DREF Operation-Final Report

Zambia | Cholera outbreak in Lusaka

DREF operation MDRZM016	**Glide number: EP-2022-000203-ZMB**
Operation start date: 15 June 2022	**Operation end date: 31 August 2022**
Host National Society(ies): Zambia Red Cross Society	**Operation budget: CHF 94,808**
Number of people affected: 95,518 (15,919 households)	**Number of people assisted: 100,830 people**
Red Cross Red Crescent Movement partners currently actively involved in the operation: International Federation of Red Cross and Red Crescent Societies (IFRC)	
Other partner organisations actively involved in the operation: Ministry of Health (MoH), Village water, UNICEF etc	

The major donors and partners of the Disaster Relief Emergency Fund (DREF) include the Red Cross Societies and governments of Belgium, Britain, Canada, Denmark, Germany, Ireland, Italy, Japan, Luxembourg, New Zealand, Norway, Republic of Korea, Spain, Sweden and Switzerland, as well as DG ECHO and Blizzard Entertainment, Mondelez International Foundation, Fortive Corporation and other corporate and private donors. The Canadian Government contributed to replenishing the DREF for this operation. On behalf of the Zambia Red Cross Society (ZRCS), the IFRC would like to extend gratitude to all for their generous contributions.

A. SITUATION ANALYSIS

Description of the Disaster

On 11 April 2022, a cholera outbreak was declared in Zambia with its index case reported in Mtendere compound. By 18 April 2022, the outbreak had spread to other areas within Lusaka with a cumulative total of 16 suspected cases of which 8 were confirmed, distributed as follows: Lusaka Province – 7 (Lusaka District 12; - Mtendere 4, Kabangwe 1, Kamwala 1 and Matero 1), Chilanga District (Midles-west 2, Apolo1, and ZESCO Kalundu 2) Northern Province 5 (Nsama District – Nsumbu 5). These are densely populated areas. The risk of further spread of that outbreak was high as these areas lacked adequate sanitation and access to clean and safe water, posing a danger for further spread of the epidemic. At mid-April, there were already reports of suspected cases in Nsumbu area in Nsama District in Northern Province and the laboratory results became negative for all the cases

Zambia faces challenges to ensure adequate access to sustainable water and sanitation conditions for the populations. The country still is at risk of periodic cholera outbreaks due to the prevailing risk factors such as managed safe drinking water, poor access to sustainably adequate sanitary facilities, inadequate hygiene facilities leading to poor hygiene practices at household level. Furthermore, existence of defective sanitary facilities has worsened the situation, leaking sewer line have been left unattended to, urbanization and industrialization has encroached on important facilities such as water recharge point, sewer lines, water distribution line leading to brokage and damages. Community members poor practices have also heavily to contributed to outbreaks such indiscriminate disposal of household waste, failure to subscribe for services.

These above-mentioned conditions, especially in densely populated and unplanned settlements in urban settings as for the affected areas was a high risk to addressed before the weather conditions increased that risk. Knowing that cholera mainly occurs during the rainy season even if these late cases was reported outside the pick time.

District	Area affected	Number of confirmed cases
Lusaka	Mtendere	4
	Kabangwe	1
	Kamwala	1
	Matero	1
Chilanga	Middle west	2
	Apolo	1
Nsama District	Nsumbu	5
TOTAL		16

Zambia Red Cross Society (ZRCS) initiated response by mobilizing funds through application of DREF to support the efforts of the Ministry of Health to combat the outbreak. The actions of ZRCS contributed to canalize the outbreak at the initial stage of 16 cases.

Summary of response

Overview of Host National Society

In line with its cholera contingency plan, ZRCS activated a cholera Incident Management System (IMS) for internal coordination purposes. It was through the IMS that the cholera trend and Ministerial updates were shared with for the purpose of planning and alignment of the response.

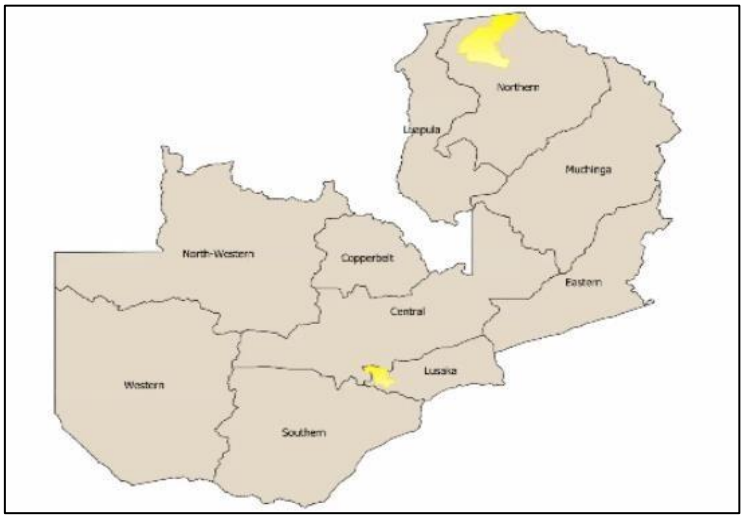

Figure 1 Districts that reported cholera cases in yellow.

