FGD and SSIs were audio-recorded and transcribed. Data analysis followed an inductive and thematic approach. Transcripts were read and coded using common themes and sub-themes according to the evaluation matrix. Analysis was conducted iteratively using a three-pronged

approach: "noticing, collecting, and thinking".[37] We also identified emerging themes in the course of analysis of qualitative data.

127. The analysis of the findings was guided by the evaluation matrix. Data was processed and synthesized for compiling and analysing findings for each of the criteria and key evaluation questions. When drafting the evaluation report, the Evaluation team systematically analysed primary data collected in relation to programme from October 2018 to December 2021 including data collected via desk review.

128. Triangulation of data was carried out using different qualitative methods to ask the same questions and asking different types of respondents the same questions. This enabled us to identify areas of agreement and disagreement between and within groups of respondents. We assigned weights in the qualitative analysis using the frequency of respondents' perceptions and agreements between different interviews and respondents. The Evaluation team also triangulated qualitative data with primary quantitative data in order to gain a deeper understanding of the findings.

7.9. Ethical Considerations and Evaluation Principles

129. The evaluation adhered to the 2020 United Nations Evaluation Group (UNEG) Ethical Guidelines. Accordingly, the Lot 1 and 2 Consultants were responsible for safeguarding and ensuring ethics at all stages of the evaluation cycle. This included but was not limited to, ensuring informed consent, protecting privacy, confidentiality, and anonymity of participants, ensuring cultural sensitivity, respecting the autonomy of participants, ensuring fair recruitment of participants (including women and socially excluded groups), and ensuring that the evaluation results caused no harm to participants or their communities.

130. The evaluation followed UNEG's directive on Ethical Standards and was guided by standard good practice and professional interagency. In compliance with UNICEF research policy, we endeavoured to ensure that the evaluation was designed and conducted in a manner that respects and protects the rights, confidentiality, impartiality, privacy, accountability, respect, and welfare of respondents. In addition, we aimed to ensure that the data was technically accurate and reliable, and that data collection was conducted in a transparent and impartial manner and contributed to reliability and validity.

131. The evaluation followed UNICEF guidelines on ethical participation. In addition, all participants in the evaluation were fully informed about the nature and purpose of the evaluation and their requested involvement. Only participants who gave their written or verbal consent (documented) were included in the evaluation. All the documents, including data collection, entry, and analysis tools, and all the data developed or collected for this evaluation are the intellectual property of the Government of Yemen and UNICEF.

132. In terms of the fieldwork safety protocols, all field researchers were trained on how to collect quantitative and qualitative data and apply the humanitarian principles of "Do No Harm" and "Light Footprint'' when they collected data in the field.

133. Our researchers/enumerators ensured that informed consent clearly highlighted the aims and methods of the assessment, including its intended and possible outcomes, and provided an opportunity to decline participation. Confidentiality and privacy were of utmost importance in our data collection.

134. Participant safety and security were considered of paramount importance by the Evaluation team. As a result, all possible considerations were taken to ensure evaluation activities did not put participants at risk. This was achieved through logistical considerations, e.g. choice of interview

[37] Seidel J.V Qualitative Data Analysis 1998 http://eer.engin.umich.edu/wpcontent/uploads/sites/443/2019/08/Seidel-Qualitative-Data-Analysis.pdf

locations and research design tools, ensuring stakeholders /participants were not targeted as a result of their participation. Furthermore, field teams ensured maintaining the anonymity of participants to encourage them to speak openly and frankly, with questionnaires designed in-house to ensure appropriate questions. Participant safety was discussed in depth during the training workshop and all security protocols were included in the fieldwork manual.

135. The Evaluation team members will not publish or disseminate the Evaluation Report, data collection tools, collected data, or any other documents produced from this consultancy without the express permission of, and acknowledgement of UNICEF.

136. The evaluation obtained an independent ethical review and approval. Particular attention was paid to the avoidance of harm and stress to evaluation participants, especially vulnerable populations; obtaining informed consent/verbal assent from them (except from UNICEF staff, who will be directed to participate if needed); absence of benefit or compensation offered to them; protection of their privacy; confidentiality and anonymity of data collected; security matters and protection protocols both for evaluation researchers and key stakeholders for interviews; training of enumerators in ethical issues and on enumeration and communication skills.

137. The evaluation was conducted according to the ethical principles and standards defined by the United Nations Evaluation Group:

i. **Anonymity and confidentiality:** The evaluation respected the rights of the people who provided information, guaranteeing their anonymity and confidentiality.

ii. **Responsibility:** The entire team confirms the results presented in this report, there are no disagreements. No conflicts or differences of opinion arose between the consultants or between the consultant and the programme managers regarding the conclusions and/or recommendations of the evaluation.

iii. **Integrity:** The evaluator highlighted issues that are not specifically mentioned in the ToR, in order to carry out a complete analysis of the programme.

iv. **Independence:** The Evaluation team assured they remained independent with respect to the programme under review, and none of the members were involved in its implementation or any other phase.

v. **Incidents:** When problems arose during fieldwork, or at any other point of the evaluation, the Evaluation team reported immediately to the Evaluation Manager. The team was aware that if this was not done, the existence of such problems could in no way be used to justify the failure to achieve the results expected by UNICEF in the terms of reference.

vi. **Validation of information:** The Evaluation team assured the accuracy of the information gathered during the preparation of the report and is responsible for the information presented in the final report.

vii. **Intellectual property:** Using the different sources of information, the Evaluation team respects the intellectual property rights of the institutions and communities involved in the evaluation.

i. **Submission of reports:** If the reports are submitted after agreed deadlines, or if the quality of the submitted reports is significantly lower than agreed, the sanctions provided in the terms of reference will apply.

7.10. Governance

138. The evaluation was funded and managed by UNICEF in collaboration with partner institutions and donors, with technical consultation with the UNICEF regional office. A steering committee was established to approve the terms of reference, endorse the inception report and ensure that all deliverables were of the required quality. A technical committee was established to provide technical inputs on the deliverables. The Evaluation Manager supervised the evaluation team and

acted as secretariat to the steering committee. The Evaluation team was supported by the steering and technical committees throughout the evaluation phases. Feedback and comments from the committees on the inception report, preliminary findings, and evaluation report were integrated to improve those evaluation products. Stakeholders, including the WASH cluster and MoWE and MoPHP authorities facilitated data collection via the Evaluation Manager. The Evaluation Team Leader managed the evaluation team and served as the liaison with UNICEF and the steering and technical committees. The Evaluation Manager and Team Leader held biweekly meetings to facilitate the evaluation and address any challenges that arose.

7.11. Limitations and constraints of the evaluation

Table 8: Limitations and Proposed Mitigation Strategies

No	Limitations and Constraints of the Evaluation	Mitigation strategies identified
1.	Limitations in Data Availability	• It was noted that given the time that elapsed since the drafting of the ToR, some available data may have been lost due to staff turnover. Thus, the issue of data availability and accessibility was recognised during the inception phase. The desk review enabled the evaluation team to understand the extent of the limitations in data available to answer the evaluation questions. For instance, financial and budgetary data were hardly available and the team did not have access to comprehensive monitoring data of the programme. Careful development of tools for KII, FGDs, Household and RRT surveys enabled the evaluation team to address the gaps as much as possible. Based on the desk review carried out, the evaluation matrix was adjusted to ensure that the questions and indicators were realistic..
2.	Some high-level officials did not have all the details on programmes required for the evaluation due to their extent of interaction with the RRT programme	• In this case, additional consultations were carried out with other delegated officials in the ministry for filling the gaps. Asking the same questions to different stakeholders within the sectors enabled the evaluation team to capture different perspectives based on the functions of the stakeholders and this helped to address gaps. To reduce delays in scheduling interviews, the Yemen Country Office contacted the ministries in advance and made arrangements.
3.	Potential biases in data collection	• There was a likelihood of recall bias given that the evaluation questions take events from 3 years retrospectively into consideration. To mitigate this, research assistants were trained in probing and asking appropriate follow-up questions. However, service users cannot be expected to recall every issue regarding the RRTs with precision and figures given may be approximate and should be interpreted with caution. • The recruitment of the participants for the FGDs and households in the surveys were carried out by the research assistants in consultation with key community and RRT stakeholders. Confidentiality and privacy were assured to enable participants answer questions freely. However, social desirability, and recall bias regarding RRT service utilization in the governorates cannot be ruled out completely.
4.	Lack of a formal theory of change and a baseline assessment	• The ToR noted that the cholera RRTs programme lacked some aspects of ideal evaluability. The lack of a formal

		theory of change (ToC) and a baseline assessment prevented some components of robust evaluation. Given the current security situation in Yemen and restrictions in access, as well as COVID-19 at the time, the evaluation was kept small in geographical scope, focusing on few governorates instead of covering the whole county. • However, desk review revealed that a ToC had been developed in 2021 and the elements were in line with the logic of the implemented programme and therefore could be leveraged in the assessment of relevance.
5.	Limitations in sampling	• Selection of samples relied on convenient and purposive sampling rather than randomized methods. However, the use of data and methods triangulation enabled the evaluation team to corroborate the findings and weaknesses in one type of data were compensated for by the strengths of other data, thereby increasing the validity and reliability of the results.
6.	Contextual / logistical issues	• In-country visits by international evaluators were not possible. However, the national members of the evaluation team are competent and experienced evaluators and Arabic-speaking. Given the humanitarian situation of Yemen and COVID-19 related issues, the evaluation team remained cognizant that the programmatic staff dealing with this evaluation continued to face heavy workloads and adapted to their schedule. Communication flowed strictly through the Evaluation Manager so as to limit further overloading already-overburdened programmatic staff; the evaluation team was aware that tight and early coordination with the Evaluation Manager was necessary when questions for programme staff arose, and that responses could take a longer-than average time under the circumstances. • Reaching the RRT teams, required a lot of communication and coordination from the Emergency Unit in Aden and field teams but the field teams succeeded in reaching the planned numbers despite the difficulties.

8. FINDINGS AND PRELIMINARY CONCLUSIONS

8.1. Relevance

QE 1.1. To what extent have cholera RRT strategies and interventions responded to district needs and priorities? To what extent do stakeholders consider RRT the most relevant possible response to cholera outbreak, out of all possible responses?

QE 1.2. To what extent has the project been aligned with the Yemen cholera response plan, wash cluster strategy, and the government's agenda, guidelines, and policies?

QE 1.3. To what extent has the RRT programme incorporated human rights principles and instruments, including those related to gender equality (To what extent was the program designed to address the (usually) disproportionate emotional, physical and socio-economic toll of the outbreaks on the women and girls which usually result from their roles as primary caregivers, food preparers and water fetchers)?

Picture 1: FGD Men

Overall Finding: The Cholera RRT Interventions were Relevant in addressing the Needs and Priorities related to the Cholera Outbreak from October 2018 to December 2021 in Yemen.

Quality of the Evidence: Strong

139. According to the OECD, the DAC criteria of relevance addresses the "extent to which the intervention objectives and design respond to beneficiaries', global, country, and partner/institution needs, policies, and priorities, and continue to do so if circumstances change."

140. The evaluation questions on Relevance were addressed qualitatively using an extensive document review, SSIs of UNICEF, government and development stakeholders; and FGDs with community men and women.

QE: 1.1 To what extent have cholera RRT strategies and interventions responded to district needs and priorities? To what extent do stakeholders consider RRT the most relevant possible response to the cholera outbreak out of all possible responses?

8.1.1. Appropriateness of the Intervention Logic and the Cholera RRT Theory of Change

141. Though the cholera RRT programme had no existing Theory of Change (ToC) in 2018/2019, the programme operated under the logic of the ToC developed later (in 2021). However, there were points of deviation: There was limited evidence that the RRTs conducted a rapid assessment of water supply, assessment of hygiene and sanitation and water chlorination (though they collected information on sanitation, and water sources, distributed chlorine, and educated the communities

on how to use it). Nevertheless, it is noted that the TOR[38] for the RRTS indicated three types of teams; RRTs for the regular response and investigation, Area WASH Assessment (AWA) to report the required WASH Interventions, and Post Distribution Monitoring (PDM) to measure the impact of RRTs interventions, The TOR also noted that the RRTs must have been trained on household interventions, WASH services assessment, and post-distribution mentoring. Key stakeholders in the interviews described that the rapid assessment included information on all aspects of water services and sanitation in terms of the status of water services - the type of water source, whether the source was protected or not, the means of transporting or fetching water, the means and tools of storage in households, in addition to the type and status of sanitation, types of pollution and their locations in the environment surrounding the households, villages, and neighbourhoods of infected cases. Though not much evidence was seen in this evaluation regarding the AWA carried out by the RRTs, the collection of the aforementioned information on water supply and sanitation appeared to be regarded as a rapid assessment.

142. The Cholera RRT response consisted of multiple interventions which were later supported by an in-depth analysis via the ToC developed by the UNICEF Country Office, WASH Cluster, and Development partners. The model described the causal assumptions behind the links in the impact pathway of the Cholera RRT response and how change was expected to happen (ex-ante case). The ToC captured the contextual elements in the country by describing bottlenecks relating to enabling environment, supply, and demand for the Cholera RRT services, quality of information management, and the need for WASH infrastructure maintenance and improvement.

143. The programme logic used in 2018/2019 was that if RRTs provided cholera prevention kits composed of chlorine, soap, laundry powder, chlorinated solutions, and informational material with cholera prevention messaging, then secondary transmission of cholera within households would be reduced. The desired outcomes would be achieved provided there was the coordination of different sectors and partners working on the cholera response and WASH preventive interventions, communities were receptive, and adequate funding was available in spite of the conflict and continued community displacement and movement and influx of refugees in Yemen.

144. **The intervention logic and the ToC proved to be relevant and consistent with the complexity and the existing context in Yemen, as it reflected the evidence generated in the field**. It was a sound and adequate approach to articulate the comprehensive Cholera RRT interventions, particularly considering the emergency nature and the short-term (outcome) perspectives of expected changes.

145. **The ToC (and programme logic) is robust – structural sound and plausible – and proved that if implemented as designed it was able to contribute to the intended results** (especially in relation to the programme design to tackle the emergency context). The ToC proved to be structurally sound for several reasons: it is understandable – the logic and structure are clear; the activities and outputs are commensurate with the expected results. The pathways of the results and the causal link assumptions are well-defined and the results follow a logical sequence.

146. **The sequence of the causal links proved to be plausible** – for instance, the sequence that if consumable hygiene kits and chlorine tablets were made available; hygiene promotion and awareness campaigns carried out, and water chlorination done; the improvement in access to personal hygiene/cleaning products, and clean drinking water, as well as the improved knowledge of the transmission route of cholera and good hygiene and sanitation practices would lead to people adopting better cleaning and hygiene behaviours. Consequently, fewer people would become infected with cholera and AWD via secondary transmission; and mortality and morbidity from cholera/AWD would be reduced in Yemen as was supported by evidence from the field. Respondents in the survey and SSI as well as the FGD participants all reported a reduction in mortality and morbidity due to cholera in the communities. Surveillance data also showed that from 1 January 2018 to 31 May 2020, the cumulative total number of suspected cases was 1,371,819 with 1566

[38] UNICEF. Terms of Reference for Yemen Cholera outbreak WASH Rapid Response Teams

associated deaths,[39] with the case fatality rate for the outbreak declining from approximately 1% at the start of the outbreak[40] to 0.11% as of 2020.[41]

147. **The evidence-based criteria in the design of the WASH Cholera RRT ToC proved relevant and appropriate to a large extent though some of the assumptions did not hold**. For instance, the RRTs did not always enjoy adequate funding to carry out their tasks and the MoPHP was not always able to share quality information in a timely manner. Nevertheless, it was useful in the ToC that the assumptions were independent of each other, recognizing that some assumptions may apply to more than one causal link.

8.1.2. Appropriateness of the Cholera RRT programme design and implementation to respond to the districts' needs and priorities

148. Stakeholders in the KII described the condition in the country during the 2018-2019 cholera outbreak. The situation was described as catastrophic, difficult, and tragic by UNICEF and its partners - The number of infected cases increased rapidly and continuously in most areas, which greatly burdened the health facilities. The RRT working mechanism was developed for the implementation of activities. Several challenges were highlighted including the poor hygiene and sanitation awareness in the communities; the lack of continuous availability or cuts of water; massive power outages; high temperature; continuous cesspit overflow and the accumulation of waste in the streets; Widespread poverty made hygiene materials unaffordable for most households due to their high prices in the market. Additionally, the public water supply was not potable since it was stored in-ground tanks. Potable water was purchased from private sector vendors and this was also unaffordable for the majority of households. The situation was worse in rural and remote areas, as well as among IDPs. Additional supply-side issues such as human resources shortage and lack of training of staff; coupled with excessive demand for health facilities to receive people for treatment exacerbated the situation. At the beginning of the project, there was unreliable data with a number of cases being exaggerated until the PAS Application of the Ministry of Health was activated. One of the most important opportunities noted by the stakeholders was the initiative to conduct approximately 480 studies in all governorates of the Republic during the first half of 2018; this was required to implement sustainable interventions to improve water services in the most affected areas.

149. **Parallel capacity-building initiatives served to reinforce the programme strategies and enabled the partners and the teams to implement the RRT working mechanism.** The training was implemented for the RRTs; the governorate coordinators were responsible for managing and monitoring the implementation of the daily teams and their activities at the level of the governorates within their competence scope: and the assistant governorate coordinators. The RRT programme also provided an opportunity to develop the partners' technical capacities. There were regular meetings, daily work development, logistical and technical support, and all required materials were supplied. The capacity of the government partner (Water Emergency Unit) to have quick and effective access and share data on infected cases through the Joint Operating Room Contributed to the rapid response.

150. The trained teams ensured the readiness of hygiene materials and awareness materials on vehicles designated for transportation, received specific plans for the names and addresses of target cases and headed directly to the households of the targeted case (contained in the epidemic monitoring report, as case cholera or a suspected case of cholera) to carry out awareness-raising

[39] *"WHO EMRO | Outbreak update – Cholera in Yemen, 31 May 2020 | Cholera | Epidemic and pandemic diseases"*. *www.emro.who.int.*

[40] Lyons K (12 October 2017). "Yemen's cholera outbreak now the worst in history as millionth case looms".

[41] *"WHO EMRO | Outbreak update – Cholera in Yemen, 31 May 2020 | Cholera | Epidemic and pandemic diseases"*. *www.emro.who.int.*

operations, health education on the risks of the epidemic, its methods of transmission, the importance of maintaining public and private hygiene, how to prepare rehydration solution at home as a first aid for any infected person, and the need to go to health centers to receive appropriate treatment. They also provided the households with 20-liter tanks to store water and educated the case household and the firewall households, consisting of 20 houses, on how to use the hygiene materials and carry out water chlorination. They carried out the initial assessment of the status of water and sanitation services at homes and the region/area according to indicators prepared in the field visit forms.

151. **UNICEF and partners were of the view that the RRT interventions had been well adapted to the context. Because the RRT was implemented by a government partner, they had the ability to reach quickly and widely**, and they had knowledge of the places where the work took place. The process worked well except in the military action areas, where there were threats to the security and safety of the RRT members.

152. **Overall, the interventions considered different districts and stakeholders' needs and interests (relevance), but did not sufficiently address long-term results by ensuring the necessary improvements of water and sanitation infrastructure which would have created a potential for sustainability**. The majority of respondents in the interviews were of the opinion that the design and implementation of the RRT programme had responded appropriately to the cholera outbreaks in Yemen, but some noted the gaps. **Essentially, the programme's design at the case level was responsive** as required but interventions did not focus significantly on improving water sources, addressing sewage problems, and covering open cesspits that were some causes of the disease outbreaks thereby enabling a recurrence of the epidemic. It should be noted that the tasks within the RRT model do not include improvement of wash and sanitation infrastructure – this element is more related to the country's broader WASH programming. However, it was clear from the evaluation that the results achieved by the RRT programme cannot be sustained without this vital input from the broader sector.

4. **In FGDs, community leaders, men, and women indicated that the RRT interventions increased hygiene awareness**, but they all complained about the insufficient number of households that received hygiene materials. According to them, **behaviour changes were hindered by the cost of soap and improved latrines**.

Q: In your opinion, how did the design and implementation of the RRT programme respond to the outbreaks?
"They were excellent and contributed to controlling the cholera outbreak. They had the most important role; because of their rapid response. For example, the case is reported on the first day, and they come down to the field on the second day. This contributed greatly to controlling the outbreak of the epidemic in neighbouring households."

"To some extent because they were limited activities and did not address the causes of the epidemic."
- ***Government Stakeholders***

"The RRT programme responded rapidly and excellently, and it was constantly being developed. This project was one of the best emergency interventions that greatly controlled the epidemic outbreak." - ***UNICEF Stakeholder***

"Its design helped to locate the outbreak of the epidemic in an effective way and that controlled the outbreak. It must be indicated that the start of the implementation of the activity coincided with the monitoring of at least 4 to 5 thousand cases per day by the epidemic monitoring in the Ministry of Health from various governorates of the Republic." ***RRT Stakeholder***

"The design and implementation of RRT were appropriate, especially since it relied on data from health facilities…"

"It was disorganized at first, and it was developed later. The project has been targeting the infected cases at the village level. This was excellent, and they had the capacity to reach them in a record time."
- ***Implementing Partners***

"Yes, because government partners did the implementation, whether the Ministry of Health or the Ministry of Water and the Water Emergency Unit. The activities were designed appropriately for the communities, and the results were achieved by 70%. - ***WHO Stakeholder***

QE 1.2 To what extent has the project been aligned with the Yemen cholera response plan, WASH cluster strategy, and the government's agenda, guidelines, and policies?

8.1.3. Alignment with the WASH Cluster strategy and the government's agenda, guidelines and policies.

153. The RRT intervention design was appropriate and aligned with the Yemen cholera response plan, WASH Cluster strategy, and the government's agenda, policies, strategies, and guidelines. UNICEF's work was in line with the national priorities – essentially to work with the Water Cluster to mobilize funds for cholera response and contribute to raising the capacities of partners represented by the MoWE and the Water Emergency Unit. There was evidence of synergies between UNICEF, WHO, the Health and Water sectors as well as the local organisations; but coordination between all the partners was not always strong.

QE 1.3 To what extent has the RRT programme incorporated human rights principles and instruments, including those related to gender equality (To what extent was the program designed to address the (usually) disproportionate emotional, physical and socio-economic toll of the outbreaks on the women and girls which usually result from their roles as primary caregivers, food preparers and water fetchers)?

8.1.4. Extent to which human rights principles, and gender equality were integrated into the design, implementation and monitoring of the programme

154. The programme integrated a gender approach in its design, implementation and monitoring. To a large extent, customs and traditions were considered, so the teams were composed of men and women to facilitate the provision of services. Further, when establishing rehydration centers, there

were quarantines for women and others for men though this was related specifically to the RRTs. There was also participation by the female staff in the monitoring, and evaluation teams.

155. Human rights and the determinants of equity (income, sex, disability, age, location/ rural) were also considered in the design, implementation, monitoring, and evaluation of the RRT programme. Targeting was carried out based on the cases reported by the Joint Operations Room (Ministry of Water and Ministry of Health). There were specific criteria for prioritizing cases and considering them, such as age, areas with malnutrition, and IDPs camps. Most people infected with cholera were the most vulnerable groups due to financial conditions and lack of awareness. The most vulnerable groups in the community are considered the most targeted category (such as the IDPs, the Muhamasheen groups, and the poorest areas, as they were the areas least advantaged in terms of infrastructure services or the ability to obtain water from safe sources.

156. The RRT targeted the household of the infected/suspected cases according to the epidemic monitoring reports and the 20 surrounding homes without discrimination. Disabilities were considered, as written, audio, and visual awareness materials were prepared, as well as sign language for the deaf; and efforts to enable access to implemented interventions (emergency latrines) for people with disabilities.

157. But there were challenges: People living in remote and challenging areas were disadvantaged; Poor infrastructure of health centers, the lack of necessary medicines, and the failure to address the causes of epidemics, such as water pollution, open cesspits, overflowing sewage, etc.; and conflict in the country and the insufficient human resource capabilities were also limitations.

8.2. Effectiveness

QE 1.1. To what extent has the project achieved its stated objective of behaviour change aimed at sharing information to address the WASH-related issues contributing to the spread of cholera and to implement protective measures?

QE 1.2. To what extent has an intervention strategy, including related indicators, been developed to monitor the effectiveness of the RRT and provide adequate corrective measures?

QE 1.3. How adequate, according to the standards set by programme documents, has the technical and organizational support provided for planning and implementing the cholera RRT program been?

QE 1.4. To what extent has the service delivery met expected quality standards? What factors have contributed to and hampered the meeting of quality standards?

Picture 2:FGD with women

Overall Finding: The Cholera RRT Interventions were Effective but with limitations in the achievement of the programme's Expected Results.

Quality of the Evidence: Strong within this specific evaluation given the limitations.

158. The DAC criteria of effectiveness are defined here as "the extent to which the interventions achieved or were expected to achieve their objectives, and results, including any differential results across groups." Effectiveness focuses more closely on outputs and attributable results than impact.

159. The evaluation questions on Effectiveness were addressed quantitatively and qualitatively using: RRT and Household surveys; SSI of UNICEF, government and development stakeholders, and community leaders; and FGD with community men and women.

QE 1.1. To what extent has the project achieved its stated objective of behaviour change aimed at sharing information to address the WASH-related issues contributing to the spread of cholera and implementing protective measures?

8.2.1. Key Achievements in behaviour change

160. **There was evidence that the RRT Interventions** implemented in the (specific) governorates from October 2018 – October 2019 and beyond this period up till December 2021 **were effective in achieving the stated objective of behaviour change**. This was the most frequently mentioned change by stakeholders in the interviews. They indicated that the awareness of the importance of hygiene in the community increased and changes were observed in negative community practices and behaviours. In response to the awareness activities, there was observed use of chlorine to purify water, and hand-washing with water and soap in the proper ways, which were perceived to have significantly contributed to the decrease in cases of infection. Respondents in the interviews highlighted the interest shown by the communities in public and personal hygiene and noted that people exhibited an interest in the means of preserving and sterilizing drinking water, whether by chlorination or heating. Some were able to make closed cesspits, though few, due to the difficult fiscal and material requirements. A few organizations also made protections for open wells in some areas. These changes in behaviour were reflected in the cholera data as noted by a monitoring coordinator:

> *"As for changes in cholera data, they have decreased significantly and in record time. The RRT services have contributed to increasing health awareness among most people and the importance of receiving medication and reporting suspected cases."* - ***Monitoring Coordinator***

161. Community men and women in the various FGDs had the consensus that AWD declined during the period due to the high level of awareness in the communities as a result of the sensitization activities of the RRTs. Positive behaviour changes were attributed to the awareness of personal and public hygiene and the hygiene kits and chlorine distributed by the RRTs. However, the participants noted that after the epidemic, there was a wane in interest due to the perceived elimination of the problem, the high cost of soap, and competing priorities related to basic needs.

> *"There was a big change for the better. Our awareness about hygiene, hygiene kits, and chlorine that we got from the RRT Program contributed to maintaining hygiene to avoid infection with the epidemic. We maintained hygiene outside the home and purified drinking water because the epidemic spreads through pollution and stagnant surface water. All such things contributed to reducing the outbreak of diarrhea."*
>
> *"Most households are poor and cannot buy soap for hand washing due to its high costs, as well as the lack of water and the difficulty of fetching water from wells. Some have no interest in that, and some are indifferent, especially after cholera infections have decreased significantly and even disappeared."*
>
> *"The numbers seemed to decrease when the RRTs intervened, but the AWD is still there."*
> ***FGDs Men***
>
> *" Awareness among the community of the importance of maintaining hygiene was increased, such as staying away from waste and sanitation, avoiding pollution, showing people how to deal with the infected, and preparing a rehydration solution at home as a first aid for the infected, which reduced diarrhoea and cholera."*
> ***FGD Women***

162. We also assessed RRT members' perceptions of their effectiveness in influencing behaviour

change in the communities via a survey. A questionnaire was administered to 100 RRT members in Aden district (50%) and Ad Dali' (50%) They were made up of 48% women and 52% men. Table 9 displays the distribution of the RRTs by gender according to governorate and district.

Table 9 Distribution of the RRTs by gender according to governorate and district.

Governorate/District	Female	Male	Grand total
Aden	**25**	**25**	**50**
Al Burayqah	3	3	6
Al Mansurah	5	6	11
Al Mualla	1	3	4
Ash Shaikh Outhman	5	4	9
At Tawahi	1	1	2
Dar Sad	3	5	8
Khur Maksar	0	1	1
Kritar - Sirah	7	2	9
Al Dhale'e	**23**	**27**	**50**
Al Azariq	4	5	9
Al Dhale'e	7	11	18
Al Husha	4	3	7
Ash Shuayb	2	2	4
Damt	3	1	4
Qa'atabah	3	5	8
Grand total	**48**	**52**	**100**

163. In terms of experience, the majority (68%) of the RRT members interviewed had between 3 to 4 years of experience. The minimum length of experience was one year. Almost all the sample (95.0%) had conducted hygiene promotion and awareness campaigns. This experience consisted of one household meeting per location (93%) or various household meetings in the same location (66.0%). 62.0% of the RRT members in the sample had mobilized social influencers for hygiene promotion and awareness campaigns and 55.0% had mobilized the media for the same purpose. RRT members in the survey had visited an average of 1500 case households and an average of 1788 firewall households between October 2018-2019 and other relevant periods up to December 2021. The maximum of case households visited by one RRT member was 6051 and a few in the sample did not visit a case household within the period. Table 10 displays the number of households visited by the RRT members in the sample and Figure 6 illustrates a number of activities consistent with the programme design which had been implemented by the RRT members.

Table 10 No of HHs visited by the RRT members in the sample during the evaluation focal period

	Min	Mean	Max	Total
Number of case HHs visited between October 2018-2019 and other relevant periods up till December 2021	0	1500	3 000	13 424
Number of firewall HHs visited between October 2018-2019 and other relevant periods up till December 2021	0	1 788	10 000	157 360
Number of rights-holders targeted	0	1 112	6 051	111 210
Actual number benefitted	0	1 292	6 000	129 216

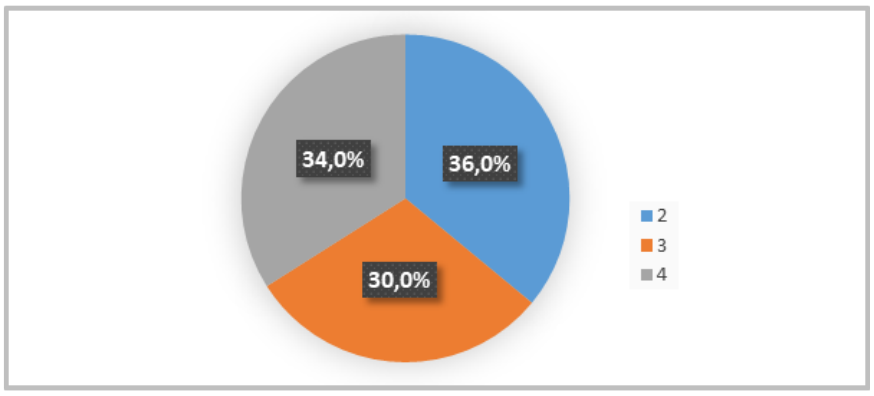


Figure 6 Number of implemented activities consistent with the programme design

164. When asked about their perception of the usefulness of their interventions, 91% of the RRTs perceived the programme as responsive to the contextual and emerging realities in Yemen. The other 9% also perceived the programme as only moderately effective. Similarly, almost all (98%) perceived the mix of interventions (hygiene promotion, hand-washing, provision of soap, chlorine, etc.) as appropriate and considered them effective in achieving the desired outcomes. The distribution of RRTs according to their perceptions of the effectiveness of the interventions and services offered to households is illustrated in Figure 7.

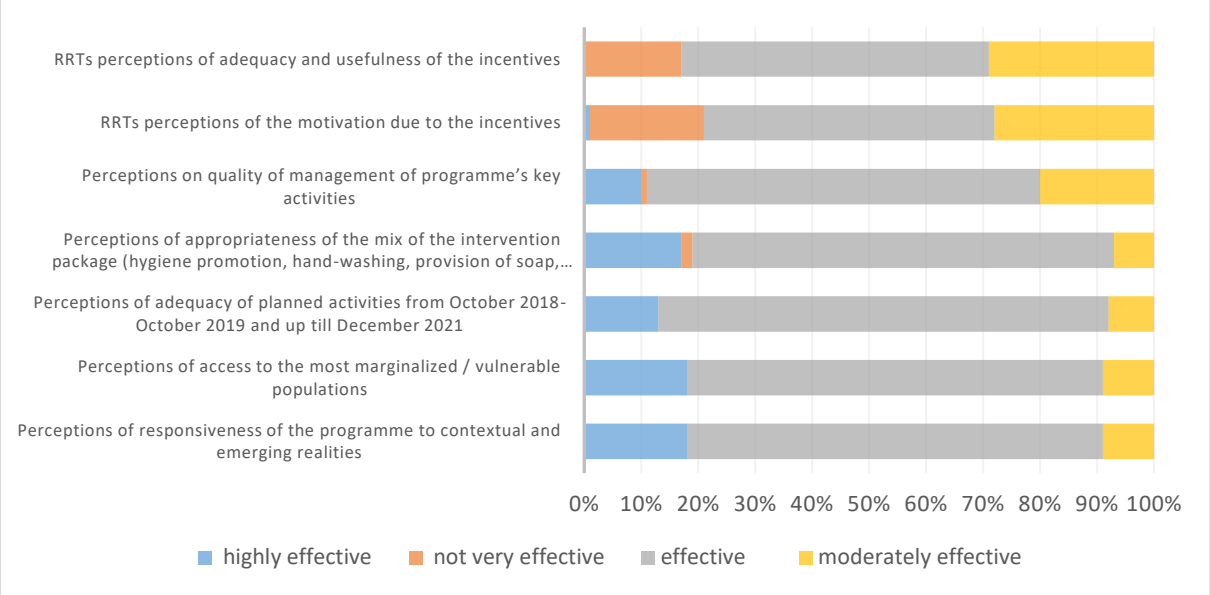


Figure 7 Distribution of RRTs according to their perception on intervention services offered to households

165. The perceptions of the communities regarding behaviour change resulting from the RRT activities were also captured via a survey of 125 households. 51.2% of the respondents in the survey were male, and 48.8% were female. Also, 52.8% of the households were located in Al Dali' and the rest were in Aden. 4% of the population was displaced. In terms of occupation, 37.6% were housewives, 34.4% were self-employed (38 men, 5 women), 6.4% were government employees (all men), and 8.0% were students (5 men, 5 women). Details about the background characteristics of the household survey sample are in Annex 12.14.

166. Almost all (98.4%) of the households interviewed had received hygiene kits from the RRT during the 2018-2019 outbreak. This kit consisted mostly of bleach 167 jerry cans (received by 44.7% of households in the sample), Soap bars ash powder tablets of aqua tabs 0.33 jerry cans (12.2%), and Soap bars ash powder (6.5%). Among all those who received hygiene kits from RRT during the first visit, 81.3% reported that they continued to buy them for the household after the intervention. Similarly, 98.4% of the households in the survey had received health education with educational

material regarding cholera and hygiene. This education included: the cholera transmission context, symptoms associated with cholera, the importance of washing hands, how and when to wash hands, the importance of cooking food thoroughly, how to treat sick household members, sterilization of clothes, bed, etc. of the affected cases, the disposition of human waste properly, the importance of washing vegetables/fruits, how to make the water safe to drink, how to treat water with chlorine products, other approaches besides chlorine used to treat the water such as boiling water, etc., how to clean cooking utensils/vessels, the importance of covering food to keep away from flies, the use of Oral Rehydration Salts (ORS), how to prepare the ORS at home, the locations of the healthcare facilities and how to inform the Monitoring Centers about any affected or suspected case.

167. **The findings in the SSIs, the FGDs, and the RRT survey were supported by the household survey. There was evidence of increased knowledge and awareness of the importance of hygiene in the community with changes in negative community practices and behaviours.** *Respondents in the household survey reported that they heard information on the prevention and treatment of cholera through various channels. The most frequently mentioned channel was the RRT (88.0%), followed by healthcare centers (64.0%); the least reported was via mosques (1.6%). Figure 8 displays the distribution of households by the source of information on the prevention and treatment of cholera.*

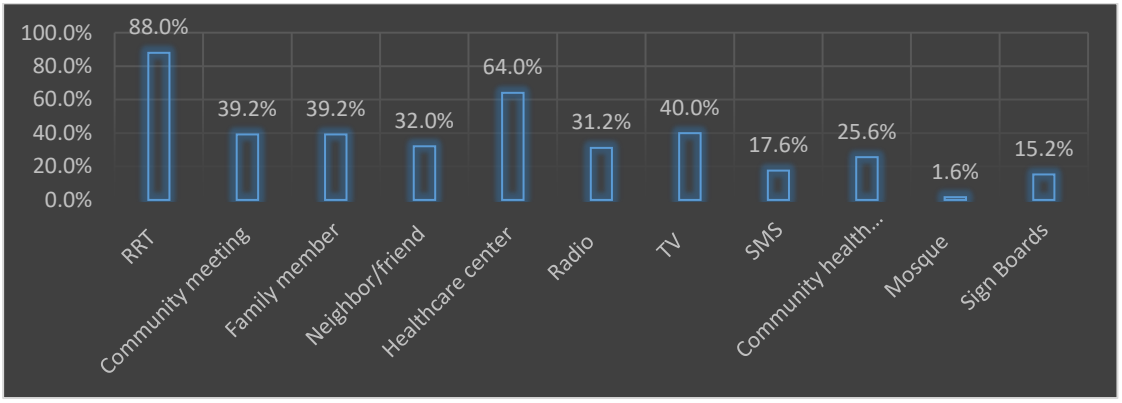


Figure 8 Distribution of households by the source of information on prevention and treatment of cholera.

168. **In terms of practices adopted after the RRT intervention, hand-washing with water and soap in the proper way and at appropriate times was the most frequently reported positive behaviour change by the communities.** Treating water with chlorine products was the least frequently reported practice (56.8%). New behaviours/practices adopted by the households in the sample after the RRT visit are displayed in figure 9.

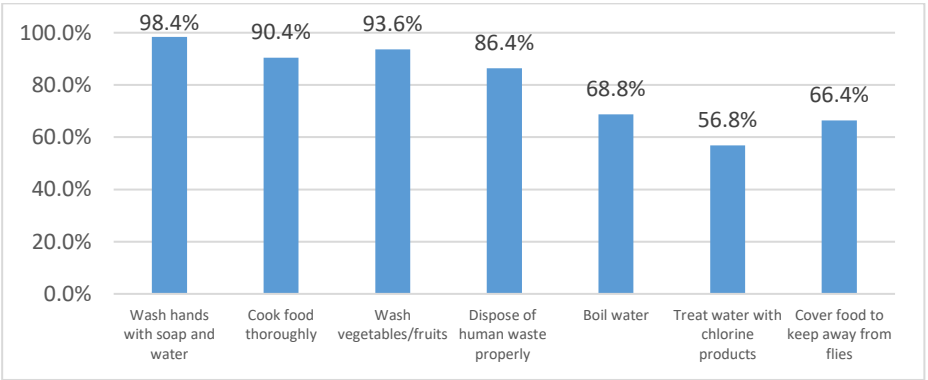


Figure 9 Distribution of households by the new behaviours/practices adopted after the RRT visit

169. 91.2% of the households surveyed reported that the RRT recorded their household information and the current situation of their household water source and sanitation during their visit. **Nevertheless, 74% of households have had another AWD case after the RRT intervention**

suggesting that the behaviour change had not been sustained. This is in line with the findings in the KIIs and FGDs where the respondents/participants noted that the underlying causes of the epidemic related to sanitation and water had not been addressed. Figure 10 displays a difference between Aden (64%) as an urban governorate and Ad Dali' (82%) as a rural governorate; but should be interpreted with caution because of the small sample size.

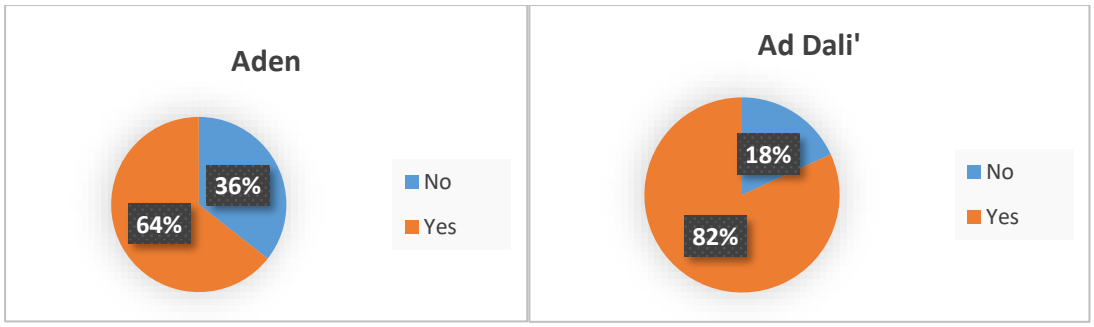


Figure 10 Percentage of households who reported having another case of AWD after the RRT visit/intervention

170. **87.2% of the households perceived the RRT interventions as useful while 12.8% either did not or were neutral** (see figure 11). This finding was supported by respondents in the FGDs who expressed their appreciation for the work done by the RRTs though they were dissatisfied with the coverage.