The NS through MOH trained 120 volunteers on Hygiene promotion and Epidemic Control, Community Engagement and Accountability (CEA) and later these were deployed in the identified hot spot areas to conduct door to door health promotion activities to prevent the further spread of the outbreak.

Suffice to note that with additional support from IFRC, ZRCS had been supporting Cholera Preparedness activities with the first response launched in October 2020 with the objective of providing communities with adequate capacity strengthening and awareness on cholera in prone areas of Zambia. The preparedness project had been key to help generating awareness on the disease and maintaining safe hygiene practices and supporting communities within cholera hotspots to protect themselves in the event of an outbreak even before the DREF funds were received.

The National Society mainly focused on community mobilization and sensitizations on cholera preventive and control measures through working closely with several stakeholders such as the local Municipality, Civic leaders, water utility companies. To raise awareness on the prevention of the outbreak, ZRCS ensured to:

- Aired 6 radio programs on local radio stations where different stakeholders were featured.
- ZRCS issued out 300 shippers (750mls ×12 per shipper) of liquid chlorine to MoH upon request for domestic water purification in the affected areas. Additionally, to the 300 chlorine shippers, the NS distributed 120 shippers of chlorines in the hot spots in Kanyama, Matero and Mtendere townships.

- 3,500 posters with cholera messages were printed and posted in designated strategic areas such as schools, markets, stations, shops as a way of raising alerts on the outbreak and prevention.
- Based on the cholera trends, the National Society prepositioned 20 ORP Kits, 117 shipper of liquid chlorine, 1433 bottle of chlorine were procured and distributed
- 3,000 tablets of hand washing soap were prepositioned and distributed as part of the response and prevention to the disease in the targeted localities.
- On the other hand, ZRCS community Based Surveillance systems were activated through the deployment of 120 volunteers trained on Branch Transmission Interruption Team (BTIT), though this was pre-planned activity under the Cholera Preparedness Project supported by the Centre for Disease Control through IFRC, which was running before this outbreak and provided a starting point for the National Society to respond.

Overview of Red Cross Red Crescent Movement in country

IFRC Cluster Office provided technical support to ZRCS throughout the operation through the in-country Operations Delegate who provided real time technical guidance on the operations from the early phase of the response and supported the set-up of the operation. IFRC Country Support Platform (CSP) Manager is also available in the country offering technical support to the ZRCS in the coordination of the response to the outbreak. IFRC Cluster Office also supported the NSD training for volunteers.
Locally, the National Society had a well-coordinated mechanism with full involvement of the HQ staff, branch and community leadership. Coordination meetings were regularly held in country within the National Society departments and the IFRC delegate, weekly updates on the outbreaks were shared through situation reports. Similarly, coordination meetings were held virtually between technical departments of the National Society and Government line ministries.

Additionally, even though the DREF funds delayed for a month, ZRCS with its internal structures and the local branch had started to respond to the outbreak through prepositioned assorted cholera prevention items such as chlorine for household water treatment, soap for handwashing distributed in the hot spots and ZRCS volunteers through their branch were already alerted and were on standby in case the situation escalated. These were some of the NFIs that were prepositioned by the IFRC Cholera prepadness project.

Overview of non-RCRC actors in country

The Zambian Government has joined global efforts to eliminate cholera, subscribing to the Global Task Force on Cholera Control strategy which aims to eliminate cholera worldwide by 2030. The Zambian government through the Ministry of Health supported a resolution at the 71st World Health Assembly in 2018 to eliminate cholera globally by 2030 (Resolution WHA[1] 71.4). This resolution was adopted by the World Health Assembly and brings global cholera control and elimination into the limelight.

Furthermore, Zambia government has set a legacy goal to eliminate cholera in the country by 2025 through a multisectoral approach to be anchored under the Office of the Vice President (OVP). This agenda is supported at the highest levels of leadership, with unprecedented political will and action. As such, this Multisectoral Cholera Elimination Plan (MCEP) 2021 – 2025, was developed to ensure that the cholera elimination agenda is implemented. This MCEP aimed at reducing morbidity and mortality due to cholera, and eventually achieving cholera elimination in Zambia by 2025. The Plan was used as a guiding document to ensure Water, Sanitation and Hygiene (WASH) infrastructure and services are established in all high-risk areas. This was one of the core interventions in elimination of cholera. As WASH interventions were implemented, other complementary measures were equally implemented concurrently: such as oral cholera vaccines and any cholera case was managed with high quality and efficiency; risk communication strategies were effectively implemented with

[1] World Health Assembly

engagement of communities; and effective surveillance and laboratory support systems were put in place.