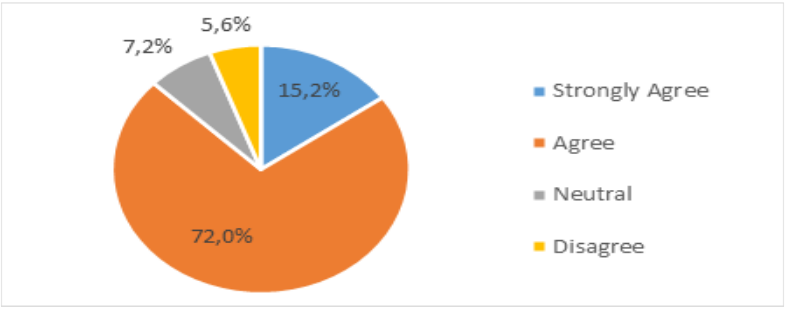


Figure 11 Households' appreciation of the usefulness of the RRT intervention

8.2.2. Facilitators and barriers to change

171. **Several reasons were given by the stakeholders in the interviews, participants in the FGDs, and respondents in the surveys for the positive changes in behaviour** displayed by the community members. The most commonly reported explanations for change include 1) The awareness-raising campaigns and health education carried out by the RRTs; 2) Communities' acceptance of awareness activities and their knowledge of wrong behaviours, especially since they knew that changing their behaviours and habits would benefit them with no financial 'harm'; 3) People's fear of contracting cholera; and 4) Access to hygiene kits to enhance household and personal hygiene – specifically the availability of soap for personal hygiene and chlorine for purification of water.

172. **Key hindrances to effectiveness** were also reported and they include 1) Conflict areas, remote areas, and rough roads which were inaccessible or difficult for RRTs to reach. 2) The limited quantity of hygiene kits; 3) the lack of the necessary funds to improve the basic services for infrastructure on water and sanitation according to the outputs of the activities of the RRT (detailed studies to improve the status of services). This affected the completeness of the package of interventions required for an integrated response according to the emergency concept. Though it has already been mentioned that the improvement of water and sanitation infrastructure is outside the scope of work of the RRTs, this element was critical to sustain the desired programme outcomes.

173. **Stakeholders perceived that the planned RRT activities were sufficient to some extent to control the epidemic outbreak in the affected areas**. However, they noted that it would have been useful to implement sustainable solutions to address water pollution, protect open wells, collection tanks, and water distribution points and address waste and sewage issues. The view was also that **at the level of the cases, the RRT activities were sufficient but at the community level, they were was not**. Targeting of the households was perceived by community members in the FGDs and some stakeholders in the SSI as not comprehensive enough. Many stakeholders were of the opinion that for the RRT Programme activities to be sufficient, a group of programmes must be integrated, and the most effective interventions would be in relation to infrastructure projects.

> *"To some extent, the activities must be accompanied by interventions to improve the status of basic infrastructure services relevant to water and sanitation to complete the package of interventions required for an integrated response."* - ***RRT Stakeholder***

174. **Factors that contributed the most to the achievement of results during the cholera outbreak of 2018-2019 were detailed by the stakeholders** and they included:
    a. The keenness of the RRTs to access the reported cases, even when the data for access was sometimes complicated.
    b. The selection of appropriate teams and trained teams that performed their interventions accurately in the hardest conditions and with the least resources.
    c. People's acceptance of the RRT interventions, especially awareness-raising campaigns and the distribution of hygiene kits and chlorine encouraged them to change their behaviours and practices.
    d. The interaction of the MoWE, their technical capabilities, coordination, and the Water Cluster's participation.
    e. Activities of the health facilities to provide healthcare for the infected cases.
    f. Easy availability of information and data about the epidemic, its accuracy, reliability, and availability in a timely manner; Availability of support and stock of needs; Smooth intervention by some organizations in other projects based on the submission of reports of needs by Rural Water; There were no complications in obtaining permits, which were noted as hindered by the lack of information and data in the recent period.

175. **The factors that hindered the achievement of results the most during the cholera outbreak of 2018-2019** were highlighted as:
    a. Perceived short-term support from the donors reported by the key stakeholders in the interviews, which was regarded as a weak point. Though donor investments targeted both immediate and longer-term responses, the financial burden due to the cholera outbreaks outweighed the available resources.
    b. The late delivery of some data and information by the health side; the inaccuracy or incompleteness of some data cost more effort and time for the RRT to reach the cases.
    c. The dilution of true cholera cases among many other diarrhoea diseases – and sometimes no diarrhoea – results in a sprinkling of the response and less impact.
    d. Poor access to water for the households, constant sewage overflow in several areas, and the persistent piling up of waste in the streets.
    e. Failure to address the causes of the cholera epidemic such as improvement of water sources and sanitation.

QE 1.2. To what extent has an intervention strategy, including related indicators, been developed to monitor

the effectiveness of the RRT and provide adequate corrective measures?

8.2.3. RRT Intervention strategy, data collection, reporting and monitoring

176. The programme has a well-developed intervention strategy - the key tasks and responsibilities of the RRTs were clearly articulated including the target households and communities. **There were detailed terms of reference outlining the team composition, key tasks, data collection, and reporting protocols**. The RRT model was undergirded with **standard operating procedures (SOP), guidelines,** and protocols. There was a clear definition of the activation, deployment, and response criteria, spatial and temporal, for the RRTs in the SOP. In terms of targeting, at the household level, RRTs visited up to 21 houses a day, on average, targeting approximately 50 to 100 metres of the immediate surrounding area, in locations or 'clusters' identified as having more than 20 reported cases, suspected or confirmed. The intervention included key activities, such as immediate investigation and active case identification, household disinfection, delivery of hygiene promotion sessions, and distribution of hygiene kits. The hygiene promotion sessions were based on key messages that ensured the integration of communications for development (C4D), and WASH.[42] At the community level, RRT conducted a rapid assessment of the WASH situation to identify potential risk factors – this was confirmed by the household survey. Almost 91.2% of the households surveyed reported that the RRT have recorded their household information and the current situation of their household water source and sanitation. The RRTs were also supposed to provide temporary chlorination of water systems and points (public or private) but there was not much evidence that this was done by the RRTs.

177. Data collection and reporting were performed by GARWSP EU / EU Aden and included information on activities conducted at household and community levels, including rapid assessments for WASH. This consisted of daily reports, using an electronic tool and database, accessible online, in the field by RRT members to RRT supervisors at the district level, and then to RRT coordinators at the governorate level for consolidation and sharing with the national coordination structure for RRTs. **Monthly reports were compiled by RRT coordinators nationally, using the information management unit that had been established within GARWSP EU / EU Aden.** Data collection and reporting consisted primarily of quantitative information regarding household-level interventions. All information was available on the GARWSP dashboard.

178. The RRT reporting template has activity implementation output indicators; performance indicators (e.g., 1) Number of targeted suspected cholera cases by the distribution of hygiene materials and conducting hygiene promotion sessions; and 2) Number of people provided with gender-responsive standard consumable kits benefiting from household level water treatment at cholera high-risk areas); and targets. The template was simple and utilization-focused.

179. **Monitoring was carried out at different levels**: continuous field assessments of the RRTs (self-evaluation); M&E teams made up of men and women who carried out an evaluation for performance, changes in community behaviour and actions; the number of infected cases; and awareness-raising capabilities; monitoring carried out by the project management unit, the Hub coordinator, the governorate coordinators, and their assistants and third-party monitoring. GARWSP conducted daily supervision of RRTs to monitor the quality of activities and to ensure proper reporting of responses by RRT supervisors at the district level. Additionally, the internal self-monitoring of RRT interventions was conducted at the household level to evaluate critical behaviours using knowledge, attitude, and practice (KAP) surveys, followed by weekly meetings with RRT coordinators at the governorate level to discuss internal findings. UNICEF staff conducted one field visit a week using a standard reporting format (not specifically tailored to the response). **UNICEF also used a third-party monitoring (TPM) firm to review the quality of activities implemented by RRTs in households.** The TPM firm conducted two field visits a month, to two households with suspected or confirmed cases and

[42] UNICEF, Global review of water, sanitation and hygiene (WASH) components in rapid response mechanisms and rapid response teams in cholera outbreak settings – Haiti, Nigeria, South Sudan and Yemen, UNICEF, New York, 2019

two randomly selected households in the community, using the same standard tool by GARWSP and RRTs for data collection and reporting.

180. Targeting and the evolution of the epidemic were monitored on a daily, weekly, and monthly basis. Data on cases were analysed according to the districts and areas to track progress, and inform the development of appropriate plans for field visits, and identify areas in which to intensify the efforts of the response teams. The administrative teams in the governorates were held accountable for the level of implementation. The governorate coordinators and assistants were notified first-hand about any observations to be avoided and issues to act on when developing plans for field visits.

181. **In terms of corrective actions** - reports and statistics were used to modify plans, amend and adjust any deviations, and alert coordinators of any violations that had occurred. **Regarding accountability for results, the Project Management Unit was reported to have relied on the principle of reward and punishment, transparency and accountability**, and to have worked to honour the diligent and assign blame and warnings to the defaulters. However, **RRT stakeholders noted the need for improvement and further development of the monitoring system and its use in decision making, especially** the importance of an efficient monitoring and evaluation framework for better measurements of results.

182. Nevertheless, there was limited availability of disaggregated monitoring data from UNICEF and other sources. UNICEF mission report of 2019[43] noted a lack of data sharing from partners, coupled with limited capacity or misunderstanding of WASH data analysis needs. Other challenges noted include

a. The limited use of epidemiological data to guide the RRT response;

b. Lack of clarity about what data to utilize and how to use them (and absence of regular analysis of available line listing);

c. Limited access to reliable epidemiological data which presented a real bottleneck for an effective response;

d. Non-systematic sharing of line lists at Governorate level - sharing often depended on personal relationship between GHO staff, RRT coordinators and UNICEF officers;

a. Inaccuracy of cases information leading to lack of prioritization or missed response by RRT: wrong phone number, same numbers for different cases (which may happen when people share phones, but sometimes from different Governorates), inaccurate locations.

QE 1.3. How adequate, according to the standards set by programme documents, has the technical and organizational support provided for planning and implementing the cholera RRT programme been?

8.2.4. Adequacy of technical and organizational support

183. UNICEF provided the RRT with all technical and logistical support. Most of the implementing partners referred to the technical and organisational support as good, or to have worked to a large extent. Almost all the RRT leaders and coordinators interviewed reported that the technical and organizational support had been 'great' and attributed the improvement/development of the project mechanism and plans; consistency and accuracy in reporting; and achievement of set objectives, to the support.

184. The RRTs received direct technical support from their coordinators and managers. In the RRT survey, when asked about the quality and effectiveness of the management of the RRT programme's key activities, 10% of the RRT members in the sample reported that the management had been 'very effective', the majority (69.0%) perceived that it was 'effective', 20% considered the management as

[43] UNICEF Mission Report for Staff Deployed in Emergency. 2019

only 'moderately effective' whereas 1% thought that it had not been effective at all.

An appropriate training for the RRTs was also provided in the field or as a workshop. However **refresher training was not systematically conducted and stakeholders noted a high rate of staff turnover within RRTs.** There was also a recognition that C4D should be better integrated in the training package. **Initial and refresher trainings were rated as of 'high' or 'moderate' quality by less than half (48.0%) of the RRT members interviewed,** 52.0% of them were neutral a (see figure 12).

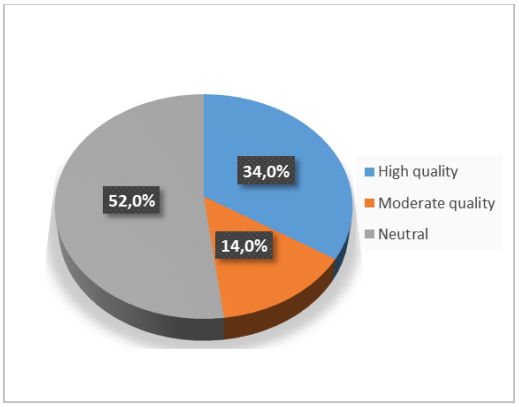


Figure 12 Perceived quality of initial and refresher trainings

185. Challenges faced by the response teams in the implementation of their activities were assessed via the RRT survey. **Difficulty in accessing affected cases or some households due to lack of information, rugged roads or distance between target areas was the most frequent challenge reported (38.7%).** 17.2% reported that people in communities were sometimes annoyed by the targeting of specific families due to a lack of awareness of the criteria of selection. 9.7% reported the issue of insufficiency of the hygiene kits provided to the communities. Figure 13 displays the details of challenges reported by the RRTs.

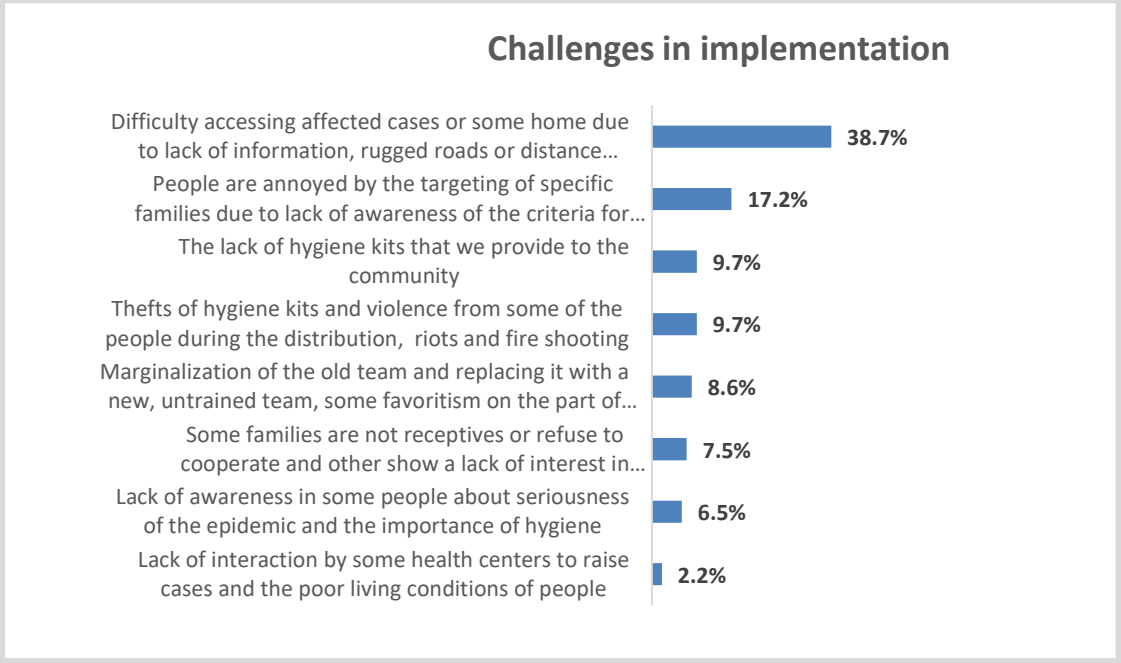


Figure 13 Challenges faced by RRTs in implementation

QE 1.4. To what extent has the service delivery met expected quality standards? What factors have contributed to and hampered the meeting of quality standards?

8.2.5. Achievement and maintenance of quality standards in RRT service delivery

186. **The principle of 'lessons learned' was applied in the management of the RRT programme service delivery and this enabled quality standards to be met to a considerable extent.** Lessons learned from the studies carried out in 2018, highlighted the failure of the Humanitarian Response Plan to understand the emergency concept – starting from the occurrence of a crisis until the situation is back to the status before the crisis. The Response Plan was noted as not having ensured the two sides of recovery and the strengthening of the resilience of those affected, because it had mostly focused on the relief side, with limited improvement in water and sanitation interventions. Due to these learnings, specialized technical training courses were implemented to promote the capabilities of technical teams in assessing needs and preparing studies In the sanitation aspect. Also these specialized technical teams carried out a field study to identify the need to improve the status of RRT services within the activities of the teams. All these enabled consistent improvement in the RRT service delivery and the achievement of quality standards.

187. Quality standards were also maintained by the regular monitoring field visits conducted by supervisory teams to assess the progress and quality of the RRTs' work in the field. This included post intervention evaluations of the RRT members (more recently referred to as Crisis and Disasters Response Sustainable committees (CDRSCs) members)'s performance.
However, **there were challenges to maintaining quality standards**: project progress reports noted the neglect of the expected WASH services improvement's interventions, based on the outputs of AWA activities. Also the interruption of the Task Force meetings led to a significant decline in coordination between the relevant authorities and partners, which greatly affected the flow of required data and information. Furthermore, there was a noted necessity of starting the response phase from the four emergency phases (mitigation, preparedness, response, and recovery), according to the phases of the emergency, and to consider balancing between them to ensure the provision of effective emergency services that have the ability to mitigate, control, protect and prevent risks and threats as an integrated emergency management. Refresher trainings were also not systematically conducted and RRT members were overdue for training. Fiscal challenges were also exacerbated in 2021 due to some persistent difficulties in payment requests due to some amendments to UNICEF financial modality and this delayed the deployment of teams and hindered the implementation of activities.

8.3. Efficiency

QE 1.1. How systematically have funds been allocated and utilized across program strategies and activities to realize program objectives?

QE 1.2. How did the provision of incentives for RRT team members facilitate and/or hinder the work of the RRTs in the cholera response?

QE 1.3. How timely have the RRTs been in responding to the cholera outbreak in each governorate?

Overall Finding: The Cholera RRT Interventions were perceived as Efficient but with limitations in the achievement of the programme's Expected Results.

Quality of the Evidence: Strong within this specific evaluation given the limitations.

188. The criteria of Efficiency are defined as, "The extent to which the intervention delivers, or is likely to deliver, results in an economic and timely way." In other words, how well are resources being used?

189. The evaluation questions on Efficiency were addressed quantitatively and qualitatively using: Household and RRT surveys, document review, and semi-structured Interviews of key UNICEF, government, and development stakeholders.

QE 1.1. How systematically have funds been allocated and utilized across programme strategies and activities to realise programme objectives?

8.3.1. Allocation and utilization of funds to realize programme objectives

190. Funding for the cholera RRT activities in Yemen from October 2018-October 2019 up till December 2021 was provided exclusively by donors. It was noted in the project reports that due to the current context in the country, GARWAP-EU did not have the resources to contribute as governmental counterparts. All project activities were funded by UNICEF and donors (FCDO, USAID, BMGF, and WB). Funds were allocated systematically. For instance, in 2018, the average monthly cost range was US$1,500,000 – 1,875,000 for an average of 625 teams, with costs varying depending on rural and urban settings. This meant that there was an average monthly cost of approximately US$2,400 for urban teams and US$3,000 for rural teams. At a micro level, an RRT team member was given YER. 8000 (approximately US$ 16.4 at that time)[44] as a daily allowance for rural areas and YER. 6000 (approximately US$ 12.3) for the urban areas. For the vehicles, an amount of YER. 35000 (approximately US$ 71.9) was given for the rural areas and YER. 17,500 (approximately US$ 35.9) for urban areas. Additional amounts were allocated to the administrative staff (coordinator of the governorate, assistant coordinator, accountant, storekeeper, guard, monitoring coordinator, and rentals for warehouses).

191. However, there is limited information on the comprehensive funding for the programme and associated costs of implementation in urban and rural settings, or by population density, and the cost-efficiency of the RRT model cannot be determined in this evaluation. However, the **majority of the stakeholders reported that the resources had been efficiently and optimally used** and that as part of the technical management, the field activities had been carried out according to the prepared plan.

192. All the stakeholders in the interviews, including the RRT leaders and coordinators, indicated that the composition, governance, and management structures of the RRTs funded by the programme were adequate to allow the achievement of results. The human resources were noted as experienced and competent. Stakeholders indicated that the majority of the response teams and the administrative staff had good capabilities as a result of trainings conducted before the start of field visits and due to the experience they gained over the years at work. However, a **noted weakness was the lack of fixed teams and the rapid turnover of RRT team members who sometimes had to be replaced by untrained members** resulting in poor targeting and inaccurate delivery of educational messages in some areas. Another issue raised was inefficiencies caused by the level at which team members were selected and the need to ensure that the RRTs had community acceptance. **The teams were at the level of the governorate centre and linked to it and not at the district level, which was noted as a challenge**. Some stakeholders highlighted that the teams should be at district level for quick response, ease of movement and access to avoid material transportation issues.

QE 1.2. How did the provision of incentives for RRT team members facilitate and/or hinder the work of the RRTs in the cholera response?

8.3.2. Value of the incentives for RRT team members

193. The incentives for the RRT team members were calculated according to the actual completion of their activities, according to the official documents submitted by the general managers of the branches based on the traffic plans for teams and cars, and compared to the progress reports of the field teams.

194. **Only 31% of the RRT members in the survey reported that they were satisfied with the incentives given to them.** 29% were either not satisfied or very unsatisfied while 40% considered them fairly satisfactory. **51% of the RRTs reported that the incentives motivated them.** SSIs of implementing partners supported this finding – late payments of financial incentives for months and reducing the incentive amounts were reported to have influenced the response by the RRTs negatively. RRT members' level of satisfaction with their incentives is illustrated in Figure 14.

[44] 1 US$ = 487 YER, https://data.worldbank.org/indicator/PA.NUS.FCRF?locations=YE

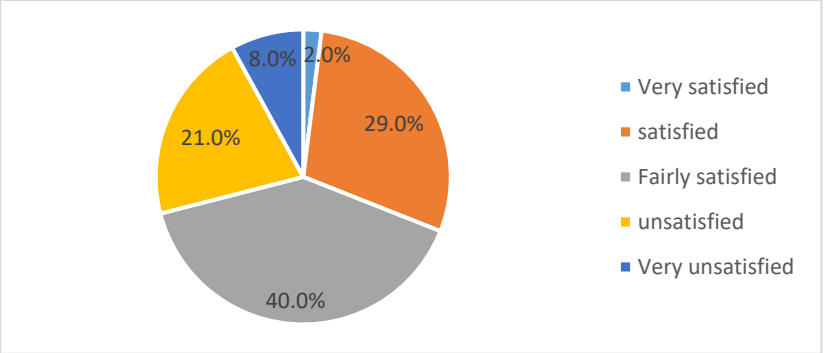


Figure 14 Level of satisfaction due to the RRT incentives

195. Interestingly the views of the RRT leaders and coordinators differed from those of the team members. The majority of the RRT leaders and coordinators in the interviews cited the RRT incentives as an important success factor in the interventions and a source of motivation for the RRTs. However, there was a reported need to increase incentives given to team members, especially with regard to the issue of differences in the exchange rate in the Internationally Recognized Government of Yemen (IRG) areas and De Facto Government (DFG), since the end of 2019.

QE 1.3. How timely have the RRTs been in responding to the cholera outbreak in each governorate?

8.3.3. Timeliness and Responsiveness of the RRTs during the cholera outbreaks

196. Stakeholders in the interviews detailed what worked well in terms of the responsiveness of the RRTs during the cholera outbreaks: Through the systematic use of surveillance systems and available epidemiological data, RRTs targeted affected households and at-risk populations in the communities efficiently; they followed the work instructions and were accurate in accessing relevant cases; targeting was for all reported cases and people's response to awareness, and some households' access to soap and chlorine as well as the availability of rehydration solutions in all health centers reduced the outbreak of complications. UNICEF and partners noted that the RRT interventions had worked well, that there was a quick response and it made a difference in controlling the outbreak of the epidemic. After some initial difficulties, data sharing was done well, the data flow was smooth and timely, the water emergency unit had an interactive dashboard that was continuously updated, and the affected areas were reviewed. The teams' daily activities were deemed efficient and there were success stories from teams that managed to reach the most remote places under the exceptional circumstances the country was going through.

> *"I believe that the secret of these RRTs' success is due to their timely intervention, going to the field, visiting the infected cases at their homes, targeting the case's neighbours, educating them, and distributing hygiene materials to contribute to promoting hygiene. These factors significantly impacted the success of the RRT activities and achieving the best results."* ***Health Officer***

197. **The majority (72%) of the RRTs perceived the alert system and deployment as effective while 3% considered the system as not effective.** 25% viewed their interventions as moderately effective (see figure 15)

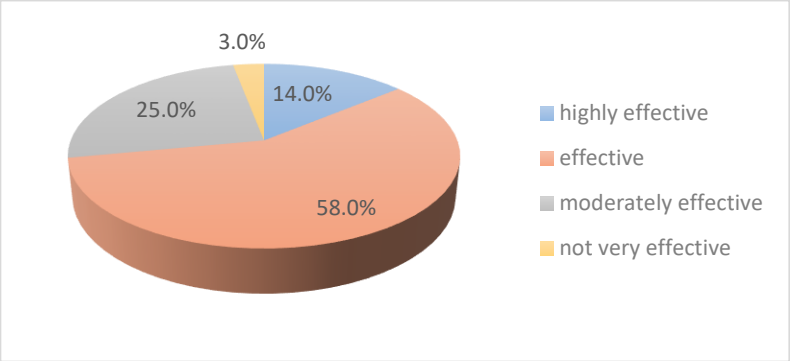


Figure 15 RRT members' perceptions of effectiveness of the alert system and the deployment of RRTs

198. **86% of the RRTs judged the timeliness of their responses as satisfying**; 12% were only fairly satisfied and 2% considered the timeliness of the RRTs responses as unsatisfactory (see figure 16). This finding was supported by respondents in the SSIs who rated the timeliness of the RRT responses as very good, using the word 'quick' frequently to describe it.

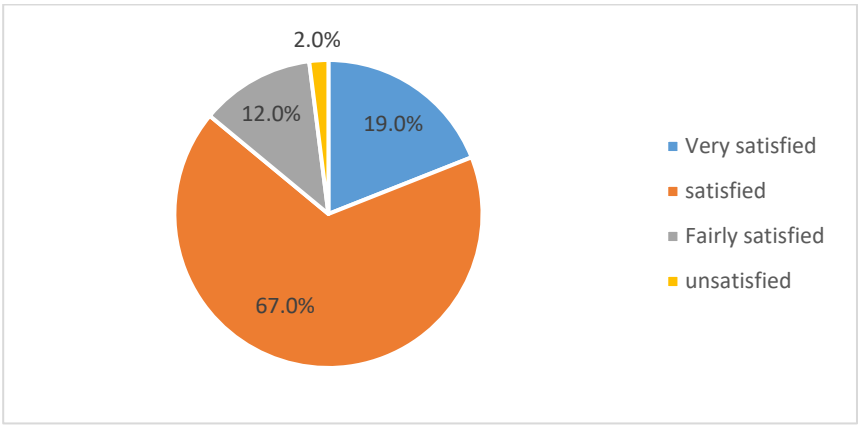


Figure 16 RRT members' perceptions of timeliness of their responses

199. However, households' perceptions of the timeliness of the RRT responses differed somewhat from the findings of the SSIs and the RRT survey. **Approximately 54.4% of case households reported that the RRTs got there in less than 24 hours; 16.5% of the HHs reported that it took between 24 to 48 hours** for the RRTs to respond, 17.5% reported that it took between 48-72 hours for RRTs to respond and **for 11.6% the RRTs responded after 72 hours** (see figure 17). In **Ad Dali', 65.5% of case households reported that the RRTs got there in less than 24 hours** compared to **40% of case households who reported the same in Aden** (see figure 18)

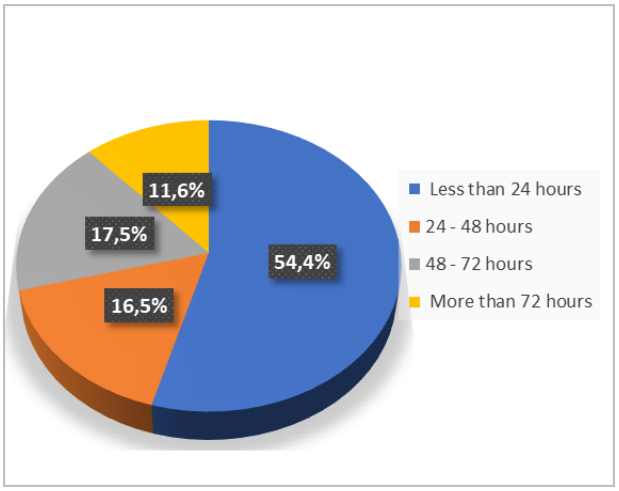


Figure 17 Households' perception of timeliness of RRT response after the reporting of a case

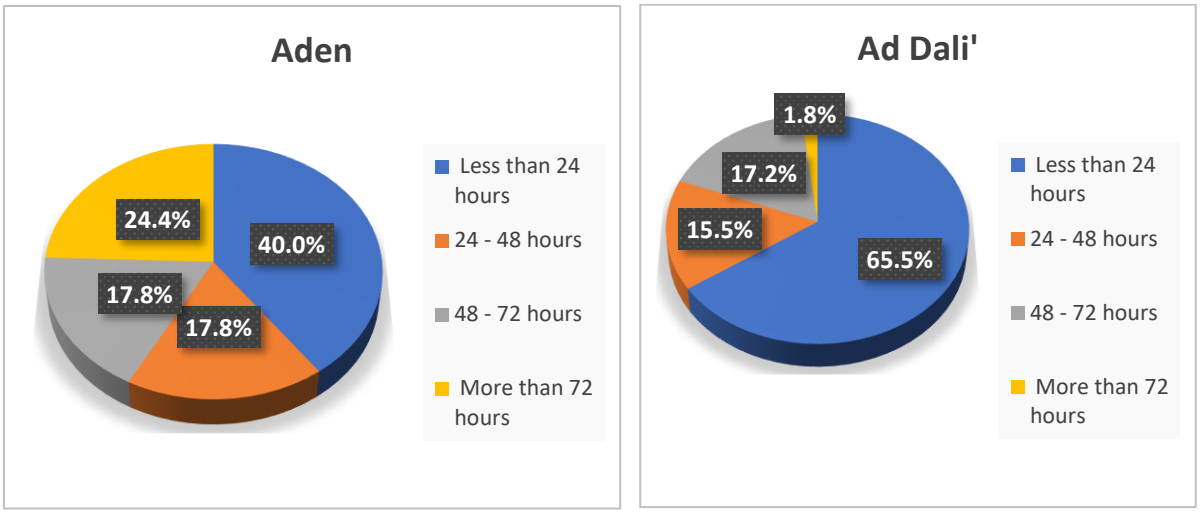


Figure 18 Households' perception of timeliness of RRT response after the reporting of a case in Aden and Ad Dali'

8.4. Coordination

QE 1.1. How well has the coordination mechanism between the RRTs (who worked with MoWE) and the MoPHP in the provision of cholera RRT services functioned?

QE 1.2. How well have the RRTs been integrated into broader WASH second-line and health-related work in the selected governorates?

Overall Finding: The Cholera RRT programme displayed evidence of coordination between the MoWE and the MoPHP in the provision of cholera RRT services more effectively from 2018-2020.

Quality of the Evidence: Strong

200. The criteria of Coordination are defined as, "The extent to which the intervention ensured coordination between its partners including ensuring whole-of-government coordination to identify and mitigate divergences between sectoral priorities and policies, and promote mutually supporting actions across sectors and institutions."

201. The evaluation questions on Coordination were addressed qualitatively using: document review and semi- structured Interviews of key UNICEF, government and development stakeholders.

QE 1.1. How well has the coordination mechanism between the RRTs (who worked with MoWE) and the MoPHP in the provision of cholera RRT services functioned?

8.4.1. Partnership and Coordination

202. **UNICEF's main partnership is with the government (emergency unit of GARWSP and the emergency unit of the MoWE in Aden) to support RRTs. Coordination was led by, and under the responsibility of the MoWE and MoPHP, with support from WHO and UNICEF.** The RRT supervisors at district level reported to the RRT coordinators at governorate level, who coordinated daily with national coordination structure for the RRTs and DHO. These resources collaborated and worked directly with RRTs to support their activation and deployment. Collaboration with epidemic monitoring officers in the health sector focused on identification of and information-sharing of surveillance data and cholera hot-spots, on a daily and weekly basis. However, a need for improved coordination in terms of planning and implementation of activities between the health- and WASH-specific RRTs was noted. This led to further harmonization in terms of planning and implementation of activities to further strengthen the overall response. Figure 19 displays a flowchart for information-sharing and ways of working between the health and WASH sectors.

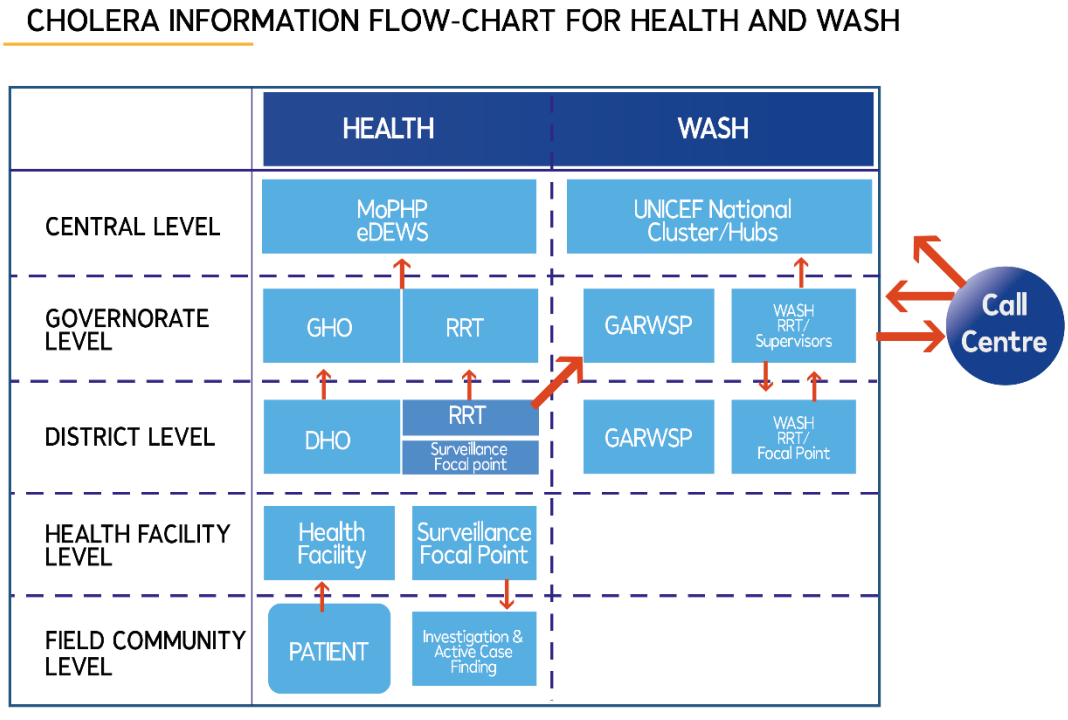


Figure 19 Cholera coordination and information flowchart for health and WASH teams, Yemen

Source: UNICEF and WHO (2018b)

203. During the cholera epidemic of 2018-2019, a Joint Operations Room was established between the two ministries with the support of UNICEF, to coordinate and share data. This was reported by

the stakeholders as being successful during the time of the epidemic.

204. Initially at the start of the response to the outbreak in 2018, the sharing of epidemiological data and line lists from the MoPHP and other key health partners were reported as one of the top challenges faced by stakeholders. This included the timeliness of information-sharing, which directly affected the ability of RRTs to deploy rapidly. This negatively affected the response criteria which is one of the key indicators used to monitor and measure the effectiveness of RRTs. The data provided at that time was also insufficient because they contained inaccurate information on patients' addresses and locations. There was noted poor coordination and interaction between the health- and WASH-specific RRTs in the country at that time; and a stated need for an integrated approach to harmonize the two teams into one joint team that worked at governorate and district levels, along with the inclusion of C4D expertise.[45] The coordination between health-specific RRTs, the WASH cluster and its partners, and WASH partners active in the rapid response mechanism was then strengthened to enable the delivery of a comprehensive alert-response strategy. The joint mechanism was between the MoWE and the MoPHP. UNICEF, WHO and other implementing partners that collaborated with the ministries. The RRTs used the Ministry of Health's epidemic monitoring lists for targeting.

205. The principle was to identify the working teams from the ministries of water and health. While the health teams focused on epidemic monitoring, field visits were made by the WASH teams. There was continuous coordination between the Emergency unit of the MoWE and the epidemic monitoring officers of the MoPHP. This ensured the continuation of data and information sharing and the validity of data, which was used to develop appropriate plans to direct the RRTs in their targeted responses.

206. **Stakeholders in the interviews reported that there was a clear and effective coordination mechanism at all levels, especially between 2018-2020**. An effective information unit and continuous reporting and data were shared with the Joint Operations Room. Tools such as the Interactive Dashboard were updated continuously, openly, and publicly, whether for partners, UNICEF or the Cluster. There was good access to that data at the right time. There was a mechanism for coordination between the water and health response coordinators. There was coordination through the emergency operations room made up of representatives of the MoWE and representatives of the MoPHP; and Task Force meetings included UNICEF, global health, representatives of the MoWE and MoPHP; and other relevant parties.

207. However, since 2020, participation has decreased significantly. **UNICEF Progress reports noted that the interruption of the Task Force meetings led to a significant decline in coordination between the relevant authorities and partners, which greatly affected the flow of required data and information**. Some implementing partners reported that no data had been shared with them on cholera and they did not have visibility into cholera outbreaks in the country.

> *"The coordination during that period was excellent - during 2018 and 2019, which contributed to the implementation of all the RRT interventions quickly and effectively, and during the period in which the 2020 suspension occurred (due to COVID). It is the period in which there was a gap in coordination, and until now, we do not get any clear data on cholera. –* ***Implementing Partner***

208. It is of note that UNICEF mission report of 2019[46] already highlighted several challenges with coordination including:

[45] UNICEF, Global review of water, sanitation and hygiene (WASH) components in rapid response mechanisms and rapid response teams in cholera outbreak settings – Haiti, Nigeria, South Sudan and Yemen, UNICEF, New York, 2019

[46] UNICEF Mission Report for Staff Deployed in Emergency. 2019

i. Lack of coherence and integration of sections cholera interventions on the ground (no or limited coordination at hub level between sections)
ii. Integrated response plan not in use to plan and monitor the response (no observation of common planning and monitoring dashboard guiding the overall response)
iii. Lack of follow-up of hubs response by the taskforce, no clear liaison mechanism in place (no or limited request to hubs for data analysis and response updates)
iv. Lack of epidemiological data driven decision at taskforce level
v. No or limited WASH coordination at Governorate level, particularly in the seven most affected governorates. The mission report stated that there was no evidence that the coordination existed, but noted tentative plans to activate coordination in Sanaa and Amanat Al Asimah Governorates
vi. Irregular Health-WASH coordination at all levels and only few Governorates with active Health-Wash taskforce
vii. Issues with NGOs roles and their integration in the overall cholera response (GARWSP-EU and NWRA were noted as often critical regarding the potential support from NGOs)

QE 1.2. How well have the RRTs been integrated into broader WASH second-line and health-related work in the selected governorates?

209. The correlation between the WASH and health sectors was noted in the stakeholder interviews and they indicated that there were integrated interventions between the health and WASH sectors for a rapid response to cholera. However, there was not much evidence of integration of the RRTs into broader WASH second-line and health-related work in the focal governorates. According to the water authorities and emergency units, the RRTs did not undertake rapid assessment of water supply, assessment of hygiene and sanitation and water chlorination. Assessment of water supply was undertaken by evaluation teams who conducted field visits and monitored the RRT activities. Reports were shared on a wide level, including data on water sources, sanitation, and water collection mechanisms and these were used to direct other implementing partners on interventions to execute with available funds. In particular, the MoWE received relevant information on the existing gaps, but its capacity to intervene in a timely manner was limited, mainly due to the lack of necessary resources.

8.5. Coverage

QE 1.1. To what extent have qualified people been available and effectively mobilized to ensure appropriate cholera RRT coverage across the districts included in the evaluation?

QE 1.2. To what extent did different groups in the community (men, women, girls and boys) have access to information and other services of the RRTs? Which vulnerable groups in society have faced the most difficulty accessing the services of the cholera RRTs, and why??

Overall Finding: The Cholera RRT programme displayed good coverage of the target populations including the vulnerable groups .

Quality of the Evidence: Strong within this specific evaluation given the limitations.

210. The criteria of Coverage specifies "the population from which observations for a particular topic can be drawn. The completeness of the information for the target population that would be derived if all of the frame units were to be surveyed."

211. The evaluation questions on Coverage were addressed qualitatively using: document review and semi- structured Interviews of key UNICEF, government and development stakeholders.

QE 1.1. To what extent have qualified people been available and effectively mobilized to ensure appropriate cholera RRT coverage across the districts included in the evaluation?