In addition, MOH responded to the outbreak by activating an Incident Management System, and partners such as Water Aid, WHO, and UNICEF, other than ZRCS were part. Most partners offered to support the Government in various sectors of the response depending on the needs which would define the situation and gaps identified. Main actors that were involved in the response are quasi government institutions such as Lusaka City Council and Lusaka Water and Sewerage Company who supported disinfection and desludging of latrines, chlorination of water sources, mounting of water tanks which were being filled daily within affected areas.

The Zambian Government, through the Zambia National Public Health Institute (ZNPHI), set up daily Incident Management System meetings in which ZRCS actively participated. This helped to ensure better coordination between agencies and prevented potential duplication of efforts.

Needs analysis and scenario planning.

Need analysis.

In the early stages of the outbreak, the Government through the MOH shared gaps that required attention, and this provided the basis for designing response activities. ZRCS relied on MoH gap analysis report shared during Incident Management System (IMS) meetings to develop the response strategy. The gaps shared during IMS covered main spheres including practice, attitude, information gaps, availability of services and logistics amongst others. Furthermore, MoH pointed out the need for community sensitization, enhancing access to clean and safe water, proper sanitation, reactivation of oral cholera vaccination, contact tracing and strengthening surveillance as some of the areas needing immediate support.

ZRCS working together with Ministry of Health (MoH), through the Zambia National Public Health Institute (ZNPHI) both conducted a pre and post intervention KAP surveys in three (3) communities in Lusaka District; Matero, Kanyama and Mtendere. The DREF strategy was later supported by a KAP conducted in June 2022. Through these assessments, it was found that:

- People have high knowledge on the transmission and prevention of cholera.
- The studies further showed that people in the communities knew the importance of hand washing and boiling drinking water as a means of disease prevention but would not wash their hands with soap even after using the toilet and before touching food. It was clearly analysed that the negative attitude toward cholera leads to poor practice towards prevention of the disease.
- It was also worth noting that despite high knowledge on Cholera the findings also showed 90% of the respondents who mentioned to wash their hands after using toilets, only 23% Wash their hands with soap and the rest do not wash their hands with soap.
- The findings further showed that about 84% of the respondents are aware of the causes and the symptoms of cholera, and only 79% of the respondents treated their drinking water. Furthermore,69% of the respondents indicated that they would accept the Cholera vaccine.
- The findings also highlighted that 67% of the respondents have received health promotion information messages in the past month. The most preferred channel of sharing cholera information was TV at 27%, megaphones and Radio and Community at 14% and 10 % respectively.
- It also showed that knowledge regarding Cholera awareness in the community however, this has not translated into positive hygiene practicing.

- 22% of the respondents did not use soap when washing their hands as purchasing soap and chlorine were a challenge in the face of other competing needs. Though 75% of the respondents indicated accessing water from taps, there was a need for local authority to intensify water testing and chlorination at household level as the available water system has

potential risks of contamination due to leakages. There was also a need for distribution of hygiene promotion materials such soap and chlorine.

Although cases had started reducing around the time of the KAP survey, the results above have oriented the actions and awareness that were still much needed to mitigate the conditions. A second KAP survey was also realised to evaluate the incidence of ZRCS in sustainable change in the communities and assess the remaining gaps that could inform future responses.

Operational Risk

Zambia still faces several health-related risks other than epidemics like cholera, including dreadful seasonal natural calamities like floods which continuously negatively impacts the situation. The country still faces threats of disease outbreaks like cholera especially in endemic areas, these situations have negatively affected resource allocation to service other critical sectors such as agriculture and health. The cholera outbreak posed further risk of crippling the life survival system by depriving and disrupting a majority livelihood activities if the situation worsened. This year's cholera outbreak not viewed as a threat to public health by the community members, mainly because of the few sporadic cases that were reported. Even when conditions that favored possible spread of the disease still existed in these prone residential areas, many people went ahead with their unhealthy activities such as open selling of ready to eat food on the streets, improper disposal of wastes. Most members of the public set economic challenges way above their health problem as evidenced in open street food vending and highly attributing to the cholera as being due to poverty at household level making it difficult to provide certain important hygiene facilities.

In addressing these risks, ZRCS through radio programs outlined specific problematic concerns from the public where specific institution representatives were invited to discuss how to mitigate some of the risk vices within the cholera hotspots. Issues such as community responsibility in disease prevention were discussed. This helped in addressing risk behaviors and was further emphasized through the door-to-door activities.

For more details on analysis, targeting, scenario planning and risk analysis refer to the Emergency Plan of Action (EPoA)

B. OPERATIONAL STRATEGY

Proposed strategy.

ZRCS, with technical guidance from the Ministry of Health, devised interventions to reach the most vulnerable members of the community in the cholera hot spots. The National Society made deliberate strategies to address the prevailing situation and the MoH adjusted several interventions to build a more robust approach to the response. ZRCS prioritized addressing prevention of the further spread of the epidemic in affected communities, focusing on social mobilization to create awareness, promotion of good hygiene practices and behavior change, enhancing access to and use of clean and safe water as well as sanitary facilities. These activities were done in close collaboration with MoH, Local Authorities and other actors.

ZRCS also built up its cholera response through taping in the structures already established through the Cholera Preparedness Program implemented with support from Africa CDC through IFRC.

Overall, the Cholera DREF and cholera Preparedness Program complimented each other during the early stages of the epidemic, which was instrumental to the institutional preparedness.

As alluded above, the ZRCS approach in this response created awareness, promoted good hygiene and sanitation, behaviour change, with inclusion of different community members such as people of varying ethnicity, gender, disability, and age. On the other hand, the initiative of stakeholder engagement provided platform for transparency and accountability through conducting combined monitoring and supervision visits as well as periodic shared updates on progress and assessments done.

Figure 2 ZRCS, MOH, Local Council engages young people.

The design and implementation of this operation was based on identified needs as well as feedback from the targeted communities. Thus, the awareness and prevention messages were prioritized as activities in this operation:

- After trainings, community sensitization were conducted through door-to-door visits, public address system, volunteers' engagement of specific group, use of printed IEC materials and radio discussions on WASH issues. A total of 100830 people were reached.
- Distribution of WASH items as such domestic liquid chlorine in targeted communities was included as an adjustment following urge needs and orientation on how to use distributed items (1 bottle of 750mls of domestic liquid chlorine per household). ZRCS also conducted demonstration sessions on proper use of chlorine and follow up at household level to assess compliance with chlorine dosing drinking water. Though chlorine was not budgeted in the DREF, nevertheless, adjustments were made in the budget to cover the cost of procurement of 1,433 bottles of chlorine that was distributed to household, this adjustment was made owing to water quality reports that showed that most water sources were contaminated with fecal coliforms at different stages of the water chain, hence the need for chlorine.
- Developed and rolled out a Knowledge, Attitudes and Practices (KAP) survey/rapid situational analysis in Lusaka district to assess behavioral challenges, local cultures, customs, concerns and risk behaviors and practices of communities as well as and track myths and knowledge gaps before and after hygiene and health promotion sessions. The findings were used to align and plan appropriate interventions for prevention of the spread of cholera. Somefindings on knowledge levels regarding Cholera, revealed that people had already good knowledge on the transmission and prevention of cholera after ZRCS activities.
- ZRCS regularly collected information on the prevailing situation from **MoH/ZNPHI** as well as alerting local ZRCS Branches in case the epidemic escalated. The response used a centralized system to report all field activities using KOBO toolbox, the data reported was analysed by PMER and shared with stakeholders.

C. DETAILED OPERATIONAL PLAN

Health

People reached: 100,830
Male: 48,398
Female:52,432

Health Outcome 4: Transmission of diseases of epidemic potential is reduced		
Indicators:	**Target**	**Actual**
# Of Developed and rolled-out KAP survey/rapid situational analysis	2	2
Conduct health promotion through CEA	1	1

Establish communication and engagement with communities related to case detection	3	3
# Of Supervision and data collection/monitoring achieved	36	36
Reproduce and distribute IEC materials on community-based disease prevention, epidemic preparedness, and health promotion, complemented using social media and youth as agents of behavioral change	3000	3500
Output 4.4: Transmission is limited through early identification and referral of suspected cases		
Indicators:	**Target**	**Actual**
% Of cases identified through community-based surveillance referred	At least 90%	0
Output 4.6: Improved knowledge about public health issues among Mtendere, Matero and Chilanga Middle West wards in Lusaka district		
Indicators:	**Target**	**Actual**
% Of the target population that have access to information pertaining to the cholera epidemic prevention	100%	100% (100830 people)
Health Outcome 7: National Society has increased capacity to manage and respond to health risk		
Output 7.1: The National Society and its volunteers are able to provide better, more appropriate, and higher quality emergency health services		
# Of NS volunteers providing cholera interventions in affected communities	120	120
# Of Technical coordination and collaboration with regional humanitarian organizations	1	3
Narrative description of achievements		

A Knowledge Attitude Practice (KAP) survey was conducted both pre and post the operation to understand the current Knowledge, attitude, practices, behaviors, in Lusaka District's: Kanyama, Mtendere, and Matero, to guide the design and packaging of interventions and measure progress of the operation.