8.5.1. Availability of qualified people effectively mobilized to ensure appropriate cholera RRT coverage

212. **Stakeholders noted that qualified people were available and mobilized to ensure appropriate cholera RRT coverage across the evaluation focal areas to a large extent**. Perceptions ranged from 70-90%. Specialised staff with experience in water and sanitation, within the GARWSP / MoWE EU and the rest of the water sector staff in all governorates were prioritised. Precedence was given to holders of higher or lower degrees from various fields. The programme included some people with advanced degrees. Volunteers were also used. The teams were equipped and distributed to the directorates. This was reinforced through the selection process for the members and their access to appropriate training.

QE 1.2. To what extent did different groups in the community (men, women, girls and boys) have access to information and other services of the RRTs? Which vulnerable groups in society have faced the most difficulty accessing the services of the cholera RRTs, and why?

8.5.2. Access to RRT services including information for different groups in the community

213. To a large extent, the RRTs provided their services to the cholera cases affected by the epidemic and the surrounding households, whether male or female and their services targeted all family members without exception**.** The infected cases that were visited got the health education, hygiene materials and chlorine for all family members, whether men, women, or children**. FGD participants across all the groups had the consensus that community members (men, women, boys and girls) had access to information and other RRT services without discrimination.**

214. **In terms of coverage of the groups within the communities, the groups with no reports about their needs were the most disadvantaged in accessing the services of RRTs**. The most vulnerable groups were detailed as the IDPs, Muhamasheen, the most destitute, residents of slums surrounding cities, people with disabilities and special needs, and the poorest areas. Other disadvantaged populations were those located in areas with a high rate of poverty as well as people in remote rural areas with challenging terrains and poor access roads. Especially those who could not visit health centers to get the necessary treatment and therefore were not registered in the

monitoring system and therefore, were not targeted.

215. Nevertheless, **there was evidence both from the interviews, FGDs and the project progress reports that vulnerable groups were covered by the intervention from October 2018-2019 outbreak up till December 2021**. For instance, in Sana'a for the reporting period from December 2020 to July 2021, there were 422 reported AWD cases, and 5,725 Malnutrition cases, and 289 visits to IDPs camps and disadvantaged communities covered 19,551 households (121,046 individuals). During the response, around 11,955 consumable hygiene kits, 1,644 Basic Hygiene Kits, 18,058 jerrycans and 95,707 straps of aqua tabs 33mg were distributed and hygiene promotion and chlorination training were conducted for all targeted households and IDPs. Similarly, the Ibb field office which also covers Ad Dali' reported that RRTs had responded to 479 reported AWD cases, and 311 Malnutrition cases, and 1 visit to IDPs camps and disadvantaged communities covered 13,277 households (81,311 individuals). During the response, around 11,611 consumable hygiene kits, two Basic Hygiene Kits, 1,439 jerry cans and 74,050 straps of aqua tabs 33mg, and 362 of 1.67 tabs were distributed. In addition, hygiene promotion and chlorination training were conducted for all targeted households, and 5 ready AWA (2 Al-Dhali', 1 Taiz, 2 Ibb) for 21,315 beneficiaries, who would be provided with sustainable WASH interventions.

216. In reviewing timeliness and responsiveness of the RRTs to reported cases by households, there were significant differences in households' perceptions of timeliness of RRT responses after reporting a case between the more rural Ad Dali' and the more urban Aden (see figure 20). **65.5% of respondents in the Ad Dali' households reported that the RRTs responded in less than 24 hours compared with 40% in Aden; and only 1.8% of households in Ad Dali' reported that the RRTs responded after 72 hours compared with 24.4% of households in Aden** (p=001). This could be due to more efficiency in the logistical deployment of RRTs in Ad Dali' or better performance of the Ad Dali' RRTs; and though correlation does not necessarily mean causation, it could also suggest that more resources were deployed in rural areas due to the programme's prioritisation of disadvantaged and vulnerable groups.

> *"There was no difference in reaching men and women, and the intervention was able to reach a large extent for all segments of society, and there was no difference in terms of the method of reaching the response teams. The male in the team was doing the work of awareness for the males, and the female in the team was educating the women at home about hygiene, and access was reached For rich and poor people, according to injuries and neighboring houses, without excluding anyone.–**FGD Men Rural***
>
> *The entire household was targeted by the RRT Program, in which there were women to deal with women and deliver all educational messages. The infected cases and their neighbouring households were visited without discrimination or bias. Most of the households in these areas are from vulnerable and poor groups – **FGD Men***

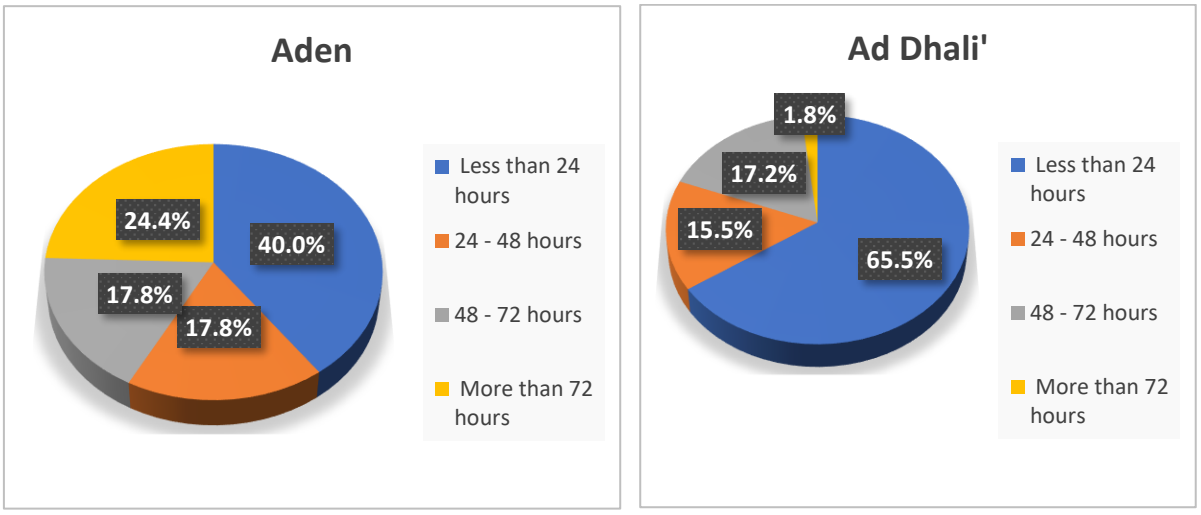


Figure 20 Households' perception of timeliness of RRT response after the reporting of a case in Aden and Ad Dali'

9. LESSONS LEARNED

217. **Collaboration and sharing of information and data between Health and WASH sectors is critical for the success of the RRT model.** When the Ministry of Water and the Ministry of Health collaborate and share information and data in the cholera emergency response, the success of the RRT model is enabled. Sustainable results would require systematic refresher trainings; and uninterrupted and consistent (Task Force) meetings to enable coordination between the relevant authorities and partners, even after outbreaks. This ensures continued flow of required data and information which in turn would allow a balanced response to address the four emergency phases of mitigation, preparedness, response, and recovery and ensure the provision of effective emergency services that have the ability to mitigate, control, protect and prevent risks and threats as an integrated emergency management.

218. **Effective coordination between different partners and sectors leads to an integrated approach with better information flow that enables an effective emergency response.** Alignment between UNICEF and WHO from the outset; better flow of line lists and health information to RRTs; an integrated RRT composition; alignment of national terminology with global terminology (i.e. CATI, etc.); the development of a clear ToR and a clear ToC for the entire response which clarifies the RRT contribution for managing expectations; are all critical success factors.

219. **The current design of the RRT model in Yemen is responsive to cholera outbreaks but sustainability of results is challenged by broader WASH issues.** The case responsive format of the RRT model is effective for short-term emergency responses and reduces morbidity and mortality due to cholera outbreaks. However sustainability of outcomes is not feasible without addressing the root causes of the epidemic via the required investments in water and sanitation infrastructure.

220. **Higher educational qualification coupled with training is predictive of competence of RRT staff to deliver appropriate health education messages to communities.** There is a greater chance of efficacy and efficiency when the RRT model is administered and implemented by skilled, experienced, trained, and competent professionals and volunteers.. The appropriate educational messages are transferred to the communities, targeting is more accurate and there are less errors in implementation.

221. **The intentional tracking of vulnerable groups by the programme enabled effective coverage of those populations.** Integrating human rights and the determinants of equity (income, sex, disability, age, location/ rural) in the design, implementation, monitoring and evaluation of the RRT model enables systematic responsiveness to and prioritisation of disadvantaged and vulnerable groups in the community.

10. FINAL CONCLUSIONS

222. The cholera RRT Interventions were **relevant** in addressing the needs and priorities related to the Cholera Outbreak from October 2018 to December 2021 in Yemen. The RRT intervention logic and the ToC proved to be consistent with the complexity and the existing context in Yemen; the programme logic was robust – structural sound and plausible – and proved that if implemented as designed it was able to contribute to the intended results (especially in tackling the emergency context). The evidence-based criteria in the design of the WASH Cholera RRT ToC proved relevant and appropriate to a large extent though some of the assumptions did not hold. For instance, the RRTs did not always enjoy adequate funding to carry out their tasks and the MoPHP did not always share quality information in a timely manner. Parallel capacity building initiatives served to reinforce the programme strategies and enabled the partners and the teams to implement the RRT working mechanism; however, refresher trainings were not systematically carried out. The interventions did not sufficiently address long-term results by ensuring the necessary improvements of water and sanitation infrastructure which would have created a potential for sustainability.

223. The programme was **effective** in achieving its stated objective of behaviour change. There was evidence of increased knowledge and awareness of the importance of hygiene in the community with changes in negative community practices and behaviours. However, there was a noted wane in interest at community level due to the perceived elimination of the problem, the high cost of soap and competing priorities related to basic needs. The planned RRT activities were sufficient at case level to control the epidemic outbreak in the affected areas but not completely at community level. The keenness of the RRTs to access the reported cases, even when the data for access was sometimes complicated; communities' acceptance of the RRT interventions, especially awareness-raising campaigns which encouraged them to change their behaviours and practices; and the collaboration between the MoWE and the MoPHP and timely availability of information and data about the epidemic were key success factors. Applying the principle of lessons learned in the management of the RRT programme service delivery enabled quality standards to be met to a considerable extent. However maintaining quality standards was challenged by the noted neglect of the expected WASH services improvement's interventions, based on the outputs of awareness-raising activities and the interruption of the Task Force meetings, which led to a significant decline in coordination between the relevant authorities and partners, and greatly affected the flow of required data and information; overdue refresher trainings; and exacerbation of fiscal challenges in 2021 - due to some persistent difficulties in payment requests resulting from some amendments to UNICEF financial modality - which delayed the deployment of teams and hindered the implementation of activities.

224. The programme was perceived as **efficient** though there was limited information on the comprehensive funding of the programme and associated costs of implementation in urban and rural settings, or by population density, and the cost-efficiency of the RRT model could not be determined in this evaluation. However, the majority of the stakeholders reported that the resources had been efficiently and optimally used and that field activities had been carried out according to the prepared plan. The composition, governance and management structures of the RRTs were deemed adequate to allow the achievement of results but a noted weakness was the lack of fixed teams and the rapid turnover of RRT team members who sometimes had to be replaced by untrained members resulting in poor targeting and inaccurate delivery of educational messages in some areas. There was also a stated need to select teams at district level not just at governorate level, to enable better community acceptance, quick response, ease of movement and access and to avoid material transportation issues.

225. The RRTs displayed considerable dissatisfaction with their incentives and about half of them were not motivated by them. There was a reported need by stakeholders to increase incentives given to team members, especially with regard to the issue of differences in the exchange rate in the Internationally Recognized Government of Yemen (IRG) areas and De Facto Government (DFG), since the end of 2019. Though the majority of the RRTs in the survey perceived the alert system and deployment as effective, households in the survey reported sub-optimal timeliness in the responses

of the RRTs after they reported a case.

226. There was evidence of a clear and effective **coordination** mechanism especially between 2018-2020, with an effective information unit, continuous reporting and data shared via the Joint Operations Room. However, since 2020, the interruption of Task Force meetings led to a significant decline in coordination between the relevant authorities and partners, which greatly affected the flow of required data and information.

227. Qualified and competent staff were available and mobilized to ensure appropriate cholera RRT **coverage** across the evaluation focal areas to a large extent. There was evidence that different groups in the community (men, women, girls and boys) had access to information and other RRT services without discrimination**;** and evidence that the programme was responsive to and prioritised disadvantaged groups in the more rural communities. Groups in the communities who were not captured in the monitoring system were the most disadvantaged in accessing the services of RRTs since they were not targeted.

228. Overall, **the current case responsive format of the RRT model is structured strategically to respond to cholera outbreaks – reducing morbidity and mortality due to the epidemics in the short-term.** Sustainability of outcomes is not feasible without addressing the root causes of the epidemic via the required investments in water and sanitation infrastructure.

11. RECOMMENDATIONS

Based on the evidence from this evaluation, the evaluation team developed a series of recommendations which were jointly validated by the in-country partners and UNICEF staff. The expectation is that the country's management response will provide an opportunity to better refine the specific activities to operationalize the strategic and operational recommendations.

Strategic Recommendations Criteria	Text of the Recommendation	Recipients	Level of priority
RELEVANCE	Incorporating the RRT model into other national control and elimination programmes that focus on overall AWD and broader public health measures could provide a platform to sustain the interventions and an efficient use of the capabilities built to address other issues.	UNICEF , Government, Partners	M
EFFECTIVENESS	Improve timeliness - strengthen the alert-response strategy, make it more comprehensive with the RRT model as one of the key components. The criterion for the activation and deployment of RRTs should clearly demonstrate information sharing and decision-making for monitoring and accountability	UNICEF CO, MoWE, MoPHP	H
COORDINATION	Strengthen the coordination between all relevant government institutions, UNICEF, WHO and other agencies and implementation partners /NGOs. As a first step, reactivate regular Task Force meetings - it is important to ensure timely information and data-sharing to enable a rapid coordinated response against future outbreaks. Establish an integrated response plan with common planning and monitoring of the dashboard guiding the overall response. Also improve the use of epidemiological data driven decision-making at taskforce level.	UNICEF, MoWE, MoPHP , WHO and other agencies	H
COORDINATION	Improve the governance of the RRTs. Structure an inter-ministerial team made up of both MoWE and MoPHP as well as representatives of development partners and the WASH Cluster as the governing body/coordination mechanism at national, governorate and district levels.	UNICEF, MoWE, MoPHP , WHO and other agencies	H

Operational Recommendations Criteria	Text of the Recommendation	Recipients	Level of priority

RELEVANCE	Systematically scale-up preventive activities **-** People's response to sensitization activities, and households' access to soap and chlorine controlled the outbreak of complications. The RRT C4D and the provision of soap and chlorine are activities that should be scaled-up in this context for more sustained results and to prevent frequent resurgence of the disease.	UNICEF	H
	Long-term infrastructural Investments focused on improving water sources, addressing sewage problems, and covering open cesspits are key to tackling the epidemic in a more sustained manner. The implications of the conflict for such investments have to be considered before funding drives.	UNICEF, WHO and other partners /donors	H
EFFECTIVENESS	Retain RRTs on a regular scale and scale up the C4D package – make more comprehensive and inclusive ensuring that the most vulnerable populations gain and retain proper understanding of how to prevent cholera/AWD. Increase focus on key messages that are tailored for specific target groups and delivered through appropriate communication channels..	UNICEF, MoWE, MoPHP	M
	Advocate for resource mobilization from the donor community based on long- term elimination and control efforts. Advocate government commitment to address basic services related to water and sanitation infrastructure.	UNICEF, Government, WHO and other partners /donors	H
EFFICIENCY	Review the incentives criteria and calculations to systematically arrive at a scale that would motivate RRTs more and improve response rates. However, it is noted that there is evidence of intrinsic motivation of RRTs in this evaluation with their work was rated positively in both the household survey and FGDs.	UNICEF, MoWE	H
	Tackle logistical challenges leading to delayed response time by ensuring that the RRTs are linked more to the district / local levels .	UNICEF, MoWE, MoPHP	M
	Strengthen the surveillance system and timely sharing of epidemiological data and line lists, based on a well-defined alert system. Advocate the necessary political support to create the enabling environment for information-sharing, coordination and	UNICEF, MoWE, MoPHP	H

	accountability at national and local levels		
	Address the human resource issues. In addition to retaining RRTs on a regular scale, consider domiciling the RRT beyond the GARWSP and expanding the focus of the RRT model without compromising their readiness for emergency responses. Also structure systematic training of RRT members to ensure that there is a competent pool of RRTs to draw from in the event of deployments.	UNICEF, MoWE, MoPHP	M
COVERAGE	Improve access for the most vulnerable - Consider mitigation measures for security and/or seasonal constraints especially for those in remote, geographically challenged and conflict affected areas.	UNICEF, MoWE	M

Deliverables

5. The contract has the following deliverables:

    1. Inception report outlining the interpretation of ToRs and methodology to be applied (including perceived limitations), ethical considerations, a timeframe of assignment and data collection instruments.

    1- Presentation of preliminary findings. The evaluation team presented the preliminary findings and conclusions to stakeholders in a workshop, conducted remotely.

    2- Draft evaluation report for comments. The draft report should be comprehensive and provide detailed specific results, conclusions and clear recommendations.

    3- Completed comments matrix. The completed matrix should be submitted with the final evaluation report.

    4- Final evaluation report. Generally, the final report should be within the page limit of 25 pages, plus a standalone Executive Summary and appendices. However, the structure of the report should be discussed during the inception phase.

    5- The evaluation team should submit all the qualitative instruments, raw data (raw qualitative data-original recordings and transcriptions of qualitative data) and datasets used in analysis. In the table below the timeline is laid out. In several of the stages more than one person would work on the deliverable in parallel.

12. APPENDICES

12.1. Terms of Reference

LRPS-2021-9166284

UNICEF YEMEN

TERMS OF REFERENCE FOR SERVICES - INSTITUTIONS

SHORT TITLE OF ASSIGNMENT

Evaluation of Cholera Rapid Response Teams (RRT) Program in Four Governorates in Yemen

BACKGROUND

The people of Yemen are facing heightened exposure to communicable disease outbreaks and critical undernutrition driven in part by critical WASH conditions, including irregular and insufficient access to safe water, and inadequate sanitation and hygiene provisions. Over 55 percent of Yemenis have no access to an improved water source, and only 22 percent of rural and 46 percent of urban populations are connected to partially functioning public water networks. Eight percent of Yemenis are income poor and only 28 percent of poorest households have safe water access, whilst 75 percent of households report having no soap, citing cost as the main reason. Of the 3.6 million displaced persons in Yemen, over 50 percent in IDP hosting sites are in acute need of WASH assistance. Over two-thirds of Yemenis (16.76 million people) require support to meet their basic WASH needs, with 10.96 million in acute need. About half (167) of the 333 districts are in acute need of sanitation support, and in 197 districts, over 55 percent of the population has no access to an improved water source. Moreover, soaring prices and reduced purchasing power have created economic barriers for people to access safe water and personal hygiene items. Such critical water, sanitation, and personal hygiene conditions are aggravating the risk of cholera, malnutrition, and other WASH-related diseases, as well as the current risk for COVID-19 infection.

According to capacity and access, in 2020, the WASH Cluster is targeting 12.5 million women, men, boys, and girls, including the total people in acute need, plus a 20 percent increase for COVID-19- exacerbated and expanded needs. A minimum package of comprehensive WASH assistance is needed to protect vulnerable populations from risk of WASH-related disease and to ensure dignity and protection, including 7.6 million people living in districts at high risk of cholera (169) and critical general acute malnutrition (83); 3.2 million IDPs, including almost 1 million in and around IDP sites, plus an additional potential 1.2 million newly displaced; and 3.5 million people requiring additional COVID-19 prevention support. Water and sanitation systems require sustained support to ensure a minimum level of services and avoid collapse. In addition to water quality assurance efforts, improved hygiene behaviours are necessary to reduce WASH-related disease.

The country reported over 172,000 suspected cholera/Acute Watery Diarrhoea (AWD) cases between January -15 August 2020, and over 55,000 cases of suspected dengue fever, as well as outbreaks of other diseases such as diphtheria and measles. The worst-affected governorates were Taizz, Hu daydah, and Sa'ada, out of the 22 governorates in the country. The heavy rainy storm affected a different water supply and sanitation system both in Urban and Rural areas. In Urban area around 1.5 million people will loss access to basic water and sanitation service due to the damage of the service. Increase on the number of choleras is reported in 8 governorates affected by the floods and Rainstorms: Sanaa, Ibb and Al-Hodieda Taiz, Amran, Hajah, Al Baidah (Rada'a) & Dhamar in addition the damages water supply and sanitation systems.

In response to cholera outbreaks in Yemen, UNICEF has worked in conjunction with health and water authorities to set up agile and mobile Rapid Response Teams (RRTs), reporting to the General Authority for Rural Water Supply Project- Emergency Unit (GARWSP- EU) under the Ministry of Water & Environment (MWE), to allow quick, flexible, and targeted control measures to be implemented in affected areas. The RRTs started work with support from UNICEF in August 2017 and aimed to target 180,000 household families (1.26 million people) per week based on their risk status for cholera transmission. To do so, RRTs deploy in communities where clusters of suspected cholera cases (20 or more at the village level) are identified.
The RRTs provide a considerable number of reported cholera / AWD-infected households and firewall households with cholera prevention kits. The kits are composed of chlorine for household water treatment, soap and laundry powder for handwashing, chlorinated solutions for water containers disinfection with information, education, and communication (IEC) material and adequate cholera prevention messages.
Despite of the efforts to scale up cholera response and integrate WASH interventions with other programs, a number of structural factors and constraints hinder efforts to implement effective cholera programming in Yemen, such as limited sectoral coordination, lack of coherence and integration of sections' cholera interventions on the ground (no or limited coordination at hub level between sections), lack of an integrated response plan and monitoring dashboard, lack of followup on hub response by the taskforce, no clear liaison

mechanism in place (no or limited request to hubs for data analysis and response updates) and lack of epidemiological, data-driven decisions at the taskforce level.

While the cholera RRT program has no existing theory of change, the program has operated under the following program logic in practice: If the RRTs provide cholera prevention kits composed of chlorine, soap, laundry powder, chlorinated solutions, and informational material with cholera prevention messaging, then secondary transmission of cholera within households will be reduced. These results will be achieved provided there is coordination of different sectors and partners working on the cholera response and WASH preventive interventions, communities are receptive, and adequate funding is available, in spite of the current conflict and continue community displacement and movement and influx of refugees in Yemen.

There have also been several recent studies - on cholera specifically and WASH more generally – that include Yemen or focus on the country specifically in their research and evaluations. These studies include the Global Review of Water, Sanitation and Hygiene (WASH) Components in Rapid Response Mechanisms and Rapid Response Teams in Cholera Outbreak Settings (Haiti, Nigeria, South Sudan and Yemen) and the Rapid Response Team High-Level Indicative & Descriptive Assessment at Household Level. UNICEF also has third-party monitoring reports, field mission reports, previous evaluation reports, strategic documents, and standard operating procedures that may be of benefit to the evaluation team. UNICEF will make these studies and reports available at the time of the desk review.

OBJECTIVE

Purpose
The purpose of the evaluation is to provide an impartial and independent assessment of cholera RRT performance in Yemen and identify key achievements, challenges, lessons learned, and practical recommendations for the upcoming phase of the program. The evaluation will systematically generate evidence on cholera RRT programming in Yemen, assessing the effectiveness of the program in achieving its stated objectives. Besides the assessment of the intended effects of the program, the evaluation also aims to identify potential unintended effects. The learning will benefit cholera response planning, as well as inform further improvement. It will also benefit UNICEF and other UN agencies, as well as MWE and MoPHP and other partners, for future program planning, coordination, and resource advocacy and allocation.

Objective
The objective of the independent evaluation of WASH RRTs for Cholera is to provide accountability and learning. The evaluation will provide accountability to UNICEF, local authorities, other UN agencies, donors, communities, private sector partners, and rights-holders with respect to whether UNICEF/WASH, through the implementation of its emergency WASH strategy, is fit for purpose and strategically well-positioned to respond to further outbreak of cholera and other diseases. It will also provide learning as to the relevance, effectiveness, and efficiency, as well as coverage and coordination, of cholera RRTs in Yemen and enable the identification of some best practices in cholera prevention in general and in Yemeni contexts specifically.
More specifically, the objectives of the evaluation are to:

- To assess the Yemen cholera RRTs and whether the governance, structure, composition, and objectives of the RRTs were appropriate to respond to the outbreak of cholera over the period targeted by the evaluation.
- To determine the degree to which cholera RRTs engaged stakeholders.
- To undertake analytical (qualitative and quantitative) assessment of the progress achieved in implementing the cholera RRT program and examine programme relevance/appropriateness and performance, identifying key successes, good practices, weaknesses, and gaps / constraints that need to be addressed.
- Examine how the programme has addressed cross-cutting issues such as gender and equity protections.

SCOPE OF WORK, ACTIVITIES, TASKS, DELIVERABLES AND TIMELINES, PLUS BUDGET PER DELIVERABLE

Scope
The evaluation will focus on the provision of cholera prevention kits in four governorates – Sana'a, Hajjah, Aden, and Ad Dali' - from October 2018 – October 2019. Given the current constraints on collecting data in Yemen, the evaluation will focus on these governorates as individual locations and will neither compare governorates nor attempt to generalize findings from these governorates to the whole of Yemen.

Evaluability
The cholera RRT program in Yemen does not have a formally-articulated theory of change or monitoring framework in place, nor has it conducted a baseline assessment. However, the program has operated by a consistent informal program logic, articulated under Background above, and monitoring has been conducted weekly according to output and outcome indicators such as number of kits distributed and incidence rates, respectively. The absence of a baseline assessment limits the ability of the evaluation to determine impact, which is why evaluation questions related to impact were not included in this ToR (see Evaluation Questions, below), but UNICEF

assumes that the evaluation team will identify and make use of any data that could stand in for baseline measures in considering the effectiveness and other aspects of the programme covered by the evaluation questions.

Evaluation Questions

The key questions for this evaluation were formulated based on the OECD-DAC criteria, as elaborated in ALNAP. The OECDDAC criteria have been limited to relevance, effectiveness, and efficiency for this evaluation in order to focus the evaluation on a number of evaluation questions manageable and appropriate for an evaluation of this size. The humanitarian criteria of coordination and coverage have also been included. In addition, given the current context of Yemen, which faces both conflict and now COVID-19, the criteria selected have been chosen because they are the most manageable criteria that can be employed to answer the key evaluation questions – How effective are the RRTs to contribute to the prevention of cholera outbreaks? Are the RRTs contributing to behaviour change or to the maintenance of existing systems? - in this context. Given the program's lack of a baseline, the impact criterion has been removed. Some humanitarian criteria – connectedness and coherence have also been removed for reasons of access to relevant data. However, cross-cutting issues of gender and equity have been integrated into the evaluation criteria. Thus, the evaluation aims to answer the following questions:

Relevance

a. To what extent have cholera RRT strategies and interventions responded to district needs and priorities? To what extent do stakeholders consider RRT the most relevant possible response to cholera outbreak, out of all possible responses?
b. To what extent has the project been aligned with the Yemen cholera response plan, wash cluster strategy, and the government's agenda, guidelines, and policies?
c. To what extent has the RRT program incorporated human rights principles and instruments, including those related to gender equality?

Efficiency

d. How systematically have funds been allocated and utilized across program strategies and activities to realize program objectives?
e. How did the provision of incentives for RRT team members facilitate and/or hinder the work of the RRTs in the cholera response?
f. How timely have the RRTs been in responding to the cholera outbreak in each governorate?

Effectiveness

g. To what extent has the project achieved its stated objective of behaviour change aimed at sharing information to address the WASH-related issues contributing to the spread of cholera and to implement protective measures?

h. To what extent has an intervention strategy, including related indicators, been developed to monitor the effectiveness of the RRT and provide adequate corrective measures?
i. How adequate, according to the standards set by programme documents, has the technical and organizational support provided for planning and implementing the cholera RRT program been?
j. To what extent has the service delivery met expected quality standards? What factors have contributed to and hampered the meeting of quality standards?

Coordination

k. How well has the coordination mechanism among the partner institutions involved in the provision of cholera RRT services functioned?

How well have the RRTs been integrated into broader WASH second-line and health-related work in the selected governorates?

Coverage

m. To what extent have qualified people been available and effectively mobilized to ensure appropriate cholera RRT coverage across the districts included in the evaluation?
n. Which vulnerable groups in society have faced the most difficulty accessing the services of the cholera RRTs, and why?

Stakeholders

The following stakeholders have been identified for this evaluation:

- Ministry of Water and Environment (plus district counterparts) in both the north and south of Yemen
  - o GARWASP
- Ministry of Public Health and Population (plus district counterparts) o Department of Health Education
- Ministry of Religious Affairs
- Communities affected by cholera
- WASH cluster, including NGO partners
- Health cluster, including NGO partners

- WASH cluster partners
- WASH technical working group
- WHO
- UNICEF o Health & Nutrition Section
- Third party monitors

Methodology

Given the nature of the program, data availability, and the current context of COVID-19, this evaluation will make use of existing quantitative data and will only collect new qualitative data, primarily remotely. There are cholera RRT data available; however, there are gaps in the available data. There is no existing baseline study, and data from early stages of the program may be used to attempt to reconstruct one, but the evaluation team should anticipate that existing data will not be adequate to constitute a true baseline.
Due to the current security situation in Yemen and the spread of COVID-19, this evaluation will not collect new quantitative data; the evaluation team should anticipate working with gaps in data and mitigating the effects of incomplete quantitative data. The evaluation methodology will be based on the evaluation framework. The selected evaluation team will be requested to refine and submit the final detailed methodology for review by UNICEF at Country Office, Regional Office and NY Headquarters level at the inception phase. UNICEF anticipates that the methodology will include an extensive desk review, given that no additional quantitative data will be collected.

Inception

The evaluation manager will organize a briefing for the evaluation team within one week of the signing of the evaluation contract. By the time of the briefing, the evaluation team will receive all documents required for the writing of the inception report and desk review. After the briefing, the evaluation team will have one week to develop the inception report, which should include an elaborated methodology as well as a workplan with timeline and data collection instruments. Requests for additional documents and data should also be begun at this time. After the submission of the inception report, UNICEF will have three weeks to provide feedback and obtain ethical clearance. The evaluation team will then have one additional week to revise and submit the final inception report.

Desk Review

The desk review for the cholera RRTs should be extensive given the inability to collect additional quantitative data in the current circumstances. The desk review should include a review of cholera RRT program records and related data at the national, governorate, and district levels (based on availability). Program managers will provide data that are readily available from various sources. In addition, the desk review is expected to include secondary data and documents when available. Given the rapidly-evolving situation with COVID-19, methodology for data collection should be reexamined at the end of the desk review to determine whether any data collection (such as focus groups) can take place face-to-face or if all of it should proceed remotely.

Data Collection

After final methodology and data collection instruments are finalized at the inception stage, data collection will begin with training of data collectors on the final versions of instruments for this evaluation. It is envisioned that this training be conducted remotely unless the evaluation team includes a data collection manager located in Yemen, in which case, it could possibly take place in a physically-distanced setting using appropriate health and safety protocols.

All interviews should be remote, and focus groups may be limited or impossible due to access restrictions in Yemen due to COVID-19 and the situation in-country. Data collection itself will consist primarily of interviews conducted remotely with key informants to include MWE and MoPHP officials, UNICEF and WHO staff, WASH cluster partners, and donor representatives. Focus groups should also be planned, with appropriate health and safety protocols including physical distancing; if it is later deemed by Evaluation Manager in collaboration with the evaluation team impossible to conduct such focus groups, they can be converted to interviews of a selection of intended focus group participants. Focus groups should include recipients of cholera prevention kits, RRT members, and WASH Cluster members. When organizing both interviews and focus groups, attention will be given to ensure gender balance, geographic distribution, representation of all population groups and representation of the stakeholders / duty bearers at all levels (policy / service providers /parents / community). When possible, existing quantitative data should be disaggregated by gender, geographical location, IDP status, and other variables to be finalized at the time of the inception report.

Data Analysis and Reporting

Given the sensitive context of Yemen, the evaluation team should pay special attention to data quality control. The evaluation team, working together with UNICEF, will exercise data quality control mechanisms intended to preserve the integrity and confidentiality of the data. Quality control measures should be included in training for enumerators, and this training should cover confidential handling and storage of evaluation data, as well as culturally-sensitive and ethical data collection (according to UNEG standards) and ethical enumerator conduct. Enumerator training should include role plays to give enumerators practice in responding to various challenges in preserving data quality, integrity, and confidentiality. In addition, the evaluation team should record the interviews and focus groups and

submit them to UNICEF with the final report. The evaluation team should store the recordings and coded data securely and keep them for 90 days after the submission of the final report. After 90 days, the data should be deleted.

Data analysis should be guided by the evaluation questions, and the final report should be structured around each of the overarching evaluation criteria – relevance, effectiveness, efficiency, coverage, and coordination – instead of individually by evaluation question. Analysis should focus existing quantitative data on descriptive statistics, as there is no baseline, and qualitative data should be mined for patterns. Data should be triangulated across sources. In addition, evidence of unintended consequences should be highlighted. Throughout the analysis, whenever possible, existing data should be disaggregated by the variables agreed in the inception report.

The final report should be shared with the evaluation technical and steering committees as a draft for comments. The draft report should be organized around these criteria, and should be comprehensive and provide detailed and specific results and conclusions, as well as clear recommendations.

Ethical Considerations

Ethical issues and considerations as per the UNEG ethical standards for evaluation should be adhered to. This includes explicit reference to the obligations of evaluators (independence, impartiality, credibility, conflicts of interest, accountability); ethical safeguards for participants appropriate for the issues described (respect for dignity and diversity, right to self-determination, fair representation, compliance with codes for vulnerable groups, confidentiality, and avoidance of harm); and if the evaluation team plans to interview children, the UNICEF procedures for 'Ethical Research Involving Children' should be explicitly referred to.

Limitations

As noted in the evaluability section above, the cholera RRTs program lacks some aspects of ideal evaluability. The lack of a formal theory of change and a baseline assessment prevent some components of robust evaluation.

Given the current security situation in Yemen and restrictions in access, as well as COVID-19, the evaluation will be kept small in geographical scope, focusing on few governorates instead of covering the whole county. Selection of samples may rely on convenient and purposive sampling rather than randomized methods. Alternative methods such as LQAS may also be used. However, the evaluation team will have to provide the justifications and framework for the sample selection methods to be used.

In-country visits by international evaluators will not be possible. Evaluation teams should include qualified Arabic-speaking team members based in Yemen for data collection.

In addition to the access restrictions listed above, given the humanitarian situation of Yemen and the onset of COVID-19, the evaluation team should remain cognizant that the programmatic staff dealing with this evaluation will continue to face heavy workloads and will not be as available to respond to questions as in many other contexts globally under different circumstances. Communication should flow strictly through the Evaluation Manager so as to limit further overloading already-overburdened programmatic staff; the evaluation team should be aware that tight and early coordination with the Evaluation Manager is necessary when questions for program staff arise, and that responses could take a longer-thanaverage time under the current circumstances.

As a result of the constraints listed above, this evaluation will not attempt to cover impact, and will focus on the objectives listed in the Purpose and Objectives section.

Governance

The evaluation will be funded and managed by UNICEF in collaboration with partner institutions and donors, with technical consultation with the UNICEF regional office. A steering committee will be established to approve the terms of reference, endorse the inception report and ensure that all deliverables are of the required quality. A technical committee will be established to provide technical inputs on the deliverables. The Evaluation Manager will supervise the evaluation team and act as secretariat to the steering committee. Stakeholders, including the WASH cluster and MWE and MoPHP authorities, will provide the evaluation team access to data and information and facilitate remote data collection via the Evaluation Manager. The Evaluation Team Leader will manage the evaluation team and serve as the liaison with UNICEF and the steering and technical committees. The Evaluation Manager and Team Leader will hold biweekly calls to facilitate the evaluation and address any challenges that arise.

Deliverables

The contract will have the following deliverables:

1- Inception report outlining the interpretation of ToRs and methodology to be applied (including perceived limitations), ethical considerations, timeframe of assignment and data collection instruments.
2- Presentation of preliminary findings. The evaluation team should present the preliminary findings and conclusions to stakeholders in a workshop, probably to be conducted remotely.

3- Draft evaluation report for comments. The draft report should be comprehensive and provide detailed specific results, conclusions and clear recommendations.
4- Completed comments matrix. The completed matrix should be submitted with the final evaluation report.
5- Final evaluation report. Generally, the final report should be within the page limit of 25 pages, plus a standalone Executive Summary and appendices. However, the structure of the report should be discussed during the inception phase.
6- The evaluation team should submit all the qualitative instruments, raw data (raw qualitative data-original recordings and transcriptions of qualitative data) and datasets used in analysis.

In the table below the time line is laid out. In several of the stages more than one person would work on the deliverable in parallel.

Lot 1: Evaluation Design, Management, Analysis, and Reporting			
Task	**Timeline**	**Deliverable**	**Responsibility**
Organize and conduct briefing meeting	1 week		UNICEF evaluation manager
Submit inception report with data collection instruments, with input from Lot 2 consultant	1 week	Draft inception report with instruments	Lot 1 consultant with input from Lot 2 consultant
Obtain ethical clearance and provide feedback on inception report	3 weeks		UNICEF evaluation manager and steering committee
Revise and submit final inception report with input from Lot 2 consultant	1 week	Final inception report with instruments	Lot 1 consultant with input from Lot 2 consultant
Conduct desk review and secondary data analysis, with input from Lot 2 consultant	3 weeks		Lot 1 consultant with input from Lot 2 consultant
Provide input to Lot 2 consultant on training of data collectors on approved instruments	1 week	Input on data collector training to Lot 2 consultant	Lot 2 consultant with input from Lot 1 consultant
Collect data (primarily remotely) and analyse data[47]	4 weeks		Lot 2 consultant (data collection) Lot 1 consultant (data analysis)
Prepare draft report with input from Lot 2 consultant	2 weeks	Draft evaluation report	Lot 1 consultant with input from Lot 2 consultant
Provide feedback on draft report	2 weeks		Evaluation manager and steering committee
Submit final evaluation report with completed comments matrix, raw data, and datasets, with input from Lot 2 consultant	2 weeks	Final report with comments matrix, raw data, and datasets	Lot 1 consultant with input from Lot 2 consultant
Submit management response	60 days	Management response	UNICEF Country Rep

Lot 2: Data Collection and Contextual Input			
Task	**Timeline**	**Deliverable**	**Responsibility**

[47] Data collection and analysis should be ongoing at the same time. The Lot 2 consultant will send data to the Lot 1 consultant as it is entered and cleaned, so that data analysis can begin while data collection is still underway.

Payment	Organize and conduct briefing meeting	1 week		UNICEF evaluation manager
	Provide input to Lot 1 consultant on inception report with data collection instruments	1 week	Input on inception report and data collection instruments to Lot 1 consultant	Lot 1 consultant with input from Lot 2 consultant
	Obtain ethical clearance and provide feedback on inception report	3 weeks		UNICEF evaluation manager and steering committee
	Provide input to Lot 1 consultant for revision and submission of final inception report	1 week	Input on final inception report with instruments to Lot 1 consultant	Lot 1 consultant with input from Lot 2 consultant
	Provide input on desk review and secondary data analysis to Lot 1 consultant	3 weeks		Lot 1 consultant with input from Lot 2 consultant
	Train data collectors on approved instruments, with input from Lot 1 consultant	1 week		Lot 2 consultant with input from Lot 1 consultant
	Collect data (primarily remotely) and analyse data	4 weeks		Lot 2 consultant (data collection, entry, and quality assurance) Lot 1 consultant (data analysis)
	Provide input on draft report to Lot 1 consultant	2 weeks	Input on draft evaluation report to Lot 1 consultant	Lot 1 consultant with input from Lot 2 consultant
	Provide feedback on draft report	2 weeks		Evaluation manager and steering committee
	Provide input on final evaluation report with completed comments matrix, raw data, and datasets to Lot 1 consultant	2 weeks	Input on final report with comments matrix, raw data, and datasets to Lot 1 consultant	Lot 1 consultant with input from Lot 2 consultant
	Submit management response	60 days	Management response	UNICEF Country Rep

rt will follow the UNICEF guidelines and be cognizant of relevant UNICEF and UNEG guidelines for evaluation.

All interested institutions or group of consultants are requested to include in their submission detailed costs including:

- Daily rate including hours per day
- Additional expenses (interpretation and translation, costs for training data collectors, etc.) to be agreed prior to commencing project
- The consultants would be required to use their own computers, printers, photocopier etc.

Payment is contingent on approval by the UNICEF Evaluation Manager and will be made in three instalments to each consultant:

- 25 percent of the lot's value after the inception report
- 45 percent of the lot's value after the completion of the draft report
- 30 percent of the lot's value on completion of all deliverable and final report to the satisfaction of UNICEF.

QUALIFICATIONS, SPECIALIZED EXPERIENCE AND ADDITIONAL COMPETENCIES

Solicitation will be managed through open RFP tender procedure by UNICEF. Bidders are required to complete the technical and administrative requirements. If bidders fail to submit the below mentioned Mandatory requirements, UNICEF has the right to disqualify the bidder.

Mandatory requirements (National and International firms)
(some requirements are specific for companies registered in Yemen, thus might not be applicable for International firms. International firms must submit documents equivalent to the mentioned below if available).

1. Bidder must have legal and valid registration or valid license in their country of origin and can operate in Yemen.
2. Bidder must submit the copy of License of Practice, Commercial Registration, Tax certification of 2021, Zakat Card Bidder must submit filled, signed and stamped bid form (please do not put any price in the bid form).
3. Bidder must submit the company profile, organization chart, CV of the manager.

Additional Essential documents to be submitted by the bidder in addition to the above mandatory requirements:

- Company Bank Account Details: Name of bank, account number, currency, intermediate bank details, location, contact person, contact details (details should be provided on bank letterhead with the bank stamp).
- UNGM registration number (if your company is not registered, please visit: https://www.ungm.org/Account/Registration).
- Supplier profile form – Attached.
- Signed & stamped of UN Code of conduct document – Attached.
- MDM (Vender master registration form -Attached.

** Note: Company name must be matching in all documents that will be provided.

Evaluation Team Composition and Required Competencies
Pre-qualification of the institute

This evaluation bid will be divided into two lots, and bidding institutes may bid on either Lot 1 or Lot 2, or both. Lot 1 will include inception and data analysis and reporting, plus the overseeing of the evaluation in general. Team members that must be included in Lot 1 are the Team Leader/Evaluation Specialist, the Public Health or WASH Specialist, and the Data Analyst. Lot 1 will include primary responsibility for all deliverables except the raw data. Lot 2 will cover the data collection, data entry, and data quality assurance. Team members that must be included in Lot 2 are the Data Collection Team Manager and Enumerators. Lot 2 will include primary responsibility for submission of the raw data. Should contracts be awarded to two different institutions for Lot 1 and Lot 2, both institutions will be expected to work closely together to ensure the timely submission of deliverables that meet UNICEF's standards. Lot 2 bidding institutes must be based in Yemen, and institutes bidding on both Lot 1 and Lot 2 must have a presence or partner in Yemen to undertake the work covered under Lot 2.

The bidding institutes will be expected to provide company registration and legal documents and should also demonstrate financial credibility. The table below sets out the required skills for team members. Ideally the team will be mixed in terms of gender and cultural backgrounds. The number of days indicated is subject to change depending on the specifics of the consultant company's proposal. A smaller team can be proposed as long as the team has the required skills necessary to answer the evaluation questions.

Team Leader / Evaluation Specialist	• Relevant master's degree (evaluation, development studies economics, social science, etc.)

(Lot 1)	• Minimum of 10 years of experience in leading evaluation teams in the UN system and in politically-sensitive and crisis-affected environments • Demonstrated leadership of 5 evaluations, with participation in at least 20 evaluations, at least some of which are related to WASH or public health • Experience integrating gender and human rights into evaluations using social science methodologies • Experience working in humanitarian contexts (preferred) • Good understanding of statistical analysis • Proven ability to produce high-quality reports for a policy audience • Strong interpersonal skills and ability to work with senior officials • Cultural sensitivity, especially as demonstrated through similar assignments in the Middle East and other regions of the Global South • Fluency in English, proficiency in Arabic (preferred)
Public Health or WASH Specialist (Lot 1)	• Relevant master's degree in public health, water engineering, or related field • Minimum 7 years of experience in analysing WASH programming specifically related to outbreak of disease (previous experience in cholera response is required) • Epidemiological experience • Strong experience in hygiene promotion and communication with community • Experience working or researching in humanitarian contexts and familiarity/ background with WASH in these contexts • Good understanding of gender and inequity issues in relation to WASH and development and the application of gender / equity analysis to policy and planning in WASH • Strong interpersonal skills and ability to work with senior officials • Cultural sensitivity, especially as demonstrated through similar assignments in the Middle East and other regions of the Global South • Fluency in English, proficiency in Arabic (preferred)
Data Analyst (Lot 1)	• Relevant degree in statistics or data management • Epidemiological understanding and experience working with epidemiological data in a public health sector context • Experience in processing and analysing qualitative and quantitative data from different sources
	• Experience wrangling, cleaning, and analysing multifaceted complicated data sets • Experience working in humanitarian contexts (preferred) • Cultural sensitivity • Fluency in English, professional proficiency in Arabic
Data Collection Team Manager (Lot 2)	• Relevant degree in WASH, public health or social sciences • Experience in managing data collection initiatives • Experience conducting quality control of qualitative data collection • Experience in working in humanitarian settings • Experience in recruiting/training enumerators • Strong interpersonal skills and leadership skills to provide oversight and guidance to enumerators • Familiarity with the ethical guidance for research with at-risk populations • Cultural sensitivity • Fluency in Arabic and professional proficiency in English

Enumerators (Lot 2)	• Relevant degree in public health, water engineering, social sciences, statistics, data management, or related field • Experience in collecting qualitative data • Experience in working in humanitarian settings • Strong interpersonal skills • Cultural sensitivity • Fluency in Arabic

CONDITIONS OF WORK

Location
The work will be home-based.

Collaborative Work
The institutes undertaking Lot 1 and Lot 2 should work collaboratively. The Lot 1 consultants will hold responsibility for managing the evaluation, including certifying quality, and the Lot 2 consultants will submit their inputs to the Lot 1 consultants directly. The Lot 1 consultants will consider the Lot 2 consultants' inputs, particularly with regard to the contexts of Yemen. The Lot 2 consultants will ensure the quality of data, based on guidance from the Lot 1 consultants, especially the Data Analyst. At the inception phase, both consultants will work together with UNICEF to finalize a timeline that adheres to the timeline laid out above in the ToR and also sets intermediate deadlines for the provision of the Lot 2 consultants' input to Lot 1 consultants. Should conflict arise between the Lot 1 and Lot 2 consultants, the UNICEF Evaluation Manager and steering committee will mediate and make final decisions on resolution of the conflict.

ICT Considerations and Data Security
The evaluation team will require access to some of the UNICEF internal databases and documents. Where UNICEF engages third parties to conduct monitoring on its behalf, they are obliged to implement appropriate data security measures. UNICEF data, including intellectual property rights, are the exclusive property of UNICEF and the evaluation team has a limited, nonexclusive permission to access and use the data. As provided in the contract, the data will be used solely for the purpose of performing its obligations under the contract. The evaluation team has no other rights under the contract, whether express or implied, to any UNICEF data or its context. To maintain the integrity of stored data, data should be protected from physical damage as well as from tampering, loss, or theft by limiting access to the data.

Data stored on paper, such as on data collection tools should be kept in a safe, secure location away from public access, e.g., a locked filing cabinet. Confidentiality and anonymity should be assured by replacing names and other personal information with encoded identifiers.
All data collected by the evaluation team at UNICEF's request is the sole property of UNICEF. The consultant agency will hand over all reports and raw data to UNICEF upon satisfactory completion of the evaluation. In terms of disposal, the evaluation data will be retained for a minimum of 3 months after UNICEF approval of the evaluation report and raw datasets. Paper documents will be shredded and digitally stored information destroyed or securely overwritten. The consultant will be expected to provide UNICEF with a letter confirming that the data has been disposed appropriately. All evaluation data will be stored centrally in one database by the Evaluation section.

Evaluation Process of the Proposal
Bidding institutes are requested to submit CVs of the proposal team members and a financial proposal. Evaluation will be done based on the evaluation criteria specified in this document, and then financial proposals of qualified bidder who pass the technical evaluation will be evaluated for competitiveness.

Unsatisfactory Performance
In case of unsatisfactory performance, the payment will be withheld until quality deliverables are submitted. If the selected organization is unable to complete the assignment, the contract will be terminated by notification letter sent 30 days prior to the termination date. In the meantime, UNICEF will initiate another selection process to identify appropriate candidate.

Conditions and Administrative Issues
The contractor will work on its own computer(s) and use its own office resources and materials in the execution of this assignment. The contractor's fee shall therefore be inclusive of all office administrative costs.

Granting access to UNICEF ICT resources for consultants/non-staff is considered as 'exception,' and therefore shall only be granted upon authorization by the head of the office on justification/need basis. This includes creation of a UNICEF email address, as well as access to ICT equipment such as laptops and mobile devices.
All persons engaged under a UNICEF service contract, either directly through an individual contract, or indirectly through an institutional contract, shall be subject to the UN Supplier Code of Conduct: https://www.ungm.org/Public/CodeOfConduct

Please also see UNICEF's Standard Terms and Conditions attached.

BID EVALUATION CRITERIA

Solicitation will be managed through UNICEF Supply Section by issuing RFP open for all relevant consultancy firms (National /International).

the awarding will be based on best value of money combining the technical and financial scores of bidders who pass the technical passing threshold. The award might not be to the lowest financial offer;

Each lot will be evaluated separately, and UNICEF might choose to **sign one or multiple contract** in parallel as per the best interest of the organization.

Proposals of Lot 1 & 2 shall be evaluated separately in accordance with the provisions of this RFP and with the following criteria:

Criteria	Maximum Points
1. Technical proposal	60%
2. Financial proposal	40%
Total maximum points to be attributed	100%

*minimum technical passing score is (42 points)
Bidders are welcomed to bid for one or both lots (1&2).
Submission:

Important Note:
UNICEF will not receive bids in hard copies or by email. All bids must be submitted online through the UNICEF esubmissions system accessible via www.ungm.org. The submissions should be segregated; Technical Proposal and Financial Proposal and each uploaded to its dedicated intent envelop on the system. Bids received in any other manner or joining technical and financial parts will be invalidated.

- Bid Form: including the documents for Administrative Compliance (see above) – no financial offer should be included in this envelope

- Technical Envelope: including the documents for Technical Proposal (see above) – no financial offer should be included in this envelope
  - Including the documents for Technical Proposal (Lot 1) (see above)
  - Including the documents for Technical Proposal (Lot 2) (see above)

- Financial Envelope: -

Bidder to provide detailed price breakdown (Staff rates and operational cost) and any additional cost needed for the implementation of this assignment
  - Including the documents for Financial Proposal (Lot 1)
  - Including the documents for Financial Proposal (Lot 2)

Lot 1			
Ref.	**Category**	**Rating**	**Max Points**

1.	Team Leader/Evaluation Specialist • Relevant master's degree (evaluation, development studies economics, social science, etc.) • Minimum of 10 years of experience in leading evaluation teams in the UN system and in politically-sensitive and crisis-affected environments • Demonstrated leadership of 5 evaluations, with participation in at least 20 evaluations, at least some of which are related to WASH or public health • Experience integrating gender and human rights into evaluations using social science methodologies • Experience working in humanitarian contexts (preferred) • Good understanding of statistical analysis • Proven ability to produce high-quality reports for a policy audience • Strong interpersonal skills and ability to work with senior officials • Cultural sensitivity, especially as demonstrated through similar assignments in the Middle East and other regions of the Global South • Fluency in English, proficiency in Arabic (preferred)	1 point for each criterion, 2 points for the ones in bold For this position and all relevant positions below: For candidates who have a bachelors but not a masters, assign 1 point To assess interpersonal skills, look for evidence of several experiences that require working closely with a team To assess cultural sensitivity, look for evidence of work in both humanitarian/conflict settings and in the Arab countries	15
2.	Public Health or WASH Specialist • Relevant master's degree in public health, water engineering, or related field • Minimum 7 years of experience in analysing WASH programming specifically related to outbreak of disease (previous experience in cholera response is required) • Epidemiological experience • Strong experience in hygiene promotion and communication with community • Experience working or researching in humanitarian contexts and familiarity/ background with WASH in these contexts • Good understanding of gender and inequity issues in relation to WASH and development and the application of gender / equity analysis to policy and planning in WASH • Strong interpersonal skills and ability to work with senior officials • Cultural sensitivity, especially as demonstrated through similar assignments in the Middle East and other regions of the Global South • Fluency in English, proficiency in Arabic (preferred)	1 point for each criterion, 2 points for the ones in bold	15

3.	Data Analyst • Relevant degree in statistics or data management • Epidemiological understanding and experience working with epidemiological data in a public health sector context • Experience in processing and analysing qualitative and quantitative data from different sources • Experience wrangling, cleaning, and analysing multifaceted complicated data sets • Experience working in humanitarian contexts (preferred) • Cultural sensitivity • Fluency in English, professional proficiency in Arabic	1 point for each criterion in bold, 0.5 for others To assess statistical analysis, look for evidence of several experiences analyzing statistical data, usually using statistical software (as opposed to interpreting data)	5
4.	**Overall proposed approach (in proposal and interview)** • Understanding of issues involved in conducting evaluations that meet UNEG standards • Understanding the issues involved in conducting evaluations in conflict settings, esp. Yemen • Description of proposed approach to conducting the evaluation • Integration of human rights-based approach with a focus on equity and gender	3 points for each criterion, according to the following scale: 3: Demonstrates nuanced understanding/approach 2: Demonstrates satisfactory understanding / approach 1: Demonstrates inadequate understanding / approach 0: No mention of this criterion in proposal	17
5.	**Company profile and experience**	8-10 years/projects = 8	8
	• Experience providing similar services to the United Nations, other multilateral organizations, and national governments • Experience in managing large-scale organizations for evaluations (Lot 1) or managing data collection for large-scale organizational evaluations (Lot 2) • Existence of detailed internal data quality assurance mechanisms	5-7 years/projects =6 2-4 years/projects = 4 1 years/projects = 2 0 years/projects = 0	
Total for technical proposal			60
Only proposals receiving a minimum of 42 points will be considered further			

Lot 2			
Ref.	**Category**	**Rating**	**Max Points**
1.	Data Collection Team Manager • Relevant degree in WASH, public health or social sciences • Experience in managing data collection initiatives • Experience conducting quality control of qualitative data collection • Experience in working in humanitarian settings • Experience in recruiting/training enumerators • Strong interpersonal skills and leadership skills to provide oversight and guidance to enumerators • Familiarity with the ethical guidance for research with at-risk populations • Cultural sensitivity • Fluency in Arabic and professional proficiency in English	2 points for each criterion in bold, 0.5 for others	15

2.	Enumerators • Relevant degree in public health, water engineering, social sciences, statistics, data management, or related field • Experience in collecting qualitative data • Experience in working in humanitarian settings • Strong interpersonal skills • Cultural sensitivity • Fluency in Arabic	3 points for each criterion in bold, 1 for others, for each enumerator Enumerators who do not pass may be removed from the team while retaining others	15
3.	**Overall proposed approach (in proposal and interview)** • Understanding of issues involved in conducting data collection that meets UNEG standards • Understanding the issues involved in conducting data collection in conflict settings, esp. Yemen • Description of proposed approach to conducting the data collection • Integration of human rights-based approach with a focus on equity and gender	3 points for each criterion, according to the following scale: 3: Demonstrates nuanced understanding/approach 2: Demonstrates satisfactory understanding / approach 1: Demonstrates inadequate understanding / approach 0: No mention of this criterion in proposal	15
4.	**Company profile and experience** • Experience providing similar services to the United Nations, other multilateral organizations, and national governments • Experience in managing large-scale organizations for evaluations (Lot 1) or managing data collection for large-scale organizational evaluations (Lot 2) • Existence of detailed internal data quality assurance mechanisms	8-10 years/projects = 15 5-7 years/projects = 9 2-4 years/projects = 6 1 years/projects = 3 0 years/projects = 0	15
Total for technical proposal			60
Only proposals receiving a minimum of 42 points will be considered further			

- Any bidder, which fails to submit the mandatory requirements set herein may, at the discretion of UNICEF, be rejected as unsuitable for evaluation and will therefore not be further considered.
- The non-submission of the required documentation will be scored as"0".
- Only the technical offers compliant to the minimum required scores will be eligible for the financial evaluation.
- The price should be broken down for each line item of the proposed work. The total amount of points allocated for the price component is 40. The maximum number of points will be allotted to the lowest price proposal that is opened and compared among those invited firms/institutions which obtain the threshold points in the evaluation of the technical component. All other price proposals will receive points in inverse proportion to the lowest price:

$$\text{Score for price proposal X} = \frac{\text{Max. Score for price proposal} * \text{Price of lowest priced proposal}}{\text{Price of proposal X}}$$

- The award of the contract will be made to the bidder whose offer has been evaluated and determined as: (i) responsive / compliant / acceptable, and (ii) having received the highest score out of a predetermined set of weighted technical and financial criteria specific to this bid.
- Bidders shall note that an acceptable proposal with the lowest price may not be selected if award to the higher-priced proposal affords UNICEF a greater overall benefit.

Annexes

- 2.1- Financial proposal form Lot 1 & Lot 2.
- 2.2- Supplier profile form.
- 2.3- UN Code of conduct.
- 2.4- MDM (Vender master registration form).

12.2. Evaluation Matrix

Evaluation Questions	Sub- questions	Indicators	Data Collection Methods	Data Sources	Data Analysis
1. To assess the RELEVANCE of the WASH Cholera RRTs to achieve the desired outcomes					
1.1 To what extent have cholera RRT strategies and interventions responded to district needs and priorities? To what extent do stakeholders consider RRT the most relevant possible response to cholera outbreak, out of all possible responses?	1.1.1. Did the RRT interventions meet the specific needs of the expected rights-holders or service users, (direct and indirect) at district and local levels?	1.1.1.1 Communities' perceptions around priority needs for children and communities during the outbreaks (October 2018-2019) and up till 2021 1.1.1.2 Awareness and acceptance of the communities of the Cholera RRT interventions 1.1.1.3 Communities' perceptions of responsiveness of the programme to contextual and emerging realities 1.1.1.4 Communities top sources of information on prevention and treatment of cholera 1.1.1.5 RRTs' perceptions of responsiveness of the programme to contextual and emerging realities 1.1.1.6 UNICEF, Government and other stakeholders' perceptions of responsiveness of the programme to contextual and emerging realities	• Desk Review • FGD Communities (men and women), • Household Survey • Survey RRTs • Key informant interviews with UNICEF, government stakeholders; NGOs and Development partners	Programme documents and reports; Monitoring and Evaluation records; Available Baseline measures/ surveys; Rapid Response Team (RRT) High-Level Indicative & Descriptive Assessment at Household Level in Yemen etc. SOP and Technical guidelines FGD Topic Guides with communities HHS and RRT Survey Questionnaires Topic guide, Key informant interviews with UNICEF, Government, health sector partners, health RRT members, community leaders and representatives of community water management committees, WHO, NGO stakeholders,	Descriptive analysis Thematic analysis Analysis of the Programme logic and assumptions Triangulation of different data sources.
	1.1.2. Did the RRT interventions in Yemen meet the specific needs of the most deprived groups in terms of socio-	1.1.2.1. Mechanisms which exist at community level to ensure all groups (including the poorest , most vulnerable,	• FGD Communities (men and women,)); • Survey RRTs	FGD Topic Guides with communities including the most vulnerable	Descriptive analysis Thematic analysis Analysis of the Programme logic and assumptions

	economic status, geographical distance, single mothers, disabled persons etc.?	physically disabled, uneducated) have equal access to RRT interventions 1.1.2.2. Awareness of the RRT and acceptance of its interventions amongst the most vulnerable/ marginalized groups in terms of socio-economic status, geographical distance, single mothers, disabled persons etc.' 1.1.2.3. RRTs' perceptions of access to the most marginalized / vulnerable populations 1.1.2.4. Stakeholders' perceptions of access to the most marginalized / vulnerable populations	• Key informant interviews with UNICEF, government stakeholders; NGOs and Development partners	HHS and RRT Survey Questionnaires Topic guide, Key informant interviews with UNICEF, Government, health sector partners, health RRT members, community leaders and representatives of community water management committees, WHO, NGO stakeholders	Triangulation of different data sources
	1.1.4. What bottlenecks have been identified by the programme and its service users? And to what extent have the interventions (a) addressed; and (b) overcome the identified bottlenecks?	1.1.4.1 RRTs' perceptions of challenges in implementation and how they have been addressed 1.1.4.2 Stakeholders' perceptions of bottlenecks in the programme and how they have been addressed. 1.1.4.3 Community views of problems experienced in October 2018-2019 with the RRTs	• Desk Review • Online Survey RRTs • Key informant interviews with UNICEF, government stakeholders; NGOs and Development partners • FGD Communities (men, women,);	Programme documents and reports; Monitoring and Evaluation records; Available Baseline measures/ surveys; Rapid Response Team (RRT) High-Level Indicative & Descriptive Assessment at Household Level in Yemen etc. SOP and Technical guidelines FGD Topic Guides with communities Online Survey Questionnaire with RRTs – duty-bearers Topic guide, Key informant interviews with UNICEF, Government, health sector partners, health RRT members, community leaders and representatives of community water management	Descriptive analysis Thematic analysis

				committees, WHO, NGO stakeholders	
	1.1.5. What areas for improvement have been identified by the programme and its beneficiaries?	1.1.5.1 RRTs' perceptions of how things could have been done differently 1.1.5.2 Stakeholders' perceptions of how things could have been done differently 1.1.5.3 Communities' views on areas for improvement	• Desk Review • Online Survey RRTs • Key informant interviews with UNICEF, government stakeholders; NGOs and Development partners • FGD Communities (men, women,);	Programme documents and reports; Monitoring and Evaluation records; Available Baseline measures/ surveys; Rapid Response Team (RRT) High-Level Indicative & Descriptive Assessment at Household Level in Yemen etc. SOP and Technical guidelines FGD Topic Guides with communities Online Survey Questionnaire with RRTs – duty-bearers Topic guide, Key informant interviews with UNICEF, Government, health sector partners, health RRT members, community leaders and representatives of community water management committees, WHO, NGO stakeholders	Descriptive analysis Thematic analysis
1.2 To what extent has the project been aligned with the Yemen cholera response plan, wash cluster strategy, and the government's agenda, guidelines, and policies?	1.2.1. What is the extent to which the RRT intervention design was appropriate and aligned with the Yemen cholera response plan, wash cluster strategy and the government's agenda, policies, strategies and guidelines.	1.2.1.1 Evidence on alignment of content in Programme Planning documents in relation to existing national strategic plans, and government agenda on WASH and cholera response 1.2.1.2 Extent of alignment of RRT programme strategies, interventions and delivery specifically to the Yemen cholera response plan 1.2.1.3 Extent of alignment of the RRT programme strategies, interventions and delivery	• Desk Review • Online Survey RRTs • Key informant interviews with UNICEF, government stakeholders; NGOs and Development partners	Programme documents and reports; Monitoring and Evaluation records; Available Baseline measures/ surveys; Rapid Response Team (RRT) High-Level Indicative & Descriptive Assessment at Household Level in Yemen etc. SOP and Technical guidelines Online Survey Questionnaire with RRTs – duty-bearers Topic guide, Key informant interviews with UNICEF, Government, health sector partners, health RRT members, community leaders and	Descriptive analysis Content Analysis Analysis of programme logic and assumptions

			specifically to the Wash Cluster strategy 1.2.1.4 Extent of alignment of programme interventions and delivery specifically to government's agenda, guidelines, and policies 1.2.1.5 The extent to which the lines of accountability between UNICEF and the government implementing partners were clearly defined and applied in reality		representatives of community water management committees, WHO, NGO stakeholders	
1.3 To what extent has the RRT program incorporated human rights principles and instruments, including those related to gender equality (To what extent was the program designed to address the (usually) disproportionate emotional, physical and socio-economic toll of the outbreaks on the women and girls which usually result from their roles as primary caregivers, food preparers and water fetchers) **?**	1.3.1. To what extent did the programme integrate the gender and human rights approach in the design, implementation, monitoring and evaluation of its interventions from October 2018-December 2021	1.3.1.1 Number of gender-responsive needs assessments in cholera prevention and treatment at the country level. 1.3.1.2 The extent to which women are represented in the RRTs (female-male ratio of teams) 1.3.1.3 Ways specific needs of girls (including regarding privacy, security, menstrual hygiene) were addressed 1.3.1.4 Number of women organisations and human rights activists (CBO) that were consulted and participated in the design, implementation and evaluation phases of the RRTs. 1.3.1.5 Stakeholders' views of how selected monitoring indicators take into account	• Desk Review • Online Survey RRTs • Key informant interviews with UNICEF, government stakeholders; NGOs and Development partners	Programme documents and reports; Monitoring and Evaluation records; Available Baseline measures/ surveys; Rapid Response Team (RRT) High-Level Indicative & Descriptive Assessment at Household Level in Yemen etc. SOP and Technical guidelines Online Survey Questionnaire with RRTs – duty-bearers Topic guide, Key informant interviews with UNICEF, Government, health sector partners, health RRT members, community leaders and representatives of community water management committees, WHO, NGO stakeholders	Descriptive analysis Thematic analysis Triangulation of different data sources

		1.3.1.6	the specificities of women and men Evidence of disaggregation of monitoring data by gender and proxy indicators for socio-economic status (place of residence, occupation, etc.)			
	1.3.2. To what extent were the determinants of equity (income, sex, disability, age, location/ rural) considered in the design, implementation and monitoring and evaluation of the RRT programme	1.3.2.1 1.3.2.2 1.3.2.3 1.3.2.4 1.3.2.5	Evidence of the extent to which the programme's targeting strategy identified and reached the most in need Equity-sensitive indicators used to collect data on beneficiaries Stakeholders views and evidences of RRTs compliance to national + international obligations around children/human rights Ways the needs of physically challenged children were addressed Level of participation of national authorities related to social affairs, gender equality and Justice in the RRT programme	• Desk Review • Online Survey RRTs • Key informant interviews with UNICEF, government stakeholders; NGOs and Development partners • FGD Communities (men, women,	Programme documents and reports; Monitoring and Evaluation records; Available Baseline measures/ surveys; Rapid Response Team (RRT) High-Level Indicative & Descriptive Assessment at Household Level in Yemen etc. SOP and Technical guidelines FGD Topic Guides with communities Online Survey Questionnaire with RRTs – duty-bearers Topic guide, Key informant interviews with UNICEF, Government, health sector partners, health RRT members, community leaders and representatives of community water management committees, WHO, NGO stakeholders	Descriptive analysis Thematic analysis Triangulation of different data sources
2. EFFECTIVENESS : The extent to which the programme has achieved its expected outcomes						
2.1 To what extent has the project achieved its stated objective of behaviour change aimed at sharing information to address the WASH-	2.1.1. To what extent did the RRT interventions achieve the expected results?	2.1.1.1. 2.1.1.2	Number of case HHs visited between October 2018-2019 and any other relevant periods up till 2021 Number of firewall HHs visited between October 2018-2019 and any other relevant periods up till 2021	• Desk Review • Online Survey RRTs • Key informant interviews with UNICEF, government	Programme documents and reports; Monitoring and Evaluation records; Available Baseline measures/ surveys; Rapid Response Team (RRT) High-Level Indicative & Descriptive Assessment at Household Level in Yemen etc.	Secondary data analysis Descriptive analysis Thematic analysis Causal contributory analysis

related issues contributing to the spread of cholera and to implement protective measures?		2.1.1.3 Evidence of reduction in cholera / AWD spread in the four focal governorates between October 2018-2019 and any other relevant periods up till 2021 2.1.1.4 Stakeholders' perceptions of the successes of the interventions 2.1.1.5 Community members' descriptions of the RRT visits and activities 2.1.1.6 Communities' perception of behaviour changes in WASH from October 2018-2019 up till 2021 2.1.1.7 Community members' perceptions of success / failure of the RRT interventions and reasons	stakeholders; NGOs and Development partners • FGD Communities (men, women-;	SOP and Technical guidelines FGD Topic Guides with communities Online Survey Questionnaire with RRTs – duty-bearers Topic guide, Key informant interviews with UNICEF, Government, health sector partners, health RRT members, community leaders and representatives of community water management committees, WHO, NGO stakeholders	
	2.1.2. Were the planned RRT activities by the government sufficient (in quantity and quality) to achieve the results and were there gaps not covered by UNICEF and other partners?	2.1.2.1 RRTs and Stakeholders' perceptions of adequacy of planned activities from October 2018-October 2019 and any other relevant periods up till 2021 2.1.2.2 Number of implemented activities consistent with the programme design 2.1.2.3 Perceptions of appropriateness of the mix of the intervention package (hygiene promotion, hand-washing, provision of soap, chlorine Kits etc.) 2.1.2.4 RRTs' perceptions on quality of management of programme's key activities	• Desk Review • Online Survey RRTs • Key informant interviews with UNICEF, government stakeholders; NGOs and Development partners	Programme documents and reports; Monitoring and Evaluation records; Available Baseline measures/ surveys; Rapid Response Team (RRT) High-Level Indicative & Descriptive Assessment at Household Level in Yemen etc. SOP and Technical guidelines Online Survey Questionnaire with RRTs – duty-bearers Topic guide, Key informant interviews with UNICEF, Government, health sector partners, health RRT members, community leaders and representatives of community water management	Descriptive analysis Thematic analysis Causal contributory analysis

				committees, WHO, NGO stakeholders	
	2.1.3. To what extent did the RRTs reached the intended target beneficiaries?	2.1.3.1. No of potential service users targeted and the actual number who benefited 2.1.3.2. Community members' views of the RRT programme reaching out to communities including the poor, illiterate and remotely placed, and those missed/not targeted 2.1.3.3. Communities' perceptions of the usefulness of the RRTs activities and effect on their lives	• Desk Review • FGD Communities (men, women,;	Monitoring and Evaluation reports; Monitoring data on cases and firewall Topic Guides FGD with communities	Secondary data analysis Descriptive analysis Thematic analysis Causal contributory analysis
	1.1.3. How satisfied are the community members with the work of the RRTs done from October 2018-Ocotber 2019?	1.1.3.1 Satisfaction levels of communities with the Cholera RRT interventions 1.1.3.2 Extent to which the RRT approach has been able to motivate the population to adopt the desired WASH behaviours – washing hands with soap and water; using hygiene Kits etc.	• FGD Communities (men, women,); including the most vulnerable • Survey RRTs •	FGD Topic Guides with communities including the most vulnerable Survey Questionnaire with RRTs – duty-bearers	Descriptive analysis Thematic analysis
	2.1.4. What are the factors that contributed to or hindered the most the attainment of the envisaged RRT objectives?.	2.1.4.1 RRTs' and Stakeholders' perceptions of drivers of change from October 2018-October 2019 and other relevant periods up till 2021 2.1.4.2 Community members' perceptions of motivation for behaviour change from October 2018-December 2021	• Desk Review • Survey RRTs • Key informant interviews with UNICEF, government stakeholders; NGOs and Development partners	Programme documents and reports; Monitoring and Evaluation records; Available Baseline measures/ surveys; Rapid Response Team (RRT) High-Level Indicative & Descriptive Assessment at Household Level in Yemen etc. SOP and Technical guidelines FGD Topic Guides with communities	Descriptive analysis Thematic analysis Causal contribution analysis

		2.1.4.3	RRTs' and Stakeholders' perceptions of barriers to the achievement of programme objectives from October 2018-October 2019 and other relevant periods up till 2021	• FGD Communities (men, women,);	Survey Questionnaire with RRTs – duty-bearers Topic guide, Key informant interviews with UNICEF, Government, health sector partners, health RRT members, community leaders and representatives of community water management committees, WHO, NGO stakeholders	
		2.1.4.4	Community members' perceptions of demotivators / specific barriers to behaviour change during the focal period			
		2.1.4.5	RRTs' suggested / potential solutions to overcoming specific barriers to implementation			
2.2 To what extent was an intervention strategy, including related indicators, been developed to monitor the effectiveness of the RRT and provide adequate corrective measures?	2.2.1. How were implementation and behaviour change monitored by the programme?	2.2.1.1	Data collection system set up for monitoring RRT activities	• Desk Review • Online Survey RRTs • Key informant interviews with UNICEF, government stakeholders; NGOs and Development partners	Programme documents and reports; Monitoring and Evaluation records; Available Baseline measures/ surveys; Rapid Response Team (RRT) High-Level Indicative & Descriptive Assessment at Household Level in Yemen etc. SOP and Technical guidelines Online Survey Questionnaire with RRTs – duty-bearers Topic guide, Key informant interviews with UNICEF, Government, health sector partners, health RRT members, WHO, NGO stakeholders	Descriptive analysis Thematic analysis
		2.2.1.2	Documented evidence of changes in national data collection and information systems ascribed to the RRT model			
		2.2.1.3	Monitoring indicators used for tracking behaviour change			
		2.2.1.4	Frequency of intervention monitoring from October 2018-2019 up till 2021			
		2.2.1.5	RRTs' and Stakeholders' perceptions of the robustness of the programmes' strategies for monitoring and evaluation			
		2.2.1.6	RRTs' and Stakeholders' views on what could have been improved in the			

		2.2.1.7 Innovative technology use monitoring, reporting and accountability/capacity development			
	2.2.2. To what extent did monitoring, evaluation and accountability mechanisms inform the programme's learning and adjustment?	2.2.2.1 Use of data in decision making 2.2.2.2 Number of process-improvement techniques adopted to identify inefficiencies and preventable errors	• Desk Review • Online Survey RRTs • Key informant interviews with UNICEF, government stakeholders; NGOs and Development partners	Programme documents and reports; Progress reports; Monitoring and Evaluation records; Available Baseline measures/ surveys; Rapid Response Team (RRT) High-Level Indicative & Descriptive Assessment at Household Level in Yemen etc. SOP and Technical guidelines Online Survey Questionnaire with RRTs – duty-bearers Topic guide, Key informant interviews with UNICEF, Government, health sector partners, health RRT members, WHO, NGO stakeholders	Descriptive analysis Thematic analysis Causal contribution analysis Triangulation of different data sources
2.3 How adequate, according to the standards set by programme documents, has the technical and organizational support provided for planning and implementing the cholera RRT programme been?	2.3.1. How did the technical and organizational support provided to the RRT programme work? What worked well and what were the key promising, emerging and good practices and /or initiatives?	2.1.2.1 Description of Programme's Standard Operating Procedures 2.1.2.2 RRTs' perception of adequacy of technical and organizational support received. 2.1.2.3 RRTs' and stakeholders' perceptions of the extent to which did the programme technical support systems functioned well during the implementation of activities from October 2018 – October 2019 and	• Desk Review • Online Survey RRTs • Key informant interviews with UNICEF, government stakeholders; NGOs and Development partners.	Programme documents and reports; Progress reports; Monitoring and Evaluation records; Available Baseline measures/ surveys; Rapid Response Team (RRT) High-Level Indicative & Descriptive Assessment at Household Level in Yemen etc. SOP and Technical guidelines Online Survey Questionnaire with RRTs – duty-bearers Topic guide, Key informant interviews with UNICEF, Government, health sector	Content analysis Descriptive analysis Thematic analysis

		other relevant periods up till 2021? 2.1.2.4 Available evidence-based laws, policies and implementation plans combined with doable and cost-effective technical solutions (which provided the basis of an enabling environment) 2.1.2.5 RRTs' and Stakeholders' views of technical and organization support that worked or did not work and why, and lessons learnt for possible correction/replication		partners, health RRT members, WHO, NGO stakeholders	
2.4 To what extent has the service delivery met expected quality standards? What factors have contributed to and hampered the meeting of quality standards?	2.4.1. How and to what extent did the programme meet the expected quality delivery standards?	2.4.1.1. Service delivery standards set in the SOPs 2.4.1.2. RRTs' and Stakeholders views and evidences on the effectiveness of RRT service delivery strategies (including any changes made during implementation) vis a vis intended/actual results in particular key features and results;	• Desk Review • Online Survey RRTs • Key informant interviews with UNICEF, government stakeholders; NGOs and Development partners.	Programme documents and reports; Progress reports; Monitoring and Evaluation records; Available Baseline measures/ surveys; Rapid Response Team (RRT) High-Level Indicative & Descriptive Assessment at Household Level in Yemen etc. SOP and Technical guidelines Online Survey Questionnaire with RRTs – duty-bearers Topic guide, Key informant interviews with UNICEF, Government, health sector partners, health RRT members, WHO, NGO stakeholders	Content Analysis Thematic analysis Causal contribution analysis
	2.4.2. What were the factors that contributed the most to the attainment of the RRT desired outcomes in quality standards from	2.4.2.1. RRTs and Stakeholders' perceptions of facilitators of the achievement of RRT interventions' objectives and quality standards	• Desk Review • Online Survey RRTs • Key informant interviews with UNICEF, government	Programme documents and reports; Progress reports; Monitoring and Evaluation records; Available Baseline measures/ surveys; Rapid Response Team	Content Analysis Thematic analysis Causal contribution analysis

	October 2018-December 2021?	2.4.2.2.	RRTs and Stakeholders' perceptions of the opportunities that emerged in the programme during October 2018-October 2019 and other relevant periods up till 2021	stakeholders; NGOs and Development partners.	(RRT) High-Level Indicative & Descriptive Assessment at Household Level in Yemen etc. SOP and Technical guidelines Online Survey Questionnaire with RRTs – duty-bearers Topic guide, Key informant interviews with UNICEF, Government, health sector partners, health RRT members, WHO, NGO stakeholders	
3. EFFICIENCY: The extent to which the results of the RRT were delivered cost-effectively using the available resources						
3.1 How systematically have funds been allocated and utilized across program strategies and activities to realize program objectives?	3.1.1. To what extent did the RRT programme deliver results in an economic and timely way (How well are resources been used?) from October 2018-December 2021?	3.1.1.1. 3.1.1.2. 3.1.1.3. 3.1.1.4.	Total Budget allocation and expenditures; Unit cost per result achieved; Cost savings as % of programme expenditure RRTs and Stakeholders views and evidences of adequacy of and gaps (if any) in human, financial and materials resources provided under the RRT model (component-based allocations/intended results and actual expenditures/results produced)	• Desk Review • Online Survey RRTs • Key informant interviews with UNICEF, government stakeholders; NGOs and Development partners.	Programme Intervention Monitoring data Programme Financial records and Reports Programme progress Reports; Data programme operational costs Online Survey Questionnaire with RRTs – duty-bearers Topic guide, Key informant interviews with UNICEF, Government, health sector partners, health RRT members, WHO, NGO stakeholders	Value For Money / Cost-effectiveness Analysis Thematic analysis
	3.1.2. To what extent were expected results (outputs) delivered within budget?	3.1.2.1	Assessment of programme in terms of intended vs achieved outputs and outcome vis a vis allocations/expenditure (for each programmatic component)	Desk Review	Programme Intervention Monitoring data Programme Financial records and Reports Programme progress Reports; Data programme operational costs	Value For Money / Cost-effectiveness Analysis
	3.1.3. To what extent were the resources (financial and human) available to meet the	3.1.3.1	UNCEF and Government Stakeholders' views on	• Desk Review • Online Survey RRTs	Programme Intervention Monitoring data Programme Financial records and Reports	Descriptive analysis Thematic analysis

	need to achieve results and effectively support the efforts of government in the allotted time?	3.1.3.2	timely delivery of results of the RRT interventions RRTs' perceptions of timeliness of technical and financial support	• Key informant interviews with UNICEF, government stakeholders; NGOs and Development partners.	Programme progress Reports; Data programme operational costs Online Survey Questionnaire with RRTs – duty-bearers Topic guide, Key informant interviews with UNICEF, Government,	
3.2 How did the provision of incentives for RRT team members facilitate and/or hinder the work of the RRTs in the cholera response?	3.2.1. What worked about the provisions of incentives for the RRT team members and why? What did not work so well?	3.2.1.1. 3.2.1.2. 3.2.1.3. 3.2.1.4. 3.2.1.5. 3.2.1.6.	Description of incentives provided to the RRTs RRTs perceptions of adequacy and usefulness of the incentives RRTs perceptions of the motivation due to the incentives Level of satisfaction due to the incentives Evidence of perverse outcomes due to the incentives Stakeholders' views of what worked and what did not work regarding the incentives provided to the RRTs	• Desk Review • Online Survey RRTs • Key informant interviews with UNICEF, government stakeholders; NGOs and Development partners.	Programme documents and reports; Progress reports; Monitoring and Evaluation records; Available Baseline measures/ surveys; Rapid Response Team (RRT) High-Level Indicative & Descriptive Assessment at Household Level in Yemen etc. SOP and Technical guidelines Online Survey Questionnaire with RRTs – duty-bearers Topic guide, Key informant interviews with UNICEF, Government, health sector partners, health RRT members, WHO, NGO stakeholders	Value For Money / Cost-effectiveness Analysis
3.3 How timely were the RRTs in responding to the cholera outbreak in each governorate?	3.3.1. What was the level of responsiveness of the RRTs to the outbreaks in each governorate from October 2018-December 2021?	3.3.1.1. 3.3.1.2. 3.3.1.3.	Effectiveness of the alert system and the deployment of RRTs RRTs' perception of timeliness of their responses in each governorate Community members' perceptions of the timeliness of the responses of the RRT teams during the outbreak from October	• Desk Review • Online Survey RRTs • FGD Communities (men, women; • Key informant interviews with UNICEF, government stakeholders; NGOs and Development partners	Programme documents and reports; Progress reports; Monitoring and Evaluation records; Available Baseline measures/ surveys; Rapid Response Team (RRT) High-Level Indicative & Descriptive Assessment at Household Level in Yemen etc. SOP and Technical guidelines Online Survey Questionnaire with RRTs – duty-bearers FGD Topic guides	Descriptive analysis Thematic analysis