The post Kap survey demonstrated the positive impact of the prevention action and education sessions to the communities.

- An indication of 15% unaware during the first KAP and 12% at post implementation KAP unaware of the cholera symptoms.
- The findings on knowledge levels regarding Cholera, revealed that people had already good knowledge on the transmission and prevention of cholera after ZRCS activities. NS has strengthened the educational session, covering knowledge on the disease but also prevention and home-made practical sanitation and water potabilization. ZRCS achieved to impact an additional 4% of the population with the above-mentioned messages, an expand the population now aware of cholera and prevention to 88% compared to 84% that were aware at Pre KAP.

The KAP findings (detailed under the need analysis above) provided a basis of reference for adjusting and aligning response activities, with the findings of the pre and post KAP, the following were adjusted.

- Radio programs were designed largely for hygiene promotion. However, looking at the figures of low-level hygiene practices among members of the public, the programs were then tailor-made to strengthen practice of good hygiene as way of cholera prevention, therefore specific experts on behavioural Change were invited to be part of the panellists of the radio discussion to specifically address the issues of poor practice.

- The coverage for safe water was also worrisome, most people still did not have access to safe water. With this finding, the project procured chlorine to support households that did not have access to safe drinking water such as those getting water from wells, boreholes. Note that in the EPOA, the call to distribute chlorine was not included, largely the focus was generally to raise awareness but because of the rising demand and given the condition of the water sources, the project adjusted within the available budget and procured 1433 by 750ml of household chlorine. This contributed to a better impact by addressing one of the driven factors of cholera in these communities.
- IEC materials were equally adjusted to basically focus on practices that prevent cholera such as handwash, safe disposal of human and general waste. The other part was also to bring on board the local Authority for the purpose of enforcement.
- Social Mobilization, Community engagement and awareness through Public Adress system is one of critical component that was used in dissemination of key messages on various situations of Public Health importance to address the water sanitation and hygiene problems to prevent and break transmission of water borne and other hygiene related diseases. The Public Address System team was coordinated by ZRCS while Lusaka District Health Office Health Promotion team provided the technical expertise in packaging content and it's estimated that about 16,342 people reached in places such as markets, bus stations, households.

Besides sensitization using Public Address system in the communities, the response also incorporated the use of media engagement through running series of Radio programs at local stations; Hot FM and Komboni radio station which has a listenership of more than 2.5 million. The topics covered included General Hygiene Promotion in the prevention of Cholera, importance of Safe Water and good sanitation, and the importance of Waste Management in the prevention of diarrheal diseases.

Towards the end of the campaign, there were diarrheal cases that were reported from Kaunda Square catchment area. These cases were suspected to be brought up by overflow of sewer in the area. In the last week of sensitization, we also incorporated Kaunda Square in our sensitization though it was not in the plan of the chosen areas. But because of the diarrhea cases, it was included.

The other aspect of information dissemination was through printing of information education materials containing cholera prevention messages, the project team planned to print 3500 posters by mid-June. 3500 posters were printed and posted in designated public areas such as Schools, Clinics, Markets, Malls, and Stations. It is estimated that 8630 individuals had access and read through the poster as evidenced through the door-to-door visits during which some of the people indicated having seen and read the poster on cholera giving us a 100% target achieved.

Monitoring and Evaluation (M&E) team continued to assess progress made in achieving expected results, to spot bottlenecks in implementation and to highlight whether there were any unintended effects from the project. A total of 2 monitoring visits was conducted in the target areas. The PMER technical team developed a reporting system using KOBO toolbox where all community response activities were being reported. 8 volunteers were reporting all field activities using mobile phones, this process gave the technical team real time data for planning and re-alignment of activities. The response targeted to reach ***95,518*** individuals from ***15,919*** households within the cholera hot spots. Overall, the project reached **100,830** individuals in ***20,166*** households during the door-to-door hygiene promotion activities**-** translating to 106% reach.

Figure 4 Volunteers sticking cholera posters.