		3.3.1.4.	2018-2019 and any other relevant periods up till 2021 Stakeholders views of timely use of RRT allocated resources for results produced by RRT teams		Topic guide, Key informant interviews with UNICEF, Government, WHO, NGO stakeholders	
4. COORDINATION – Assessment of coordination between partners and different sectors						
4.1 How well has the coordination mechanism among the partner institutions involved in the provision of cholera RRT services functioned?	4.1.1. To what extent did the partnership network established through the RRT model and the partnership strategies function to contribute to the achievement of the expected results?	4.1.1.1 4.1.1.2 4.1.1.3 4.1.1.4 4.1.1.5	RRTs and Stakeholders' perceptions of the functionality of partnership coordination mechanisms Stakeholders' views on coordination of the RRT interventions with other sectors (e.g. health) for better management of resources Stakeholders' perceptions of the usefulness of established partnership networks Stakeholders' perceptions of the value of partnerships' strategies Perceptions of the extent to which partnerships and collaborations have been leveraged by the programme	• Desk Review • Online Survey RRTs • Key informant interviews with UNICEF, government stakeholders; NGOs and Development partners	Programme documents and reports; Progress reports; Monitoring and Evaluation records; Available Baseline measures/ surveys; Rapid Response Team (RRT) High-Level Indicative & Descriptive Assessment at Household Level in Yemen etc. SOP and Technical guidelines Online Survey Questionnaire with RRTs – duty-bearers Topic guide, Key informant interviews with UNICEF, Government, health sector partners, health RRT members, WHO, NGO stakeholders	Descriptive analysis Thematic analysis Narrative analysis
4.2 How well have the RRTs been integrated into broader WASH second-line and health-related work in the selected governorates?	4.2.1. To what extent were the RRTs integrated into the WASH second line and health related work in the four governorates from October 2018-December 2021?	4.2.1.1. 4.2.1.2.	Evidence of integration of RRT support into WASH second line and health related budgets RRTs and Stakeholders' perceptions of the usefulness of integration of RRTs into the broader WASH and health related sectors	• Desk Review • Online Survey RRTs • Key informant interviews with UNICEF, government stakeholders; NGOs and Development partners	Programme documents and reports; Progress reports; Monitoring and Evaluation records; Available Baseline measures/ surveys; Rapid Response Team (RRT) High-Level Indicative & Descriptive Assessment at Household Level in Yemen etc. SOP and Technical guidelines	Descriptive analysis Thematic analysis Narrative analysis

		4.2.1.3. Extent of participation of relevant government ministries and departments in the RRT 4.2.1.4. 4.2.1.5. quality of Assessment of hygiene/ sanitation in affected areas and Rapid assessment of water supply in affected areas 4.2.1.6. Relevance of WASH related information provided by RRT 4.2.1.7. Timely transmission of information to country wash sector, wash cluster and wash technical group 4.2.1.8. 4.2.1.9. PTF to coordinate to address quick responses to WASH issues on all affected area 4.2.1.10. capacity of wash technical group to address underlying WASH issues 4.2.1.11. Coordination among wash cluster and wash technical group for prioritization and link emergency and development 4.2.1.12. Capacity of RRT for C4D		Online Survey Questionnaire with RRTs – duty-bearers Topic guide, Key informant interviews with UNICEF, Government, health sector partners, health RRT members, WHO, NGO stakeholders	
5. COVERAGE					
5.1 To what extent have qualified people been available and effectively mobilized to ensure appropriate cholera	5.1.1. Were trained and qualified personnel mobilized to ensure adequate coverage across all the districts in the four governorates	5.1.1.1. Perceptions of capacity of the RRT teams, managers and coordinators in the four governorates 5.1.1.2. Availability of trained personnel to implement RRT activities	• Desk Review • Online Survey RRTs • Key informant interviews with UNICEF, government	Programme documents and reports; Progress reports; Monitoring and Evaluation records; Training reports SOP and Technical guidelines Online Survey Questionnaire with RRTs – duty-bearers	Descriptive analysis Thematic analysis

RRT coverage across the districts included in the evaluation?	from October 2018-December 2021?	5.1.1.3. Gender and equity related capacity built within the field teams 5.1.1.4. Modality of choice of personnel for training and deployment as RRTs 5.1.1.5. Perceived quality of initial and refresher trainings		stakeholders; NGOs and Development partners	Topic guide, Key informant interviews with UNICEF, Government, health sector partners, health RRT members, WHO, NGO stakeholders	
5.2 To what extent did different groups in the community (men, women, girls and boys) have access to information and other services of the RRTs? Which vulnerable groups in society have faced the most difficulty accessing the services of the cholera RRTs, and why?	5.2.1. Who were the most vulnerable and marginalized groups? And which of them were most disadvantaged in accessing the services of the RRTs and why?	5.2.1.1. Identified vulnerable and marginalized groups (including the poorest; those in hard to reach areas; people with disabilities; single mothers , orphans etc.) 5.2.1.2. Numbers and types of groups that have been reached in different settings (including the most deprived and those most likely to be missed) 5.2.1.3. Community members' perceptions of difficulties in accessing RRT services for different groups in the community from October 2018-2019 and other relevant periods up till 2021 5.2.1.4. Factors that led to or contributed to the difficulties in access for vulnerable groups 5.2.1.5. RRTs and stakeholders' views of the most vulnerable groups for whom access was difficult 5.2.1.6. Solutions that had been implemented by the	• Desk Review • Online Survey RRTs • FGD Communities (men, women,); • Key informant interviews with UNICEF, government stakeholders; NGOs and Development partners	Programme documents and reports; Progress reports; Monitoring and Evaluation records; Available Baseline measures/ surveys; Rapid Response Team (RRT) High-Level Indicative & Descriptive Assessment at Household Level in Yemen etc. SOP and Technical guidelines Online Survey Questionnaire with RRTs – duty-bearers FGD Topic guides Topic guide, Key informant interviews with UNICEF, Government, health sector partners, health RRT members, community leaders and representatives of community water management committees, WHO, NGO stakeholders	Secondary data analysis Descriptive analysis Thematic analysis Causal contribution analysis Triangulation of different data sources

			programme to address difficulties.			
		5.2.1.7.	RRTs, Stakeholders and community views of continuing challenges (issues that the RRTs did not address) for poor and most deprived groups			

12.3. Annex Informed Consent Forms -SSIs

Informed Consent Form – Semi-structured Interviews – Government Stakeholders

Oversee Advising Group and AFCAR Consulting are conducting the Evaluation of Cholera Rapid Response Teams (RRT) Program in Four Governorates (Sana'a, Hajjah, Aden, and Ad Dali') in Yemen. The focus of the evaluation is on what happened from **October 2018 - October 2019** and other relevant periods up till **December 2021** in the RRT programme

This consent form explains the evaluation and the role of participants in the evaluation. Please consider this information and take as much time as you need. If you have questions at a later time, you can ask any of the members of the national evaluation team.

The purpose of the evaluation is to provide an impartial and independent assessment of cholera RRT performance in Yemen and identify key achievements, challenges, lessons learned, and practical recommendations for the upcoming phase of the programme.

To do this, the evaluation will focus on addressing the following objectives:

1. To assess the Yemen cholera RRTs and whether the governance, structure, composition, and objectives of the RRTs were appropriate to respond to the outbreak of cholera over the period targeted by the evaluation;
2. To determine the degree to which cholera RRTs engaged stakeholders;
3. To undertake analytical (qualitative and quantitative) assessment of the progress achieved in implementing the cholera RRT program and examine programme relevance/appropriateness and performance, identifying key successes, good practices, weaknesses, and gaps / constraints that need to be addressed;
4. Examine how the program has addressed cross-cutting issues such as gender and equity protections.
5. Assess the extent to which the RRT strategies and key interventions integrated equity and gender in its design, implementation and monitoring.

Voluntary Participation
We are inviting you to participate in this evaluation because you are a Key Government Stakeholder
Your participation in this evaluation is entirely voluntary. It is your choice whether to participate or not. You may change your mind and stop participating at any time.

Procedures
We would like to ask you some questions relating to the RRT Programme. We will ask you questions relating to strategies that aimed at addressing cholera/AWD outbreaks in the country and the focal governorates; your perceptions of the achievements and outcomes of the RRT Programme; how things worked out – what facilitated changes and how? What were the barriers faced? And areas for improvements.

To make sure that I don't forget or change what you are saying to me I ask for your permission to audio record and write down the conversation. Everything that will be recorded and written down will be confidential. Please note that you can refuse to give your permission to this.
Duration
The interview will last for about 60-90 minutes
Benefits

There are no direct benefits to you from being in this evaluation. However, the data the interview will provide may give some important information to the policy makers and development partners to improve the RRT programme in the country and you may have an indirect benefit from that.

Risks, discomforts and rights to withdraw

There are no obvious physical, psychological, social, economic, legal, and emotional risks in participating in this study. Participation in this evaluation is voluntary. During the interview, you are allowed to refuse to answer any question and you are allowed to stop the interview at any time. There are no consequences should you decide not to continue with the interview.

Confidentiality and Privacy

The information that you give us is completely confidential. We will not associate your
name with anything that you say. We will not use personal identifiers for the information obtained. The researchers will read the notes for analysis. The recordings/notes will be kept in secure digital locations and will be destroyed or deleted after all the information have been mined.
Privacy will be assured during this interview by having it here (or virtually).

Consent and contact

Have you got any questions you would like to ask?
Do you agree to answer the questions now?
If you have any other questions about this evaluation later you can contact the Lead Supervisor on (*mobile telephone no) : 711811151*

If you agree to participate after receiving the above information please sign below.

☐ Check for verbal consent

Read by Respondent [ ] Interviewer [ ]
Agreed [ ] Refused [ ]
Respondent: _____
Interviewer: _____ Date: ___/___/___

If Refused, the interviewer should inform the team lead for proper documentation.

Informed Consent Form – Semi-structured Interviews – UNICEF stakeholders

Oversee Advising Group and AFCAR Consulting are conducting the Evaluation of Cholera Rapid Response Teams (RRT) Program in Four Governorates (Sana'a, Hajjah, Aden, and Ad Dali') in Yemen. The focus of the evaluation is on what happened from **October 2018 - October 2019** and other relevant periods up till **December 2021** in the RRT programme

This consent form explains the evaluation and the role of participants in the evaluation. Please consider this information and take as much time as you need. If you have questions at a later time, you can ask any of the members of the national evaluation team.

The purpose of the evaluation is to provide an impartial and independent assessment of cholera RRT performance in Yemen and identify key achievements, challenges, lessons learned, and practical recommendations for the upcoming phase of the programme.

To do this, the evaluation will focus on addressing the following objectives:

1. To assess the Yemen cholera RRTs and whether the governance, structure, composition, and objectives of the RRTs were appropriate to respond to the outbreak of cholera over the period targeted by the evaluation;
2. To determine the degree to which cholera RRTs engaged stakeholders;
3. To undertake analytical (qualitative and quantitative) assessment of the progress achieved in implementing the cholera RRT program and examine programme relevance/appropriateness and performance, identifying key successes, good practices, weaknesses, and gaps / constraints that need to be addressed;
4. Examine how the program has addressed cross-cutting issues such as gender and equity protections.
5. Assess the extent to which the RRT strategies and key interventions integrated equity and gender in its design, implementation and monitoring.

Voluntary Participation
We are inviting you to participate in this evaluation because you are a UNICEF Stakeholder
Your participation in this evaluation is entirely voluntary. It is your choice whether to participate or not. You may change your mind and stop participating at any time.

Procedures
We would like to ask you some questions relating to the RRT Programme. We will ask you questions relating to strategies that aimed at addressing cholera/AWD outbreaks in the country and the focal governorates; your perceptions of the achievements and outcomes of the RRT Programme; how things worked out – what facilitated changes and how? What were the barriers faced? And areas for improvements.

To make sure that I don't forget or change what you are saying to me I ask for your permission to audio record and write down the conversation. Everything that will be recorded and written down will be confidential. Please note that you can refuse to give your permission to this.

Duration
The interview will last for about 60-90 minutes

Benefits
There are no direct benefits to you from being in this evaluation. However, the data the interview will provide may give some important information to the policy makers and development partners to improve the RRT programme in the country and you may have an indirect benefit from that.

Risks, discomforts and rights to withdraw

There are no obvious physical, psychological, social, economic, legal, and emotional risks in participating in this evaluation. Participation in this evaluation is voluntary. During the interview, you are allowed to refuse to answer any question and you are allowed to stop the interview at any time. There are no consequences should you decide not to continue with the interview.

Confidentiality and Privacy

The information that you give us is completely confidential. We will not associate your name with anything that you say. We will not use personal identifiers for the information obtained. The researchers will read the notes for analysis. The recordings/notes will be kept in secure digital locations and will be destroyed or deleted after all the information have been mined.

Privacy will be assured during this interview by having it here (or virtually).

Consent and contact

Have you got any questions you would like to ask?

Do you agree to answer the questions now?

If you have any other questions about this evaluation later you can contact the Lead Supervisor on (*mobile telephone no) :* ……..

If you agree to participate after receiving the above information please sign below.

☐ Check for verbal consent

Read by Respondent [ ] Interviewer [ ]

Agreed [ ] Refused [ ]

Respondent: _____

Interviewer: _____ Date: ___/___/___

If Refused, the interviewer should inform the team lead for proper documentation.

Informed Consent Form – Semi-structured Interviews – Community Stakeholders

Oversee Advising Group and AFCAR Consulting are conducting the Evaluation of Cholera Rapid Response Teams (RRT) Program in Four Governorates (Sana'a, Hajjah, Aden, and Ad Dali') in Yemen. The focus of the evaluation is on what happened from **October 2018 - October 2019 and up till December 2021** in the RRT programme

This consent form explains the evaluation and the role of participants in the evaluation. Please consider this information and take as much time as you need. If you have questions at a later time, you can ask any of the members of the national evaluation team.

The purpose of the evaluation is to assess cholera RRT performance in your community from October 2018-December 2021

We are conducting this interview to find out the kind of access you and people in your community had to RRT services and to ascertain the quality of the services.

Voluntary Participation

We are inviting you to participate in this evaluation because you are a community leader or a representative of a community water management committee. Your participation in this evaluation is entirely voluntary. It is your choice whether to participate or not. You may change your mind and stop participating at any time. Please feel free to share your opinions on the different subjects proposed and rest assured that this information will be used in total confidentiality.

Procedures

We would like to ask you some questions relating to the RRT Programme. We will ask you questions relating to community engagement activities, household decision making and behavioural change in relation to birth registrations; what has worked and did not work in terms of community engagement and how? your perceptions of what facilitated changes and how? What are the difficulties faced? And suggestions for improvement.

To make sure that I don't forget or change what you are saying to me I ask for your permission to write down the conversation. Everything that will be written down will be confidential. Please note that you can refuse to give your permission to this.

Duration

The discussions will last for about 60 minutes

Benefits

There are no direct benefits to you from being in this evaluation. However, the data the interview will provide may give some important information to the policy makers and development partners to improve the RRT programme in the country and you may have an indirect benefit from that.

Risks, discomforts and rights to withdraw

There are no obvious physical, psychological, social, economic, legal, and emotional risks in participating in this evaluation. Participation in this evaluation is voluntary. During the interview, you are allowed to refuse to answer any question and you are allowed to stop the interview at any time. There are no consequences should you decide not to continue with the interview.

Confidentiality and Privacy

The information that you give us is completely confidential. We will not associate your name with anything

that you say. We will not use personal identifiers for the information obtained. The recordings/notes will be kept in secure digital locations and will be destroyed or deleted after all the information have been mined. Privacy will be assured during this interview by having it here.

Consent and contact

Have you got any questions you would like to ask?
Do you agree to answer the questions now?
If you have any other questions about this evaluation later you can contact the Lead Supervisor on +2348091115403
If you agree to participate after receiving the above information, please sign below.

☐ Check for verbal consent

Read by Respondent [ ] Interviewer [ ]
Agreed [ ] Refused [ ]
Respondent: _____
Interviewer: _____ Date: ___/___/___

If Refused, the interviewer should inform the team lead for proper documentation.

Informed Consent Form – Semi-structured Interviews – Technical / Development Partners

Oversee Advising Group and AFCAR Consulting are conducting the Evaluation of Cholera Rapid Response Teams (RRT) Program in Four Governorates (Sana'a, Hajjah, Aden, and Ad Dali') in Yemen. The focus of the evaluation is on what happened from **October 2018 - October 2019** and other relevant periods up till **December 2021** in the RRT programme

This consent form explains the evaluation and the role of participants in the evaluation. Please consider this information and take as much time as you need. If you have questions at a later time, you can ask any of the members of the national evaluation team.

The purpose of the evaluation is to provide an impartial and independent assessment of cholera RRT performance in Yemen and identify key achievements, challenges, lessons learned, and practical recommendations for the upcoming phase of the programme.

To do this, the evaluation will focus on addressing the following objectives:

1. To assess the Yemen cholera RRTs and whether the governance, structure, composition, and objectives of the RRTs were appropriate to respond to the outbreak of cholera over the period targeted by the evaluation;
2. To determine the degree to which cholera RRTs engaged stakeholders;
3. To undertake analytical (qualitative and quantitative) assessment of the progress achieved in implementing the cholera RRT program and examine programme relevance/appropriateness and performance, identifying key successes, good practices, weaknesses, and gaps / constraints that need to be addressed;
4. Examine how the program has addressed cross-cutting issues such as gender and equity protections.
5. Assess the extent to which the RRT strategies and key interventions integrated equity and gender in its design, implementation and monitoring.

Voluntary Participation
We are inviting you to participate in this evaluation because you are a Technical or Development Partner working on Cholera Responses in Yemen
Your participation in this evaluation is entirely voluntary. It is your choice whether to participate or not. You may change your mind and stop participating at any time.

Procedures
We would like to ask you some questions relating to the RRT Programme. We will ask you questions relating to strategies that aimed at addressing cholera/AWD outbreaks in the country and the focal governorates; your perceptions of the achievements and outcomes of the RRT Programme; how things worked out – what facilitated changes and how? What were the barriers faced? And areas for improvements.

To make sure that I don't forget or change what you are saying to me I ask for your permission to audio record and write down the conversation. Everything that will be recorded and written down will be confidential. Please note that you can refuse to give your permission to this.

Duration
The interview will last for about 60-90 minutes

Benefits
There are no direct benefits to you from being in this evaluation. However, the data the interview will provide may give some important information to the policy makers and development partners to improve the RRT

programme in the country and you may have an indirect benefit from that.

Risks, discomforts and rights to withdraw

There are no obvious physical, psychological, social, economic, legal, and emotional risks in participating in this evaluation. Participation in this evaluation is voluntary. During the interview, you are allowed to refuse to answer any question and you are allowed to stop the interview at any time. There are no consequences should you decide not to continue with the interview.

Confidentiality and Privacy

The information that you give us is completely confidential. We will not associate your name with anything that you say. We will not use personal identifiers for the information obtained. The researchers will read the notes for analysis. The recordings/notes will be kept in secure digital locations and will be destroyed or deleted after all the information have been mined.

Privacy will be assured during this interview by having it here (or virtually).

Consent and contact

Have you got any questions you would like to ask?

Do you agree to answer the questions now?

If you have any other questions about this evaluation later you can contact the Lead Supervisor on (*mobile telephone no) :* ……..

If you agree to participate after receiving the above information please sign below.

☐ Check for verbal consent

Read by Respondent [ ] Interviewer [ ]

Agreed [ ] Refused [ ]

Respondent: _____

Interviewer: _____ Date: ___/___/___

If Refused, the interviewer should inform the team lead for proper documentation.

12.4. Annex - Topic Guides for Key Informant Interviews

Topic Guide – Government Stakeholders at National, Governorate and District Levels

*Please note that these are topic **guides** – some questions are generic and will apply to all the government stakeholders but some questions will depend on specific functions of the stakeholders in the different sectors relating to RRTs. Not all of them will be able to answer all the questions. Qualitative research assistants will be trained to use the tools appropriately.*

Background Information

- Collection location
- Respondent's gender
- Position held
- Activities carried out within the framework of the RRT interventions
- Years of experience
- Types of interventions

Role of a respondent - I'd like to start by having you briefly describe your role and responsibilities within the RRT programme as a government stakeholder

Context of Programme Implementation

1. What are the main interventions your Government is implementing in the field of cholera response?
    a. What activities have been carried out as part of the RRT interventions? Please could you also share any available project proposals, budgets and reports?
    b. Please can you describe the situation during the outbreak around October 2018? What were the main issues (threats and opportunities) experienced during that period?
    c. Please can you describe the RRT programme implemented from October 2018 to October 2019? And other relevant periods up till December 2021 *(**Probe** for other outbreaks beyond October 2019 and RRT activities implemented)*
    d. In your opinion, how did the design and implementation of the RRT programme respond to the outbreaks?
    e. How do you think the RRT interventions were able to adapt to the country context in order to achieve its objectives?
        i. What were the opportunities? How did they influence the implementation of the RRT interventions ?
        ii. What were the threats? How did they influence the implementation of the RRT interventions?

Relevance

2. What are the national priorities concerning outbreaks including cholera response? What have been the main challenges in this sector?
3. What is the extent to which the RRT intervention design was appropriate and aligned with the Yemen cholera response plan, wash cluster strategy and the government's agenda, policies, strategies and guidelines?
4. To what extent did the programme integrate the gender approach in the design, implementation, monitoring and evaluation of its interventions from October 2018-October 2019 and up till December 2021

5. To what extent were human rights and the determinants of equity (income, sex, disability, age, location/ rural) considered in the design, implementation and monitoring and evaluation of the RRT programme?
6. What is your perception of the extent to which the RRT interventions were responsive to the needs of the targeted populations during the outbreaks in the focal periods (2018-2019 and up till 2021?
    a. What worked well?
    b. What were specific bottlenecks in the different governorates during the RRT implementation?
    c. How were the issues addressed for the most vulnerable groups in the communities?
    d. What could have been improved?

The Effectiveness of the RRT Interventions to achieve intended results (Outputs and Outcomes)

7. How would you describe the changes that occurred due to the RRT Interventions in the (specific) governorates from October 2018 – October 2019 and beyond this period up till December 2021? (Probe for changes in access to basic WASH services for the population; improved awareness and behaviour change in WASH; changes in cholera/AWD epidemiological data)
8. How can these changes be explained - what do you think has made it possible for these changes to happen? Why? What else?
    a. What in your view were the most effective RRT interventions? What factors explain the successes? (probe for the intervention package implemented by the RRTs; incentives given to the RRTs; integration with the broader WASH and health services)
    b. What were the least effective interventions? What factors explain this weakness?
    c. What are the main constraints relating to the uptake of the RRT interventions at the population level? What do you think has made it difficult for changes to happen? Why? What else?
9. In your perception were the planned RRT activities by the government sufficient) to achieve the results and were there gaps not covered by UNICEF and other partners? Please explain.
10. In your opinion, what are the factors that contributed the most to the achievement of results by the RRTs? In your view, what hindered the achievement of results the most?
11. How did the technical and organizational support provided to the RRT programme work?
    a. What worked well and what were the key promising, emerging and good practices and /or initiatives?
    b. What could have been improved?

Efficiency (the roles and responsibilities detailed at the start of the interview will determine the stakeholder(s) to ask some of the questions

12. What funding was available for the RRT programme in Yemen from October 2018- December 2021? From the national, governorate, district, UNICEF and other sources? Please can you share some financial records and reports?
13. How did you ensure that the funds for RRT interventions were used as intended? *(**Ask only** the appropriate government stakeholder based on their function and **skip for the rest**)*
14. In your opinion how appropriate were the RRT teams composition, governance and management structures adequate to allow the achievement of results? Please explain. Were there any weaknesses observed and how did they affect the implementation of the interventions as well as achievement of expected results? (**Probe** for competencies, resources - both financial and human resources; **probe** for staffing and initial and refresher trainings; use of information management systems)

15. How were implementation and behaviour change monitored by the programme? How appropriate were the M&E strategies for tracking the results of the programme?
16. How do you make use of results from monitoring system? How analyzed? Used for accountability mechanisms? For learning and programme adjustment? Translated into action? Risks monitored and monitoring adapted?

Coordination

17. How well have the RRTs been integrated into broader WASH and health-related work in the selected governorates? Were there specific objectives settled for the WASH clusters and partners along with the intervention of RRT?
18. How well has the coordination mechanism between the RRTs (who worked with MoWE) and the MoPH in the provision of cholera RRT services functioned?
19. How RRT transmitted the information of the Rapid assessment of water supply in affected areas ? (way of transmission, direct designatory)
    a. Was the Ministry of Water & Environment (MWE) timely informed?
    b. Had the Ministry of Water & Environment (MWE) the capacity to timely intervene?
    c. What were the enabling factors
    d. What were the main constraints?
20. **What was the quality of the RRT** Rapid assessment of water supply in affected areas?
    a. How it was used? By which entity?
    b. How did it influence the emergency response?
    c. Was it relevant for addressing underlying causes?

Coverage

21. In your opinion, to what extent were qualified people available and mobilized to ensure appropriate cholera RRT coverage across the districts included in the evaluation?
    a. How were trained and qualified personnel mobilized to ensure adequate coverage across all the districts in the four governorates from October 2018-October 2019 and other relevant periods up till December 2021? What worked well? Were there any bottlenecks? How was this addressed?
22. In your view, to what extent did different groups in the community (men, women, girls and boys) have access to information and other services of the RRTs?
    a. In your view, who are the most vulnerable and marginalized groups in the communities?
    b. And which of them were most disadvantaged in accessing the services of the RRTs and why?

Topic Guide – UNICEF Stakeholders

Background Information

- Collection location
- Respondent's gender
- Position held
- Activities carried out within the framework of WASH and the RRT programme
- Years of experience

Role of a respondent - I'd like to start by having you briefly describe your role and responsibilities within the WASH sector and RRT programme as a UNICEF stakeholder

a. How long have been involved with the Yemen RRT interventions?

Context of Programme Implementation

1. What are the main interventions being implemented in the country in the area of cholera response?
    a. What activities have been carried out as part of the RRT interventions? Please could you also share any available project proposals, budgets and reports?
    b. Please can you describe the situation during the outbreak around October 2018? What were the main issues (threats and opportunities) experienced during that period?
    c. Please can you describe the RRT programme implemented from October 2018 to October 2019? And other relevant periods up till December 2021 *(**Probe** for other outbreaks beyond October 2019 and RRT activities implemented)*
    d. In your opinion, how did the design and implementation of the RRT programme respond to the outbreak?
    e. How do you think the RRT interventions were able to adapt to the country context in order to achieve its objectives?
        i. What were the opportunities? How did they influence the implementation of the RRT interventions ?
        ii. What were the threats? How did they influence the implementation of the birth RRT interventions?

Relevance

2. What are the national priorities concerning outbreaks including cholera response? What have been the main challenges in this sector?
3. What is the extent to which the RRT intervention design was appropriate and aligned with the Yemen cholera response plan, wash cluster strategy and the government's agenda, policies, strategies and guidelines?
4. To what extent did the programme integrate the gender approach in the design, implementation, monitoring and evaluation of its interventions
5. To what extent were human rights and the determinants of equity (religion, income, sex, disability, age, location/ rural) considered in the design, implementation and monitoring and evaluation of the RRT programme?
6. What is your perception of the extent to which the RRT interventions were responsive to the needs of the targeted populations during the outbreaks in the focal period?
    a. What worked well?
    b. What were specific bottlenecks in the different governorates during the RRT implementation?
    c. How were the issues addressed for the most vulnerable groups in the communities?

d. What could have been improved?

The Effectiveness of the RRT Interventions to achieve intended results (Outputs and Outcomes)

7. What in your view were the most effective RRT interventions? What factors explain the successes? (probe for the intervention package implemented by the RRTs; incentives given to the RRTs; integration with the broader WASH and health services)
    a. What were the least effective interventions? What factors explain this weakness?
    b. What are the main constraints relating to service utilization at the population level? What do you think has made it difficult for changes to happen? Why? What else?
8. In your perception were the planned RRT activities by the government sufficient (in quantity and quality) to achieve the results and were there gaps not covered by UNICEF and other partners? (Probe for appropriateness of the mix of interventions; adequacy of planned activities; quality of management)
9. In your opinion, what are the factors that contributed the most to the achievement of results by the RRTs? In your view, what hindered the achievement of results the most?
10. How did the technical and organizational support provide to the RRT programme work?
    a. What worked well and what were the key promising, emerging and good practices and /or initiatives?
    b. What could have been improved?
11. Did the training RRT received allow a proper implementation of Hygiene promotion and awareness campaign aiming to induce behaviour change? How?
    Did the RRT had the time to implement a proper Hygiene promotion and awareness campaign? or were there other interventions planned to pursue the process?

Efficiency (the roles and responsibilities detailed at the start of the interview will determine the stakeholder(s) to ask some of the questions

12. What funding was available for the RRT programme in Yemen from October 2018- October 2019 and up till 2021? From the national, governorate, district, UNICEF and other sources? Please can you share some financial records and reports?
13. In your opinion, how well were resources been used? (probe for financial, material and human resources) Were the funds for RRT interventions used as intended? How?
14. In your opinion how appropriate were the RRT team's composition, governance and management structures adequate to allow the achievement of results? Please explain. Were there any weaknesses observed and how did they affect the implementation of the interventions as well as achievement of expected results?
15. How would you describe the capability at RRT teams and coordination structure to deliver on expected outputs/ expected/ planned results regarding cholera response? (**Probe** for competencies, resources - both financial and human resources; **probe** for staffing and initial and refresher trainings; use of information management systems)
16. Were the planned activities sufficient (in quantity and quality) to achieve the results or were there gaps not covered by other partners or the government? To what extent were results delivered in a timely manner?
17. How were implementation and behaviour change monitored by the programme? How appropriate were the M&E strategies for tracking the results of the programme?

18. How do you make use of results from monitoring system? How analyzed? Used for accountability mechanisms? For learning and programme adjustment? Translated into action? Risks monitored and monitoring adapted?

Coordination

19. How well have the RRTs been integrated into broader WASH and health-related work in the selected governorates? Were there specific objectives settled for the WASH cluster and partners along with the intervention of RRT?
20. How well has the coordination mechanism between the RRTs (who worked with MoWE) and the MoPH in the provision of cholera RRT services functioned?
21. Was there a mechanism or system for coordination between UNICEF and other partners involved in the RRT programme and the integrated cholera response in the focal period? What are they? Please could you describe and give some examples? How has the coordination with the government worked?
22. What was the quality of RRT assessment of hygiene/ sanitation in affected areas ?
    a. Was it useful/ relevant for the emergency response?
    b. Was it relevant for addressing underlying causes?
23. How RRT transmitted the information of the Rapid assessment of water supply in affected areas ? (way of transmission, direct designatory)
    a. Was the Ministry of Water & Environment (MWE) timely informed?
    b. Had the Ministry of Water & Environment (MWE) the capacity to timely intervene?
    c. What were the enabling factors
    d. What were the main constraints?
24. How was the RRT Rapid assessment of water supply in affected areas used?
    a. How did it influence the emergency response?
    b. Was it relevant for addressing underlying causes?

What was the quality of RRT assessment of hygiene/ sanitation in affected areas?

a. Was it useful/ relevant for the emergency response?
b. Was it relevant for addressing underlying causes?

25. What was the quality of the RRT Rapid assessment of water supply in affected areas?
    c. How it was used? By which entity?
    d. How did it influence the emergency response?
    e. Was it relevant for addressing underlying causes?

Coverage

26. In your opinion, to what extent were qualified people available and mobilized to ensure appropriate cholera RRT coverage across the districts included in the evaluation?

a. How were trained and qualified personnel mobilized to ensure adequate coverage across all the districts in the four governorates from October 2018-October 2019 and up till December 2021? What worked well? Were there any bottlenecks? How was this addressed?

27. In your view, to what extent did different groups in the community (men, women, girls and boys) have access to information and other services of the RRTs?

    a. In your view, who were the most vulnerable and marginalized groups?
    b. And which of them were most disadvantaged in accessing the services of the RRTs and why?

Topic Guide – Community leaders and Representatives of Community Water Management Committees

Background Information

- Collection location
- Respondent's gender
- Position held
- Activities carried out within the framework of the RRT programme as a community level stakeholder
- No of years of interaction with the RRT programme

Relevant roles of the respondent - I'd like to start by having you briefly describe your role and responsibilities within the community water management committees or a community leader who interacts with the RRT programme

Context and Community activities

1. Please could you describe the role and activities of the community water management committee?
2. Please could you describe the RRT programme? (*explain in a way they will understand what you mean*)
3. When and how did you or the committee interact with the RRT programme? What activities of the programme have been carried out in your community?
4. What were your community's needs and expectations from RRTs during the period of the outbreak from October 2018-2019? And after that up till December 2021?
5. In your opinion, did the RRT programme address all the communities' needs and expectations? What were the gaps? What could have been done differently by the programme to improve things?

Access and WASH

6. In your opinion, how do community members generally respond during cholera outbreaks?
    - Did this change between October 2018-2019 and up till December 2021? How? Why?
7. What was the source of water most households used in this community when RRT came? (check if this is safe water source (borehole or well with pump, water distribution network) or not (open well, etc)
8. What did RRT do regarding the water source? (check chlorine distribution, chloritization of well, advices,)
9. If households received chlorine: in your perception, among 10 households that received chlorine, how many really used it to treat the water they used? (why?)
10. Were there any changes regarding water supply in this community since the RRT intervention? (check if safe water supply was built, which year)
11. In your perception, among 10 households in this community, how many use latrine?
12. Did the number increase or decrease since RRT intervention? (why?)
13. Are there any constraints in building latrines? (which one?)

14. In your perception, did the RRT intervention induce any change in handwashing behaviour? Why? (check if RRT distributed soap, to which households)
15. Today, in your perception, among 10 households this community, how many wash hands with soap after using latrine/ defecating?
16. Are there any constraints in using soap to wash hand? (which ones)
17. What in your opinion are the changes in experiences of Acute Watery Diahorrea from October 2018- October 2019 and up till December 2021

    What made change possible? What made change difficult?
18. Can you explain how rights-holdersof the RRT programme interventions were identified and selected? Would you say that this selection process was fair and favoured selection of people who were really in need of this kind of support? Why?
19. What is your opinion about the benefits of the RRT programme?

Gender equality and Vulnerable Groups

20. Do you think there were differences in the way women and men were reached by the RRTs from October 2018- October 2019 and up till December 2021? To what extent did the programme interventions reach the poorest / vulnerable as well in your community during the focal period? Do you think there were differences in the way the RRT packs and messages reached the wealthiest and most destitute? What about single mothers? Disabled persons? Orphans? Please could you explain your answer
21. In your opinion do you think the RRT programme took the needs of all groups in the communities into account? To what extent did different groups in the community (men, women, girls and boys) have access to information and other services of the RRTs? Please give examples.
22. Any other comments or information that you would like to add?

Topic Guide – Technical /Emergency Partners

Please probe for specific organizations as appropriate and note that there are specific questions that apply to only one level

Background Information

- Collection location
- Respondent's gender
- Organization and Position held
- Activities carried out within the framework of the RRT programme / WASH Cluster / integrated choler response
- Years of experience

Role of a respondent - I'd like to start by having you briefly describe your role and responsibilities within the RRT programme as a Technical / Emergency Partner

a. How long have you been involved with the Yemen RRT programme?

Context of Programme Implementation

1. What are the main interventions your Government is implementing in the field of cholera response?
    a. What activities have been carried out as part of the RRT interventions? Please could you also share any available project proposals, budgets and reports?
    b. Please can you describe the situation during the outbreak around October 2018? What were the main issues (threats and opportunities) experienced during that period?
    c. Please can you describe the RRT programme implemented from October 2018 to October 2019 And other relevant periods up till December 2021 *(**Probe** for other outbreaks beyond October 2019 and RRT activities implemented)*?
    d. In your opinion, how did the design and implementation of the RRT programme respond to the outbreak?
    e. How do you think the RRT interventions were able to adapt to the country context in order to achieve its objectives?
        i. What were the opportunities? How did they influence the implementation of the RRT interventions ?
        ii. What were the threats? How did they influence the implementation of the birth RRT interventions?

Relevance

2. What are the national priorities concerning outbreaks including cholera response? What have been the main challenges in this sector?
3. What is the extent to which the RRT intervention design was appropriate and aligned with the Yemen cholera response plan, wash cluster strategy and the government's agenda, policies, strategies and guidelines?
4. To what extent did the programme integrate the gender approach in the design, implementation, monitoring and evaluation of its interventions.
5. To what extent were human rights and the determinants of equity (religion, income, sex, disability, age, location/ rural) considered in the design, implementation and monitoring and evaluation of the RRT programme?
6. What is your perception of the extent to which the RRT interventions were responsive to the needs of the targeted rights-holders during the outbreak in the focal period?
    a. What worked well?

b. What were specific bottlenecks in the different governorates during the RRT implementation?
c. How were the issues addressed for the most vulnerable groups in the communities?
d. What could have been improved?

The Effectiveness of the RRT Interventions to achieve intended results (Outputs and Outcomes)

7. What in your view were the most effective RRT interventions? What factors explain the successes? (probe for the intervention package implemented by the RRTs; incentives given to the RRTs; integration with the broader WASH and health services)
    a. What were the least effective interventions? What factors explain this weakness?
    b. What are the main constraints relating to RRT service utilization at population level? What do you think has made it difficult for changes to happen? Why? What else?
8. In your perception were the planned RRT activities by the government sufficient (in quantity and quality) to achieve the results and were there gaps not covered by UNICEF and other partners? (Probe for appropriateness of the mix of interventions; adequacy of planned activities; quality of management)
9. In your opinion, what are the factors that contributed the most to the achievement of results by the RRTs? In your view, what hindered the achievement of results the most?
10. How did the technical and organizational support provide to the RRT programme work?
    a. What worked well and what were the key promising, emerging and good practices and /or initiatives?
    b. What could have been improved?

15. Did the training RRT received allow a proper implementation of Hygiene promotion and awareness campaign aiming to induce behavior change?

16. Did the RRT had the time to implement a proper Hygiene promotion and awareness campaign? or were the other interventions planned to pursue the process?

Efficiency (the roles and responsibilities detailed at the start of the interview will determine the stakeholder(s) to ask some of the questions

11. What funding was available for the RRT programme in Yemen from October 2018- October 2019 and up till 2021? From the national, governorate, district, UNICEF and other sources? Please can you share some financial records and reports?
12. In your opinion, how well were resources been used? (probe for financial, material and human resources)

13. In your opinion how appropriate were the RRT team's composition, governance and management structures adequate to allow the achievement of results? Please explain. Were there any weaknesses observed and how did they affect the implementation of the interventions as well as achievement of expected results?
14. How would you describe the capability at RRT teams and coordination structure to deliver on expected outputs/ expected/ planned results regarding cholera response? (**Probe** for competencies, resources - both financial and human resources; **probe** for staffing and initial and refresher trainings; use of information management systems)

15. Were the planned activities sufficient (in quantity and quality) to achieve the results or were there gaps not covered by other partners or the government? To what extent were results delivered in a timely manner?
16. How were implementation and behaviour change monitored by the programme? How appropriate were the M&E strategies for tracking the results of the programme?
17. How do you make use of results from monitoring system? How analyzed? Used for accountability mechanisms? For learning and programme adjustment? Translated into action? Risks monitored and monitoring adapted?

Coordination

18. How well have the RRTs been integrated into broader WASH and health-related work in the selected governorates? Were there specific objectives settled for the WASH cluster and partners along with the intervention of RRT?
19. How well has the coordination mechanism between the RRTs (who worked with MoWE) and the MoPH in the provision of cholera RRT services functioned?
20. Was there a mechanism or system for coordination between UNICEF and other partners involved in the RRT programme and the integrated cholera response in the focal period? What are they? Please could you describe and give some examples? How has the coordination with the government worked?
28. How RRT transmitted the information of the Rapid assessment of water supply in affected areas ? (way of transmission, direct designatory)
    a. Was the Ministry of Water & Environment (MoWE) timely informed?
    b. Had the Ministry of Water & Environment (MoWE) the capacity to timely intervene?
    c. What were the enabling factors
    d. What were the main constraints?
29. What was the quality of RRT assessment of hygiene/ sanitation in affected areas?
    a. Was it useful/ relevant for the emergency response?
    b. Was it relevant for addressing underlying causes?
30. What was the quality of the RRT Rapid assessment of water supply in affected areas?
    a. How it was used? By which entity?
    b. How did it influence the emergency response?
    c. Was it relevant for addressing underlying causes?

Coverage

21. In your opinion, to what extent were qualified people available and mobilized to ensure appropriate cholera RRT coverage across the districts included in the evaluation?
    a. How were trained and qualified personnel mobilized to ensure adequate coverage across all the districts in the four governorates from October 2018-October 2019 and up till 2021? What worked well? Were there any bottlenecks? How was this addressed?
22. In your view, to what extent did different groups in the community (men, women, girls and boys) have access to information and other services of the RRTs?
    a. In your view, who were the most vulnerable and marginalized groups?

b. And which of them were most disadvantaged in accessing the services of the RRTs and why?

12.5. Annex Informed Consent Forms - Focus Group Discussions

Informed Consent Form – Focus Group Discussions

Oversee Advising Group and AFCAR Consulting are conducting the Evaluation of Cholera Rapid Response Teams (RRT) Program in Four Governorates (Sana'a, Hajjah, Aden, and Ad Dali') in Yemen. The focus of the evaluation is on what happened from **October 2018 - October 2019 and up till December 2021** in the RRT programme
This consent form explains the evaluation and the role of participants in the evaluation. Please consider this information and take as much time as you need. If you have questions at a later time, you can ask any of the members of the national evaluation team.
The purpose of the evaluation is to assess cholera RRT performance in your community from October 2018-December 2021

This will involve discussions in order to find out the kind of access you and your children had to RRT services and ascertain the quality of the services. We are conducting this Focus group exercise aiming at **discussing and exchanging opinions** about a certain number of subjects concerning the RRT Programme.

Voluntary Participation
We are inviting you to participate in this evaluation because you are a community member (or community dialogue facilitator. Your participation in this evaluation is entirely voluntary. It is your choice whether to participate or not. You may change your mind and stop participating at any time. Please feel free to share your opinions on the different subjects proposed and rest assured that this information will be used in total confidentiality.

Procedures
We would like to ask you some questions relating to the RRT Programme. We will ask you questions relating to community engagement activities, household decision making and behavioural change in relation to birth registrations; what has worked and did not work in terms of community engagement and how? your perceptions of what facilitated changes and how? What are the difficulties faced? And suggestions for improvement.

To make sure that I don't forget or change what you are saying to me I ask for your permission to write down the conversation. Everything that will be written down will be confidential. Please note that you can refuse to give your permission to this.
Duration
The discussions will last for about 60 – 90 minutes
Benefits
There are no direct benefits to you from being in this evaluation. However, the data the interview will provide may give some important information to the policy makers and development partners to improve the RRT programme in the country and you may have an indirect benefit from that.

Risks, discomforts and rights to withdraw
There are no obvious physical, psychological, social, economic, legal, and emotional risks in participating in this evaluation. Participation in this evaluation is voluntary. During the interview, you are allowed to refuse to answer any question and you are allowed to stop the interview at any time. There are no consequences should you decide not to continue with the interview.

Confidentiality and Privacy
The information that you give us is completely confidential. We will not associate your name with anything that you say. We will not use personal identifiers for the information obtained. The researchers will read the notes for analysis. The recordings/notes will be kept in secure digital locations and will be

destroyed or deleted after all the information have been mined.
Privacy will be assured during this interview by having it here.
Please do not discuss the information that is shared by other participants during the focus group outside the discussion site. The other participants have also been instructed to maintain similar confidentiality.

Consent and contact
Have you got any questions you would like to ask?
Do you agree to answer the questions now?
If you have any other questions about this evaluation later you can contact the Lead Supervisor on +2348091115403
If you agree to participate after receiving the above information, please sign below.

☐ Check for verbal consent

Read by Respondent [ ] Interviewer [ ]
Agreed [ ] Refused [ ]
Respondent: _____
Interviewer: _____ Date: ___/___/___

If Refused, the interviewer should inform the team lead for proper documentation.

12.6. Annex -Topic Guides for Focus Group Discussions

Note on FGDs: As far as possible, have the focus group discussions with men/boys and women/girls in separate groups. Aim for about 8-10 persons per FGD.

These list of questions are guidelines; you are free to ask follow up questions in case additional issues of relevance come up. Be flexible, but keep time in mind.

For all questions (where relevant) probe about the situation from October 2018 to October 2019 and up till December 2021; and the reasons for change.

FGDs should last approximately one – one and a half hour. This is a limited time for participatory activities. However, ensure sufficient time for trend appraisals. Ask the FGD participants to think back how the situation was specifically during the outbreaks of 2018 to 2019 and other relevant outbreaks up till 2021.

Preparation for the FGD:

1. Criteria for selection of FGD participants
2. Selection of FGD participants
3. Selection of location for FGD (should allow for privacy, and for the creation of an atmosphere which promotes discussion, food and drinks can be served).
4. Once location selected, invite participants (through community mobilizers) who will explain the purpose of the work to any potential participants they have identified; they will stress that participation is voluntary, and that all discussions held will be
5. Make a Focus group checklist:

Make sure you have:

- Made arrangements for refreshments
- Have all of your equipment, and they are functional:
  - Audio Recorders
  - Notebook and pens
  - Name cards and felt tip markers
- Have all of your focus group materials:
  - 1 large envelope
  - 2 copies of this focus group guide
  - Informed consent forms, if necessary (enough for up to 10 participants)

6. As participants arrive, welcome them and obtain informed consent. This could be verbal, and should be preceded with a general introduction to the purpose of the discussion. The facilitator is responsible for assuring that each participant:

- Knows participation is voluntary
- Knows they can leave at any time without any negative repercussions
- Know that all discussions will be held in confidence
- Know that they will be given a pseudo name during the discussions
- Know that the group discussions will be taped

Participants should also be made aware that they should not discuss the information that is shared by other participants during the focus group once they leave the site.

Background Information

Remember to collect the background characteristics of each respondent:

- Collection location
- Respondents' gender
- Respondents' ages
- Occupations

Date		District	
County		Rural/Urban	
Governorate			
FGD Moderator Name:			
FGD Facilitator Name:			
Note Taker:			
Other Detail:			

Introduction:

The purpose of the evaluation is to provide an impartial and independent assessment of cholera RRT performance in Yemen and identify key achievements, challenges, lessons learned, and practical recommendations for the upcoming phase of the programme.

This will involve discussions in order to find out the kind of access you and your children have to RRT services and ascertain the quality of services available to you and your children. We are conducting this Focus group exercise aiming at **discussing and exchanging opinions** about a certain number of subjects concerning the RRT programme especially the community level activities of the programme.
Introduce yourself and clarify that you are not part of the programme and that the information that is being obtained will be treated confidentially. Encourage people to be open and frank as that will be more useful for learning from their experiences. Also mention that people are not obliged to participate and can withdraw at any time in line with research ethics. Ask permission to start with the FGD.

Background

Ask all people participating in the FGD since when they were involved/in-contact with the RRTs (This will provide you as interviewer with info about the time span you can cover with the different persons involved in the FGD)

FGD Topic Guide for Community level stakeholders, parents, caregivers – community men and women (different groups)

Subdomain: Context and Community activities

23. Do you know about the RRT programme? (*explain in a way they will understand what you mean*) If yes, can you shortly describe it?
24. When and how did you learn about the RRT programme?
25. What were your needs and expectations from RRTs during the period of the outbreak from October 2018-2019? And after that up till December 2021?
26. In your opinion, did the RRT programme address all your needs and expectations? What were the gaps? What could have been done differently by the programme to improve things?

Subdomain: Access and WASH

27. How do community members generally respond during cholera outbreaks?
    - Did this change between October 2018-2019 and up till December 2021? How? Why?
28. What was the source of water most households used in this community when RRT came? (check if this is safe water source (borehole or well with pump, water distribution network) or not (open well, etc)
29. What did RRT do regarding the water source? (check chlorine distribution, chloritization of well, advices,)
30. If households received chlorine: in your perception, among 10 households that received chlorine, how many really used it to treat the water they used? (why?)
31. Were there any changes regarding water supply in this community since the RRT intervention? (check if safe water supply was built, which year)
32. In your perception, among 10 households in this community, how many use latrine?
33. Did the number increase or decrease since RRT intervention? (why?)
34. Are there any constraints in building latrines? (which one?)
35. In your perception, did the RRT intervention induce any change in handwashing behaviour? Why? (check if RRT distributed soap, to which households)
36. Today, in your perception, among 10 households this community, how many wash hands with soap after using latrine/ defecating?
37. Are there any constraints in using soap to wash hand? (which ones)
38. Changes in experiences of Acute Watery Diahorrea from October 2018- October 2019 and up till December 2021

    What made change possible?

    Difficulties in achieving change
39. Can you explain how rights-holders of the RRT programme interventions were identified and selected? Would you say that this selection process was fair and favoured selection of people who were really in need of this kind of support? Why?
40. What is your opinion about the benefits of the RRT programme?

Subdomain: Gender equality and Vulnerable Groups

41. Do you think there were differences in the way women and men were reached by the RRTs from October 2018- October 2019 and up till December 2021? To what extent did the programme interventions reach the poorest / vulnerable as well in your community during the focal period? Do you think there were differences in the way the RRT packs and messages reached the wealthiest and most destitute? What about single mothers? Disabled persons? Orphans?
42. In your opinion do you think the RRT programme took the needs of all groups in the communities into account? To what extent did different groups in the community (men, women, girls and boys) have access to information and other services of the RRTs? Please give examples.
43. Any other comments or information that you would like to add.

Thank you very much for your participation,

12.7. Annex Informed Consent - Surveys

Informed Consent Form – Survey - RRT Members

Oversee Advising Group and AFCAR Consulting are conducting the Evaluation of Cholera Rapid Response Teams (RRT) Program in Four Governorates (Sana'a, Hajjah, Aden, and Ad Dali') in Yemen. The focus of the evaluation is on what happened from **October 2018 - October 2019** and other relevant periods up till **December 2021** in the RRT programme

This consent form explains the evaluation and the role of participants in the evaluation. Please consider this information and take as much time as you need. If you have questions at a later time, you can ask any of the members of the national evaluation team.

The purpose of the evaluation is to provide an impartial and independent assessment of cholera RRT performance in Yemen and identify key achievements, challenges, lessons learned, and practical recommendations for the upcoming phase of the programme.

To do this, the evaluation will focus on addressing the following objectives:

6. To assess the Yemen cholera RRTs and whether the governance, structure, composition, and objectives of the RRTs were appropriate to respond to the outbreak of cholera over the period targeted by the evaluation;
7. To determine the degree to which cholera RRTs engaged stakeholders;
8. To undertake analytical (qualitative and quantitative) assessment of the progress achieved in implementing the cholera RRT program and examine programme relevance/appropriateness and performance, identifying key successes, good practices, weaknesses, and gaps / constraints that need to be addressed;
9. Examine how the program has addressed cross-cutting issues such as gender and equity protections.
10. Assess the extent to which the RRT strategies and key interventions integrated equity and gender in its design, implementation and monitoring.

Voluntary Participation
We are inviting you to participate in this survey because you are a RRT member
Your participation in this survey is entirely voluntary. It is your choice whether to participate or not. You may change your mind and stop participating at any time.

Procedures
We would like to ask you some questions relating to the RRT Programme. We will ask you questions relating to strategies that aimed at addressing cholera/AWD outbreaks in the country and the focal governorates; your perceptions of the achievements and outcomes of the RRT Programme; how things worked out – what facilitated changes and how? What were the barriers faced? And areas for improvements.
To make sure that I don't forget or change what you are saying to me I ask for your permission to fill in the questionnaire in this device. All the information provide will be confidential. Please note that you can refuse to give your permission to this.

Duration
The survey will last for about 30-45 minutes
Benefits
There are no direct benefits to you from being in this evaluation. However, the data the interview will provide may give some important information to the policy makers and development partners to improve the RRT programme in the country and you may have an indirect benefit from that.
Risks, discomforts and rights to withdraw
There are no obvious physical, psychological, social, economic, legal, and emotional risks in participating

in this study. Participation in this evaluation is voluntary. During the interview, you are allowed to refuse to answer any question and you are allowed to stop the interview at any time. There are no consequences should you decide not to continue with the interview.

Confidentiality and Privacy

The information that you give us is completely confidential. We will not associate your name with anything that you say. We will not use personal identifiers for the information obtained. The researchers will have access to the raw data. The data will be kept in secure digital locations and will be destroyed or deleted after all the information have been mined.
Privacy will be assured during this survey by having it here.

Consent and contact

Have you got any questions you would like to ask?
Do you agree to answer the questions now?
If you have any other questions about this evaluation later you can contact the Lead Supervisor on (*mobile telephone no) : 711811151*

If you agree to participate after receiving the above information please sign below.

☐ Check for verbal consent

Read by Respondent [ ] Interviewer [ ]
Agreed [ ] Refused [ ]
Respondent: _____
Interviewer: _____ Date: ___/___/___

If Refused, the interviewer should inform the team lead for proper documentation.

Informed Consent Form – Household Survey

Oversee Advising Group and AFCAR Consulting are conducting the Evaluation of Cholera Rapid Response Teams (RRT) Program in Four Governorates (Sana'a, Hajjah, Aden, and Ad Dali') in Yemen. The focus of the evaluation is on what happened from **October 2018 - October 2019 and up till December 2021** in the RRT programme

This consent form explains the evaluation and the role of participants in the evaluation. Please consider this information and take as much time as you need. If you have questions at a later time, you can ask any of the members of the national evaluation team.

The purpose of the evaluation is to assess cholera RRT performance in your community from October 2018-December 2021

We are conducting this survey in order to find out the kind of access you and your household had to RRT services and to understand your perception of the quality of the services.

Voluntary Participation

We are inviting you to participate in this survey because your household was affected or was a firewall during the outbreak of 208/2019. Your participation in this survey is entirely voluntary. It is your choice whether to participate or not. You may change your mind and stop participating at any time. Please feel free to share your opinions on the different subjects proposed and rest assured that this information will be used in total confidentiality

Procedures

We would like to ask you some questions relating to the RRT Programme and the activities used in addressing Cholera/AWD at household level in your community. We will also ask you questions relating to changes that have occurred as a result of the programme.

To make sure that I don't forget or change what you are saying to me I ask for your permission to fill in the household questionnaire in this device. All the information provide will be confidential. Please note that you can refuse to give your permission to this.

Duration

The survey will last for about 30 minutes

Benefits

There are no direct benefits to you from being in this evaluation. However, the data the interview will provide may give some important information to the policy makers and development partners to improve the RRT programme in the country and you may have an indirect benefit from that.

Risks, discomforts and rights to withdraw

There are no obvious physical, psychological, social, economic, legal, and emotional risks in participating in this study. Participation in this evaluation is voluntary. During the interview, you are allowed to refuse to answer any question and you are allowed to stop the interview at any time. There are no consequences should you decide not to continue with the interview.

Confidentiality and Privacy

The information that you give us is completely confidential. We will not associate your
name with anything that you say. We will not use personal identifiers for the information obtained. The researchers will have access to the raw data. The data will be kept in secure digital locations and will be destroyed or deleted after all the information have been mined.

Privacy will be assured during this survey by having it here.

Consent and contact

Have you got any questions you would like to ask?

Do you agree to answer the questions now?

If you have any other questions about this evaluation later you can contact the Lead Supervisor on (*mobile telephone no) : 711811151*

If you agree to participate after receiving the above information please sign below.

☐ Check for verbal consent

Read by Respondent [ ] Interviewer [ ]
Agreed [ ] Refused [ ]
Respondent: _____
Interviewer: _____ Date: ___/___/___

If Refused, the interviewer should inform the team lead for proper documentation.

12.8. RRT Survey Questionnaire

Good morning/afternoon, my name is [Enumerator name]. We are undertaking an assessment of the RRT programme and you have been invited to participate in this survey because you are a RRT member. The information obtained from this survey will help us understand which aspects of the programme work for you and which aspects could be improved. There will be no penalty to you if you decide not to participate. Your participation is entirely voluntary and your answers and responses will not be completely anonymous (not attributed to any person).

We would greatly appreciate your help in responding to this survey. It will take about 30 minutes to complete

Section 1: Background Information		
OAG1Q1	Location _____	
OAG1Q2	Respondent's gender *1= Male 2= Female*	I__I
OAG1Q3	Position held _____	I__I
OAG1Q4	Activities carried out within the framework of the RRT programme	I__I
OAG1Q5	Years of experience	I__I__I
OAG1Q6	Briefly description of your role and responsibilities within the RRT programme _____	
OAG1Q7	How long have you been involved with the Yemen RRT interventions? *(In months)*	I__I__I
OAG1Q8	Before being part of RRT did you have any experience in Hygiene promotion and awareness campaigns? *1= Yes 2= No*	I__I
OAG1Q9	The Hygiene promotion and awareness campaign you implemented consisted in *(1= Yes 2= No)*: - one HH meeting per location? I__I - various HH meetings in the same location? I__I	
OAG1Q10	Did you mobilize media for Hygiene promotion and awareness campaign? *1= Yes 2= No*	I__I
OAG1Q11	Did you mobilize social influencer for Hygiene promotion and awareness campaign *1= Yes 2= No*	I__I

Section 2: Using Likert scale / or other rankings		
OAG2Q1	Perceptions of responsiveness of the programme to contextual and emerging realities *1= highly effective 2= effective 3= moderately effective 4= not very effective 5= Totally uneffective*	I__I
OAG2Q2	Perceptions of access to the most marginalized / vulnerable populations *1= highly effective 2= effective 3= moderately effective 4= not very effective 5= Totally uneffective*	I__I
OAG2Q3	Perceptions of adequacy of planned activities from October 2018-October 2019 and up till December 2021 *1= highly effective 2= effective 3= moderately effective 4= not very effective 5= Totally uneffective*	I__I
OAG2Q4	Perceptions of appropriateness of the mix of the intervention package (hygiene promotion, hand-washing, provision of soap, chlorine Kits etc.) *1= highly effective 2= effective 3= moderately effective 4= not very effective 5= Totally uneffective*	I__I
OAG2Q5	Perceptions of appropriateness of the mix of the intervention package (hygiene promotion, hand-washing, provision of soap, chlorine Kits etc.) *1= highly effective 2= effective 3= moderately effective 4= not very effective 5= Totally uneffective*	I__I
OAG2Q6	Perceptions on quality of management of programme's key activities *1= highly effective 2= effective 3= moderately effective 4= not very effective 5= Totally uneffective*	I__I
OAG2Q7	RRTs perceptions of adequacy and usefulness of the incentives *1= highly justified 2= justified 3= moderately justified 4= not very justified 5= Very unjustified*	I__I

OAG2Q8	RRTs perceptions of the motivation due to the incentives *1= highly effective 2= effective 3= moderately effective 4= not very effective 5= Totally uneffective*	I__I
OAG2Q9	Level of satisfaction due to the incentives *1= Very satisfied 2= satisfied 3= Fairly satisfied 4= unsatisfied 5= Very unsatisfied*	I__I
OAG2Q10	Perception of effectiveness of the alert system and the deployment of RRTs *1= highly effective 2= effective 3= moderately effective 4= not very effective 5= Totally uneffective*	I__I
OAG2Q11	Perception of timeliness of their responses in each governorate *1= Very satisfied 2= satisfied 3= Fairly satisfied 4= unsatisfied 5= Very unsatisfied*	I__I
OAG2Q12	Perceived quality of initial and refresher trainings *1= High quality 2= Average quality 3= Moderate quality 4= Bad quality 5= Very bad quality*	I__I

Section 3: Listings

OAG3Q1	Challenges in implementation 1. 2. 3. _____	
OAG3Q2	How different implementation challenges were addressed 1. 2. 3. _____	
OAG3Q3	RRTs' suggested / potential solutions to overcoming specific barriers to implementation 1. 2. 3. _____	
OAG3Q4	Ways specific needs of girls (including regarding privacy, security, menstrual hygiene) were addressed 1. 2 3. _____	
OAG3Q5	Perceptions of drivers of change from October 2018-October 2019 and up till December 2021 1. 2. 3. _____	
OAG3Q6	Listing of incentives provided to the RRTs 1. 2. 3. _____	
OAG3Q7	Any perverse outcomes due to the incentives 1. 2 _____	

OAG3Q8	RRTs' views of the most vulnerable groups for whom access was difficult 1. 2. 3. 4. _____	
OAG3Q9		

Section 4: Numerical		
OAG4Q1	Number of case HHs visited between October 2018-2019 and other relevant periods up till December 2021	I_I_I
OAG4Q2	Number of firewall HHs visited between October 2018-2019 and other relevant periods up till December 2021	I_I_I
OAG4Q3	Number of implemented activities consistent with the programme design	I_I_I
OAG4Q4	No of beneficiaries targeted and the actual number benefited	I_I_I

Text (Qualitative)

1. How things could have been donedifferently.....
.....
.....
2. Views of continuing challenges (issues that the RRTs did not address) for poor and most deprived groups
.....
.....
.....

12.9. Household Survey Questionnaire

Household Survey Questions

Introduction

Good morning/afternoon , my name is [Enumerator name]. We are undertaking an assessment for RRT programme in_____ [this area] to assess the RRT process and activities in addressing Cholera/AWD at household level in your community. These activities were designed to help prevent cholera outbreak and make a difference to the community and your lives. This assessment will help us understand which aspects of the programme worked for you and which aspects could be better managed. There will be no penalty to you and your community if you decide not to participate. Your participation is entirely voluntary and your answers and responses will not be attributed to any person.

We would greatly appreciate your help in responding to this survey. It will take about 30 minutes to complete

Eligibility questions

OAG0Q1	Would you be willing to participate? *1= Yes 2= No (If no, end the Interview)*	I__I
OAG0Q2	Knows about RRT program *1= Yes 2= No (If no, end the Interview)*	I__I
OAG0Q3	Have you been visited by RRT? *1= Yes, 2= No (If no, end the Interview)*	I__I

Interview Information

OAG0Q4	Respondent Name					
OAG0Q5	Respondent Status Female Head of household *1=Male head of household, 2=Other Adults: Specify*					
OAG0Q6	RESIDENTIAL ADDRESS:	Governorate	District	Subdistrict	Village/ City	
OAG0Q7	Respondent Phone :.....					
OAG0Q8	Place of Interview	Governorate	District	Subdistrict	Village/ City	
OAG0Q9	Interview Date: I__I__I/I__I__I/2022					
OAG0Q10	Interview Time	□ AM □ PM	Start Time :.....	End Time :.....	DURATION	
OAG0Q11	Interviewer Name :.....					
OAG0Q12	Supervisor Name :.....					

Section 1: Socio-Demographic Information

OAG1Q1	What is your age? *1= [18-25]; 2= [26-30]; 3= [31-40]; 4= [41-50]; 5= [51-60]; 6= +60*	I__I
OAG1Q1B	Gender of interviewee (Interviewer: Do not Ask) *1= Male; 2= Female*	I__I
OAG1Q2	Interviewee Occupation *1= Government employee; 2= Student; 3= Housewife; 4= Private sector employee; 5= Searching for a job; 6= Self-employed; 7= Retired; 8= Other: specify: _____*	I__I
OAG1Q3	What is the highest level of education have you completed? *1= Illiterate; 2= Read & write; 3= Primary school; 4= Diploma after primary school; 5= Secondary school or equivalent; 6= Diploma after secondary school; 7= Bachelors; 8= Masters and above; 9= Other, Specify .....*	I__I
OAG1Q4	Type of population *1= Displaced; 2= Host community; 3= Returned*	
OAG1Q5	Total number of members in the household: (Interviewer: Write totals first then breakdowns)	

Members/age	Number/Male	Number/Female	Total
0 to 5	I__I__I	I__I__I	I__I__I
6-17	I__I__I	I__I__I	I__I__I
18-59	I__I__I	I__I__I	I__I__I
60+	I__I__I	I__I__I	I__I__I
Total	I__I__I	I__I__I	I__I__I

OAG1Q6	Number of household members suffering from any chronic disease.	I__I
OAG1Q7	have you had another AWD case in your HH after the RRT intervention/visit? *1= Yes 2= No*	I__I
OAG1Q8	What is your monthly income? *1= No Income; 2= Less than 45,000 Y.R; 3=* 45,001 - 65,000 *Y.R; 4=* 65,001 *– 85,000 Y.R; 5=* 85,001 *– 105,000 Y.R; 6= 105,001 – 125,000 Y.R; 7= More than 1250,00 Y.R (Specify)… 8= Refused to answer*	I__I
OAG1Q9	Any other comments? _____	

Section 2: Process

OAG2Q1A	Were you an affected Case in 2018-2019? *1= Yes 2= No*	
OAG2Q1B	Were you a firewall Case in 2018-2019? *1= Yes 2= No*	
OAG2Q2	At that time (2018-2019): How did RRT knew about your case? (Read the options) *1= I went to the healthcare center and registered my case their 2= I informed the RRT directly in the field 3= I was a firewall H.H 4= I called the RRT 5= Others (specify)*	I__I
OAG2Q3	How long (time) did the RRT take to visit your H.H after you had reported your case? *1= Less than 24 hours; 2= 24 - 48 hours; 3= 48 - 72 hours; 4= More than 72 hours; 5= I am a firewall H.H*	
OAG2Q4	Did the RRT record your H.H information, and the current situation of your H.H water source and sanitation? *1= Yes 2= No*	
OAG2Q5	After the first visit, did the RRT visit your H.H again? *1= Yes 2= No* ***(If no, go to***	
OAG2Q6	If yes, how many times did the RRT visit your H.H (after the first visit)? (Interviewer: The number of visits until this interview date, excluding the first RRT visit) *1= One time; 2= Two times; 3= Three times 4= Four times; 5= Five times; 6= More than five times*	
OAG2Q7	Did any organization visit your H.H in 2019 regarding cholera prevention other than RRT? *1= Yes 2= No*	
OAG2Q8	If yes, could you share with us the name(s) of the organization(s)? *This can be of greater value for better collaboration among active organizations in the field* (Interviewer: Try to get the names of the organizations, such as Care, Save the Children, etc.) _____	
OAG2Q9	In your opinion, was the visit of RRT members different from those of these other organizations? *1= Yes 2= No* ***(If no, go to***	
OAG2Q10	If yes, in which aspect? _____	

Section 3: Hygiene Kit (Cholera Prevention Kit)

OAG3Q1	Did your H.H receive a Hygiene Kit from the RRT during the first visit? (Interviewer: Ask this question if you are interviewing an **AFFECTED CASE** ONLY; NOT a firewall) *1= Yes 2= No*	I__I
OAG3Q2	During the first visit, what items did your H.H received from RRT? Regardless of whether these items are part of the Kit or not? (Interviewer: Read the options to the interviewee) (Multiple choices Question) *1= Soap bars, 2= ashing powder, 3= tablets of Aquatabs 0.33, 4= Bleach167, 5= jerry cans*	I__I
OAG3Q3	*For each of the received items in which quantity?* *1= Soap bars* I__I__I__I *Bars , 2= ashing powder* I__I__I__I Kg, *3= tablets of Aquatabs 0.33* I__I__I__I *Tablets, 4= Bleach167* I__I__I__I *Litter, 5= jerry cans* I__I__I__I 20 *Liter Container*	I__I
OAG3Q4	Did you continue to buy for the H.H after the RRT first visit: *1= Yes; 2= No* Soap bars I__I Chlorine stocks I__I	I__I
OAG3Q5	For each of them, if no, why? *1= We can't afford it / It is expensive 2= It is useless / It is not important; 3= Other, Specify*	I__I

Section 4: Awareness Sessions and Educational Materials

OAG4Q1A	Did the RRT team educate (and provide) you with educational materials regarding cholera and hygiene? *1= Yes 2= No*	I__I
OAG4Q1B	If Yes, about what? (Multiple choices Question) *1= What is the cholera transmission context?* *2= What symptoms are associated with cholera* *3= The importance of wash hands?* *4= How to wash hands?* *5= When do you wash hands?* *6= Show you (in a demo-performed activity) how to wash your hands?* *7= The importance of cook food thoroughly?* *8= How to treat the ill household members?* *9= How to sterilize clothes. bed, etc. of the affected cases?* *10= How to dispose of human waste properly* *11= The importance of wash vegetables/fruits* *12= How to make the water safe to drink?* *13= How to treat water with chlorine products?* *14= Other approach to treat the water such as Boil water, etc.? (Other than chlorine)* *15= Clean cooking utensils/vessels* *16= The importance of covering food to keep away from flies* *17= The use of Oral Rehydration Salts (ORS)? How to prepare the ORS at home?* *18= Where are the locations of the healthcare facilities?* *19= How to inform the Monitoring Centers about any affected or Suspected case?* *20= Importance of cholera vaccine*	

Section 5: Knowledge

OAG5Q1	What causes cholera? (Interviewer: Do not read and select all apply) (Multiple choices Question) *1= Drinking dirty water 2= Eating dirty food; 3= Unwashed fruits/vegetables; 4= Flies/insects 5= Poor hygiene/not washing hands 6= Don't Know 7= Other specify, _____*	I__I
OAG5Q2	How would you treat cholera for yourself or family members? *1= Go to cholera treatment center 2= Use oral rehydration solution 3= Use homemade sugar-salt solution 4= Go to a traditional healer 5= Home remedy 6= Cannot be treated 7= Don't know; 8= Other Specify: _____*	I__I
OAG5Q3	What symptoms are associated with cholera? (Multiple choices Question) *1= Fever 2= Vomiting 3= Watery diarrhea 4= Stomach/abdominal pain 5= Bloody diarrhea 6= Dehydration 7= Don't know 8= Other Specify_____*	I__I
OAG5Q4	How can you prevent you or your family members from becoming ill with cholera? (Interviewer: Do not read and select all apply) (Multiple choices possible) *1= Wash hands with soap and water 2= Cook food thoroughly 3= Wash vegetables/fruits 4= Dispose of human waste properly 5= Boil water before drinking 6= Clean cooking utensils/vessels 7= Treat water with chlorine products 8= Cover food to keep away from flies 9= Cholera vaccine 10= Cannot be prevented 11= Don't know 12= Other, Specify: _____*	I__I
OAG5Q4	Whom have you heard from about preventing and treating cholera? (Interviewer: Do not read and select all apply) *1= RRT 3= Family member 4= Neighbor/friend 5= Healthcare center 6= Radio 7= TV 8= SMS Community meeting 9= Community health worker visiting home other than RRT 10= Mosque 11= Sign Boards 12= Other, Specify .....*	I__I
OAG5Q4	When do you usually wash your hands (Interviewer: Do not read and select all apply)? *1= After using the toilet 2= Before eating 3= After eating 4= Before cooking 5= After cleaning baby diapers/baby stools 6= After cleaning the home 7= Other, Specify*	I__I

Section 6: Attitude and Practice

OAG6Q1	What do you do to avoid being cholera-infected through food? What do you do to keep your food safe and clean? (Interviewer: Do not read and select all apply) *1= Cook the food thoroughly 2= Wash vegetables and fruits well 3= Clean cooking utensils/vessels 4= Cover foods 5= Store cooked foods in fridge 6= Other, Specify .....*	I__I
OAG6Q2	Do you have soap or detergent in the house? *1= Yes 2= No* ***(If No, go to OAG7Q1)***	I__I
OAG6Q3	Interviewer: If "Yes" OR "Don't know", get permission to look at existing soap near water source. If permitted, continue with the interview; **if not go to OAG6Q6**	I__I
OAG6Q4	Is the soap close to water source? *1= Yes 2= No*	I__I
OAG6Q5	Is the soap used or new? *1= Yes 2= No*	I__I
OAG6Q6	For which purpose do you usually use the soap or detergent? (Interviewer: Do not read and select all apply)? *1= Washing hands 2= Bathing 3= Washing Clothes 4= Cleaning the house 5= Cleaning utensils / vessels 6= Other, Specify .....*	I__I

Section 7: Satisfaction and Perceptions

OAG7Q1	Regarding the RRT visits of 2018-2019) On a scale of 1 to 5 how satisfied were you with (*1= Extremely Unsatisfied 2= Unsatisfied 3= Satisfied / Dissatisfied 4= Satisfied 5=Extremely Satisfied)*:	RRT response time	RRT Activities	The quantity of the distributed items	Clarity of RRT communication	Addressing your questions	RRT Enthusiasm during their visit	
		I__I	I__I	I__I	I__I	I__I	I__I	
OAG7Q2	If the answer is 1, or 2. Why? The key reason	_____	_____	_____	_____	_____	_____	
OAG7Q3	To what extent have you/your family hygiene practice improved from 2019 -2021*1= Much Worse 2= Worse 3= No change 4= Improved 5= Significantly improved*							I__I

OAG7Q4	If the answer 1, or 2. Why? The key reason.	_____	_____	_____	_____	_____	_____ __	
OAG7Q5	In general, to what extent did the RRT interventions made improvements on you and your family? *1= Much Worse 2= Worse 3= No change 4= Improved 5= Significantly improved*							I__I
OAG7Q6	What are the new behaviors/practices has your family been doing based on RRT visit? (Interviewer: Do not read and select all apply) *1= Wash hands with soap and water; 2= Cook food thoroughly; 3= Wash vegetables/fruits; 4= Dispose of human waste properly* *5=Boil water; 6= Treat water with chlorine products; 7= Cover food to keep away from flies; 8= Do not Know; 9= Other specify: .....*							I__I
OAG7Q7	On a scale of 1 to 5 what extent do you agree with *(1= Strongly Disagree; 2= Disagree; 3= Agree/Disagree; 4= Agree; 5= Strongly Agree)*			Q1 If the answer of Q40 is 1 or 2, what were your priority needs at the time of RRT intervention? *(Interviewer: Do not read and select all apply) 1= Food; 2= Cash Assistance; 3= Education; 4= Nutrition 5= Water Source; 6= Health; 7= Other, Specify .....*				
	Number of cholera-affected people has declined because RRT intervention I__I The timeliness of RRT intervention was appropriate I__I RRT intervention addressed your priority needs? I__I			I__I I__I I__I				
OAG7Q8	Q1 In case of further outbreaks, do you have any suggestions to improve the RRT interventions, kit composition, or information received from RRT? (Interviewer: Note down three suggestions max)							

Section 8: FRC Test for Stored Water at Household Level

OAG8Q1	What is the main source of water used by your H.H? *1= Piped water, in house; 2= Piped water, public; 3= Well, protected; 4= Well, unprotected*	I__I
OAG8Q2	Do you have a container to store drinking water? *1= Yes 2= No*	I__I
OAG8Q3	Interviewer: Have a look at the main water container. How do you rate its cleanliness? *0= I Was Not Permitted to Check; 1= Dirty; 2= Moderately Dirty; 3= Clean*	I__I
OAG8Q4	Interviewer: Did you test the drinking water? *1= Yes 2= No*	I__I
OAG8Q5	If Yes, Testing result: _____	
OAG8Q6	If No, why?: _____	
OAG8Q7	Any other comments? _____	

Closing Remarks (for Interviewer):

1. Thank you for your time. I assure you of the confidentiality of the information you have provided and as indicated earlier, these honest answers will help the project improve.
2. If the need arise, can our supervisor call you to ask for clarifications regarding some of the questions and answers above.
3. If you agree, what is the time suits you best to call? .....