Figure 3 Cholera poster at a market

Figure 8 ZRCS, MOH, Lusaka Water and sewerage company Managing Director and a Volunteers at Komboni Radio

Challenges

- The door-to-door activities were mostly affected by external (not ZRCS related) factors owing to poor service delivery by agencies, institutions, or ministries. It was noted that community members in the Cholera affected areas bemoaned the poor service delivery especially on waste collection and water supply. Most people complained that knowledge alone was not all they needed but also the actual services needed to prevent cholera and other diseases was crucial.
- To address this common challenge, ZRCS approached relevant stakeholders such as the Council and Water utility Company to join in the field activities to provide real time feedback to queries that member of the community had patterning to service provision. Through this approach, Local council Health Inspectors joined volunteers and ZRCS staff during the door-to-door hygiene promotion and this helped members of the community to appreciate what different institutions were doing to better utility services. Most important was the fact that members of the public realized that they are party of the problem and therefore they needed to be part of the solution. In Kanyama, it was great to see

some many households requesting to be subscribed on water collection systems while some requested for water utility company to connect them to a supply system.

- The funds were received a month late which affected timely implementation of the activities as per workplan. However, the team had already started putting documents in place such that the moment funds were received, everything was in place and went straight to implement activities. This readiness helped very much to catch up on implementation.

Lessons Learned

- The fight against cholera is won through integration and involvement of principal stakeholders and this intervention has demonstrate that knowledge alone in not sufficient but also provision of services and minimum material is crucial in the fight against cholera.
- Through this operation, branches learnt that knowledge did not automatically translate into practice, hence the need to emphasize on change of behavior beyond awareness creation and diffusion, but as a continuous action.

Water, sanitation, and hygiene

People reached: 100,830
Male: 48,398
Female:52,432

WASH Outcome1: Immediate reduction in risk of waterborne and water related diseases in targeted communities

Output 1.1: Continuous assessment of water, sanitation, and hygiene situation is carried out in targeted communities

Indicators:	Target	Actual
# Of households supported and reached with WASH items to improve hygiene and sanitation condition	15,919 HHs	20,166 HHs (100,830 individuals)

Output 1.2: Daily access to safe water which meets Sphere and WHO standards in terms of quantity and quality is provided to target population

Indicators:	Target	Actual
# Of Households that have access to safe water per Sphere standards	1591 HHs	1433

Output 1.3: Adequate sanitation which meets Sphere standards in terms of quantity and quality is provided to target population

Indicators:	Target	Actual
# Of people reached with education sessions and hygiene promotion messages	95,518	100,830
# Of households supported with WASH items such as domestic liquid chlorine, hand washing with soap and disinfectants	1591 HHs	1433

Output 1.5: Hygiene-related goods (NFIs) which meet Sphere standards and training on how to use those goods is provided to the target population

Indicators:	Target	Actual
% Of households supported with NFIs to improve hygiene	100%	1433 HH

Outcome 2: Sustainable reduction in risk of waterborne and water related diseases in targeted communities in the recovery phase

Output 2.1: Continuous monitoring and evaluation of water, sanitation, and hygiene situation is carried out in targeted communities		
Indicators:	**Target**	**Actual**
% Of targeted population adhering to proper water, sanitation and hygiene and hygiene guidelines	100%	100%
Conduct training for RC volunteers on carrying out water, sanitation, and hygiene assessments/BTIT	120	120
Conduct initial assessment of the water, sanitation, and hygiene situation in targeted communities	1	3
# Of monitoring conducted on water, sanitation, and hygiene situation in targeted communities	2160	2160 HH visits
Coordinate with other WASH actors on target group needs and appropriate response.	1	1
Educate population of targeted communities on safe water storage and on safe use of water treatment products	95,518	100,830
Narrative description of achievements		

Figure 5 Water quality testing at some communal water source

To raise awareness of the prevention of enteric diseases, cholera, the Zambia Red Cross in partnership with the Ministry of Health through Lusaka District Health Office conducted an hygiene promotion training of 75 Red Cross Volunteers and 6 Environmental Health Technologists from Mtendere, Kanyama and Matero. The general objective of the training was to equip volunteers on cholera prevention and skills on dissemination of messages. This was an intensive training which was cascade to others volunteers as per the plan.

In total 120 volunteers were oriented at the end on cholera prevention and were deployed to conduct hygiene promotion sessions in cholera hot spots with a target of 22 households per day per volunteer for 3 times in a week. Supervision visits were equally provided during the volunteer field visit days, these visits were conducted with other stakeholders such Local Municipality, MoH staff, Civic Leaders, Ward Development Committees, and representatives from the Branch Executive. A briefing given to volunteers based on the field experience and observations. Field data was collected using hard copies from volunteers and transmitted electronically by a few the volunteer leaders' using KOBO.