12.10. List of Stakeholders interviewed

#	Governorate	District	Organization	Name	Position	Years of Experience	Respondent's gender
1	Amanat Al Asimah		UNICEF	Sa'ad Al Sady	Sana'a Hub Official		Male
2	Amanat Al Asimah		WASH Cluster	Yassin Taha Yassin Al Ademi	Information Management Officer	4	Male
3	Amanat Al Asimah		WHO	Abdulmalek Mufadal	WASH Official	23	Male
4	Ibb		InterSoS	Akram Al Wajih	Water Cluster Member and Data Entry	4	Male
5	Amanat Al Asimah		ResponseMena Organization	Mohammed Abdullah Hashim	CEO of ReMENA	12	Male
6	Aden		Taiba Foundation for Development	Sarah Fuad Al Sharjabi			Female
7	Amanat Al Asimah		ADRA	Hani Al-Kwly	In the past, I was with the International Medical Authority since 2017 until 2019 as a coordinator for Sana'a Governorate. Then I moved to ADRA as supervisor for WASH and supervisor on Water Technical Teams		Male
8	Amanat Al Asimah		Sanitation Emergency Unit	Fateh Ali Alansi	RRT Head (Technical Official for the Program Activities)	6	Male
9	Al Dhale'	Al Dhale'e -Ozla Hajr	Health Center-Lakat Al Douki	Marina Abdullah Ahmed Hussein	Commuity Midwife	6	Female
10	Al Dhale'	Al Azareq	Health Center-Helhal	Zain Obadi Ahmed	Health Center Director	7	Male
11	Al Dhale'	Al Azareq	Al-Azareq District Health Office	Abdo Abdullah Hassan Al-Muhrabi	Health Officer	15	Male
12	Al Dhale'e	Al Azareq	Health Unit-Hourat Ghania	Saleh Mohsen Al Maqraei	Health Unit Director	16	Male
13	Al Dhale'e	Al-Dhale'e	Al Nassr Hospital	Ahmed Ali Naji	Assitant Doctor	10	Male

14	Al Dhale'e	Al Azareq	Al Azareq Rural Hospital	Aqeel Ali Saleh	Al Azareq Rural Hospital Manager	33	Male
15	Aden	Dar Sa'ad	Charitable Health Center- Al Basateen	Enas Obaid Ali	The Center Head	10	Female
16	Aden	Al Tawahi	Al Tawahi Medical Complex	Abdullah Abdulrahim Abdullah Karankda	Al Tawahi District Monitoring Coordinator	20	Male
17	Aden	Mualla	Al Mualal- Health Complex	Salwah Ali Abduh	Monitoring Coordinator	9	Female
18	Aden	Al Buraiqah	Al Buraikah Health Complex	Gamila Bazuhair	Monitoring Coordinator- Al Buraiqah District	8	Female
19	Aden	Sirah	Health and Population Office	Wafa Mohammed Abdullah Tarmom	Monitoring Coordinator- Sirah District	30	Female
20	Aden		Ministry of Health	Dr.Hana Ahmed Hussein Al Saqaf	Retired now- Communication Officers Coordinator	35 Years - RRT from the beginning	Female
21	Aden		Aden Health Office	Dr. Hiba Rashed Sharaf Sallam	Communication Officer for Daily Reporting (Monitoring)		Female
22	Al Dhale'e	Al Dhale'e	National Authority for Rural Water Supply Projects - Al Dhale'e Governorate	Saddam Abduh Saleh Al Wueel	Deputy Branch Manager- Governorate's Assistant Coordinator to Rapid Response Projec	16	Male
23	Hajjah	Hajjah City	National Authority for Rural Water Supply Projects - Hajjah Governorate	Basem Ahmed Sallam Al Ariqi	Rural Water Project- Manager, Hajjah- and Coordinator for Hodeidah Hub at Rapid Response Project since 2019-5/2021	14	Male
24	Sana'a	Sana'a	Emergency unit	Hisham Saif Naji Al-Qudsi	Hub Coordinators-Sana'a Hub	15	Male

25	Aden		The General Authority for Rural Water Projects	Shakher Mohammed Ahmed Saleh	Respone Project Coordinator- Aden Governorate since mid 2019	4	Male
26	Sa'adah		Emergency unit	Abdullah Al-Qadi	Coordination Administration at Emergency Unit - Sa'adah Coordinator at Rapid	12	Male
27	Al Dale'e	Al Dale'e	The General Authority for Rural Water Projects- Al Dale'e Governorate Branch	Ghazi Saif Saleh	General Manger of Authority Branch/Al Dale'e- Governorate Coordinator in Response Proejct	18	Male
28	Amanat Al Asimah		The General Authority for Rural Water Project- Amanat Al Asima Branch	Rashad Mohammed Ahmed Al Haj	Information Management Head- The General Authorty for Rural Water Project in Amant Al Asimam/Rapid Response Project Coordinator in Amant Al Asima	14	Male
29	Dhamar	Dhamar City	The General Authority for Rural Water Project- Dhamar Governorate Branch	Saleh M. Al Falahi	Position	18	Male
30	Aden		WASH Emergency Unit	Awsan Hassan Saleh Garhoum	Emergency Unit Project Officer- Aden Governorate Coordinator in Emergency Response Project-2018 and 2019	Years of Experience	Male
31	Aden		Emergency Unit	Helmi Ana'am	Aden Hub Coordinator for the period 3/2018 to 11/2019	22	Male
32	Taiz		The General Authority for Rural Water Projects-Taiz Governorate	Amer Abdulrahman	Deputy Manager of the General Authority for Water Project - Taiz and Assitant Coordinator for Rapid Resposne Team- Taiz	Years 14	Male
33	Amanat Al Asimah		Emergency Unit	Abdulmonem Salah	Ibb Hub Coordinator- Rapid Response Team Project	15 years	Male

34	Aden		Emergency Unit-Aden	Naif Abdulaziz bin Shaiban	Deputy General Manager - and Financial and Administrative Manager	17	Male
35	Al Dhale'e	Al Azareq	Wa'elan Well Project	Ali Ahmed Hussein Naji	Community Committee Member- Wa'elan Well Project		Male
36	Al Dhale'e	Al Azareq	Asfal Dabaan well project	Mohammad Ali Mohammad Mohsen	Community Committee Member		Male
37	Al Dhale'e	Al Dhale'e	Al Radou Water Project Association	Abduljalil Abdullha Muthana	Project Assistant Manager		Male
38	Al Dhale'e	Al Dhale's	Alzand Water Project	Nassr Mohamoud Abdullah Nassr	Alzand Water Project Financial Officer		Male
39	Al Dhale'e	Al Azareq	Community leader	Abdulsalam Saleh Muthana	Community Committee Head and School Principal		Male
40	Al Dhale'e	Al Azareq	Community Committee to manage Al Mawadeq Water Project	Nabil Ahmed Hassan Sufian	Al Mawadeq Water Project Committee Head		Male
41	Al Dhale'e	Qatabah	Community leader	Sheikh/Musaed Hussein Al Ashab	Social figure, dignitary, Ghul Al Daimah Village, Muris		Male
42	Al Dhale'e	Qatabah	Community leader	Hassan Ali Muthana Olaiah	Health Unit Head, Al Madrag village, Community Committee Member		Male
43	Al Dhale'e	Qatabah	Community leader	Sheikh Abdulfatah Ismael Al Hadi	Community Committee Member, Al Marwai Village, Muris Ozla		Male
44	Al Dhale'e	Qatabah	Local Council	Mr. Najeeb Al Jalal	Local Council Member, Qatabah District, Services Committee Head		Male
45	Al Dhale'e	Al Dhale'e	Community leader	Ala Abdullah Ahmed	Social figure		Male
46	Al Dhale'e	Al Dhale'e	Community leader	Sheikh Mutia Ahmed Naji	A sheikh of Hajar Ozla Areas		Male
47	Al Dhale'e	Al Dhale'e	Local Council	Askar Naji	The Council Local Member, Al Dhale'e District		Male

12.11. Household sites visited

Governorate	District	Subdistrict	Village/ City
Al Dhale'e	Al Azariq	Mithead	Haraf Mithead
Al Dhale'e	Al Azariq	Al-Qufla	Al-Jadra
Al Dhale'e	Al Azariq	Al-Qufla	Al-Rakb
Al Dhale'e	Al Azariq	Al-Qufla	Habil Al-Zaahir
Al Dhale'e	Al Azariq	Dhi Jalal	Althiyla
Al Dhale'e	Al Azariq	Dhi Jalal	Waealan
Al Dhale'e	Al Azariq	Khishan	Al-Kabina
Al Dhale'e	Al Azariq	Al-Qufla	Al-Jadra
Al Dhale'e	Al Azariq	Al-Qufla	Al-Rakb
Al Dhale'e	Al Azariq	Dhi Jalal	Habil Al-Zaahir
Al Dhale'e	Al Azariq	Dhi Jalal	Al-Thiyla
Al Dhale'e	Al Azariq	Dhi Jalal	Waealan
Al Dhale'e	Al Azariq	Khishan	Al-Kadima
Al Dhale'e	Al Dhale'e	Habil Jabari	Habil Jabari
Al Dhale'e	Al Dhale'e	Al Dhale'e	Alearshiu
Al Dhale'e	Al Dhale'e	Habil Jabari	Habil Jabari
Al Dhale'e	Qa'atabah	Qa'atabah	Al-Hadaadin Neighborhood
Al Dhale'e	Qa'atabah	Main Steet	Main Steet
Al Dhale'e	Qa'atabah	Qa'atabah	Al-Amn Neighborhood
Al Dhale'e	Qa'atabah	Qa'atabah	Al-Diyafa Neighborhood
Al Dhale'e	Qa'atabah	Qa'atabah	Al-Wahdah Neighborhood
Al Dhale'e	Qa'atabah	Qa'atabah	Al-Amn Neighborhood
Al Dhale'e	Qa'atabah	Harat Al-Amin	Al-Wahdah Neighborhood
Al Dhale'e	Qa'atabah	Qa'atabah	Al-Madafin Neighborhood
Aden	Al Mualla	Al Mualla	Al Mualla
Aden	Al Mualla	Hafon	Al Mualla
Aden	Al Mualla	Madram Street	Main Steet
Aden	Al Mualla	Sheikh Isaac	Al Mualla
Aden	Al Mualla	Kabsuh	Al Mualla
Aden	Ash Shaikh Outhman	Al-Mahariq	Al-Mahariq

Aden	Ash Shaikh Outhman	Al-Wahdah	Al-Wahdah	
Aden	Ash Shaikh Outhman	Ottoman Code	New Al-Mimdaruh	
Aden	Dar Sad	Dar Sad	Al-Bas=satin	
Aden	Kritar - Sirah	Al-Tilal Neighborhood	Al-Tawiluh	
Aden	Kritar - Sirah	Sirah	Sirah	

12.12. RRT sites visited

Governorate	District	Subdistrict	
Aden	Al Burayqah	Al Burayqah	
Aden	Al Mansurah	Al Mansurah	
Aden	Al Mansurah	Al-Qahira	
Aden	Al Mansurah	Block 37	
Aden	Al Mansurah	Remy	
Aden	Al Mansurah	Abdulaziz Neighborhood	
Aden	Al Mansurah	Khalifa Neighborhood	
Aden	Al Mansurah	Al Mansurah	
Aden	Al Mualla	Main Street	
Aden	Al Mualla	Al Mualla	
Aden	Ash Shaikh Outhman	Al-Drin	
Aden	Ash Shaikh Outhman	Ash Shaikh Outhman	
Aden	Ash Shaikh Outhman	Love Street	
Aden	Ash Shaikh Outhman	Al-Mimdaruh	
Aden	At Tawahi	Muharraq Neighborhood	
Aden	At Tawahi	Al-Shula	
Aden	Dar Sad	Al-Basatin	
Aden	Dar Sad	Greet City	
Aden	Dar Sad	Dar Sad	
Aden	Khur Maksar	October Neighborhood	
Aden	Kritar - Sirah	Kritar - Sirah	
Al Dhale'e	Al Azariq	Al-Azariq	
Al Dhale'e	Al Azariq	Bilad Al-Ahamdi	

Al Dhale'e	Al Azariq	Hurat Ghania	
Al Dhale'e	Al Azariq	Dhi Jalal	
Al Dhale'e	Al Azariq	Hurat Ghania Khathmi	
Al Dhale'e	Al Azariq	Rabat Village	
Al Dhale'e	Al Azariq	Al-Qufla	
Al Dhale'e	Al Dhale'e	Al Dhale'e	
Al Dhale'e	Al Dhale'e	Nasham	
Al Dhale'e	Al Dhale'e	Al-Jamaruk	
Al Dhale'e	Al Dhale'e	Dhi Haran	
Al Dhale'e	Al Dhale'e	Hukula	
Al Dhale'e	Al Dhale'e	Ghul Samid	
Al Dhale'e	Al Dhale'e	Bilad Al-Ashraf	
Al Dhale'e	Al Husha	Dawran	
Al Dhale'e	Al Husha	Eimara	
Al Dhale'e	Ash Shuayb	Al-Dahra	
Al Dhale'e	Ash Shuayb	Al-Sharaf	
Al Dhale'e	Damt	Bani Saif Al-Aali	
Al Dhale'e	Damt	Al-Mibyad	
Al Dhale'e	Damt	Damt	
Al Dhale'e	Qa'atabah	Al-Waha Neighborhood	
Al Dhale'e	Qa'atabah	Qa'atabah	
Al Dhale'e	Qa'atabah	Al-Habibal Neighborhood	
Al Dhale'e	Qa'atabah	Maris	
Al Dhale'e	Qa'atabah	Al-Habibal Neighborhood	
Al Dhale'e	Qa'atabah	Qarin Al-Fahd	

12.13. List of Documents Reviewed

N	Documents Reviewed / Used
1	Yemen Acute Watery Diarrhea and Cholera Outbreak Standard Operating Procedures
2	A roadmap for more cost-effective and sustainable cholera response
3	Cluster WASH (Water, Sanitation and Hygiene)
4	Power point presentation of WHO/UNICEF 24th Joint Cholera Situation Updated Call
5	WASH section input for OVC
6	Power point presentation of the WASH Rapid Response Teams (RRTs) - Yemen
7	WASH section input -EMT
8	TERMS OF REFERENCE FOR INDIVIDUAL CONSULTANTS AND CONTRACTORS
9	YEMEN CRISIS EMERGENCY MANAGEMENT TEAM (YEMT)
10	Power point presentation of Strategic Direction to Cholera Control
11	Plans for complementary WASH interventions (Water, Sanitation and Hygiene (WASH) situation in Yemen: UNICEF REVISION_UPDATE_INPUTS)
12	WASH input COVID19 response tracking matrix
13	WASH Cholera Rapid Response Teams Theory of Change
14	UNICEF YEMENTERMS OF REFERENCE FOR SERVICES - INSTITUTIONS
15	Yemen cholera deep dive
16	Power point presentation on Using climate services for implementing early action for cholera Response in Yemen
17	Global Review of Water, Sanitation and Hygiene (WASH) Components in Rapid Response Mechanisms and Rapid Response Teams in Cholera Outbreak Settings Haiti, Nigeria, South Sudan and Yemen
18	Yemen Country Office Humanitarian Situation Report
19	UNICEF Supported WASH Interventions in Cholera Response in Yemen
20	UNICEF Evaluation Inception Report Checklist
21	UNOCA Yemen, Yemen humanitarian response project. Third party monitoring report of FSAC and WASH interventions September 30, 2020
22	Time plan for the EOR and Sub EORs activities in the Hubs/Govs
23	Steering Committee Terms of Reference
24	Power point presentation on the source of cholera cases during the 2019 epidemic wave in Yemen
25	CHOLERA LESSONS LEARNT WORKSHOP TECHNICAL WORKING GROUPS RECOMMENDATIONS - SANA'A (10-11 MARCH 2020, AL BUSTAN HOTEL)
26	Yemen Cholera outbreak WASH Rapid Response Teams

27	Daily Rapid Response Teams Update At the National Level
28	
29	RRTs full capacity team distribution
30	Rapid Response Teams - Overview
31	Prioritization suggestion RRTs map
32	INCEPTION REPORT Rapid Response Team (RRT) High-Level Indicative Evaluation at Household Level October 8, 2019 (Version #1)
33	RESEARCH INTO CHOLERA RAPID RESPONSE TEAMS (RRTs) IN HUMANITARIAN AND FRAGILE CONTEXTS
34	RRT ON-SITE MONITORING FORM
35	DESCRIPTIVE REPORT Rapid Response Team (RRT) High-Level Indicative & Descriptive Assessment at Household Level in Yemen March 24, 2020 (Version #3)
3	Power point presentation on Integrated Cholera Prevention and Control Strategic Plan
37	Health Rapid Response Teams - Overview
38	Preparedness and response planning
39	Terms of Reference – Evaluation of Cholera Rapid Response Teams (RRT) Program in Yemen
40	Responses of UNICEF Yemen to the clarifications raised by the GTFCC OCV WG
41	RE GTFCC approval of 1.6 million OCV doses
42	Re EOR data base
43	Re CDRSCs (RRTs) reports and maps
44	Programme progress/final report – to be completed by Government Implementing Partner as part of reporting with FACE (Sana'a hub, ibb hub, Alhodaida)
45	Organization of RRTs with MOWE , UNICEF and Third-Party Monitoring
46	Organization of RRTs with EOC/MOH, UNICEF and Third-Party Monitoring
47	Oral Cholera Vaccination (OCV) Multi-Year Strategy (2022-2024) South Yemen
48	Yemen Ma' rib Governate operational response plan to the influx of IDPs November 2021
49	Revised SOP Cholera Rapid Response Teams GARWSP-EU / UNICEF Yemen August 2019
50	Strengthening WASH Response in Cholera confirmed Locations Emergency Operation Room
51	UNICEF mission report for staff deployed in emergency
52	Marib situation overview
53	Highest villages in RRT
54	Key evaluation questions from Costed Evaluation Plan
55	Weekly epidemiological bulletin
56	Minutes of Meeting Emergency Operation Room WASH Response / Cholera Outbreak
57	Terms of Reference for

	Yemen Cholera outbreak WASH Crisis & Disasters Response Sustainable Committees
58	Twelfth WHO/UNICEF Joint Weekly Cholera Situation update and Preparedness/Readiness meeting call
59	Report of the CDRSCs
60	CHOLERA LESSONS LEARNT WORKSHOP TECHNICAL WORKING GROUPS RECOMMENDATIONS – ADEN (04-05 MARCH 2020, LOTUS HOTEL)
61	UNICEF Yemen CO Contingency Response Plan: Ma'rib Internal Displacement
62	Minute Cholera Task Force Thursday 12 November 2020
63	Yemen WASH RRTs Project Impact Report 27/04/2017 - 20/10/2018
64	WASH Activity planned and progress by district with OCV focus
65	Research Ethics Review Feedback Template

12.14. Annex - Quantitative tables and graphs

Table 11: Distribution of RRT members by gender according to Governorate and district

Governorate/District	Female	Male	Grand total
Aden	**25**	**25**	**50**
Al Burayqah	3	3	6
Al Mansurah	5	6	11
Al Mualla	1	3	4
Ash Shaikh Outhman	5	4	9
At Tawahi	1	1	2
Dar Sad	3	5	8
Khur Maksar	0	1	1
Kritar - Sirah	7	2	9
Al Dhale'e	**23**	**27**	**50**
Al Azariq	4	5	9
Al Dhale'e	7	11	18
Al Husha	4	3	7
Ash Shuayb	2	2	4
Damt	3	1	4
Qa'atabah	3	5	8
Total	**48**	**52**	**100**

Figure 21: Years of experience of RRT program's member

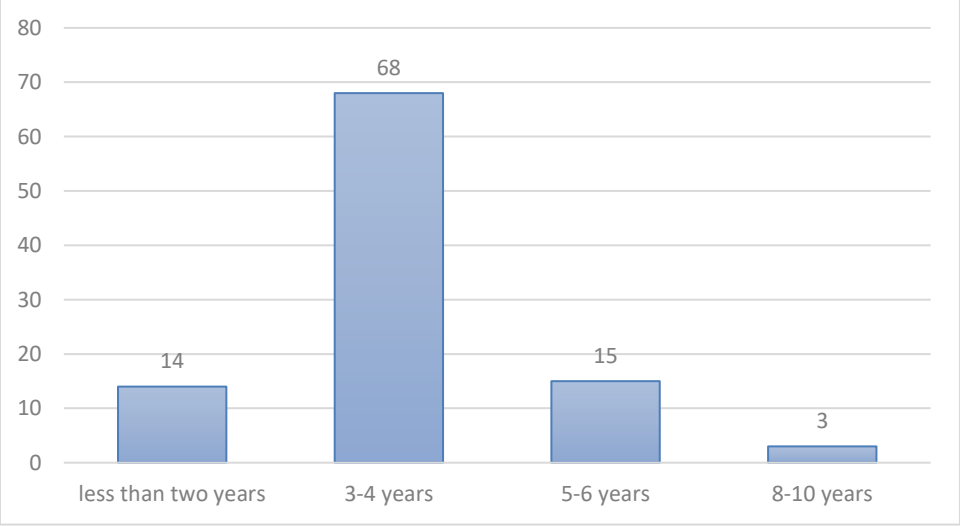


Figure 22: Time involving with the Yemen RRT intervention

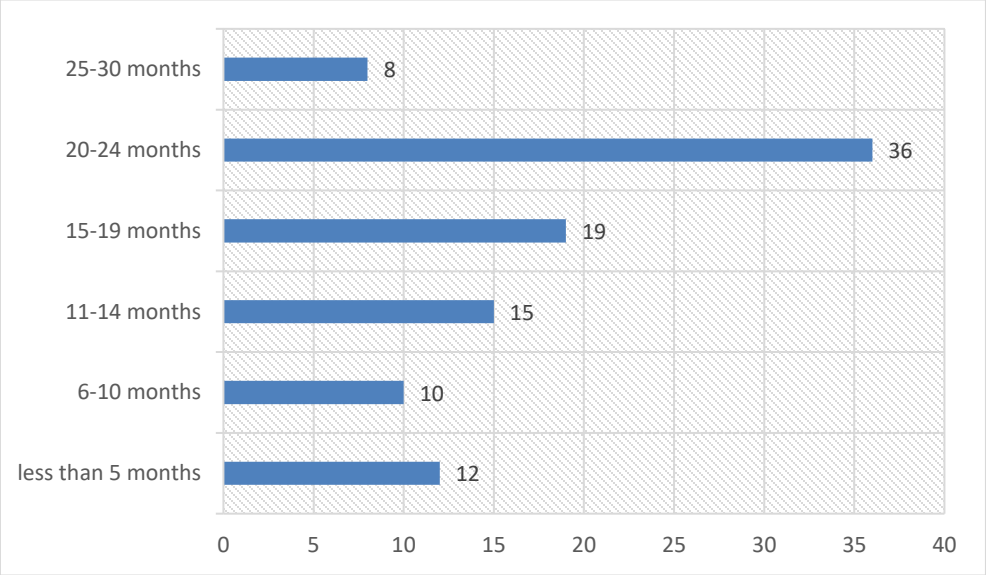


Figure 23: Distribution of RRTs according to the type of mobilization used for hygiene promotion

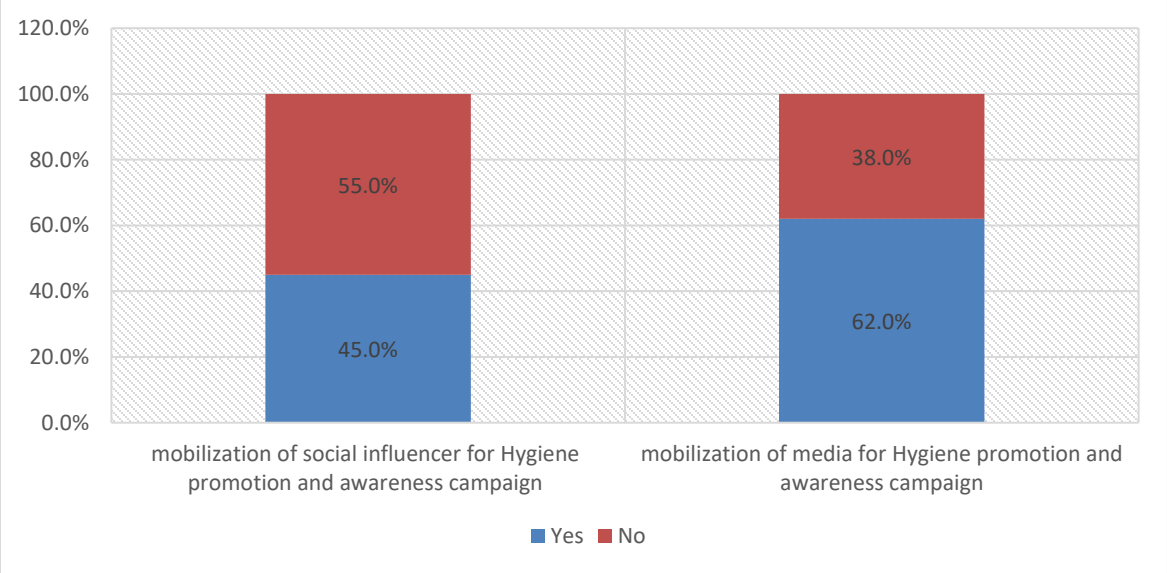


Figure 24: Distribution of RRTs according to their perception on intervention services offered to household

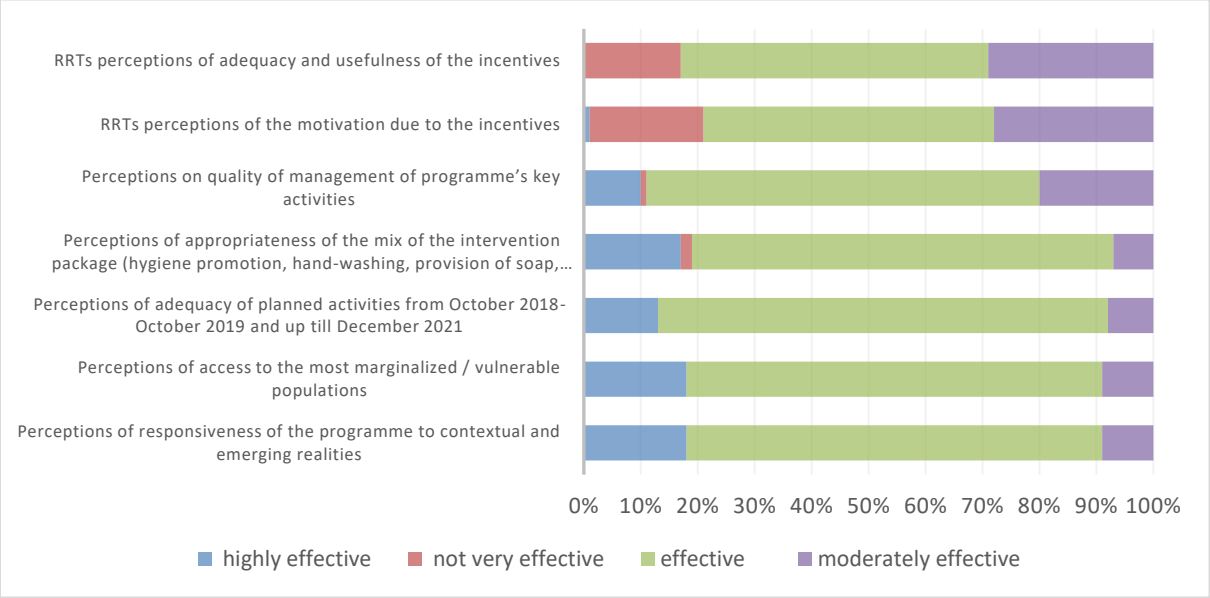


Figure 25: Level of satisfaction due to the incentives

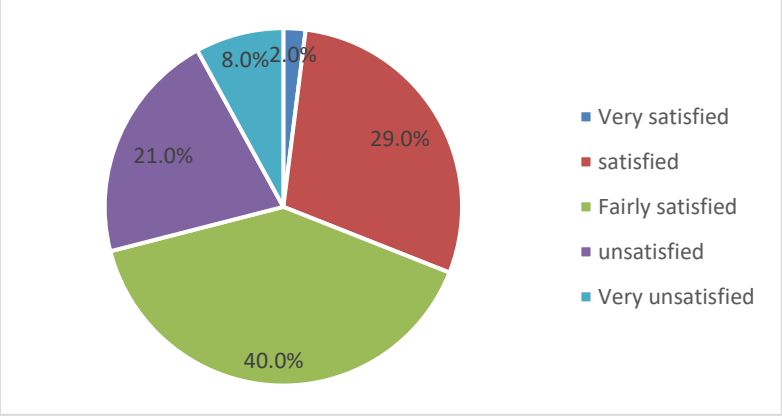


Figure 26: Perception of effectiveness of the alert system and the deployment of RRTs

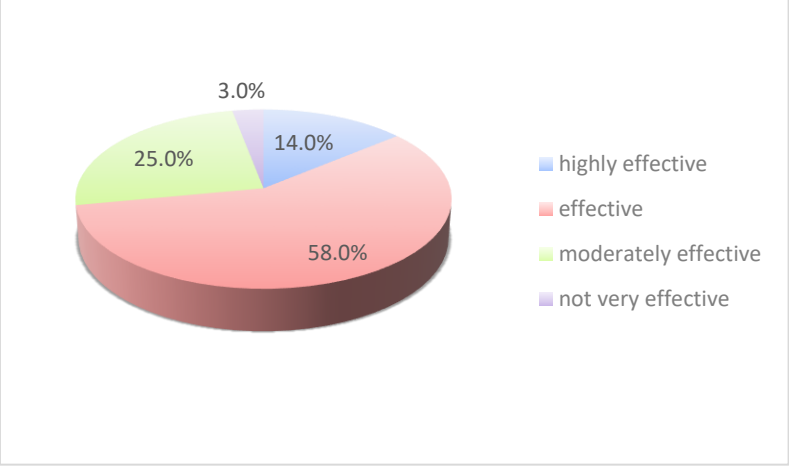


Figure 27: Distribution of RRT members by Governorate according to their perception of timeless of their intervention

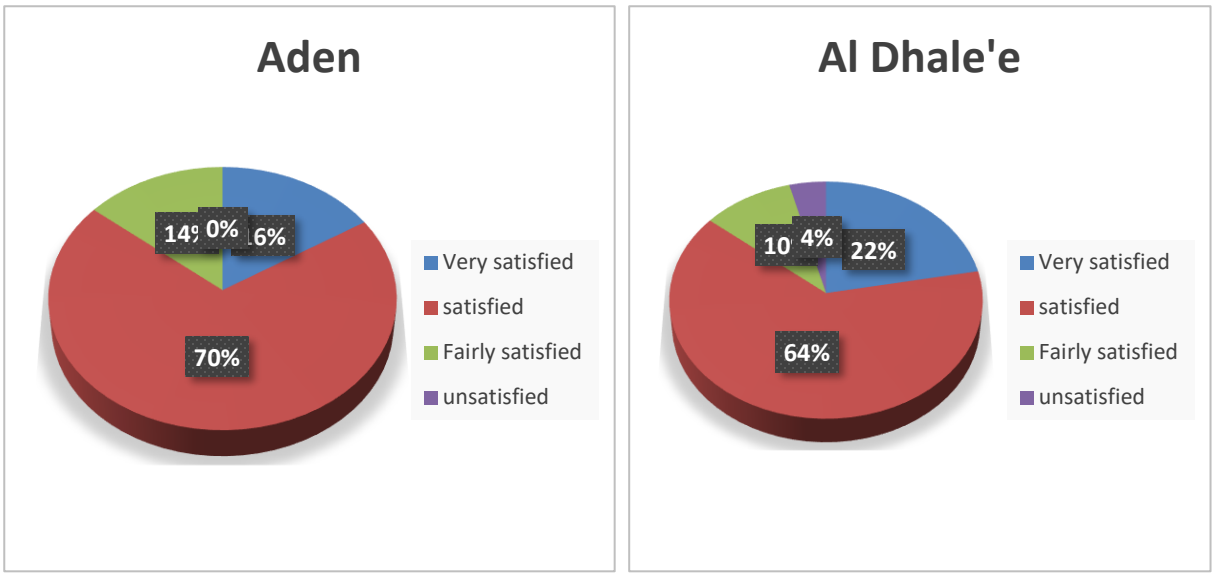


Figure 28: Perceived quality of initial and refresher trainings

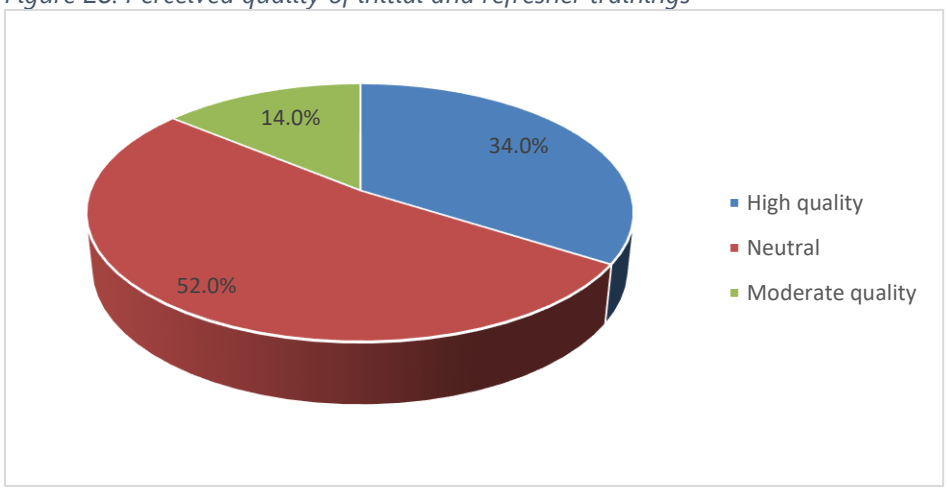


Figure 29: Challenges faced by RRT in implementation

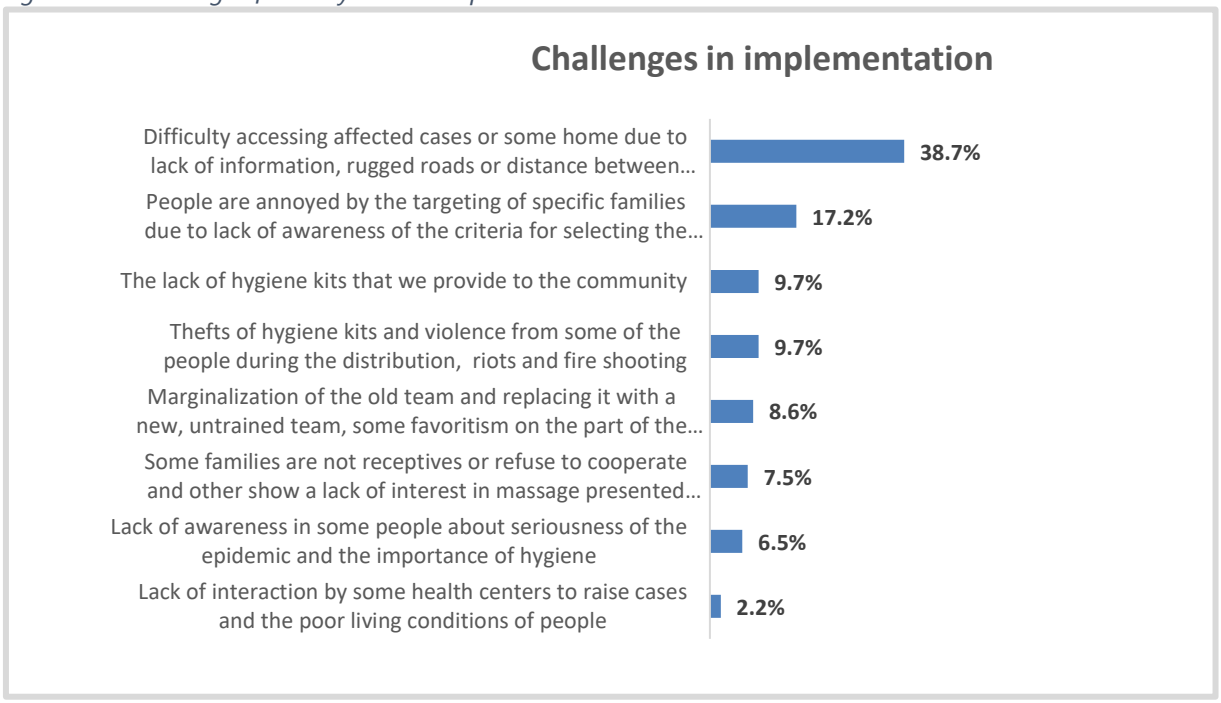


Table 12: Summarize of the results by RRT

	Min	Mean	Max	Total
Number of case HHs visited between October 2018-2019 and other relevant periods up till December 2021	0	151	3 000	13 424
Number of firewall HHs visited between October 2018-2019 and other relevant periods up till December 2021	0	1 788	10 000	157 360
Number of rights-holders targeted	0	1 112	6 051	111 210
Actual number benefited	0	1 292	6 000	129 216

Figure 30: Number of implemented activities consistent with the program design

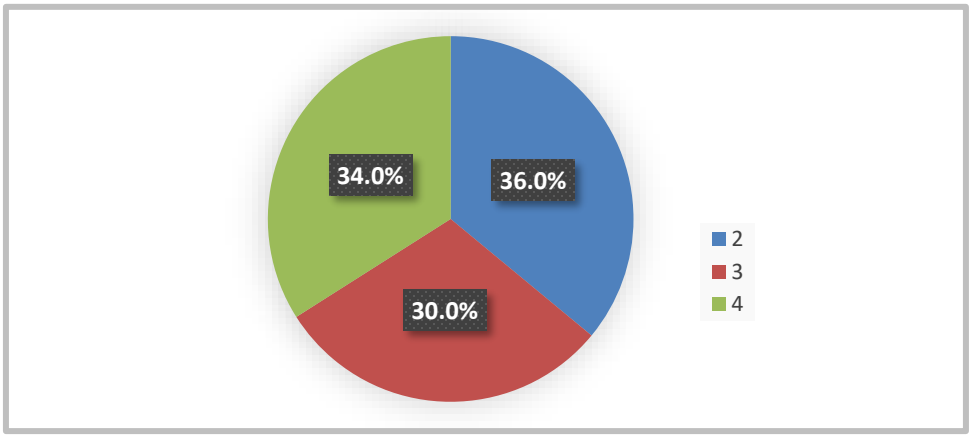


Figure 31: Distribution of respondent by gender

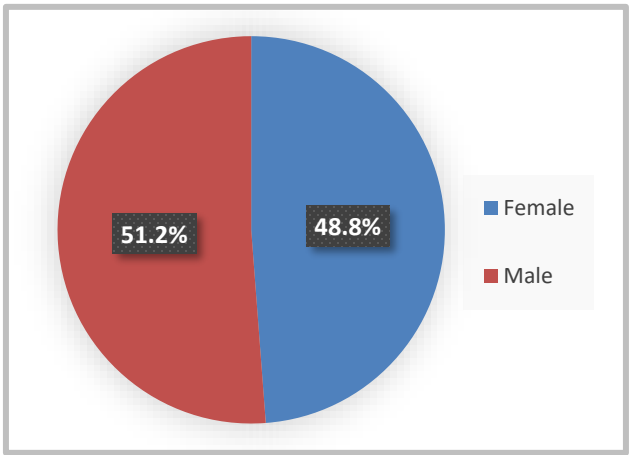


Figure 32: Distribution of household sample by Governorate

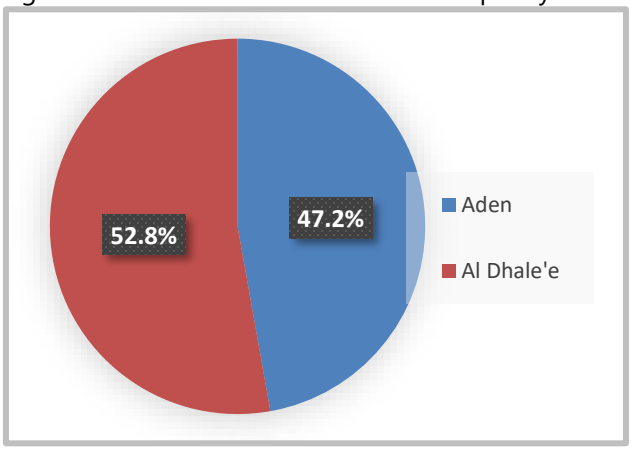


Figure 33: Proportion of household surveyed by district

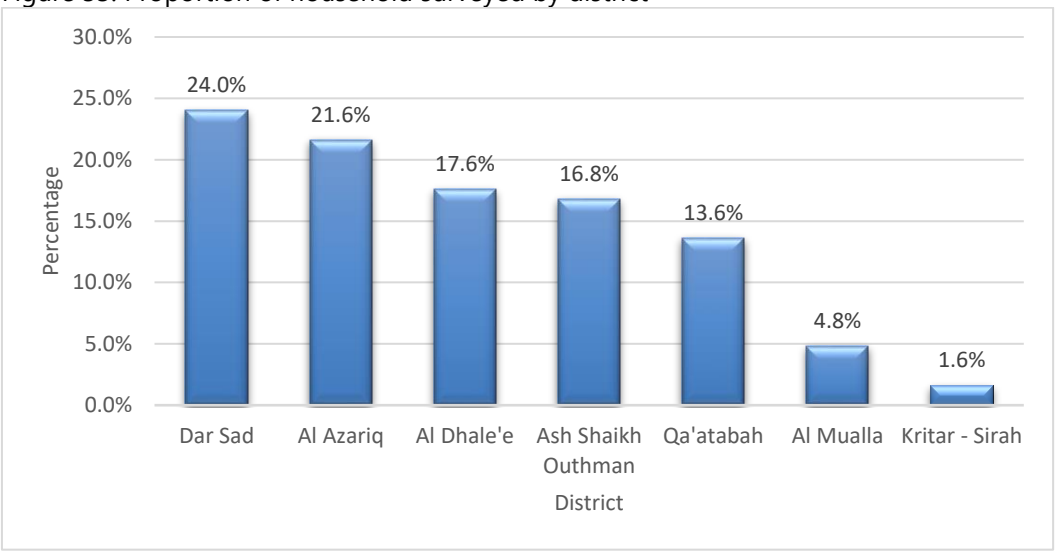


Table 13: distribution of household respondent by occupation according to their gender

Respondent Occupation	Female	Male	Total	Percentage
Government employee		8	8	6.4%
Housewife	47		47	37.6%
Other	1	4	5	4.0%
Private sector employee	3	4	7	5.6%
Retired	0	4	4	3.2%
Searching for a job	0	1	1	0.8%
Self-employed	5	38	43	34.4%
Student	5	5	10	8.0%
Total	**61**	**64**	**125**	**100.0%**

Figure 34: Distribution of household respondents by age

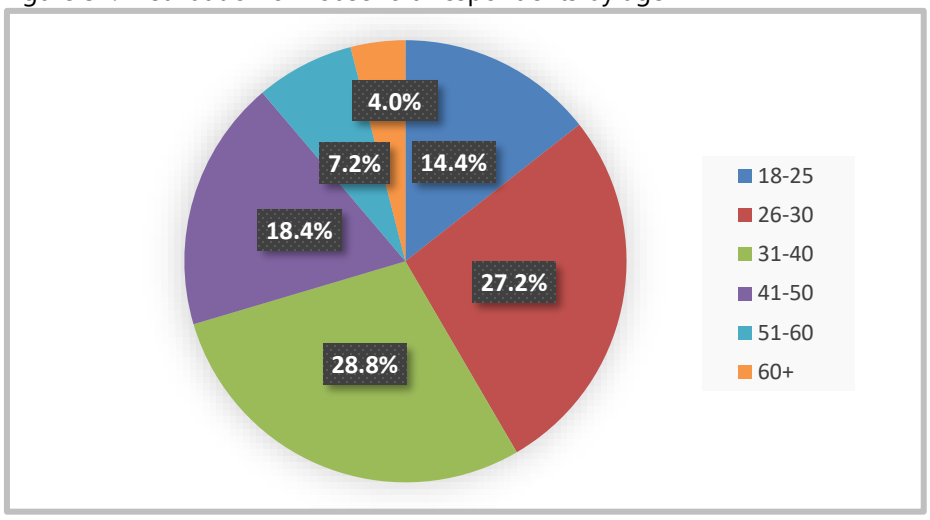


Figure 35: Distribution of household respondent by level of education

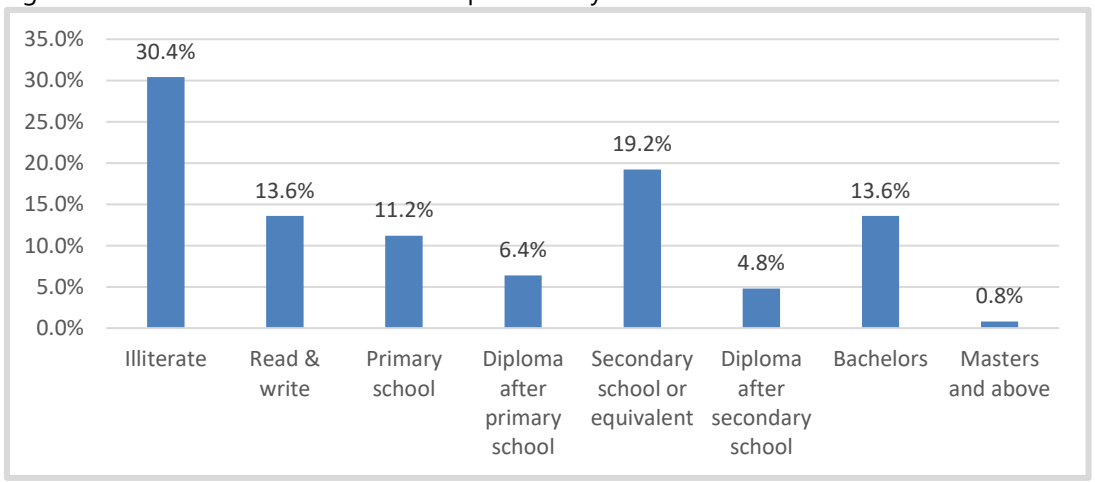


Table 14: Distribution of cases of chronic disease in household by the number of household member

		NUMBER OF HOUSEHOLD MEMBERS SUFFERING FROM ANY CHRONIC DISEASE		
		None	**At least one**	**Total**
TOTAL NUMBER OF MEMBERS IN THE HOUSEHOLD	**2-5**	29(63.0%)	17(37.0%)	**46(36.8%)**
	6-10	27(38.6%)	43(61.4%)	**70(56.0%)**
	11+	3(33.3%)	6(66.7%)	**9(7.2%)**
	Total	**59(47.2%)**	**66(52.8%)**	**125(100%)**

Figure 36: Share of total household by income

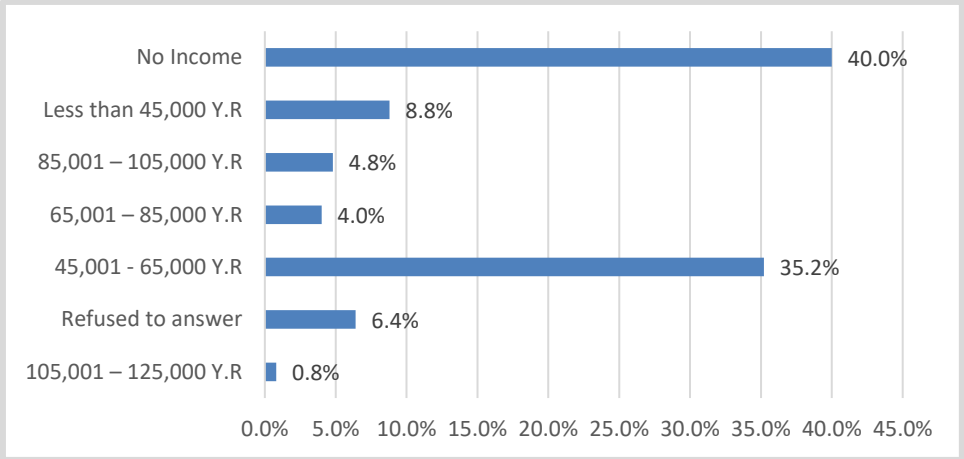


Figure 37: Total number of members in the household

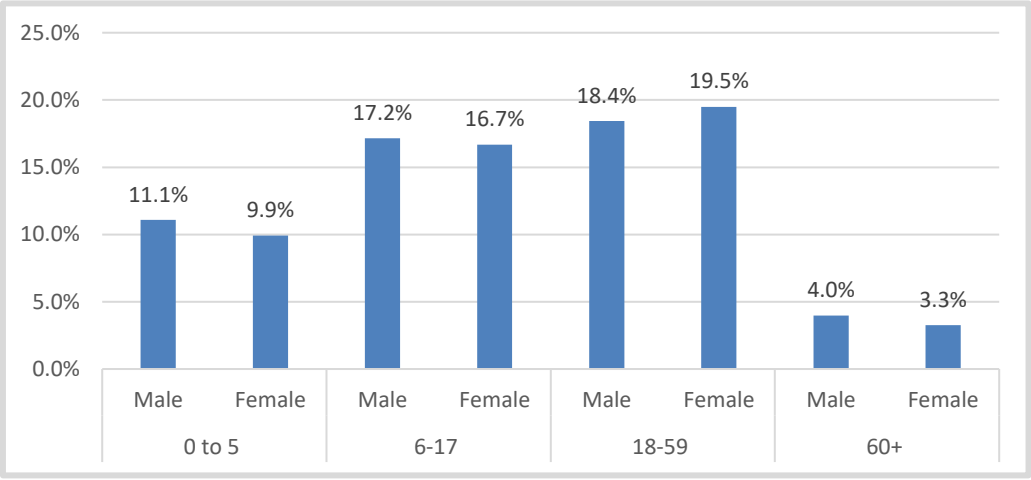


Figure 38: Percentage of household having another AWD case after the RRT intervention/visit

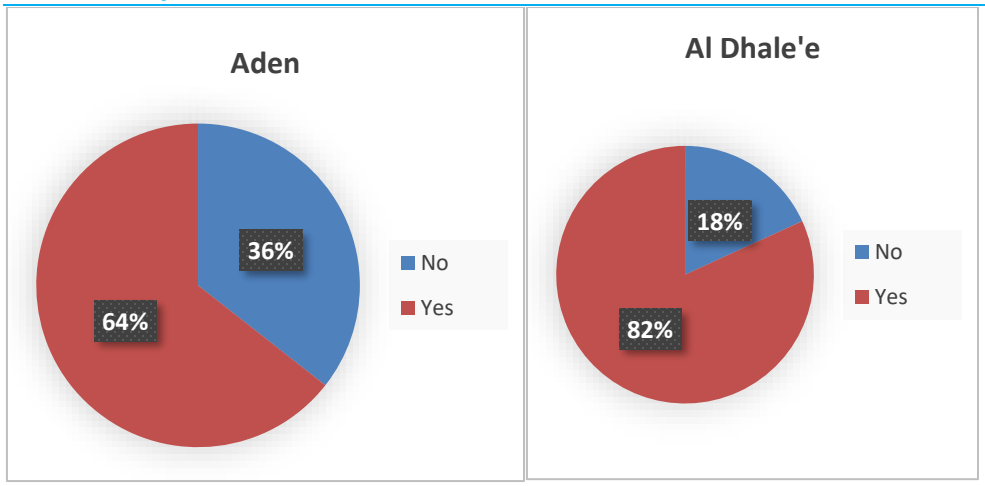


Figure 39: Channels of information of the RRT about cases in 2018-2019

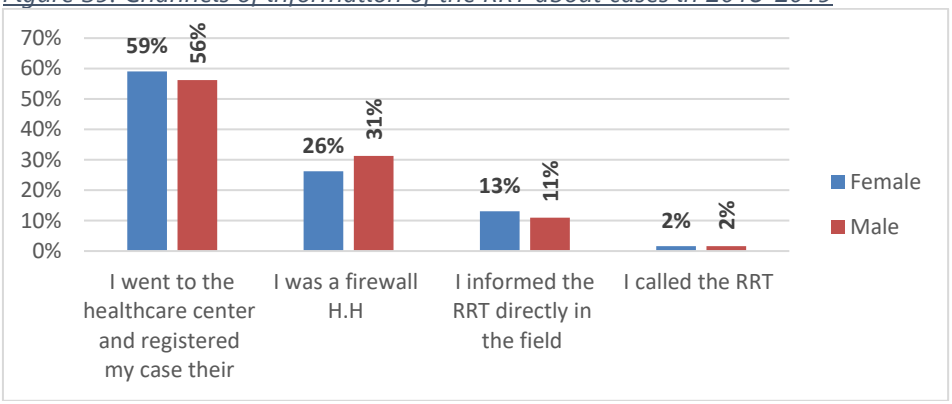


Figure 40: Distribution of household by time taking by the RRT to visit H.H after reporting of a case

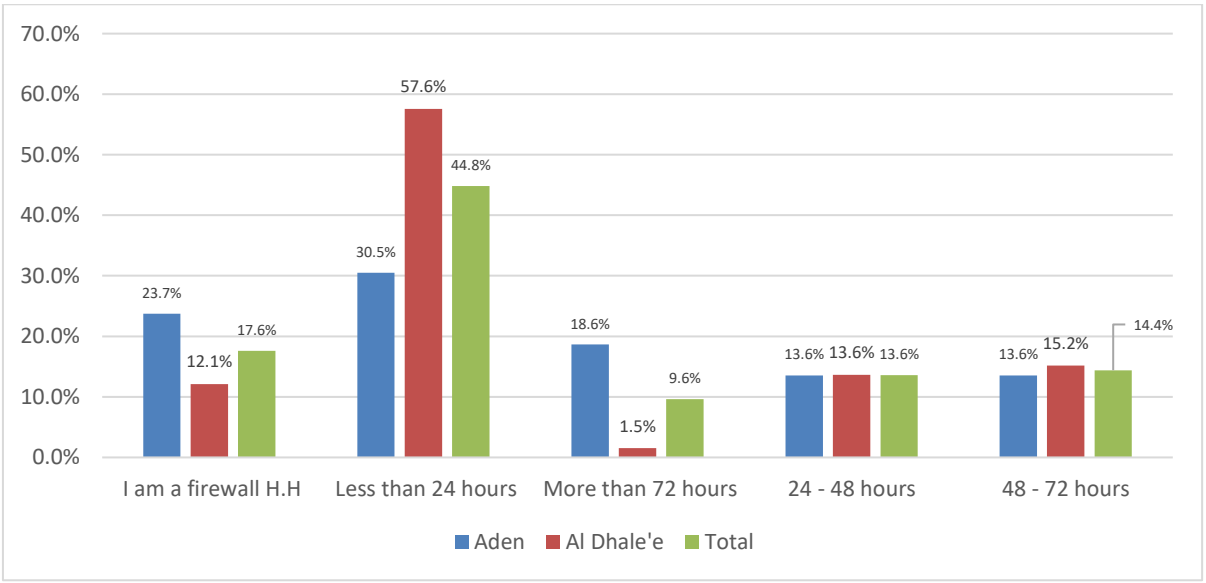


Figure 41: Recording of the H.H information, and the current situation of water source and sanitation by RRT

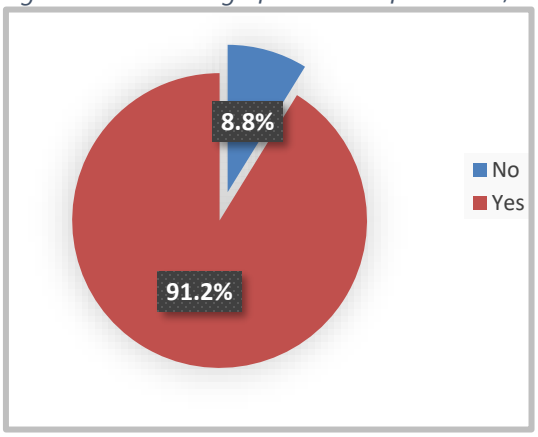


Figure 42: Visit of H.H by the after the first visit

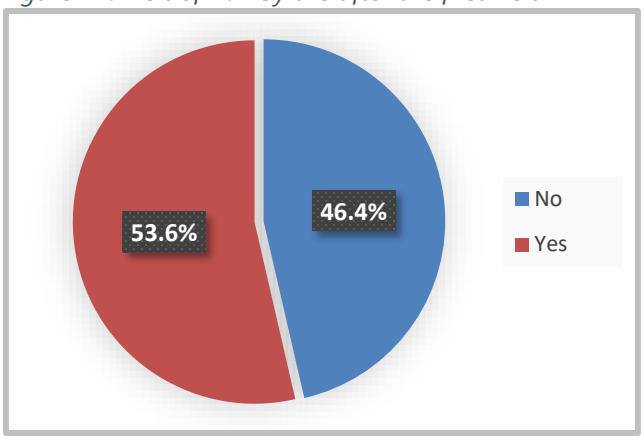


Figure 43: Level of satisfaction by RRT services

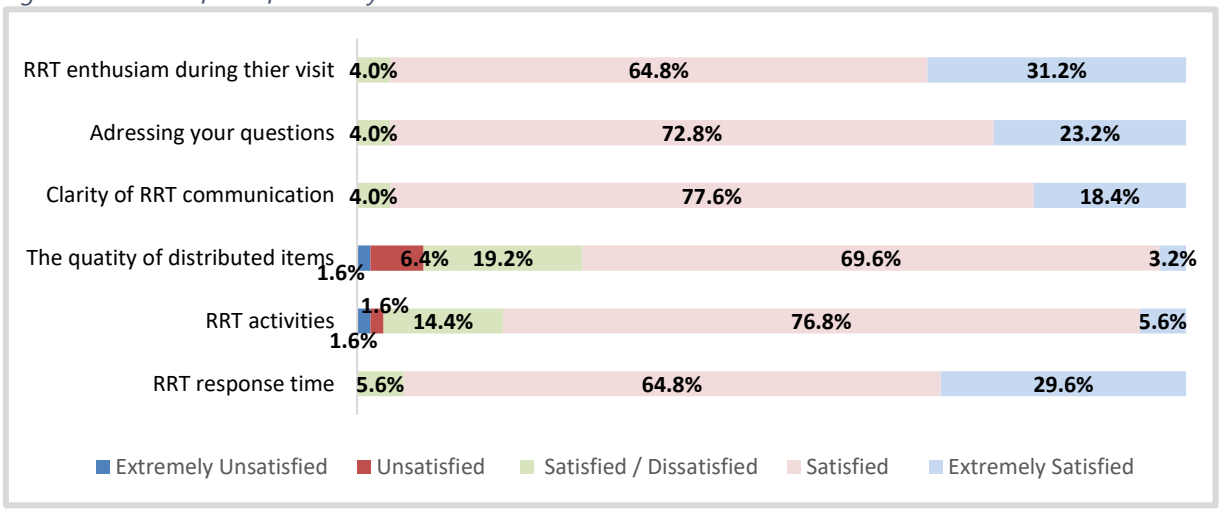


Figure 44: Proportion of household that have received education and provision of educational materials regarding cholera and hygiene

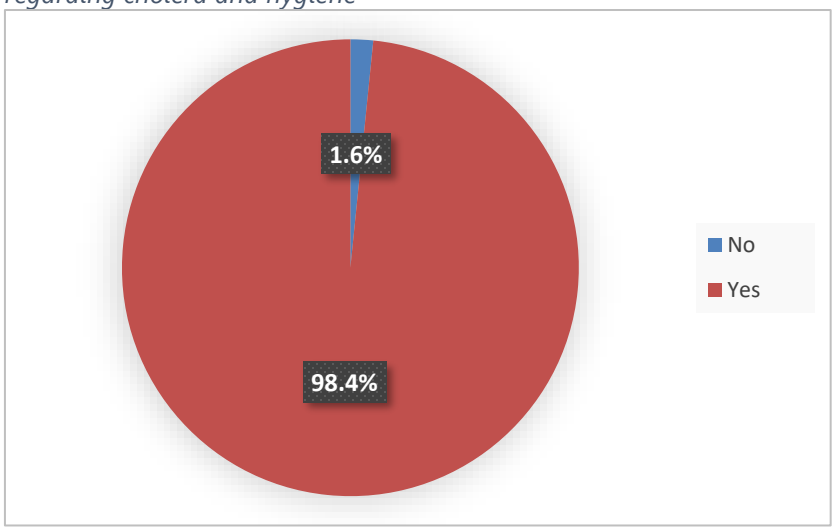


Figure 45: Distribution of household according to theirs knowledge of causes cholera

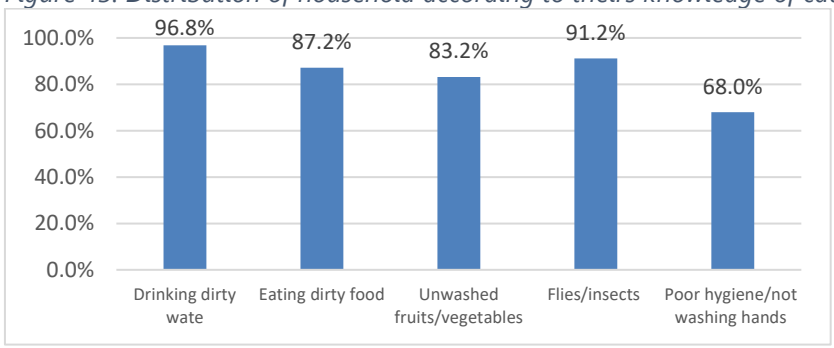


Figure 46: Distribution of household according to their knowledge of symptoms associated with cholera

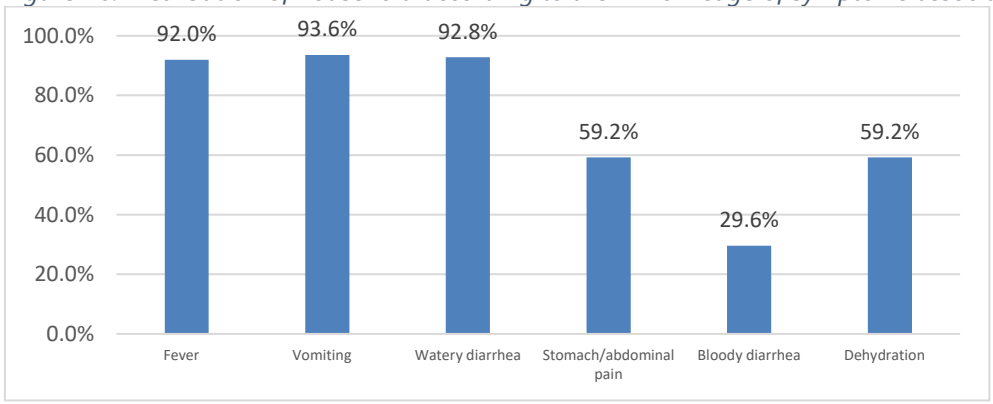


Figure 47: Methods used by household to prevent cholera contamination

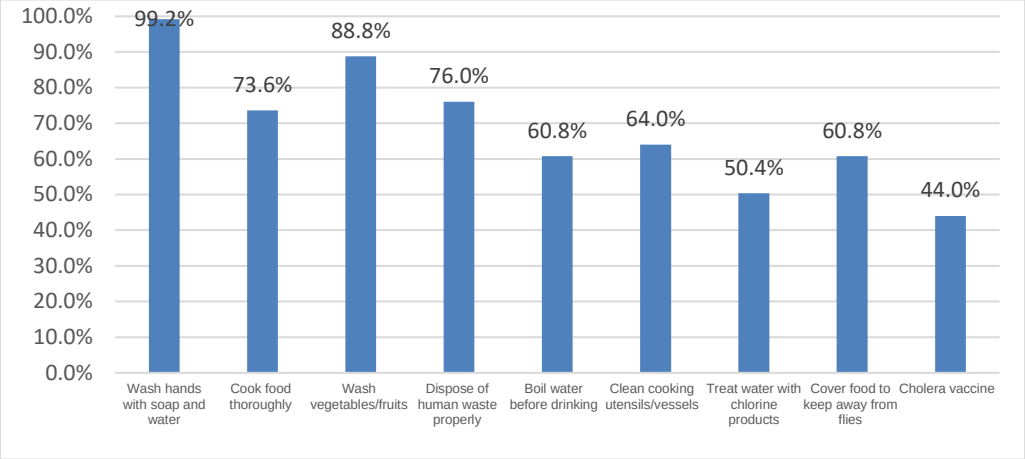


Figure 48: Distribution of household by the source of information on prevention and treatment against cholera

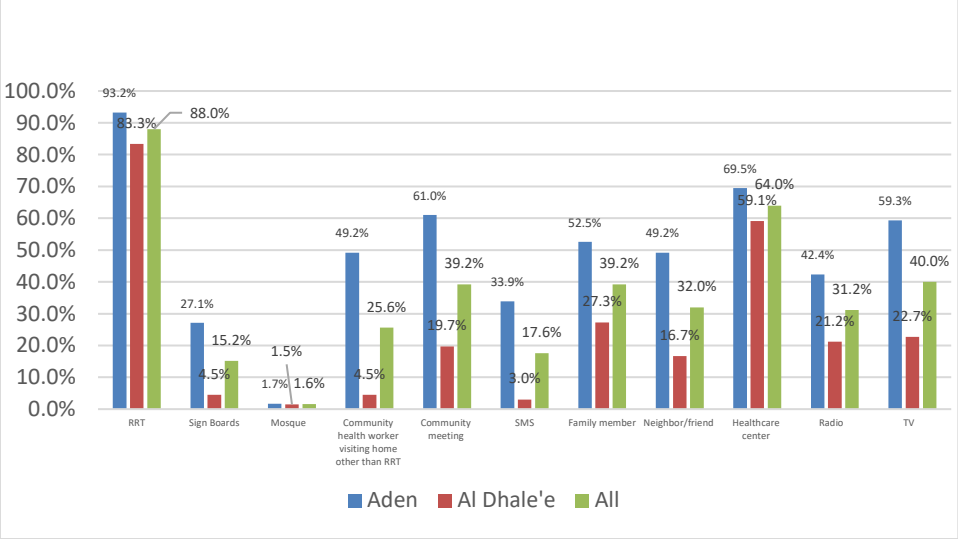


Figure 49: Distribution of household by the new behaviors/practices they adopted based on RRT visit

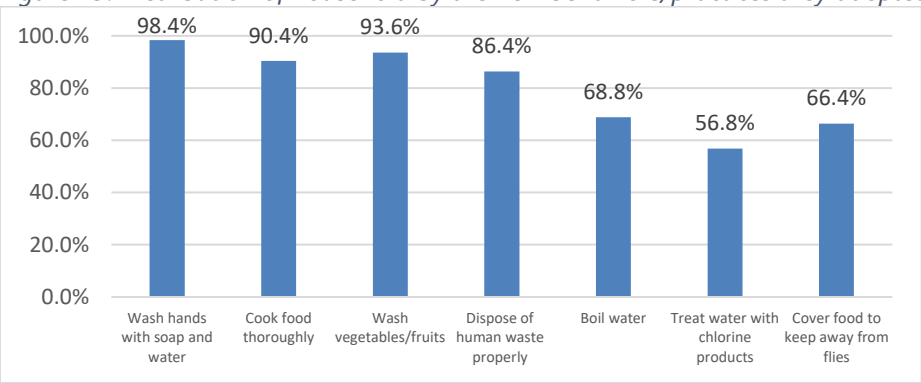


Figure 50: Distribution of household by their appreciation on usefulness of RRT intervention by RRT intervention to address their priority needs

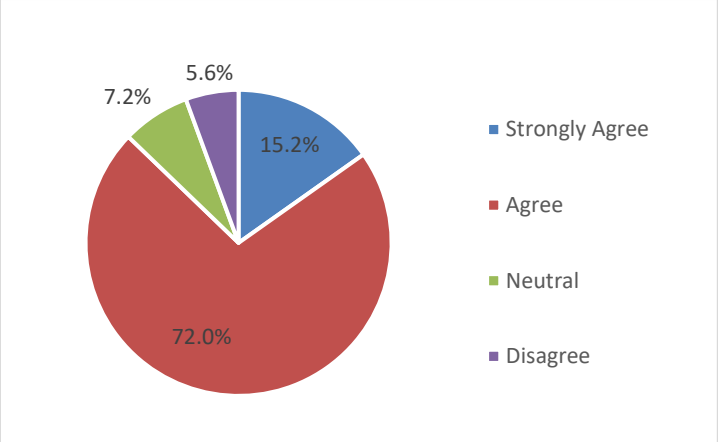


Figure 51: Appreciation of the timeliness of RRT intervention by household

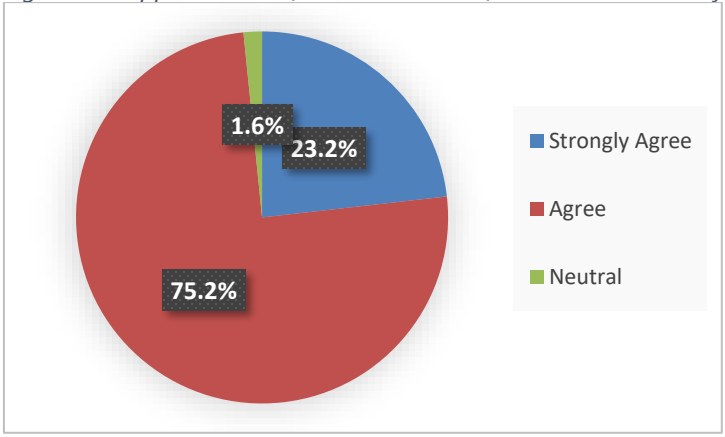


Figure 52: Perception of decline in cholera contamination by household because of RRT intervention

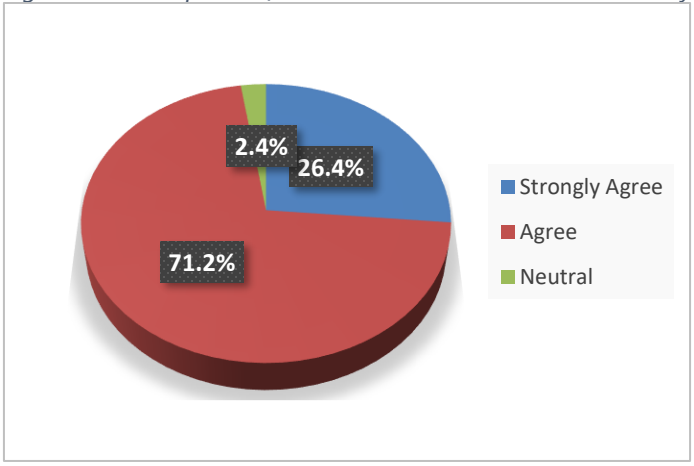


Figure 53: Perception of improvement made in household

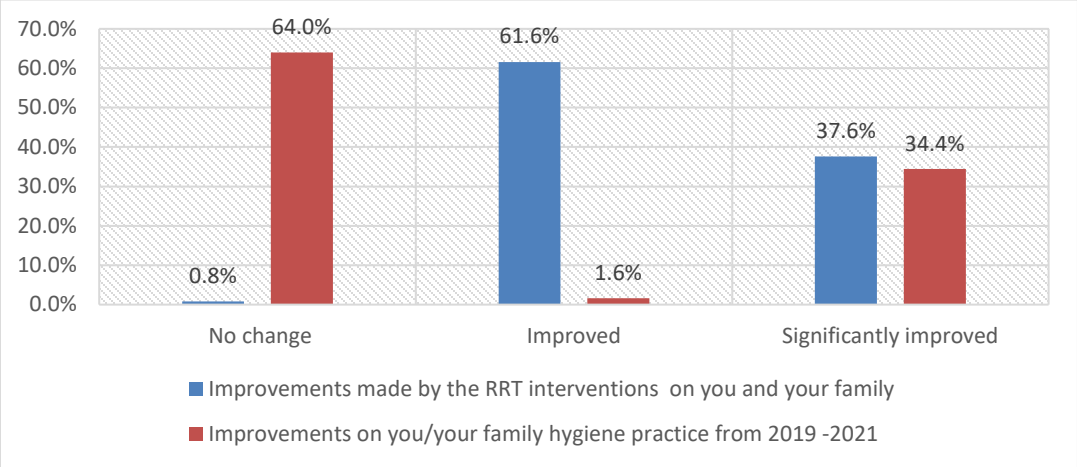


Figure 54: Reason for not testing drinking water by household

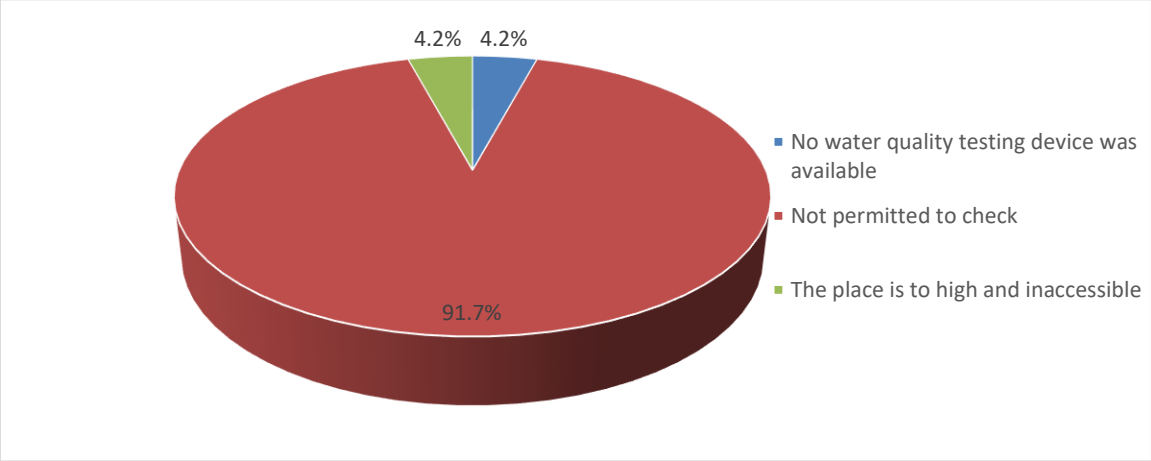


Figure 55: Result of testing drinking water

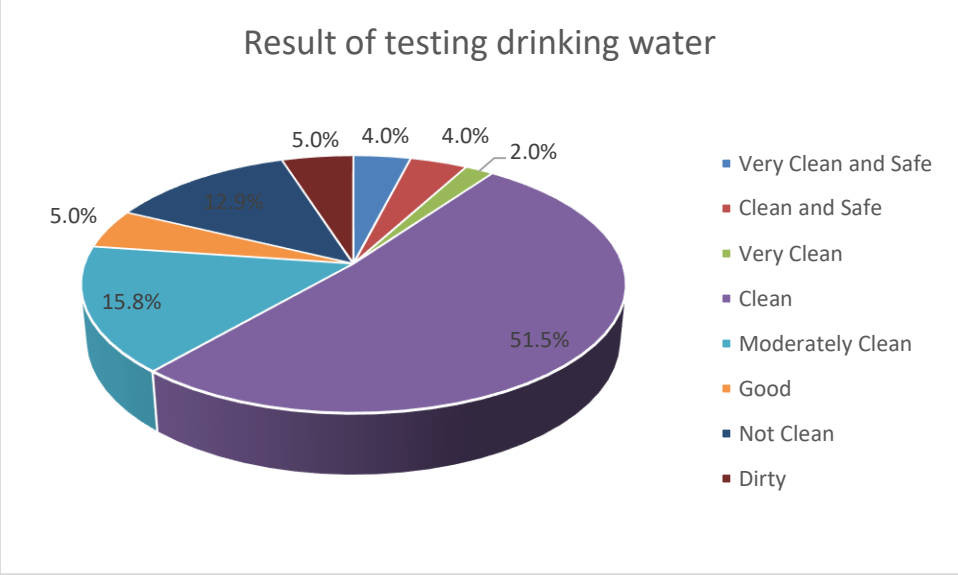


Figure 56: Rating cleanliness of drinking water

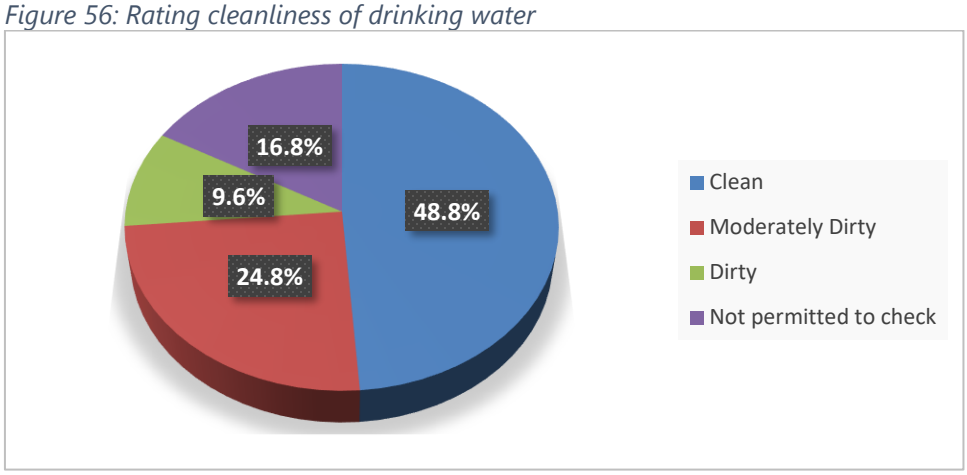
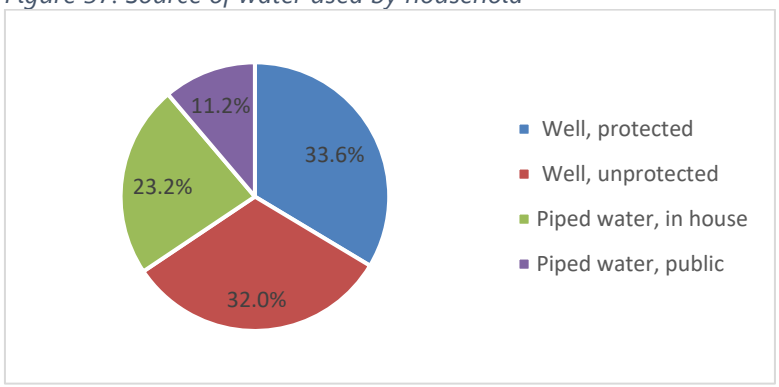


Figure 57: Source of water used by household



12.15. Team presentation

Presentation of Dr NGOZI AKWATAGHIBE, Team Leader

6. **Ngozi Akwataghibe, MD, MPH, (PhD in view),** is an experienced Evaluator, a Medical Doctor and a Public Health Specialist. She is the Principal Consultant at ENAULD Health Research and Services, The Netherlands; an Associate at Royal Tropical Institute (KIT) in Amsterdam; and a Doctoral Researcher in Transdisciplinary Global Health at the Vrije Universiteit (VU) Amsterdam. She has collectively over 26 years of clinical and public health experience. As a public health specialist, she has expertise in International Development; Water, Sanitation and Hygiene (WASH), Evaluations including impact Evaluation, Health and Health Systems Strengthening; Project Management and Capacity building.
7. Ngozi is a Mixed Methods expert. She is especially adept at designing and using complex and innovative mixed methodologies in research and evaluations. She has led the development of several innovative proposals that have won contracts from various international organizations including the World Bank, UNICEF, International Initiative for Impact Evaluation (3ie), Shell, the WHO Alliance for Health Policy and Systems Research, GAVI and Bill and Melinda Gates Foundation.
8. She has extensive experience working with teams in Africa, Asia, Europe and USA; liaising with government, UN and a broad range of community stakeholders and in leading and/or providing technical support to projects. For instance, in 2020/2021 she was the Evaluation Team Lead for the Final Evaluation of the Comic Relief- GlaxoSmithKline 'Fighting Malaria, Improving Health' Partnership in Sub-Saharan Africa (Sierra Leone; Ghana; Tanzania; Mozambique) and Greater Mekong sub-region (Cambodia; Laos; and Myanmar); from 2017-2018, she worked as a Consultant Evaluator in the Liberian Health Sector Performance Evaluation (focused on 2006-2017) for the Government of Liberia. From 2016-2020, was the Lead Principal Investigator in the Formative Evaluation (funded by 3ie and Bill and Melinda Gates Foundation) of the DELIR project using Participatory Action Research (PAR) to increase immunization coverage in Nigeria. She was the Country Lead – core team member for the Impact Evaluation of the UNICEF / Federal Government WASH Country programme in Nigeria; She was the Country Lead and the Mixed Methods Advisor in a 2017 UNICEF WASH Operations Research (OR) in Nigeria. In 2011, she was the Principal Investigator and Country Lead in a baseline evaluation of Human Resources for Health in Nigeria commissioned by the World Bank to inform policy on a 150 million dollars RBF project piloted in three Nigerian states. She followed that up in 2015 by co-facilitating a World Bank Capitalization Write Shop for the national and states stakeholders including the RBF duty-bearers and practitioners – a Learning and Capacity Strengthening project.
9. She is currently the Lead Monitoring, Evaluation and Learning (MEL) Advisor for Africa Resource Centre for Supply Chain - a Public-Private collaboration between Bill and Melinda Gates Foundation and Private Sector Health Alliance Nigeria. She is also the Country Lead / Mixed Methods Advisor of the UNICEF Final Evaluation of Girls' Education Programme (GEP3) in Northern Nigeria; and the Evaluation Team Lead in the UNICEF WCARO Multi-Country Formative Evaluation of the Key Result for Children (KRC) #7 (Birth Registration) for period 2018-2020 for nine countries (Cote d'Ivoire, Guinea, Guinea-Bissau, Liberia, Togo, Chad, Cameroon and Equatorial Guinea, and Benin).
10. Ngozi is an excellent (oral and written) communicator and versed in advocacy relating to a broad range of stakeholders – governments, funders, grantees, civil society, public and academic audiences. She is the lead or co-author of several peer-reviewed publications in scientific journals.
11. At KIT she is part of the Health Systems Strengthening team; and a Thesis Advisor for Masters in Public Health (MPH) students.

Presentation of Natalie BOCKEL, WASH Specialist

12. **Natalie Bockel** is an agricultural engineer and has sixteen years of experience in conducting evaluations of rural development projects in Africa, particularly in the WASH sector, financed by the European Union,

AFD, MFA, USAID, the World Bank, UNICEF and Sida. This includes rural development projects implemented by NGOs, partnerships with local actors, cooperation programmes of international or bilateral organisations or institutional support in various sectors (water, sanitation and hygiene, food security, micro-credit, farmers' organisations, agriculture), most of them as team leader.

13. This experience is reinforced by training in evaluation methods (Evaluation methods and tools - SFE (Société Françaised' Evaluation); Evaluation of the quality of humanitarian action - Groupe URD; Ethics in the production of evidence - UNICEF). Natalie also has experience of managing rural development projects and programmes, having worked as a project manager and country director for an NGO.
14. Natalie has a proven competence in developing the most appropriate evaluation method according to the objective set and the indicators to be collected, as well as piloting the evaluation process, data collection and analysis, according to the standards of the European Commission and United Nations (UNEG) External Aid Evaluation Methodology).

Presentation of Cedrix Bamio, Quantitative Adviser

15. With a degree in Statistical Engineering and Economics, **Cedrix Bamio** has coordinated and participated in the data analysis of several socio-economic studies for over 5 years now. A survey enthusiast, he has acquired over the years a very interesting global vision of data collection and analysis processes and more globally a perfect mastery of the statistical data production process.

Presentation of Awny Amer, data analyst

16. **Awny Amer**, Regional Independent Monitoring, Research, Evaluation, and Capacity Building Consultant in addition to the translation missions as well, has 33 of experience in the development with special focus in the monitoring, research & evaluation in the last 16 years. He had the opportunity to work and conduct diverse R&E processes with different UN & INGOs/ such as UNICEF, UNDP, UNESCO, ESCWA, IOM, WFP, ILO, UNFPA, Positive Planet International (PPI), Right to Play, War Child, Plan, CARE, Save the Children, Inter news, IDRC, DfID, UN Women, Search for Common Ground (SFCG), Oxfam, Drosos, Terre De Hommes and others. In this regard, he led the R&E in different programmes. Some areas of expertise he has including are: Develop participatory situation analysis, ECCD situation analysis, Human- Rights Based Approaches, Humanitarian assistance programmes, Immigration, Child-Rights programming, Program design, Adolescents & youth programming, Children With Disabilities (CWD) using CBR approach, Program, process & project evaluations using participatory methodologies, approaches, mechanisms and tools, Participatory situation analysis, Community reflection methodologies & tools, Gender-based violence, Gender analysis, mainstreaming & evaluation in addition to design & develop M&E frameworks & systems and others. Additionally, I am enjoying with strong regional experience where he worked with most of the MENA region countries in regional task & assignments. He is acting as board member in International Development & Evaluation Assoc/iation (IDEAS), Research & Evaluation African Policy Center (APC), Africa Gender & Development Evaluators Network- AGDEN and Board Member & one of the founders of the Evaluation MENA network in addition to the Research & Evaluation network in Egypt (EREN). Additionally, he is a member in other regional & international R&E associations such as AfrEA, (AEA), (CoE) and others. Finally, Awny published different articles, papers in addition to other chapters in some of the key M&E publication and translation of others.

Presentation of Hubal PFUMTCHUM, Quality Assurance

17. With dual skills (IT and management), **Hubal Pfumtchum** holds a Master II MIAGE and is certified in information system auditing. As part of his professional career, mainly in audit and evaluation, he has carried out more than 150 audit and advisory missions in several sectors of activity (banking, microfinance, path of iron, governance, decentralization, project financed by donors.). In recent years, he has specialized in conducting studies and evaluations of projects and programs of humanitarian

actors and UN agencies in Africa, Europe and Latin America and the Caribbean. Now in charge OAG Africa office, ensures quality control as part of the studies and evaluations conducted by the firm.

12.16. Roles and Responsibilities of the Evaluation Team

18. This section should indicate how the roles and responsibilities will be distributed among the members. of the evaluation team (Table xx). However, this section will also need to repeat the ToRs section. which explains how the relationship between the evaluation team and the Reference Group will be articulated throughout the Terms of Reference (what is normally defined as the "governance" of the evaluation).

Table 15: Sample: Summary of Roles and Responsibilities by Team Member

Member of the team	Leading Role	Specific tasks within the team
Dr Ngozi AKWATAGHIBE	Team Leader	▸ Responsible of the overall conduct of the evaluation ▸ Work closely with UNICEF ▸ Clarify the methodological approach ▸ Provide the general direction of the evaluation process. ▸ Develop the evaluation matrix and tools; and finalize the evaluation work plan; ▸ Desk review ▸ Design protocols for Semi-structured interviews (SSIs) and Focus Group Discussions (FGDs); ▸ Lead qualitative data analysis ▸ Support secondary data analysis ▸ Drafting of inception, draft and final reports ▸ Supervise the overall coordination of all team members ▸ Present the key findings
Natalie BOCKEL	WASH Specialist	▸ Contribute to the development of methodology and tools ▸ Desk review ▸ Support training of research assistants in WASH related components ▸ Contribute to qualitative data analysis ▸ Contribute to the development of inception, draft and final reports
Awny Amer	Data analyst	▸ Contribute to the development of evaluation methodology ▸ Review of data collection tools/instruments ▸ Train online research assistants ▸ Oversee data collection ▸ Clean data and coding ▸ Analyse data ▸ Contribute to the development of inception, draft and final reports
Hubal PFUMTCHUM	Quality assurance	▸ The QA will be responsible for the day-to-day oversight and management of the evaluation including management of the evaluation budget, ▸ Wil ensure the quality and independence of the Evaluation and its alignment with UNEG Norms and Standards and Ethical Guidelines.

Oversee Advising Group
Think Smart

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