The response targeted to reach 95,518 individuals from 15,919 households in the cholera hot spots. Overall, the project reached 100,830 individuals in 20,166 households during the door-to-door hygiene promotion activities- translating to 106% reach. The number of households increased since there where areas bordering the target zones which still needed attention such as Matero Chunga area, Kanyama West Garden Park area are Kaunda Square which borders with Mtendere were WASH conditions were poor Apart from hygiene promotion activities, the project also focused on improving the quality and safety of drinking water at household level through procurement and distribution of 1433 ×750mls bottles of chlorin for domestic water purification. Based on the KAP findings, the chlorine was distributed to household that drew water from wells and communal taps. Though not directly a focus area, the project conducted an initial water quality testing on 3 communal water points in the hot spots by use of H2S and the result were negative for any contamination. However, water quality testing is a routine activity under Council and MOH, and during this outbreak several water samples were collected, and it was noticed that 95% of the wells were contaminated, therefore, an adjustment was made to the budget procure chlorine to address the situation especially in Kanyama where most households access water from communal taps and wells. The aim was to enhance the treatment of water at household level hence contributing to the improvement of quality drinking water and increase access to safe drinking water.

Figure 6 volunteers before deployment

Cholera prevention and control is dependent on several factors, both software and hardware components. The recent cholera outbreak posed a huge risk on public health as it lacked a robust approached on issues concerning WASH. ZRCS focused mainly on awareness but the challenges on the ground where more than just awareness such that even the door-to-door activities were affected because the public had concerns that needed to be addressed such as poor water supply (intermittent supply), poor solid waste management with piles of uncollected garbage in undesignated areas close to households.

To mitigate this, ZRSC invited key institution to join the field visits so that these WASH gaps could be addressed. Local Authority including Lusaka Water and Sewerage Company joined the field and radio program, through this engagement, waste franchises were engaged to intensify waste collection while

individual households where to link to the Millennium Challenge Project to access funds for construction of watertight household latrines.

Figure 7 ZRCS, MOH conducting follow-up visits to households.

Figure 8 Door to door supervision

Figure 10 Chlorine distribution in progress

Figure 9 DSG and HCM during senior management visit to the field

Challenges

With the prevailing WASH conditions in the communities, it was challenging for volunteers who only could give information on prevention and control of cholera but not with most underlying causes or drivers not being attended to by relevant authorities such as poor water supply (intermittent supply), poor solid waste management with piles of uncollected garbage in undesignated areas close to households.

Figure 11 Volunteers staff and stakeholders take part in the field visits.

Lessons Learned
The integration of key stakeholders in the door-to-door household supervision helped to provide real time feedback on the numerous WASH challenges faced by the public.

Strategies for Implementation: Influence others as leading strategic partner		
S1.1: National Society capacity building and organizational development objectives are facilitated to ensure that National Societies have the necessary legal, ethical, and financial foundations, systems and structures, competences, and capacities to plan and perform these trainings are supported by the NSD SO at the Cluster		
Indicators:	**Target**	**Actual**
# Of NS volunteers insured in readiness for program	120	120
Output S1.1.4: National Societies have effective and motivated volunteers who are protected and trained		
Indicators:	**Target**	**Actual**
# Of self-motivated volunteers in the response	100	120
Provide complete briefings on volunteers' roles and the risks they face and train the volunteers in NSD matters and understanding the movement	1	1
Provide psychosocial support to volunteers	1	1
Ensure volunteers are aware of their rights and responsibilities	120	120
Ensure volunteers' safety and wellbeing	120	120
Narrative description of achievements		

In ensuring volunteers well-being, ZRCS insured 120 volunteers as duty of care through a local Insurance company. All were given visibility regalia and other protective incentives such as soap, masks and sanitizes. 120 T-shirts and 120 bibs for volunteers and NS staff (10) and other visibility materials with cholera messaging were distributed to the team.
Volunteers oriented on their rights and responsibilities and signed the code of conduct as a way of reducing possibilities of exploitation. Additionally, an NSD training for volunteers was conducted with support from the Organization Development Officer from the Zimbabwe Cluster. Some of the policies covered during the training include.

The PSEA Policy
Through this policy, the volunteers were taken through the prevention and response to sexual exploitation, abuse, and exploitation policy (PSEA), focusing mainly on the key guiding principles, the channel of complaint and the policy agreement form. the aim was to introduce volunteer to the atmosphere of free reporting of any SGBV cases among themselves and in the community.
Youth policy
Under this policy, the focused was on the youth executive structures in detail including the social and cultural aspects as enshrined in the youth policy document.

Figure 12 NSD training in progress

Challenges

- The was needed to procure volunteer gum boots.
- Branch needs printed copies of the policies to be used every time new people join the movement

Lessons Learned

- Induction of the branch volunteers on key policies is important if the values of the movement are to be fulfilled.

D. Financial Report

The final expenditure CHF 93,400 represent 99% of the allocation of CHF 94,808. Balance of CHF 1,409 will be returned to the DREF pot. The overall explanation of variances is provided below.

III. Variances explanation by budget category & group					
Description	**Budget**	**Expenditure**	**Variance**	**Percentage**	**Variance explanation**
Teaching Materials	11,975	9,025	2,949	25%	Savings on the procurement of communication material and distribution and logistics cost have contributed to cover the general expenditure and IEC material cost extension following field needs.
Transport & Vehicles Costs	9,797	7,797	2,000	20%	
National Society Staff	2,351	1,838	513	22%	
Information & Public Relations	13,063	19,954	-6,891	-53%	
Office Costs		244	-244	-100%	
Communications		282	-282	-100%	
Financial Charges	1,502	89	1,413	94%	

DREF Operation

FINAL FINANCIAL REPORT

Selected Parameters			
Reporting Timeframe	2022/1-2023/1	Operation	MDRZM016
Budget Timeframe	*	Budget	APPROVED

Prepared on 14/Feb/2023

All figures are in Swiss Francs (CHF)

MDRZM016 - Zambia - Cholera Outbreak in Lusaka

Operating Timeframe: 22 Apr 2022 to 31 Aug 2022

I. Summary

Opening Balance	**0**
Funds & Other Income	**94,808**
DREF Allocations	94,808
Expenditure	**-93,400**
Closing Balance	**1,408**

II. Expenditure by area of focus / strategies for implementation

Description	Budget	Expenditure	Variance
AOF1 - Disaster risk reduction			**0**
AOF2 - Shelter			**0**
AOF3 - Livelihoods and basic needs			**0**
AOF4 - Health			**0**
AOF5 - Water, sanitation and hygiene	47,777	47,973	**-196**
AOF6 - Protection, Gender & Inclusion			**0**
AOF7 - Migration			**0**
Area of focus Total	**47,777**	**47,973**	**-196**
SFI1 - Strenghten National Societies	35,855	36,068	**-213**
SFI2 - Effective international disaster management	6,956	6,626	**330**
SFI3 - Influence others as leading strategic partners	2,898	2,732	**166**
SFI4 - Ensure a strong IFRC	1,322		**1,322**
Strategy for implementation Total	**47,031**	**45,426**	**1,605**
Grand Total	**94,808**	**93,400**	**1,409**

DREF Operation

FINAL FINANCIAL REPORT

Selected Parameters			
Reporting Timeframe	2022/1-2023/1	Operation	MDRZM016
Budget Timeframe	*	Budget	APPROVED

Prepared on 14/Feb/2023

All figures are in Swiss Francs (CHF)

MDRZM016 - Zambia - Cholera Outbreak in Lusaka

Operating Timeframe: 22 Apr 2022 to 31 Aug 2022

III. Expenditure by budget category & group

Description	Budget	Expenditure	Variance
Relief items, Construction, Supplies	**17,282**	**14,316**	**2,966**
Medical & First Aid	5,307	5,291	16
Teaching Materials	11,975	9,025	2,949
Logistics, Transport & Storage	**9,797**	**7,797**	**2,000**
Transport & Vehicles Costs	9,797	7,797	2,000
Personnel	**23,644**	**21,527**	**2,117**
National Society Staff	2,351	1,838	513
Volunteers	21,293	19,689	1,604
Workshops & Training	**15,077**	**15,303**	**-226**
Workshops & Training	15,077	15,303	-226
General Expenditure	**23,221**	**28,756**	**-5,534**
Travel	2,722	2,566	156
Information & Public Relations	13,063	19,954	-6,891
Office Costs		244	-244
Communications		282	-282
Financial Charges	1,502	89	1,413
Other General Expenses	5,934	5,621	313
Indirect Costs	**5,786**	**5,700**	**86**
Programme & Services Support Recover	5,786	5,700	86
Grand Total	**94,808**	**93,400**	**1,409**

Contact information

Reference documents

Click here for:

- Previous Appeals and updates
- Emergency Plan of Action (EPoA)

For further information, specifically related to this operation please contact:

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How we work

All IFRC assistance seeks to adhere to the **Code of Conduct** for the International Red Cross and Red Crescent Movement and Non-Governmental Organizations (NGO's) in Disaster Relief and the **Humanitarian Charter and Minimum Standards in Humanitarian Response (Sphere**) in delivering assistance to the most vulnerable. The IFRC's vision is to inspire**, encourage, facilitate and promote at all times all forms of humanitarian activities** by National Societies, with a view to **preventing and alleviating human suffering**, and thereby contributing to the maintenance and promotion of human dignity and peace in the world. The IFRC's work is guided by Strategy 2020 which puts forward three strategic aims:

1. Save lives, protect livelihoods, and strengthen recovery from disaster and crises.
2. Enable healthy and safe living.
3. Promote social inclusion and a culture of non-violence and peace.